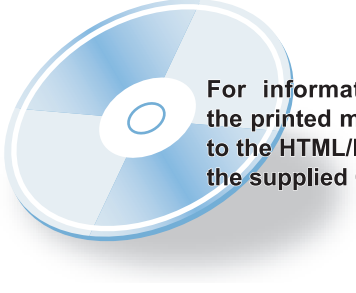
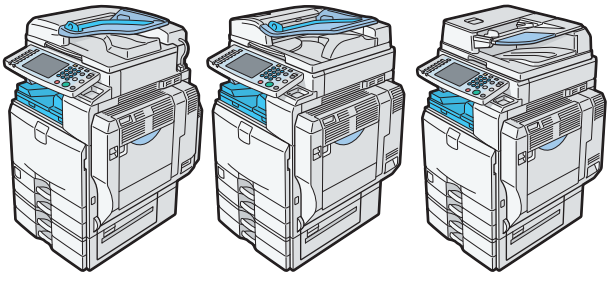
Read This First

C9130/C9135/C9145/C9145A/C9155/C9155A
C9130G/C9135G/C9145G/C9145AG/C9155G/C9155AG
LD630C/LD635C/LD645C/LD645CA/LD655C/LD655CA
LD630CG/LD635CG/LD645CG/LD645CAG/LD655CG/LD655CAG
Aficio™ MP C3001/C3501/C4501/C4501A/C5501/C5501A
Aficio™ MP C3001G/C3501G/C4501G/C4501AG/C5501G/C5501AG

Operating Instructions
About This Machine



For information not in the printed manual, refer to the HTML/PDF files on the supplied CD-ROM.



1 Simple Search
2 Getting Started
3 Adding Paper
4 Adding Toner and Staples
5 Entering Text
6 On-screen Operating Instructions
7 Remarks
8 Appendix

Read this manual carefully before you use this machine and keep it handy for future reference. For safe and correct use, be sure to read the Safety Information in this manual before using the machine.

Documentation for This Machine

About This Machine (This manual)

Troubleshooting

Copy and Document Server Reference

- Using the various copier functions
- Using the Document Server functions
- Changing the default settings of the copier and Document Server functions, and related information

Facsimile Reference

- Sending and receiving faxes
- Using the fax function through a computer
- Changing the default settings of the fax function, and related information

Printer Reference

- Installing the driver for the printer function
- Changing the default settings of the printer function, and related information

Scanner Reference

- Sending scan files
- Storing scan files
- Changing the default settings of the scanner function, and related information

Network and System Settings Reference

- Connecting to a network
- Registering addresses for fax/scanner functions
- Changing the default settings of the system, and related information

Security Reference

PostScript 3 Supplement

VM Card Extended Feature Settings Device Reference

VM Card Extended Feature Settings Web Reference

Quick Reference Copy Guide

Quick Reference Printer Guide

Quick Reference Fax Guide

Quick Reference Scanner Guide

App2Me Start Guide

TABLE OF CONTENTS

Documentation for This Machine....1
Manuals for This Machine....8
Manuals List....10
What You Can Do with This Machine....11
- Using This Machine as a Copier....11
- Using This Machine as a Printer....12
- Utilizing Stored Documents....12
- Paperless Fax Transmission and Reception....13
- Fax Transmission and Reception Over the Internet....15
- Using the Facsimile and the Scanner in a Network Environment....16
- Administrating the Machine/Protecting Documents (Security Functions)....16
- Monitoring and Setting the Machine Via Computer....17

Notice....19
- Important....19

How to Read This Manual....20
- Symbols....20
- Machine Types....20
- Names of Major Items....21
- Notes....21

Safety Information....22
- Safety During Operation....22
- Safety Precautions to Be Followed....22

Safety Labels of This Machine....30
- Positions of WARNING and CAUTION labels for Users of Type 1 and 2....30
- Positions of WARNING and CAUTION labels for Users of Type 3 and 4....33
- Power Switch Symbols....38

ENERGY STAR Program....39
Energy Saving Functions....40
Laws and Regulations....42
- Legal Prohibition....42
- Laser Safety for Users of Type 1 and 2....42
- Laser Safety for Users of Type 3 and 4....42
- Notes to users in the United States of America....43

Important Safety Instructions....44

1. Simple Search

Searching by What You Want to Do....47
I Want to Save my Paper Document!....47
I Want to Convert Documents to Electronic Formats Easily!....48
I Want to Register Destinations!....49
I Want to Operate the Machine More Effectively!....49
Searching by Keyword....51
Paper....51
Register/Change/Delete....51
Color....52
Check....52
Install....53
Envelope....53

2. Getting Started

Guide to Components....55
Guide to Components of Type 1 and 2....55
Guide to Components of Type 3 and 4....58
About the Guide on the Internal Tray 2 (Optional)....61
Options....63
External Options....63
Internal Options....69
Control Panel....70
Display Panel....73
Simplified Display....73
Changing the Display Language....74
When the Authentication Screen is Displayed....76
User Code Authentication (Using the Control Panel)....76
User Code Authentication (Using a Printer Driver)....77
Login (Using the Control Panel)....77
Logout (Using the Control Panel)....78
Login (Using a Printer Driver)....79
Login (Using Web Image Monitor)....79

Logout (Using Web Image Monitor)....79
Changing Modes....80
System Reset....81
Turning On/Off the Power....82
Turning On the Main Power....82
Turning On the Power....83
Turning Off the Power....83
Turning Off the Main Power....84
Saving Energy....85
Downloading Utility Software....87
SmartDeviceMonitor for Admin....87
DeskTopBinder....87
SmartDeviceMonitor for Client....88
Installing the Small Size Paper Tray....89

3. Adding Paper

Loading Paper....93
Loading Paper into Trays 1 - 4....93
Loading Paper into the Small Size Paper Tray....95
Loading Paper into Tray 3 (LCT)....96
Loading Paper into the Large Capacity Tray (LCT)....97
Loading Orientation-Fixed Paper or Two-Sided Paper....99
Changing the Paper Size....101
Changing the Paper Size in Trays 2 - 4....101
Changing the Paper Size in the Small Size Paper Tray....104
Changing to a Size That Is Not Automatically Detected....108
Changing Paper Thickness Settings....111
Recommended Paper Sizes and Types....113
Envelopes....119
Thick Paper....121
Unusable Paper....122
Paper Storage....124

4. Adding Toner and Staples

Adding Toner....125

Replacing Toner....126
Sending Faxes or Scanned Documents When Toner Has Run Out....127
Used Toner....127
Adding Staples....129
Adding Staples to Finisher SR3050....129
Adding Staples to Finisher SR790....130
Adding Staples to Booklet Finisher SR3000....131
Adding Staples to Booklet Finisher SR3020....132
Adding Staples to Booklet Finisher SR3020 (Saddle Stitch)....133
Adding Staples to Finisher SR3030....134
Replacing the Stamp Cartridge....136
Replacing the Stamp Cartridge of Type 1 and 2....136
Replacing the Stamp Cartridge of Type 3 and 4....138

5. Entering Text

Entering Text....141
Available Characters....141
Keys....141
How to Enter Text....142

6. On-screen Operating Instructions

Formats of the Operating Instructions....145
Reading the HTML Manuals on the CD-ROMs....146
Installing and Opening the HTML Manuals....147
Reading the PDF Manuals on the CD-ROMs....149

7. Remarks

Dos and Don'ts....151
Saving Color Copies....152
Where to Put Your Machine....153
Machine Environment....153
Power Connection....156
Maintaining Your Machine....158
Cleaning the Machine....158
Cleaning the Exposure Glass....158
Cleaning the Auto Reverse Document Feeder....158

Cleaning the One-pass Duplex Scanning ADF....159
Cleaning the Dustproof Glass....160
Cleaning the Power Cord Plug....161
Backing Up Hard Disk Data....162
Counter....163
Inquiry....164

8. Appendix

Software and Utilities Included on the CD-ROM....167
Viewing the Contents of the CD-ROM....167
Printer Drivers for This Machine....167
TWAIN Driver....168
LAN-Fax Driver....169
Specifications for the Main Unit....171
For Users of Type 1 and 2....171
For Users of Type 3 and 4....175
Auto Reverse Document Feeder for Type 1 and 2....180
Auto Reverse Document Feeder for Type 3 and 4....180
One-pass Duplex Scanning ADF....181
Document Server....181
Specifications for Finisher SR790 (1000-sheet) (Optional)....182
Finisher Upper Tray....182
Finisher Shift Tray....182
Specifications for Finisher SR3030 (3000-sheet) (Optional)....184
Finisher Upper Tray....184
Finisher Shift Tray....184
Specifications for Finisher SR3050 (500-sheet) (Optional)....186
Specifications for Booklet Finisher SR3020 (2000-sheet-Booklet) (Optional)....188
Finisher Upper Tray....188
Finisher Shift Tray....188
Finisher Booklet Tray....189
Specifications for Booklet Finisher SR3000 (1000-sheet-Booklet) (Optional)....191
Finisher Upper Tray....191
Finisher Shift Tray....191

Finisher Booklet Tray....192
Specifications for Punch Unit (Finisher SR3030, Booklet Finisher SR3020) (Optional)....194
Specifications for Punch Unit (Booklet Finisher SR3000) (Optional)....195
Specifications for Lower Paper Tray (Optional)....196
Specifications for Lower Paper Trays (Optional)....197
Specifications for the Small Size Paper Tray (Optional)....198
Specifications for Tray 3 (LCT) (Optional)....199
Specifications for Large Capacity Tray (LCT) (Optional)....200
Specifications for Bridge Unit (Optional)....201
Specifications for Internal Tray 2 (Optional)....202
Specifications for Internal Shift Tray (Optional)....203
Specifications for External Tray (Optional)....204
Specifications for IEEE 1284 Interface Board (Optional)....205
Specifications for Wireless LAN Board (Optional)....206
Specifications for Gigabit Ethernet (Optional)....207
Trademarks....208
INDEX....211

Manuals for This Machine

Read this manual carefully before you use this machine.

Refer to the manuals that are relevant to what you want to do with the machine.

Important

- **Media differ according to manual.**
- **The printed and electronic versions of a manual have the same contents.**
- **Adobe Acrobat Reader/Adobe Reader must be installed in order to view the manuals as PDF files.**
- **A Web browser must be installed in order to view the html manuals.**

About This Machine

Before using the machine, be sure to read the section of this manual entitled Safety Information.

This manual introduces the machine's various functions. It also explains the control panel, preparation procedures for using the machine, how to enter text, how to install the CD-ROMs provided, and how to replace paper, toner, staples, and other consumables.

Troubleshooting

Provides a guide for resolving common usage-related problems.

Copy and Document Server Reference

Explains Copier and Document Server functions and operations. Also refer to this manual for explanations on how to place originals.

Facsimile Reference

Explains Facsimile functions and operations.

Printer Reference

Explains Printer functions and operations.

Scanner Reference

Explains Scanner functions and operations.

Network and System Settings Reference

Explains how to connect the machine to a network, configure and operate the machine in a network environment, and use the software provided. Also explains how to change User Tools settings and how to register information in the Address Book.

Security Reference

This manual is for administrators of the machine. It explains security functions that you can use to prevent unauthorized use of the machine, data tampering, or information leakage. For enhanced security, we recommend that you first make the following settings:

- Install the Device Certificate.
- Enable SSL (Secure Sockets Layer) Encryption.

- Change the user name and password of the administrator using Web Image Monitor.

For details, see “Setting up the Machine”, Security Reference.

Be sure to read this manual when setting the enhanced security functions, or user and administrator authentication.

PostScript 3 Supplement

Explains how to set up and use PostScript 3.

VM Card Extended Feature Settings Device Reference

Explains how to set up the extended features settings with the machine.

VM Card Extended Feature Settings Web Reference

Explains how to set up the extended features settings using Web Image Monitor.

Other manuals

- UNIX Supplement
- Quick Reference Copy Guide
- Quick Reference Printer Guide
- Quick Reference Fax Guide
- Quick Reference Scanner Guide
- App2Me Start Guide

Note

- Manuals provided are specific to machine types.
- For “UNIX Supplement”, please visit our Web site or consult an authorized dealer. This manual includes descriptions of functions and settings that might not be available on this machine.
- The following software products are referred to using general names:

Product name	General name
ScanRouter EX Professional *1 and ScanRouter EX Enterprise *1	the ScanRouter delivery software

*1 Optional

Manuals List

Manual Name	Printed Manuals Provided	HTML Manuals Provided	PDF Manuals Provided
About This Machine	Yes	Yes	Yes
Troubleshooting	Yes	Yes	Yes
Copy and Document Server Reference	No	Yes	Yes
Facsimile Reference	No	Yes	Yes
Printer Reference	No	Yes	Yes
Scanner Reference	No	Yes	Yes
Network and System Settings Reference	No	Yes	Yes
Security Reference	No	Yes	Yes
PostScript 3 Supplement	No	Yes	Yes
VM Card Extended Feature Settings Device Reference	No	Yes	Yes
VM Card Extended Feature Settings Web Reference	No	Yes	Yes

What You Can Do with This Machine

This section introduces the features of this machine.

Note

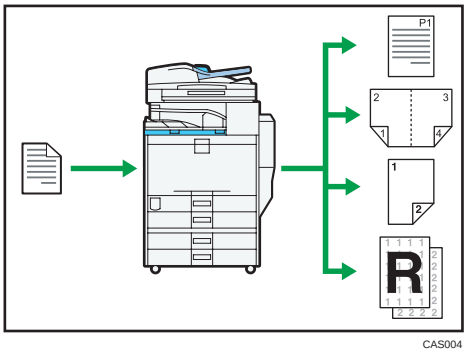
- For details about options, see “Options”.

Reference

- p.63 "Options"

Using This Machine as a Copier

You can make copies of originals.



CAS004

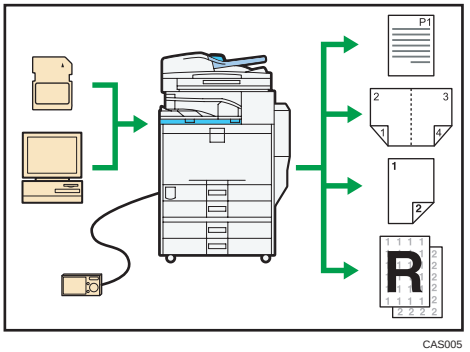
- You can make copies in full color. You can switch the color copy mode depending on the type of originals used and the desired finish.
- You can print stamps on copies. Stamps can include background numbers, scanned images, dates, and page numbers.
- You can adjust the color tones and image quality of your copies.
- You can reduce or enlarge the copy image. With Auto Reduce / Enlarge, the machine automatically detects the original size, and then selects an appropriate reproduction ratio based on the paper size you select. If the orientation in which your original is placed is different from that of the paper you are copying onto, the machine rotates the original image by 90 degrees and fits it on the copy paper.
- Copier functions such as Duplex, Combine, Booklet, and Magazine allow you to save on paper by copying multiple pages onto single sheets.
- You can copy onto various types of paper such as envelopes and OHP transparencies.
- The optional finisher allows you to sort, staple, and punch holes in your copies.

Reference

- See Copy and Document Server Reference.

Using This Machine as a Printer

You can print documents created in applications.



CAS005

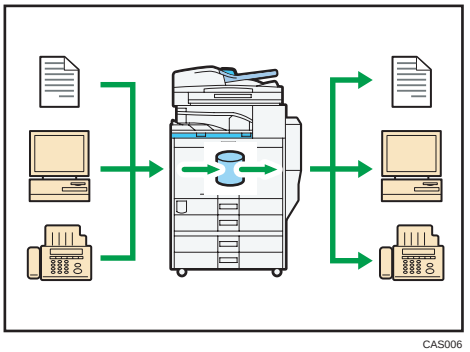
- This machine supports network and local connections.
- If the optional media slot or the optional PostScript 3 unit is installed, you can send PDF files directly to the machine for printing, without having to open a PDF application.
- You can print or delete print jobs stored on the machine's hard disk, which have been previously sent from computers using the printer driver. The following types of print jobs can be selected: Sample Print, Locked Print, Hold Print, and Stored Print.
- The optional finisher allows you to collate, staple, and punch holes in your prints.
- If the optional PictBridge card is installed, you can connect a PictBridge-compatible digital camera to this machine using a USB cable. This allows you to print the photographs stored on the camera using the camera's own interface.
- If the optional media slot is installed, you can print files stored on a removable memory device and specify print conditions such as color mode and print size.

Reference

- See Printer Reference.

Utilizing Stored Documents

You can store files scanned in copier, printer, or scanner mode on the machine's hard disk. With Web Image Monitor, you can use your computer to search for, view, print, delete, and send stored files via the network. You can also change print settings and print multiple documents (Document Server).



CAS006

- You can retrieve stored documents scanned in scanner mode.
- Using the file format converter (optional), you can download documents stored in copier, Document Server, or printer mode to your computer.

Reference

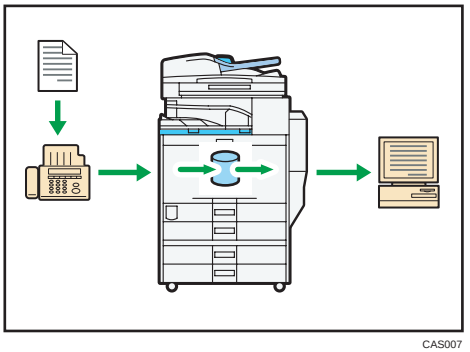
- For details about machine's settings, see “Network Settings Required to Use Document Server”, Network and System Settings Reference.
- For details about Document Server in copier mode, see “Storing Data in the Document Server”, Copy and Document Server Reference.
- For details about Document Server in printer mode, see “Saving and Printing Using the Document Server”, Printer Reference.
- For details about Document Server in fax mode, see “Storing a Document”, Facsimile Reference.
- For details about Document Server in scanner mode, see “Storing Files Using the Scanner Function”, Scanner Reference.
- For details about Document Server, see “Document Server”, Copy and Document Server Reference.

Paperless Fax Transmission and Reception

You can send and receive fax messages without printing them.

Reception

You can store and save received fax documents as electronic formats in the machine's hard disk without printing them.



CAS007

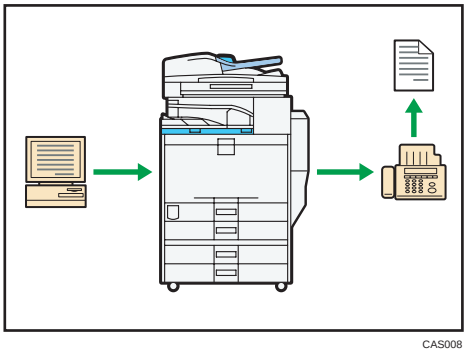
You can use Web Image Monitor to check, print, delete, retrieve, or download documents using your computer (Storing received documents).

Reference

- See “Confirming/Printing/Deleting Received and Stored Documents”, Facsimile Reference .

Transmission

You can send a fax from your computer over the network (Ethernet or wireless LAN) to this machine, which then forwards the fax via its telephone connection (LAN-Fax).



CAS008

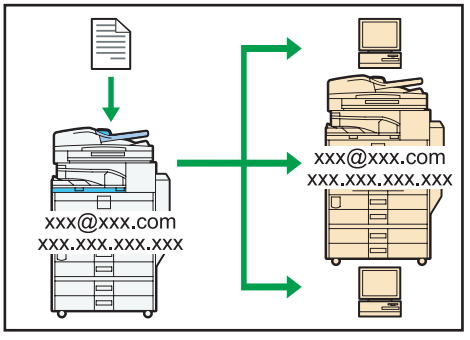
- To send a fax, print from the Windows application you are working with, select LAN-Fax as the printer, and then specify the destination.
- You can also check the sent image data.

Reference

- For details about the machine's settings, see “Network Settings Required to Use the Printer/LAN-Fax”, Network and System Settings Reference .
- For details about how to use the function, see “Fax via Computer”, Facsimile Reference .

Fax Transmission and Reception Over the Internet

You can send and receive faxes over your LAN and the Internet.



E-mail Transmission

This machine converts scanned document images to e-mail format, and transmits and receives this data over the Internet.

- To send a document, specify an e-mail address instead of dialing the destination telephone number (Internet Fax and e-mail transmission).
- This machine can receive e-mail messages via Internet Fax or from computers (Internet Fax Reception and Mail to Print).
- Internet Fax compatible machines and computers that have e-mail addresses can receive e-mail messages via Internet Fax.

IP-Fax

The IP-Fax function sends or receives documents between two facsimiles directly via a TCP/IP network.

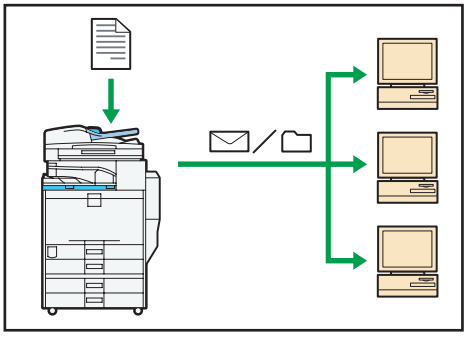
- To send a document, specify an IP address or host name instead of a fax number (IP-Fax Transmission).
- This machine can receive documents sent via Internet Fax (IP-Fax Reception).
- Using a VoIP gateway, this machine can send to G3 facsimiles connected to the public switched telephone network (PSTN).

Reference

- For details about settings, see "Network Settings Required to Use Internet Fax", Network and System Settings Reference.
- For details about how to transmit and receive documents over the Internet, see "Transmission" and "Reception", Facsimile Reference.

Using the Facsimile and the Scanner in a Network Environment

You can use a facsimile and a scanner over the network.



CAS010

- You can send scan files to a specified destination using e-mail (Sending scan files by e-mail).
- You can send scan files directly to folders (Sending scan files by Scan to Folder).
- You can use this machine as a delivery scanner for the ScanRouter delivery software*1 (Network delivery scanner). You can save scan files in the delivery server or send them to a folder in a computer on the same network.
- You can use Web Services on Devices (WSD) to send scan files to a client computer.

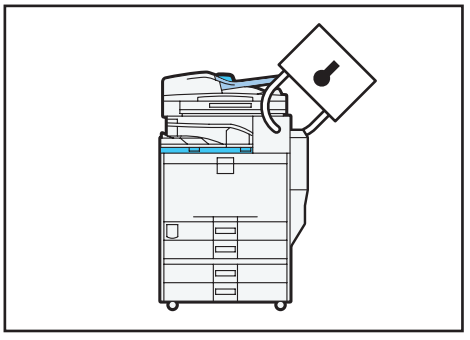
*1 For details to purchase ScanRouter delivery software, contact your local dealer.

Reference

- For details about sending scan files by e-mail, see "Specifying a Destination", Facsimile Reference, and "Sending Scan Files by E-mail", Scanner Reference.
- For details about file storage, see Scanner Reference.
- For details about sending scan files by Scan to Folder, see "Specifying a Destination", Facsimile Reference, and "Sending Scan Files to Folders", Scanner Reference.
- For details about the machine's settings for network delivery scanner, see "Network Settings Required to Use the Network Delivery Scanner", Network and System Settings Reference.
- For details about how to use the network delivery scanner function, see "Delivering Scan Files", Scanner Reference.
- For details about sending using WSD, see "Sending Scan Files Using WSD", Scanner Reference.

Administrating the Machine/Protecting Documents (Security Functions)

You can prevent information leakage by managing the machine and protecting documents.



CAS011

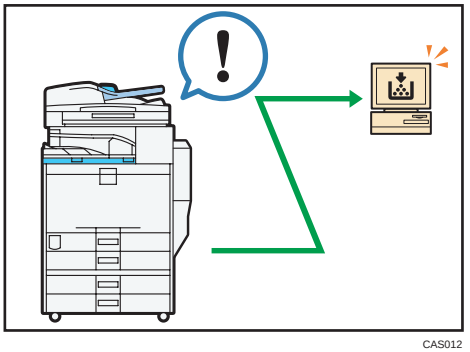
- You can protect documents from unauthorized access and stop them from being copied without permission.
- You can control the use of the machine, as well as prevent machine settings from being changed without authorization.
- By setting passwords, you can prevent unauthorized access via the network.
- You can erase the data on the hard disk to prevent the information from leaking out.
- You can limit the volume of the usage of the machine for each user.

Reference

- See Security Reference.

Monitoring and Setting the Machine Via Computer

You can change the machine's settings and monitor its status from a connected computer.



CAS012

- Web Image Monitor lets you configure and operate the machine using a Web browser on a computer.
- Using Web Image Monitor, you can register information in the Address Book, specify the machine's settings, and check the machine's status with ease.

- Using Web Image Monitor, you can check and specify the initial settings (System Settings, Printer Features, network settings, security settings/certificate management, and e-mail notification), control print jobs, display the print job journal, and protect the data in the machine using authentication.

Notice

Important

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

For good copy quality, the manufacturer recommends that you use genuine toner from the manufacturer.

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

How to Read This Manual

Symbols

This manual uses the following symbols:

Important

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

Note

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys on the machine's display or control panels.

Indicates instructions in book form.

Indicates instructions in sheet form.

Indicates instructions stored in a file on a provided CD-ROM.

Machine Types

The model names of the machines do not appear in the following pages. Check the type of your machine before reading this manual.

- Type 1: C9130/LD630C/Aficio MP C3001/C9130G/LD630CG/Aficio MP C3001G
- Type 2: C9135/LD635C/Aficio MP C3501/C9135G/LD635CG/Aficio MP C3501G
- Type 3: C9145/C9145A/LD645C/LD645CA/Aficio MP C4501/Aficio MP C4501A/ C9145G/C9145AG/LD645CG/LD645CAG/Aficio MP C4501G/Aficio MP C4501AG
- Type 4: C9155/C9155A/LD655C/LD655CA/Aficio MP C5501/Aficio MP C5501A/ C9155G/C9155AG/LD655CG/LD655CAG/Aficio MP C5501G/Aficio MP C5501AG

Certain types might not be available in some countries. For details, please contact your local dealer.

Names of Major Items

Major items of this machine are referred to as follows in this manual:

- Auto Reverse Document Feeder → ARDF
- Auto Document Feeder → ADF (in this manual, "ADF" refers to the ARDF and the one-pass duplex scanning ADF)
- Large capacity tray (optional) → LCT
- Envelope Feeder EF3000 → Small size paper tray

Notes

Contents of this manual are subject to change without prior notice.

Colors on color keys or the color circle may differ slightly from the colors of actual copies.

The color samples in this manual may differ slightly from the colors of actual copies.

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Depending on which country you are in, certain units may be optional. For details, please contact your local dealer.

Safety Information

When using this machine, the following safety precautions should always be followed.

Safety During Operation

In this manual, the following important symbols are used:

⚠WARNING
Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.

⚠CAUTION
Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

Safety Precautions to Be Followed

This section explains safety precautions that should always be followed when using this machine.

Environments where the machine can be used

This section explains safety precautions about environments where the machine can be used.

⚠WARNING

- Do not use flammable sprays or solvents in the vicinity of this machine. Doing so could result in fire or electric shock.

⚠WARNING

- Do not place vases, plant pots, cups, toiletries, medicines, small metal objects, or containers holding water or any other liquids, on or close to this machine. Fire or electric shock could result from spillage or if such objects or substances fall inside this machine.

⚠CAUTION

- Keep the machine away from humidity and dust. Otherwise a fire or an electric shock might occur.

⚠CAUTION

- Do not place the machine on an unstable or tilted surface. If it topples over, an injury might occur.

⚠CAUTION

- Do not place heavy objects on the machine. Doing so can cause the machine to topple over, possibly resulting in injury.

⚠CAUTION

- Make sure the room where you are using the machine is well ventilated and spacious. Good ventilation is especially important when the machine is used heavily.

⚠CAUTION

- Keep the machine away from salt-bearing air and corrosive gases. Also, do not install the machine in places where chemical reactions are likely (laboratories, etc.), as doing so will cause the machine to malfunction.

⚠CAUTION

- Do not obstruct the machine's vents. Doing so risks fire caused by overheated internal components.

⚠CAUTION

- Machine sound levels exceeding LWAd > 63 dB (A) are not suitable for desk work environments, so place the machine in another room.

Handling power cords and power plugs

This section explains safety precautions about handling power cords and power plugs.

⚠WARNING

- Do not use any power sources other than those that match the specifications shown in “Specifications for the Main Unit” in this manual. Doing so could result in fire or electric shock.

⚠WARNING

- Do not use any frequencies other than those that match the specifications shown. Doing so could result in fire or electric shock.

⚠WARNING

- Do not use multi-socket adaptors. Doing so could result in fire or electric shock.

⚠WARNING

- Do not use extension cords. Doing so could result in fire or electric shock.

⚠WARNING

- Do not use power cords that are damaged, broken, or modified. Also, do not use power cords that have been trapped under heavy objects, pulled hard, or bent severely. Doing so could result in fire or electric shock.

⚠WARNING

- Touching the prongs of the power cable's plug with anything metallic constitutes a fire and electric shock hazard.

⚠WARNING

- The supplied power cord is for use with this machine only. Do not use it with other appliances. Doing so could result in fire or electric shock.

⚠WARNING

- It is dangerous to handle the power cord plug with wet hands. Doing so could result in electric shock.

⚠WARNING

- Disconnect the power plug (by pulling the plug, not the cable) if the power cable or plug becomes frayed or otherwise damaged.

⚠WARNING

- If the power cord is damaged (exposure of the core, disconnection, etc.), contact your service representative to change a new one. Operating the machine with a damaged power cord may cause an electric shock or fire.

⚠CAUTION

- Be sure to push the plug of the power cord fully into the wall outlet. Partially inserted plugs create an unstable connection that can result in unsafe buildup of heat.

⚠CAUTION

- If this machine is not going to be used for several days or longer at a time, disconnect its power cord from the wall outlet.

⚠CAUTION

- When disconnecting the power cord from the wall outlet, always pull the plug, not the cord. Pulling the cord can damage the power cord. Use of damaged power cords could result in fire or electric shock.

⚠CAUTION

- Be sure to disconnect the plug from the wall outlet and clean the prongs and the area around the prongs at least once a year. Allowing dust to build up on the plug constitutes a fire hazard.

⚠CAUTION

- When performing maintenance on the machine, always disconnect the power cord from the wall outlet.

Handling the main machine

This section explains safety precautions about handling the main machine.

⚠WARNING

- Be sure to locate the machine as close as possible to a wall outlet. This will allow easy disconnection of the power cord in the event of an emergency.

⚠WARNING

- If the machine emits smoke or odours, or if it behaves unusually, you must turn off its power immediately. After turning off the power, be sure to disconnect the power cord plug from the wall outlet. Then contact your service representative and report the problem. Do not use the machine. Doing so could result in fire or electric shock.

⚠WARNING

- If metal objects, or water or other fluids fall inside this machine, you must turn off its power immediately. After turning off the power, be sure to disconnect the power cord plug from the wall outlet. Then contact your service representative and report the problem. Do not use the machine. Doing so could result in fire or electric shock.

⚠WARNING

- Do not touch this machine if a lightning strike occurs in the immediate vicinity. Doing so could result in electric shock.

⚠WARNING

- Keep the polythene materials (bags, etc.) supplied with this machine away from babies and small children at all times. Suffocation can result if polythene materials are brought into contact with the mouth or nose.

⚠CAUTION

- Unplug the power cord from the wall outlet before you move the machine. While moving the machine, take care that the power cord is not damaged under the machine. Failing to take these precautions could result in fire or electric shock.

⚠CAUTION

- If you have to move the machine when the optional paper tray unit is attached, do not push on the main unit's top section. Doing so can cause the optional paper tray unit to detach, possibly resulting in injury.

⚠CAUTION

- After you move the machine, use the caster fixture to fix it in place. Otherwise the machine might move or come down to cause an injury.

⚠CAUTION

- Contact your service representative if you need to lift the machine (such as when relocating it to another floor). Do not attempt to lift the machine without the assistance of your service representative. The machine will be damaged if it topples or is dropped, resulting in malfunction and risk of injury to users.

⚠CAUTION

- Do not look into the lamp. It can damage your eyes.

⚠CAUTION

- Protect the machine from dampness or wet weather, such as rain and snow.

⚠CAUTION

- For environmental reasons, do not dispose of the machine or expended supply waste at household waste collection points. Disposal can take place at an authorized dealer.

Handling the machine's interior

This section explains safety precautions about handling the machine's interior.

⚠WARNING

- Do not remove any covers or screws other than those explicitly mentioned in this manual. Inside this machine are high voltage components that are an electric shock hazard and laser components that could cause blindness. Contact your sales or service representative if any of the machine's internal components require maintenance, adjustment, or repair.
- Do not attempt to disassemble or modify this machine. Doing so risks burns and electric shock. Note again that exposure to the laser components inside this machine risks blindness.

⚠CAUTION

- Some of this machine's internal components get very hot. For this reason, take care when removing misfed paper. Not doing so could result in burns.

⚠CAUTION

- The inside of the machine could be very hot. Do not touch the parts with a label indicating the "hot surface". Otherwise, an injury might occur.

⚠CAUTION

- When loading paper, take care not to trap or injure your fingers.

⚠CAUTION

- Keep your hands clear of the booklet finisher tray when removing misfed paper, pulling out or pushing in the finisher's staple unit. You can trap and injure your fingers if you do not.

⚠CAUTION

- During operation, rollers for transporting the paper and originals revolve. A safety device has been installed so that the machine can be operated safely. But take care not to touch the machine during operation. Otherwise, an injury might occur.

⚠CAUTION

- If the machine's interior is not cleaned regularly, dust will accumulate. Fire and breakdown can result from heavy accumulation of dust inside this machine. Contact your sales or service representative for details about and charges for cleaning the machine's interior.

Handling the machine's supplies

This section explains safety precautions about handling the machine's supplies.

⚠WARNING

- Do not incinerate toner (new or used) or toner containers. Doing so risks burns. Toner will ignite on contact with naked flame.

⚠WARNING

- Do not store toner (new or used) or toner containers anywhere near naked flames. Doing so risks fire and burns. Toner will ignite on contact with naked flame.

⚠WARNING

- Do not incinerate spilled toner or used toner. Toner dust might ignite when exposed to an open flame.

⚠WARNING

- Keep the polythene materials (bags, gloves, etc.) supplied with this machine away from babies and small children at all times. Suffocation can result if polythene materials are brought into contact with the mouth or nose.

⚠CAUTION

- Do not crush or squeeze toner containers. Doing so can cause toner spillage, possibly resulting in dirtying of skin, clothing, and floor, and accidental ingestion.

⚠CAUTION

- Keep toner (used or unused) and toner containers out of reach of children.

⚠CAUTION

- If toner or used toner is inhaled, gargle with plenty of water and move into a fresh air environment. Consult a doctor if necessary.

⚠CAUTION

- If toner or used toner gets into your eyes, flush immediately with large amounts of water. Consult a doctor if necessary.

⚠CAUTION

- If toner or used toner is swallowed, dilute by drinking a large amount of water. Consult a doctor if necessary.

⚠CAUTION

- When removing jammed paper or replacing toner, avoid getting toner (new or used) on your clothing. If toner comes into contact with your clothing, wash the stained area with cold water. Hot water will set the toner into the fabric and make removing the stain impossible.

⚠CAUTION

- When removing jammed paper or replacing toner, avoid getting toner (new or used) on your skin. If toner comes into contact with your skin, wash the affected area thoroughly with soap and water.

⚠CAUTION

- Do not attempt to print on stapled sheets, aluminum foil, carbon paper, or any kind of conductive paper. Doing so risks fire.

Other safety precautions

This section explains other safety precautions.

⚠CAUTION

- A network interface cable with a ferrite core must be used for RF interference suppression.

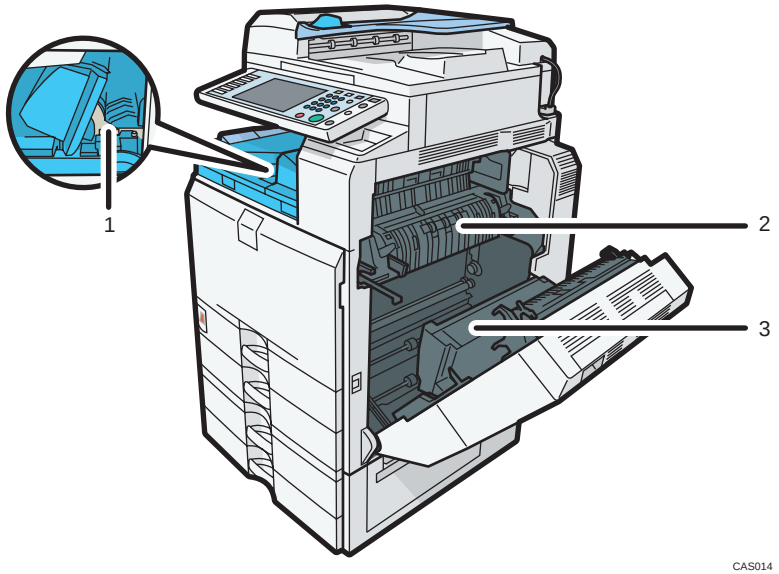
Safety Labels of This Machine

This section explains the machine's safety information labels.

Positions of WARNING and CAUTION labels for Users of Type 1 and 2

This machine has labels for ⚠WARNING and ⚠CAUTION at the positions shown below. For safety, please follow the instructions and handle the machine as indicated.

Main unit



CAS014

1

CAS015

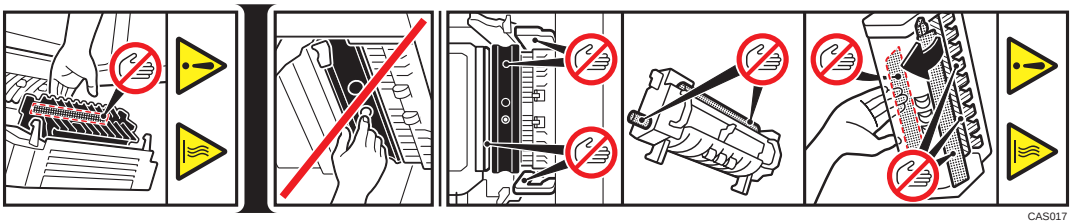
Do not touch the parts a label indicates. The inside of the bridge unit could be very hot. Caution should be taken when removing misfed paper.

2

CAS016

High temperature parts. Wait a while to allow the Fusing Unit to cool down before removing misfed paper.

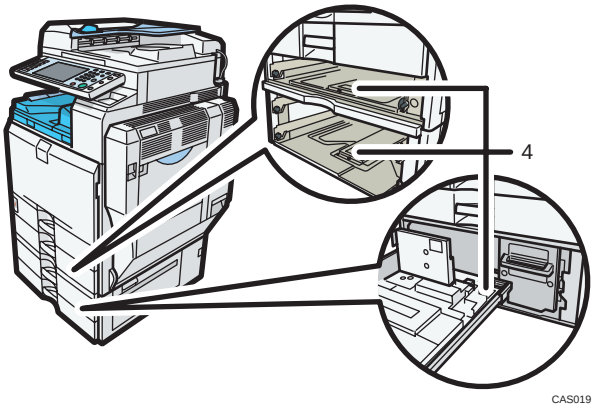
3



CAS017

Do not touch the parts a label indicates. The inside of the machine could be very hot. Caution should be taken when removing misfed paper.

Paper tray



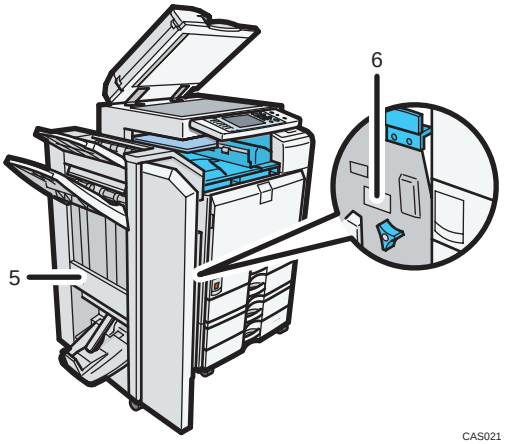
CAS019

4

CAS020

The inside of the machine could be very hot. Do not touch the parts which a label is put on. Otherwise, an injury might occur.

Booklet Finisher SR3000



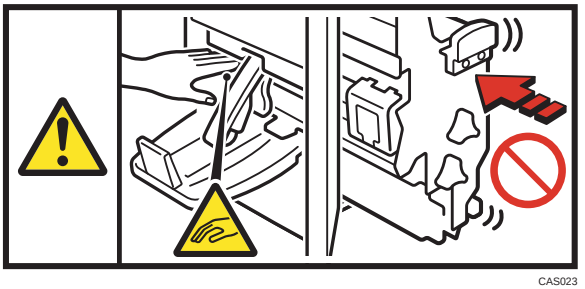
CAS021

5

CAS022

Keep your hands clear of the booklet finisher tray when pulling out or pushing in the finisher's staple unit, or removing paper jam. You might trap your fingers if you do not. Take care not to touch the booklet finisher tray during operation. Otherwise, an injury might occur.

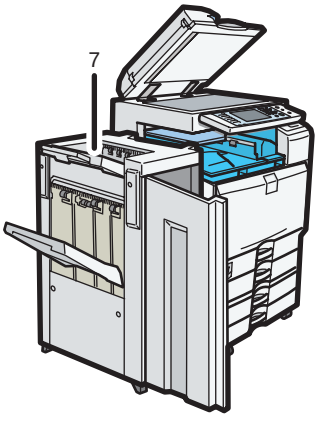
6



CAS023

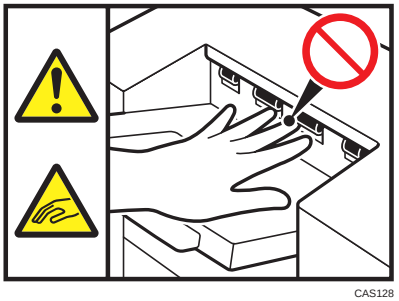
Keep your hands clear of the booklet finisher tray when pulling out or pushing in the finisher's staple unit, or removing paper jam. You might trap your fingers if you do not.

Finisher SR790



CAS127

7



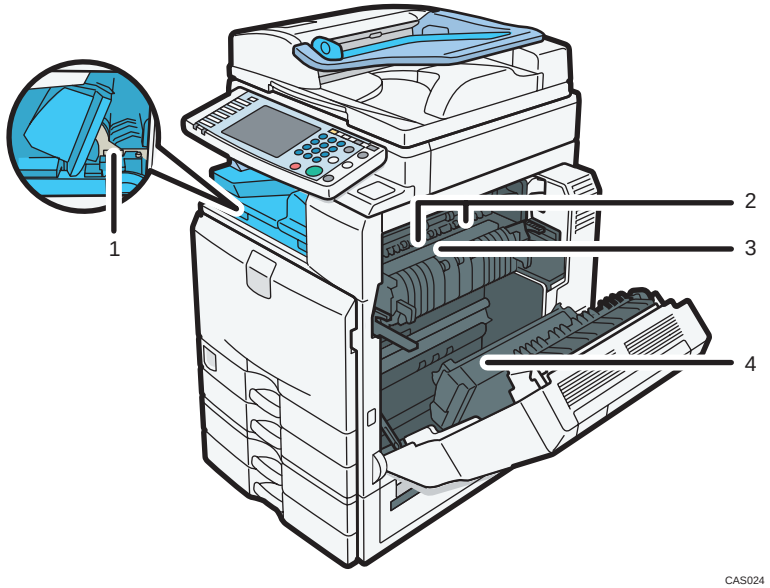
CAS128

During operation, rollers for transporting the paper revolve. Take care not to touch rollers during operation. Otherwise, an injury might occur.

Positions of WARNING and CAUTION labels for Users of Type 3 and 4

This machine has labels for ⚠WARNING and ⚠CAUTION at the positions shown below. For safety, please follow the instructions and handle the machine as indicated.

Main unit



CAS024

1

CAS015

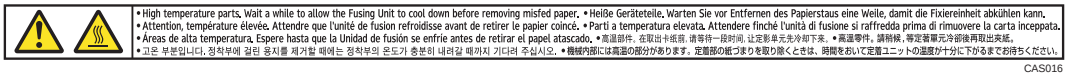
Do not touch! Surface may be very hot.

2

CAS025

Do not touch the parts a label indicates. The inside of the machine could be very hot. Caution should be taken when removing misfed paper.

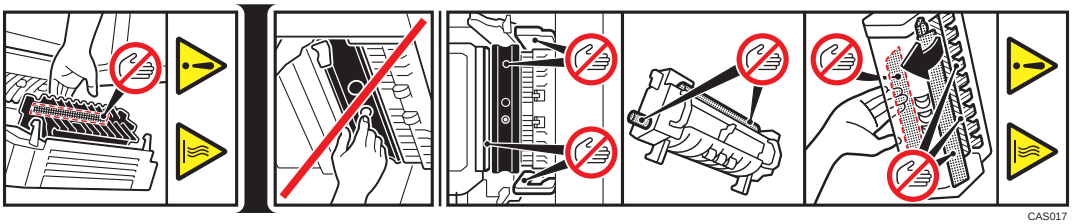
3



CAS016

High temperature parts. Wait a while to allow the Fusing Unit to cool down before removing misfed paper.

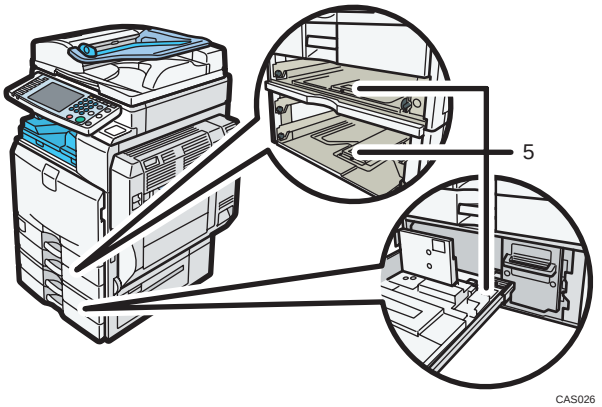
4



CAS017

Do not touch the parts a label indicates. The inside of the machine could be very hot. Caution should be taken when removing misfed paper.

Paper tray



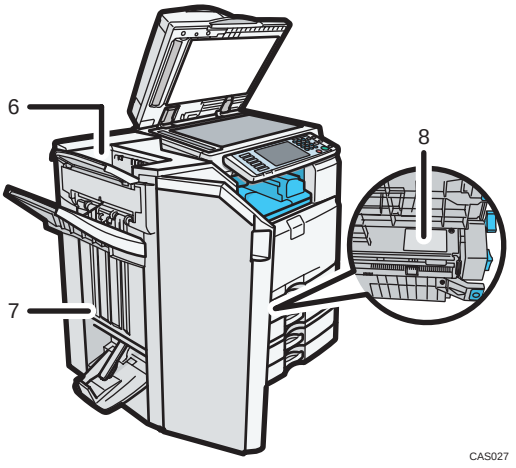
CAS026

5

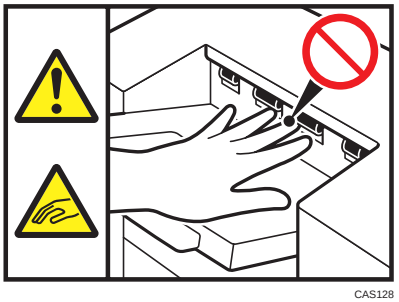
CAS020

The inside of the machine could be very hot. Do not touch the parts which a label is put on. Otherwise, an injury might occur.

Finisher SR3030 or Booklet Finisher SR3020



6

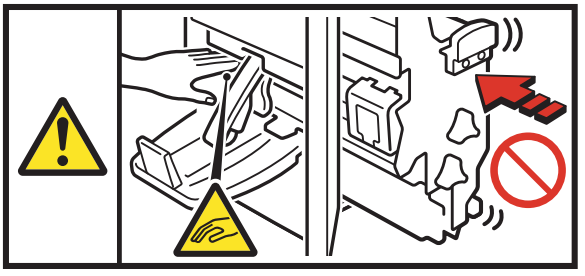


During operation, rollers for transporting the paper revolve. Take care not to touch rollers during operation. Otherwise, an injury might occur.

7

Keep your hands clear of the booklet finisher tray when pulling out or pushing in the finisher's staple unit, or removing paper jam. You might trap your fingers if you do not. Take care not to touch the booklet finisher tray during operation. Otherwise, an injury might occur.

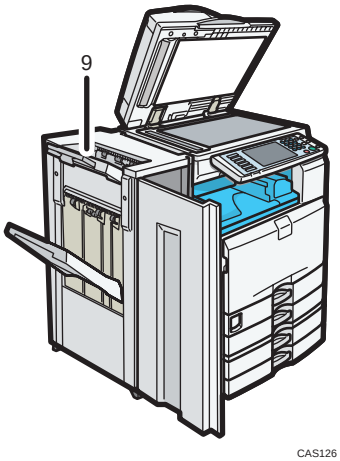
8



CAS023

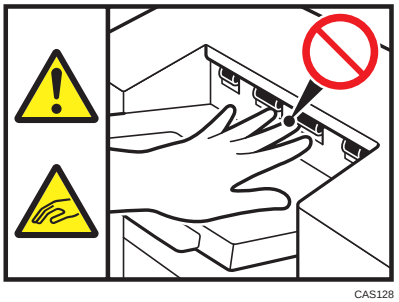
Keep your hands clear of the booklet finisher tray when pulling out or pushing in the finisher's staple unit, or removing paper jam. You might trap your fingers if you do not.

Finisher SR790



CAS126

9



CAS128

During operation, rollers for transporting the paper revolve. Take care not to touch rollers during operation. Otherwise, an injury might occur.

Power Switch Symbols

The meanings of the symbols for the switches on this machine are as follows:

- I : POWER ON
- ⏻ : STANDBY

ENERGY STAR Program

ENERGY STAR® Program Requirements for Imaging Equipment

This company is a participant in the ENERGY STAR® Program.

This machine is compliant with the regulations specified by the ENERGY STAR® Program.

The ENERGY STAR® Program Requirements for Imaging Equipment encourage energy conservation by promoting energy efficient computers and other office equipment.

The program backs the development and dissemination of products that feature energy saving functions.

It is an open program in which manufacturers participate voluntarily.

Targeted products are computers, monitors, printers, facsimiles, copiers, scanners, and multi-function devices. Energy Star standards and logos are internationally uniform.

Note

- For details about the “default delay time”, see “Energy Saving Functions”.

Reference

- p.40 "Energy Saving Functions"

Energy Saving Functions

To reduce its power consumption, this machine has the following functions:

Low Power Mode

- If this machine remains idle for a specified period, it automatically reduces its electrical consumption.
- The default period the machine waits before entering Low Power Mode is "Off". This default time can be changed.

Sleep Mode

- If this machine is already in Low Power Mode and remains idle for a specified period, it automatically enters Sleep Mode to further reduce its electrical consumption.
- The default delay time the machine waits before entering Sleep Mode is 1 minute. This default time can be changed.
- The machine can print jobs from computers and receive faxes while in Sleep Mode.

Specification for type 1 and 2

	Type 1	Type 2
Reduced Electrical Consumption by Low Power Mode	92 W	92 W
Time of Switch into Low Power Mode	Off	Off
Time of Switch out from Low Power Mode	6 seconds	6 seconds
Reduced Electrical Consumption by Sleep Mode	1.2 W	1.2 W
Time of Switch into Sleep Mode	1 minute	1 minute
Time of Switch out from Sleep Mode	13 seconds	13 seconds

Specification for type 3 and 4 (models equipped with the ARDF)

	Type 3	Type 4
Reduced Electrical Consumption by Low Power Mode	99 W	99 W
Time of Switch into Low Power Mode	Off	Off
Time of Switch out from Low Power Mode	10 seconds	10 seconds

	Type 3	Type 4
Reduced Electrical Consumption by Sleep Mode	1.2 W	1.2 W
Time of Switch into Sleep Mode	1 minute	1 minute
Time of Switch out from Sleep Mode	19 seconds	32 seconds

Specification for type 3 and 4 (models equipped with the one-pass duplex scanning ADF)

	Type 3	Type 4
Reduced Electrical Consumption by Low Power Mode	111 W	111 W
Time of Switch into Low Power Mode	Off	Off
Time of Switch out from Low Power Mode	10 seconds	10 seconds
Reduced Electrical Consumption by Sleep Mode	1.2 W	1.2 W
Time of Switch into Sleep Mode	1 minute	1 minute
Time of Switch out from Sleep Mode	19 seconds	32 seconds

Note

- Specifications can vary depending on which options are installed on the machine.
- For details about how to change the default interval, see "Timer Settings", Network and System Settings Reference.
- Depending on which Embedded Software Architecture application is installed on it, the machine might take longer than indicated to enter Sleep Mode.

Laws and Regulations

Legal Prohibition

Do not copy or print any item for which reproduction is prohibited by law.

Copying or printing the following items is generally prohibited by local law:

bank notes, revenue stamps, bonds, stock certificates, bank drafts, checks, passports, driver's licenses.

The preceding list is meant as a guide only and is not inclusive. We assume no responsibility for its completeness or accuracy. If you have any questions concerning the legality of copying or printing certain items, consult with your legal advisor.

This machine is equipped with a function that prevents making counterfeit bank bills. Due to this function the original images similar to bank bills may not be copied properly.

Laser Safety for Users of Type 1 and 2

CDRH Regulations

This equipment complies with requirements of 21 CFR subchapter J for class I laser products. This equipment contains four AlGaInP laser diodes, 9 milliwatts, 648 - 663 nanometer wavelength for each emitter.

Caution:

Use of controls or adjustments or performance of procedures other than those specified in this manual might result in hazardous radiation exposure.

Laser Safety for Users of Type 3 and 4

CDRH Regulations

This equipment complies with requirements of 21 CFR subchapter J for class I laser products. This equipment contains eight AlGaInP laser diodes, 9 milliwatts, 648 - 663 nanometer wavelength for each emitter.

Caution:

Use of controls or adjustments or performance of procedures other than those specified in this manual might result in hazardous radiation exposure.

Notes to users in the United States of America

FCC Rules and IC Rules

Declaration of Conformity

This device complies with Part 15 of the FCC Rules and RSS-Gen of IC Rules.

Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible party: Ricoh Americas Corporation

Address: 5 Dedrick Place, West Caldwell, NJ 07006

Telephone number: 973-882-2000

Product Name: Multi Function Peripheral

Model Number:

- C9130/LD630C/Aficio MP C3001
- C9135/LD635C/Aficio MP C3501
- C9130G/LD630CG/Aficio MP C3001G
- C9135G/LD635CG/Aficio MP C3501G
- C9145/LD645C/Aficio MP C4501
- C9145A/LD645CA/Aficio MP C4501A
- C9155/LD655C/Aficio MP C5501
- C9155A/LD655CA/Aficio MP C5501A
- C9145G/LD645CG/Aficio MP C4501G
- C9145AG/LD645CAG/Aficio MP C4501AG
- C9155G/LD655CG/Aficio MP C5501G
- C9155AG/LD655CAG/Aficio MP C5501AG

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television

reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio /TV technician for help.

Caution:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Warning:

This device complies with part 15 and 18 of the FCC Rules and RSS-Gen of IC Rules.

Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device must not be co-located or operated in conjunction with any other antenna or transmitter except for Wireless LAN module R-WL54MN (FCC ID: BBP-WLRWL541) which performed colocation testing.

Notes on lamp(s) inside this machine

LAMP(S) INSIDE THIS PRODUCT CONTAIN MERCURY AND MUST BE RECYCLED OR DISPOSED OF ACCORDING TO LOCAL, STATE OR FEDERAL LAWS.

Notes to users in the state of California

Perchlorate Material - special handling may apply, See www.dtsc.ca.gov/hazardouswaste/perchlorate

Important Safety Instructions

When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

- Do not use this product near water, for example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool.
- Avoid using a telephone during an electrical storm. There may be a remote risk of electric shock from lightning.
- Do not use a telephone in the vicinity of a gas leak to report the leak.
- Use only the power cord and batteries indicated in this manual. Do not dispose of batteries in a fire. They may explode. Check with local codes for possible special disposal instructions.

Save these instructions.

IMPORTANTES MESURES DE SÉCURITÉ

Certaines mesures de sécurité doivent être prises pendant l'utilisation de material téléphonique afin de réduire les risques d'incendie, de choc électrique et de blessures. En voici quelques-unes:

- Ne pas utiliser l'appareil près de l'eau, p.ex., près d'une baignoire, d'un lavabo, d'un évier de cuisine, d'un bac à laver, dans un sous-sol humide ou près d'une piscine.
- Éviter d'utiliser le téléphone (sauf s'il s'agit d'un appareil sans fil) pendant un orage électrique. Ceci peut présenter un risque de choc électrique causé par la foudre.
- Ne pas utiliser l'appareil téléphonique pour signaler une fuite de gaz s'il est situé près de la fuite.
- Utiliser seulement le cordon d'alimentation et le type de piles indiqués dans ce manual. Ne pas jeter les piles dans le feu: elles peuvent exploser. Se conformer aux règlements pertinents quant à l'élimination des piles.

Conserver ces instructions.

1. Simple Search

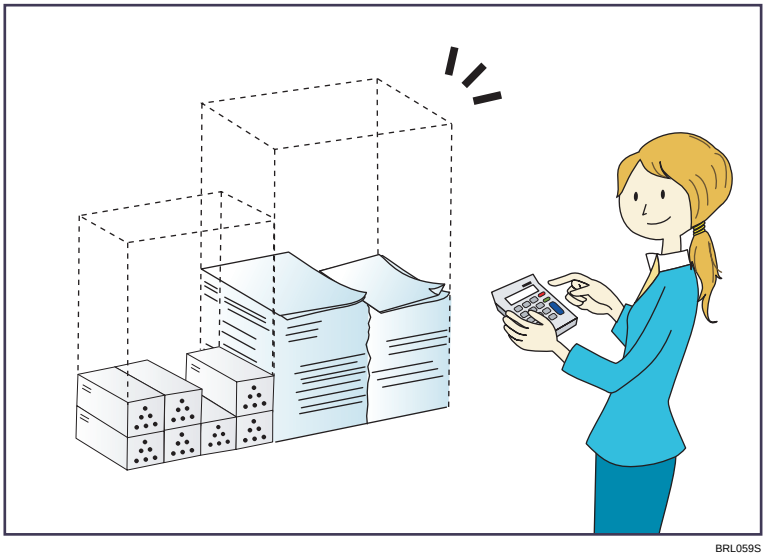
You can search for a procedure either by keyword or by what you want to do.

Searching by What You Want to Do

You can search for a procedure by what you want to do.

I Want to Save my Paper Document!

This section explains the functions and procedures that you can use to reduce your printing and running costs easily.



BRL059S

Printing multi-page documents on both sides of sheets (Duplex Copy)

⇒ See "Duplex Copying", Copy and Document Server Reference.

Printing multi-page documents and received faxes on a single sheet (Combine (Copier/Fax))

⇒ See "Combined Copying", Copy and Document Server Reference.

⇒ See "Combine Two Originals", Facsimile Reference.

Printing received faxes on both sides of sheets (2 Sided Print)

⇒ See "Two-Sided Printing", Facsimile Reference.

Converting received faxes to electronic formats (Paperless Fax)

⇒ See "Confirming/Printing/Deleting Received and Stored Documents", Facsimile Reference.

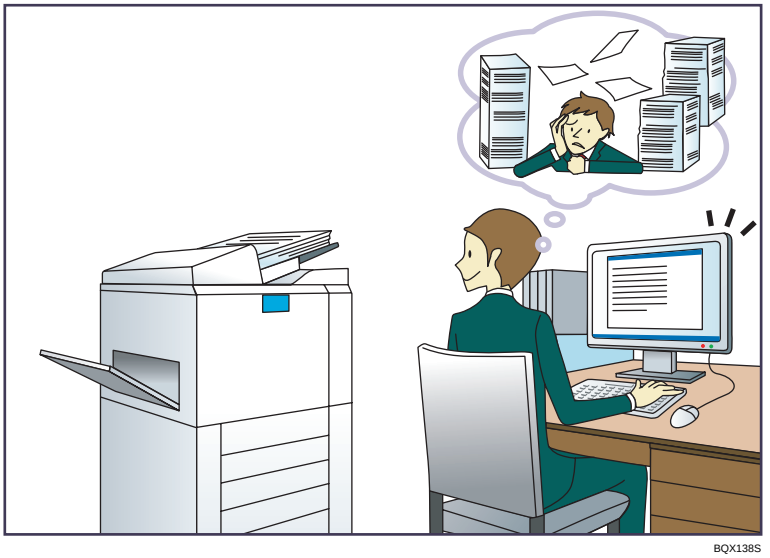
Sending files from the computer without printing them (LAN-Fax)

⇒ See "Sending Fax Documents from Computers", Facsimile Reference.

1

I Want to Convert Documents to Electronic Formats Easily!

This section explains the functions and procedures you can use to convert documents to electronic formats easily.



BQX138S

Sending scan files

⇒ See "Basic Procedure for Sending Scan Files by E-mail", Scanner Reference.

Sending the URL of the folder in which scan files are stored

⇒ See "Sending the URL by E-mail", Scanner Reference.

Storing scan files in a shared folder

⇒ See "Basic Procedure When Using Scan to Folder", Scanner Reference.

Storing scan files on media

⇒ See "Basic Procedure for Saving Scan Files on a Removable Memory Device", Scanner Reference.

Converting transmitted faxes to electronic formats and sending them to a computer

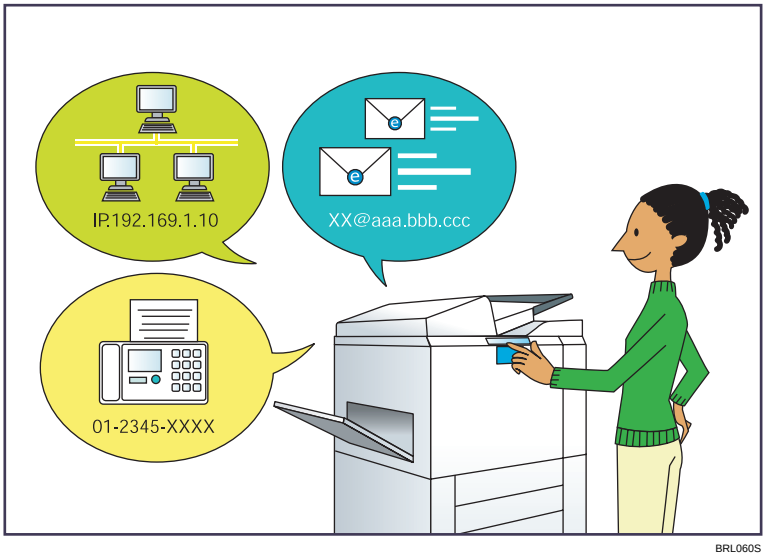
⇒ See "Folder Transmission", Facsimile Reference.

Managing and using documents converted to electronic formats (Document Server)

⇒ See "Relationship between Document Server and Other Functions", Copy and Document Server Reference.

I Want to Register Destinations!

You can find explanations of the functions and procedures that you can use to register destinations easily.



Using the control panel to register destinations in the Address Book

⇒ See "Registering Entered Destinations to the Address Book", Facsimile Reference.

⇒ See "Registering a Directly-Entered Destination in the Address Book", Scanner Reference.

Using Web Image Monitor to register destinations from a computer

⇒ See "To add new receiver", Facsimile Reference.

Downloading destinations registered in the machine to the LAN-Fax driver destination list

⇒ See "Using the Machine's Address Book as the LAN-Fax Destination List", Facsimile Reference.

I Want to Operate the Machine More Effectively!

This section explains the functions and procedures that you can use to operate the machine more effectively.

BQX139S

Registering and using frequently-used settings (Program)

⇒ See “Registering Frequently Used Functions”, Copy and Document Server Reference.

⇒ See “Registering Frequently Used Settings”, Facsimile Reference.

⇒ See “Registering Frequently Used Settings”, Scanner Reference.

Registering frequently-used settings as initial settings (Program as Defaults (Copier/Fax/Scanner))

⇒ See “Changing the Default Functions of the Copy's Initial Display”, Copy and Document Server Reference.

⇒ See “Changing the Default Functions of the Fax's Initial Display”, Facsimile Reference.

⇒ See “Changing the Default Functions of the Scanner's Initial Display”, Scanner Reference.

Searching by Keyword

You can search for a procedure by keyword.

Paper

I want to load paper.

⇒ p.93 "Loading Paper"

I want to change the paper size.

⇒ p.101 "Changing the Paper Size"

I want to know what the paper specifications are.

⇒ p.113 "Recommended Paper Sizes and Types"

The paper has jammed.

⇒ See “Removing Jammed Paper”, Troubleshooting.

I want to change the initial paper settings.

⇒ See “Tray Paper Settings”, Network and System Settings Reference.

Register/Change/Delete

I want to register a fax number.

⇒ See “Registering a Fax Destination”, Network and System Settings Reference.

⇒ See “Registering Destinations in the Address Book”, Facsimile Reference.

I want to register an IP-Fax number.

⇒ See “Registering an IP-Fax Destination”, Network and System Settings Reference.

I want to register an e-mail address.

⇒ See “Registering an E-mail Destination”, Network and System Settings Reference.

I want to register an SMB folder.

⇒ See “Registering an SMB Folder”, Network and System Settings Reference.

I want to register multiple addresses as a group.

⇒ See “Registering Names to a Group”, Network and System Settings Reference.

I want to register frequently-used copier functions.

⇒ See “Registering Frequently Used Functions”, Copy and Document Server Reference.

I want to copy the contents of the machine's Address Book to the LAN-Fax address book.

⇒ See “Using the Machine's Address Book as the LAN-Fax Destination List”, Facsimile Reference .

1

Color

I want to scan a color original (Normal Color Scan)

⇒ See “Specifying Scan Settings”, Scanner Reference .

I want to minimize the amount of storage required when scanning color originals (High Compression PDF)

⇒ See “Specifying the File Type”, Scanner Reference .

Check

I want to display the fax transmission status.

⇒ See “Confirming on Display”, Facsimile Reference .

I want to print a report of the fax transmission status.

⇒ See “Confirming by Report”, Facsimile Reference .

I want to check which destinations the machine failed to send faxes to.

⇒ See “Communication Failure Report”, Facsimile Reference .

I want to check which files have been sent by memory transmission.

⇒ See “Communication Result Report (Memory Transmission)”, Facsimile Reference .

I want to check which files are stored in the Document Server.

⇒ See “Using the Document Server”, Copy and Document Server Reference .

I want to check which faxes have been received.

⇒ See “Checking the Reception Result (Reception File Status)”, Facsimile Reference .

I want to view the received faxes that are stored in the machine.

⇒ See “Confirming Received and Stored Documents”, Facsimile Reference .

To avoid sending faxes to wrong destinations, I want to check fax transmission details before sending.

⇒ See “Preventing Transmission to the Wrong Destination”, Facsimile Reference .

I want to check the settings for scanning and sending files before sending a scan file.

⇒ See “Check Modes”, Scanner Reference .

I want to check the scan image before sending it.

⇒ See “Preview”, Scanner Reference .

I want to view the transmission result.

⇒ See "Scanned Files Status", Scanner Reference.

Install

I want to install the printer driver so I can use the SmartDeviceMonitor for Client port.

⇒ See "Using the SmartDeviceMonitor for Client Port", Printer Reference.

I want to install the printer driver so I can use the Standard TCP/IP port.

⇒ See "Using the Standard TCP/IP Port", Printer Reference.

I want to install the printer driver so I can use as a Windows Network Printer.

⇒ See "Using as a Windows Network Printer", Printer Reference.

I want to install the printer driver so I can use the machine by USB.

⇒ See "Installing the Printer Driver Using USB", Printer Reference.

Envelope

I want to copy onto envelopes.

⇒ See "Copying onto Envelopes from the Bypass Tray", Copy and Document Server Reference.

⇒ See "Copying onto Envelopes from the Small Size Paper Tray", Copy and Document Server Reference.

I want to print onto envelopes.

⇒ See "Setting Envelopes Using the Control Panel", Printer Reference.

2. Getting Started

This chapter describes how to start using this machine.

Guide to Components

This section introduces the names and functions of the components.

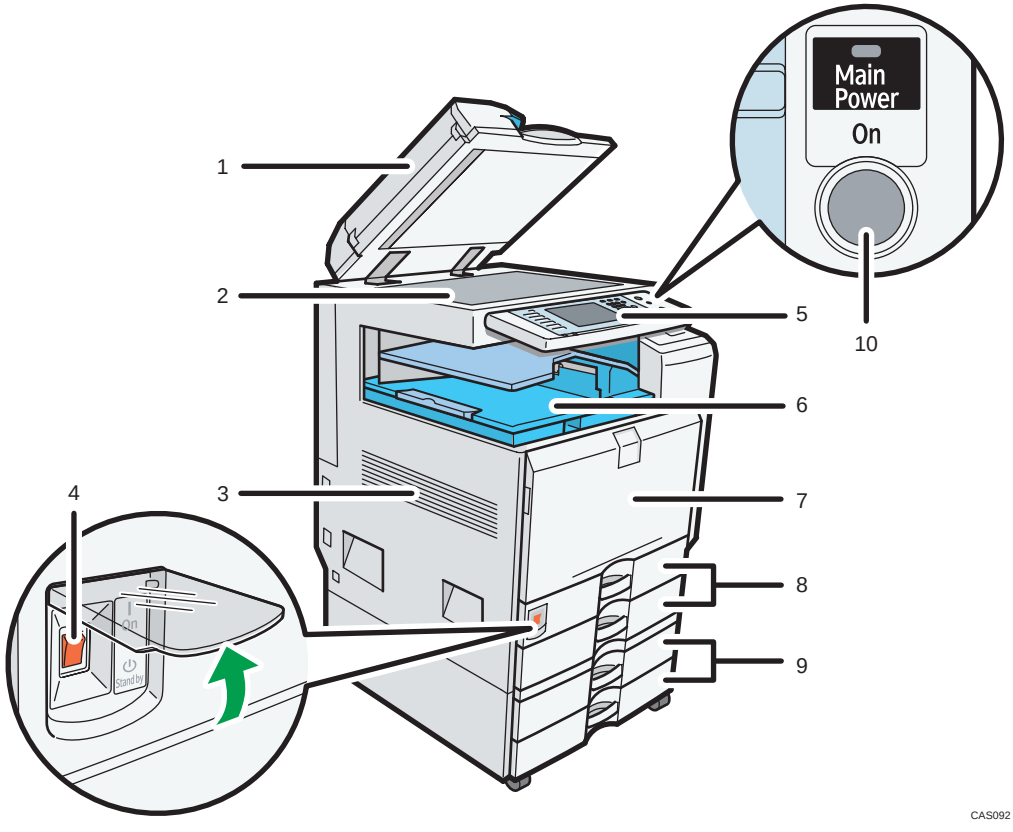
Guide to Components of Type 1 and 2

This section introduces the names and functions of the components of type 1 and 2.

Important

- **Do not obstruct the ventilation holes by placing objects near them or leaning things against them. If the machine overheats, a fault might occur.**

Front and left view



1. **ARDF**

   Lower the ARDF over originals placed on the exposure glass.

   If you load a stack of originals in the ARDF, the ARDF will automatically feed the originals one by one. The ARDF scans both sides of an original one side at a time.

2. **Exposure glass**

   Place originals face down here.

3. **Ventilation holes**

   Prevent overheating.

4. **Main power switch**

   If the machine does not operate after turning on the operation switch, check if the main power switch is turned on. If it is off, turn it on. See “Turning On/Off the Power”.

5. **Control panel**

   See “Control Panel”.

6. **Internal tray 1**

   Copied/printed paper and fax messages are delivered here.

7. **Front cover**

   Open to access the inside of the machine.

8. **Paper trays (trays 1 - 2)**

   Load paper here.

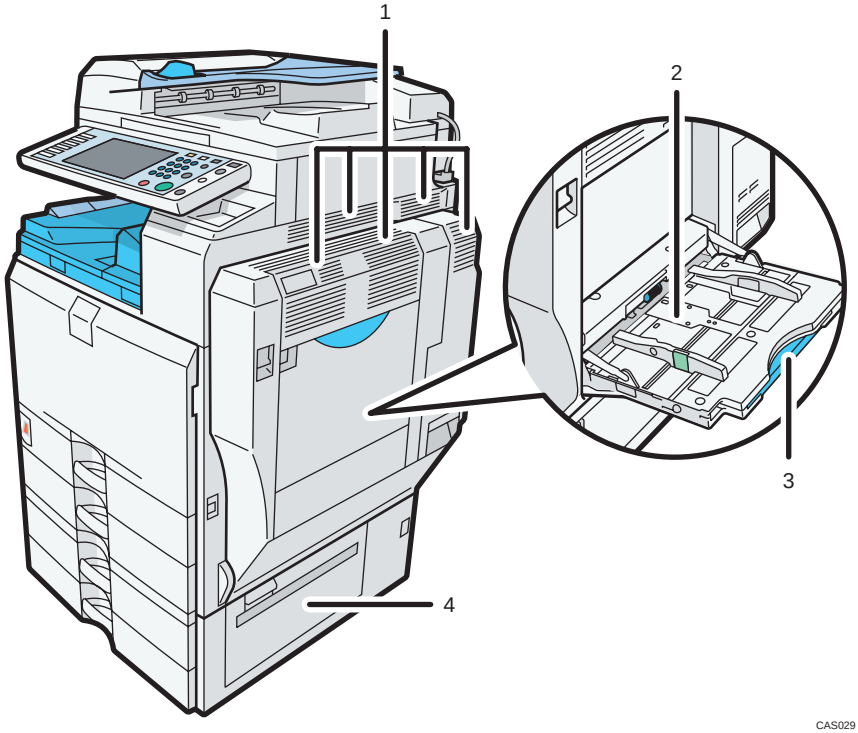
9. **Lower paper trays (optional)**

   Load paper here.

10. **Operation switch**

    Press to turn the power on (the operation switch indicator lights up). To turn the power off, press again (the operation switch indicator goes off). See “Turning On/Off the Power”.

Front and right view



1. **Ventilation holes**

   Prevent overheating.

2. **Bypass tray**

   Use to copy or print on OHP transparencies, label paper (adhesive labels), envelopes and custom size paper.

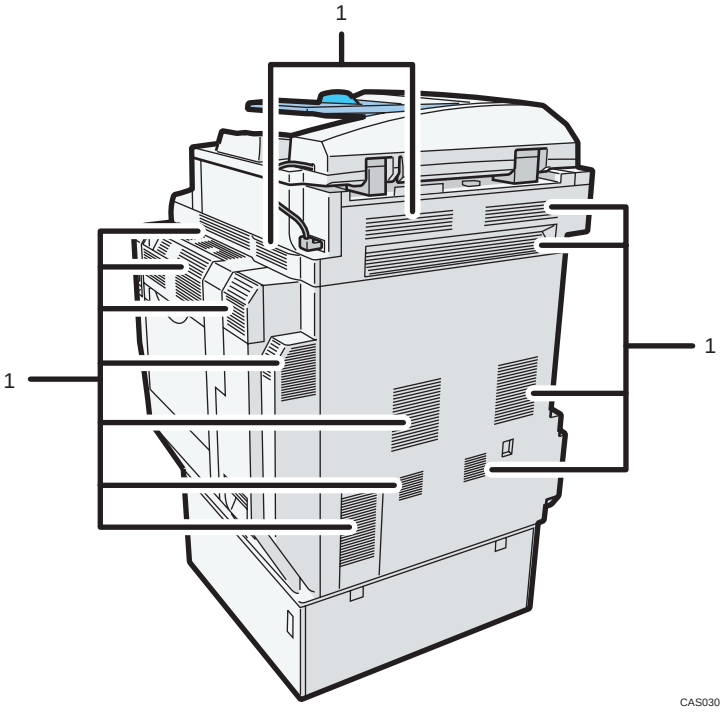
3. **Extender**

   Pull this extender out when loading sheets larger than A4 in the bypass tray.

4. **Lower right cover**

   Open this cover when a paper jam occurs.

Rear and right view



1. **Ventilation holes**

   Prevent overheating.

Reference

- p.70 "Control Panel"
- p.82 "Turning On/Off the Power"

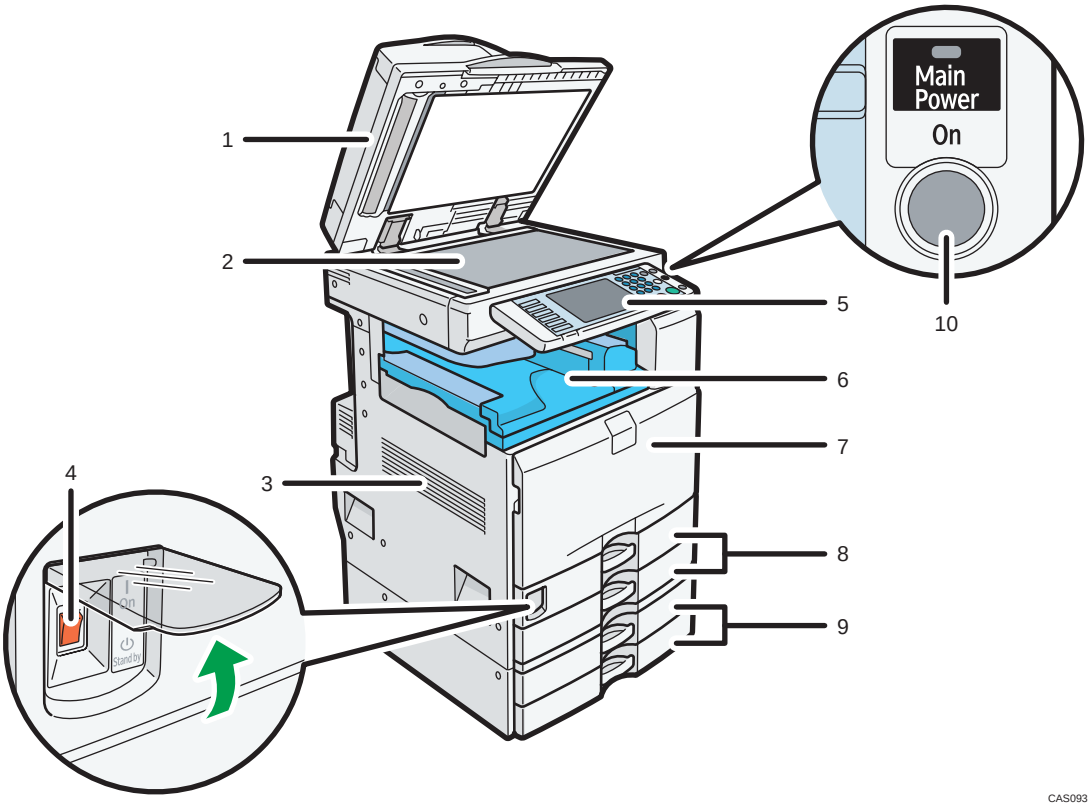
Guide to Components of Type 3 and 4

This section introduces the names and functions of the components of type 3 and 4.

Important

- **Do not obstruct the ventilation holes by placing objects near them or leaning things against them. If the machine overheats, a fault might occur.**

Front and left view



1. **ARDF or one-pass duplex scanning ADF**

   (The illustration shows the ARDF.)

   Lower the ADF over originals placed on the exposure glass.

   If you load a stack of originals in the ADF, the ADF will automatically feed the originals one by one.

   The ARDF scans both sides of an original one side at a time.

   The one-pass duplex scanning ADF scans both sides of an original simultaneously.

2. **Exposure glass**

   Place originals face down here.

3. **Ventilation holes**

   Prevent overheating.

4. **Main power switch**

   If the machine does not operate after turning on the operation switch, check if the main power switch is turned on. If it is off, turn it on. See “Turning On/Off the Power”.

5. **Control panel**

   See “Control Panel”.

6. **Internal tray 1**

   Copied/printed paper and fax messages are delivered here.

7. **Front cover**

   Open to access the inside of the machine.

8. **Paper trays (trays 1 - 2)**

   Load paper here.

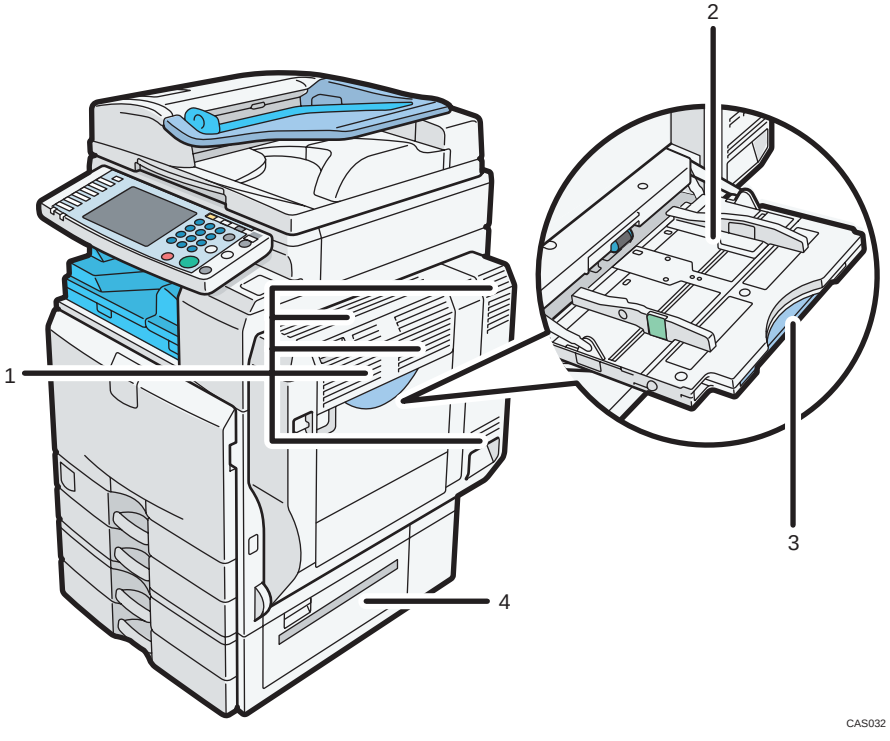
9. **Lower paper trays (optional)**

   Load paper here.

10. **Operation switch**

    Press to turn the power on (the operation switch indicator lights up). To turn the power off, press again (the operation switch indicator goes off). See "Turning On/Off the Power".

Front and right view



1. **Ventilation holes**

   Prevent overheating.

2. **Bypass tray**

   Use to copy or print on OHP transparencies, label paper (adhesive labels), envelopes and custom size paper.

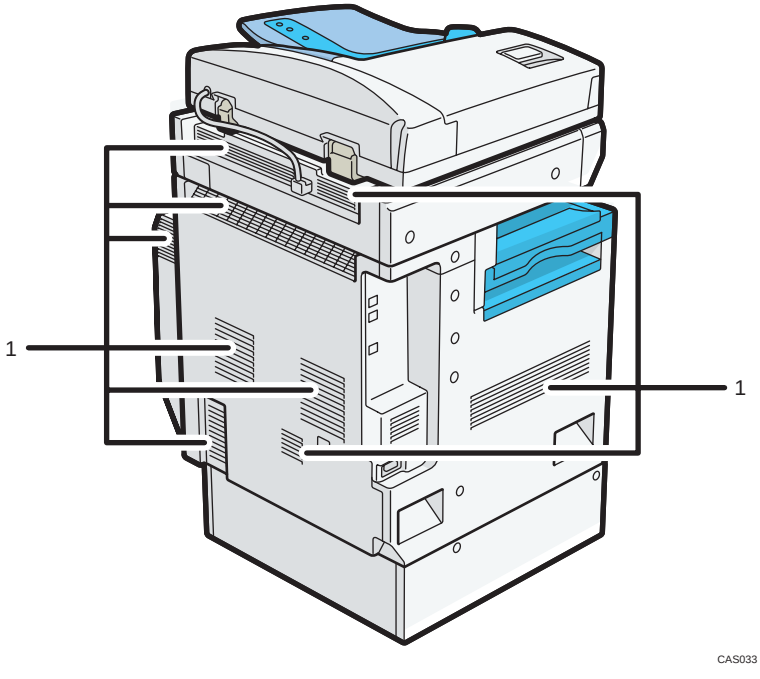
3. **Extender**

   Pull this extender out when loading sheets larger than A4 in the bypass tray.

4. **Lower right cover**

   Open this cover when a paper jam occurs.

Rear and left view



1. **Ventilation holes**

   Prevent overheating.

Note

- To cool the machine's interior, the fan may continue running after the machine finishes a large print job. For details, see “When You Have Problems Operating the Machine”, Troubleshooting.

Reference

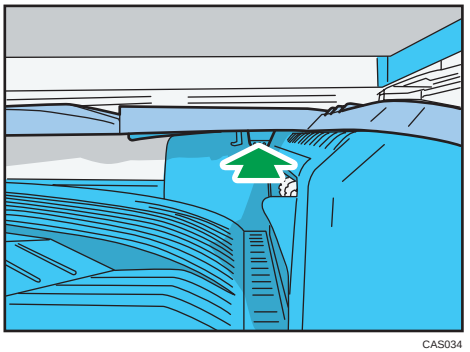
- p.70 "Control Panel"
- p.82 "Turning On/Off the Power"

About the Guide on the Internal Tray 2 (Optional)

If printed sheets come out curled, raise the guide on the internal tray 2.

To raise the guide on the internal tray 2

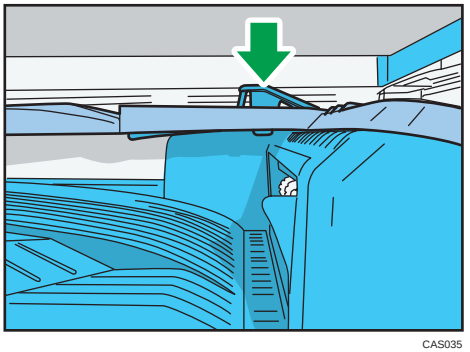
Push the lever that is on the underside of the internal tray 2 inward.



CAS034

To lower the guide on internal tray 2

Push down on the top surface of the guide.



CAS035

Options

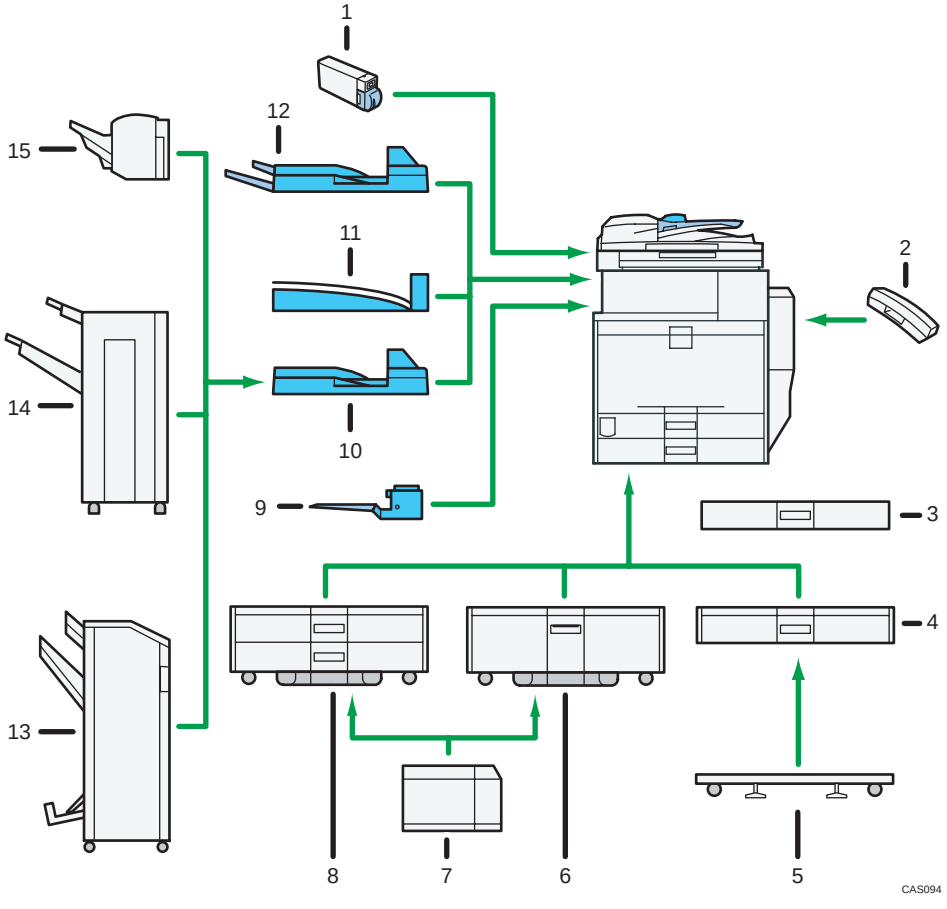
This section introduces the names and functions of main optional parts.

External Options

This section provides explanations about external options.

External options for type 1 and 2

This section provides explanations about external options for type 1 and 2.



1. **Media slot**

   With this media slot, you can save scan files on a removable memory device. You can also print files stored on a removable memory device.

2. **Handset**

   Used as a receiver when a fax unit is installed.

3. **Small size paper tray**

   Holds small size sheets of paper or envelopes.

   To use the small size paper tray, install it in tray 2 or the lower paper trays. The small size paper tray cannot be installed in the lower paper tray. For details about how to install the small size paper tray, see “Installing the Small Size Paper Tray”.

4. **Lower paper tray**

   Holds up to 550 sheets of paper.

5. **Caster table for lower paper tray**

   To use the lower paper tray, attach the caster table.

6. **Tray 3 (LCT)**

   Holds up to 2,000 sheets of paper.

7. **Large capacity tray (LCT)**

   Holds up to 1,200 sheets of paper.

8. **Lower paper trays**

   Consists of two paper trays. Holds up to 1,100 sheets of paper. Each paper tray holds 550 sheets.

9. **Internal tray 2 (1 bin tray)**

   If you select this as the output tray, copied/printed paper or fax messages are delivered here face down.

10. **Bridge unit**

    Relays paper to the finisher.

11. **Internal shift tray**

    Sorts and stacks multiple sheets of paper.

12. **External tray**

    If you select this as the output tray, copied/printed paper and fax messages are delivered here face down.

13. **Booklet Finisher SR3000**

    Sorts, stacks, staples, and punches multiple sheets of paper. The saddle stitch function can staple multiple sheets of paper in the center and fold them into booklets. Consists of the following paper trays:

    - Finisher upper tray
    - Finisher shift tray
    - Finisher booklet tray

14. **Finisher SR790**

    Sorts, stacks, and staples multiple sheets of paper. Consists of the following paper trays:

    - Finisher upper tray
    - Finisher shift tray

15. **Finisher SR3050**

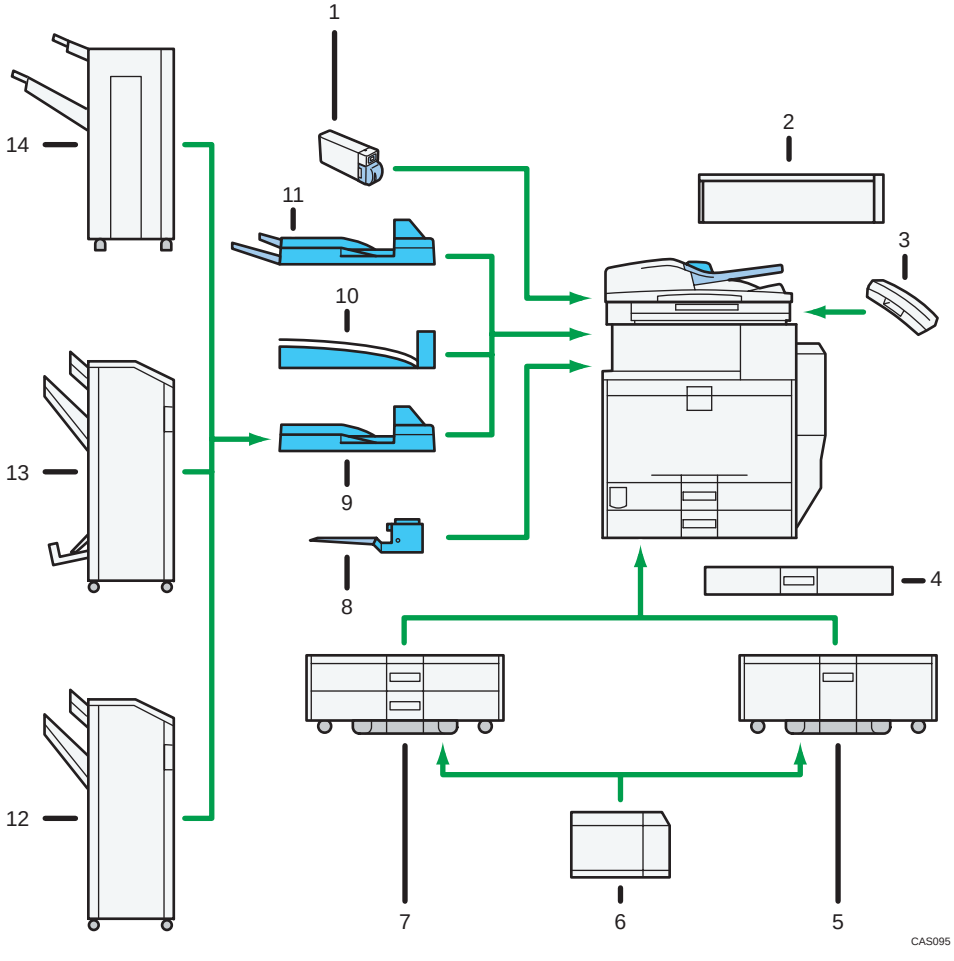
    Sorts, stacks, and staples multiple sheets of paper.

Reference

- p.89 "Installing the Small Size Paper Tray"

External options for type 3 and 4 (models equipped with the ARDF)

This section provides explanations about external options for type 3 and 4 (models equipped with the ARDF).



1. **Media slot**

   With this media slot, you can save scan files on a removable memory device. You can also print files stored on a removable memory device.

2. **Scanner accessibility unit**

   This unit lets you operate the machine or scan documents from the side instead of using the control panel on the machine.

3. **Handset**

   Used as a receiver when a fax unit is installed.

4. **Small size paper tray**

   Holds small size sheets of paper or envelopes.

   To use the small size paper tray, install it in trays 2 - 4. For details, see "Installing the Small Size Paper Tray".

5. **Tray 3 (LCT)**

   Holds up to 2,000 sheets of paper.

6. **Large capacity tray (LCT)**

   Holds up to 1,200 sheets of paper.

7. **Lower paper trays**

   Consists of two paper trays. Holds up to 1,100 sheets of paper. Each paper tray holds 550 sheets.

8. **Internal tray 2 (1 bin tray)**

   If you select this as the output tray, copied/printed paper or fax messages are delivered here face down.

9. **Bridge unit**

   Relays paper to the finisher.

10. **Internal shift tray**

    Sorts and stacks multiple sheets of paper.

11. **External tray**

    If you select this as the output tray, copied/printed paper and fax messages are delivered here face down.

12. **Finisher SR3030**

    Sorts, stacks, staples, and punches multiple sheets of paper. Consists of the following paper trays:

    - Finisher upper tray
    - Finisher shift tray

13. **Booklet Finisher SR3020**

    Sorts, stacks, staples, and punches multiple sheets of paper. The saddle stitch function can staple multiple sheets of paper in the center and fold them into booklets. Consists of the following paper trays:

    - Finisher upper tray
    - Finisher shift tray
    - Finisher booklet tray

14. **Finisher SR790**

    Sorts, stacks, and staples multiple sheets of paper. Consists of the following paper trays:

    - Finisher upper tray
    - Finisher shift tray

Note

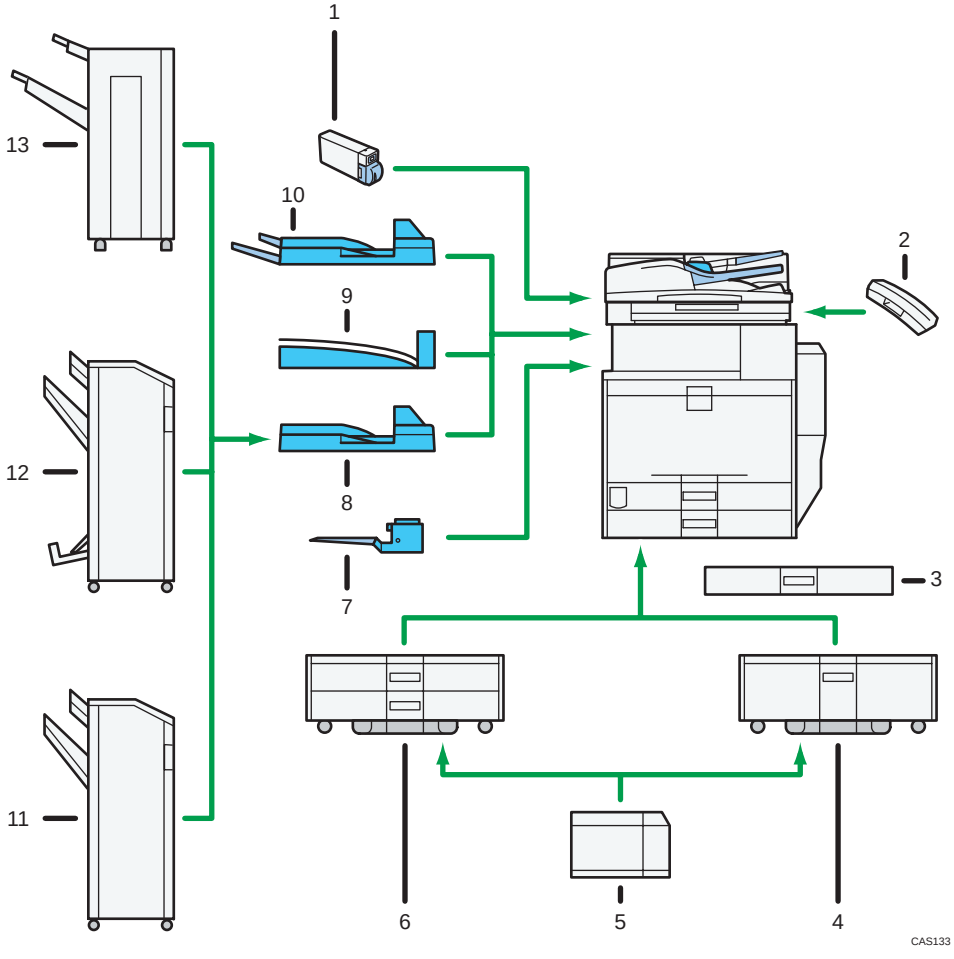
- When the Scanner Accessibility Unit is installed, the control panel and the scanner unit on the machine cannot be used.

Reference

- p.89 "Installing the Small Size Paper Tray"

External options for type 3 and 4 (models equipped with the one-pass duplex scanning ADF)

This section provides explanations about external options for type 3 and 4 (models equipped with the one-pass duplex scanning ADF).



1. **Media slot**

   With this media slot, you can save scan files on a removable memory device. You can also print files stored on a removable memory device.

2. **Handset**

   Used as a receiver when a fax unit is installed.

3. **Small size paper tray**

   Holds small size sheets of paper or envelopes.

   To use the small size paper tray, install it in trays 2 - 4. For details, see “Installing the Small Size Paper Tray”.

4. **Tray 3 (LCT)**

   Holds up to 2,000 sheets of paper.

5. **Large capacity tray (LCT)**

   Holds up to 1,200 sheets of paper.

6. **Lower paper trays**

   Consists of two paper trays. Holds up to 1,100 sheets of paper. Each paper tray holds 550 sheets.

7. **Internal tray 2 (1 bin tray)**

   If you select this as the output tray, copied/printed paper or fax messages are delivered here face down.

8. **Bridge unit**

   Relays paper to the finisher.

9. **Internal shift tray**

   Sorts and stacks multiple sheets of paper.

10. **External tray**

    If you select this as the output tray, copied/printed paper and fax messages are delivered here face down.

11. **Finisher SR3030**

    Sorts, stacks, staples, and punches multiple sheets of paper. Consists of the following paper trays:

    - Finisher upper tray
    - Finisher shift tray

12. **Booklet Finisher SR3020**

    Sorts, stacks, staples, and punches multiple sheets of paper. The saddle stitch function can staple multiple sheets of paper in the center and fold them into booklets. Consists of the following paper trays:

    - Finisher upper tray
    - Finisher shift tray
    - Finisher booklet tray

13. **Finisher SR790**

    Sorts, stacks, and staples multiple sheets of paper. Consists of the following paper trays:

    - Finisher upper tray
    - Finisher shift tray

Reference

- p.89 "Installing the Small Size Paper Tray"

Internal Options

This section describes the options that can be installed in the machine.

- Fax unit

  Allows you to use the facsimile function.

- Extra G3 interface unit

  This lets you add a G3 fax line.

- PictBridge card

  Allows you to directly print images taken with a PictBridge-compatible digital camera.

- Browser unit

  You can use this function to display data from the server in HTML format on the machine's control panel. You can also use this function to send scan files from the control panel.

- IEEE 1284 interface board

  Allows you to connect to an IEEE 1284 cable.

- Wireless LAN board

  Allows you to install a wireless LAN interface.

- PostScript 3 unit

  Allows you to print by Adobe PostScript printer driver.

- Gigabit Ethernet (1000BASE-T)

  Allows you to communicate over 1000BASE-T.

- File format converter

  Allows you to download documents from the Document Server stored by copier and printer functions.

  See “Downloading Stored Documents with Web Image Monitor”, Copy and Document Server Reference.

Note

- Only one of the following options can be installed on the machine at any one time: IEEE 1284 interface board, wireless LAN board.

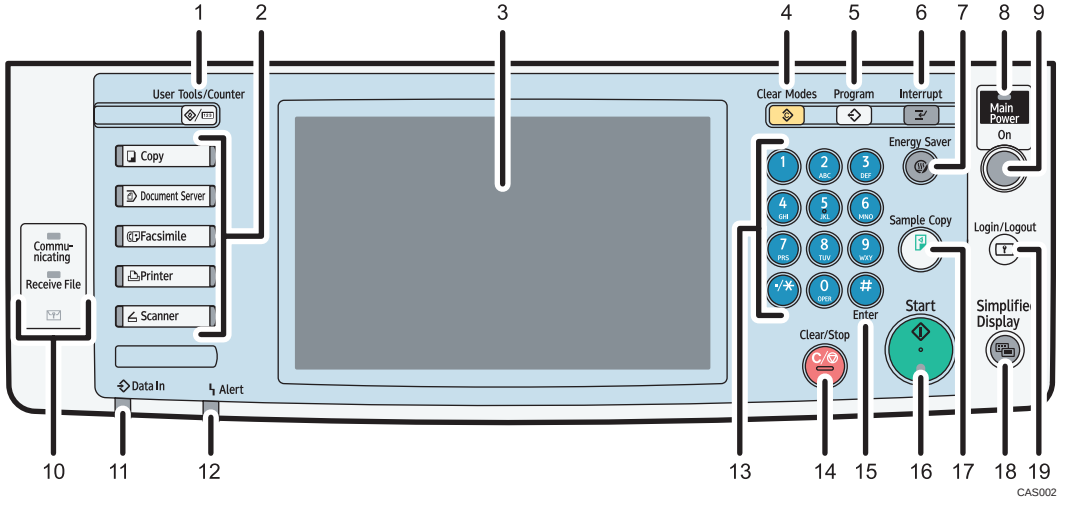
Control Panel

This section introduces the names and functions of the components on the control panel.

Important

- **Do not turn off the main power switch while the operation switch indicator is lit or blinking. Doing so may damage the hard disk.**

This illustration shows the control panel of the machine with options fully installed.



1. **[User Tools/Counter] key**
   - User Tools

     Press to change the default settings to meet your requirements. See "Accessing User Tools", Network and System Settings Reference.
   - Counter

     Press to check or print the counter value. See "Counter".
   - Inquiry

     Press to find out where to order expendable supplies and where to call when a malfunction occurs. You can also print these details. See "Inquiry".
2. **Function keys**

   Press to display the operation screen of one of the following functions: copy, Document Server, facsimile, printer, or scanner.

   The indicator of the selected function goes on. See "Changing Modes".
3. **Display panel**

   Displays keys for each function, operation status, or messages. See "Display Panel".
4. **[Clear Modes] key**

   Press to clear the current settings.

5. **[Program] key (copier, Document Server, facsimile, and scanner mode)**
   - Press to register frequently used settings, or to recall registered settings.

     See “Registering Frequently Used Functions” and “Registering Frequently Used Functions for Printing Stored Documents from the Document Server”, Copy and Document Server Reference.

     See “Registering Frequently Used Settings”, Facsimile Reference.

     See “Registering Frequently Used Settings”, Scanner Reference.
   - Press to program defaults for the initial display when modes are cleared or reset, or immediately after the operation switch is turned on.

     See “Changing the Default Functions of the Copy's Initial Display”, Copy and Document Server Reference.

     See “Changing the Default Functions of the Fax's Initial Display”, Facsimile Reference.

     See “Changing the Default Functions of the Scanner's Initial Display”, Scanner Reference.
6. **[Interrupt] key**

   Press to make interrupt copies. See “Interrupt Copy”, Copy and Document Server Reference.
7. **[Energy Saver] key**

   Press to switch to and from Energy Saver mode. See “Saving Energy”.
8. **Main power indicator**

   The main power indicator goes on when you turn on the main power switch.
9. **Operation switch**

   Press to turn the power on (the operation switch indicator goes on). To turn the power off, press again (the operation switch indicator goes off). See “Turning On/Off the Power”.
10. **Communicating indicator, Receiving File indicator, Confidential File indicator**
    - Communicating indicator

      Lights continuously during data transmission and reception.
    - Receiving File indicator

      Lights continuously while data other than personal box or Memory Lock file is being received and stored in the fax memory.

      See “Substitute Reception”, Facsimile Reference.
    - Confidential File indicator

      Lights continuously while personal box data is being received.

      Blinks while Memory Lock file is being received.

      See “Personal Boxes”, Facsimile Reference and “Printing a File Received with Memory Lock”, Facsimile Reference.
11. **Data In indicator (facsimile and printer mode)**

    Flashes when the machine is receiving print jobs or LAN-Fax documents from a computer. See Facsimile Reference and Printer Reference.
12. **Alert indicator**

    Lights continuously if an error has occurred.

13. **Number keys**

    Use to enter the numbers for copies, fax numbers and data for the selected function.

14. **[Clear/Stop] key**

    - Clear

      Press to delete a number entered.

    - Stop

      Press to stop a job in progress, such as copying, scanning, faxing, or printing.

15. **[#] key (Enter key)**

    Press to confirm values entered or items specified.

16. **[Start] key**

    Press to start copying, printing, scanning, or sending.

17. **[Sample Copy] key**

    Press to make a single set of copies or prints to check print quality before making multiple sets. See “Sample Copy”, Copy and Document Server Reference.

18. **[Simplified Display] key**

    Press to switch to the Simplified Display. See “Simplified Display”.

19. **[Login/Logout] key**

    Press to log in or log out.

Reference

- p.73 "Display Panel"
- p.73 "Simplified Display"
- p.80 "Changing Modes"
- p.82 "Turning On/Off the Power"
- p.85 "Saving Energy"
- p.163 "Counter"
- p.164 "Inquiry"

Display Panel

The display panel shows machine status, error messages, and function menus.

Important

- **Don't apply strong impact or force to the screen. Or it may be damaged. Maximum force allowable is approx. 30N (approx. 3 kgf). (N = Newton, kgf = Kilogram force. 1 kgf = 9.8N.)**

The function items displayed serve as selector keys. You can select or specify an item by lightly pressing them.

When you select or specify an item on the display panel, it is highlighted like Auto Reduce / Enlarge. Keys appearing as Auto Reduce / Enlarge cannot be used.

The copy display is set as the default screen when the machine is turned on.

Note

- The display panels shown in this manual's illustrations are taken from a machine on which all options are installed.

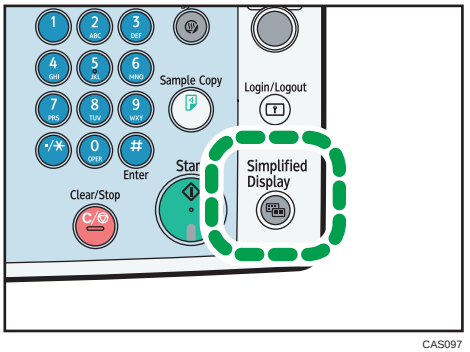
Simplified Display

This section explains how to switch to the simplified display.

When you press the [Simplified Display] key, the screen changes from the initial display to the simplified display.

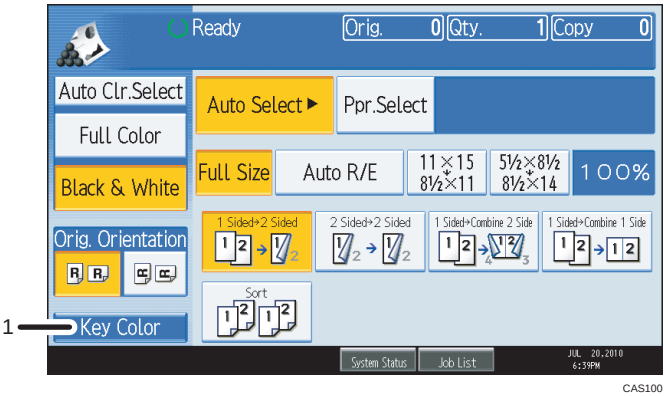
Letters and keys are displayed at a larger size, making operations easier.

1. **Press the [Simplified Display] key.**



CAS097

This illustration shows the copier function's simplified display.



CAS100

1. **[Key Color]**

   Press to increase screen contrast by changing the color of the keys.

   This is available only for the simplified display.

Note

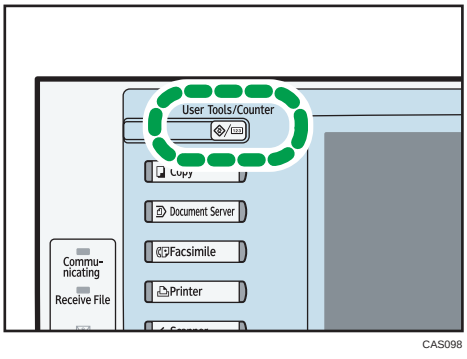
- To return to the initial display, press the [Simplified Display] key again.
- Certain keys do not appear on the simplified display.

Changing the Display Language

You can change the language used on the display. English is set as default.

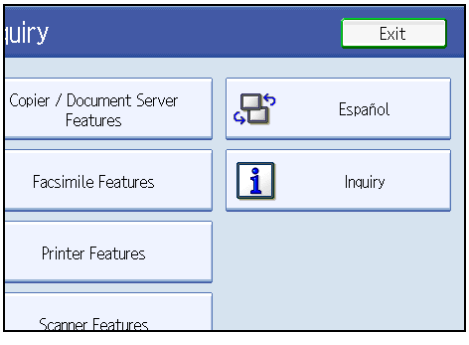
The following procedure explains switching the language from English to Spanish.

1. **Press the [User Tools/Counter] key.**



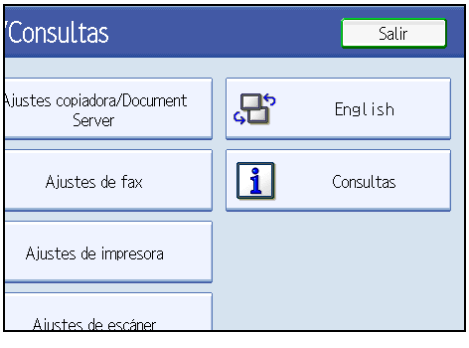
CAS098

2. **Press [Español].**



The language is changed to Spanish.

3. **Press [Salir.]**



The menu appears in Spanish.

Note

- If you want to return the display language to “English”, repeat the step above.

When the Authentication Screen is Displayed

This section explains the authentication screen.

Important

- **Ask the user administrator for the Login User Name, Login Password, and User Code. For details about user authentication, contact your administrator.**
- **User Code to enter on User Code Authentication is the numerical value registered in the Address Book as "User Code".**

If Basic Authentication, Windows Authentication, LDAP Authentication, or Integration Server Authentication is active, the authentication screen appears on the display. The machine only becomes operable after entering your own Login User Name and Login Password. If User Code Authentication is active, you cannot use the machine until you enter the User Code.

If you can use the machine, you can say that you are logged in. When you go out of the operable state, you can say that you are logged out. After logging in the machine, be sure to log out of it to prevent unauthorized usage.

Note

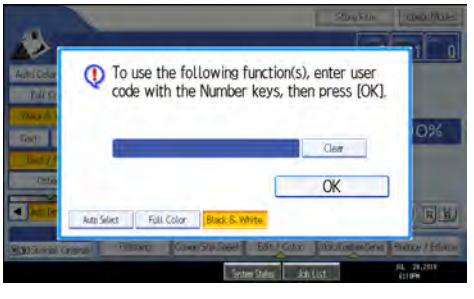
- If authentication fails, the "Authentication has failed." message appears. Check that the Login User Name and Login Password are correct.

User Code Authentication (Using the Control Panel)

This section explains the procedure for logging in to the machine using the control panel while User Code Authentication is active.

If User Code Authentication is active, a screen prompting you to enter a User Code appears.

1. **Enter a User Code (up to eight digits), and then press [OK].**



Note

- To log out, do one of the following:
  - Press the operation switch.

- Press the [Energy Saver] key after jobs are completed.

User Code Authentication (Using a Printer Driver)

This section explains the procedure for logging in to the machine using a printer driver while User Code Authentication is active.

If User Code Authentication is active, specify the User Code in the printer properties of the printer driver. For details, see the printer driver Help.

Note

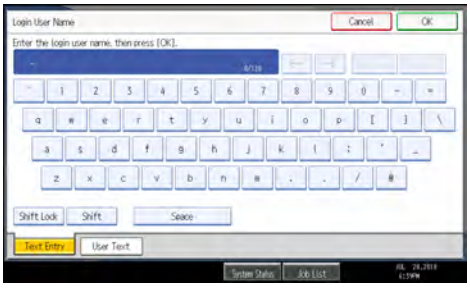
- When logged in through User Code Authentication, you do not have to log out.

Login (Using the Control Panel)

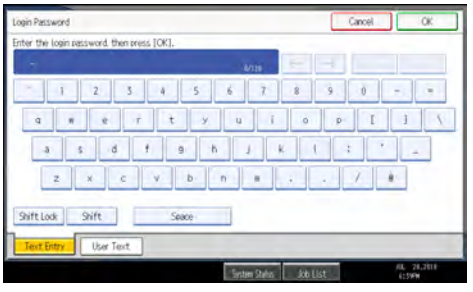
This section explains the procedure for logging in to the machine when Basic Authentication, Windows Authentication, LDAP Authentication, or Integration Server Authentication is set.

1. **Press [Login].**

2. **Enter a Login User Name, and then press [OK].**



3. **Enter a Login Password, and then press [OK].**



When the user is authenticated, the screen for the function you are using appears.

Note

- If authentication fails, the "Authentication has failed." message appears. Check that the Login User Name and Login Password are correct.

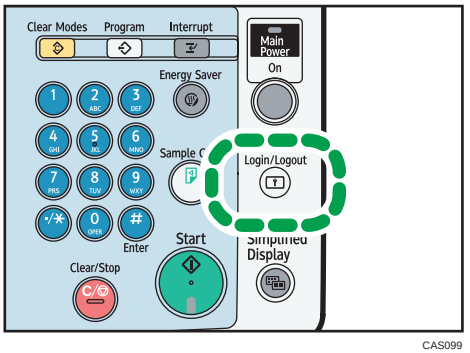
Logout (Using the Control Panel)

This section explains the procedure for logging out the machine when Basic Authentication, Windows Authentication, LDAP Authentication, or Integration Server Authentication is set.

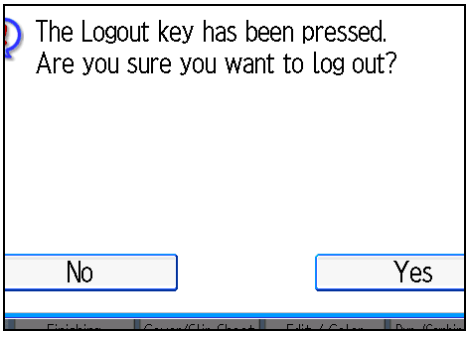
Important

- **To prevent use of the machine by unauthorized persons, always log out when you have finished using the machine.**

1. **Press the [Login/Logout] key.**



2. **Press [Yes].**



Login (Using a Printer Driver)

This section explains the procedure for logging in to the machine using a printer driver.

If Basic Authentication, Windows Authentication, LDAP Authentication, or Integration Server Authentication is active, make encryption settings in the printer properties of the printer driver, and then specify a Login User Name and Login Password. For details, see the printer driver Help.

Note

- When logged in using a printer driver, you do not have to log out.

Login (Using Web Image Monitor)

This section explains the procedure for logging in to the machine via Web Image Monitor.

1. **Click [Login].**
2. **Enter a Login User Name and Login Password, and then click [Login].**

Note

- For User Code Authentication, enter a User Code in [Login User Name], and then click [Login].

Logout (Using Web Image Monitor)

This section explains the procedure for logging out the machine via Web Image Monitor.

1. **Click [Logout] to log out.**

Note

- Delete the cache memory of a Web browser after logging out.

2

Changing Modes

This section explains how to change modes.

CAS101

Note

- You cannot switch modes in any of the following situations:
  - When scanning a fax message for transmission
  - During immediate transmission
  - When accessing User Tools / Counter / Inquiry
  - During interrupt copying
  - During On-hook dialing for fax transmission

- While scanning an original

- The copy display is set as the default screen when the machine is turned on. You can change this default setting under Function Priority. See “System Settings”, Network and System Settings Reference .

System Reset

This section explains System Reset.

After finishing a job, the machine waits a specified length of time and then restores its settings to the default values specified under Function Priority. This function is called “System Reset”. For the procedure for specifying default settings under Function Priority, see “System Settings”, Network and System Settings Reference .

To change the length of time that the machine waits before restoring its settings to their default values, use the System Auto Reset Timer setting. See “System Settings”, Network and System Settings Reference .

Turning On/Off the Power

This section discusses how to turn on/off the power.

Power supply

This machine has two power switches: operation switch and main power switch.

- Operation switch (right side of the control panel)

  Press to activate the machine. When the machine has finished warming up, you can make use of each function.

- Main power switch (left side of the machine)

  Turning off this switch makes the main power indicator on the right side of the control panel go off. When this is done, machine power is completely off. When the fax unit (optional) is installed, fax files in memory may be lost if you turn this switch off. Use this switch only when necessary.

Note

- This machine automatically enters Energy Saver mode or turns itself off if you do not use it for a while. To specify the time that the machine waits before it enters Energy Saver mode and/or turns itself off, configure the Energy Saver Timer and/or Auto Off Timer setting, respectively. See “System Settings”, Network and System Settings Reference.

Turning On the Main Power

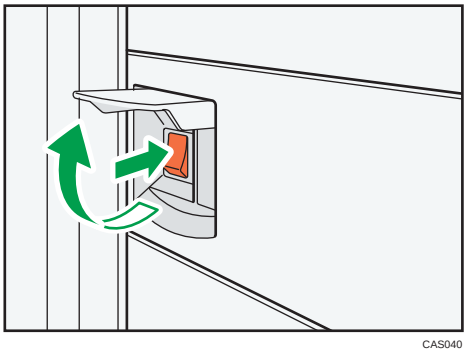
This section explains how to turn on the main power.

Important

- **Do not turn off the main power switch immediately after turning it on. Doing so may result in damage to the hard disk or memory, leading to malfunctions.**

1. **Make sure the power cord is firmly plugged into the wall outlet.**
2. **Open the main power switch cover, and turn on the main power switch.**

   The main power indicator goes on.



CAS040

Note

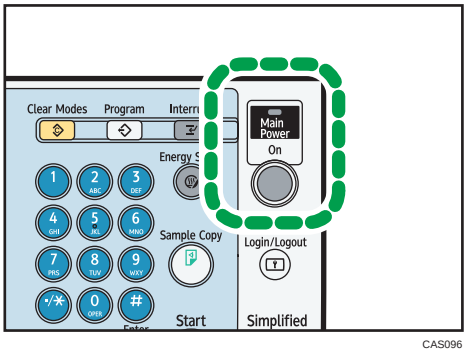
- After you switch the main power on, a screen may appear to indicate that the machine is initializing. Do not switch the power off during this process. Initialization takes about three minutes.

Turning On the Power

This section explains how to turn on the power.

1. **Press the operation switch.**

   The operation switch indicator goes on.



CAS096

Note

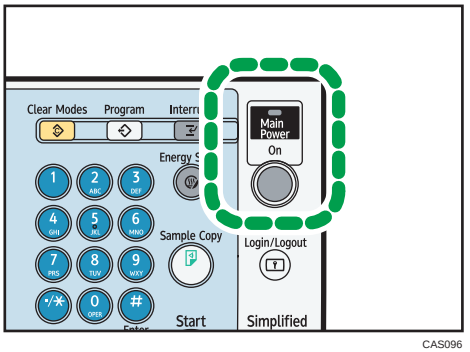
- If the power does not come on when the operation switch is pressed, check the main power switch is on. If it is off, turn it on.

Turning Off the Power

This section explains how to turn off the power.

1. **Make sure the ADF is in the right position.**
2. **Press the operation switch.**

   The operation switch indicator goes off.



Note

- Even if you press the operation switch, the operation switch indicator does not go out, but blinks in the following cases:
  - During communication with external equipment.
  - When the hard disk is active.
  - When the internal cooling fan is active.

Turning Off the Main Power

This section explains how to turn off the main power.

Important

- **Do not turn off the main power switch when the operation switch indicator is lit or blinking. Doing so may result in damage to the hard disk or memory.**
- **Make sure to turn off the main power switch before pulling out the power plug. Not doing so may result in damage to the hard disk or memory, leading to malfunctions.**
- **After turning the machine's power off, wait at least a few seconds before turning it back on. If the message "Turn main Power Switch off" appears, turn the machine's power off, wait three seconds or more, and then turn it back on again. Never turn the power back on immediately after turning it off.**

1. **Make sure the operation switch indicator is not lit.**
2. **Open the main power switch cover, and then turn off the main power switch.**

   The main power indicator goes out.

Note

- When the main power switch is turned off while using the fax function, waiting fax and print jobs may be cancelled, and incoming fax documents not received. If you have to turn off this switch for some reason, make sure 100% is shown as available memory on the screen before turning off the main power switch or unplugging the power cord. Fax files in memory are deleted an hour after you turn off the main power switch or unplug the power cord.

- For details, see “Turning Off the Main Power / In the Event of Power Failure”, Troubleshooting.

Saving Energy

This section explains the machine's energy saving functions.

This machine has the following energy saving functions.

Energy Saver

If you do not use the machine for a certain period after an operation, or when you press the [Energy Saver] key, the display disappears and the machine goes into Energy Saver mode. When you press the [Energy Saver] key again, the machine returns to the ready condition. The machine uses less electricity in Energy Saver mode.

You can change the amount of time the machine waits before switching to Energy Saver mode after copying has finished or the last operation is performed under Panel Off Timer.

Low power mode

If you do not use the machine for a certain period, it automatically lowers its power consumption. When you press the [Energy Saver] key, the machine returns to ready condition.

You can change the amount of time the machine waits before switching to the Low power mode under Energy Saver Timer.

Auto Off

If the machine remains inactive for a specified period, it automatically enters the same low power state that it enters when the operation switch is pressed (indicator unlit). This function is called “Auto Off”.

You can change the Auto Off time under Auto Off Timer.

Note

- See “System Settings”, Network and System Settings Reference.
- The Energy Saver, Low power mode, and Auto Off functions will not operate in the following cases:
  - When a warning message appears
  - When the service call message appears
  - When paper is jammed
  - When the cover is open
  - When the "Add Toner" message appears
  - When toner is being replenished
  - When the User Tools / Counter / Inquiry screen is displayed
  - When fixed warm-up is in progress

- When data is being processed
- When operations are suspended during printing
- When the On-hook dialing function is in use
- When the handset is in use
- When a recipient is being registered in the address list or group dial list
- When the Data In indicator is on or blinking
- When the screen of a document that was stored under the printer function appears. (The machine enters Energy Saver mode and Low power mode if this happens.)
- When the sample print, locked print, hold print, or stored print screen is displayed
- When the internal cooling fan is active

Downloading Utility Software

This section explains the utility software for this machine.

SmartDeviceMonitor for Admin

This section describes the functions available with SmartDeviceMonitor for Admin.

SmartDeviceMonitor for Admin is an application that monitors network printers. It can monitor multiple network printers using IP address. We recommend that network administrators use this application.

SmartDeviceMonitor for Admin has the following functions:

- Group management for the machines
- Monitoring the machines
- Operation restriction
- Managing the Address Book
- Per-user counters
- User restriction

SmartDeviceMonitor for Admin with full functionality can be purchased from your local dealer. Contact your local dealer for information on purchasing the software.

SmartDeviceMonitor for Admin with limited functionality is available as a free download. Contact your local dealer for information on downloading the software.

Note

- For details about the functionality, see the manual for SmartDeviceMonitor for Admin.

DeskTopBinder

This section describes the functions available with DeskTopBinder.

DeskTopBinder is to be installed on the client computers for integration and management of various kinds of files such as scan files, files created with applications, and existing scan files. This software allows you to use various functions for stored scan files such as viewing stored files. Also, with the ScanRouter delivery software *1, you can view the files stored in in-trays of the delivery server, or use other functions for stored files.

DeskTopBinder Professional provides the full functionality of the software. Contact your local dealer for information on purchasing the software.

DeskTopBinder Lite with limited functionality is available as a free download. Contact your local dealer for information on downloading the software.

*1 For details to purchase ScanRouter delivery software, contact your local dealer.

Note

- For details about the functionality, see Help of DeskTopBinder.

SmartDeviceMonitor for Client

This section describes the functions available with SmartDeviceMonitor for Client.

SmartDeviceMonitor for Client allows you to manage and print various data such as files created with an application, images scanned with a scanner, and existing images as one document.

SmartDeviceMonitor for Client has the following functions:

- Checking printer supplies such as paper or toner
- Checking results of print jobs executed from the computer

SmartDeviceMonitor for Client is available as a free download. Contact your local dealer for information on downloading the software.

Note

- For details about the functionality, see Help of SmartDeviceMonitor for Client.

Installing the Small Size Paper Tray

This section describes how to install the small size paper tray.

To use the small size paper tray, install it in tray 2 or the lower paper trays. In the following example procedure, the small size paper tray is installed in tray 2.

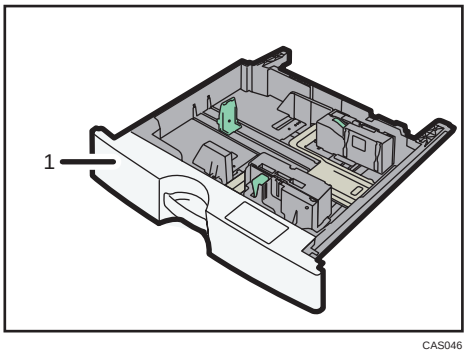
Important

- **The small size paper tray cannot detect paper size automatically. Specify the paper size on the control panel. For details, see "Changing to a Size That Is Not Automatically Detected".**

For users of type 1 and 2

The small size paper tray cannot be installed in the lower paper tray.

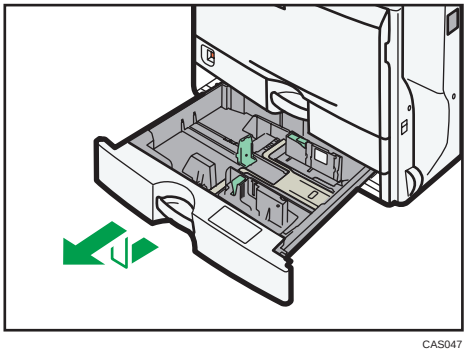
1. **Check the contents of the package.**



CAS046

1. **Small size paper tray**

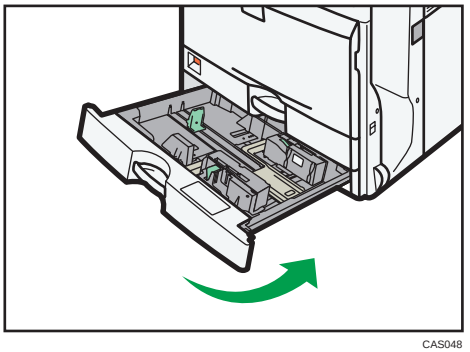
2. **Remove the packaging from the small size paper tray.**
3. **Carefully pull out tray 2 until it stops, then slightly raise the front of the tray, and then pull it out completely.**



CAS047

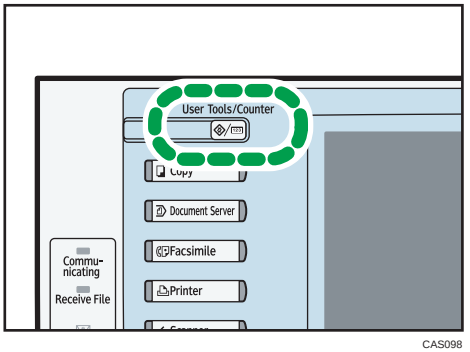
Store the paper tray in a safe place.

4. Lift the front of the small size paper tray, and then carefully push it fully in.



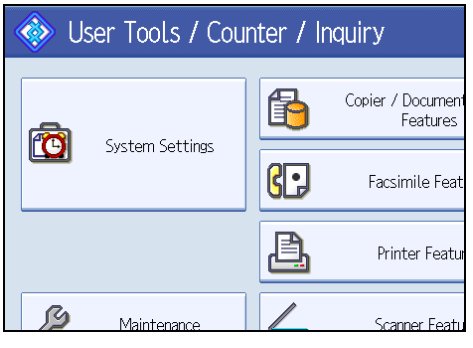
CAS048

5. Press the [User Tools/Counter] key.



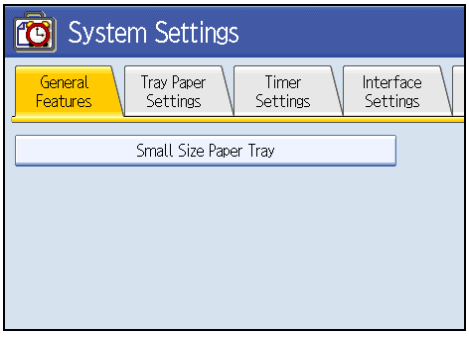
CAS098

6. Press [System Settings].



7. Check that [General Features] is selected.

8. **Press [Small Size Paper Tray].**



If the setting to be specified does not appear, press [▼ Next] to scroll down to other settings.

9. **Press [On] for Tray 2.**

10. **Press [OK].**
11. **Turn off the machine, and then turn it back on.**

Note

- If the small size paper tray is not installed correctly, repeat the installation procedure from the beginning. If the installation is still not correct, contact your service representative.
- In printer mode, configure the settings for the options that are installed on the machine. For details, see the printer driver Help.

Reference

- p.108 "Changing to a Size That Is Not Automatically Detected"

3. Adding Paper

This chapter describes recommended paper sizes and types, and how to load paper into the paper tray.

Loading Paper

This section describes how to load paper into the paper tray.

⚠CAUTION

- When loading paper, take care not to trap or injure your fingers.

Important

- **Do not stack paper over the limit mark.**

Note

- Fan the paper before loading.
- Straighten curled or warped paper before loading.
- For details about paper sizes and types, see “Recommended Paper Sizes and Types”.
- To load paper in the bypass tray, see “Copying from the Bypass Tray”, Copy and Document Server Reference.

Reference

- p.113 "Recommended Paper Sizes and Types"

Loading Paper into Trays 1 - 4

This section describes how to load paper into trays 1 - 4.

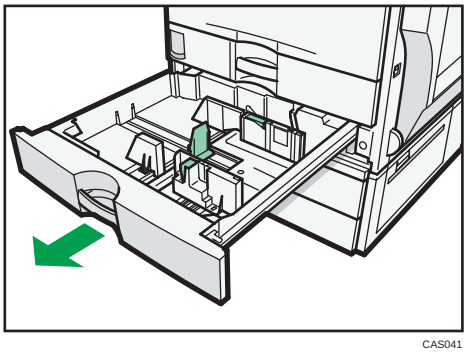
Every paper tray is loaded in the same way.

In the following example procedure, paper is loaded in tray 2.

Important

- **Tray 1 can hold $8\frac{1}{2} \times 11$ paper only. If you want to print on A4, A5, or B5 JIS (Japanese Industrial Standard) from tray 1, contact your service representative.**
- **Check the paper edges are aligned at the right side.**

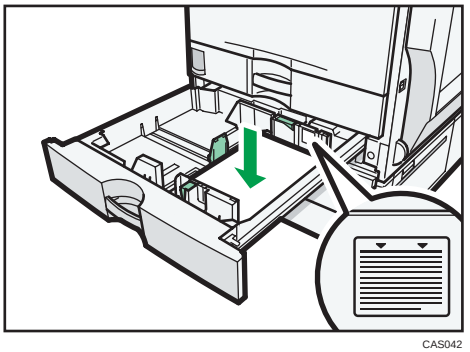
1. **Carefully pull out the paper tray until it stops.**



CAS041

2. **Square the paper and load it print side up.**

   Do not stack paper over the limit mark.



CAS042

3. **Carefully push the paper tray fully in.**

Note

- When loading a low number of sheets, be sure not to squeeze the side fences in too tightly. If the paper bows, it might not feed in properly.
- If a paper tray is pushed vigorously when putting it back into place, the position of the tray's side fences may slip out of place.
- Various sizes of paper can be loaded in trays 2 - 4 by adjusting the positions of side fences and end fence. For details, see “Changing the Paper Size in Trays 2 - 4”.
- You can load envelopes in trays 2 - 4. For details about how to load envelopes, see “Changing the Paper Size in Trays 2 - 4”. For details about various details about and recommendations concerning envelopes, see “Envelopes”.
- Each tray can hold up to 550 sheets.

Reference

- p.101 "Changing the Paper Size in Trays 2 - 4"
- p.119 "Envelopes"

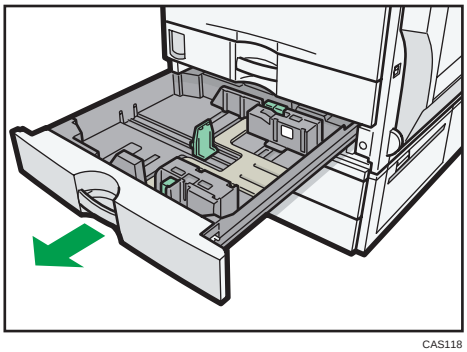
Loading Paper into the Small Size Paper Tray

This section describes how to load paper into the small size paper tray.

Important

- **Check the paper edges are aligned at the right side.**

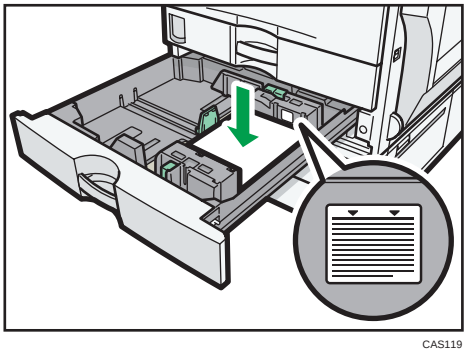
1. **Carefully pull out the paper tray until it stops.**



CAS118

2. **Square the paper and load it print side up.**

   Do not stack paper over the limit mark.



CAS119

3. **Carefully push the paper tray fully in.**

Note

- When loading a low number of sheets, be sure not to squeeze the side fences in too tightly. If the paper bows, it might not feed in properly.
- If a paper tray is pushed vigorously when putting it back into place, the position of the tray's side fences may slip out of place.
- Various sizes of paper can be loaded in the small size paper tray by adjusting the positions of side fences and end fence. For details, see “Changing the Paper Size in the Small Size Paper Tray”.

- You can load envelopes in the small size paper tray. For details about how to load envelopes, see “Changing the Paper Size in the Small Size Paper Tray”. For details about various details about and recommendations concerning envelopes, see “Envelopes”.
- The small size paper tray can hold up to 550 sheets.
- For details about how to install the small size paper tray, see “Installing the Small Size Paper Tray”.

Reference

- p.89 "Installing the Small Size Paper Tray"
- p.104 "Changing the Paper Size in the Small Size Paper Tray"
- p.119 "Envelopes"

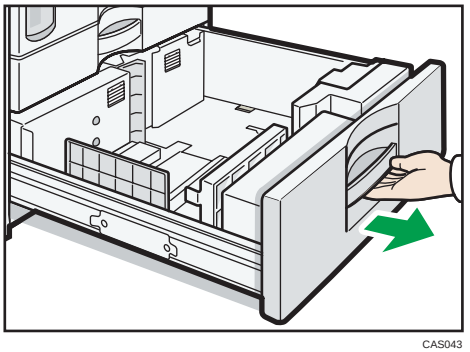
Loading Paper into Tray 3 (LCT)

This section describes how to load paper into Tray 3 (LCT).

Important

- **When paper loaded in the right side of Tray 3 (LCT) runs out, paper on the left is automatically shifted to the right. While the paper is moving, a message instructing you to wait appears. Do not pull out the tray at this time.**
- **For the right stack, align the right edge of the paper with the right edge of the tray. For the left stack, align the left edge of the paper to the left edge of the tray.**
- **Tray 3 (LCT) can hold $8\frac{1}{2} \times 11$ paper only. If you want to print on A4 from Tray 3 (LCT), contact your service representative.**

1. **Carefully pull out Tray 3 (LCT) until it stops.**

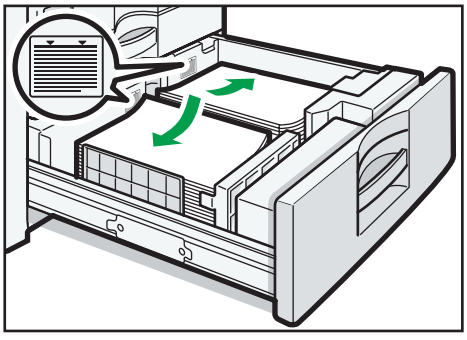


CAS043

2. **Square the paper and load it print side up.**

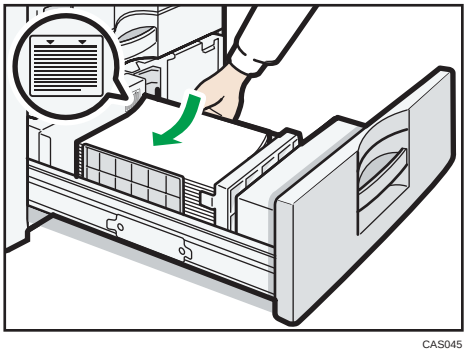
   Do not stack paper over the limit mark.

   - Whole tray pulled out



CAS044

- Left half of the tray pulled out



CAS045

3. **Carefully push the paper tray fully in.**

Note

- You can load paper even while making copies from Tray 3 (LCT). You can pull out the left half of the tray while copying is in.
- Load the same size and orientation paper in the other half of the tray.
- Each tray can hold up to 1,000 sheets of paper.

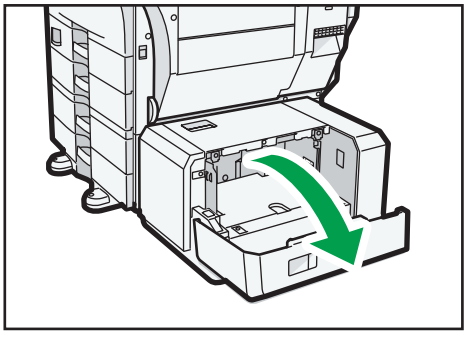
Loading Paper into the Large Capacity Tray (LCT)

This section describes how to load paper into the large capacity tray (LCT).

Important

- **The large capacity tray (LCT) can hold $8\frac{1}{2} \times 11$ paper only. If you want to print on A4 or B5 JIS from the large capacity tray (LCT), contact your service representative.**
- **Check the paper edges are aligned at the left side.**

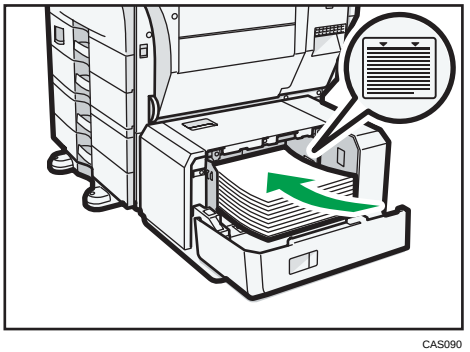
1. **Open the right cover of the large capacity tray (LCT).**



CAS089

2. **Load the paper in the tray along the edge on the back.**

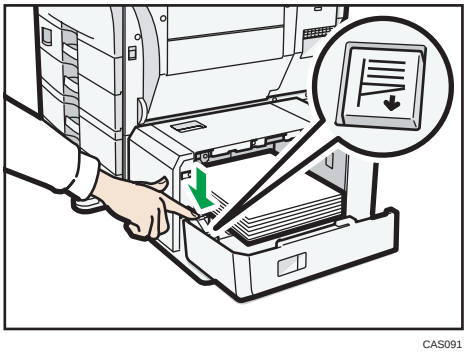
   Load the paper print side down.



CAS090

3. **Press the [Down] key.**

   The bottom plate is moving down.



CAS091

4. **Load paper by repeating steps 2 and 3.**
5. **Close the right cover of the large capacity tray (LCT).**

Note

- The tray can hold up to 1,200 sheets.

Loading Orientation-Fixed Paper or Two-Sided Paper

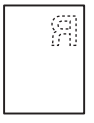
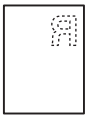
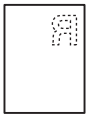
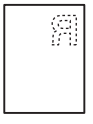
This section describes loading paper that has a specified orientation and printing side (such as letterhead paper).

Orientation-fixed (top to bottom) or two-sided paper (for example, letterhead paper, punched paper, or copied paper) might not print correctly, depending on how the originals and paper are placed. Set [Letterhead Setting] to [Yes] in [Input / Output] under [Copier / Document Server Features], and then place the original and paper as shown below. For details about Letterhead Setting, see "Copier and Document Server Features", Copy and Document Server Reference. For details about printing with the printer function, see "Printing on Orientation-Fixed or Two-Sided Paper", Printer Reference.

Original Orientation

Exposure glass		ADF	
	• Copy • Scanner		

Paper Orientation

Copy Mode		Tray 1 or Tray 3 (LCT)	Trays 2 – 4 or the small size paper tray	Large Capacity Tray (LCT)	Bypass Tray
	1 Sided				 *1
	2 Sided				
	1 Sided	—		—	*1
	2 Sided	—		—	

*1 When the paper size is specified.

: Shows the paper frontside facing up.

: Shows the paper backside facing up.

CAS049

Changing the Paper Size

This section describes how to change the paper size.

⚠CAUTION

- When loading paper, take care not to trap or injure your fingers.

Important

- **Do not stack paper over the limit mark.**
- **Tray 1, Tray 3 (LCT), and the large capacity tray (LCT) can hold $8\frac{1}{2} \times 11$ paper only. If you want to print on any of the following paper sizes from these trays, contact your service representative:**
  - **Tray 1: A4, A5, B5 JIS**
  - **Tray 3 (LCT): A4**
  - **Large capacity tray (LCT): A4, B5 JIS**

Note

- Be sure to select the paper size with User Tools. If you do not, misfeeds might occur. For details about Tray Paper Size, see "System Settings", Network and System Settings Reference.
- Fan the paper before loading.
- Straighten curled or warped paper before loading.
- For details about paper sizes and types, see "Recommended Paper Sizes and Types".

Reference

- p.113 "Recommended Paper Sizes and Types"

Changing the Paper Size in Trays 2 - 4

This section describes how to change the paper size in trays 2 - 4.

The paper size setting is changed in the same way for every paper tray.

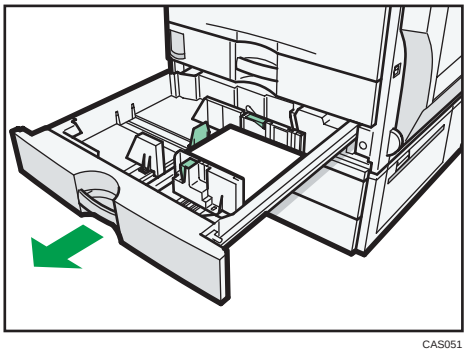
In the following example procedure, the paper size setting for tray 2 is changed.

Important

- **If a paper tray is pushed vigorously when putting it back into place, the position of the tray's side fences may slip out of place.**
- **Check the paper edges are aligned at the right side.**
- **Slide the side fences until they are aligned with the paper size, and then re-lock the side fences.**

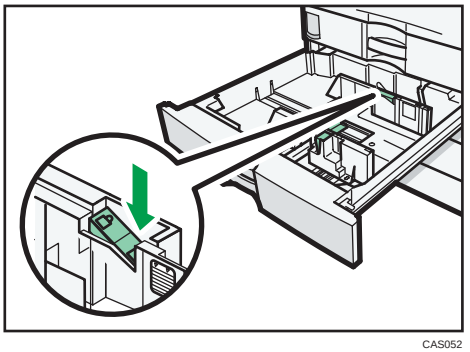
Various sizes of paper can be loaded in trays 2 - 4 by adjusting the positions of the side fences and end fence.

1. Check that paper in the paper tray is not being used, and then pull the tray carefully out until it stops.



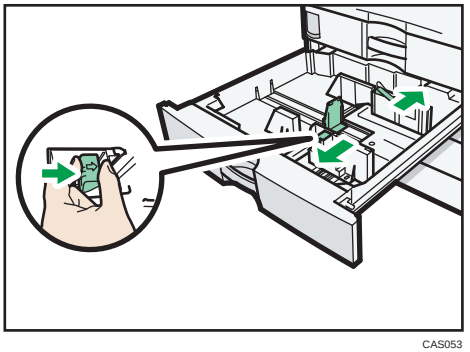
CAS051

2. Remove paper if loaded.
3. Release the lock on the side fences.



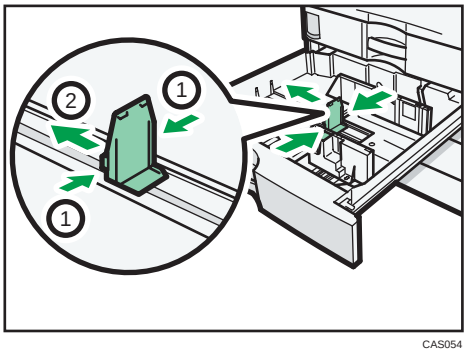
CAS052

4. While pressing down the release lever, slide the side fences outward.



CAS053

5. Slide the end fence outward.

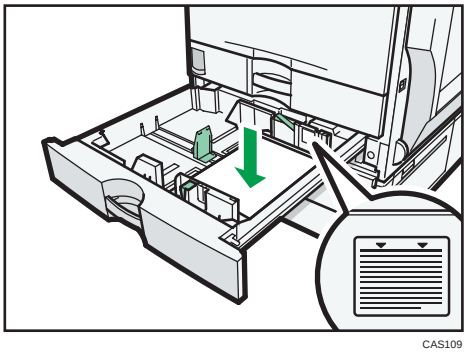


CAS054

1. Pinch the release levers of the end fence.
2. Slide the end fence outward.

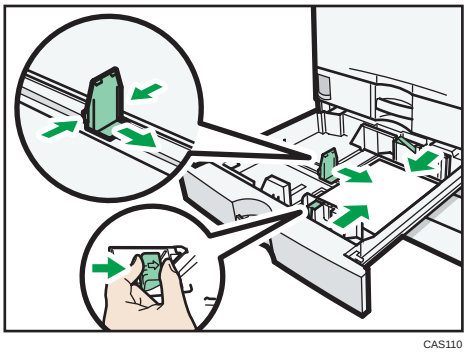
6. Square the paper and load it print side up.

Do not stack paper over the limit mark.



CAS109

7. Align the back and side fences gently against the paper you loaded.

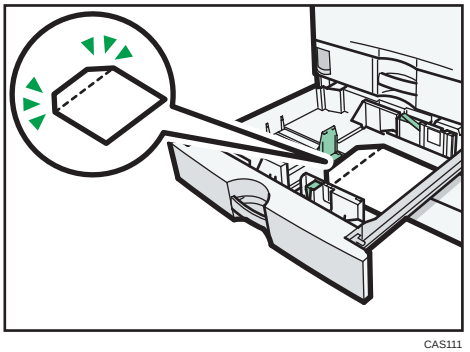


CAS110

8. Re-lock the side fences.
9. Carefully slide the paper tray fully in.
10. Check the paper size on the display.

Note

- You can load envelopes in trays 2 - 4. Be sure to open out their flaps and set them in the orientation.



CAS111

- For details about various details about and recommendations concerning envelopes, see “Envelopes”.
- If you load a paper size that is not selected automatically, you will need to specify the paper size with the control panel. For details, see “Changing to a Size That Is Not Automatically Detected”.

Reference

- p.108 "Changing to a Size That Is Not Automatically Detected"
- p.119 "Envelopes"

Changing the Paper Size in the Small Size Paper Tray

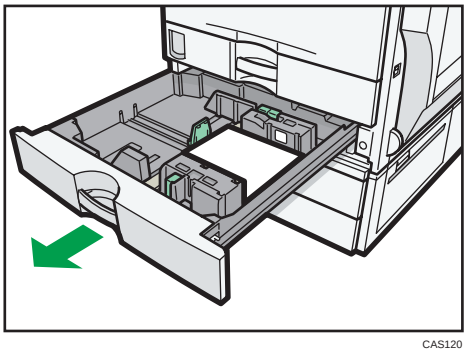
This section describes how to change the paper size in the small size paper tray.

Important

- **If a paper tray is pushed vigorously when putting it back into place, the position of the tray's side fences may slip out of place.**
- **Check the paper edges are aligned at the right side.**
- **Slide the side fences until they are aligned with the paper size, and then re-lock the side fences.**

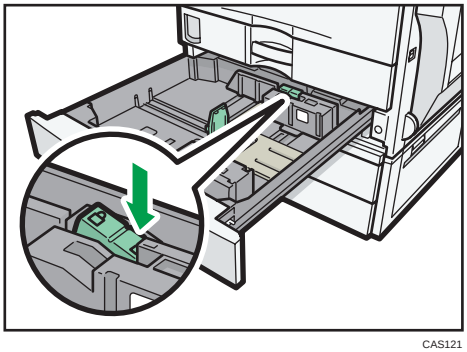
Various sizes of paper can be loaded in the small size paper tray by adjusting the positions of the side fences and end fence.

1. Check that paper in the small size paper tray is not being used, and then pull the tray carefully out until it stops.



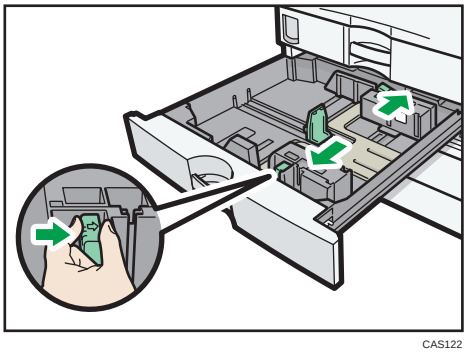
CAS120

2. Remove paper if loaded.
3. Release the lock on the side fences.



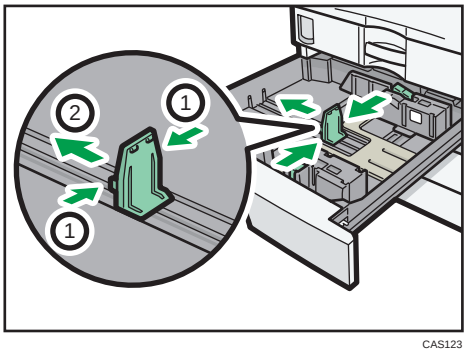
CAS121

4. While pressing down the release lever, slide the side fences outward.



CAS122

5. Slide the end fence outward.

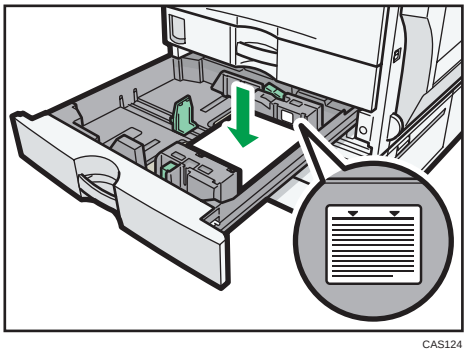


CAS123

1. Pinch the release levers of the end fence.
2. Slide the end fence outward.

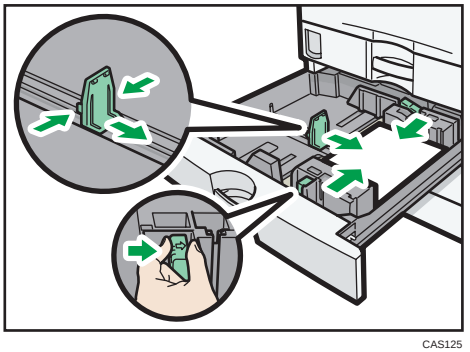
6. Square the paper and load it print side up.

Do not stack paper over the limit mark.



CAS124

7. Align the back and side fences gently against the paper you loaded.

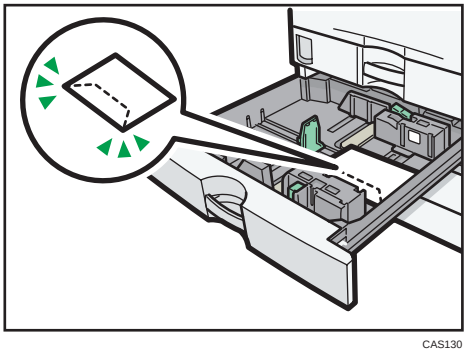


CAS125

8. Re-lock the side fences.
9. Carefully slide the small size paper tray fully in.

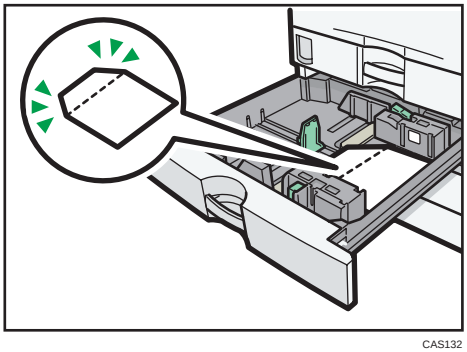
Note

- The small size paper tray cannot detect the paper size automatically. When changing the paper size, specify it with the control panel. For details, see “Changing to a Size That Is Not Automatically Detected”.
- You can load envelopes in the small size paper tray. Be sure to close their flaps and set them in the ▭ orientation.



CAS130

- If you are copying onto $3^{7}/_{8} \times 7^{1}/_{2}$▭, C6 Env▭, or DL Env▭ envelopes and they become creased, set them in the ▯ orientation.



CAS132

- For details about various details about and recommendations concerning envelopes, see “Envelopes”.
- For details about how to install the small size paper tray, see “Installing the Small Size Paper Tray”.

Reference

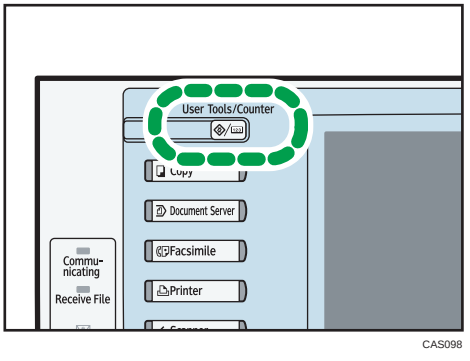
- p.89 "Installing the Small Size Paper Tray"
- p.108 "Changing to a Size That Is Not Automatically Detected"
- p.119 "Envelopes"

Changing to a Size That Is Not Automatically Detected

If you load a paper size that is not selected automatically, you need to specify the paper size with the control panel. This section describes how to load such paper.

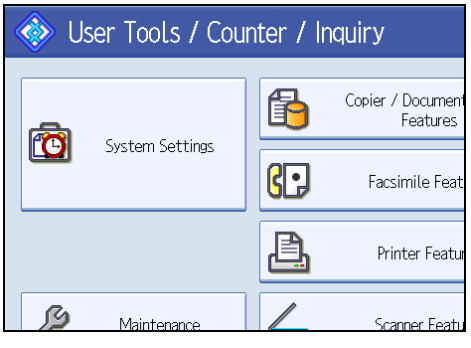
This section explains how to load these paper taking $8\frac{1}{4} \times 14$ as an example.

1. **Press the [User Tools/Counter] key.**

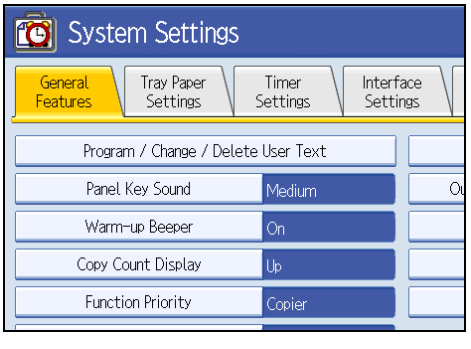


CAS098

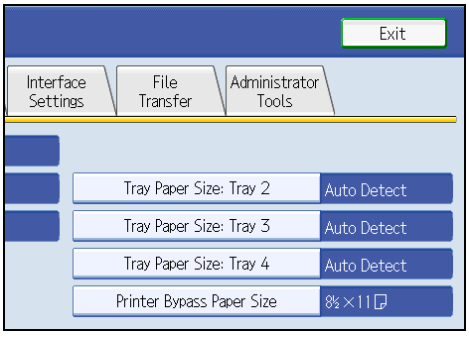
2. **Press [System Settings].**



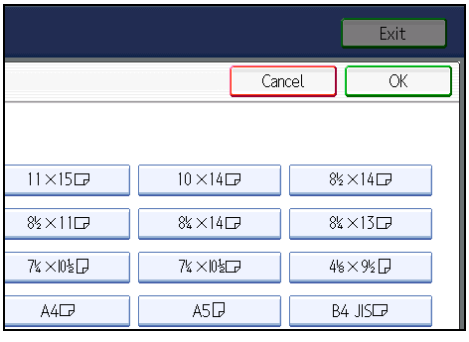
3. **Press the [Tray Paper Settings] tab.**



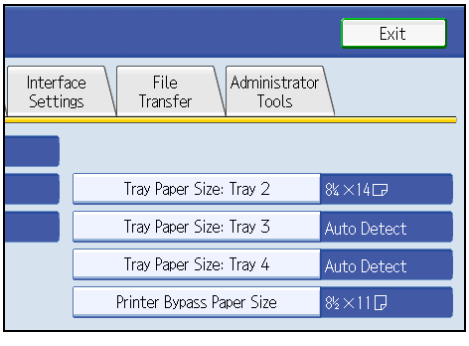
4. **Select the tray for which you want to change the paper settings.**



5. **Select the loaded paper size and feed direction, and then press [OK].**



The set paper size and feed direction is displayed.



6. **Press the [User Tools/Counter] key.**

The initial display is shown.

Note

- For details about paper sizes selected automatically, see “Recommended Paper Sizes and Types”.
- If you want to print on paper that is selected automatically after printing on a paper size that is not selected automatically, you must return the setting to “Auto Detect”. Reload the paper, and select “Auto Detect” in step 5. The setting is returned to “Auto Detect”.

Reference

- p.113 "Recommended Paper Sizes and Types"

Changing Paper Thickness Settings

Select [Plain Paper 1] or [Plain Paper 2] depending on the type of plain paper.

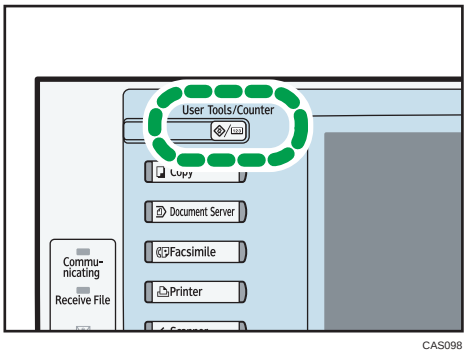
If in System Settings, [Tray Paper Settings], you set "Paper Thickness" to [Plain Paper] for each tray's [Paper Type], you must then select [Maintenance], [Plain Paper Setting] and specify either [Plain Paper 1] or [Plain Paper 2], depending on the thickness of the loaded paper.

The default setting is **Plain Paper 2**.

Important

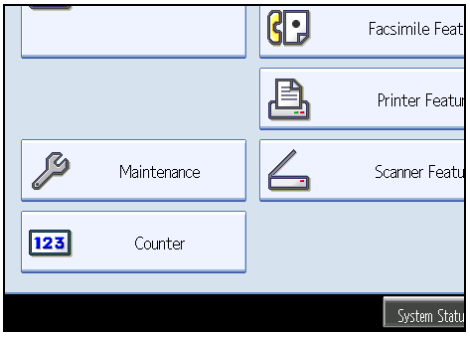
- **Select [Plain Paper 1] when paper weight is between 60 g/m^2 (16 lb. Bond) and 74 g/m^2 (20 lb. Bond).**
- **Select [Plain Paper 2] when paper weight is between 75 g/m^2 (20 lb. Bond) and 81 g/m^2 (20 lb. Bond).**

1. **Press the [User Tools/Counter] key.**

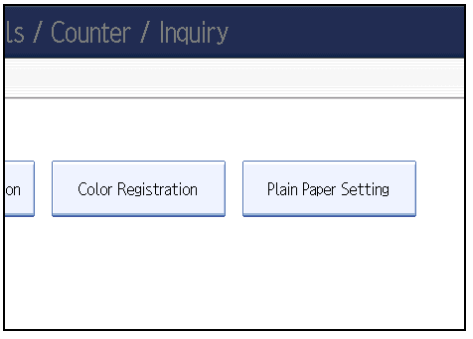


CAS098

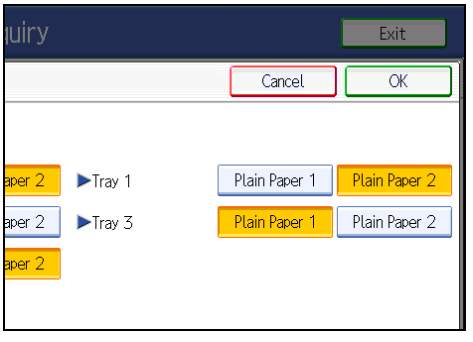
2. **Press [Maintenance].**



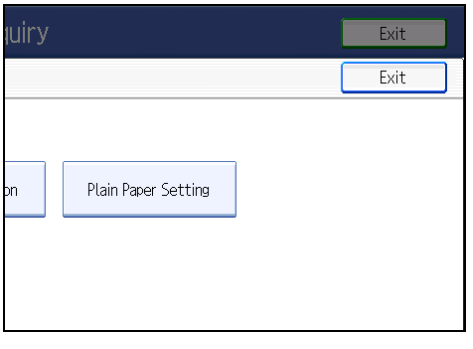
3. Press [Plain Paper Setting].



4. Select the plain paper type for each tray depending on the paper to be set and press [OK].



5. Press [Exit].



6. Press [Exit].

Note

- In System Settings, [Tray Paper Settings], for each tray's [Paper Type] you can specify “Paper Thickness”. For details about paper thickness, see “Recommended Paper Sizes and Types”.

Reference

- p.113 "Recommended Paper Sizes and Types"

Recommended Paper Sizes and Types

This section describes recommended paper sizes and types.

Important

- **Do not use paper designed for inkjet printers, as these may stick to the fusing unit and cause a misfeed.**
- **Do not use color OHP transparencies with coatings that are easily melted by heat.**
- **If you use damp or curled paper, a staple clogging or paper jam may occur.**

Tray 1

Paper type and weight	Paper size	Paper capacity *1
60 - 256 g/m^2 (16 lb. Bond - 140 lb. Index) Plain Paper 1 - Thick Paper 3	8 1/2 × 11	550 sheets
60 - 256 g/m^2 (16 lb. Bond - 140 lb. Index) Plain Paper 1 - Thick Paper 3	*2 A4, A5, B5 JIS	550 sheets

Tray 2 - 4

Paper type and weight	Paper size	Paper capacity *1
60 - 256 g/m^2 (16 lb. Bond - 140 lb. Index) Plain Paper 1 - Thick Paper 3	*3 A4, A5, B5 JIS, 11 × 17, 8 1/2 × 14, 8 1/2 × 11, 7 1/4 × 10 1/2	550 sheets
60 - 256 g/m^2 (16 lb. Bond - 140 lb. Index) Plain Paper 1 - Thick Paper 3	*4 A3, A4, B4 JIS, B5 JIS, 8 1/2 × 13, 8 1/4 × 14, 8 1/4 × 13, 8 × 13, 8 × 10, 7 1/4 × 10 1/2, 8K, 16K, 11 × 15, 10 × 14	550 sheets

Paper type and weight	Paper size	Paper capacity *1
60 - 256 g/m^2 (16 lb. Bond - 140 lb. Index) Plain Paper 1 - Thick Paper 3	Custom size *13 Vertical: 7.17 - 11.69 Inches Horizontal: 5.83 - 17.00 Inches	550 sheets
Envelopes *8	*4 $4^1/_8 \times 9^1/_2$, C5 Env	50 sheets *10

Small size paper tray (tray 2 - 4) (optional)

Paper type and weight	Paper size	Paper capacity *1
60 - 256 g/m^2 (16 lb. Bond - 140 lb. Index) Plain Paper 1 - Thick Paper 3	*4 A4, A5, A6, B5 JIS, B6 JIS, $8^1/_2 \times 11$, $7^1/_4 \times 10^1/_2$, $5^1/_2 \times 8^1/_2$	550 sheets
60 - 256 g/m^2 (16 lb. Bond - 140 lb. Index) Plain Paper 1 - Thick Paper 3	Custom size Vertical: 3.94 - 8.66 Inches Horizontal: 5.83 - 17.00 Inches	550 sheets
Envelopes *8	*4 $4^1/_8 \times 9^1/_2$, $3^7/_8 \times 7^1/_2$, C5 Env, C6 Env, DL Env	• : 50 sheets *10 • : Double flap: 15 sheets Single flap: 25 sheets

Bypass tray

Paper type and weight	Paper size	Paper capacity *11
60 - 300 g/m^2 (16 lb. Bond - 110 lb. Cover) Thin Paper - Thick Paper 4	*3 11 × 17, 8 1/2 × 11, 5 1/2 × 8 1/2	• Thin Paper - Middle Thick: 100 sheets • Thick Paper 1: 40 sheets • Thick Paper 2 - Thick Paper 3: 20 sheets • Thick Paper 4: 16 sheets
60 - 300 g/m^2 (16 lb. Bond - 110 lb. Cover) Thin Paper - Thick Paper 4	*5 A3, A4, A5, A6, B4 JIS, B5 JIS, B6 JIS, 8 1/2 × 14, 8 1/2 × 13, 8 1/4 × 13, 7 1/4 × 10 1/2, 11 × 15, 10 × 14, 8 1/4 × 14, 8 × 10, 8 × 13, 8K, 16K, 12 × 18	• Thin Paper - Middle Thick: 100 sheets • Thick Paper 1: 40 sheets • Thick Paper 2 - Thick Paper 3: 20 sheets • Thick Paper 4: 16 sheets
60 - 300 g/m^2 (16 lb. Bond - 110 lb. Cover) Thin Paper - Thick Paper 4	*6 Custom size Vertical: 3.55 - 12.00 Inches Horizontal: 5.83 - 23.62 Inches	• Thin Paper - Middle Thick: 100 sheets • Thick Paper 1: 40 sheets • Thick Paper 2 - Thick Paper 3: 20 sheets • Thick Paper 4: 16 sheets
OHP transparencies *7	A4	50 sheets *9
Label paper (adhesive labels)	B4 JIS, A4	30 sheets *9
Envelopes *8	*5 4 1/8 × 9 1/2, 3 7/8 × 7 1/2, C5 Env, C6 Env, DL Env	10 sheets *9

Tray 3 (LCT) (optional)

Paper type and weight	Paper size	Paper capacity *12
60 - 256 g/m^2 (16 lb. Bond - 140 lb. Index) Plain Paper 1 - Thick Paper 3	8 1/2 × 11	1,000 sheets × 2
60 - 256 g/m^2 (16 lb. Bond - 140 lb. Index) Plain Paper 1 - Thick Paper 3	*2 A4	1,000 sheets × 2

Large capacity tray (LCT) (optional)

Paper type and weight	Paper size	Paper capacity *12
60 - 216 g/m^2 (16 lb. Bond - 80 lb. Cover)	8 1/2 × 11	1,200 sheets
60 - 216 g/m^2 (16 lb. Bond - 80 lb. Cover)	*2 A4, B5 JIS	1,200 sheets

*1 When loading paper, make sure the stack height does not exceed the limit mark of the paper tray. The amount of paper that can be set is 55.5 mm/550 sheets approximately. See "Loading Paper".

*2 The paper tray fence is fixed. If you wish to change the size of paper, contact your service representative.

*3 The paper size is detected automatically.

*4 Select the paper size under Tray Paper Size: Tray 2 - 4 in System Settings. See "System Settings", Network and System Settings Reference.

*5 Press [Bypass], and the [#] key, and then select the paper size.

*6 Press [Bypass], and the [#] key, and then enter the paper size using the number keys.

*7 Press [Bypass], and the [#] key, and then select [OHP (Transparency)] for [Paper Type].

*8 For details about loading envelopes, see "Envelopes".

*9 It is recommended to place one sheet at a time.

*10 Open out flaps of envelopes.

*11 When loading paper, make sure the stack height does not exceed the limit mark of the paper tray. The amount of paper that can be set is 10 mm/100 sheets approximately. See "Loading Paper".

*12 When loading paper, make sure the stack height does not exceed the limit mark of the paper tray. See "Loading Paper".

*13 When loading paper with a vertical length of more than 279 mm (11.0 inches) in trays 2 - 4, use paper that has a horizontal width of 420 mm (16.6 inches) or less.

Paper Thickness

Paper Thickness *1	Paper weight
Plain Paper 1	60 - 74 g/m^2 (16 - 20 lb. Bond)
Plain Paper 2	75 - 81 g/m^2 (20 lb. Bond)
Middle Thick	82 - 105 g/m^2 (20 - 28 lb. Bond)
Thick Paper 1	106 - 169 g/m^2 (28 lb. Bond - 90 lb. Index)
Thick Paper 2	170 - 220 g/m^2 (65 - 80 lb. Cover)
Thick Paper 3	221 - 256 g/m^2 (80 lb. Cover - 140 lb. Index)
Thick Paper 4	257 - 300 g/m^2 (140 lb. Index - 110 lb. Cover)

*1 Print quality will decrease if the paper you are using is close to the minimum or maximum weight. Change the paper weight setting to thinner or thicker.

Note

- When loading paper in trays 1 - 4 or Tray 3 (LCT), place the print side face up. When loading paper in the bypass tray or large capacity tray (LCT), place the print side face down.
- When using translucent paper or label paper, make sure to select the appropriate paper type under Paper Type: Bypass Tray. See "System Settings", Network and System Settings Reference.
- When you use the bypass tray, it is recommended to set the paper direction to ▭.
- Certain types of paper produce noise when delivered. This noise does not indicate a problem and print quality is unaffected. (Glossy paper and OHP transparencies can produce noise when delivered.)
- When you load OHP transparencies, check the front and back of the sheets, and place them correctly, or a misfeed might occur. For details, see Copy and Document Server Reference, and Printer Reference.
- When you use OHP transparencies, fan them for each use.
- We recommend that you use a 4000 ANSI lumen or brighter overhead projector to project OHP transparencies.
- When copying or printing onto OHP transparencies, the copy/print speed is slower than usual.
- When copying or printing onto thick paper of 106 - 300 g/m^2 (28 lb. Bond - 110 lb. Cover), the copy/print speed is slower than usual.
- When copying or printing onto prepunched paper, the copy/print speed is slower than usual.
- Flatten out curled sheets before loading them.
- If multiple sheet feeding occurs, load sheets one by one.

- To print on coated paper from the bypass tray, trays 2 - 4, Tray 3 (LCT), or the large capacity tray (LCT): select System Settings, [Tray Paper Settings], and then, for each tray's [Paper Type] be sure to set [Paper Type] to [Coated Paper], and [Paper Thickness] to [Thick Paper 1].
- To print on high-gloss coated paper from the bypass tray, paper trays, Tray 3 (LCT), or the large capacity tray (LCT): select System Settings, [Tray Paper Settings], and then, for each tray's [Paper Type], be sure to set [Paper Type] to [Coated Paper: Gloss].
- Before loading coated or glossy sheets, be sure to fan them thoroughly. If sheets feed in together, become jammed, or produce strange noises when delivered, load them one by one from the bypass tray.
- When copying or printing onto letterhead paper, the paper placing orientation is different depending on which function you are using. See “Loading Orientation-Fixed Paper or Two-Sided Paper”.
- If you load paper of the same size in two or more trays, the machine automatically shifts to the other tray when the first tray in use runs out of paper. This function is called Auto Tray Switching. (However, if the paper type of one tray is recycled or special paper, the settings of the other trays must be the same for the Auto Tray Switching function to work.) This saves interrupting a copy run to replenish paper when making a large number of copies. You can set the paper type of the paper trays under Paper Type: Tray 1 - 4 and Paper Type: LCT. See “System Settings”, Network and System Settings Reference. For the setting procedure of the Auto Tray Switching function, see “Copier and Document Server Features”, Copy and Document Server Reference.

Reference

- p.93 "Loading Paper"
- p.99 "Loading Orientation-Fixed Paper or Two-Sided Paper"
- p.119 "Envelopes"
- p.121 "Thick Paper"

Envelopes

This section gives you various details about and recommendations concerning envelopes.

Important

- **Misfeeds might occur depending on the length and shape of the flaps.**
- **Do not use window envelopes.**
- **Only envelopes that are at least 148 mm wide and whose flaps are open can be loaded in the orientation.**
- **When loading envelopes in the orientation, load them with flaps fully open. Otherwise, they might not feed into the machine.**

To print on envelopes, load them on the bypass tray, in trays 2 - 4, or in the small size paper tray, and be sure to specify the appropriate paper type. For details about how to load envelopes in trays 2 - 4, see "Changing the Paper Size in Trays 2 - 4". For details about how to load envelopes in the small size paper tray, see "Changing the Paper Size in the Small Size Paper Tray". For details about how to copy onto envelopes, see "Copying onto Envelopes from the Bypass Tray" and "Copying onto Envelopes from the Small Size Paper Tray", Copy and Document Server Reference. For details about how to print onto envelopes, see "Setting Envelopes Using the Control Panel", Printer Reference.

Specifications for envelopes are as follows:

- Weight: 82 - 120 g/m^2 (20 - 32 lb. Bond)
- Paper Size: $4^1/_8 \times 9^1/_2$, $3^7/_8 \times 7^1/_2$, C5 Env, C6 Env, DL Env

Note

- When loading envelopes on the bypass tray, place them address side facing down. When loading envelopes in trays 2 - 4 or the small paper tray, place them address side facing up.
- The size of envelopes that you can load depends on a tray. For details, see "Recommended Paper Sizes and Types".
- Load only one size and type of envelope at a time.
- Before loading envelopes, press down on them to remove any air from inside, flatten out all four edges. If they are bent or curled, flatten their leading edges (the edge going into the machine) by running a pencil or ruler across them.
- Fan the envelopes before loading them to separate them and prevent the glue on them from causing them to stick together.
- Some kinds of envelope might cause misfeeds, wrinkles or print poorly.
- Print quality on envelopes may be uneven if parts of an envelope have differing thicknesses. Print one or two envelopes to check print quality.
- High temperature and high humidity conditions can reduce print quality and cause envelopes to become creased.

Reference

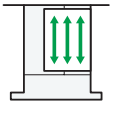
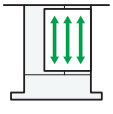
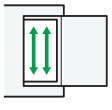
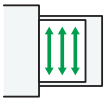
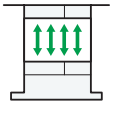
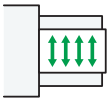
- p.101 "Changing the Paper Size in Trays 2 - 4"
- p.104 "Changing the Paper Size in the Small Size Paper Tray"
- p.113 "Recommended Paper Sizes and Types"

Thick Paper

This section gives you various details about and recommendations concerning thick paper.

When loading thick paper of 170 - 256 g/m^2 (65 lb. Cover - 140 lb. Index) in trays 1 - 4, the small size paper tray, or Tray 3 (LCT), 170 - 216 g/m^2 (65 - 80 lb. Cover) in the large capacity tray (LCT), or 170 - 300 g/m^2 (65 - 110 lb. Cover) in the bypass tray, follow the recommendations below to prevent misfeeds and loss of image quality.

- Store all your paper in the same environment - a room where the temperature is 20 - 25°C (68 - 77° F) and the humidity is 30 - 65%.
- When loading thick sheets in trays 1 - 4 or the small size paper tray, be sure to load at least 20 sheets. Also, be sure to position the side fences flush against the paper stack.
- Smooth out any curls in the paper before loading it.
- Jams and misfeeds can occur when printing on thick glossy sheets. To prevent such problems, be sure to fan glossy sheets thoroughly before loading them. If sheets continue to become jammed or feed in together even after they are fanned, load them one by one from the bypass tray.
- When loading thick paper, set the paper direction according to its grain, as shown in the following diagram:

Direction of paper grain	Tray 1 or Tray 3 (LCT)	Tray 2 - 4 or the small size paper tray	Large capacity tray (LCT)	Bypass tray
				
	Not available		Not available	

Note

- Even if thick paper is loaded as described above, normal operations and print quality might still not be possible, depending on the paper type.
- Prints might have prominent vertical creases.
- Prints might be noticeably curled. Flatten out prints if they are creased or curled.

Unusable Paper

This section describes paper unusable on this machine.

⚠CAUTION

- Do not attempt to print on stapled sheets, aluminum foil, carbon paper, or any kind of conductive paper. Doing so risks fire.

Important

- **To prevent faults, do not use any of the following kinds of treated paper:**
  - **Paper for inkjet printers**
  - **Thermal fax paper**
  - **Art paper**
  - **Aluminum foil**
  - **Carbon paper**
  - **Conductive paper**
  - **Paper with perforated lines**
  - **Hemmed-edge paper**
  - **Color OHP transparencies with easily melted coatings**
  - **Window envelopes**
- **Faults can occur if you copy or print onto sides that are already printed. Take care to copy or print onto unprinted sides only.**

Note

- To prevent misfeeds, do not use the following kinds of paper:
  - Bent, folded, or creased paper
  - Perforated paper
  - Slippery paper
  - Torn paper
  - Rough paper
  - Thin paper with little stiffness
  - Paper with a dusty surface
- Even supported types of paper may cause paper jams or malfunctions if the paper is not in good condition.
- If you copy or print onto rough grain paper, the output image might be blurred.

- Do not load sheets that have already been printed onto by another machine. (Sheets can become jammed if they have been improperly stored.)

Paper Storage

This section describes how to store paper.

- When storing paper, the following precautions should always be followed:
  - Do not store paper where it will be exposed to direct sunlight.
  - Avoid storing paper in humid areas (humidity: 70% or less).
  - Store on a flat surface.
  - Do not store paper vertically.
- Under high temperature and humidity conditions, or low temperature and humidity conditions, store paper in plastic bags.

4. Adding Toner and Staples

This chapter explains how to replenish toner and staples when they run out.

Adding Toner

This section describes how to add and store toner.

⚠WARNING

- Do not incinerate toner (new or used) or toner containers. Doing so risks burns. Toner will ignite on contact with naked flame.

⚠WARNING

- Do not store toner (new or used) or toner containers anywhere near naked flames. Doing so risks fire and burns. Toner will ignite on contact with naked flame.

⚠WARNING

- Do not incinerate spilled toner or used toner. Toner dust might ignite when exposed to an open flame.

⚠CAUTION

- Do not crush or squeeze toner containers. Doing so can cause toner spillage, possibly resulting in dirtying of skin, clothing, and floor, and accidental ingestion.

⚠CAUTION

- Keep toner (used or unused) and toner containers out of reach of children.

⚠CAUTION

- If toner or used toner is inhaled, gargle with plenty of water and move into a fresh air environment. Consult a doctor if necessary.

⚠CAUTION

- If toner or used toner gets into your eyes, flush immediately with large amounts of water. Consult a doctor if necessary.

⚠CAUTION

- If toner or used toner is swallowed, dilute by drinking a large amount of water. Consult a doctor if necessary.

⚠CAUTION

- When removing jammed paper or replacing toner, avoid getting toner (new or used) on your clothing. If toner comes into contact with your clothing, wash the stained area with cold water. Hot water will set the toner into the fabric and make removing the stain impossible.

⚠CAUTION

- When removing jammed paper or replacing toner, avoid getting toner (new or used) on your skin. If toner comes into contact with your skin, wash the affected area thoroughly with soap and water.

Important

- **Always add toner when the machine instructs you.**
- **Fault may occur if you use toner other than the recommended type.**
- **When adding toner, do not turn off the operation switch. If you do, settings will be lost.**
- **Store toner where it will not be exposed to direct sunlight, temperatures above 35 °C, or high humidity.**
- **Store toner on a flat surface.**

Note

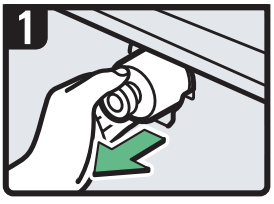
- If the message "Check toner cartridge replacement(s)." appears, the toner has almost run out. Have a replacement toner cartridge at hand.
- If appears when there is still toner in the cartridge, hold the cartridge with the opening upward, shake it well, and then reinstall it.
- You can check the name of the required toner and the replacement procedure using the "Add Toner" screen.
- Press [System Status] to check contact number where you can order supplies. See “Checking Machine Status and Settings”, Troubleshooting.
- You can add all four color toners in the same way.

Replacing Toner

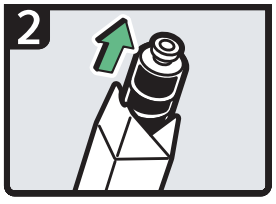
This section describes how to replace toner.

Important

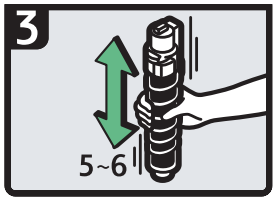
- **Do not shake the toner cartridge with its mouth down after removing it. Residual toner may scatter.**
- **Do not repeatedly install and remove toner cartridges. This will result in toner leakage.**



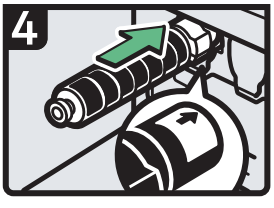
- Open the front cover of the machine.
- Pull out the toner cartridge slowly.



- Take out the new toner cartridge from the box.



- Hold the toner cartridge and shake it five or six times.



- Check the orientation of the toner cartridge and insert it carefully.
- Close the front cover of the machine.

CAS062

Sending Faxes or Scanned Documents When Toner Has Run Out

When the machine has run out of toner, the indicator on the display lights. Note that even if there is no toner left, you can still send faxes or scanned documents.

Important

- **If number of communications executed after the toner has run out and not listed in the automatically output Journal exceeds 200, communication is not possible.**

1. **Make sure the machine is in facsimile or scanner mode.**
2. **Press [Exit], and then perform transmission operation.**

   The error message disappears.

Note

- Any reports are not printed.
- If the fax or scanner screen does not appear in step 1, press the [Facsimile] key or the [Scanner] key.

Used Toner

This section describes what to do with used toner.

Toner cannot be re-used.

Bring the stored used container to your sales representative or service representative for recycling through our recycling system. If you discard it on your own, treat it as general plastic waste material.

Adding Staples

This section describes what to do when staples need replacing.

⚠CAUTION

- Keep your hands clear of the booklet finisher tray when removing misfed paper, pulling out or pushing in the finisher's staple unit. You can trap and injure your fingers if you do not.

Important

- **Stapling failures or jams may occur if you use a staple cartridge other than that recommended.**

Note

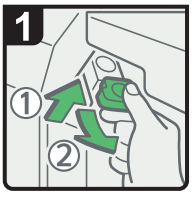
- If you cannot pull out the upper unit, there are staples remaining inside the cartridge. Use all the staples, and do not add more.
- Refill the stapler according to the finisher type. Check the type if you are unsure. For details about type of finisher, see “Options”.

Reference

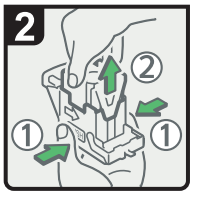
- p.63 "Options"

Adding Staples to Finisher SR3050

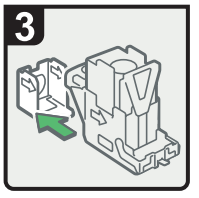
This section describes how to add staples to the Finisher SR3050.



- Open the finisher front cover.
- Hold the lever, and then gently pull out the cartridge.

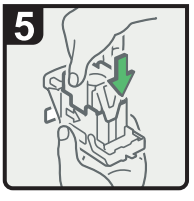


- Holding both side of the cartridge, pull up the upper unit.

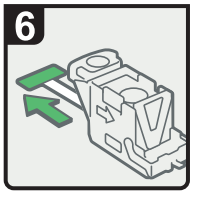


- Remove the empty refill in the direction of the arrow.

- Push the new refill into the cartridge until it clicks.



- Push the upper unit gently into the cartridge.



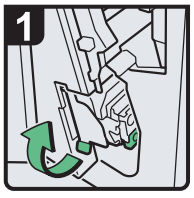
- Pull out the ribbon.

- Hold the lever, and then push in the cartridge until it clicks.
- Close the finisher front cover.

CAS063

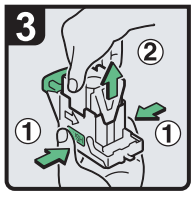
Adding Staples to Finisher SR790

This section describes how to add staples to the Finisher SR790.

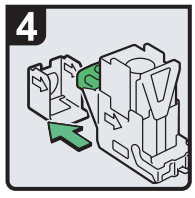


- Open the finisher front cover, and then pull out the staple unit.

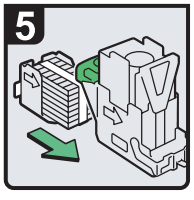
- Hold the lever, and then gently pull out the cartridge.



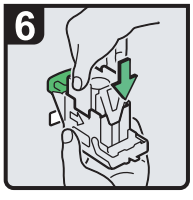
- Holding both side of the cartridge, pull up the upper unit.



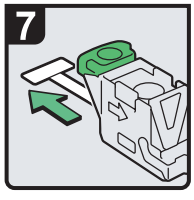
- Remove the empty refill in the direction of the arrow.



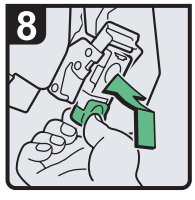
- Push the new refill into the cartridge until it clicks.



- Push the upper unit gently into the cartridge.



- Pull out the ribbon.

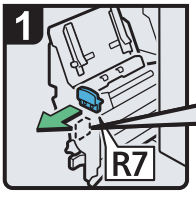


- Hold the green lever, and then push in the cartridge until it clicks.
- Return the staple unit to its original position, and then close the finisher front cover.

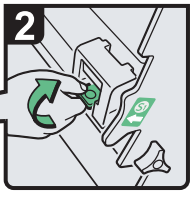
CAS064

Adding Staples to Booklet Finisher SR3000

This section describes how to add staples to the Booklet Finisher SR3000.

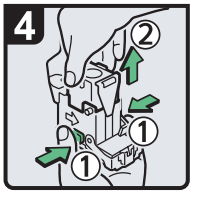


- Open the finisher front cover, and then pull out the staple unit.

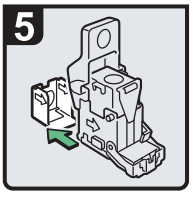


- Hold the lever and pull it up.

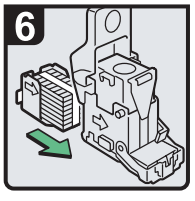
- Pull out the cartridge gently.



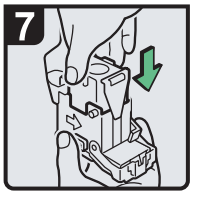
- Holding both side of the cartridge, pull up the upper unit.



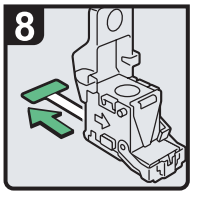
- Remove the empty refill in the direction of the arrow.



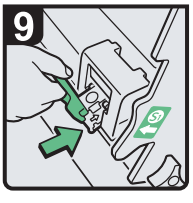
- Push the new refill into cartridge until it clicks.



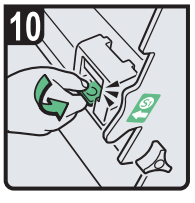
- Push the upper unit gently into the cartridge.



- Pull out the ribbon.



- Push in the cartridge gently.

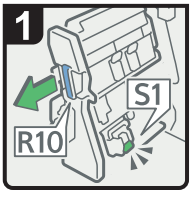


- Hold the lever and hold it down until it clicks.
- Return the staple unit to its original position, and close the finisher front cover.

CAS065

Adding Staples to Booklet Finisher SR3020

This section describes how to add staples to the Booklet Finisher SR3020.

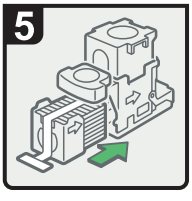


- Open the finisher front cover.
- Pull out the staple unit.

- Pull out the cartridge gently.

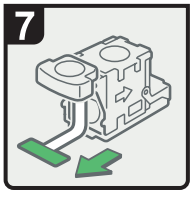
- Holding both sides of the cartridge, pull up the upper unit.

- Remove the empty refill in the direction of the arrow.



- Push the new refill into the cartridge until it clicks.

- Push the upper unit gently into the cartridge.



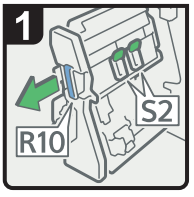
- Pull out the ribbon.

- Push the cartridge down until it clicks.
- Return the staple unit to its original position and close the finisher front cover.

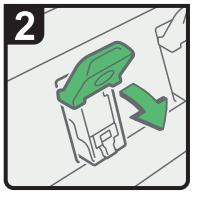
CAS066

Adding Staples to Booklet Finisher SR3020 (Saddle Stitch)

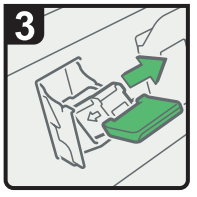
This section describes how to add staples to the Booklet Finisher SR3020 (Saddle Stitch).



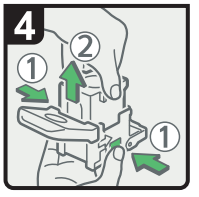
- Open the finisher front cover.
- Pull out the staple unit.



- Pull lever S2.

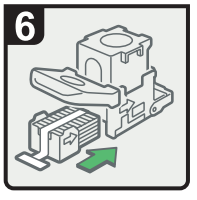


- Pull out the cartridge gently.

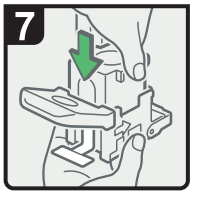


- Holding both sides of the cartridge, pull up the upper unit.

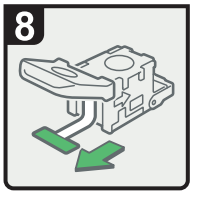
- Remove the empty refill in the direction of the arrow.



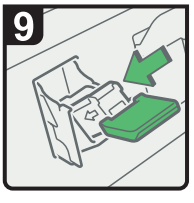
- Push the new refill into the cartridge until it clicks.



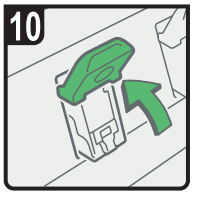
- Push the upper unit gently into the cartridge.



- Pull out the ribbon.



- Push the cartridge down.



- Return lever S2 to its original position.
- Return the staple unit to its original position and close the finisher front cover.

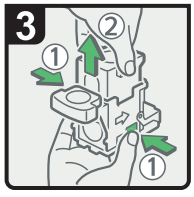
CAS067

Adding Staples to Finisher SR3030

This section describes how to add staples to the Finisher SR3030.

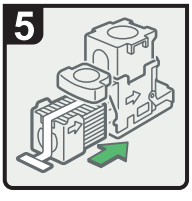
- Open the finisher front cover.
- Pull out the staple unit.

- Pull out the cartridge gently.



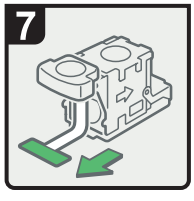
- Holding both sides of the cartridge, pull up the upper unit.

- Remove the empty refill in the direction of the arrow.

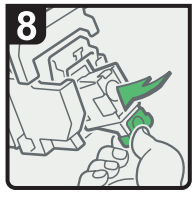


- Push the new refill into the cartridge until it clicks.

- Push the upper unit gently into the cartridge.



- Pull out the ribbon.



- Push the cartridge down until it clicks.
- Return the staple unit to its original position and close the finisher front cover.

CAS068

Replacing the Stamp Cartridge

If the transmission stamp becomes faint, replace the cartridge.

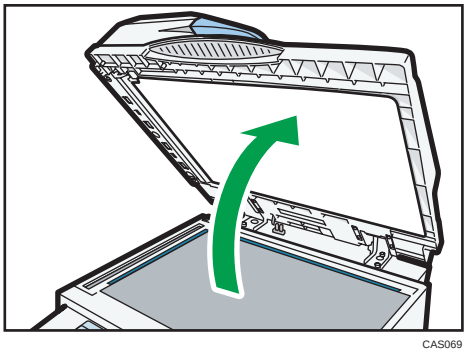
Important

- This stamp cartridge is used for facsimile and scanner functions.
- Do not add ink to the cartridge by yourself. Neglecting this can cause ink leakage.
- Be sure not to dirty your fingers with ink from the cartridge.
- Use the cartridge specified for this machine.

4

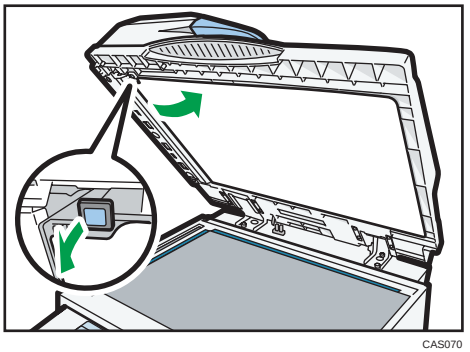
Replacing the Stamp Cartridge of Type 1 and 2

1. Open the ARDF unit.



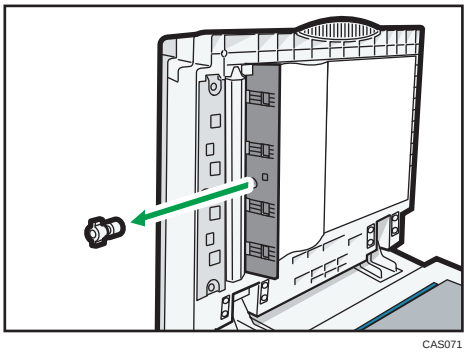
CAS069

2. Open the stamp cover.



CAS070

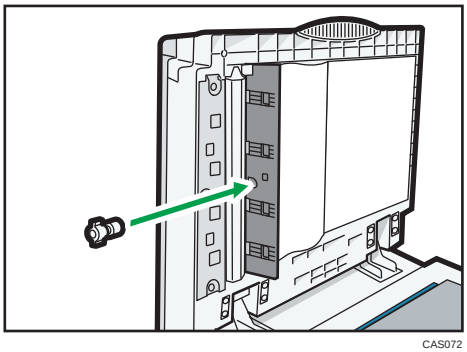
3. **Pull out the old stamp cartridge.**



CAS071

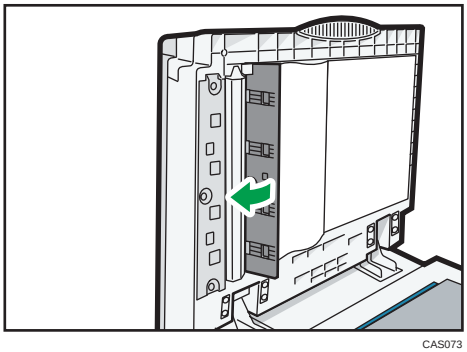
4. **Insert the new stamp cartridge.**

   Insert the cartridge until the metal parts are no longer visible.



CAS072

5. **Close the stamp cover.**

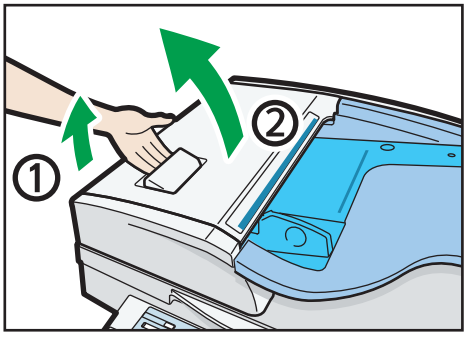


CAS073

6. **Close the ARDF unit.**

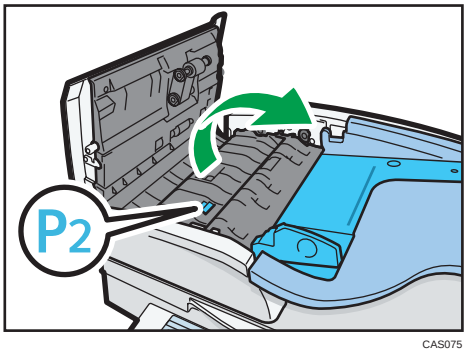
Replacing the Stamp Cartridge of Type 3 and 4

1. Open the ARDF cover.



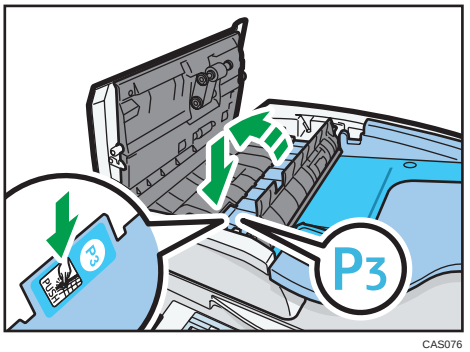
CAS074

2. Raise lever P2, and then pull open cover P2.



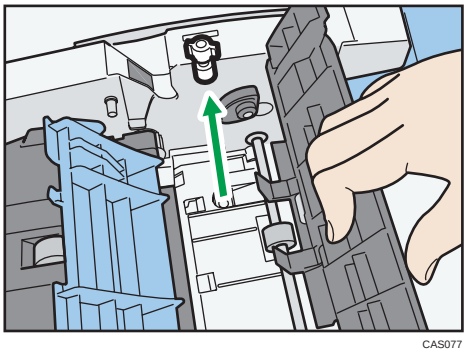
CAS075

3. Push on the area of cover P3 marked "PUSH", and then open the cover P3.



CAS076

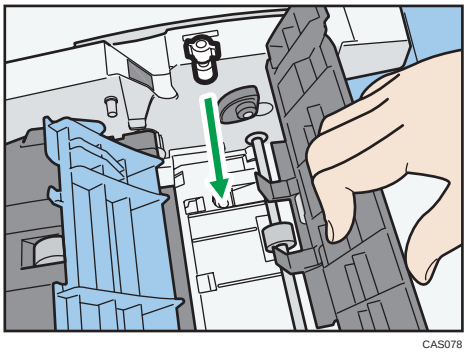
4. **Pull out the old stamp cartridge.**



CAS077

5. **Insert the new stamp cartridge.**

   Push in the cartridge until the metal parts are no longer visible.



CAS078

6. **Close cover P3, P2, and the ARDF cover.**

Note

- The one-pass duplex scanning ADF does not support the transmission stamp function.

5. Entering Text

This chapter describes how to enter characters.

Entering Text

This section explains how to enter text.

When you enter a character, it appears at the position of the cursor. If there is a character already at the cursor position, the entered character appears before that.

Available Characters

This section explains which characters are available.

You can enter the following characters:

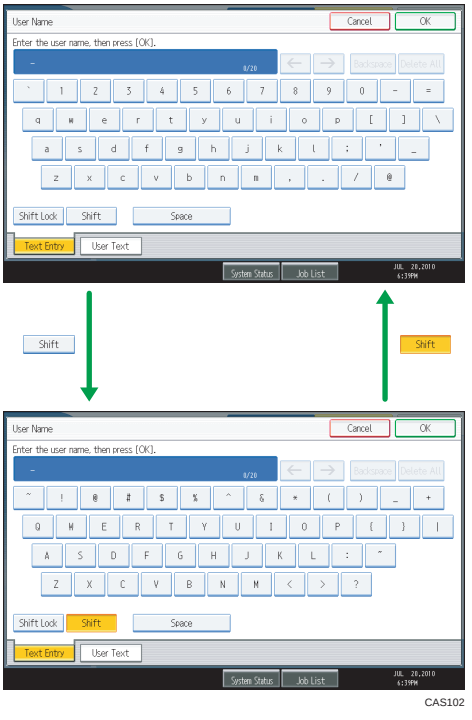
- Alphabetic characters
- Numerals

  0123456789

Keys

This section explains the entry screen and the keys displayed on it.

You can change the entry screen using the keys below.



CAS102

Note

- When entering uppercase or lowercase letters continuously, use [Shift Lock] to lock the case.

How to Enter Text

This section explains text entry more specifically.

Entering letters

This section explains how to enter letters.

1. **Press [Shift] to switch between uppercase and lowercase.**
2. **Press the letters you want to enter.**

Entering numbers

This section explains how to enter numbers.

1. **Press numbers you want to enter.**

Note

- You can also use the number keys to enter numbers, regardless of mode.

Deleting characters

This section explains how to delete characters.

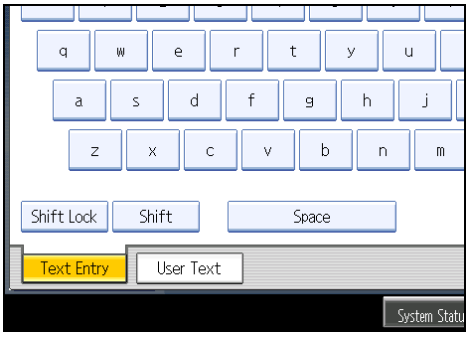
1. **Press [Backspace] or [Delete All] to delete characters.**

Adding user text

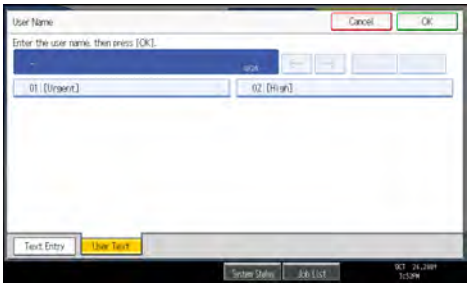
You can select and use a User Text that is registered in [Program / Change / Delete User Text].

For the registration procedure under Program / Change / Delete User Text, see "System Settings", Network and System Settings Reference.

1. **Press [User Text].**



2. **Select the User Text you want to use.**



6. On-screen Operating Instructions

This chapter describes the on-screen operating instructions of this machine. The on-screen operating instructions are included in the supplied manual CD-ROMs.

Formats of the Operating Instructions

The operating instructions of this machine are provided in the following formats:

- Printed manuals
- HTML manuals
- PDF manuals

The printed and electronic versions of a manual have the same contents. For details about the contents of each manual, see “Manuals for This Machine”. The various manuals are available in different formats. For details about availability, see “Manuals List”.

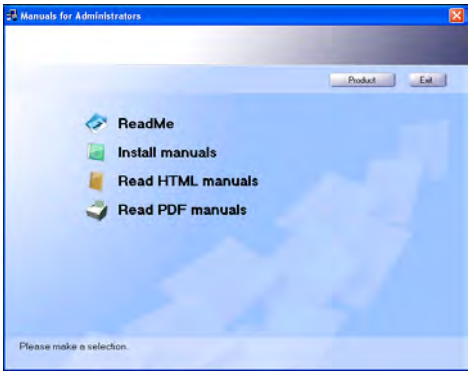
Reference

- p.8 "Manuals for This Machine"
- p.10 "Manuals List"

Reading the HTML Manuals on the CD-ROMs

This section describes how to read the HTML manuals on the supplied manual CD-ROMs.

1. **Insert the CD-ROM in the CD-ROM drive of your computer.**
2. **Select a language and a product, and then click [OK].**
3. **Click [Read HTML manuals].**



4. **Click the title of manual you want to read.**

   The browser opens, and then the manual appears.

Note

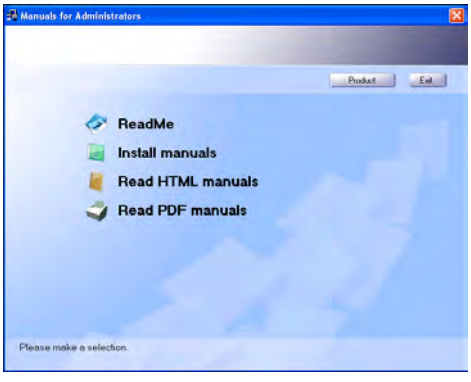
- Recommended browsers:
  - Internet Explorer 6 or later
  - Firefox 3.5 or later
  - Safari 4.0 or later
- Non-recommended browsers can display the simplified manual only.
- If you are using an earlier or non-recommended browser and the simplified version of the documentation does not appear automatically, open index.htm, which can be found in the following folder on the CD-ROM: MANUAL_HTML\LANG\(language)\(manual)\unv
- Depending on your computer's operating environment, the HTML manual you select will be one of the following:
  - Standard version
  - Simplified version
- If you want to read the HTML manuals on a Macintosh, insert the CD-ROM in the CD-ROM drive, and then click [Read HTML manuals].
- If JavaScript is disabled or unavailable in your browser, you will not be able to search or use certain buttons in the HTML documentation.

Installing and Opening the HTML Manuals

This section describes how to install and open the HTML manuals on your computer.

For your convenience, we recommend you install these manuals on your computer.

1. **Insert the CD-ROM in the CD-ROM drive of your computer.**
2. **Select a language and a product, and then click [OK].**
3. **Click [Install manuals].**



4. **Install the HTML manuals by following the on-screen instructions.**
5. **When the installation is complete, click [Finish].**
6. **Click [Exit].**
7. **Open the HTML manuals that you installed.**

   To open the manuals from an icon, double-click the icon on the desktop. To open the manuals from the [Start] menu, point to [All Programs] (Windows 2000: [Programs]), and then [Product Name].
8. **Click the title of the manual you want to read.**

Note

- You need administrator permissions to install the manuals. Log in as an Administrators group member.
- The system requirements for installing the manuals are as follows:
  - Operating system: Windows 2000/XP/Vista/7, Windows Server 2003/2003 R2/2008/2008 R2
  - Minimum display resolution: 800 × 600 pixels
- Hyperlinks might not work and referenced sections might not appear unless all the HTML manuals have been installed. To display referenced sections, be sure to install all the HTML manuals.
- If you cannot install a manual, copy the "MANUAL_HTML" folder to your computer's hard drive, and then run "Setup.exe".
- To delete an installed manual, on the [Start] menu, click [All Programs] (Windows 2000: [Programs]), then [Product Name], and then uninstall the data.

- Depending on the settings made during installation, menu folder names may differ.

Reading the PDF Manuals on the CD-ROMs

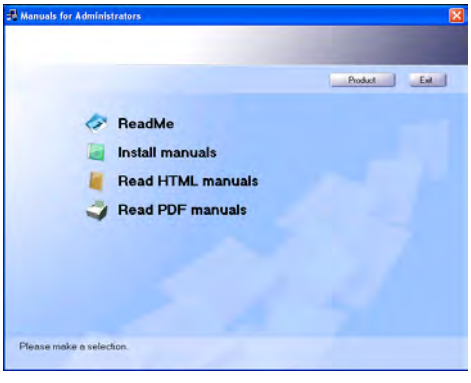
This section describes how to read the PDF manuals on the supplied manual CD-ROMs.

File path

The manuals are included in the following folder on the CD-ROMs:

`MANUAL_PDF\(language)`

1. **Insert the CD-ROM in the CD-ROM drive of your computer.**
2. **Select a language and a product, and then click [OK].**
3. **Click [Read PDF manuals].**



4. **Click the title of the manual you want to read.**

Note

- To view the PDF manuals, you need to have Adobe Acrobat Reader/Adobe Reader installed on your computer.
- If you want to read the HTML manuals on a Macintosh, insert the CD-ROM in the CD-ROM drive, and then click [Read PDF manuals].

7. Remarks

This chapter describes how to maintain and operate the machine.

Dos and Don'ts

The following items should be followed during use of this machine.

⚠WARNING

- Do not use flammable sprays or solvents in the vicinity of this machine. Doing so could result in fire or electric shock.

⚠CAUTION

- Unplug the power cord from the wall outlet before you move the machine. While moving the machine, take care that the power cord is not damaged under the machine. Failing to take these precautions could result in fire or electric shock.

Important

- Do not turn the power off while the operation switch indicator is lit or blinking. Doing so may damage the hard disk.
- Before unplugging the power cord or turning off the main power switch, make sure remaining memory space is at 100%, as shown on the screen. See “Turning On/Off the Power”.
- Do not touch areas on or around the fusing unit. These areas get hot.
- After scanning originals continuously, the exposure glass may become warm - this is not a malfunction.
- The area around the ventilation holes might feel warm. This is caused by exhaust air and is not a malfunction.
- If the machine is moved from a cold to a warm place, condensation may form inside it. After moving the machine, do not use it for at least an hour. The machine requires this time to adapt to its new environment.
- The machine will malfunction if its internal temperature becomes too high. Be sure not to block the intake and exhaust vents.
- Do not turn off the power while the machine is in operation. See “Turning On/Off the Power”.
- Do not open the covers of the machine when it is in operation. If you do, misfeeds might occur.
- Do not move or tilt the machine when the power is on.
- Do not allow small objects such as paper clips to fall into or become stuck inside the machine.
- Do not knock the machine while it is operating (for instance, do not use the machine's surfaces to knock stacks of paper into square).

- **Depending on the ambient temperature and humidity, steam may come from the exhaust vent behind the control panel during printing. This is water vapor from the paper, not a sign of malfunction.**
- **If condensation forms inside the machine as a result of temperature change, the machine may not print properly. To minimize this problem, use the optional anti-condensation heaters.**
- **Be sure to make a note of the registered machine settings in case they are lost due to accident or malfunction.**
- **The manufacturer shall not be liable for any loss or damage resulting from a failure of the machine, loss of settings, or use of the machine.**

Ventilation

When you use this machine in a confined space without good ventilation for a long time or print large quantities, you might detect an odd smell.

This might cause the output paper to also have an odd smell.

When you detect an odd smell, regularly ventilate in order to keep the workplace comfortable.

- Set up the machine so that it does not directly ventilate towards people.
- Ventilation should be more than 30 m^3/hr/person.

New machine smell

When a machine is new, it might have a unique smell. This smell will subside in about one week.

When you detect an odd smell, sufficiently ventilate and circulate the air in the room.

Reference

- p.82 "Turning On/Off the Power"

Saving Color Copies

This section explains notes on saving color copies.

- Like most prints, color prints will fade if exposed to strong light or dampness and humidity for lengthy periods. Preserve the quality of your copies by storing them in a binder in a dark, dry place.
- Toner may melt if a print and a half-dried print are put on top of each other.
- Toner may also melt when using solvent type adhesive agents for pasting prints.
- When folding prints, toner in the folds will come off.
- Toner may melt if it is placed on mats made of chlorinated plastic in locations of high temperature for long periods of time.
- Toner may melt if prints are placed in places of extremely high temperatures, such as near heaters.

Where to Put Your Machine

This section describes precautions for installation and movement.

Machine Environment

Choose your machine's location carefully.

Environmental conditions greatly affect its performance.

Moving

This section describes precautions when moving the machine.

⚠CAUTION

- Contact your service representative if you need to lift the machine (such as when relocating it to another floor). Do not attempt to lift the machine without the assistance of your service representative. The machine will be damaged if it topples or is dropped, resulting in malfunction and risk of injury to users.

⚠CAUTION

- Unplug the power cord from the wall outlet before you move the machine. While moving the machine, take care that the power cord is not damaged under the machine. Failing to take these precautions could result in fire or electric shock.

⚠CAUTION

- After you move the machine, use the caster fixture to fix it in place. Otherwise the machine might move or come down to cause an injury.

⚠CAUTION

- If you have to move the machine when the optional paper tray unit is attached, do not push on the main unit's top section. Doing so can cause the optional paper tray unit to detach, possibly resulting in injury.

Important

- **Be careful when moving the machine. Take the following precautions:**
  - **Turn off the main power. For details about how to turn the main power off, see "Turning On/Off the Power".**

- Unplug the power cord from the wall outlet. When you pull out the plug from the socket, grip the plug to avoid damaging the cord, thereby reducing the risk of fire or electric shock.
- Close all covers and trays, including the front cover and bypass tray.
- Keep the machine level and carry it carefully, taking care not to jolt or tip it. Rough handling may cause a malfunction or damage the hard disk or memory, resulting in loss of stored files.
- Do not take off the holding stand.
- Protect the machine from strong shocks. Impact can damage the hard disk and cause stored files to be lost. As a precautionary measure, files should be copied to another computer.

Reference

- p.82 "Turning On/Off the Power"

Optimum environmental conditions

This section describes precautions when locating the machine.

⚠CAUTION

- Keep the machine away from humidity and dust. Otherwise a fire or an electric shock might occur.

⚠CAUTION

- Do not place the machine on an unstable or tilted surface. If it topples over, an injury might occur.

⚠CAUTION

- After you move the machine, use the caster fixture to fix it in place. Otherwise the machine might move or come down to cause an injury.

⚠CAUTION

- Make sure the room where you are using the machine is well ventilated and spacious. Good ventilation is especially important when the machine is used heavily.

⚠CAUTION

- Keep the machine away from salt-bearing air and corrosive gases. Also, do not install the machine in places where chemical reactions are likely (laboratories, etc.), as doing so will cause the machine to malfunction.

⚠CAUTION

- Machine sound levels exceeding LWAd > 63 dB (A) are not suitable for desk work environments, so place the machine in another room.

- Temperature: 10 - 32 °C (50 - 89.6 °F) (humidity to be 54% at 32 °C, 89.6 °F)
- Humidity: 15 - 80% (temperature to be 27 °C, 80.6 °F at 80%)
- A strong and level base.
- The machine must be level within 5 mm, 0.2 inch: both front to rear and left to right.

Environments to avoid

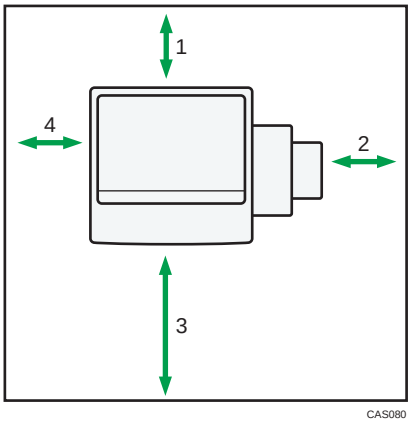
This section describes environments to avoid when locating the machine.

- Locations exposed to direct sunlight or other sources of strong light (more than 1,500 lux).
- Locations directly exposed to cool air from an air conditioner or heated air from a heater. (Sudden temperature changes can cause condensation to form inside the machine.)
- Locations close to machines generating ammonia, such as a diazo copy machine.
- Places where the machine will be subject to frequent strong vibration.
- Dusty areas.
- Areas with corrosive gases.

Access to the machine

This section describes the space required for the machine.

Place the machine near the power source, providing the clearance areas shown.



1. **Rear: 10 cm (4 inches) or more**
2. **Right: 10 cm (4 inches) or more**
3. **Front: 75 cm (29.5 inches) or more**
4. **Left: 10 cm (4 inches) or more**

Note

- For the required space when options are installed, contact your service representative.

Power Connection

This section describes power supply.

⚠WARNING

- Do not use any power sources other than those that match the specifications shown in "Specifications for the Main Unit" in this manual. Doing so could result in fire or electric shock.

⚠WARNING

- Do not use any frequencies other than those that match the specifications shown. Doing so could result in fire or electric shock.

⚠WARNING

- Do not use multi-socket adaptors. Doing so could result in fire or electric shock.

⚠WARNING

- Do not use extension cords. Doing so could result in fire or electric shock.

⚠WARNING

- Do not use power cords that are damaged, broken, or modified. Also, do not use power cords that have been trapped under heavy objects, pulled hard, or bent severely. Doing so could result in fire or electric shock.

⚠WARNING

- Touching the prongs of the power cable's plug with anything metallic constitutes a fire and electric shock hazard.

⚠WARNING

- The supplied power cord is for use with this machine only. Do not use it with other appliances. Doing so could result in fire or electric shock.

⚠WARNING

- It is dangerous to handle the power cord plug with wet hands. Doing so could result in electric shock.

⚠WARNING

- Disconnect the power plug (by pulling the plug, not the cable) if the power cable or plug becomes frayed or otherwise damaged.

⚠WARNING

- If the power cord is damaged (exposure of the core, disconnection, etc.), contact your service representative to change a new one. Operating the machine with a damaged power cord may cause an electric shock or fire.

⚠CAUTION

- Be sure to push the plug of the power cord fully into the wall outlet. Partially inserted plugs create an unstable connection that can result in unsafe buildup of heat.

⚠CAUTION

- If this machine is not going to be used for several days or longer at a time, disconnect its power cord from the wall outlet.

⚠CAUTION

- When disconnecting the power cord from the wall outlet, always pull the plug, not the cord. Pulling the cord can damage the power cord. Use of damaged power cords could result in fire or electric shock.

⚠CAUTION

- Be sure to disconnect the plug from the wall outlet and clean the prongs and the area around the prongs at least once a year. Allowing dust to build up on the plug constitutes a fire hazard.

⚠CAUTION

- When performing maintenance on the machine, always disconnect the power cord from the wall outlet.

- Make sure the plug is inserted firmly in the wall outlet.
- Voltage must not fluctuate by more than +8.66% or less than -10%.

.

Maintaining Your Machine

If the exposure glass or scanning glass is dirty, copy clarity may be reduced. Clean these parts if they are dirty.

Important

- **Do not use chemical cleaners or organic solvents, such as thinner or benzene. If such substances get inside the machine or melt plastic parts, a failure might occur.**
- **Do not clean parts other than those explicitly specified in this manual. Other parts should only be cleaned by your service representative.**

Cleaning the Machine

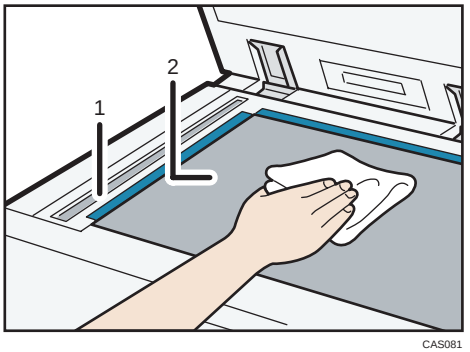
This section describes how to clean the machine.

Wipe the machine with a soft, dry cloth. If this does not remove the dirt, wipe the machine with a damp and tightly wrung cloth. If a damp cloth still does not remove the dirt, try using a mild detergent. Wipe the machine with a dry cloth to remove the moisture, after using a damp cloth.

Cleaning the Exposure Glass

This section describes how to clean the exposure glass and the scanning glass.

1. **Wipe the exposure glass and the scanning glass.**



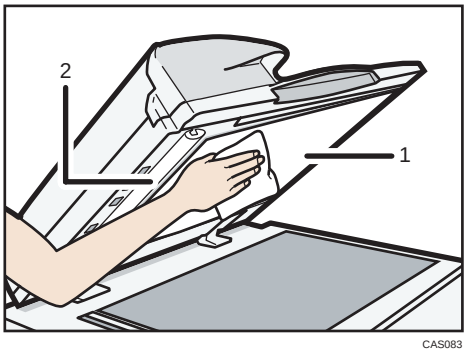
CAS081

1. **Scanning glass**
2. **Exposure glass**

Cleaning the Auto Reverse Document Feeder

This section describes how to clean the ARDF.

1. **Wipe the sheet and guide plate of the ARDF.**



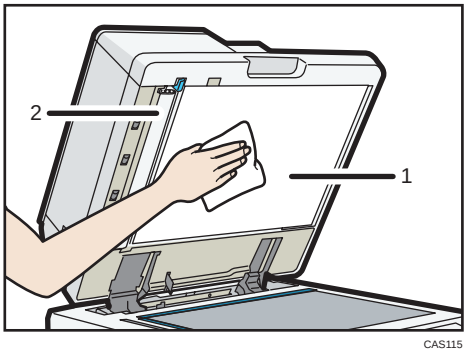
CAS083

1. **Sheet**
2. **Guide plate**

Cleaning the One-pass Duplex Scanning ADF

This section describes how to clean the one-pass duplex scanning ADF.

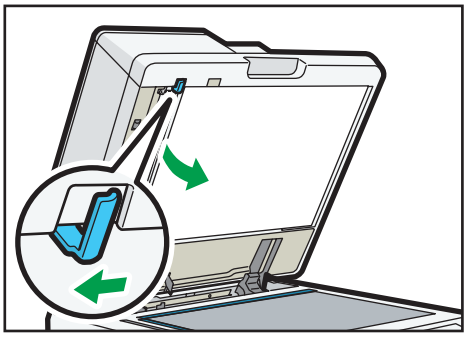
1. **Wipe the sheet and guide plate of the one-pass duplex scanning ADF.**



CAS115

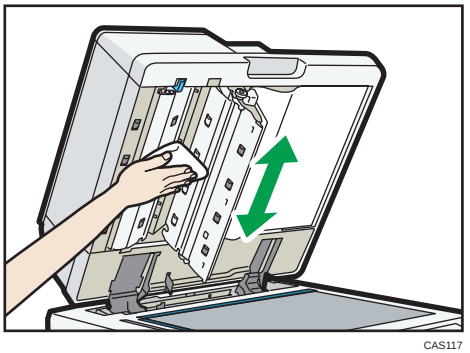
1. **Sheet**
2. **Guide plate**

2. Pull the lever.



CAS116

3. Wipe the scanning glass.



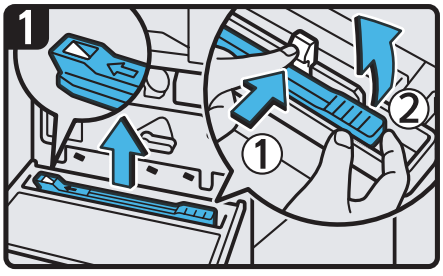
CAS117

Cleaning the Dustproof Glass

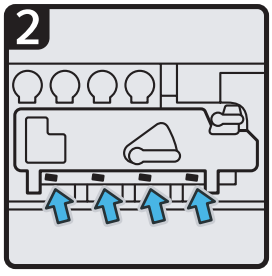
The dustproof glass may require cleaning if white lines appear on the print side of the document.

Important

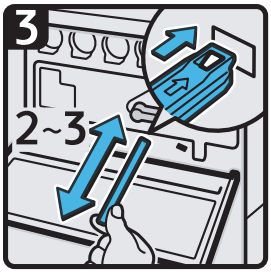
- **Do not insert the cleaning brush forcefully, or the machine might be damaged.**



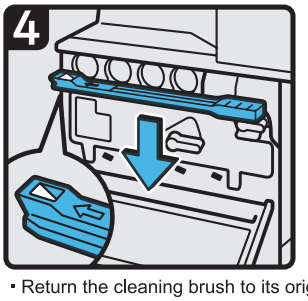
- Turn off the main power switch, and then unplug the power cord.
- Open the front cover and remove the cleaning brush. Release the catch at the center of the cleaning brush (①), hold the catch to prevent it re-engaging, and then raise the cleaning brush grip(②).



- There are four holes for cleaning the dustproof glass.



- Slide the cleaning brush in and out slowly two to three times to clean all four areas.



- Return the cleaning brush to its original position, and then close the front cover.
- Plug in the power cord, and then turn on the main power switch.

CAS084

Note

- Insert the cleaning brush so that its arrow mark is pointing up.

Cleaning the Power Cord Plug

This section describes precautions for cleaning the power cord plug.

⚠CAUTION

- Be sure to disconnect the plug from the wall outlet and clean the prongs and the area around the prongs at least once a year. Allowing dust to build up on the plug constitutes a fire hazard.

Backing Up Hard Disk Data

You can store data such as images and Address Book information on the machine's hard disk.

This section describes how to back up or download this data.

Important

- **If the machine's hard disk fails, data stored on it, including Address Book information might be lost. For this reason, do not save important data on the machine's hard disk without backing it up or downloading it. We also recommend backing up fonts, forms, and any other downloaded resources that are stored on the hard disk. The manufacturer is not liable for damages resulting from lost data.**

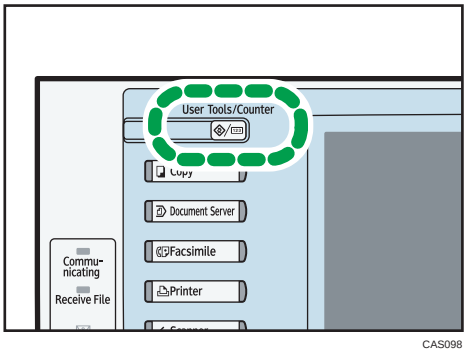
Note

- You can use SmartDeviceMonitor for Admin or Web Image Monitor to back up the machine's Address Book. For details about SmartDeviceMonitor for Admin, see the manual for SmartDeviceMonitor for Admin. For details about Web Image Monitor, see the Help for Web Image Monitor.
- You can use Web Image Monitor to download data stored on the Document Server to your computer. For details about how to do this, see "Downloading Stored Documents with Web Image Monitor", Copy and Document Server Reference, or the Help for Web Image Monitor.

Counter

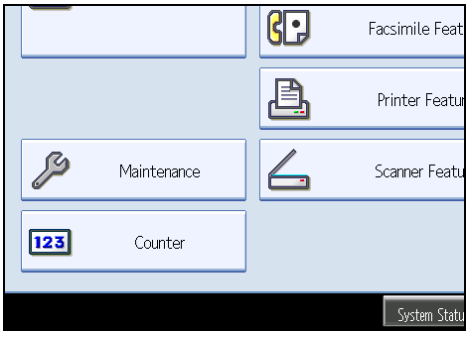
You can display the total counter value used for all functions.

1. **Press the [User Tools/Counter] key.**

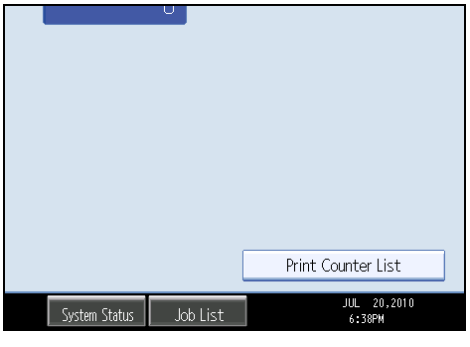


CAS098

2. **Press [Counter].**



3. **To print a counter list, press [Print Counter List].**



4. **Press the [Start] key.**

   A counter list prints out.

5. **Press [Exit] twice.**

Inquiry

The Inquiry function lets you check the telephone numbers to contact for repairs, or ordering consumables such as toner.

Be sure to contact your service engineer to verify the following:

Consumables

- Telephone No. to order
- Toner
- Staple
- Staple (Center)
- TX Stamp Name

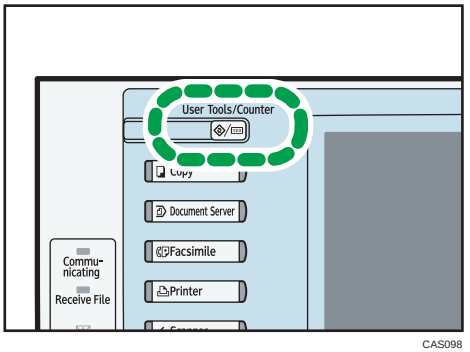
Machine Maintenance/Repair

- Telephone No.
- Serial No. of Machine

Sales Representative

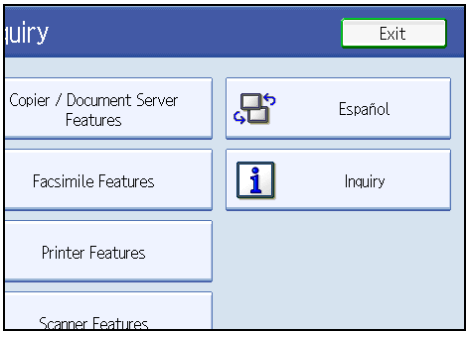
- Telephone No.

1. **Press the [User Tools/Counter] key.**



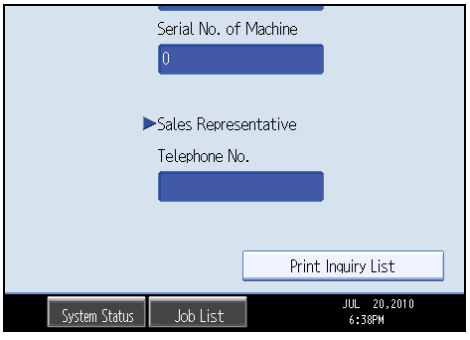
CAS098

2. **Press [Inquiry].**



Inquiry information appears.

3. **Press [Print Inquiry List].**



4. **Press the [Start] key.**

Inquiry information prints out.

5. **Press [Exit] twice.**

8. Appendix

This chapter describes the provided software and utilities CD-ROM, and specifications.

Software and Utilities Included on the CD-ROM

This section explains the software and utilities CD-ROM provided with this machine.

The following is included in the CD-ROM:

Font Manager

For installing new screen fonts, or organizing and managing fonts already in the system. For details about Font Manager, see the manual on the CD-ROM.

Viewing the Contents of the CD-ROM

This section explains how to view the contents of the CD-ROM.

1. **Insert the CD-ROM in the CD-ROM drive of your computer.**
2. **Select a language and a product, and then click [OK].**
3. **Click [Browse This CD-ROM].**

   Explorer starts and displays the contents of the CD-ROM.

Printer Drivers for This Machine

This section explains printer drivers for this machine.

Important

- **You can install the PCL printer drivers (PCL 5c and PCL 6), and the Adobe PostScript printer driver from the CD-ROM provided with this machine or download them from the manufacturer's Web site. If your operating system is Windows XP/Vista/7 x64, or Windows Server 2003/2003 R2/2008/2008 R2 x64, you must download the printer drivers from the manufacturer's Web site. Select this machine and the operating system you are using, and then download them.**

Printing requires installation of a printer driver for your operating system. The following drivers are included on the CD-ROM.

Printer Language	PCL 5c	PCL 6	PostScript 3
Windows 2000 *1	OK	OK	OK
Windows XP *2	OK	OK	OK

Printer Language	PCL 5c	PCL 6	PostScript 3
Windows Vista *3	OK	OK	OK
Windows 7 *4	OK	OK	OK
Windows Server 2003 *5	OK	OK	OK
Windows Server 2008 *6	OK	OK	OK
Mac OS X *7	–	–	OK

*1 Microsoft Windows 2000 Professional /Microsoft Windows 2000 Server/Microsoft Windows 2000 Advanced Server

*2 Microsoft Windows XP Professional Edition/Microsoft Windows XP Home Edition/Microsoft Windows XP Media Center Edition/Microsoft Windows XP Tablet PC Edition

*3 Microsoft Windows Vista Ultimate/Microsoft Windows Vista Enterprise/Microsoft Windows Vista Business/ Microsoft Windows Vista Home Premium/Microsoft Windows Vista Home Basic

*4 Microsoft Windows 7 Home Premium/Microsoft Windows 7 Professional/Microsoft Windows 7 Ultimate/ Microsoft Windows 7 Enterprise

*5 Microsoft Windows Server 2003 Standard Edition/Microsoft Windows Server 2003 Enterprise Edition/ Microsoft Windows Server 2003 R2 Standard Edition/Microsoft Windows Server 2003 R2 Enterprise Edition

*6 Microsoft Windows Server 2008 Standard/Microsoft Windows Server 2008 Enterprise

*7 Mac OS X 10.2 or later (Native mode)

8

PCL printer drivers

Two kinds of PCL printer driver (PCL 5c and PCL 6) are included. These drivers allow your computer to communicate with this machine via a printer language.

Adobe PostScript printer driver and PPD files

Adobe PostScript printer driver allows the computer to communicate with the printer using a printer language. PPD files allow the printer driver to enable specific printer functions.

PPD files

PPD files allow the printer driver to enable specific printer functions.

Note

- Some applications may require installation of the PCL 5c printer driver. In this case, you can install PCL 5c without having to install PCL 6.
- For details, see “Preparing the Machine”, Printer Reference and PostScript 3 Supplement.

TWAIN Driver

This section describes the file path and system requirements of the TWAIN driver.

This driver is required to scan an original using a scanner. To use the machine as a network TWAIN scanner, this driver must be installed.

File path

The driver is included in the following folder on the CD-ROM:

`\DRIVERS\TWAIN`

System requirements

- Hardware

  PC/AT-compatible machines that support the following operating system properly
- Operating system

  Windows 2000/XP/Vista/7

  Windows Server 2003/2003 R2/2008
- Display resolution

  800 × 600 pixels, 256 colors or higher

LAN-Fax Driver

This section describes the file path and system requirements of the LAN-Fax driver.

Important

- **You can install the LAN-Fax driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site. If your operating system is Windows XP/Vista/7 x64, or Windows Server 2003/2003 R2/2008/2008 R2 x64, you must download the LAN-Fax driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**

This driver is required to use LAN-Fax functions.

File path

The driver is included in the following folder on the CD-ROM:

`\DRIVERS\LAN-FAX\XP_VISTA`

System requirements

- Hardware

  PC/AT-compatible machines that support the following operating system properly
- Operating systems

  Windows 2000/XP/Vista/7

  Windows Server 2003/2003 R2/2008
- Display

  VGA 640 × 480 pixels or more

Note

- Before beginning installation, exit all other applications.

Specifications for the Main Unit

This section describes specifications for the main unit.

For Users of Type 1 and 2

This section describes specifications for the main unit of type 1 and 2.

Configuration:

Desktop

Photosensitivity type:

OPC drum

Original scanning:

One-dimensional solid scanning system through CCD

Copy process:

Laser beam scanning and electro-photographic printing

Development:

Dry two-component magnetic brush development system

Fusing:

Induction Heating (IH) fusing

Resolution:

- Scanning originals: 600 dpi
- Copying: 600 dpi
- Printing: 200 dpi/300 dpi/400 dpi/600 dpi/1200 dpi

Exposure glass:

Stationary original exposure type

Original reference position:

Rear left corner

Warm-up time (23°C (73°F), rated voltage):

23 seconds

Originals:

Sheet/book/objects

Maximum original size:

A3□, 11 × 17□

Paper size:

- Tray 1:

  A4, $8^1/_2 \times 11$, A5, B5 JIS

- Tray 2:

  A3, A4, A5, B4 JIS, B5 JIS,

  11 × 17, $8^1/_2 \times 14$, $8^1/_2 \times 13$, $8^1/_2 \times 11$, $8^1/_4 \times 14$, $8^1/_4 \times 13$, 8 × 13, 8 × 10, $7^1/_4 \times 10^1/_2$,

  8K, 16K, 11 × 15, 10 × 14, $4^1/_8 \times 9^1/_2$, C5 Env

- Tray 2 (custom size):

  Vertical: 182.0 - 297.0 mm (7.17 - 11.69 inches)

  Horizontal: 148.0 - 432.0 mm (5.83 - 17.00 inches)

- Bypass tray:

  A3, A4, A5, A6, B4 JIS, B5 JIS, B6 JIS,

  11 × 17, $8^1/_2 \times 14$, $8^1/_2 \times 13$, $8^1/_2 \times 11$, $8^1/_4 \times 14$, $8^1/_4 \times 13$, 8 × 13, 8 × 10, $7^1/_4 \times 10^1/_2$, $5^1/_2 \times 8^1/_2$,

  $4^1/_8 \times 9^1/_2$, $3^7/_8 \times 7^1/_2$, C5 Env, C6 Env, DL Env, 8K, 16K, 12 × 18, 11 × 15, 10 × 14

- Bypass tray (custom size):

  Vertical: 90.0 - 305.0 mm (3.55 - 12.00 inches)

  Horizontal: 148.0 - 600.0 mm (5.83 - 23.62 inches)

- Duplex:

  A3, A4, A5, A6, B4 JIS, B5 JIS, B6 JIS,

  11 × 17, $8^1/_2 \times 14$, $8^1/_2 \times 13$, $8^1/_2 \times 11$, $8^1/_4 \times 14$, $8^1/_4 \times 13$, 8 × 13, 8 × 10, $7^1/_4 \times 10^1/_2$,

  8K, 16K, 11 × 15, 10 × 14

Paper weight:

- Paper trays: 60 - 256 g/m^2 (16 lb. Bond - 140 lb. Index)
- Bypass: 60 - 300 g/m^2 (16 lb. Bond - 110 lb. Cover)
- Duplex: 60 - 169 g/m^2 (16 lb. Bond - 90 lb. Index)

For details about and recommendations concerning thick paper, see “Thick Paper”.

Non-reproduction area (Copier):

- Leading edge: 2.7 - 5.7 mm (0.11 - 0.23 inches)
- Trailing edge: 0.5 - 6.0 mm (0.02 - 0.24 inches) (3.0 - 6.0 mm (0.12 - 0.24 inches) in Duplex mode)

- Left and right edges: 0.5 ~ 4.0 mm (0.02 ~ 0.16 inches)

First copy/print time:

- Full Color: 7.8 seconds
- B&W: 4.9 seconds

(A4, $8^1/_2$ × 11, 100% reproduction, feeding from tray 1, on the exposure glass)

Copy/print speed (Full Color / B&W):

- Type 1: 30 sheets/minute (A4, $8^1/_2$ × 11)
- Type 2: 35 sheets/minute (A4, $8^1/_2$ × 11)

Reproduction ratio:

- Preset reproduction ratios:
  - Enlargement: 400%, 200%, 155%, 129%, 121%
  - Full size: 100%
  - Reduction: 93%, 85%, 78%, 73%, 65%, 50%, 25%
- Zoom: From 25 to 400% in increments of 1%

Maximum continuous copy run:

999 sheets

Paper capacity (80 g/m^2, 20 lb. Bond):

- Tray 1, 2: 550 sheets
- Bypass tray: 100 sheets

Power source:

120 ~ 127 V, 60 Hz, 12 A or more

Please be sure to connect the power cord to a power source as above. For details about power source, see “Power Connection”.

Power consumption:

- Main unit only

	Type 1	Type 2
Stand-by	About 152 W	About 152 W
During printing	About 752 W	About 766 W
Maximum	1,584 W	1,584 W

- Complete system

	Type 1	Type 2
Maximum	1,584 W	1,584 W

The complete system consists of the main unit, internal tray 2 (1 bin tray), lower paper trays, large capacity tray (LCT), bridge unit, and Booklet Finisher SR3000.

Dimensions (W × D × H up to ARDF):

670 × 671 × 880 mm (26.4 × 26.5 × 34.8 inches)

Space for main unit (W × D):

1,065 × 671 mm (42.0 × 26.5 inches)

Noise emission:

- Sound power level:
  - Main unit only

	Type 1	Type 2
Stand-by	Less than 39.0 dB (A)	Less than 39.2 dB (A)
Copying	Less than 64.2 dB (A)	Less than 64.4 dB (A)

  - Complete system

	Type 1	Type 2
Stand-by	Less than 38.9 dB (A)	Less than 39.3 dB (A)
Copying	Less than 69.3 dB (A)	Less than 69.9 dB (A)

- Sound pressure level:
  - Main unit only

	Type 1	Type 2
Stand-by	Less than 27.0 dB (A)	Less than 27.3 dB (A)
Copying	Less than 50.7 dB (A)	Less than 51.5 dB (A)

  - Complete system

	Type 1	Type 2
Stand-by	Less than 25.8 dB (A)	Less than 27.2 dB (A)
Copying	Less than 54.6 dB (A)	Less than 55.2 dB (A)

- Sound power level and sound pressure level are actual values measured in accordance with ISO 7779.
- Sound pressure level is measured from the position of the bystander.
- The complete system consists of the main unit, internal tray 2 (1 bin tray), lower paper trays, large capacity tray (LCT), bridge unit, and Booklet Finisher SR3000.

Weight:

Approx. 120 kg (264.6 lb.)

Reference

- p.121 "Thick Paper"
- p.156 "Power Connection"

For Users of Type 3 and 4

This section describes specifications for the main unit of type 3 and 4.

Configuration:

Desktop

Photosensitivity type:

OPC drum

Original scanning:

One-dimensional solid scanning system through CCD

Copy process:

Laser beam scanning and electro-photographic printing

Development:

Dry two-component magnetic brush development system

Fusing:

Induction Heating (IH) fusing

Resolution:

- Scanning originals: 600 dpi
- Copying: 600 dpi
- Printing: 200 dpi/300 dpi/400 dpi/600 dpi/1200 dpi

Exposure glass:

Stationary original exposure type

Original reference position:

Rear left corner

Warm-up time (23°C (73°F), rated voltage):

- Type 3: 22 seconds
- Type 4: 36 seconds

Originals:

Sheet/book/objects

Maximum original size:

A3, 11 × 17

Paper size:

- Tray 1:

  A4, $8^1/_2$ × 11, A5, B5 JIS

- Tray 2:

  A3, A4, A5, B4 JIS, B5 JIS,

  11 × 17, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, 8 × 10, $7^1/_4$ × $10^1/_2$,

  8K, 16K, 11 × 15, 10 × 14, $4^1/_8$ × $9^1/_2$, C5 Env

- Tray 2 (custom size):

  Vertical: 182.0 - 297.0 mm (7.17 - 11.69 inches)

  Horizontal: 148.0 - 432.0 mm (5.83 - 17.00 inches)

- Bypass tray:

  A3, A4, A5, A6, B4 JIS, B5 JIS, B6 JIS,

  11 × 17, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, 8 × 10, $7^1/_4$ × $10^1/_2$, $5^1/_2$ × $8^1/_2$,

  $4^1/_8$ × $9^1/_2$, $3^7/_8$ × $7^1/_2$, C5 Env, C6 Env, DL Env, 8K, 16K, 12 × 18, 11 × 15, 10 × 14

- Bypass tray (custom size):

  Vertical: 90.0 - 305.0 mm (3.55 - 12.00 inches)

  Horizontal: 148.0 - 600.0 mm (5.83 - 23.62 inches)

- Duplex:

  A3, A4, A5, A6, B4 JIS, B5 JIS, B6 JIS,

  11 × 17, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, 8 × 10, $7^1/_4$ × $10^1/_2$,

  8K, 16K, 11 × 15, 10 × 14

Paper weight:

- Paper trays: 60 - 256 g/m^2 (16 lb. Bond - 140 lb. Index)

- Bypass: 60 - 300 g/m^2 (16 lb. Bond - 110 lb. Cover)
- Duplex: 60 - 169 g/m^2 (16 lb. Bond - 90 lb. Index)

For details about and recommendations concerning thick paper, see “Thick Paper”.

Non-reproduction area (Copier):

- Leading edge: 2.7 - 5.7 mm (0.11 - 0.23 inches)
- Trailing edge: 0.5 - 6.0 mm (0.02 - 0.24 inches) (3.0 - 6.0 mm (0.12 - 0.24 inches) in Duplex mode)
- Left and right edges: 0.5 - 4.0 mm (0.02 - 0.16 inches)

First copy/print time:

- Type 3:
  - Full Color: 5.9 seconds
  - B&W: 3.7 seconds
- Type 4:
  - Full Color: 5.0 seconds
  - B&W: 3.1 seconds

(A4, 8$^1/_2$ × 11, 100% reproduction, feeding from tray 1, on the exposure glass)

Copy/print speed (Full Color / B&W):

- Type 3: 45 sheets/minute (A4, 8$^1/_2$ × 11)
- Type 4: 55 sheets/minute (A4, 8$^1/_2$ × 11)

Reproduction ratio:

- Preset reproduction ratios:
  - Enlargement: 400%, 200%, 155%, 129%, 121%
  - Full size: 100%
  - Reduction: 93%, 85%, 78%, 73%, 65%, 50%, 25%
- Zoom: From 25 to 400% in increments of 1%

Maximum continuous copy run:

999 sheets

Paper capacity (80 g/m^2, 20 lb. Bond):

- Tray 1, 2: 550 sheets
- Bypass tray: 100 sheets

Power source:

120 - 127 V, 60 Hz, 12 A or more

Please be sure to connect the power cord to a power source as above. For details about power source, see “Power Connection”.

Power consumption:

- Models equipped with the ARDF:
  - Main unit only

	Type 3	Type 4
Stand-by	About 174 W	About 174 W
During printing	About 956 W	About 1,073 W
Maximum	1,584 W	1,584 W

  - Complete system

	Type 3	Type 4
Maximum	1,584 W	1,584 W

    The complete system consists of the main unit, internal tray 2 (1 bin tray), lower paper trays, large capacity tray (LCT), bridge unit, and Booklet Finisher SR3020.

- Models equipped with the one-pass duplex scanning ADF:
  - Main unit only

	Type 3	Type 4
Stand-by	About 185 W	About 185 W
During printing	About 964 W	About 1,078 W
Maximum	1,584 W	1,584 W

  - Complete system

	Type 3	Type 4
Maximum	1,584 W	1,584 W

    The complete system consists of the main unit, internal tray 2 (1 bin tray), lower paper trays, large capacity tray (LCT), bridge unit, and Booklet Finisher SR3020.

Dimensions:

- Models equipped with the ARDF (W × D × H up to ARDF): 670 × 677 × 895 mm (26.4 × 26.7 × 35.4 inches)
- Models equipped with the one-pass duplex scanning ADF (W × D × H up to one-pass duplex scanning ADF): 670 × 677 × 930 mm (26.4 × 26.7 × 36.6 inches)

Space for main unit (W × D):

1,065 × 677 mm (42.0 × 26.7 inches)

Noise emission:

- Sound power level:
  - Main unit only

	Type 3	Type 4
Stand-by	Less than 39.2 dB (A)	Less than 40.0 dB (A)
Copying	Less than 65.7 dB (A)	Less than 67.3 dB (A)

  - Complete system

	Type 3	Type 4
Stand-by	Less than 39.5 dB (A)	Less than 39.7 dB (A)
Copying	Less than 72.7 dB (A)	Less than 73.6 dB (A)

- Sound pressure level:
  - Main unit only

	Type 3	Type 4
Stand-by	Less than 28.6 dB (A)	Less than 27.7 dB (A)
Copying	Less than 53.2 dB (A)	Less than 54.5 dB (A)

  - Complete system

	Type 3	Type 4
Stand-by	Less than 27.2 dB (A)	Less than 27.5 dB (A)
Copying	Less than 58.2 dB (A)	Less than 59.1 dB (A)

    - Sound power level and sound pressure level are actual values measured in accordance with ISO 7779.
    - Sound pressure level is measured from the position of the bystander.
    - The complete system consists of the main unit, internal tray 2 (1 bin tray), lower paper trays, large capacity tray (LCT), bridge unit, and Booklet Finisher SR3020.

Weight:

- Models equipped with the ARDF: approx. 130 kg (286.6 lb.)

- Models equipped with the one-pass duplex scanning ADF: approx. 133 kg (293.3 lb.)

Reference

- p.121 "Thick Paper"
- p.156 "Power Connection"

Auto Reverse Document Feeder for Type 1 and 2

Mode:

ADF mode, Batch mode, SADF mode, Mixed Sizes mode, Custom Size originals mode

Original size:

- 11 × 17 - $5^1/_2$ × $8^1/_2$ (1-sided originals)
- 11 × 17 - $5^1/_2$ × $8^1/_2$ (2-sided originals)

Original weight:

- 1-sided originals: 40 - 128 g/m^2 (11 - 34 lb. Bond)
- 2-sided originals: 52 - 105 g/m^2 (14 - 28 lb. Bond) (64 - 105 g/m^2 (17 - 28 lb. Bond) for 11 × 17)

Number of originals to be set:

50 sheets (80 g/m^2, 20 lb. Bond)

8

Auto Reverse Document Feeder for Type 3 and 4

Mode:

ADF mode, Batch mode, SADF mode, Mixed Sizes mode, Custom Size originals mode

Original size:

- 11 × 17 - $5^1/_2$ × $8^1/_2$ (1-sided originals)
- 11 × 17 - $5^1/_2$ × $8^1/_2$ (2-sided originals)

Original weight:

- 1-sided originals: 40 - 128 g/m^2 (11 - 34 lb. Bond)
- 2-sided originals: 52 - 128 g/m^2 (14 - 34 lb. Bond)

Number of originals to be set:

100 sheets (80 g/m^2, 20 lb. Bond)

One-pass Duplex Scanning ADF

Mode:

ADF mode, Batch mode, SADF mode, Mixed Sizes mode, Custom Size originals mode

Original size:

- 11 × 17↵ - $5^1/_2$ × $8^1/_2$↵ (1-sided originals)
- 11 × 17↵ - $5^1/_2$ × $8^1/_2$↵ (2-sided originals)

Original weight:

- 1-sided originals: 40 - 128 g/m^2 (11 - 34 lb. Bond)
- 2-sided originals: 52 - 128 g/m^2 (14 - 34 lb. Bond)

Number of originals to be set:

100 sheets (80 g/m^2, 20 lb. Bond)

Document Server

HDD (Document Server):

Approx. 78 GB

Maximum: 9,000 pages

(Total number of pages that can be accommodated stored with all functions combined)

Copier/B&W/A4 original: Approx. 4,000 pages

Copier/Full Color/A4 original: Approx. 1,000 pages

Printer/Full Color/A4 original/600 dpi, 2 bits: Approx. 9,000 pages

Scanner/Full Color/A4/200 dpi, 8 bits/JPEG: Approx. 9,000 pages

(Under the printer and scanner functions, the number of the pages that can be stored depends on the print image and original.)

Maximum number of stored documents:

3,000 documents

(The maximum number of received faxes that can be stored is 400.)

Number of pages supported by memory sorting:

Maximum: 2,000 pages

Copier/B&W/A4 original: Approx. 2,000 pages

Printer/B&W/A4/600 dpi, 2 bits: Approx. 2,000 pages

(Under the printer function, the number of the pages that can be sorted depends on the print image.)

Specifications for Finisher SR790 (1000-sheet) (Optional)

This section describes specifications for Finisher SR790.

Finisher Upper Tray

This section describes specifications for the finisher upper tray of Finisher SR790.

Paper size:

A3, B4 JIS, A4, B5 JIS, A5, B6 JIS, A6,

12 × 18, 11 × 17, 11 × 15, 10 × 14, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, 8 × 10, $5^1/_2$ × $8^1/_2$, $7^1/_4$ × $10^1/_2$,

8K, 16K, custom size

Paper weight:

60 - 260 g/m^2 (16 lb. Bond - 140 lb. Cover)

Stack capacity (80 g/m^2, 20 lb. Bond):

- 250 sheets: A4, $8^1/_2$ × 11 or smaller
- 50 sheets: B4 JIS, $8^1/_2$ × 14 or larger

Finisher Shift Tray

This section describes specifications for the finisher shift tray of Finisher SR790.

Paper size:

A3, B4 JIS, A4, B5 JIS, A5,

12 × 18, 11 × 17, 11 × 15, 10 × 14, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, 8 × 10, $5^1/_2$ × $8^1/_2$, $7^1/_4$ × $10^1/_2$,

8K, 16K

Paper weight:

60 - 163 g/m^2 (16 lb. Bond - 90 lb. Index)

Stack capacity (80 g/m^2, 20 lb. Bond):

- 1,000 sheets: A4, $8^1/_2$ × 11 or smaller
- 500 sheets: B4 JIS, $8^1/_2$ × 14 or larger

Staple paper size:

A3, B4 JIS, A4, B5 JIS,

11 × 17□, 11 × 15□, 10 × 14□, 8 1/2 × 14□, 8 1/2 × 11□□, 7 1/4 × 10 1/2□□, 8 × 13□, 8 1/2 × 13□, 8 1/4 × 14□, 8 1/4 × 13□, 8 × 10□,

8K□, 16K□□

Staple paper weight:

64 - 90 g/m^2 (17 - 24 lb. Bond)

Staple capacity (80 g/m^2, 20 lb. Bond):

- Without Mixed Size:
  - 30 sheets: A3□, B4 JIS□, 11 × 17□, 8 1/2 × 14□, 8 × 13□, 8 1/2 × 13□, 8 1/4 × 14□, 8 1/4 × 13□, 11 × 15□, 10 × 14□, 8K□
  - 50 sheets: A4□□, B5 JIS□□, 8 1/2 × 11□□, 8 × 10□, 7 1/4 × 10 1/2□□, 16K□□
- With Mixed Size:

  16 sheets

Stack capacity after stapling (80 g/m^2, 20 lb. Bond):

- 2 - 9 sheets: 100 sets (A4□□, B5 JIS□□, 8 1/2 × 11□□)
- 10 - 50 sheets: 100 - 20 sets (A4□, 8 1/2 × 11□)
- 10 - 50 sheets: 50 - 10 sets (A4□, B5 JIS□□, 8 1/2 × 11□)
- 2 - 9 sheets: 50 sets (A3□, B4 JIS□, 11 × 17□, 8 1/2 × 14□)
- 10 - 30 sheets: 50 - 10 sets (A3□, B4 JIS□, 11 × 17□, 8 1/2 × 14□)

Staple position:

3 positions (Top, Bottom, 2 Staples)

Power consumption:

50 W or less (Power is supplied from the main unit.)

Dimensions (W × D × H):

527 × 520 × 790 mm (10.7 × 20.5 × 31.2 inches)

Weight:

Approx. 25 kg (55.2 lb.)

Specifications for Finisher SR3030 (3000-sheet) (Optional)

This section describes specifications for Finisher SR3030.

Finisher Upper Tray

This section describes specifications for the finisher upper tray of Finisher SR3030.

Paper size:

A3, B4 JIS, A4, B5 JIS, A5, B6 JIS, A6,

12 × 18, 11 × 17, 11 × 15, 10 × 14, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, 8 × 10, $5^1/_2$ × $8^1/_2$, $7^1/_4$ × $10^1/_2$,

8K, 16K, custom size

Paper weight:

60 - 163 g/m^2 (16 lb. Bond - 90 lb. Index)

Stack capacity (80 g/m^2, 20 lb. Bond):

- 250 sheets: A4, $8^1/_2$ × 11 or smaller
- 50 sheets: B4 JIS, $8^1/_2$ × 14 or larger

Finisher Shift Tray

This section describes specifications for the finisher shift tray of Finisher SR3030.

Paper size:

A3, B4 JIS, A4, B5 JIS, A5, B6 JIS, A6

12 × 18, 11 × 17, 11 × 15, 10 × 14, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, 8 × 10, $5^1/_2$ × $8^1/_2$, $7^1/_4$ × $10^1/_2$,

$4^1/_8$ × $9^1/_2$, $3^7/_8$ × $7^1/_2$, C5 Env, C6 Env, DL Env, 8K, 16K, custom size

Paper weight:

60 - 256 g/m^2 (16 lb. Bond - 140 lb. Index)

Stack capacity (80 g/m^2, 20 lb. Bond):

- 3,000 sheets: A4, $8^1/_2$ × 11
- 1,500 sheets: A3, B4 JIS, A4, B5 JIS, 12 × 18, 11 × 17, $8^1/_2$ × 14, $8^1/_2$ × 11
- 500 sheets: A5

- 100 sheets: A5, B6 JIS, A6, $5^1/_2 \times 8^1/_2$

Staple paper size:

A3, B4 JIS, A4, B5 JIS,

11 × 17, 11 × 15, 10 × 14, $8^1/_2 \times 14$, $8^1/_2 \times 11$, $7^1/_4 \times 10^1/_2$, 8 × 13, $8^1/_2 \times 13$, $8^1/_4 \times 14$, $8^1/_4 \times 13$, 8 × 10,

8K, 16K

Staple paper weight:

64 - 90 g/m^2 (17 - 24 lb. Bond)

Staple capacity (80 g/m^2, 20 lb. Bond):

- Without Mixed Size:
  - 30 sheets: A3, B4 JIS, 11 × 17, $8^1/_2 \times 14$, 8 × 13, $8^1/_2 \times 13$, $8^1/_4 \times 14$, $8^1/_4 \times 13$, 11 × 15, 10 × 14, 8K
  - 50 sheets: A4, B5 JIS, $8^1/_2 \times 11$, 8 × 10, $7^1/_4 \times 10^1/_2$, 16K
- With Mixed Size:

  30 sheets

Stack capacity after stapling (80 g/m^2, 20 lb. Bond):

- Without Mixed Size:
  - 2 - 19 sheets: 150 sets (A4, $8^1/_2 \times 11$)
  - 20 - 50 sheets: 150 - 60 sets (A4, $8^1/_2 \times 11$)
  - 2 - 14 sheets: 100 sets (A4, B5 JIS, $8^1/_2 \times 11$)
  - 15 - 50 sheets: 100 - 30 sets (A4, B5 JIS, $8^1/_2 \times 11$)
  - 2 - 14 sheets: 100 sets (other size paper)
  - 15 - 30 sheets: 100 - 33 sets (other size paper)
- With Mixed Size:
  - 2 - 30 sheets: 50 sets: A3/ A4, B4 JIS/ B5 JIS, 11 × 17/ $8^1/_2 \times 11$

Staple position:

4 positions (Top, Top Slant, Bottom, 2 Staples)

Power consumption:

96 W or less (Power is supplied from the main unit.)

Dimensions (W × D × H):

657 × 613 × 960 mm (25.9 × 24.2 × 37.8 inches)

Weight:

- Approx. 54 kg (119.1 lb.) (without punch kit)
- Approx. 56 kg (123.5 lb.) (with punch kit)

Specifications for Finisher SR3050 (500-sheet) (Optional)

This section describes specifications for Finisher SR3050.

Paper size:

A3, B4 JIS, A4, B5 JIS, A5, B6 JIS, A6,

11 × 17, 11 × 15, 10 × 14, 8 1/2 × 14, 8 1/2 × 13, 8 1/2 × 11, 8 1/4 × 14, 8 1/4 × 13, 8 × 13, 8 × 10, 7 1/4 × 10 1/2, 5 1/2 × 8 1/2,

12 × 18, 8K, 16K, custom size

Paper weight:

60 - 253 g/m^2 (16 lb. Bond - 140 lb. Index)

Stack capacity (80 g/m^2, 20 lb. Bond):

- 500 sheets: A4, 8 1/2 × 11 or smaller
- 250 sheets: B4 JIS, 8 1/2 × 14 or larger

Staple paper size:

A3, B4 JIS, A4, B5 JIS,

11 × 17, 11 × 15, 10 × 14, 8 1/2 × 14, 8 1/2 × 11, 7 1/4 × 10 1/2, 8 × 13, 8 1/2 × 13, 8 1/4 × 14, 8 1/4 × 13, 8 × 10,

8K, 16K

Staple paper weight:

60 - 157 g/m^2 (16 lb. Bond - 40 lb. Cover)

Staple capacity (80 g/m^2, 20 lb. Bond):

- Without Mixed Size:
  - 30 sheets: A3, B4 JIS, 11 × 17, 8 1/2 × 14, 8 × 13, 8 1/2 × 13, 8 1/4 × 14, 8 1/4 × 13, 11 × 15, 10 × 14, 8K
  - 50 sheets: A4, B5 JIS, 8 1/2 × 11, 8 × 10, 7 1/4 × 10 1/2, 16K
- With Mixed Size:

  30 sheets

Stack capacity after stapling (80 g/m^2, 20 lb. Bond):

- 2 - 9 sheets: 55 - 46 sets (A4, B5 JIS, 8 1/2 × 11)
- 10 - 50 sheets: 45 - 10 sets (A4, B5 JIS, 8 1/2 × 11)
- 2 - 9 sheets: 55 - 27 sets (A4, B5 JIS, 8 1/2 × 11)
- 10 - 50 sheets: 25 - 8 sets (A4, B5 JIS, 8 1/2 × 11)
- 2 - 9 sheets: 55 - 27 sets (A3, B4 JIS, 11 × 17, 8 1/2 × 14)

- 10 - 30 sheets: 25 - 8 sets (A3□, B4 JIS□, 11 × 17□, 8 1/2 × 14□)

Staple position:

5 positions (Top, Top Slant, Bottom, Bottom Slant, 2 Staples)

Power consumption:

50 W or less (Power is supplied from the main unit.)

Dimensions (W × D × H):

396 × 551 × 275 mm (15.6 × 21.7 ×10.9 inches)

Weight:

Approx. 12 kg (26.5 lb.)

Specifications for Booklet Finisher SR3020 (2000-sheet-Booklet) (Optional)

This section describes specifications for Booklet Finisher SR3020.

Finisher Upper Tray

This section describes specifications for the finisher upper tray of Booklet Finisher SR3020.

Paper size:

A3, B4 JIS, A4, B5 JIS, A5, B6 JIS, A6,

12 × 18, 11 × 17, 11 × 15, 10 × 14, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, 8 × 10, $5^1/_2$ × $8^1/_2$, $7^1/_4$ × $10^1/_2$,

8K, 16K, custom size

Paper weight:

60 - 163 g/m^2 (16 lb. Bond - 90 lb. Index)

Stack capacity (80 g/m^2, 20 lb. Bond):

- 250 sheets: A4, $8^1/_2$ × 11 or smaller
- 50 sheets: B4 JIS, $8^1/_2$ × 14 or larger

Finisher Shift Tray

This section describes specifications for the finisher shift tray of Booklet Finisher SR3020.

Paper size:

A3, B4 JIS, A4, B5 JIS, A5, B6 JIS, A6,

12 × 18, 11 × 17, 11 × 15, 10 × 14, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, 8 × 10, $5^1/_2$ × $8^1/_2$, $7^1/_4$ × $10^1/_2$,

$4^1/_8$ × $9^1/_2$, $3^7/_8$ × $7^1/_2$, C5 Env, C6 Env, DL Env, 8K, 16K, custom size

Paper weight:

60 - 256 g/m^2 (16 lb. Bond - 140 lb. Index)

Stack capacity (80 g/m^2, 20 lb. Bond):

- 2,000 sheets: A4, $8^1/_2$ × 11
- 1,000 sheets: A3, B4 JIS, A4, B5 JIS, 11 × 17, $8^1/_2$ × 14, $8^1/_2$ × 11, 12 × 18
- 500 sheets: A5

- 100 sheets: A5, B6 JIS, A6, $5^1/_2 \times 8^1/_2$

Staple paper size:

A3, B4 JIS, A4, B5 JIS,

11 × 17, 11 × 15, 10 × 14, $8^1/_2 \times 14$, $8^1/_2 \times 11$, $7^1/_4 \times 10^1/_2$, 8 × 13, $8^1/_2 \times 13$, $8^1/_4 \times 14$, $8^1/_4 \times 13$, 8 × 10,

8K, 16K

Staple paper weight:

64 - 90 g/m^2 (17 - 24 lb. Bond)

Staple capacity (80 g/m^2, 20 lb. Bond):

- Without Mixed Size:
  - 30 sheets: A3, B4 JIS, 11 × 17, $8^1/_2 \times 14$, 8 × 13, $8^1/_2 \times 13$, $8^1/_4 \times 14$, $8^1/_4 \times 13$, 11 × 15, 10 × 14, 8K
  - 50 sheets: A4, B5 JIS, $8^1/_2 \times 11$, 8 × 10, $7^1/_4 \times 10^1/_2$, 16K
- With Mixed Size: 30 sheets

Stack capacity after stapling (80 g/m^2, 20 lb. Bond):

- Without Mixed Size:
  - 2 - 12 sheets: 150 sets (A4, $8^1/_2 \times 11$)
  - 13 - 50 sheets: 150 - 40 sets (A4, $8^1/_2 \times 11$)
  - 2 - 9 sheets: 100 sets (A4, B5 JIS, $8^1/_2 \times 11$)
  - 10 - 50 sheets: 100 - 20 sets (A4, B5 JIS, $8^1/_2 \times 11$)
  - 2 - 9 sheets: 100 sets (other size paper)
  - 10 - 30 sheets: 100 - 33 sets (other size paper)
- With Mixed Size:
  - 2 - 30 sheets: 50 sets (A3/A4, B4 JIS/B5 JIS, 11 × 17/$8^1/_2 \times 11$)

Staple position:

4 positions (Top, Top Slant, Bottom, 2 Staples)

Finisher Booklet Tray

This section describes specifications for the finisher booklet tray of Booklet Finisher SR3020.

Saddle stitch paper size:

A3, B4 JIS, A4, B5 JIS, 11 × 17, $8^1/_2 \times 14$, $8^1/_2 \times 11$

Saddle stitch paper weight:

64 - 90 g/m^2 (17 - 24 lb. Bond)

Saddle stitch capacity (80 g/m^2, 20 lb. Bond):

1 set (15 sheets)

Stack capacity after saddle stitching (80 g/m^2, 20 lb. Bond):

- 2 - 5 sheets: approx. 30 sets
- 6 - 10 sheets: approx. 15 sets
- 11 - 15 sheets: approx. 10 sets

Saddle stitch position:

Center 2 positions

Power consumption:

96 W or less (Power is supplied from the main unit.)

Dimensions (W × D × H):

657 × 613 × 960 mm (25.9 × 24.2 × 37.8 inches)

Weight:

- Approx. 63 kg (138.9 lb.) (without punch kit)
- Approx. 65 kg (143.3 lb.) (with punch kit)

Specifications for Booklet Finisher SR3000 (1000-sheet-Booklet) (Optional)

This section describes specifications for Booklet Finisher SR3000.

Finisher Upper Tray

This section describes specifications for the finisher upper tray of Booklet Finisher SR3000.

Paper size:

A3, B4 JIS, A4, B5 JIS, A5, B6 JIS, A6,

12 × 18, 11 × 17, 11 × 15, 10 × 14, 8 1/2 × 14, 8 1/2 × 13, 8 1/2 × 11, 8 1/4 × 14, 8 1/4 × 13, 8 × 13, 8 × 10, 5 1/2 × 8 1/2, 7 1/4 × 10 1/2,

8K, 16K, custom size

Paper weight:

60 - 105 g/m^2 (16 - 28 lb. Bond)

Stack capacity (80 g/m^2, 20 lb. Bond):

- 100 sheets: A4, 8 1/2 × 11 or smaller
- 50 sheets: B4 JIS, 8 1/2 × 14 or larger

Finisher Shift Tray

This section describes specifications for the finisher shift tray of Booklet Finisher SR3000.

Paper size:

A3, B4 JIS, A4, B5 JIS, A5, B6 JIS, A6,

12 × 18, 11 × 17, 11 × 15, 10 × 14, 8 1/2 × 14, 8 1/2 × 13, 8 1/2 × 11, 8 1/4 × 14, 8 1/4 × 13, 8 × 13, 8 × 10, 5 1/2 × 8 1/2, 7 1/4 × 10 1/2,

8K, 16K, custom size

Paper weight:

60 - 256 g/m^2 (16 lb. Bond - 140 lb. Index)

Stack capacity (80 g/m^2, 20 lb. Bond):

- 1,000 sheets: A4, 8 1/2 × 11 or smaller
- 500 sheets: B4 JIS, 8 1/2 × 14 or larger

Staple paper size:

A3, B4 JIS, A4, B5 JIS,

11 × 17□, 11 × 15□, 10 × 14□, 8 1/2 × 14□, 8 1/2 × 11□□, 7 1/4 × 10 1/2□□, 8 × 13□, 8 1/2 × 13□, 8 1/4 × 14□, 8 1/4 × 13□, 8 × 10□,

8K□, 16K□□

Staple paper weight:

64 - 90 g/m² (17 - 24 lb. Bond)

Staple capacity (80 g/m², 20 lb. Bond):

- Without Mixed Size:
  - 30 sheets: A3□, B4 JIS□, 11 × 17□, 8 1/2 × 14□, 8 × 13□, 8 1/2 × 13□, 8 1/4 × 14□, 8 1/4 × 13□, 11 × 15□, 10 × 14□, 8K□
  - 50 sheets: A4□□, B5 JIS□□, 8 1/2 × 11□□, 8 × 10□, 7 1/4 × 10 1/2□□, 16K□□
- With Mixed Size: 20 sheets

Stack capacity after stapling (80 g/m², 20 lb. Bond):

- 2 - 9 sheets: 100 sets (A4□, 8 1/2 × 11□)
- 10 - 50 sheets: 100 - 20 sets (A4□, 8 1/2 × 11□)
- 2 - 9 sheets: 100 sets (A4□, B5 JIS□□, 8 1/2 × 11□)
- 10 - 50 sheets: 50 - 10 sets (A4□, B5 JIS□□, 8 1/2 × 11□)
- 2 - 9 sheets: 50 sets (A3□, B4 JIS□, 11 × 17□, 8 1/2 × 14□)
- 10 - 30 sheets: 50 - 10 sets (A3□, B4 JIS□, 11 × 17□, 8 1/2 × 14□)

Staple position:

3 positions (Top, Bottom, 2 Staples)

Finisher Booklet Tray

This section describes specifications for the finisher booklet tray of Booklet Finisher SR3000.

Saddle stitch paper size:

A3□, B4 JIS□, A4□, B5 JIS□, 11 × 17□, 8 1/2 × 14□, 8 1/2 × 11□

Saddle stitch paper weight:

64 - 90 g/m² (17 - 24 lb. Bond)

Saddle stitch capacity (80 g/m², 20 lb. Bond):

1 set (10 sheets)

Stack capacity after saddle stitching (80 g/m², 20 lb. Bond):

- 2 to 5 sheets: approx. 20 sets
- 6 to 10 sheets: approx. 10 sets

Saddle stitch position:

Center 2 positions

Power consumption:

60 W or less (Power is supplied from the main unit.)

Dimensions (W × D × H):

535 × 600 × 930 mm (21.1 × 23.7 × 36.7 inches)

Weight:

- Approx. 48 kg (105.9 lb.) (without punch kit)
- Approx. 50 kg (110.3 lb.) (with punch kit)

Specifications for Punch Unit (Finisher SR3030, Booklet Finisher SR3020) (Optional)

This section describes specifications for the punch unit (Finisher SR3030, Booklet Finisher SR3020).

Paper size:

Punch unit type	Paper size
2 & 4 holes type: 2 holes	▭: A3, B4 JIS, A4, B5 JIS, A5, 11 × 17, 8 1/2 × 14, 8 1/2 × 11, 5 1/2 × 8 1/2, 7 1/4 × 10 1/2, 8 × 13, 8 1/2 × 13, 8 1/4 × 13, 8K, 16K, 8 1/4 × 14, 8 × 10, 11 × 15, 10 × 14, custom size
2 & 4 holes type: 2 holes	▯: A4, B5 JIS, A5, 8 1/2 × 11, 7 1/4 × 10 1/2, 16K, custom size
2 & 4 holes type: 4 holes	▭: A3, B4 JIS, 11 × 17, 11 × 15, 8K, custom size
2 & 4 holes type: 4 holes	▯: A4, B5 JIS, 8 1/2 × 11, 7 1/4 × 10 1/2, 16K, custom size
4 holes type: 4 holes	▭: A3, B4 JIS, A4, B5 JIS, A5, 11 × 17, 8 1/2 × 14, 8 1/2 × 11, 5 1/2 × 8 1/2, 7 1/4 × 10 1/2, 8 × 13, 8 1/2 × 13, 8 1/4 × 13, 8K, 16K, 8 1/4 × 14, 8 × 10, 11 × 15, 10 × 14, custom size
4 holes type: 4 holes	▯: A4, B5 JIS, A5, 8 1/2 × 11, 7 1/4 × 10 1/2, 16K, custom size
2 & 3 holes type: 2 holes	▭: A3, B4 JIS, A4, B5 JIS, A5, 11 × 17, 8 1/2 × 14, 8 1/2 × 11, 5 1/2 × 8 1/2, 7 1/4 × 10 1/2, 8 × 13, 8 1/2 × 13, 8 1/4 × 13, 8K, 16K, 8 1/4 × 14, 8 × 10, 11 × 15, 10 × 14, custom size
2 & 3 holes type: 2 holes	▯: A4, B5 JIS, A5, 8 1/2 × 11, 7 1/4 × 10 1/2, 16K, custom size
2 & 3 holes type: 3 holes	▭: A3, B4 JIS, 11 × 17, 11 × 15, 10 × 14, 8K, custom size
2 & 3 holes type: 3 holes	▯: A4, B5 JIS, 8 1/2 × 11, 7 1/4 × 10 1/2, 16K, custom size

Paper weight:

60 - 163 g/m^2 (16 lb. Bond - 90 lb. Index)

Power consumption:

20 W (Power is supplied from the main unit.)

Dimensions (W × D × H):

110 × 484 × 117 mm (4.4 × 19.1 × 4.7 inches)

Weight:

Approx. 2.9 kg (6.4 lb.)

Specifications for Punch Unit (Booklet Finisher SR3000) (Optional)

This section describes specifications for the punch unit (Booklet Finisher SR3000).

Paper size:

Punch unit type	Paper size
2 & 4 holes type: 2 holes	▭: A3, B4 JIS, A4, B5 JIS, A5, 11 × 17, 8 1/2 × 14, 8 1/2 × 11, 5 1/2 × 8 1/2, 7 1/4 × 10 1/2, 8 × 13, 8 1/2 × 13, 8 1/4 × 13, 8K, 16K, 8 1/4 × 14, 8 × 10, 11 × 15, 10 × 14
2 & 4 holes type: 2 holes	▯: A4, B5 JIS, A5, 8 1/2 × 11, 7 1/4 × 10 1/2, 16K
2 & 4 holes type: 4 holes	▭: A3, B4 JIS, 11 × 17, 11 × 15, 8K
2 & 4 holes type: 4 holes	▯: A4, B5 JIS, 8 1/2 × 11, 7 1/4 × 10 1/2, 16K
4 holes type: 4 holes	▭: A3, B4 JIS, A4, B5 JIS, A5, 11 × 17, 8 1/2 × 14, 8 1/2 × 11, 5 1/2 × 8 1/2, 7 1/4 × 10 1/2, 8 × 13, 8 1/2 × 13, 8 1/4 × 13, 8K, 16K, 8 1/4 × 14, 8 × 10, 11 × 15, 10 × 14
4 holes type: 4 holes	▯: A4, B5 JIS, A5, 8 1/2 × 11, 7 1/4 × 10 1/2, 16K
2 & 3 holes type: 2 holes	▭: A3, B4 JIS, A4, B5 JIS, A5, 11 × 17, 8 1/2 × 14, 8 1/2 × 11, 5 1/2 × 8 1/2, 7 1/4 × 10 1/2, 8 × 13, 8 1/2 × 13, 8 1/4 × 13, 8K, 16K, 8 1/4 × 14, 8 × 10, 11 × 15, 10 × 14
2 & 3 holes type: 2 holes	▯: A4, B5 JIS, A5, 8 1/2 × 11, 7 1/4 × 10 1/2, 16K
2 & 3 holes type: 3 holes	▭: A3, B4 JIS, 11 × 17, 11 × 15, 10 × 14, 8K
2 & 3 holes type: 3 holes	▯: A4, B5 JIS, 8 1/2 × 11, 7 1/4 × 10 1/2, 16K

Paper weight:

60 - 163 g/m^2 (16 lb. Bond - 90 lb. Index)

Specifications for Lower Paper Tray (Optional)

This section describes specifications for the lower paper tray.

Paper size:

A3, A4, A5, B4 JIS, B5 JIS, 11 × 17, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, 8 × 10, $7^1/_4$ × $10^1/_2$, 8K, 16K, 11 × 15, 10 × 14, custom size

Paper weight:

60 - 256 g/m^2 (16 lb. Bond - 140 lb. Index)

Paper capacity (80 g/m^2, 20 lb. Bond):

550 sheets × 1 tray

Power consumption:

55 W or less (Power is supplied from the main unit.)

Dimensions (W × D × H):

580 × 620 × 120 mm (22.9 × 24.5 × 4.8 inches)

Weight:

Approx. 15 kg (33.1 lb.)

Specifications for Lower Paper Trays (Optional)

This section describes specifications for the lower paper trays.

Paper size:

A3, A4, A5, B4 JIS, B5 JIS, 11 × 17, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, 8 × 10, $7^1/_4$ × $10^1/_2$, 8K, 16K, 11 × 15, 10 × 14, custom size

Paper weight:

60 - 256 g/m^2 (16 lb. Bond - 140 lb. Index)

Paper capacity (80 g/m^2, 20 lb. Bond):

550 sheets × 2 trays

Power consumption:

60 W or less (Power is supplied from the main unit.)

Dimensions (W × D × H):

668 × 766 × 260 mm (26.3 × 30.2 × 10.3 inches)

Weight:

Approx. 26 kg (57.4 lb.)

Specifications for the Small Size Paper Tray (Optional)

This section describes specifications for the small size paper tray.

Paper size:

A4, A5, A6, B5 JIS, B6 JIS, $8^1/_2 \times 11$, $7^1/_4 \times 10^1/_2$, $5^1/_2 \times 8^1/_2$, $4^1/_8 \times 9^1/_2$, $3^7/_8 \times 7^1/_2$, C5 Env, C6 Env, DL Env, custom size

Paper weight:

60 - 256 g/m^2 (16 lb. Bond - 140 lb. Index)

Paper capacity (80 g/m^2, 20 lb. Bond):

550 sheets

Specifications for Tray 3 (LCT) (Optional)

This section describes specifications for Tray 3 (LCT).

Paper size:

A4, $8^1/_2 \times 11$

Paper weight:

60 - 256 g/m^2 (16 lb. Bond - 140 lb. Index)

Paper capacity (80 g/m^2, 20 lb. Bond):

1,000 sheets × 2 trays

Power consumption:

55 W or less (Power is supplied from the main unit.)

Dimensions (W × D × H):

668 × 766 × 260 mm (26.3 × 30.2 × 10.3 inches)

Weight:

Approx. 26 kg (57.4 lb.)

Specifications for Large Capacity Tray (LCT) (Optional)

This section describes specifications for the large capacity tray (LCT).

Paper size:

A4, B5 JIS, $8^1/_2 \times 11$

Paper weight:

60 - 216 g/m^2 (16 lb. Bond - 80 lb. Cover)

Paper capacity (80 g/m^2, 20 lb. Bond):

1,200 sheets

Power consumption:

55 W or less (Power is supplied from the main unit.)

Dimensions (W × D × H):

348 × 540 × 290 mm (13.8 × 21.3 × 11.5 inches)

Weight:

Approx. 14 kg (30.9 lb.)

Specifications for Bridge Unit (Optional)

This section describes specifications for the bridge unit.

Staple capacity (80 g/m^2, 20 lb. Bond):

- 250 sheets: A4, $8^1/_2$ × 11 or smaller
- 125 sheets: B4 JIS, $8^1/_2$ × 14 or larger

Power consumption:

20 W or less (Power is supplied from the main unit.)

Dimensions (W × D × H):

415 × 412 × 111 mm (16.4 × 16.3 × 4.4 inches)

Weight:

Approx. 4 kg (8.9 lb.)

Specifications for Internal Tray 2 (Optional)

This section describes specifications for the internal tray 2 (1 bin tray).

Number of bins:

1

Paper size:

A3, A4, A5, B4 JIS, B5 JIS,

11 × 17, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, 8 × 10, $7^1/_4$ × $10^1/_2$, $5^1/_2$ × $8^1/_2$,

8K, 16K, 11 × 15, 10 × 14, custom size

Paper weight:

60 - 169 g/m^2 (16 lb. Bond - 90 lb. Index)

Paper capacity (80 g/m^2, 20 lb. Bond):

125 sheets

Power consumption:

12 W or less (Power is supplied from the main unit.)

Dimensions (W × D × H):

565 × 410 × 115 mm (22.3 × 16.2 × 4.6 inches)

Weight:

Approx. 2.5 kg (5.6 lb.)

Specifications for Internal Shift Tray (Optional)

This section describes specifications for the internal shift tray.

Paper size:

A3, A4, A5, A6, B4 JIS, B5 JIS, B6 JIS,

11 × 17, $8\frac{1}{2}$ × 14, $8\frac{1}{2}$ × 13, $8\frac{1}{2}$ × 11, $8\frac{1}{4}$ × 14, $8\frac{1}{4}$ × 13, 8 × 13, 8 × 10, $7\frac{1}{4}$ × $10\frac{1}{2}$, $5\frac{1}{2}$ × $8\frac{1}{2}$,

$4\frac{1}{8}$ × $9\frac{1}{2}$, $3\frac{7}{8}$ × $7\frac{1}{2}$, C5 Env, C6 Env, DL Env, 8K, 16K, 12 × 18, 11 × 15, 10 × 14, custom size

Paper weight:

60 - 300 g/m^2 (16 lb. Bond - 110 lb. Cover)

Paper capacity (80 g/m^2, 20 lb. Bond):

- 250 sheets: A4, $8\frac{1}{2}$ × 11 or smaller
- 125 sheets: B4 JIS, $8\frac{1}{2}$ × 14 or larger

Power consumption:

10 W or less (Power is supplied from the main unit.)

Dimensions (W × D × H):

423 × 468 × 114 mm (16.7 × 18.5 × 4.5 inches)

Weight:

Approx. 2 kg (4.5 lb.)

Specifications for External Tray (Optional)

This section describes specifications for the external tray.

Paper size:

A3, A4, A5, A6, B4 JIS, B5 JIS, B6 JIS,

11 × 17, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, 8 × 10, $7^1/_4$ × $10^1/_2$, $5^1/_2$ × $8^1/_2$,

$4^1/_8$ × $9^1/_2$, $3^7/_8$ × $7^1/_2$, C5 Env, C6 Env, DL Env, 8K, 16K, 12 × 18, 11 × 15, 10 × 14, custom size

Paper weight:

60 - 300 g/m^2 (16 lb. Bond - 110 lb. Cover)

Paper capacity (80 g/m^2, 20 lb. Bond):

- Internal tray 1:
  - 250 sheets: A4, $8^1/_2$ × 11 or smaller
  - 125 sheets: B4 JIS, $8^1/_2$ × 14 or larger
- External tray: 125 sheets

Power consumption:

20 W or less (Power is supplied from the main unit.)

Dimensions (W × D × H):

780 × 415 × 138 mm (30.8 × 16.4 × 5.5 inches)

Weight:

Approx. 4.5 kg (10.0 lb.)

Specifications for IEEE 1284 Interface Board (Optional)

This section describes specifications for the IEEE 1284 interface board.

Important

- **Do not use an IEEE 1284 cable that is longer than 3 meters.**

Transmission spec.:

IEEE 1284

Required cable:

Standard IEEE 1284 compliant Micro Centronics 36 pin cable

Specifications for Wireless LAN Board (Optional)

This section describes specifications for the wireless LAN board.

Transmission spec.:

Based on IEEE 802.11a/b/g (wireless LAN)

Protocol:

TCP/IP, IPX/SPX

Transmission Rate:

Auto select from the following speed:

1 Mbps, 2 Mbps, 5.5 Mbps, 6 Mbps, 9 Mbps, 11 Mbps, 12Mbps, 18Mbps, 24 Mbps, 36 Mbps, 48 Mbps, 54 Mbps

Frequency range (Center Frequency):

- 2412 - 2462 MHz (1 - 11 channels)
- 5180 - 5320 MHz (36, 40, 44, 48, 52, 56, 60, and 64 channels)

Transmission mode:

- Ad hoc mode
- Infrastructure mode

8

Note

- Web Image Monitor is supported.
- The channel in use might differ depending on the country.

Specifications for Gigabit Ethernet (Optional)

This section describes specifications for the Gigabit Ethernet.

Interface connector:

10Base-T, 100Base-TX, 1000Base-T

Data transmission speed:

1000 Mbps, 100 Mbps, 10 Mbps

Protocol:

TCP/IP, IPX/SPX

Distance between devices:

100 m

Trademarks

Adobe, Acrobat, Acrobat Reader, PostScript, and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Macintosh®, Mac OS®, and Safari® are registered trademarks of Apple Inc.

Firefox® is a registered trademark of the Mozilla Foundation.

Microsoft®, Windows®, Windows Server®, and Windows Vista® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

PCL® is a registered trademark of Hewlett-Packard Company.

UNIX is a registered trademark in the United States and other countries, licensed exclusively through X/Open Company Limited.

IPX and IPX/SPX are either registered trademarks or trademarks of Novell, Inc.

Java, JavaScript, and all trademarks and logos based on Java are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights to those marks.

The proper names of the Windows operating systems are as follows:

- The product names of Windows 2000 are as follows:

  Microsoft® Windows® 2000 Professional

  Microsoft® Windows® 2000 Server

  Microsoft® Windows® 2000 Advanced Server
- The product names of Windows XP are as follows:

  Microsoft® Windows® XP Professional Edition

  Microsoft® Windows® XP Home Edition

  Microsoft® Windows® XP Media Center Edition

  Microsoft® Windows® XP Tablet PC Edition
- The product names of Windows Vista are as follows:

  Microsoft® Windows Vista® Ultimate

  Microsoft® Windows Vista® Business

  Microsoft® Windows Vista® Home Premium

  Microsoft® Windows Vista® Home Basic

  Microsoft® Windows Vista® Enterprise
- The product names of Windows 7 are as follows:

  Microsoft® Windows® 7 Home Premium

Microsoft® Windows® 7 Professional

Microsoft® Windows® 7 Ultimate

Microsoft® Windows® 7 Enterprise

- The product names of Windows Server 2003 are as follows:

  Microsoft® Windows Server® 2003 Standard Edition

  Microsoft® Windows Server® 2003 Enterprise Edition

- The product names of Windows Server 2003 R2 are as follows:

  Microsoft® Windows Server® 2003 R2 Standard Edition

  Microsoft® Windows Server® 2003 R2 Enterprise Edition

- The product names of Windows Server 2008 are as follows:

  Microsoft® Windows Server® 2008 Standard

  Microsoft® Windows Server® 2008 Enterprise

- The product names of Windows Server 2008 R2 are as follows:

  Microsoft® Windows Server® 2008 R2 Standard

  Microsoft® Windows Server® 2008 R2 Enterprise

INDEX

1 bin tray.....61, 64, 66, 68, 202
1000BASE-T.....69

A

Access to the machine.....155
Adding staples.....129, 130, 131, 132, 133, 134
Adding toner.....125
Address book.....17, 49, 51
ADF.....21, 59, 181
Adhesive labels.....113
Alert indicator.....71
ARDF.....21, 56, 59, 158, 180
Authentication screen.....76
Auto Document Feeder.....21, 59
Auto Off.....85
Auto Reduce / Enlarge.....11
Auto Reverse Document Feeder....21, 56, 59, 158, 180
Available characters.....141

B

Backing up hard disk data.....162
Booklet.....11
Booklet Finisher SR3000.....64, 131, 191, 195
Booklet Finisher SR3020..... 66, 68, 132, 188, 194
Booklet Finisher SR3020 (Saddle Stitch).....133
Bridge unit.....64, 66, 68, 201
Browser unit.....69
Bypass tray.....57, 60, 115, 121

C

Caster table for lower paper tray.....64
CAUTION.....22
CAUTION labels.....30, 33
CD-ROM.....146, 147, 149, 167
Change.....51
Changing modes.....80
Changing Paper Thickness Settings.....111
Changing the paper size.....101, 104, 108
Check.....52
Checking before sending.....52
Class B.....43
Cleaning.....158, 159, 160, 161
Clear key.....72
Clear Modes key.....70
Clear/Stop key.....72
Coated paper.....113
Collate.....12
Color.....52
Color copy.....11, 152
Color originals.....52
Color printing.....47
Color tones.....11
Combine.....11, 47
Communicating indicator.....71
Components.....55
Computer.....17
Confidential File indicator.....71
Contents of the CD-ROM.....167
Control panel.....56, 59, 70, 76, 77, 78
Converting documents to electronic formats.....48
Copier.....11, 80
Counter.....163
Counterfeit bank bills.....42

D

Data In indicator.....71
Delete.....51
Deleting characters.....143
DeskTopBinder.....87
DeskTopBinder Lite.....87
DeskTopBinder Professional.....87
Destinations.....49
Display language.....74
Display panel.....70, 73
Document Server.....12, 48, 52, 80, 181
Dos and Don'ts.....151
Downloading utility software.....87
Duplex.....11, 47
Dustproof glass.....160

E

E-mail address.....51
E-mail transmission.....15
Energy Saver.....85
Energy Saver key.....71
Energy saving functions.....40

ENERGY STAR Program....39
Enlarge....11
Enter key (# key)....72
Entering letters....142
Entering numbers....142
Entering text....141, 142
Entry screen....141
Envelope....53, 101, 104, 113, 119
Envelope Feeder EF3000....21
Environments to avoid....155
Environments where the machine can be used....22
Ethernet....13, 207
Exposure glass....56, 59, 158
Extender....57, 60
External options....63
External options for type 1 and 2....63
External options for type 3 and 4....65, 67
External tray....64, 66, 68, 204
Extra G3 interface unit....69

F

Facsimile....13, 15, 80
Fax number....51
Fax transmission status....52
Fax unit....69
FCC Rules....43
FCC Rules and IC Rules....43
File format converter....12, 69
File type....48
Finisher booklet tray....189, 192
Finisher shift tray....182, 184, 188, 191
Finisher SR3030....66, 68, 134, 184, 194
Finisher SR3050....64, 129, 186
Finisher SR790....64, 66, 68, 130, 182
Finisher upper tray....182, 184, 188, 191
Font Manager....167
Formats of the operating instructions....145
Frequently-used settings....49
Front cover....56, 60
Function keys....70

G

G3 fax line....69
Genuine parts....19
Genuine toner....19
Gigabit Ethernet....69, 207
Grain....121

H

Handling power cords....23
Handling power plugs....23
Handling the machine's interior....26
Handling the machine's supplies....27
Handling the main machine....25
Handset....64, 66, 67
Hard disk....162
High Compression PDF....52
Hold Print....12
How to enter text....142
HTML manuals....10, 145, 146, 147

I

IEEE 1284 interface board....69, 205
Image quality....11
Important....19
Important safety instructions....44
IMPORTANTES MESURES DE SÉCURITÉ....45
Initial settings....49
Inquiry....164
Install....53
Installing the HTML manuals....147
Internal options....69
Internal shift tray....64, 66, 68, 203
Internal tray 1....56, 60
Internal tray 2....61, 64, 66, 68, 202
Internet Fax....15
Interrupt key....71
IP-Fax....15
IP-Fax number....51
Items....21

K

Key arrangement....141
Key Color....74

L

Label paper (adhesive labels)....113

Lamp(s) inside this machine.....44
LAN-Fax.....13, 47, 169
LAN-Fax driver.....169
LAN-Fax driver destination list.....49
Large capacity tray.....21
Large capacity tray (LCT).....64, 66, 68, 97, 116, 200
Laser safety for users of type 1 and 2.....42
Laser safety for users of type 3 and 4.....42
Laws.....42
LCT.....21, 64, 66, 68, 96, 97, 116, 199, 200
Legal prohibition.....42
Legality of copying or printing.....42
Loading paper.....93, 95, 96, 97, 99
Local connection.....12
Locked Print.....12
Login.....77, 79
Login key.....72
Login/Logout key.....72
Logout.....78, 79
Logout key.....72
Low Power mode.....40
Lower paper tray.....64, 196
Lower paper trays.....56, 60, 64, 66, 68, 197
Lower right cover.....57, 61

M

Machine environment.....153
Machine smell.....151
Machine types.....20
Magazine.....11
Mail to Print.....15
Main power.....82, 84
Main power indicator.....71
Main power switch.....56, 59, 82
Main unit.....171
Main unit of type 1 and 2.....171
Main unit of type 3 and 4.....175
Maintaining your machine.....158
Manuals.....145, 146, 147, 149
Manuals for Administrators.....147
Manuals for this machine.....8
Manuals list.....10
Media.....145
Media slot.....63, 65, 67
Memory transmission.....52
Moving.....153

N

Names of major items.....21
Network.....16
Network connection.....12
Network delivery scanner.....16
Normal Color Scan.....52
Notes.....21, 43, 44
Notice.....19
Number keys.....72
Numbers.....142

O

OHP transparencies.....11, 113
One-pass duplex scanning ADF.....59, 181
One-pass Duplex Scanning ADF.....159
Operating instructions.....146
Operation switch.....56, 60, 71, 82
Optimum environmental conditions.....154
Options.....63, 65, 67, 69
Orientation-fixed paper.....99
Other safety precautions.....29

P

Paper.....51, 93, 101
Paper grain.....121
Paper setting direction.....121
Paper size.....101, 104, 108, 113
Paper size that is not automatically detected.....108
Paper storage.....124
Paper trays.....56, 60, 121
Paper types.....113
Paperless fax.....47
Paperless fax reception.....13
Paperless fax transmission.....13
Password.....16
PCL.....167
PDF manuals.....10, 149
Perchlorate material.....44
PictBridge card.....69

Plug....161
Positions of WARNING and CAUTION labels for users of type 1 and 2....30
Positions of WARNING and CAUTION labels for users of type 3 and 4....33
PostScript 3....167
PostScript 3 unit....69
Power....82, 83
Power connection....82, 156
Power cord plug....161
Power supply....82, 156
Power switch symbols....38
PPD....167
Print job function....12
Printed manuals....10, 145
Printer....12, 80
Printer driver....77, 79, 167
Printing a PDF file directly....12
Printing with the finisher....12
Program....49
Program as Defaults....49
Program key....71
Punch....11, 12
Punch unit....194, 195

R

Receiving File indicator....71
Recommended paper sizes and types....113
Reduce....11
Reducing costs....47
Register....51
Registering destinations....49
Regulations....42
Removable memory device....63, 65, 67
Replacing the stamp cartridge....136
Replacing toner....126

S

Saddle Stitch....133
Safety information....22
Safety labels....30
Safety precautions to be followed....22
Sample Copy key....72
Sample Print....12
Saving color copies....152
Saving paper....11
Scan files....48
Scanner....16, 80
Scanner accessibility unit....65
Scanning color originals....52
ScanRouter....16, 87
Searching by keyword....51
Searching by what you want to do....47
Security functions....16
Sending faxes when toner has run out....127
Sending scan files by e-mail....16
Sending scan files by Scan to Folder....16
Sending scanned documents when toner has run out....127
Simplified display....73
Simplified Display key....72, 73
Size notation....21
Sleep mode....40
Small size paper tray....21, 64, 66, 68, 89, 95, 104, 114, 198
SmartDeviceMonitor for Admin....87
SmartDeviceMonitor for Client....88
SMB folder....51
Smell....151
Software included on the CD-ROM....167
Sort....11
Space required for the machine....155
Specifications....171, 175, 180, 181, 182, 184, 186, 188, 191, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207
Specifying the paper size....108
Stamp....11
Stamp cartridge....136
Standard TCP/IP....53
Staple....11, 12, 129
Start key....72
Stop key....72
Stored Print....12
Storing paper....124
Storing received documents....13
Symbols....20
System Reset....81

T

Tandem tray....96
Telephone equipment....44
Text....141, 142
Thick paper....113, 121
Toner....125, 126, 127
Total counter....163
Trademarks....208
Tray 1....56, 60, 93, 113
Tray 2....56, 60, 93, 101, 113
Tray 3....56, 60, 93, 101, 113
Tray 3 (LCT)....64, 66, 68, 96, 116, 199
Tray 4....56, 60, 93, 101, 113
Turning off the main power....84
Turning off the power....82, 83
Turning on the main power....82
Turning on the power....82, 83
TWAIN driver....168
Two-sided paper....99
Two-Sided Print....47

U

Unusable paper....122
USB....53
Used toner....127
User Code Authentication....76, 77
User Text....143
User Tools key....74
User Tools/Counter key....70, 74
Utilities included on the CD-ROM....167
Utility software....87

V

Ventilation....151
Ventilation holes....56, 57, 58, 59, 60, 61
Viewing the HTML manuals....146

W

WARNING....22
WARNING labels....30, 33
Web Image Monitor....12, 13, 17, 79
Web Services on Devices....16
When toner has run out....127
Where to put your machine....153
Windows Network Printer....53
Wireless LAN....13, 206
Wireless LAN board....69, 206
WSD....16

MEMO

© 2010

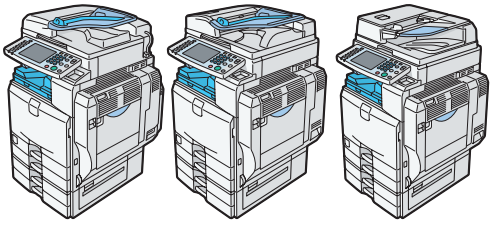
Operating Instructions

About This Machine

C9130/C9135/C9145/C9145A/C9155/C9155A
C9130G/C9135G/C9145G/C9145AG/C9155G/C9155AG
LD630C/LD635C/LD645C/LD645CA/LD655C/LD655CA
LD630CG/LD635CG/LD645CG/LD645CAG/LD655CG/LD655CAG
Aficio™ MP C3001/C3501/C4501/C4501A/C5501/C5501A
Aficio™ MP C3001G/C3501G/C4501G/C4501AG/C5501G/C5501AG

Operating Instructions

Copy and Document Server Reference



1 Placing Originals
2 Basic Copying
3 Color Copying
4 Advanced Copying
5 Document Server
6 Copier and Document Server Features
7 Appendix

Read this manual carefully before you use this machine and keep it handy for future reference. For safe and correct use, be sure to read the Safety Information in "About This Machine" before using the machine.

TABLE OF CONTENTS

Manuals for This Machine....6
Notice....8
Important....8
Available Color Functions....9
Color Copying....9
Stamping on Copies....11
Adjusting Colors....12
Adjusting Image Qualities....13
How to Read This Manual....15
Symbols....15
Machine Types....15
Names of Major Items....16
Notes....16
Laws and Regulations....17
Legal Prohibition....17
Functions Requiring Optional Configurations....18
Display Panel....19
Simplified Display....20

1. Placing Originals

Originals....21
Sizes and Weights of Recommended Originals....21
Sizes Detectable with Auto Paper Select....23
Missing Image Area....25
Placing Originals....26
Original Orientation....26
Left Original Beeper....28
Placing Originals on the Exposure Glass....28
Placing Originals in the Auto Document Feeder....29
Batch Mode....32
SADF Mode....33
Mixed Sizes Mode....34
Specifying Original Sizes....35

2. Basic Copying

Basic Procedure....39
Interrupt Copy....40
Auto Start....41
Job Preset....41
Copying from the Bypass Tray....43
Copying onto Regular Size Paper....45
Copying onto Custom Size Paper....46
Copying onto OHP Transparencies or Thin Paper....48
Copying onto Thick Paper....49
Copying onto Envelopes from the Bypass Tray....50
Copying onto Envelopes from the Small Size Paper Tray....53
Reducing or Enlarging Originals....55
Preset Reduce / Enlarge....55
Zoom....57
Auto Reduce / Enlarge....60
Duplex Copying....62
Originals and Copy Orientation....65
Combined Copying....66
One-Sided Combine....66
Two-Sided Combine....70
Finishing....74
Sort....74
Stack....80
Staple....83
Punch....90
Storing Data in the Document Server....94
Managing Jobs....96
Job List Screen....96
Checking Jobs in the Job List....97
Changing the Order of Jobs....98
Holding Jobs....98
Deleting Jobs....99

Checking the Job History....100
Registering Frequently Used Functions....101
Registering Functions in a Program....101
Changing a Stored Program....102
Recalling a Stored Program....103
Deleting a Stored Program....103
Changing the Default Functions of the Copy's Initial Display....105

3. Color Copying

Color Functions....107
Selecting a Color Mode....107
Convert Colors....108
Erase Color....109
Color Background....111
Adjusting Color and Image Quality....112
Color Balance....112
Color Balance Program....113
Color Adjustment....115
Image Adjustment....116
User Color....120

4. Advanced Copying

Adjusting Copy Image Density....125
Auto Image Density....125
Manual Image Density....125
Combined Auto and Manual Image Density....126
Selecting the Original Type....127
Selecting Copy Paper....129
Auto Paper Select....129
Manual Paper Select....130
Advanced Reduce / Enlarge Copying....132
Size Magnification....132
Directional Magnification (%)....133
Directional Size Magnification (inch)....136
Create Margin....138

Stamps....139
Background Numbering....139
Preset Stamp....140
User Stamp....143
Date Stamp....149
Page Numbering....152
Advanced Copier Functions....160
Margin Adjustment....160
Erase Center / Border....161
Image Repeat....167
Double Copies....171
Centering....172
Positive/Negative....173
Mirror Image....174
Series Copies....175
Booklet/Magazine....177
Covers....181
Designate....184
Chapters....186
Slip Sheet....187

5. Document Server

Relationship between Document Server and Other Functions....191
Document Server Display....192
Simplified Display....193
Preview Display....194
Using the Document Server....196
Storing Data....196
Changing the User Name of a Stored Document....200
Changing the File Name of a Stored Document....201
Changing the Password of a Stored Document....202
Checking the Details of a Stored Document....202
Searching for Stored Documents....203
Printing Stored Documents....205

Deleting a Stored Document....211
Displaying Stored Documents with Web Image Monitor....212
Downloading Stored Documents with Web Image Monitor....213
Registering Frequently Used Functions for Printing Stored Documents from the Document Server....214
Changing the Default Functions of the Document Server's Initial Display....214

6. Copier and Document Server Features

Accessing User Tools....217
Changing Default Settings....217
Quitting User Tools....218
General Features....219
Reproduction Ratio....223
Edit....225
Stamp....229
Background Numbering....229
Preset Stamp....229
User Stamp....230
Date Stamp....231
Page Numbering....233
Input / Output....235
Adjust Color Image....238
Administrator Tools....239

7. Appendix

Function Compatibility....241
Trademarks....243
INDEX....245

Manuals for This Machine

Read this manual carefully before you use this machine.

Refer to the manuals that are relevant to what you want to do with the machine.

Important

- **Media differ according to manual.**
- **The printed and electronic versions of a manual have the same contents.**
- **Adobe Acrobat Reader/Adobe Reader must be installed in order to view the manuals as PDF files.**
- **A Web browser must be installed in order to view the html manuals.**

About This Machine

Before using the machine, be sure to read the section of this manual entitled Safety Information.

This manual introduces the machine's various functions. It also explains the control panel, preparation procedures for using the machine, how to enter text, how to install the CD-ROMs provided, and how to replace paper, toner, staples, and other consumables.

Troubleshooting

Provides a guide for resolving common usage-related problems.

Copy and Document Server Reference

Explains Copier and Document Server functions and operations. Also refer to this manual for explanations on how to place originals.

Facsimile Reference

Explains Facsimile functions and operations.

Printer Reference

Explains Printer functions and operations.

Scanner Reference

Explains Scanner functions and operations.

Network and System Settings Reference

Explains how to connect the machine to a network, configure and operate the machine in a network environment, and use the software provided. Also explains how to change User Tools settings and how to register information in the Address Book.

Security Reference

This manual is for administrators of the machine. It explains security functions that you can use to prevent unauthorized use of the machine, data tampering, or information leakage. For enhanced security, we recommend that you first make the following settings:

- Install the Device Certificate.
- Enable SSL (Secure Sockets Layer) Encryption.

- Change the user name and password of the administrator using Web Image Monitor.

For details, see “Setting up the Machine”, Security Reference.

Be sure to read this manual when setting the enhanced security functions, or user and administrator authentication.

PostScript 3 Supplement

Explains how to set up and use PostScript 3.

VM Card Extended Feature Settings Device Reference

Explains how to set up the extended features settings with the machine.

VM Card Extended Feature Settings Web Reference

Explains how to set up the extended features settings using Web Image Monitor.

Other manuals

- UNIX Supplement
- Quick Reference Copy Guide
- Quick Reference Printer Guide
- Quick Reference Fax Guide
- Quick Reference Scanner Guide
- App2Me Start Guide

Note

- Manuals provided are specific to machine types.
- For “UNIX Supplement”, please visit our Web site or consult an authorized dealer. This manual includes descriptions of functions and settings that might not be available on this machine.

Notice

Important

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

For good copy quality, the manufacturer recommends that you use genuine toner from the manufacturer.

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

Available Color Functions

This section introduces the machine's color functions that you are likely to use most often.

Color Copying

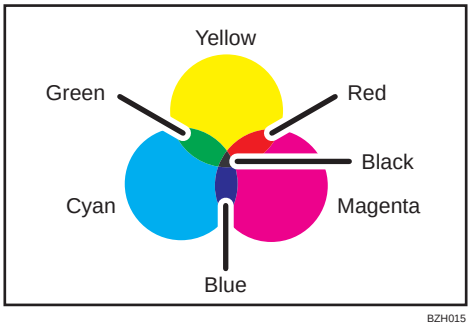
You can switch the color copy mode depending on the type of originals used and the desired finish.

You can also erase or convert a certain color in the original, or add a background color to the whole page.

See p.107 "Selecting a Color Mode".

Primary Colors

Colors can be created by combining the three primary colors: yellow, magenta, and cyan. Black can be made by combining yellow, magenta and cyan, however, as there might be some slight differences, “black” will be expressed using a black toner.



BZH015

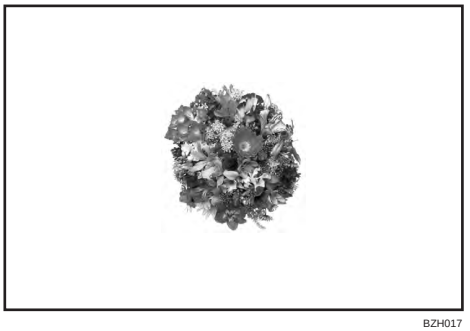
Full Color

Copies using four colors: yellow, magenta, cyan, and black.

BZH016

Black & White

Copies in black and white even if the original is colored.

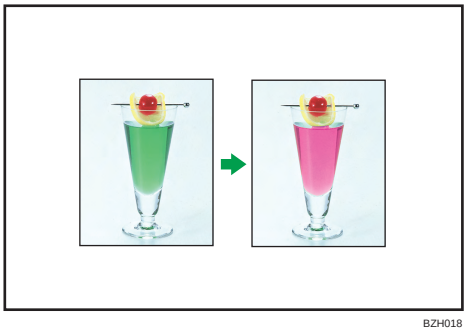


BZH017

Convert Colors

Copies by changing a certain color in the original to another color.

See p.108 "Convert Colors".

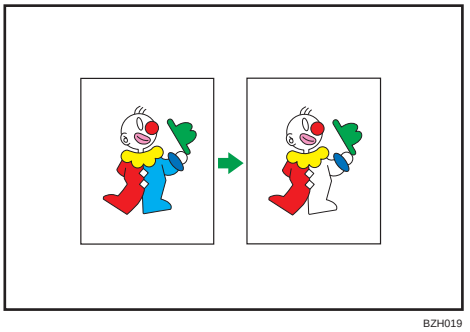


BZH018

Erase Specified Color

Copies by erasing a certain color in the original.

See p.109 "Erase Color".

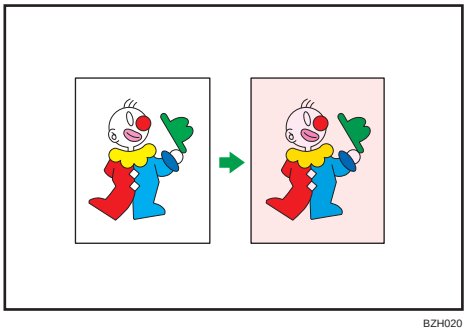


BZH019

Color Background

Copies by adding a color to the whole page.

See p.111 "Color Background".

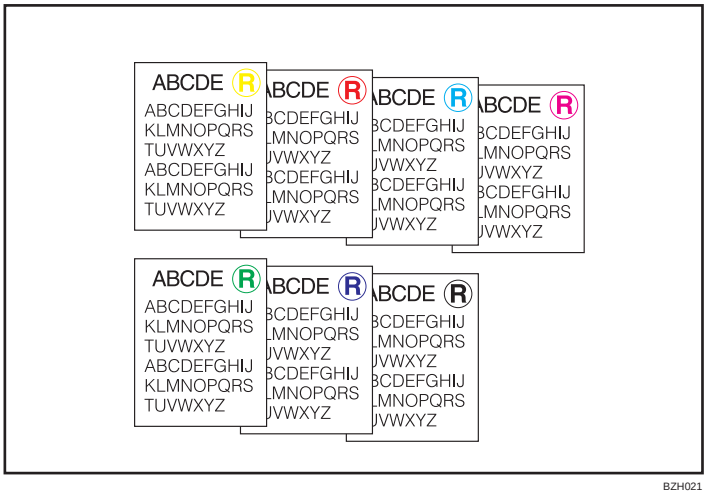


BZH020

Stamping on Copies

Copies with the date, page numbers, etc.

The stamp color can be yellow, red, cyan, magenta, green, blue, and black.



BZH021

Printed inserts types:

Background Numbering

See p.139 "Background Numbering".

Preset Stamp

See p.140 "Preset Stamp".

User Stamp

See p.143 "User Stamp".

Date Stamp

See p.149 "Date Stamp".

Page Numbering

See p.152 "Page Numbering".

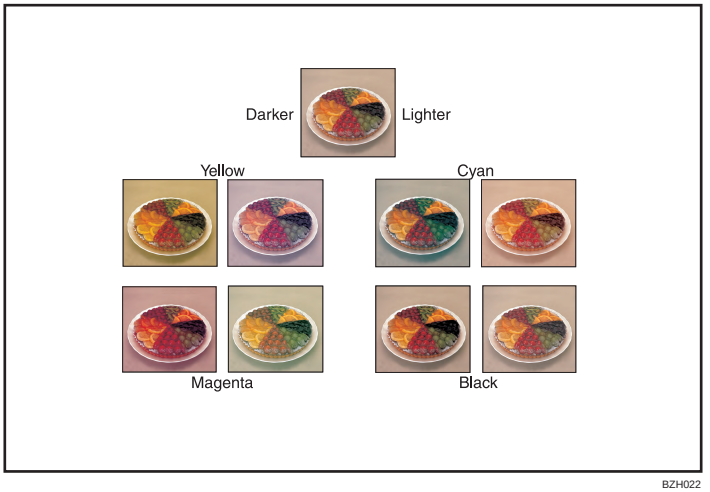
Adjusting Colors

You can adjust the color tone of copies.

Color Balance

Adjusts the overall color tone of copies.

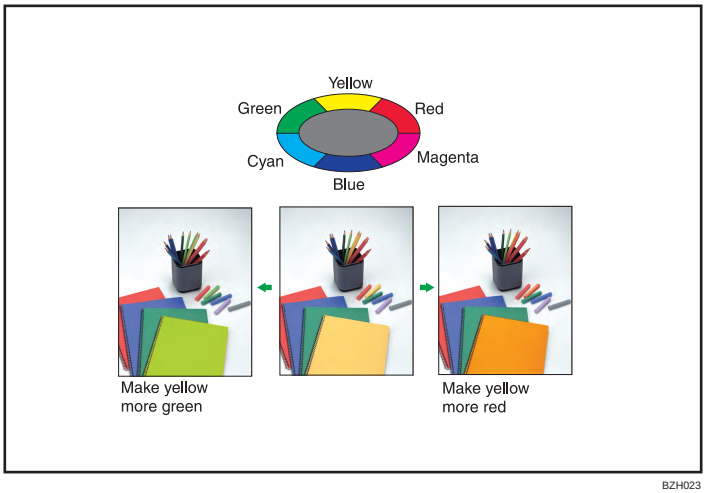
See p.112 "Color Balance".



Adjust Color

Adjusts the specific colors (yellow, red, magenta, blue, cyan and green) by mixing them with adjacent colors in the color circle.

See p.115 "Color Adjustment".



BZH023

Adjusting Image Qualities

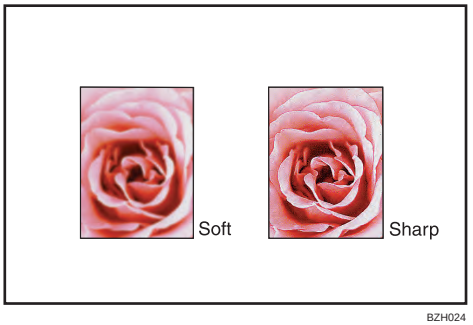
You can adjust image qualities.

See p.116 "Image Adjustment".

Sharp / Soft

Adjusts the outline of an image.

See p.117 "Sharp / Soft".

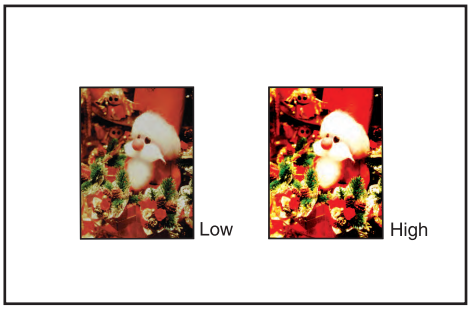


BZH024

Contrast

Adjusts the shades of an image.

See p.118 "Contrast".

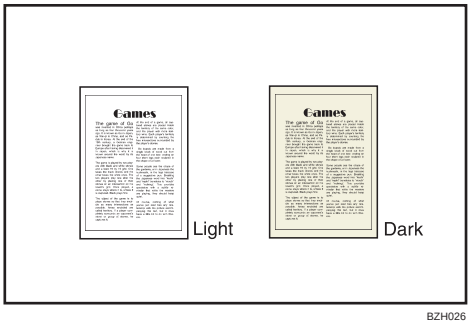


BZH025

Background Density

Adjusts the background density of an image.

See p.118 "Background Density".



BZH026

How to Read This Manual

Note

- For proper use of this product, be sure to read About This Machine first.

Symbols

This manual uses the following symbols:

Important

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

Note

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys on the machine's display or control panels.

Machine Types

This machine comes in several models which vary in copy/print speed.

Machine types for users of type 1 and 2

	Type 1	Type 2
Copy/print speed (Full Color)	30 sheets/minute (A4, $8\frac{1}{2} \times 11$)	35 sheets/minute (A4, $8\frac{1}{2} \times 11$)
Copy/print speed (B&W)	30 sheets/minute (A4, $8\frac{1}{2} \times 11$)	35 sheets/minute (A4, $8\frac{1}{2} \times 11$)

Machine types for users of type 3 and 4[*1]

	Type 3	Type 4
Copy/print speed (Full Color)	45 sheets/minute (A4, $8^1/_2 \times 11$)	55 sheets/minute (A4, $8^1/_2 \times 11$)
Copy/print speed (B&W)	45 sheets/minute (A4, $8^1/_2 \times 11$)	55 sheets/minute (A4, $8^1/_2 \times 11$)

*1 Type 3 and 4 are equipped with the one-pass duplex scanning ADF as standard, or can be fitted with the optional ARDF or exposure glass cover.

Names of Major Items

Major items of this machine are referred to as follows in this manual:

- Auto Reverse Document Feeder → ARDF
- Auto document feeder → ADF (in this manual, "ADF" refers to the ARDF and the one-pass duplex scanning ADF)
- Large capacity tray → LCT
- Envelope Feeder EF3000 → Small size paper tray

Notes

Contents of this manual are subject to change without prior notice.

Colors on color keys or the color circle may differ slightly from the colors of actual copies.

The color samples in this manual may differ slightly from the colors of actual copies.

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Depending on which country you are in, certain units may be optional. For details, please contact your local dealer.

Laws and Regulations

Legal Prohibition

Do not copy or print any item for which reproduction is prohibited by law.

Copying or printing the following items is generally prohibited by local law:

bank notes, revenue stamps, bonds, stock certificates, bank drafts, checks, passports, driver's licenses.

The preceding list is meant as a guide only and is not inclusive. We assume no responsibility for its completeness or accuracy. If you have any questions concerning the legality of copying or printing certain items, consult with your legal advisor.

This machine is equipped with a function that prevents making counterfeit bank bills. Due to this function the original images similar to bank bills may not be copied properly.

Functions Requiring Optional Configurations

Certain functions require special machine configuration and extra options as follows:

Type 1 and 2

Function	Option
Shift Sort	Internal shift tray, Finisher SR3050, Finisher SR790, or Booklet Finisher SR3000
Stack	Internal shift tray, Finisher SR3050, Finisher SR790, or Booklet Finisher SR3000
Staple	Finisher SR3050, Finisher SR790, or Booklet Finisher SR3000
Staple (Center)	Booklet Finisher SR3000
Punch	Booklet Finisher SR3000 and punch unit

Type 3 and 4

Function	Option
Shift Sort	Internal shift tray, Finisher SR790, Finisher SR3030, or Booklet Finisher SR3020
Stack	Internal shift tray, Finisher SR790, Finisher SR3030, or Booklet Finisher SR3020
Staple	Finisher SR790, Finisher SR3030, or Booklet Finisher SR3020
Staple (Center)	Booklet Finisher SR3020
Punch	Finisher SR3030 and punch unit, or Booklet Finisher SR3020 and punch unit

Note

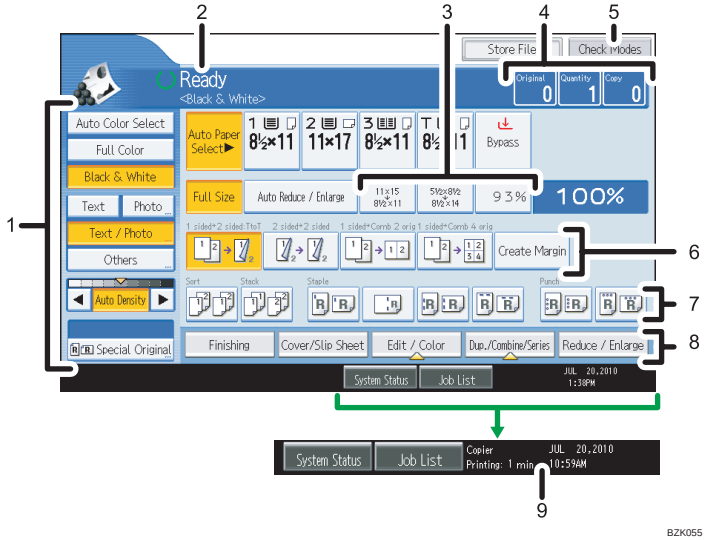
- A finisher can be attached only if the bridge unit and either a paper tray unit or LCT is installed. The Finisher SR3050 however requires the bridge unit only.
- Depending on the model you are using, some options may be provided as standard. For more information, see “Options”, About This Machine.

Display Panel

The function items displayed serve as selector keys. You can select or specify an item by lightly pressing them.

When you select or specify an item on the display panel, it is highlighted like Auto Reduce / Enlarge. Keys appearing as Auto Reduce / Enlarge cannot be used.

Initial copy display



1. **Use this area to specify the original type, color mode, image density level, and other settings.**
2. **Displays operational status and messages.**
3. **You can register up to three frequently used reduce/enlarge ratios other than the preset ratios under Reproduction Ratio in User Tools. For details, see "Reproduction Ratio".**
4. **Displays the numbers of originals scanned, copies set, and copies made.**
5. **Press the key to confirm the current settings.**
6. **Displays the Shortcut keys. You can register frequently used functions under General Features in User Tools. For details, see "General Features".**
7. **Displays the Sort, Stack, Staple, and Punch functions.**
8. **Displays available functions. Press a function to display its menu. When you select a function, a clip mark is displayed under the key.**
9. **Displays the estimated time of completion for the scanning and printing of a copy job. This time does not change, even if the job is interrupted.**

Note

- The illustration is an example of the panel display when the booklet finisher, tray 3, and the LCT are installed.

Reference

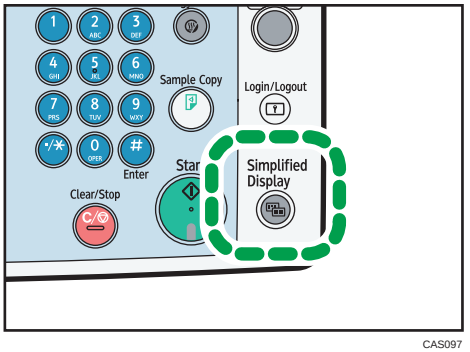
- p.219 "General Features"
- p.223 "Reproduction Ratio"

Simplified Display

This section explains how to switch to the simplified display.

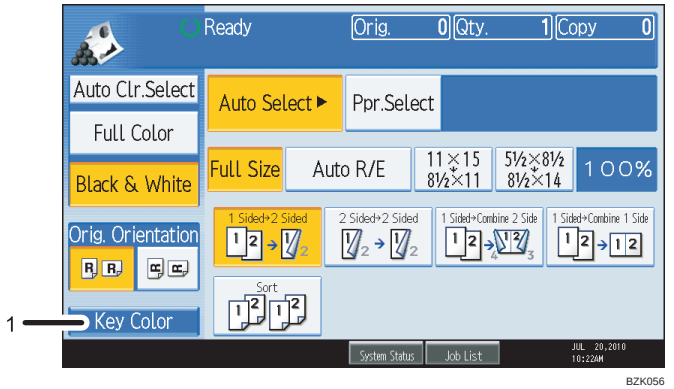
When you press the [Simplified Display] key, the screen changes from the initial display to the simplified display.

Letters and keys are displayed at a larger size, making operations easier.



CAS097

Example of a simplified display



BZK056

1. **[Key Color]**

   Press to increase screen contrast by changing the color of the keys.

   This is available only for the simplified display.

Note

- To return to the initial display, press the [Simplified Display] key again.
- Certain keys do not appear on the simplified display.

1. Placing Originals

This chapter describes the types of originals you can set and how to place originals.

Originals

This section describes the types of originals that can be placed, paper sizes that are automatically detected, and missing image area.

Note

- As the color of markers or highlighters is difficult to reproduce, the copy might not come out depending on the color or a different color might be copied.

Sizes and Weights of Recommended Originals

The following describes recommended paper sizes and non-recommended originals:

Type 1 and 2

Original location	Original size	Original weight
Exposure glass	Up to 11 × 17	-
ARDF	One-sided originals: 11 × 17 - $5^1/_2$ × $8^1/_2$	40 - 128 g/m^2 (11 lb. Bond - 34 lb. Bond)
	Two-sided originals: 11 × 17 - $5^1/_2$ × $8^1/_2$	52 - 105 g/m^2 (14 lb. Bond - 28 lb. Bond) 11 × 17: 64 - 105 g/m^2 (17 lb. Bond - 28 lb. Bond)

Type 3 and 4

Original location	Original size	Original weight
Exposure glass	Up to 11 × 17	-

Original location	Original size	Original weight
ADF	One-sided originals: 11 × 17 - $5^1/_2$ × $8^1/_2$	40 - 128 g/m^2 (11 lb. Bond - 34 lb. Bond)
	Two-sided originals: 11 × 17 - $5^1/_2$ × $8^1/_2$	52 - 128 g/m^2 (14 lb. Bond - 34 lb. Bond)

Note

- With Type 1 and 2, about 50 originals can be loaded in the ARDF.
- With Type 3 and 4, about 100 originals can be loaded in the ADF.

Non-compatible originals for the Auto Document Feeder

Placing unsuitable originals in the ADF can cause paper misfeeds or black lines, or result in damage to the originals.

Place the following types of originals on the exposure glass instead.

- Originals other than those specified on "Sizes and Weights of Recommended Originals"
- Stapled or clipped originals
- Perforated or torn originals
- Curled, folded, or creased originals
- Pasted originals
- Originals with adhesive tape, glue or paste stuck to them
- Originals with any kind of coating, such as thermal fax paper, art paper, aluminum foil, carbon paper, or conductive paper
- Originals with perforated lines
- Originals with indexes, tags, or other projecting parts
- Sticky originals such as translucent paper
- Thin or highly flexible originals
- Thick originals such as postcards
- Bound originals such as books
- Transparent originals such as OHP transparencies or translucent paper
- Originals that are still wet with ink or correction fluid

Note

- The original might become dirty if it is written with a pencil or a similar tool.

Sizes Detectable with Auto Paper Select

This section describes sizes detectable by the exposure glass and ADF.

Size / Original location	11 × 17	8 1/2 × 14	8 1/2 × 11	8 1/2 × 11	5 1/2 × 8 1/2	5 1/2 × 8 1/2
Exposure glass	○	○	○*3	○*3	○	×*6
ADF	○*1	○*2	○*4	○*5	○	○

Size / Original location	10 × 14	7 1/4 × 10 1/2	A3	A4
Exposure glass	×	×	×	×*3
ADF	○	○	○	○

○: Detectable size ×: Undetectable size

*1 Default is 11 × 17. If you want to switch the detectable size from 11 × 17 to 11 × 15, contact your service representative.

*2 Default is 8 1/2 × 14. If you want to switch the detectable size from 8 1/2 × 14 to 8 1/2 × 13, contact your service representative.

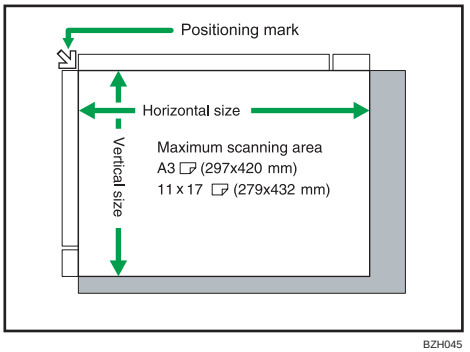
*3 Default is 8 1/2 × 11. If you want to switch the detectable size from 8 1/2 × 11 to A4, contact your service representative.

*4 Default is 8 1/2 × 11. If you want to switch the detectable size from 8 1/2 × 11 to 7 1/4 × 10 1/2, contact your service representative.

*5 Default is 8 1/2 × 11. If you want to switch the detectable size from 8 1/2 × 11 to 8 × 10, contact your service representative.

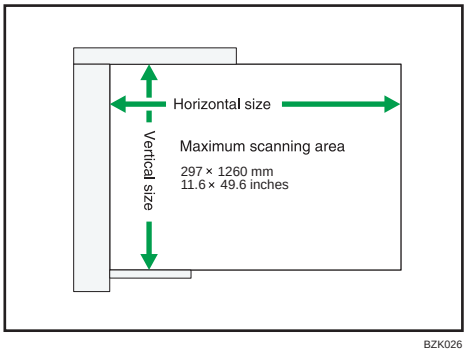
*6 If you want to make 5 1/2 × 8 1/2 size detectable, contact your service representative.

Exposure glass



BZH045

ADF



BZK026

Note

- When you copy custom size originals, make sure you specify the size of the originals. If not, the image may not be copied properly. For details about custom size originals, see “Custom sizes”.

Reference

- p.36 "Custom sizes"

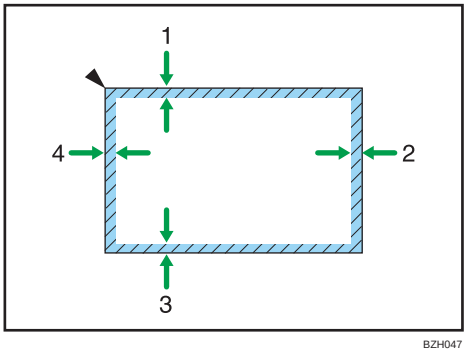
Sizes difficult to detect

It is difficult for the machine to detect the sizes of the following originals, so select the paper size manually:

- Originals with indexes, tags, or other projecting parts
- Transparent originals such as OHP transparencies or translucent paper
- Dark originals with a lot of text and drawings
- Originals which partially contain a solid image
- Originals which have solid images at their edges

Missing Image Area

Even if you place originals in the ADF or on the exposure glass correctly, margin of a few millimeters on all four sides of the original might not be copied.



BZH047

1. **0.5 - 4.0 mm (0.02 - 0.15 inch)**
2. **0.5 - 6.0 mm (0.02 - 0.24 inch) (3.0 - 6.0 mm (0.12 - 0.24 inch) in Duplex mode)**
3. **0.5 - 4.0 mm (0.02 - 0.15 inch)**
4. **4.2 ± 1.5 mm (0.17 ± 0.06 inch)**

Placing Originals

This section describes the procedure for placing originals on the exposure glass and in the ADF.

Take care to place originals after any correction fluid and ink has completely dried. Not taking this precaution could cause marks on the exposure glass that will be copied onto paper.

Note

- For original sizes you can place on the exposure glass and in the ADF, see “Originals”.

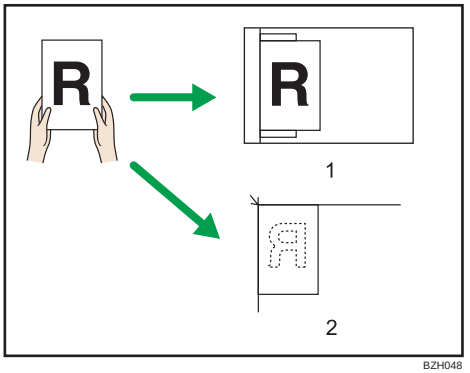
Reference

- p.21 "Originals"

Original Orientation

You can specify the original orientation if necessary.

When using the exposure glass, place the original face down. When using the ADF, place it face up.



BZH048

1. **ADF**
2. **Exposure glass**

When you cannot place the original as the above, you may not make copies as you want with particular functions. If this happens, change the orientation by selecting the unreadable orientation.

- Readable orientation

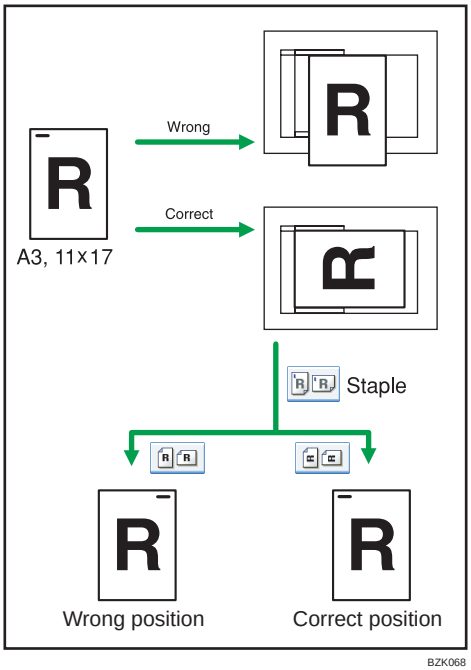
  Select this mode when the original orientation is the same as the copy paper orientation.

- Unreadable orientation

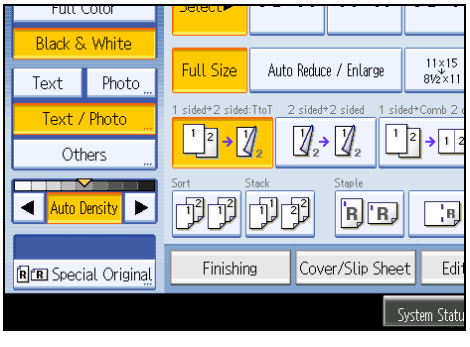
  Select this mode when you want to copy A3, B4 JIS, or 11 × 17 size originals. The machine rotates the copy image by 90 degrees and you can make copies as you want.

  This is useful for copying large originals with the Staple, Duplex, Combine or Stamp functions.

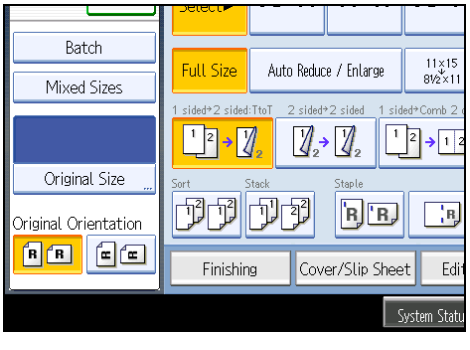
  For example, to copy A3 or 11 × 17 originals with the Staple function selected:



1. **Press [Special Original].**



2. **Select the original orientation, and then press [OK].**



Note

- It is recommended that you use this function together with the Auto Paper Select or Auto Reduce / Enlarge function.

1

Left Original Beeper

The beeper sounds and an error message is displayed when you leave your originals on the exposure glass after copying.

You can change the beeper setting under Alert Sound: Original left on Exposure Glass in User Tools. For details, see “General Features”.

Reference

- p.219 "General Features"

Placing Originals on the Exposure Glass

Place originals on the exposure glass.

Important

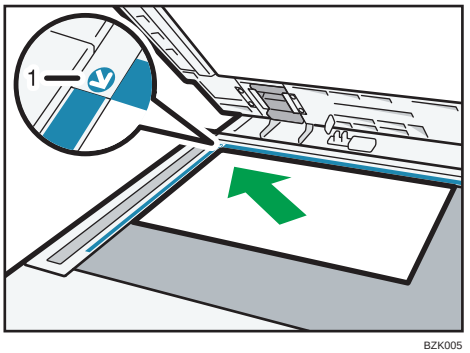
- **Do not lift the ADF forcefully. Otherwise, the cover of the ADF might open or be damaged.**

1. **Lift the ADF.**

   Be sure to lift the ADF by more than 30 degrees. Otherwise, the size of the original might not be detected correctly.

2. **Place the original face down on the exposure glass. The original should be aligned to the rear left corner.**

   Start with the first page to be copied.



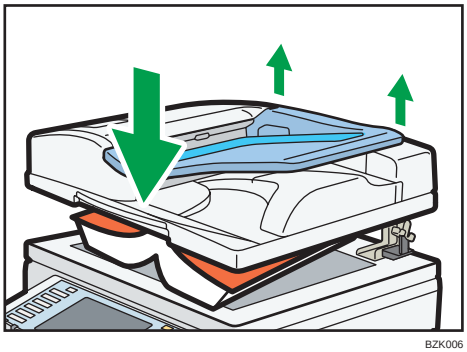
BZK005

1. **Positioning mark**

3. **Lower the ADF.**

Note

- When you place a thick book or three-dimensional original on the exposure glass and lower the ADF, the back side of the ADF rises up to accommodate the original. Keep your hands away from the hinges at the back of the ADF when you close it.



BZK006

- For details about how to specify the original size, see “Specifying Original Sizes”.
- When the Sort, Combine, or 1 Sided → 2 Sided function has been set, press the [#] key after all originals have been scanned.

Reference

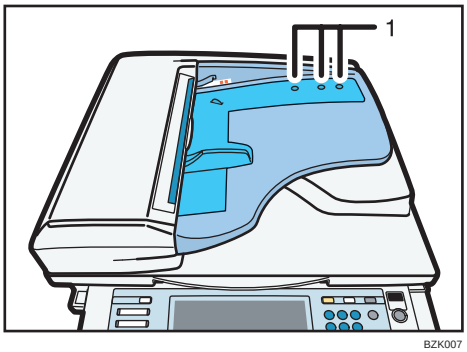
- p.35 "Specifying Original Sizes"

Placing Originals in the Auto Document Feeder

Place originals in the ADF.

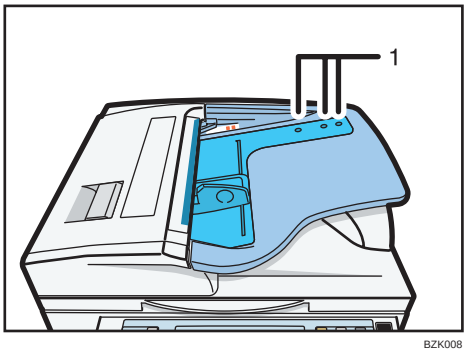
Be sure not to block the sensor or load the original untidily. Doing so may cause the machine to detect the size of the original incorrectly or display a paper misfeed message. Also, be sure not to place originals or other objects on the top cover. Doing so may cause a malfunction.

ARDF (Type 1 and 2)



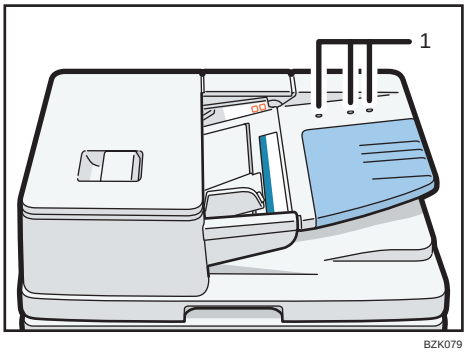
BZK007

ARDF (Type 3 and 4)



BZK008

One-pass duplex scanning ADF (Type 3 and 4)



BZK079

1. **Sensors**

Settings should be made in the following situations:

When the number of originals placed in the ADF exceeds the limit:

See “Batch Mode”.

When placing originals one by one:

See “SADF Mode”.

When copying originals of various sizes:

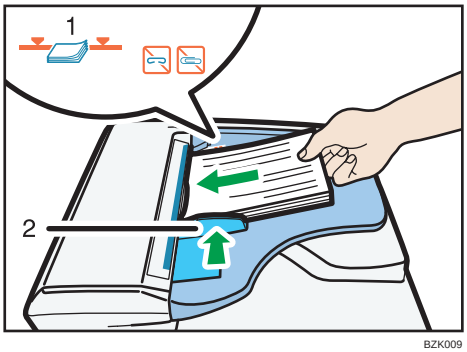
See “Mixed Sizes Mode”.

1. **Adjust the document guide to the original size.**
2. **Set the aligned originals face up into the ADF.**

   Do not stack originals beyond the limit mark.

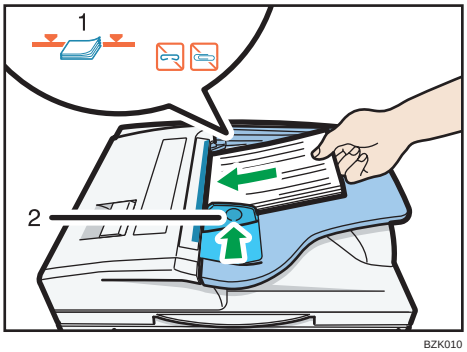
   The first page should be on the top.

ARDF (Type 1 and 2)



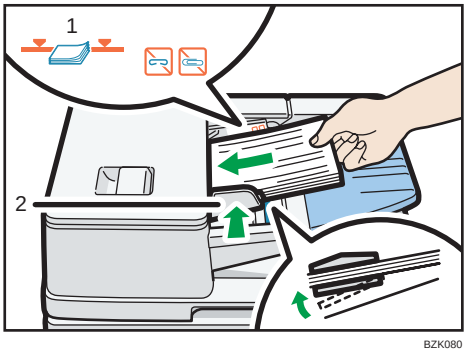
BZK009

ARDF (Type 3 and 4)



BZK010

One-pass duplex scanning ADF (Type 3 and 4)



BZK080

1. **Limit mark**
2. **Document guide**

Note

- For details about how to specify the original size, see “Specifying Original Sizes”.
- Straighten curls in the originals before placing them in the ADF.
- To prevent multiple sheets from being fed at once, fan the original before placing it in the ADF.

- Set the original squarely.
- When originals are loaded in the one-pass duplex scanning ADF, the bottom plate rises automatically.

Reference

- p.32 "Batch Mode"
- p.33 "SADF Mode"
- p.34 "Mixed Sizes Mode"
- p.35 "Specifying Original Sizes"

Batch Mode

Using Batch mode, you can copy an original that is too large to place in the ADF by placing it in the ADF in sections (batches). The original will be scanned and stored as a single document.

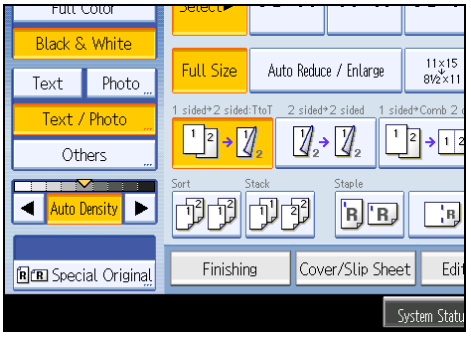
Important

- **Place special originals, such as translucent paper, one by one.**

The maximum numbers of sheets you can load in the ADF are as follows:

- Type 1 and 2: 50 sheets
- Type 3 and 4: 100 sheets

1. **Press [Special Original].**



2. **Select [Batch], and then press [OK].**
3. **Place the first part of the original, and then press the [Start] key.**
4. **After the first part of the original has been fed, place the next part, then press the [Start] key.**

Note

- When [SADF] is displayed instead of [Batch], specify the Batch mode under Switch to Batch in User Tools. For details about Switch to Batch, see "Input / Output".
- To copy subsequent originals in this mode, repeat step 4.

- When the Sort, Combine or 1 Sided → 2 Sided function has been set, press the [#] key after all originals have been scanned.
- You cannot switch between 1-sided and 2-sided originals during copying.

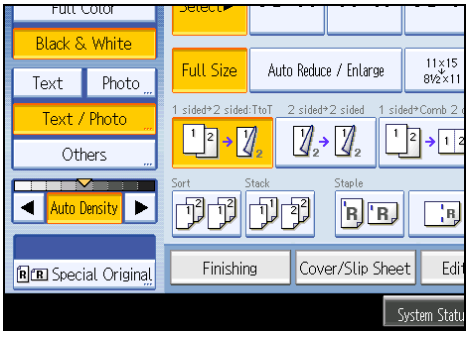
Reference

- p.235 "Input / Output"

SADF Mode

In SADF mode, even when an original is placed page by page in the ADF, each page is automatically fed when placed.

1. **Press [Special Original].**



2. **Select [SADF], and then press [OK].**
3. **Place one page of an original, and then press the [Start] key.**
4. **When the machine instructs you to place another original, place the next page.**

   The second and subsequent pages will be fed automatically without pressing the [Start] key.

Note

- When [Batch] is displayed instead of [SADF], specify the SADF mode under Switch to Batch in User Tools. For details about Switch to Batch, see “Input / Output”.
- When the Sort, Combine or 1 Sided → 2 Sided function has been set, press the [#] key after all originals have been scanned.
- In SADF mode, an original must be set within a specified time after the previous original has been fed. You can adjust this time under SADF Auto Reset in User Tools. For details, see “Input / Output”.
- You cannot switch between 1-sided and 2-sided originals during copying.

Reference

- p.235 "Input / Output"

Mixed Sizes Mode

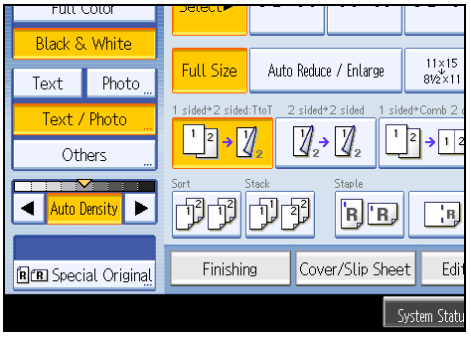
If you apply this mode, you can place originals of different sizes together in the ADF. The machine will automatically detect the size of each original and copy it accordingly.

Important

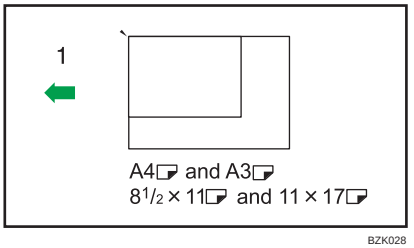
- **When placing originals of different sizes in the ADF and making copies without using the Mixed Sizes mode, paper might become jammed or parts of the original image might not be copied.**

The sizes of the originals that can be placed in this mode are as follows: 11 × 17, $8^1/_2$ × 14, $8^1/_2$ × 11, 10 × 14, $7^1/_4$ × $10^1/_2$, A3, A4

1. **Press [Special Original].**



2. **Select [Mixed Sizes], and then press [OK].**
3. **Align the rear and left edges of the originals as shown in the illustration.**



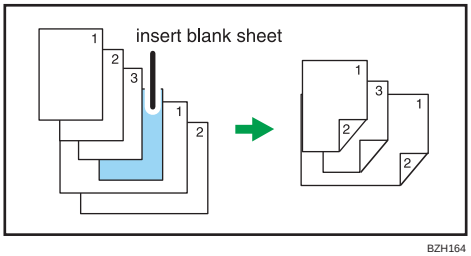
1. **Orientation in which original is fed**

4. **Adjust the document guide to the widest original size.**
5. **Place originals in the ADF.**
6. **Press the [Start] key.**

Note

- Since small originals may not be correctly aligned with the original guide, the copy image may be slanted.
- You can place originals of two different sizes at a time.

- Copying speed and scanning speed will be reduced.
- The weight range for originals in the Mixed Sizes mode is as follows:
  - Type 1 and 2: 52 - 105 g/m^2 (14 - 28 lb. Bond)
  - Type 3 and 4: 52 - 81 g/m^2 (14 - 20 lb. Bond)
- When using this function with 1 Sided → 2 Sided mode, always ensure that the originals of each size are in even numbers. If you have an odd number of originals, insert blank sheets to adjust the total.



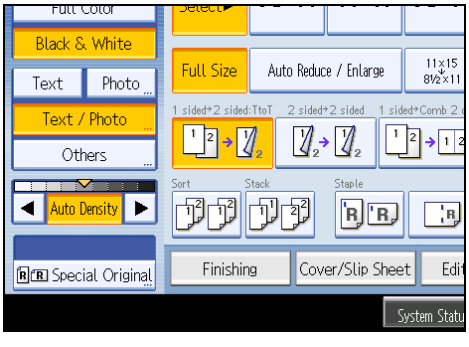
Specifying Original Sizes

Specify the size of the originals.

Regular sizes

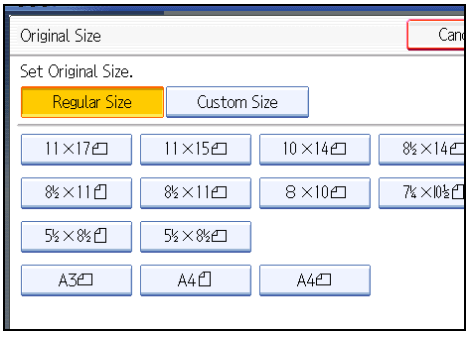
Select the size of the originals from the regular sizes.

1. **Press [Special Original].**



2. **Press [Original Size].**

3. Press [Regular Size].



4. Select the size of original, and then press [OK] twice.
5. Place the originals, and then press the [Start] key.

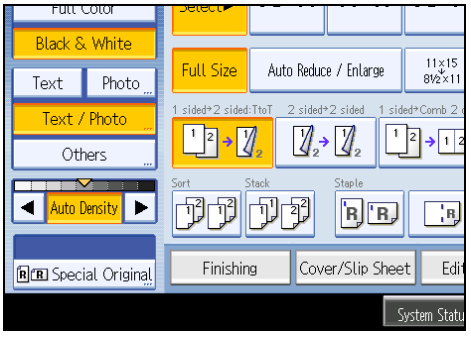
Custom sizes

When copying custom size originals, specify the size of the originals.

Important

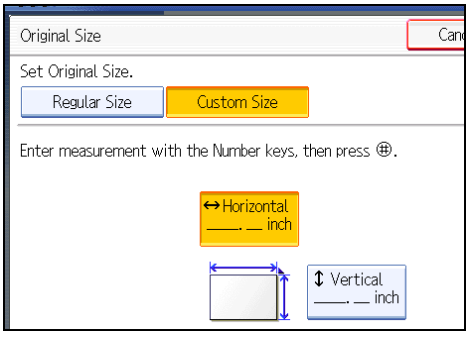
- The size range of originals that can be scanned by this machine is as follows:
  - Horizontal length: 128 - 1260 mm (5.1 - 49.6 inches), vertical length: 128 - 297 mm (5.1 - 11.6 inches)
- However, the size range of copy paper is limited to 148 - 457.2 mm (5.83 - 18.00 inches) horizontally and 90 - 305 mm (3.55 - 12.00 inches) vertically.

1. Press [Special Original].



2. Press [Original Size].
3. Press [Custom Size].

4. **Enter the horizontal size with the number keys, and then press [#].**



5. **Enter the vertical size with the number keys, and then press [#].**
6. **Press [OK] twice.**
7. **Place the originals, and then press the [Start] key.**

Note

- To change the value you entered, press the item you want to change, and then enter a new value.

2. Basic Copying

This chapter describes the basic procedure for making copies.

Basic Procedure

This section describes the basic procedure for making copies.

Important

- When User Code Authentication is set, enter your user code (up to eight digits) with the number keys so that the machine accepts copy jobs. For details about Administrator Tools, see "System Settings", Network and System Settings Reference.
- When Basic Authentication, Windows Authentication, LDAP Authentication, or Integration Server Authentication is set, enter your login user name and password so that the machine accepts copy jobs. Ask the administrator for the login user name and password. For details, see "When the Authentication Screen is Displayed", About This Machine.
- To copy onto paper other than plain paper, specify the paper type in User Tools. For details, see "System Settings", Network and System Settings Reference.

1. **Make sure "Ready" appears on the screen.**

   If any other function is displayed, press the [Copy] key on the left side of the control panel.

   Initial copy screen

2. **Make sure no previous settings remain.**

   When there are previous settings remaining, press the [Clear Modes] key.

3. **Place the originals.**

4. **Make desired settings.**

5. **Enter the number of copies with the number keys.**

   The maximum copy quantity that can be set is 999.

6. **Press the [Start] key.**

   The machine starts copying.

   When placing originals on the exposure glass, press the [#] key after all originals are scanned.

7. **When the copy job is finished, press the [Clear Modes] key to clear the settings.**

Note

- After logging in the machine, be sure to log out of it to prevent unauthorized usage.
- To stop the machine during a multi-copy run, press the [Clear/Stop] key.
- To cancel all copy functions and return the machine to the default condition, press the [Clear Modes] key.
- To clear entered values, press the [Clear/Stop] key or [Cancel] on the screen.
- To confirm settings, press [Check Modes].
- You can change the maximum copy quantity under Max. Copy Quantity in User Tools. For details about Max. Copy Quantity, see "General Features".

Reference

- p.219 "General Features"

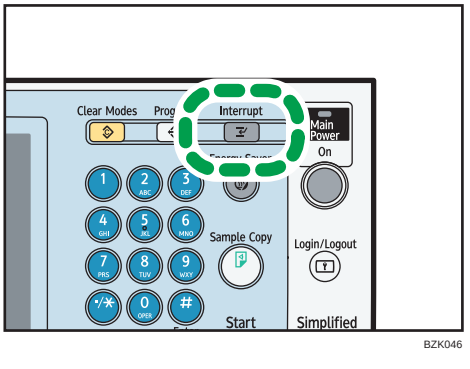
Interrupt Copy

Use this function if you want to interrupt a long copy job to make urgently needed copies.

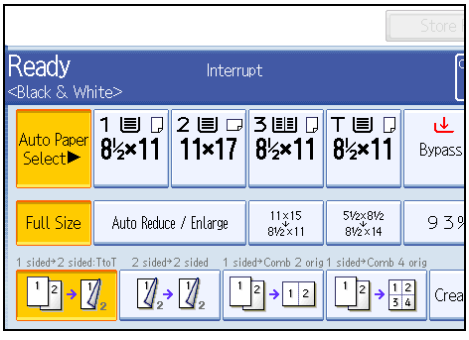
Important

- **You cannot use the Interrupt Copy function when fax originals are being scanned or the scanner function is being used.**
- **You cannot use the Staple function with this function if another copy job is already using the Staple function.**

1. **Press the [Interrupt] key.**



The interrupt key indicator lights. The machine stops scanning.



2. **Remove the originals that were being copied.**
3. **Place the originals you want to copy.**
4. **Press the [Start] key.**

   The machine starts making copies.
5. **When copying is complete, remove the originals and copies.**
6. **Press the [Interrupt] key again.**

   The interrupt key indicator goes off.
7. **Replace the originals that you were copying, and then press the [Start] key.**

   Following the instructions on the display.

Note

- The previous copy job settings are restored. Simply press the [Start] key to continue copying from where it left off.

Auto Start

If you make settings and scan originals while the machine is busy, your copies will be made once the machine is ready.

1. **Make your settings while "Select copy mode and press the Start key." and "Scanning originals can be started." are displayed alternately.**
2. **Place the original.**
3. **Press the [Start] key.**

   The machine scans the original.

   Copying starts automatically once the machine is ready.

Job Preset

You can make settings for the next copy job during copying.

If a long copy job is in progress and you do not want to wait for it to finish, you can use this function to set up the next copy job in advance. When the current copy job is finished, the next job will start automatically.

1. **Press [New Job] when "Copying..." appears.**

2. **Be sure message "Ready" appears, and then make settings for the next copy job.**
3. **Place the originals, and then press the [Start] key.**

   All originals are scanned.

   When the preset job is complete, a job preset confirmation dialog box appears.
4. **Press [Exit].**

   The initial copy display appears.

   After the current copy job, the next copy job starts automatically.

Note

- You can switch the display to the current copy job by pressing [To Copying Screen]. You can switch the display to the preset job by pressing [To Reserv. Screen].
- Preset copy jobs are registered under job numbers in the Reserv. Screen.
- You can confirm and delete preset jobs. For details about the procedures, see “Managing Jobs”.

Reference

- p.96 "Managing Jobs"

Copying from the Bypass Tray

The bypass tray allows you to copy non-standard paper.

Use the bypass tray to copy onto OHP transparencies, adhesive labels, translucent paper, and paper that cannot be loaded in the paper trays.

Important

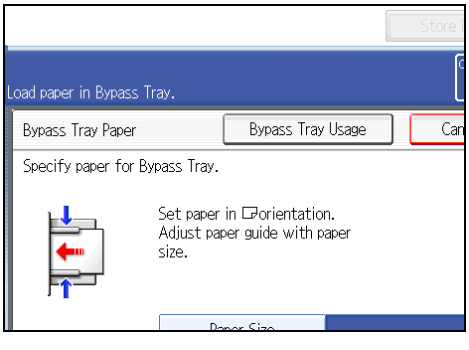
- Paper that has a vertical length of 90.0 - 305.0 mm (3.55 - 12.00 inches) and a horizontal length of 148.0 - 457.2 mm (5.83 - 18.00 inches) can be fed in from the bypass tray. Note however that the limitation on the horizontal and vertical length range will vary depending on which options are installed.
  - When prints are delivered to the trays of the finisher:

    Horizontal length: 148.0 - 457.2 mm (5.83 - 18.00 inches), vertical length: 100.0 - 305.0 mm (3.94 - 12.00 inches)
  - When prints are delivered to Internal Tray 2:

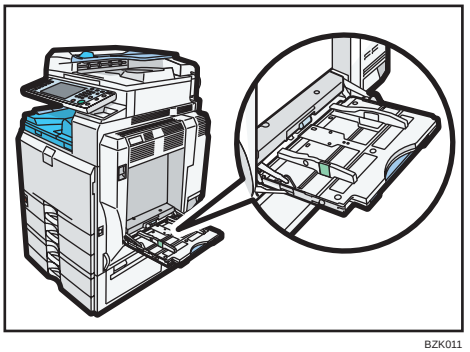
    Horizontal length: 148.0 - 432.0 mm (5.83 - 17.00 inches), vertical length: 93.0 - 297.0 mm (3.67 - 11.69 inches)
- Paper that has a horizontal length of 432 mm or more is prone to creasing, feed failures, and jamming.
- The machine can automatically detect the following sizes as regular size copy paper:
  - 11 × 17⬓, $8^1/_2$ × 11⬓⬓, $5^1/_2$ × $8^1/_2$⬓
- If the paper you want to copy onto is not shown on the Paper Type screen or is lighter than 75 g/m^2 (approx. 20 lb. Bond) or heavier than 81 g/m^2 (approx. 20 lb. Bond), you must specify the paper type under Tray Paper Settings in User Tools. For details about Tray Paper Settings, see "System Settings", Network and System Settings Reference.
- Do not use color OHP transparencies that are coated with materials that might melt.
- The maximum number of sheets you can load at the same time depends on paper type. Load only as much paper as can be held between the paper guides on the bypass tray.

[Bypass Tray Usage]

Press [Bypass Tray Usage] to display a description on using the bypass tray.



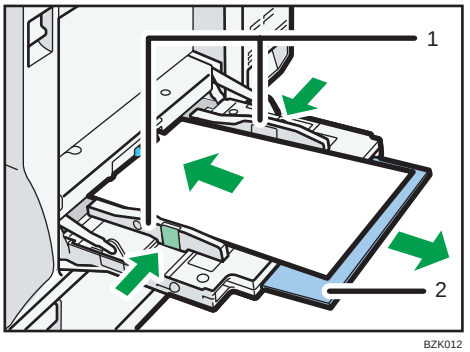
1. **Open the bypass tray.**



BZK011

2. **Insert the paper face down until you hear the beep, and then align the paper guides to the paper size.**

   If the guides are not flush against the paper, images might be skewed or paper misfeeds might occur.



BZK012

   1. **Paper guides**
   2. **Extender**

3. **Press [Bypass], and then press the [#] key.**
4. **Select the size and type of the paper.**
5. **Press [OK].**
6. **Place the originals, and then press the [Start] key.**
7. **When the copy job is finished, press the [Clear Modes] key to clear the settings.**

Note

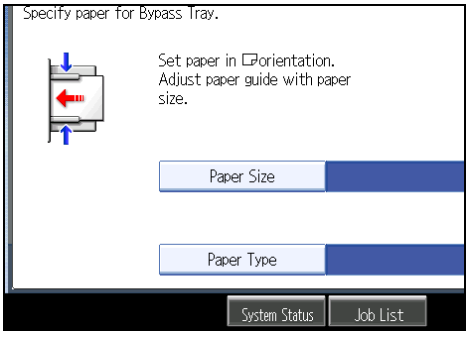
- Certain types of paper might not be detected properly when placed on the bypass tray. If this happens, remove the paper and place it on the bypass tray again.
- Load only as much paper as can be held between the guides on the bypass tray. Overloading the bypass tray can result in misfeeds and skewed images.
- The following paper sizes can be selected as the standard sizes:

- A3, A4, A5, A6, B4 JIS, B5 JIS, B6 JIS, 12 × 18, 11 × 17, 11 × 15, 10 × 14, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, 8 × 10, $7^1/_4$ × $10^1/_2$, $5^1/_2$ × $8^1/_2$, $4^1/_8$ × $9^1/_2$, $3^7/_8$ × $7^1/_2$, C5 Env, C6 Env, DL Env, 8K, 16K
- To support A4, $8^1/_2$ × 11 or larger paper sizes, pull out the extender.
- To prevent multiple sheets from being fed at once, fan paper before placing it on the tray.
- When the Panel Key Sound is turned off, it will not sound if you insert paper into the bypass tray. For details about Panel Key Sound, see "System Settings", Network and System Settings Reference.
- Depending on the environment where the machine is being used, you might at times hear a rustling noise from paper moving through the machine. This noise does not indicate a malfunction.

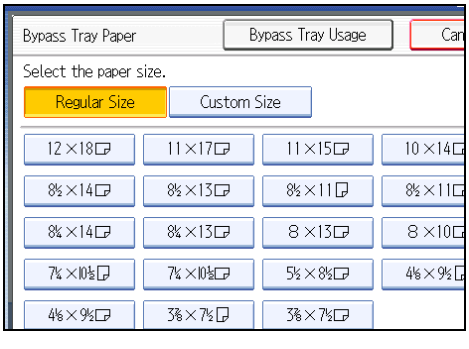
Copying onto Regular Size Paper

Makes copies onto regular size paper from the bypass tray.

1. **Open the bypass tray, and then insert the paper face down until you hear the beep.**
2. **Align the paper guides to the paper size.**
3. **Press [Bypass], and then press the [#] key.**
4. **Press [Paper Size].**



5. **Select the paser size.**

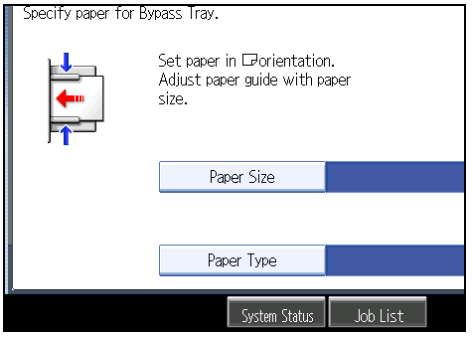


6. Press [OK] twice.
7. Place the originals, and then press the [Start] key.

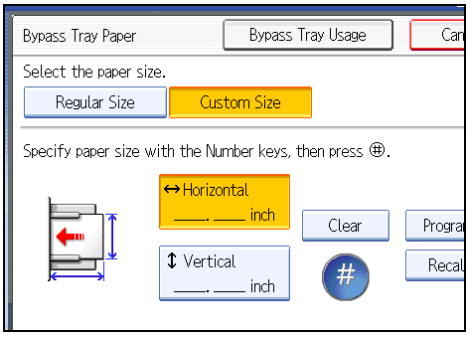
Copying onto Custom Size Paper

Makes copies onto custom size paper from the bypass tray.

1. Open the bypass tray, and then insert the paper face down until you hear the beep.
2. Align the paper guides to the paper size.
3. Press [Bypass], and then press the [#] key.
4. Press [Paper Size].



5. Press [Custom Size].
6. Enter the horizontal size with the number keys, and then press [#].



7. Enter the vertical size with the number keys, and then press [#].
8. Press [OK] twice.
9. Place the originals, and then press the [Start] key.

Note

- To change the value you entered, press the item you want to change, and then enter a new value.

- You can register a custom paper size. For details, see “Registering a custom size”. You can also recall the registered custom paper size. For details, see “Recalling the registered custom size”.

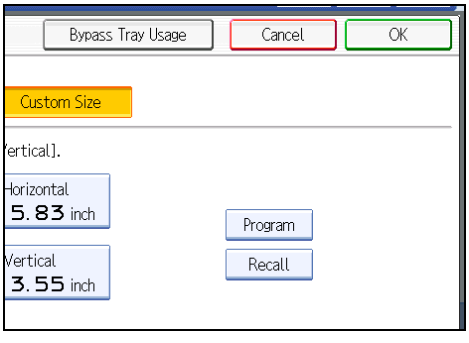
Reference

- p.47 "Registering a custom size"
- p.47 "Recalling the registered custom size"

Registering a custom size

Register a custom paper size.

1. **Press [Bypass], and then press the [#] key.**
2. **Press [Paper Size].**
3. **Press [Custom Size].**
4. **Enter the horizontal size with the number keys, and then press [#].**
5. **Enter the vertical size with the number keys, and then press [#].**
6. **Press [Program].**



The confirmation screen appears.

7. **Press [Exit].**
8. **Press [OK] twice.**

Note

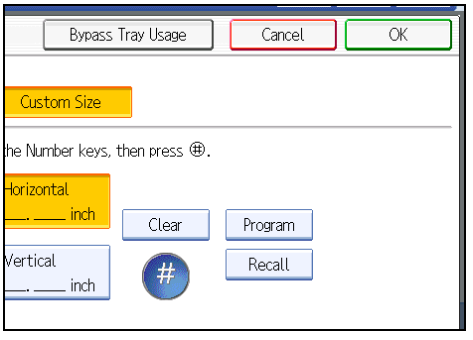
- To change the value you entered, press the item you want to change, and then enter a new value.
- You can specify only one custom size.

Recalling the registered custom size

Recalls the registered paper size.

1. **Press [Bypass], and then press the [#] key.**

2. Press [Paper Size].
3. Press [Custom Size].
4. Press [Recall].



The registered size is displayed.

5. Press [OK] twice.

Copying onto OHP Transparencies or Thin Paper

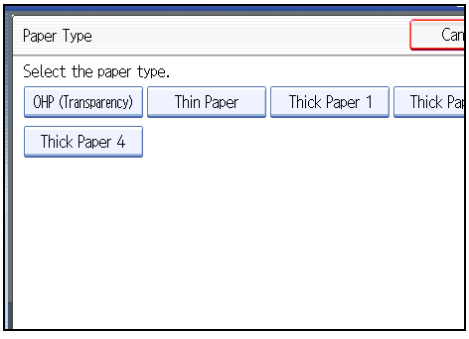
When copying onto OHP transparencies or thin paper, select the type and size of paper.

Important

- We recommend that you use specified OHP transparencies.
- Do not use color OHP transparencies that are coated with materials that might melt.
- OHP transparencies must be loaded face down in the tray.
- When copying onto OHP transparencies, remove copied sheets one by one.
- The Duplex function cannot be used with OHP transparencies or thin paper. If [1 Sided → 2 Sided] is selected, cancel the setting.

1. Open the bypass tray, and then insert the paper face down until you hear the beep.
2. Align the paper guides to the paper size.
3. Press [Bypass], and then press the [#] key.
4. Press [Paper Type].

5. **Select [OHP (Transparency)] or [Thin Paper], and then press [OK].**



6. **Specify the paper size, and then press [OK] twice.**
7. **Place the originals, and then press the [Start] key.**

Note

- Printing on special paper such as OHP transparencies and thin paper may be slower than printing on plain paper.
- To prevent multiple sheets from being fed at once, fan paper before placing it on the tray.
- Load OHP transparencies one by one if they jam when loaded together.

Copying onto Thick Paper

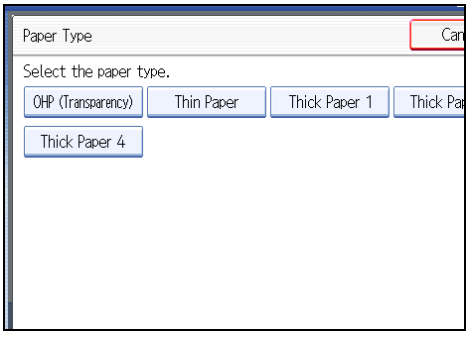
When copying onto thick paper, select the type and size of paper.

Important

- **The Duplex function cannot be used with paper that is classifiable as Thick Paper 2, 3, or 4. If [1 Sided → 2 Sided] is selected, cancel the setting.**

1. **Open the bypass tray, and then insert the paper face down until you hear the beep.**
2. **Align the paper guides to the paper size.**
3. **Press [Bypass], and then press the [#] key.**
4. **Press [Paper Type].**

5. **Select a paper weight from 1 to 4, and then press [OK].**



Select [Thick Paper 1] when paper weight is between 106 g/m^2 (28 lb. Bond) and 169 g/m^2 (90 lb. Index).

Select [Thick Paper 2] when paper weight is between 170 g/m^2 (65 lb. Cover) and 220 g/m^2 (80 lb. Cover).

Select [Thick Paper 3] when paper weight is between 221 g/m^2 (80 lb. Cover) and 256 g/m^2 (140 lb. Index).

Select [Thick Paper 4] when paper weight is between 257 g/m^2 (140 lb. Index) and 300 g/m^2 (110 lb. Cover).

6. **Specify the paper size, and then press [OK] twice.**
7. **Place the originals, and then press the [Start] key.**

Note

- When copying onto Thick Paper 4, copy paper is output in the internal tray even if you specified a different tray.
- Printing on thick paper may be slower than printing on plain paper.
- To prevent multiple sheets from being fed at once, fan paper before placing it on the tray.

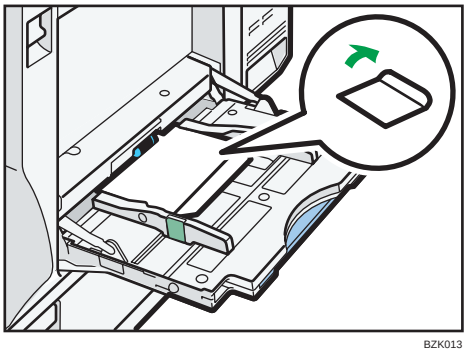
Copying onto Envelopes from the Bypass Tray

When copying onto envelopes, specify the paper type and paper size.

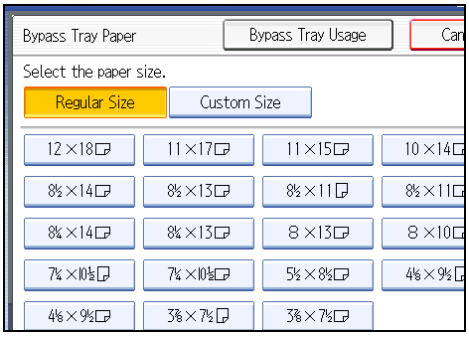
Important

- **Before using this function, select [Envelope] under Paper Type: Bypass Tray in User Tools. For details, see "System Settings", Network and System Settings Reference.**
- **Before loading self-adhesive envelopes, be sure to fan them thoroughly. This will prevent them sticking together. If fanning does not prevent them sticking together, load them one by one. Note that some types of envelope cannot be used with this machine.**
- **The Duplex function cannot be used with envelopes. If [1 Sided → 2 Sided] is selected, cancel the setting.**

1. **Open the bypass tray and set the envelopes print side down, flaps open and pointing away from the machine. Push the envelopes into the machine until you hear the beep.**



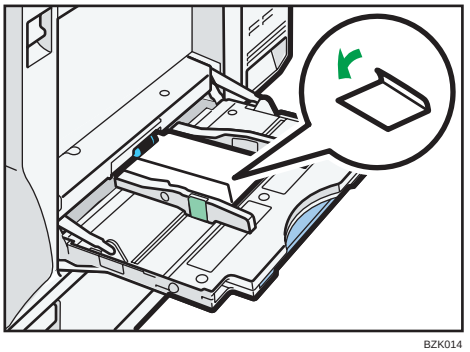
2. **Align the paper guides to the envelope size.**
3. **Press [Bypass], and then press the [#] key.**
4. **Press [Paper Size].**
5. **Select the envelope size, and then press [OK] twice.**



6. **Place the originals, and then press the [Start] key.**

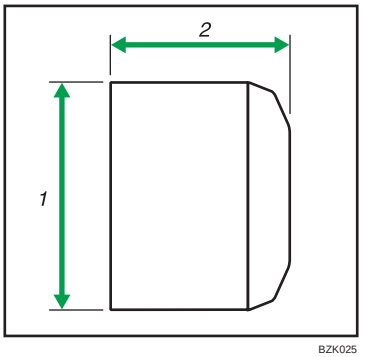
Note

- When placing an original on the exposure glass, place the original with the bottom line aligned to the left scale.
- When placing an original in the ADF, place the original with the bottom line inserted in the ADF.
- Load envelopes with flaps fully open. Otherwise, they might not feed into the machine.
- When loading envelopes in the landscape (⧉) orientation, set them so that their flaps are closed, facing upward, and pointing toward the front of the machine.



BZK014

- To copy onto custom size envelopes, you must specify the envelope's dimensions. Be sure to include the fully open flap in the horizontal dimension.



BZK025

1. Vertical size
2. Horizontal size

- Check the envelopes are not damp.
- Load only as much envelopes as can be held between the paper guides on the bypass tray. For the number of envelopes that you can set on the bypass tray, see “Recommended Paper Sizes and Types”, About This Machine.
- Check there is no air in the envelopes before loading.
- To get better print quality, it is recommended that you set the right, left, top, and bottom print margin, to at least 15 mm (0.6 inch) each.
- You cannot print envelopes with the Duplex function.
- Load only one size and type of envelope at a time.
- Before loading envelopes, flatten leading edges (the side going into the machine) by pressing a pencil or ruler across them.
- Before loading envelopes, check they are rectangular in shape.
- For details about supported envelope types, see “Envelopes”, About This Machine.

Copying onto Envelopes from the Small Size Paper Tray

The small size paper tray allows you to copy onto A4 or smaller sizes of paper, as well as stationery such as envelopes.

This section describes how to copy onto envelopes from the small size paper tray.

Important

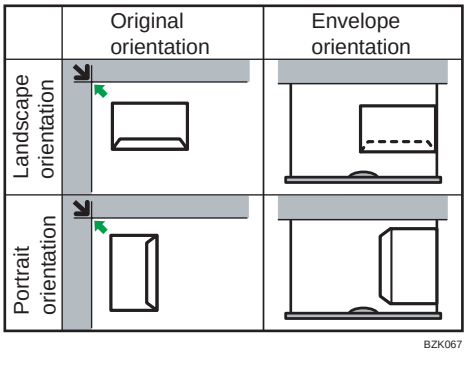
- **Specify the paper size and type under Tray Paper Settings in User Tools in advance. For the paper type, select [Envelope]. For details, see "System Settings", Network and System Settings Reference.**
- **For the procedure for loading envelopes in the small size paper tray, see "Changing the Paper Size", About This Machine.**
- **Before loading self-adhesive envelopes, be sure to fan them thoroughly. This will prevent them sticking together. If fanning does not prevent them sticking together, load them one by one. Note that some types of envelope cannot be used with this machine.**
- **For details about supported envelope types, see "Envelopes", About This Machine.**
- **The Duplex function cannot be used with envelopes. If [1 Sided → 2 Sided] is selected, cancel the setting.**

Envelope orientation

This section explains how to set envelopes according to orientation.

When loading envelopes in the landscape (⬓) orientation, set them print side up with their flaps closed and pointing toward the front of the machine.

When loading envelopes in the portrait (▯) orientation, set them print side up with their flaps open and pointing away from the paper feed direction.



The illustration shows the orientation of copy envelopes loaded in the small size paper tray.

1. **Select the small size paper tray.**
2. **Place the originals, and then press the [Start] key.**

Note

- Envelopes can also be loaded in the bypass tray. For the procedure for copying onto envelopes from the bypass tray, see “Copying onto Envelopes from the Bypass Tray”.
- When copying onto $4^{1}/_{8} \times 9^{1}/_{2}$ or C5 envelopes, load them on the bypass tray or in a paper tray. For details about which trays can be used for envelopes, see “Recommended Paper Sizes and Types”, About This Machine.

Reference

- p.50 "Copying onto Envelopes from the Bypass Tray"

Reducing or Enlarging Originals

This section describes methods of reducing or enlarging images by specifying a reproduction ratio, or a paper size.

In addition to the functions described in this section, advanced reduce / enlarge copy functions are also available. For details about these functions, see “Advanced Reduce / Enlarge Copying”.

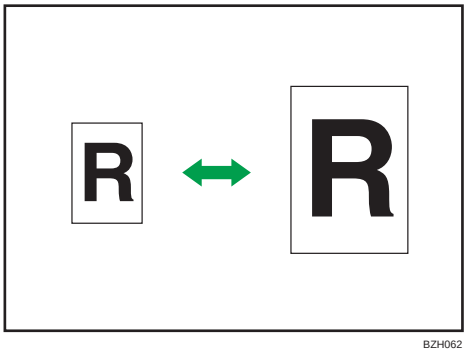
Reference

- p.132 "Advanced Reduce / Enlarge Copying"

Preset Reduce / Enlarge

This function allows you to reduce or enlarge images by selecting a preset ratio.

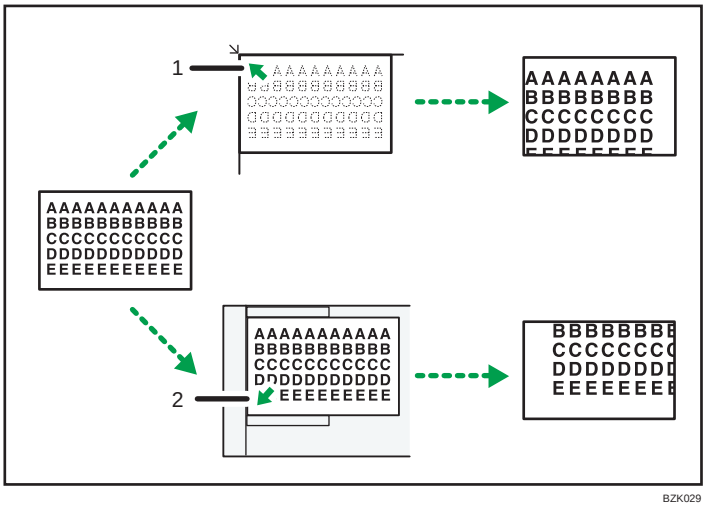
You can register up to three frequently used reproduction ratios other than the preset Reduce / Enlarge ratios.



BZH062

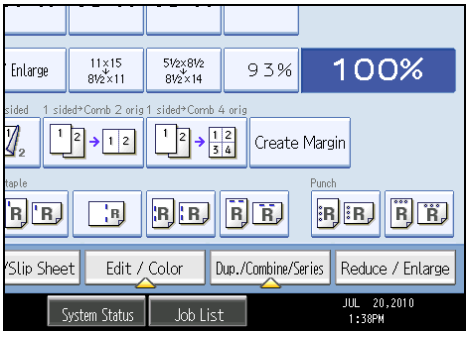
Base Point

The base point of Reduce / Enlarge differs depending on how the original is scanned. When the original is placed on the exposure glass, the upper left corner will be the base point. When it is placed in the ADF, the bottom left corner will be the base point.

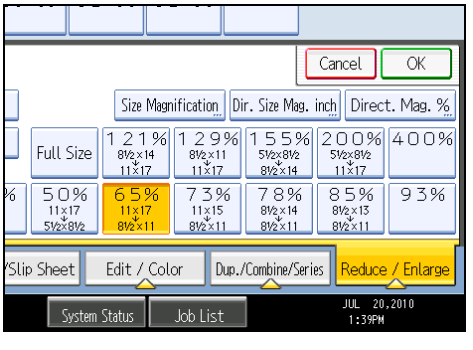


1. Base point when placed on the exposure glass
2. Base point when placed in the ADF

1. Press [Reduce / Enlarge].



2. Select a ratio, and then press [OK].



3. Place the originals, and then press the [Start] key.

Note

- You can change reproduction ratios shown on the initial display under Reproduction Ratio in User Tools. For details about Reproduction Ratio, see “Reproduction Ratio”.
- You can also select a preset ratio on the initial display, press the shortcut reduce/enlarge key. In the case, proceed to step 3.
- You can select one of 12 preset ratios (5 enlargement ratios, 7 reduction ratios).
- You can select a ratio regardless of the size of an original or copy paper. With some ratios, parts of the image might not be copied or margins will appear on copies.

Reference

- p.223 "Reproduction Ratio"

Zoom

You can specify the reproduction ratio in increments of 1%.

BZH064

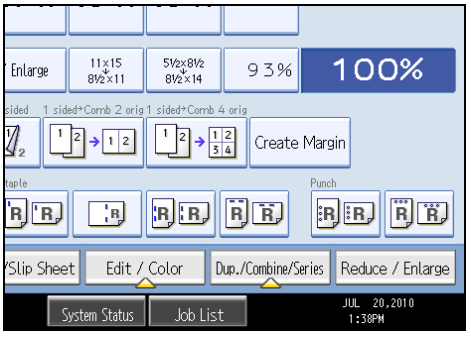
Note

- The reproduction ratios you can specify are 25 - 400%.
- You can select a ratio regardless of the size of an original or copy paper. With some ratios, parts of the image might not be copied or margins will appear on copies.

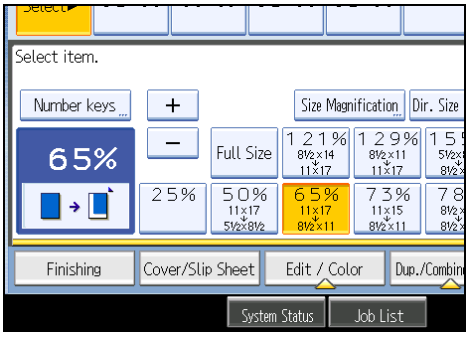
Specifying the ratio with [−] and [+]

Specify a ratio using [−] and [+].

1. **Press [Reduce / Enlarge].**



2. **Select a preset ratio which is close to the desired ratio.**
3. **Adjust the ratio with [−] and [+].**



Press [−] or [+] changes the ratio in increments of 1%. Pressing and holding down [−] or [+] changes it in increments of 10%.

4. **Press [OK].**
5. **Place the originals, and then press the [Start] key.**

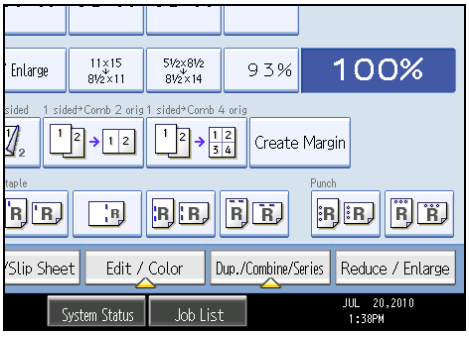
Note

- To change the value you specified, readjust it with [−] and [+].

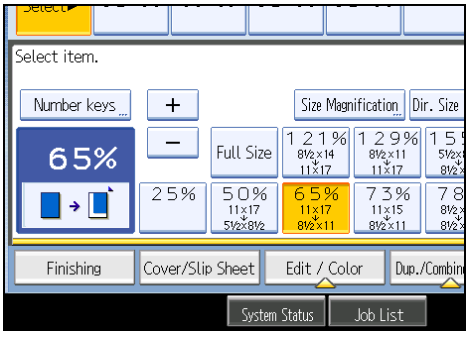
Entering the ratio with the number keys

Enter a ratio using the number keys.

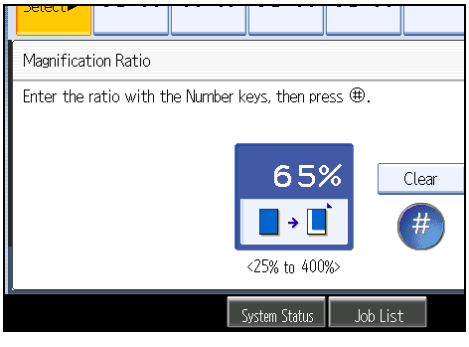
1. **Press [Reduce / Enlarge].**



2. **Press [Number keys].**



3. **Enter the desired ratio with the number keys, and then press [#].**



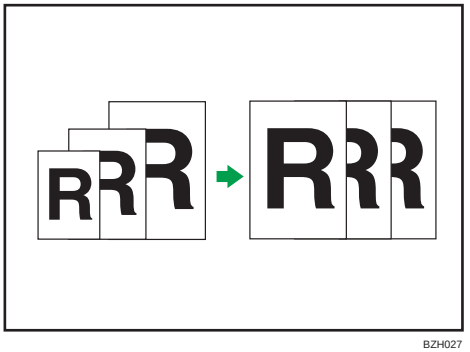
4. **Press [OK] twice.**
5. **Place the originals, and then press the [Start] key.**

Note

- To change the value you entered, press [Clear], and then enter a new value.

Auto Reduce / Enlarge

The machine automatically detects the original size and then selects an appropriate reproduction ratio based on the paper size you select.



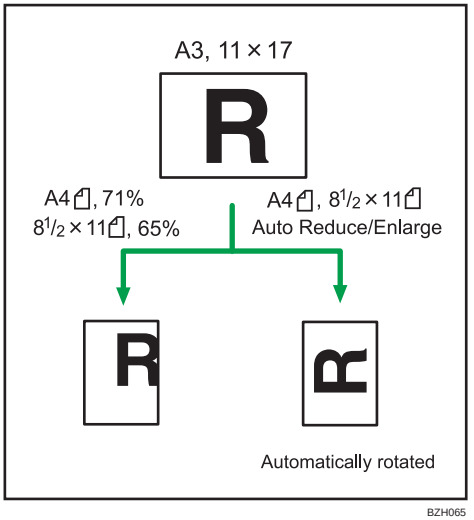
BZH027

Important

- **If you select a reproduction ratio after pressing [Auto Reduce / Enlarge], [Auto Reduce / Enlarge] is canceled and the image cannot be rotated automatically.**

This is useful to copy different size originals to the same size paper.

If the orientation in which your original is placed is different from that of the paper you are copying onto, the machine rotates the original image by 90 degrees and fits it on the copy paper (Rotate Copy). For example, to reduce A3 (11 × 17)⬓ originals to fit onto A4 ($8^1/_2$ × 11)▯ paper, select a paper tray containing A4 ($8^1/_2$ × 11)▯ paper, and then press [Auto Reduce / Enlarge]. The image is automatically rotated.



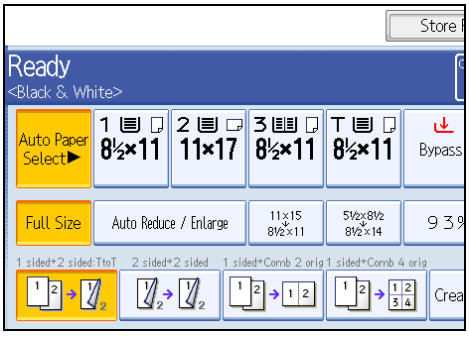
BZH065

For details about Rotate Copy, see “Rotate copy”.

The original sizes and orientations you can use with this function are as follows:

Original location	Original size and orientation
Exposure glass	11 × 17, 8 1/2 × 14, 8 1/2 × 11, 5 1/2 × 8 1/2
ADF	11 × 17, 8 1/2 × 14, 8 1/2 × 11, 5 1/2 × 8 1/2, 10 × 14, 7 1/4 × 10 1/2, A3, A4

1. **Press [Auto Reduce / Enlarge].**



2. **Select the paper size.**
3. **Place the originals, and then press the [Start] key.**

Note

- You can place originals of different sizes in the ADF at once.
- The machine selects reproduction ratios of between 25 and 400%.

Reference

- p.130 "Rotate copy"

Duplex Copying

This section describes how to make duplex copies.

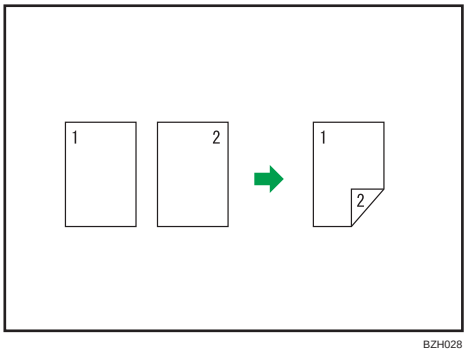
Copies two 1-sided pages or one 2-sided page onto a 2-sided page.

Important

- **The paper weight that can be used with this function is 60 - 169 g/m^2 (16 lb. Bond - 90 lb. Index).**

1 Sided → 2 Sided

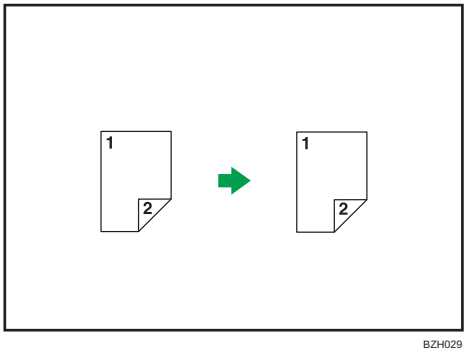
Copies two 1-sided pages on one 2-sided page.



BZH028

2 Sided → 2 Sided

Copies one 2-sided page on one 2-sided page.

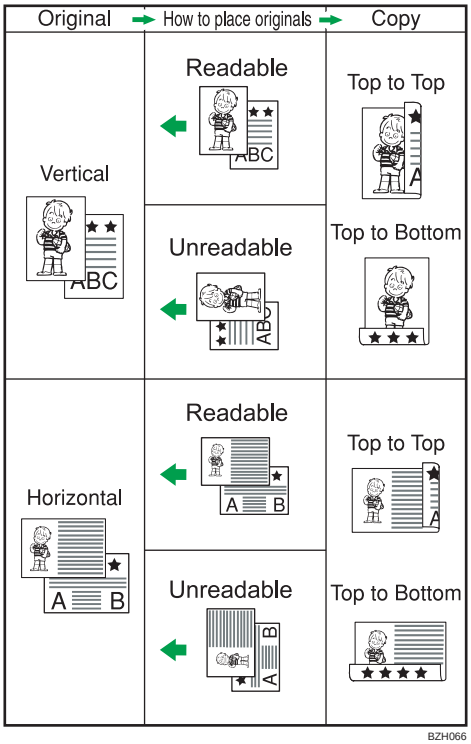


BZH029

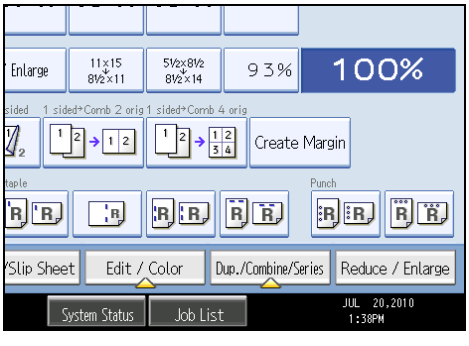
Original orientation and completed copies

The resulting copy image will differ according to the orientation in which you place your originals (↓ or →).

The table shows the orientation of images on the front and back of copies, not the orientation of delivery.

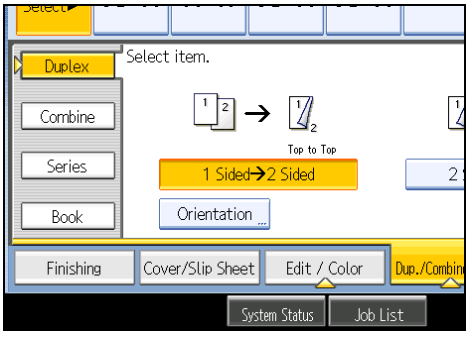


1. **Press [Dup./Combine/Series].**



2. **Make sure that [Duplex] is selected. If [Duplex] is not selected, press [Duplex].**

3. **Select [1 Sided → 2 Sided] or [2 Sided → 2 Sided].**



To change the original or copy orientation, press [Orientation].

4. **Press [OK].**
5. **Place the originals, and then press the [Start] key.**

Note

- When placing originals on the exposure glass, start with the first page to be copied. When placing originals in the ADF, set so that the first page is on the top.
- When placing originals on the exposure glass, or in the ADF using Batch mode, press the [#] key after all the originals have been scanned.
- You can also select [1 Sided → 2 Sided] or [2 Sided → 2 Sided] directly by pressing the copy function key. In that case, proceed to step 5.
- You can specify the margins under Edit in User Tools. For details about Edit, see "Edit".
- You can use the following copy paper with this function:
  - A3□, A4□□, A5□□, A6□, B4 JIS□, B5 JIS□□, B6 JIS□, 11 × 17□, 11 × 15□, 10 × 14□, $8^1/_2$ × 14□, $8^1/_2$ × 13□, $8^1/_2$ × 11□□, $8^1/_4$ × 14□, $8^1/_4$ × 13□, 8 × 13□, 8 × 10□, $7^1/_4$ × $10^1/_2$□□, 8K□, 16K□
- You cannot use the following copy paper with this function:
  - Translucent paper
  - Label paper (adhesive labels)
  - OHP transparencies
  - Postcards
  - Envelopes
  - Thin paper
  - Thick paper
- When an odd number of originals are placed in the ADF, the back of the last page of copied paper is blank.
- During copying, the image is shifted to allow for the binding margin.

- By default, a binding margin is made on the back side.

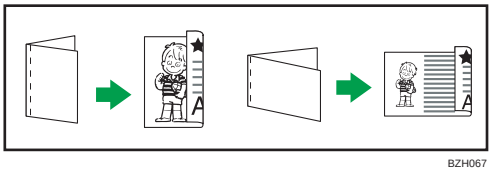
Reference

- p.225 "Edit"

Originals and Copy Orientation

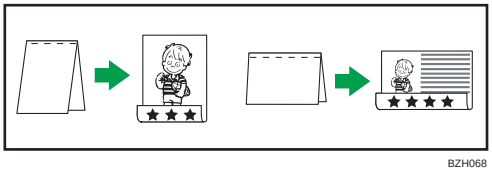
You can select the orientation of originals and copies.

- Top to Top



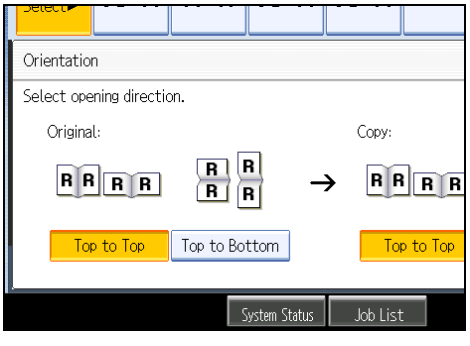
BZH067

- Top to Bottom



BZH068

1. **Press [Orientation].**
2. **Select orientation ([Top to Top]/[Top to Bottom]), and then press [OK].**



Note

- The default setting is [Top to Top]. You can change the default orientation under Original Orientation in Duplex Mode and Copy Orientation in Duplex Mode in User Tools. For details, see “General Features”.

Reference

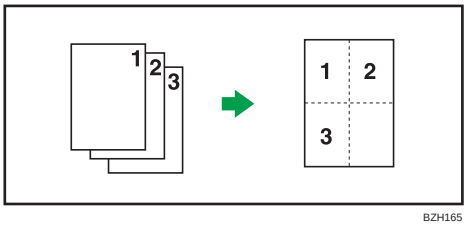
- p.219 "General Features"

Combined Copying

This section describes how to make combined copies.

Note

- When placing originals on the exposure glass, start with the first page to be copied. When placing originals in the ADF, set the first page on top.
- When placing originals on the exposure glass or in the ADF using the Batch function, press the [#] key after all the originals have been scanned.
- If you selected [2 Sided] for Original or [Combine 2 Sides] for Copy, you can change the orientation. See “Originals and Copy Orientation”.
- You can change the initial settings for 1-Sided Combine or 2-Sided Combine under Edit in User Tools. For details, see “Edit”.
- In this mode, the machine selects the reproduction ratio automatically. This reproduction ratio depends on copy paper sizes and the number of originals.
- The machine selects reproduction ratios of between 25 and 400%.
- If the calculated ratio is under the minimum ratio, it is automatically adjusted to within available range. However, with some ratios, parts of the image might not be copied.
- If the orientation of originals is different from that of the copy paper, the machine will automatically rotate the image by 90 degrees to make copies properly.
- If the number of originals placed is less than the number specified for combining, the last page segment is left blank as shown.



BZH165

Reference

- p.65 "Originals and Copy Orientation"
- p.225 "Edit"

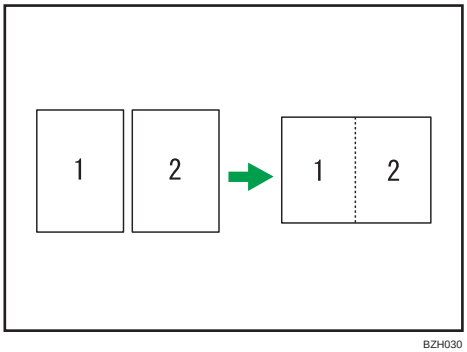
One-Sided Combine

Combine several pages onto one side of a sheet.

There are six types of One-Sided Combine.

1 Sided 2 Pages → Combine 1 Side

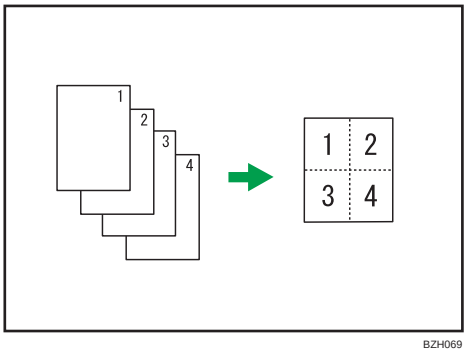
Copies two 1-sided originals to one side of a sheet.



BZH030

1 Sided 4 Pages → Combine 1 Side

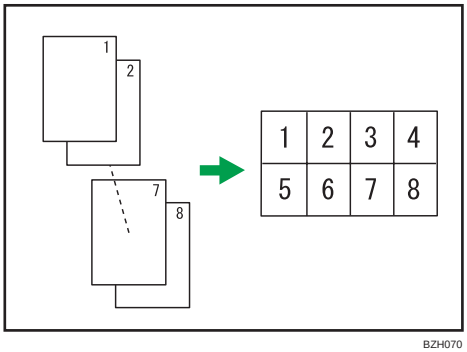
Copies four 1-sided originals to one side of a sheet.



BZH069

1 Sided 8 Pages → Combine 1 Side

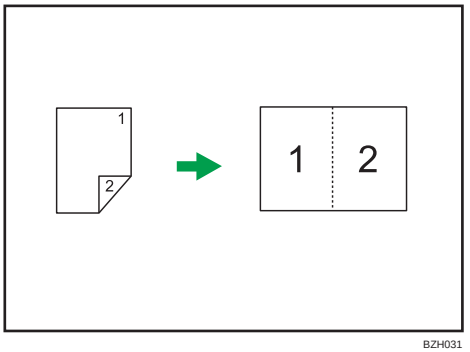
Copies eight 1-sided originals to one side of a sheet.



BZH070

2 Sided 1 Page → Combine 1 Side

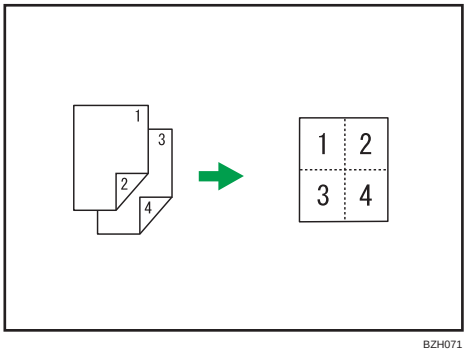
Copies one 2-sided original to one side of a sheet.



BZH031

2 Sided 2 Pages → Combine 1 Side

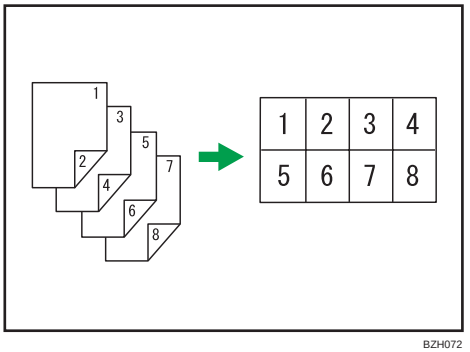
Copies two 2-sided originals to one side of a sheet.



BZH071

2 Sided 4 Pages → Combine 1 Side

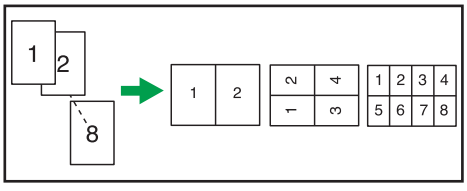
Copies four 2-sided originals to one side of a sheet.



BZH072

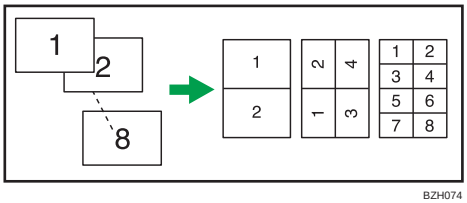
Orientation of the original and image position of combine

Portrait (⬚) originals



BZH073

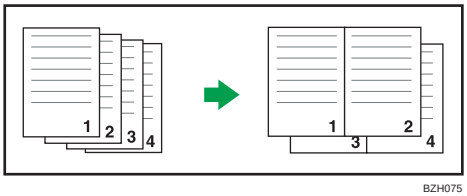
Landscape (⊐) originals



BZH074

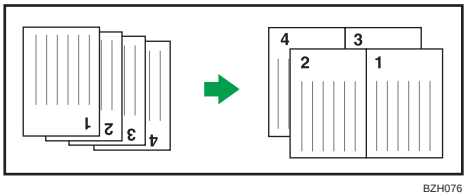
Placing originals (originals placed in the ADF)

- Originals read from left to right



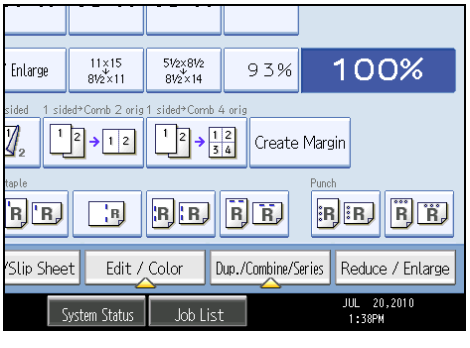
BZH075

- Originals read from top to bottom



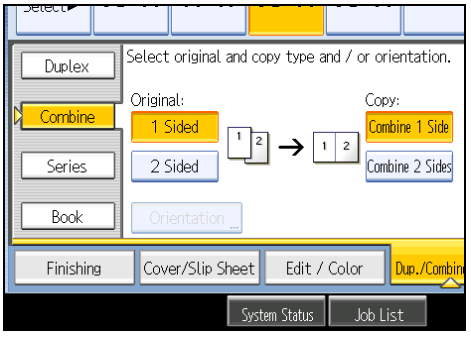
BZH076

1. **Press [Dup./Combine/Series].**



2. **Press [Combine].**

3. **Select [1 Sided] or [2 Sided] for Original, and then press [Combine 1 Side] for Copy.**



4. **Select the number of originals to combine.**
5. **Press [OK].**
6. **Select the paper size.**
7. **Place the originals, and then press the [Start] key.**

Note

- You can also select [1 sided → Comb 2 orig] or [1 sided → Comb 4 orig] directly by pressing the copy function key. In that case, proceed to step 6.

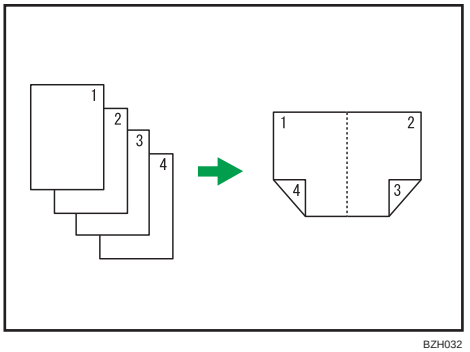
Two-Sided Combine

Combines various pages of originals onto two sides of one sheet.

There are six types of Two-Sided Combine.

1 Sided 4 Pages → Combine 2 Sides

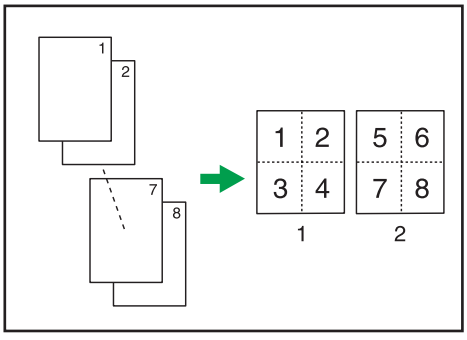
Copies four 1-sided originals to one sheet with two pages per side.



BZH032

1 Sided 8 Pages → Combine 2 Sides

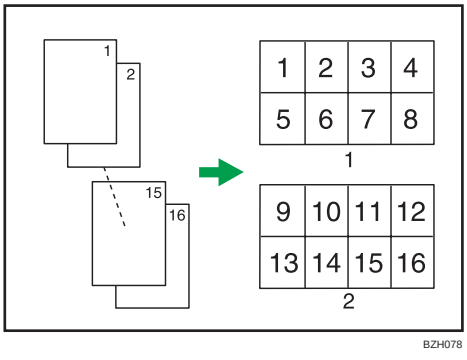
Copies eight 1-sided originals to one sheet with four pages per side.



1. **Front**
2. **Back**

1 Sided 16 Pages → Combine 2 Sides

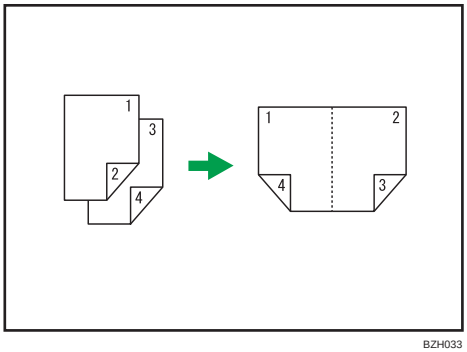
Copies 16 1-sided originals to one sheet with eight pages per side.



1. **Front**
2. **Back**

2 Sided 2 Pages → Combine 2 Sides

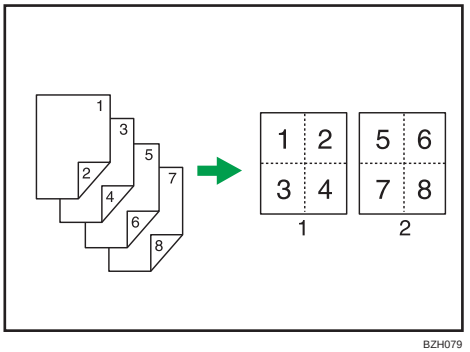
Copies two 2-sided originals to one sheet with two pages per side.



2

2 Sided 4 Pages → Combine 2 Sides

Copies four 2-sided originals to one sheet with four pages per side.

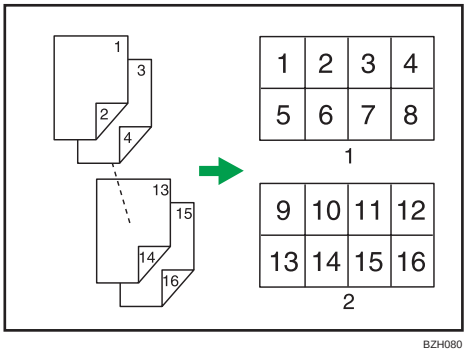


BZH079

1. **Front**
2. **Back**

2 Sided 8 Pages → Combine 2 Sides

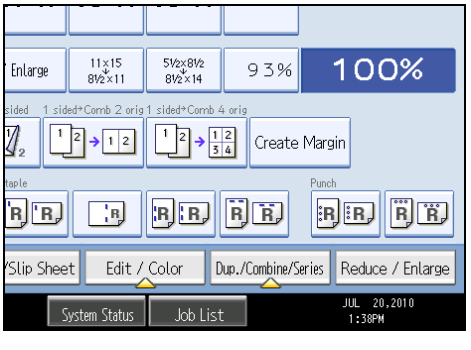
Copies eight 2-sided originals to one sheet with eight pages per side.



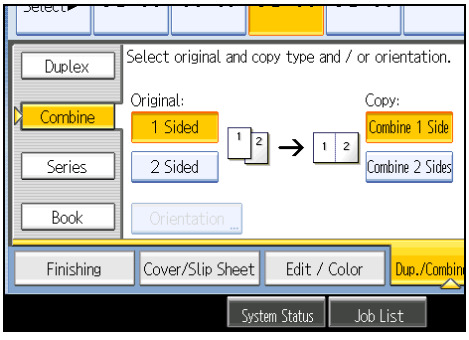
BZH080

1. **Front**
2. **Back**

1. **Press [Dup./Combine/Series].**



2. Press [Combine].
3. Select [1 Sided] or [2 Sided] for Original, and then press [Combine 2 Sides] for Copy.



4. Press [Orientation].
5. Select orientation ([Top to Top]/[Top to Bottom]), and then press [OK].
6. Select the number of originals to combine.
7. Press [OK].
8. Select the paper size.
9. Place the originals, and then press the [Start] key.

Note

- You cannot use custom size paper.

Finishing

You can sort, staple, and punch your copies.

Note

- Depending on your model and which options are installed on it, some of these functions might not be available. For details, see “Functions Requiring Optional Configurations”.

Reference

- p.18 "Functions Requiring Optional Configurations"

Sort

The machine assembles copies as sets in sequential order.

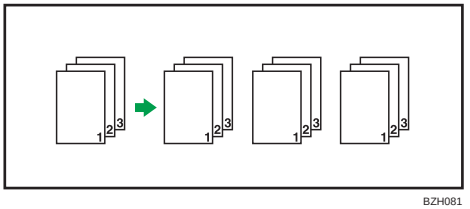
Important

- **To use the Rotate Sort function, two paper trays loaded with paper of the same size and type, but in different orientation (⧉) are required. See “System Settings”, Network and System Settings Reference.**
- **You cannot use the bypass tray with Rotate Sort.**

Sort/Shift Sort

Copies are assembled as sets in sequential order.

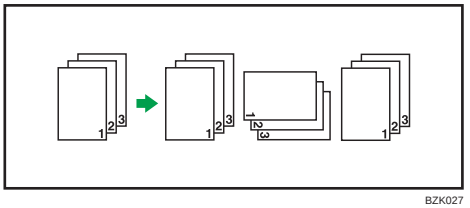
To use Shift Sort, a finisher or the internal shift tray is required. Each time the copies of one set or a job are delivered, the next copy is shifted to separate each set or job.



BZH081

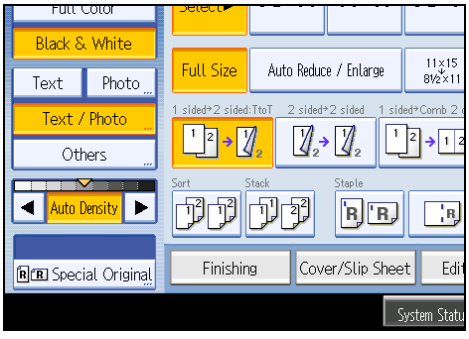
Rotate Sort

Every other copy set is rotated by 90 degrees (⧉) and delivered to the copy tray.



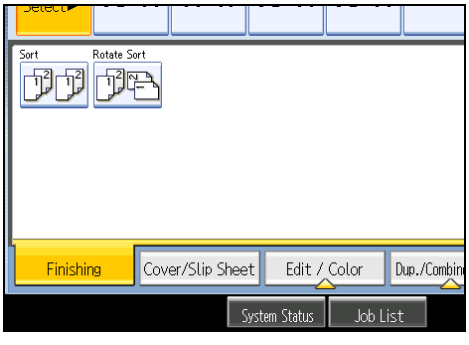
BZK027

1. **Press [Finishing].**

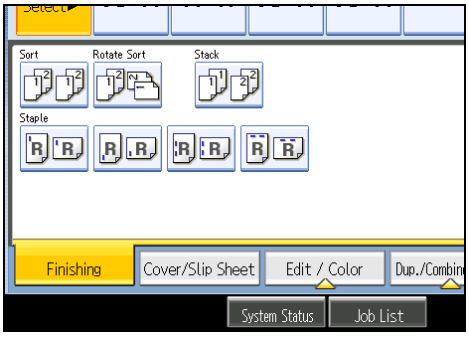


2. **Select [Sort] or [Rotate Sort].**

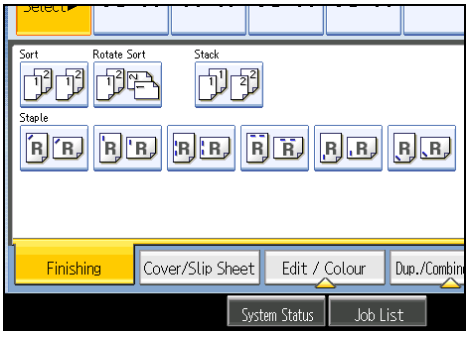
When the finisher is not attached:



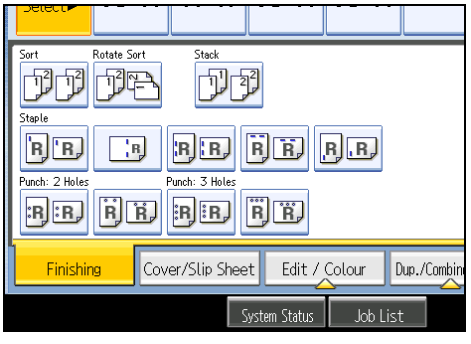
When Finisher SR790 is attached:



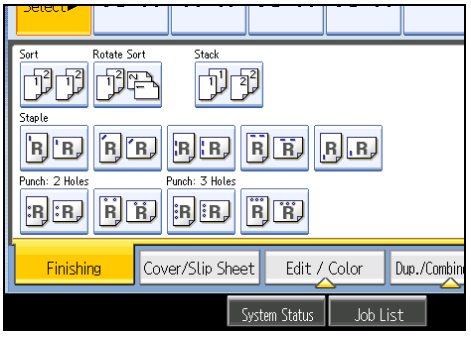
When Finisher SR3050 is attached (Type 1 and 2):



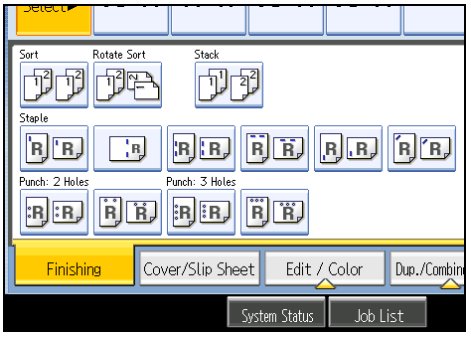
When Booklet Finisher SR3000 is attached (Type 1 and 2):



When Finisher SR3030 is attached (Type 3 and 4):



When Booklet Finisher SR3020 is attached (Type 3 and 4):



3. **Enter the number of copy sets using the number keys.**
4. **Press [OK].**
5. **Place the originals.**

   To confirm the type of finishing, press the [Sample Copy] key.
6. **Press the [Start] key.**

Note

- If you are copying from the exposure glass, a single copy of each original is made first. If the first copy set is acceptable, you can make the remaining copy sets by pressing the [#] key. The time required for copy sets to be delivered varies depending on the print settings.
- When placing originals on the exposure glass, start with the first page to be copied. When placing originals in the ADF, set so that the first page is on the top.
- When placing originals on the exposure glass, or in the ADF using Batch mode, press the [#] key after all the originals have been scanned.
- You can change the settings for the Sort function under Input / Output in User Tools. For details, see "Input / Output".
- Paper sizes and orientations that can be shifted when delivered to the shift tray are as follows:
  - Type 1 and 2
    - Internal shift tray
      - Standard size

        A3, A4, A5, A6, B4 JIS, B5 JIS, B6 JIS, 12 × 18, 11 × 17, 11 × 15, 10 × 14, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, 8 × 10, $7^1/_4$ × $10^1/_2$, $5^1/_2$ × $8^1/_2$, 8K, 16K, $4^1/_8$ × $9^1/_2$, $3^7/_8$ × $7^1/_2$, C5 Env, C6 Env, DL Env
      - Custom size

        Horizontal size: 148.0 - 457.2 mm (5.83 - 18.00 inches), Vertical size: 90.0 - 305.0 mm (3.55 - 12.00 inches)
    - Finisher shift tray for Finisher SR790
      - Standard size

        A3, A4, A5, B4 JIS, B5 JIS, 12 × 18, 11 × 17, 11 × 15, 10 × 14, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, 8 × 10, $7^1/_4$ × $10^1/_2$, $5^1/_2$ × $8^1/_2$, 8K, 16K
    - Finisher shift tray for Finisher SR3050
      - Standard size

        A3, A4, B4 JIS, B5 JIS, 11 × 17, 11 × 15, 10 × 14,

$8^1/_2 \times 14$, $8^1/_2 \times 13$, $8^1/_2 \times 11$, $8^1/_4 \times 14$, $8^1/_4 \times 13$, 8 × 13, 8 × 10, $7^1/_4 \times 10^1/_2$, 8K, 16K

- Custom size

  Horizontal size: 148.0 - 457.2 mm (5.83 - 18.00 inches), Vertical size: 182.0 - 297.0 mm (7.17 - 11.69 inches)

- Finisher shift tray for Booklet Finisher SR3000
  - Standard size

    A3, A4, A5, B4 JIS, B5 JIS, 12 × 18, 11 × 17, 11 × 15, 10 × 14, $8^1/_2 \times 14$, $8^1/_2 \times 13$, $8^1/_2 \times 11$, $8^1/_4 \times 14$, $8^1/_4 \times 13$, 8 × 13, 8 × 10, $7^1/_4 \times 10^1/_2$, $5^1/_2 \times 8^1/_2$, 8K, 16K

  - Custom size

    Horizontal size: 148.0 - 457.2 mm (5.83 - 18.00 inches), Vertical size: 148.0 - 305.0 mm (5.83 - 12.00 inches)

- Type 3 and 4
  - Internal shift tray
    - Standard size

      A3, A4, A5, A6, B4 JIS, B5 JIS, B6 JIS, 12 × 18, 11 × 17, 11 × 15, 10 × 14, $8^1/_2 \times 14$, $8^1/_2 \times 13$, $8^1/_2 \times 11$, $8^1/_4 \times 14$, $8^1/_4 \times 13$, 8 × 13, 8 × 10, $7^1/_4 \times 10^1/_2$, $5^1/_2 \times 8^1/_2$, 8K, 16K, $4^1/_8 \times 9^1/_2$, $3^7/_8 \times 7^1/_2$, C5 Env, C6 Env, DL Env

    - Custom size

      Horizontal size: 148.0 - 457.2 mm (5.83 - 18.00 inches), Vertical size: 90.0 - 305.0 mm (3.55 - 12.00 inches)

  - Finisher shift tray for Finisher SR790
    - Standard size

      A3, A4, A5, B4 JIS, B5 JIS, 12 × 18, 11 × 17, 11 × 15, 10 × 14, $8^1/_2 \times 14$, $8^1/_2 \times 13$, $8^1/_2 \times 11$, $8^1/_4 \times 14$, $8^1/_4 \times 13$, 8 × 13, 8 × 10, $7^1/_4 \times 10^1/_2$, $5^1/_2 \times 8^1/_2$, 8K, 16K

  - Finisher shift tray for Booklet Finisher SR3020 and Finisher SR3030
    - Standard size

      A3, A4, A5, B4 JIS, B5 JIS, 12 × 18, 11 × 17, 11 × 15, 10 × 14, $8^1/_2 \times 14$, $8^1/_2 \times 13$, $8^1/_2 \times 11$, $8^1/_4 \times 14$, $8^1/_4 \times 13$, 8 × 13, 8 × 10, $7^1/_4 \times 10^1/_2$, 8K, 16K

    - Custom size

Horizontal size: 148.0 - 457.2 mm (5.83 - 18.00 inches), Vertical size: 148.0 - 305.0 mm (5.83 - 12.00 inches)

- Paper sizes and orientations that can be used in the Rotate Sort function are as follows:
  - A4, A5, B5 JIS, $8^1/_2 \times 11$, $7^1/_4 \times 10^1/_2$, $4^1/_8 \times 9^1/_2$, C5 Env, 16K
- When the number of copies exceeds capacity, copying stops. If this happens, remove copies from the tray to resume copying. For details about the number of copy sheets that the output tray can accommodate, see “Appendix”, About This Machine.

Reference

- p.235 "Input / Output"

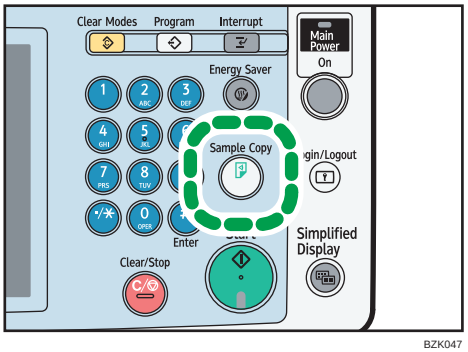
Sample Copy

Use this function to check the copy settings before making a long copy run.

Important

- **This function can be used only when the Sort function is selected.**

1. **Select Sort and any other necessary functions, and then place the originals.**
2. **Enter the number of copy sets with the number keys.**
3. **Press the [Sample Copy] key.**



One copy set is delivered as a sample.

4. **If the sample is acceptable, press [Continue].**

The number of copies made is the number specified, minus one for the proof copy.

Note

- If you press [Suspend] after checking the results, return to step 1 to adjust the copy settings as necessary. You can change the settings. However, depending on the combination of functions, you may not be able to change some settings.

Changing the number of sets

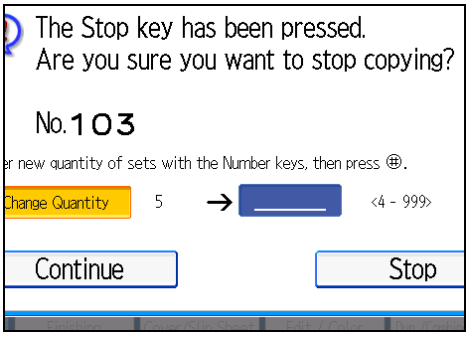
You can change the number of copy sets during copying.

Important

- **This function can be used only when the Sort function is selected.**

2

1. **While "Copying..." is displayed, press the [Clear/Stop] key.**
2. **Press [Change Quantity].**
3. **Enter the number of copy sets with the number keys, and then press the [#] key.**



4. **Press [Continue].**

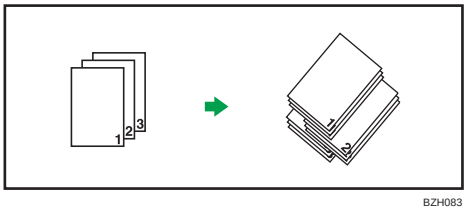
   Copying starts again.

Note

- The number of sets you can enter in step 3 differs depending on when the [Clear/Stop] key is pressed.

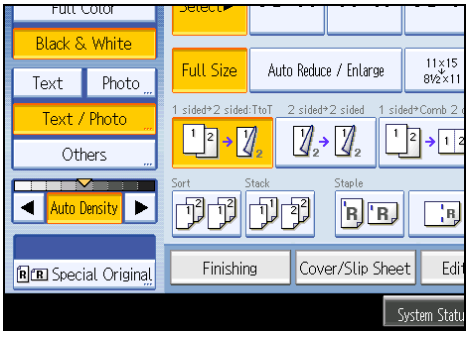
Stack

Groups together copies of each page in a multi-page original.



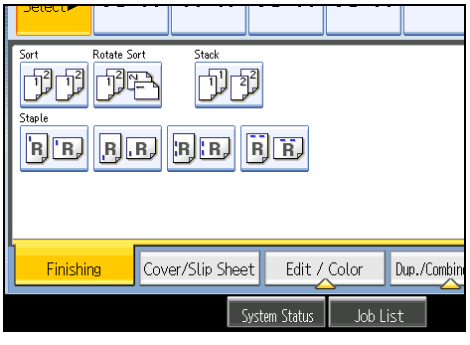
If the internal shift tray or a finisher is attached, each time the copies of one page are delivered, the next copy is shifted when delivered so you can separate each job by page.

1. **Press [Finishing].**

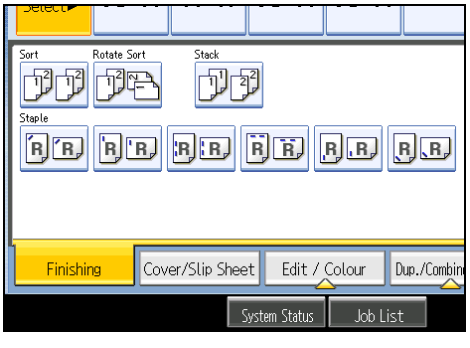


2. **Press [Stack].**

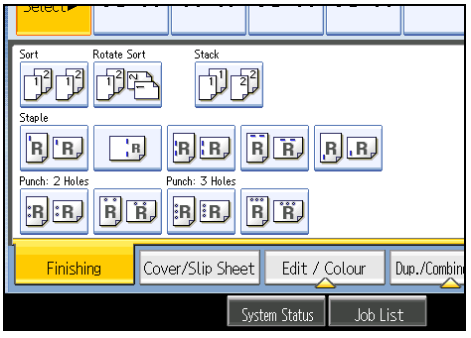
When Finisher SR790 is attached:



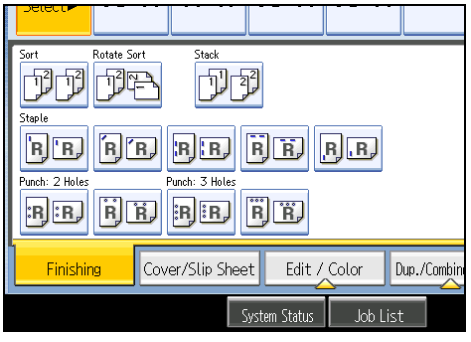
When Finisher SR3050 is attached (Type 1 and 2):



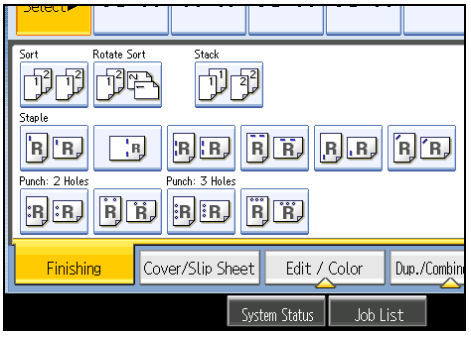
When Booklet Finisher SR3000 is attached (Type 1 and 2):



When Finisher SR3030 is attached (Type 3 and 4):



When Booklet Finisher SR3020 is attached (Type 3 and 4):



3. **Enter the number of copies with the number keys.**
4. **Press [OK].**
5. **Place the originals, and then press the [Start] key.**

Note

- When placing originals on the exposure glass, start with the first page to be copied. When placing originals in the ADF, set so that the first page is on the top.
- When placing originals on the exposure glass, or in the ADF using the Batch mode, press the [#] key after all the originals have been scanned.

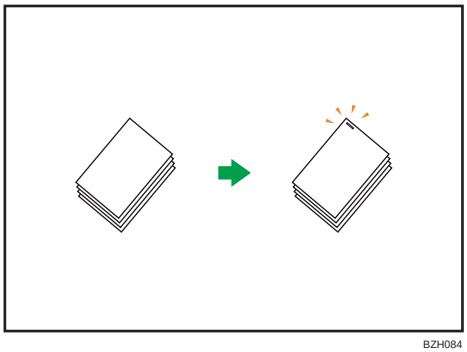
- For details about paper sizes and orientations that can be shifted when delivered to the shift tray, see “Sort”.

Reference

- p.74 "Sort"

Staple

Each copy set can be stapled together.



BZH084

Important

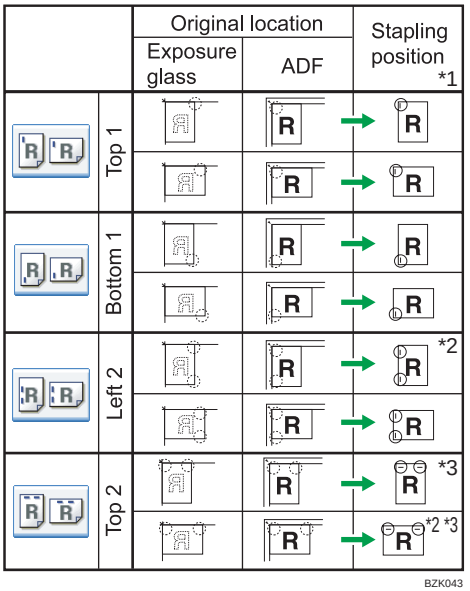
- **You cannot use the bypass tray with this function.**

Original orientation and stapling position

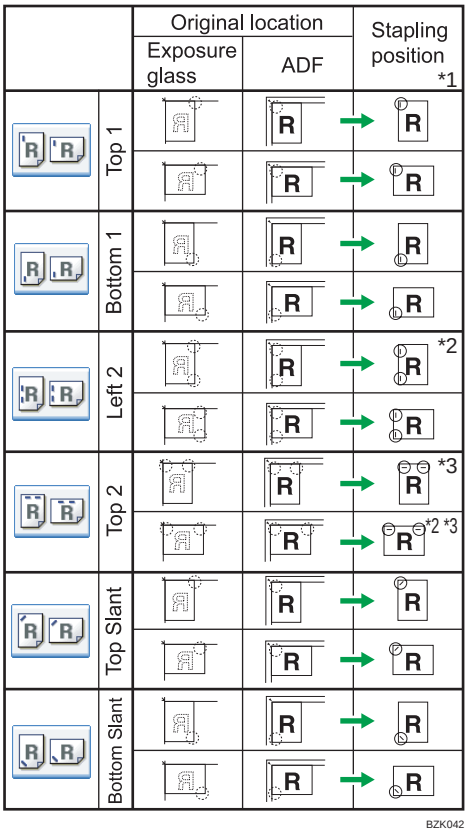
Place all the originals in the ADF in the orientation in which they can be read normally. When placing the original on the exposure glass, keep the same orientation, but set the original facing downwards.

The relationship between the orientation in which you place the original and the staple positions is as follows:

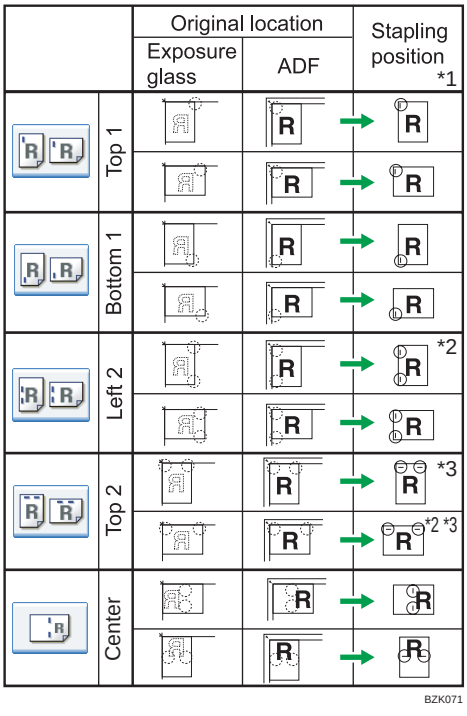
- Finisher SR790



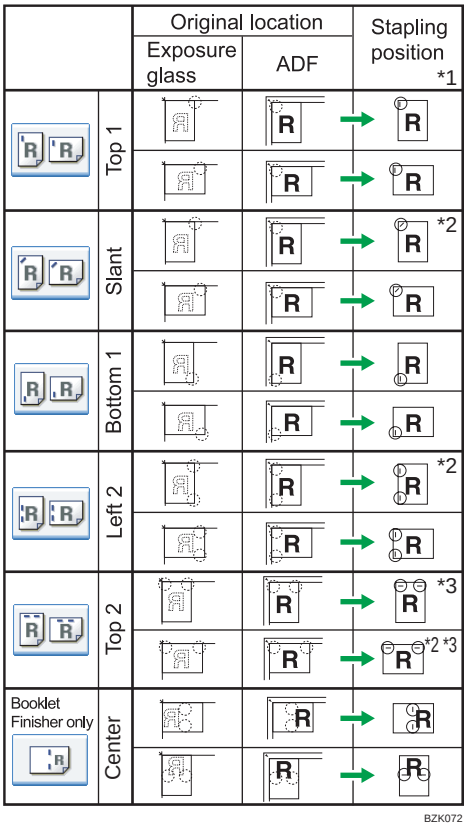
- Finisher SR3050 (Type 1 and 2)



- Booklet Finisher SR3000 (Type 1 and 2)



- Finisher SR3030 / Booklet Finisher SR3020 (Type 3 and 4)

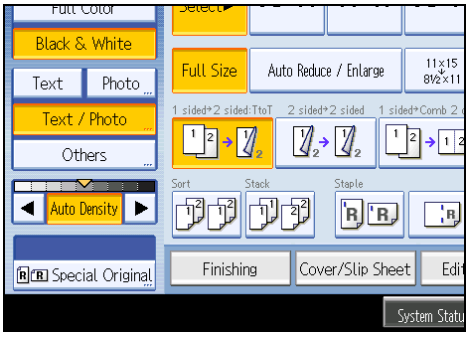


*1 The above tables show staple positioning. The orientation of the paper does not indicate orientation of delivery.

*2 You cannot staple at this position when copying onto the following paper sizes: A3, B4 JIS, 11 × 17, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_4$ × 13, 8 × 13

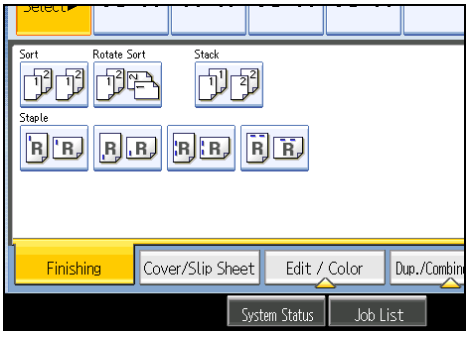
*3 If you want to staple at this position, select unreadable orientation in Original Orientation and then select Top 2.

1. Press [Finishing].

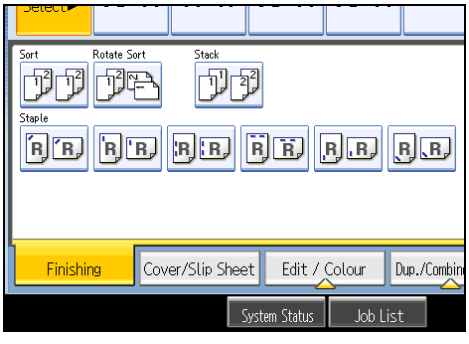


2. Select one of the stapling positions.

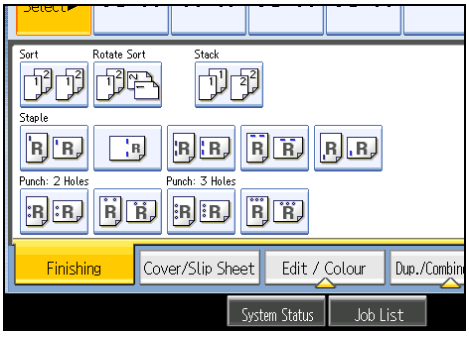
When Finisher SR790 is attached:



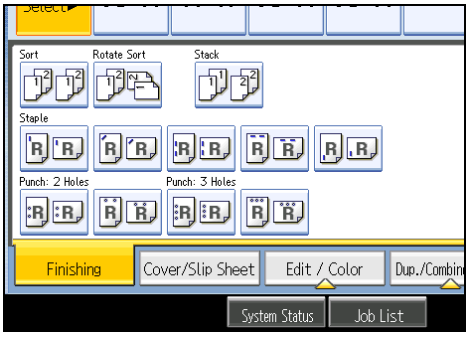
When Finisher SR3050 is attached (Type 1 and 2):



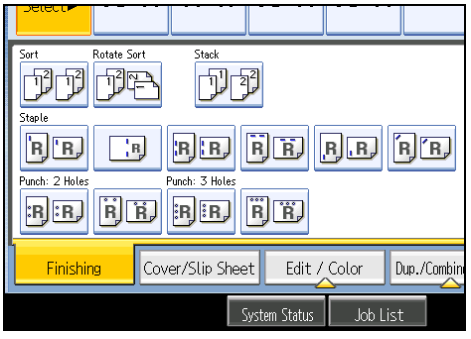
When Booklet Finisher SR3000 is attached (Type 1 and 2):



When Finisher SR3030 is attached (Type 3 and 4):



When Booklet Finisher SR3020 is attached (Type 3 and 4):



When you select a stapling position, Sort is automatically selected.

3. **Enter the number of copy sets with the number keys.**
4. **Press [OK].**
5. **Place the originals, and then press the [Start] key.**

Note

- When placing originals on the exposure glass, start with the first page to be copied. When placing originals in the ADF, set so that the first page is on the top.
- When placing originals on the exposure glass, or in the ADF using Batch mode, press the [#] key after all the originals have been scanned.
- If you specify Staple: Center, you must specify the Magazine function. For details about Magazine, see "Booklet/Magazine".
- You can change the staple positions shown on the initial display under Input / Output in User Tools. For details about staple positions, see "Input / Output".
- The following type of paper cannot be stapled:
  - Postcard
  - Translucent paper
  - OHP transparencies
  - Label paper (adhesive labels)
  - Coated paper
  - Envelopes
  - Thick paper
  - Curled paper
  - Paper of low stiffness
- You can specify how the machine responds if its memory becomes full during copying, or if the number of copies exceeds the capacity of the stapler:
  - Divides the copies into the number of sheets that can be stapled

- Cancels the stapling job

- To specify Left 2, Top 2, or Slant together with 2 Originals or 8 Originals of Combine 1 Side, or 4 Originals or 16 Originals of Combine 2 Sides: specify paper for orientation originals and specify paper for orientation originals.
- To specify Left 2, Top 2, or Slant together with Double Copies: specify paper for orientation originals and specify paper for orientation originals.
- Even if you place different size originals in the ADF, appropriate size of copy paper can be automatically selected and stapled using the Mixed Sizes mode and Auto Paper Select function. Load the paper you want to use in the paper trays beforehand. Paper sizes that can be stapled when using the Mixed Sizes mode are as follows:
  - A3 and A4
  - B4 JIS and B5 JIS
  - 11 × 17 and $8^1/_2$ × 11
  - 8K and 16K
- When stapling B4 JIS, $8^1/_2$ × 14 or larger paper sizes, be sure to extend the paper support plate of the finisher tray.
- You cannot change stapling positions during copying.
- When the original image is rotated, the staple orientation changes by 90 degrees.
- The maximum original image size that can be rotated is A4.
- When using Slant, Left 2, or Top 2 with the Combine, Double Copies or Auto Reduce / Enlarge function, "Orig. and paper orientation mismatched for Staple mode. Cancel Staple mode or change paper orientation in tray." message may appear depending on the orientation of originals and paper you placed. In this case, change the paper orientation.
- When Top or Bottom is selected and the paper with the same orientation as the original is not loaded, the image is rotated and the paper with the same size and the different orientation is selected.
- When Left 2, or Top 2 is selected, the following settings are useful to rotate images appropriately:
  - Auto Reduce / Enlarge or Auto Paper Select
  - Replace Auto Tray Switching with With Image Rotation in User Tools.
- If you select Center with the booklet finisher, the machine staples and folds the paper in the center, then delivers the paper folded.
- If you select Center for the Magazine function, the machine staples the paper, and folds it like a book, then delivers the paper folded.
- When the number of copies exceeds tray capacity, copying stops. If this happens, remove the copies from the finisher tray to resume copying.
- Depending on the settings for the Staple, you may not be able to use the Rotate Copy function.

- For details about the number of sheets that can be stapled together, the paper weight that can be stapled, and the number of stapled copies that can be stacked on each tray, see “Appendix”, About This Machine.

Reference

- p.177 "Booklet/Magazine"
- p.235 "Input / Output"

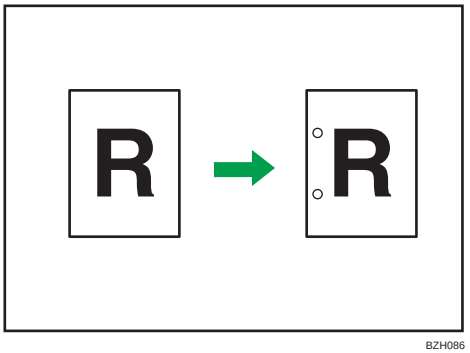
Punch

You can make punch holes in copies.

Important

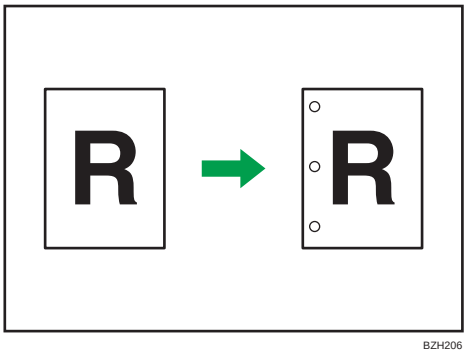
- **You cannot use the bypass tray with this function.**

2 holes



BZH086

3 holes

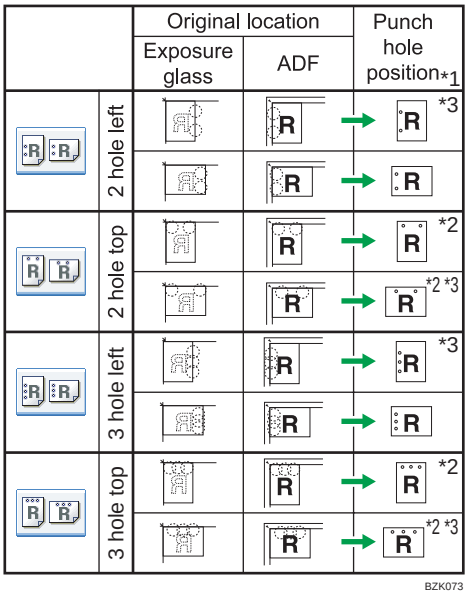


BZH206

Original orientation and punch hole position

Place all the originals in the ADF in the orientation in which they can be read normally. When placing the original on the exposure glass, keep the same orientation, but set the original facing downwards.

The relationship between the orientation in which you place the original and the punch hole positions is as follows:

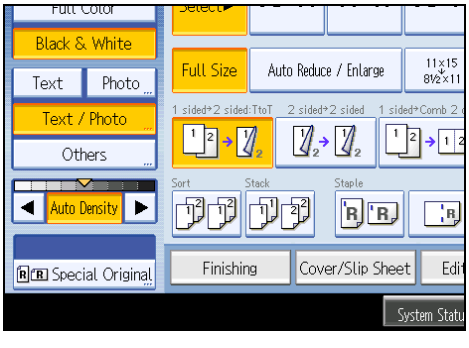


*1 The above table shows punch hole positioning. Punched sheets might not be delivered in the orientation shown in this table.

*2 If you want to punch at this position, select unreadable orientation in Original Orientation and then select 2 Holes Top/3 Holes Top.

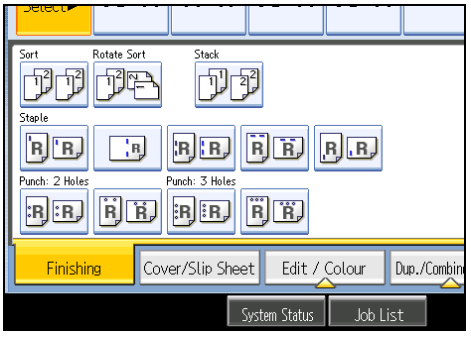
*3 You cannot punch at this position when copying onto the following paper sizes: A3, B4 JIS, 11 × 17, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_4$ × 13, 8 × 13

1. **Press [Finishing].**

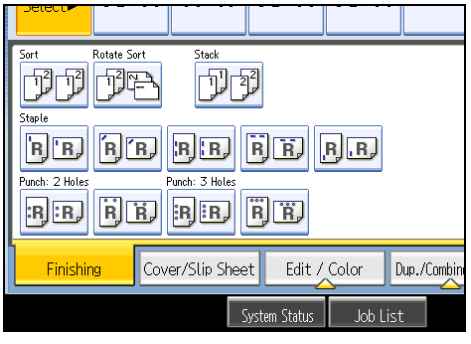


2. **Select one of the punch hole positions.**

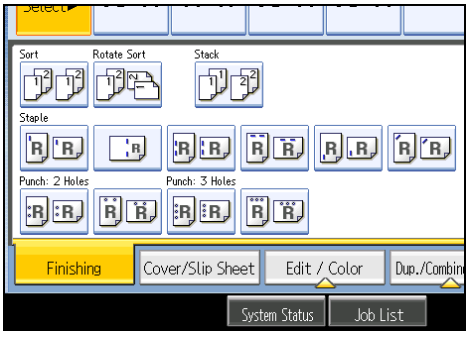
When Booklet Finisher SR3000 is attached (Type 1 and 2):



When Finisher SR3030 is attached (Type 3 and 4):



When Booklet Finisher SR3020 is attached (Type 3 and 4):



3. **Enter the number of copy sets with the number keys.**
4. **Press [OK].**
5. **Place the originals, and then press the [Start] key.**

Note

- When placing originals on the exposure glass, start with the first page to be copied. When placing originals in the ADF, set so that the first page is on the top.
- You can change the punch hole types shown on the initial display under Input / Output in User Tools. For details, see “Input / Output”.

- Paper can be punched only if it meets the machine's size and orientation requirements. For details about which sizes and weights of paper that can be punched, see “Appendix”, About This Machine.
- When using the Punch and Combine, Double Copies, or Auto Reduce / Enlarge, the message "Orig. and paper orientation mismatched for Punch mode. Cancel Punch mode or change paper orientation in tray." may appear because of the orientation of the original and the copy paper. If this occurs, change the orientation of the copy paper.
- Since punch holes are made in each copy, the punch hole positions vary slightly.

Reference

- p.235 "Input / Output"

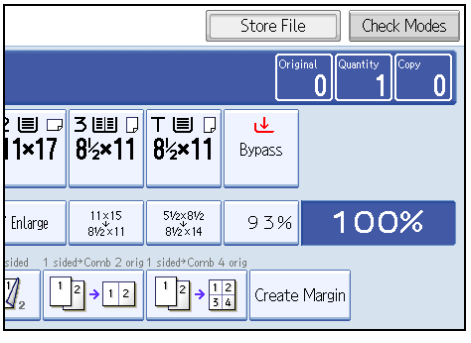
Storing Data in the Document Server

The Document Server enables you to store documents being read with the copy feature on the hard disk of this machine. Thus you can print them later applying necessary conditions.

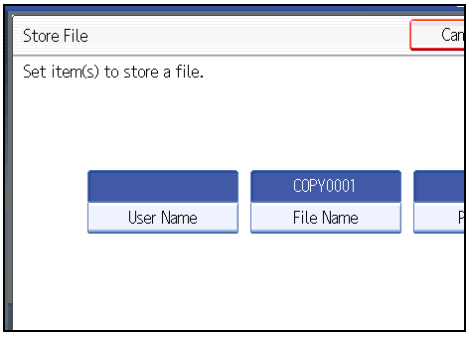
Important

- **Machine failure can result in data loss. Important data stored on the hard disk should be backed up. The manufacturer shall not be responsible for any damage that might result from the loss of data.**

1. **Press [Store File].**



2. **Enter a file name, user name, or password if necessary.**



3. **Press [OK].**
4. **Place the originals.**
5. **Make the scanning settings for the original.**
6. **Press the [Start] key.**

   Stores scanned originals in memory and makes one set of copies.

Note

- To stop scanning, press the [Clear/Stop] key. To resume a paused scanning job, press [Continue] in the confirmation display. To delete scanned images and cancel the job, press [Stop]. The originals placed in the ADF will be ejected.

- When placing originals on the exposure glass, press the [#] key after all the originals have been scanned.
- Data stored in the Document Server is set to be deleted after three days (72 hours) by the factory default. You can specify the period after which the stored data is deleted automatically under Auto Delete File in Document Server in User Tools. For details about changing settings, see “System Settings”, Network and System Settings Reference.
- To check if the document has been stored, press the [Document Server] key.
- If the ADF cannot detect the size of an original automatically, the scan will be made at the closest available size.
- If you want to store another document, do so after copying is complete.
- For details about the Document Server, see “Using the Document Server”.
- For details about printing stored documents, see “Printing Stored Documents”.
- For details about setting user name, file name, and password, see “Using the Document Server”.
- Depending on the security setting, Access Privileges may appear instead of User Name. For details about Access Privileges, consult the administrator.
- For details about how to enter text, see “Entering Text”, About This Machine.

Reference

- p.196 "Using the Document Server"
- p.205 "Printing Stored Documents"

Managing Jobs

Jobs printed using Copy, Document Server, or Printer mode are temporarily stored in the machine, and then executed in order. The Job List function allows you to manage these jobs.

For example, you can cancel incorrect job settings or print an urgent document.

2

Note

- You cannot use the Job List function when Interrupt Copy is active.
- Documents printed using the scanner function and facsimile function are not displayed in the job list.

Job List Screen

This section explains displays and icons that appear in the Job List screen.

The Job List screen varies depending on whether Job Order is selected with Print Priority for the System Settings. For details about the setting procedure, see “System Settings”, Network and System Settings Reference.

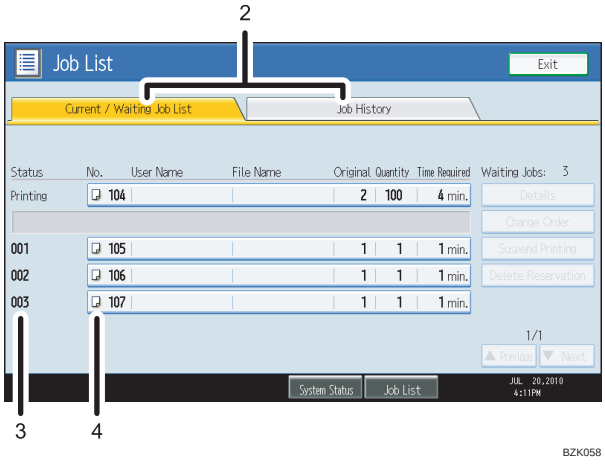
When [Job Order] is not selected:

The job list is displayed for each of the functions.

BZK057

When [Job Order] is selected:

The job list is displayed for all functions in the order of print jobs.



1. **Switches between job lists for each function.**
2. **Switches between [Current / Waiting Job List] and [Job History].**
3. **Displays reserved job numbers.**
4. **Displays the function used to print jobs.**

   : Job printed using copy function

   : Job printed using printer function

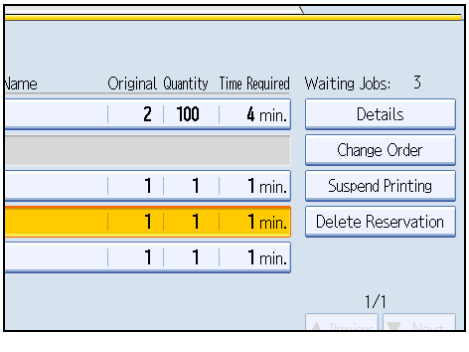
   : Job printed using Document Server function

   : Job printed using Web Image Monitor

Checking Jobs in the Job List

You can check the contents of jobs in the job list.

1. **Press [Job List].**
2. **Select the job whose contents you want to check.**
3. **Press [Details], and then check the contents.**

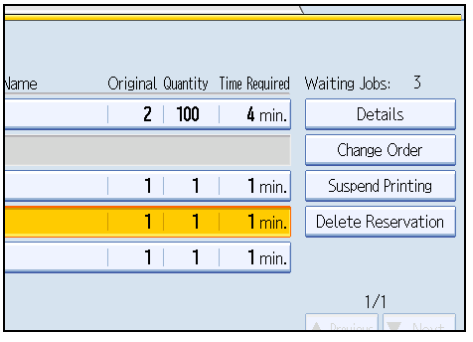


4. **Press [Exit] twice.**

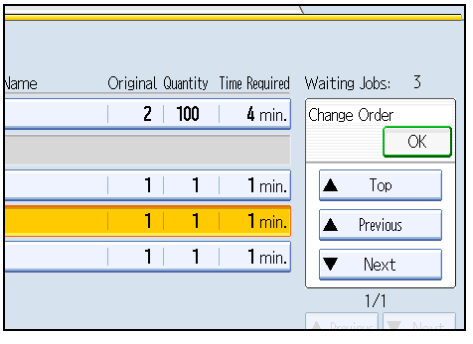
Changing the Order of Jobs

You can change the order of jobs in the job list.

1. **Press [Job List].**
2. **Select the job whose order you want to change.**
3. **Press [Change Order].**



4. **Change the order using [Top], [Previous], or [Next].**



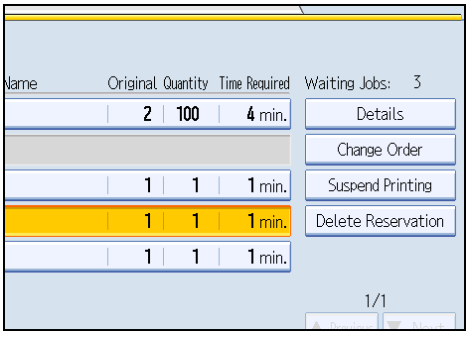
5. **Press [OK].**
6. **Press [Exit].**

Holding Jobs

You can hold jobs that are queued or currently printing.

1. **Press [Job List].**
2. **Select the job you want to hold.**

3. **Press [Suspend Printing].**



The selected job and the jobs that follow it are suspended. "Suspended" is displayed at the left of the jobs in the job list that are suspended.

4. **Press [Exit].**

Note

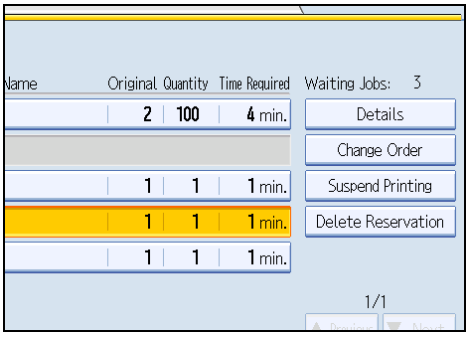
- To resume the suspended jobs, press [Resume Printing].
- This function is available only if [Job Order] is specified.

Deleting Jobs

You can delete a job that is queued or currently printing.

1. **Press [Job List].**
2. **Select the job you want to delete.**

   To delete two or more print jobs, select them.
3. **Press [Delete Reservation].**



4. **Press [OK].**
5. **Press [Exit].**

Checking the Job History

You can view the history and contents of completed print jobs.

1. **Press [Job List].**
2. **Press [Job History].**

   A list of completed print jobs appears.
3. **Select the job whose contents you want to check.**
4. **Press [Details], and then check the contents.**
5. **Press [Exit] twice.**

Registering Frequently Used Functions

You can store frequently used copy job settings in the machine memory and recall them for future use.

You can store up to 10 programs.

The settings you can register are Color Mode, Paper Tray, Original Type, Density, Special Original, Original Orientation, Finishing, Cover/Slip Sheet, Edit / Color, Dup./Combine/Series, Reduce / Enlarge, Store File, and number of copies.

Note

- When a specified program is registered as the default, its values become the default settings, which are displayed without pressing the [Program] key, when modes are cleared or reset, and after the operation switch is turned on. See "Changing the Default Functions of the Copy's Initial Display".
- Paper settings are stored based on paper size. So if you place more than one paper tray of the same size, the paper tray prioritized under System Settings in User Tools will be selected first. For details, see "System Settings", Network and System Settings Reference.
- Programs are not deleted by turning the power off or by pressing the [Clear Modes] key.

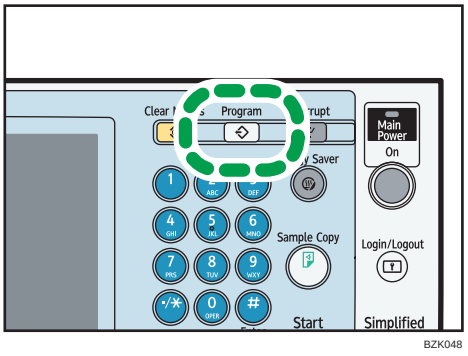
Reference

- p.105 "Changing the Default Functions of the Copy's Initial Display"

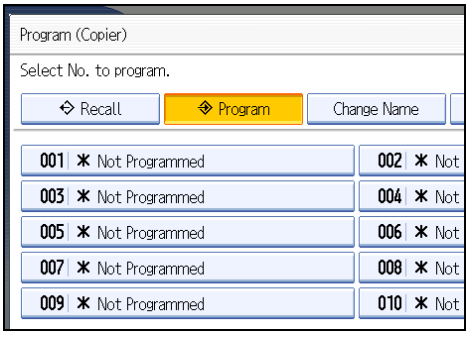
Registering Functions in a Program

You can register functions in a program.

1. **Edit the copy settings so all functions you want to store in a program are selected.**
2. **Press the [Program] key.**

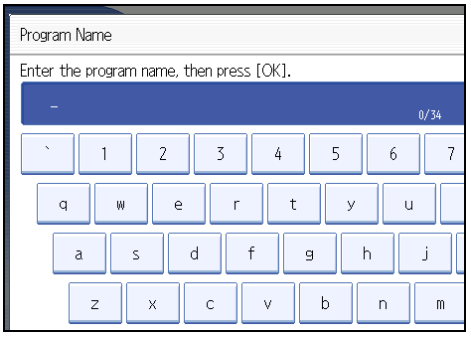


3. **Press [Program].**



4. **Press the program number you want to store.**
5. **Enter the program name with the letter keys on the display panel.**

   You can enter up to 34 characters.



6. **Press [OK].**

   The screen returns to the program screen, showing the program number followed by the program name. The screen returns to the initial copy display after a short time.

Note

- Program numbers with ◈ against them already have settings made for them.
- For details about how to enter text, see "Entering Text", About This Machine.

Changing a Stored Program

Changes program settings.

1. **Check the program settings.**
2. **Specify the contents of a program.**
3. **Press the [Program] key.**
4. **Press [Program].**

5. **Press the program number you want to change.**
6. **Press [Yes].**
7. **Enter the program name.**

   You can enter up to 34 characters.
8. **Press [OK].**

   The screen returns to the program screen, showing the program number followed by the program name. The screen returns to the initial copy display after a short time.

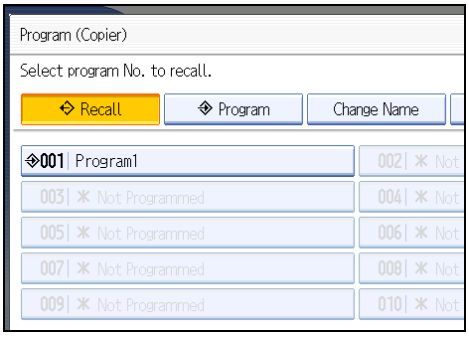
Note

- To check the contents of a program, recall the program.
- When it is overwritten, the previous program is deleted.

Recalling a Stored Program

Recalls a stored program to make copies using the stored settings.

1. **Press the [Program] key.**
2. **Press [Recall].**
3. **Press the program number you want to recall.**



   The stored settings are displayed.

Note

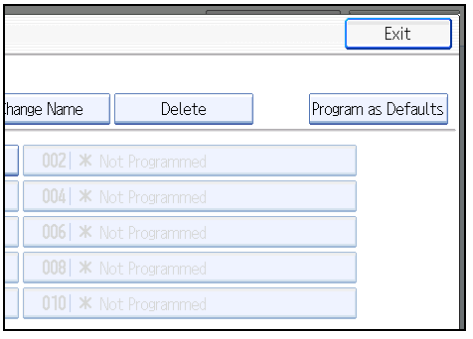
- Only programs with ◈ against them contain a program.

Deleting a Stored Program

Erases the contents of a program.

1. **Press the [Program] key.**

2. **Press [Delete].**



3. **Press the program number you want to delete.**
4. **Press [Yes].**

   The program is deleted, and the display returns to the initial copy display.

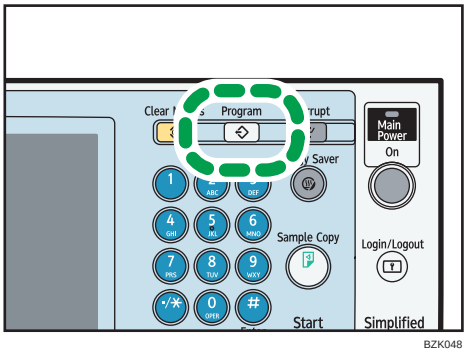
Changing the Default Functions of the Copy's Initial Display

You can configure the settings of the initial screen so that the default display contains the functions you use most often.

For example: if the default selection is the Duplex function, but the function you use most frequently is 1-sided copying, you can change the default selection to 1-sided copying instead.

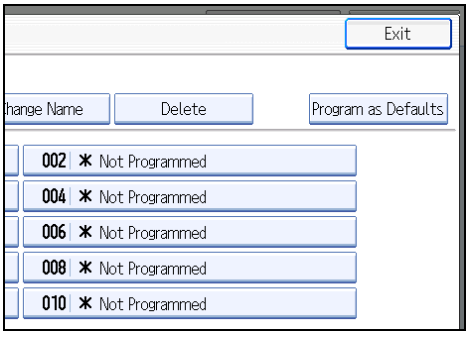
The settings you can register as defaults are Color Mode, Paper Tray, Original Type, Density, Special Original, Original Orientation, Cover/Slip Sheet, Edit / Color, Dup./Combine/Series, Reduce / Enlarge, Finishing, Store File, and number of copies.

1. **Specify scan settings and any other settings you require on the initial display.**
2. **Press the [Program] key.**

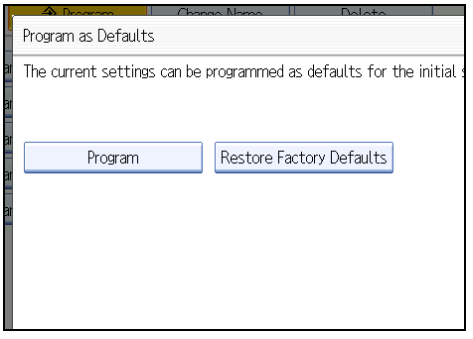


BZK048

3. **Press [Program as Defaults].**



4. **Press [Program].**



5. **When a confirmation dialog appears, press [Yes].**

   The current settings are programmed as defaults. The screen returns to the initial display.

Note

- To restore the factory default settings on the initial display, press [Restore Factory Defaults].
- The default settings can be programmed separately for the normal screen and simplified display screens.

3. Color Copying

This chapter describes how to make color copies and adjust color and image quality.

Color Functions

This section describes functions that are used for color copying.

Selecting a Color Mode

Select a color mode that suits your originals and copying requirements.

For color images, see “Available Color Functions”.

The following three color modes are available:

Auto Color Select

Judges the color of the original automatically, and copies either in full color or black and white.

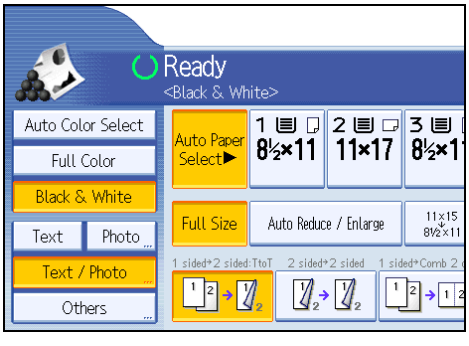
Full Color

Copies by overlaying yellow, magenta, cyan and black.

Black & White

Copies in black regardless of the color of the original.

1. **Select a color mode.**



2. **Place the originals, and then press the [Start] key.**

Note

- To use a user color, you need to register it beforehand. For details, see “User Color”.
- For examples of what you can do with the color functions, see “Available Color Functions”.

Reference

- p.9 "Available Color Functions"

- p.120 "User Color"

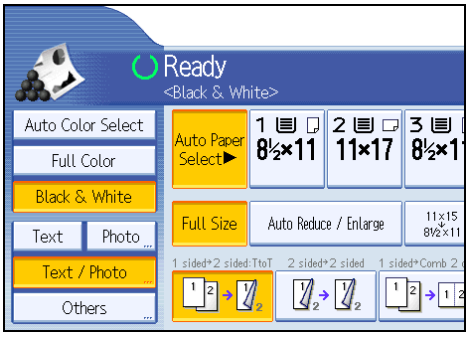
Convert Colors

Copies by changing a certain color in the original to another color.

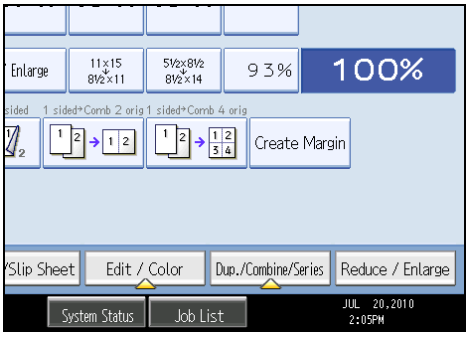
Important

- **Up to four colors can be converted at the same time.**
- **To use this function, [Full Color] must be selected.**
- **If any other color mode is selected, you cannot select [Convert Color].**

1. **Press [Full Color].**

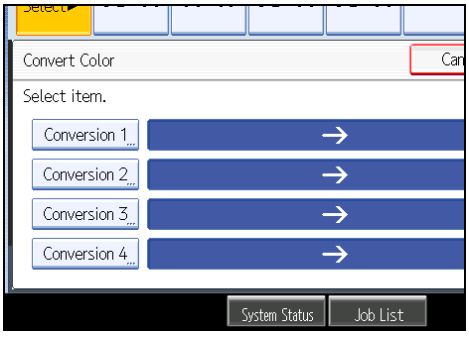


2. **Press [Edit / Color].**



3. **Press [Color], and then press [Convert Color].**

4. **Select any one item from [Conversion 1] to [Conversion 4].**



5. **Select the color to be converted.**
6. **Select the new color.**

   You can adjust the density of the color in four steps.

   To select user color, press [User Color], and then select the color.

   To change more than two colors, repeat steps 4 to 6.
7. **After selecting all colors to be converted, press [OK] three times.**
8. **Place the originals, and then press the [Start] key.**

Note

- The width of the color to be converted can be adjusted in five levels. When the width of the color is set to [Wider] under Color Sensitivity in User Tools and red has been specified, colors close to orange and purple will be converted. You can change the setting. For details about Color Sensitivity, see "Adjust Color Image".
- To change the converted color, press from [Conversion 1] to [Conversion 4], and then make the selection again.
- The full color counter will advance by "1".
- For examples of what you can do with the color functions, see "Available Color Functions".

Reference

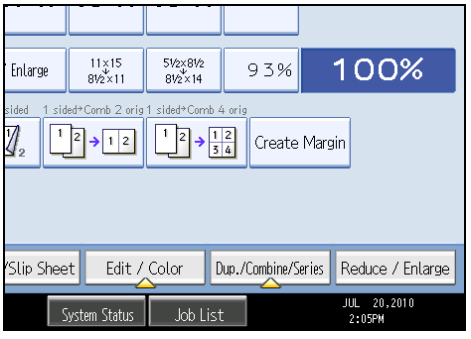
- p.9 "Available Color Functions"
- p.238 "Adjust Color Image"

Erase Color

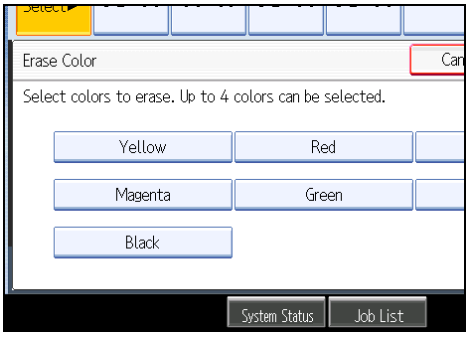
Copies by erasing a certain color in the image of the original.

1. **Select a color mode.**

2. **Press [Edit / Color].**



3. **Press [Color], and then press [Erase Color].**
4. **Select the color to be erased.**



Up to four colors can be erased at the same time.

5. **After selecting all colors to be erased, press [OK] twice.**
6. **Place the originals, and then press the [Start] key.**

Note

- The width of the color to be erased can be adjusted in five levels. When the width of the color is set to [Wider] under Color Sensitivity in User Tools and red has been specified, colors close to orange and purple will be erased. You can change the setting. For details about Color Sensitivity, see "Adjust Color Image".
- To cancel the selection, press the selected (highlighted) key.
- When the Full Color is selected, the full color counter will advance by "1". When the Black & White is selected, the mono-color counter will advance by "1".
- For examples of what you can do with the color functions, see "Available Color Functions".

Reference

- p.9 "Available Color Functions"
- p.238 "Adjust Color Image"

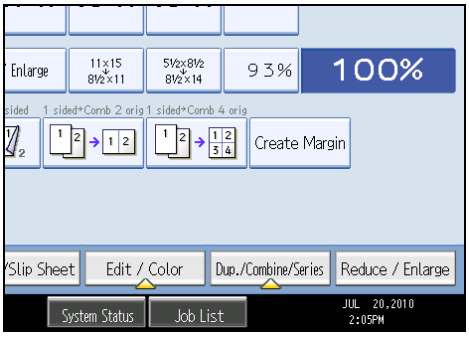
Color Background

Copies by adding a color in the whole page.

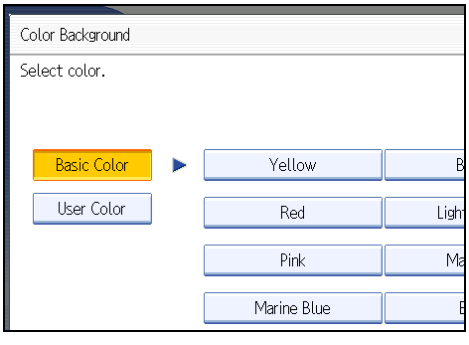
Important

- **Since the Color Background function overprints the entire original, the color of the image may change.**

1. **Select a color mode.**
2. **Press [Edit / Color].**



3. **Press [Color], and then press [Color Background].**
4. **Select the background color, and then press [OK] twice.**



You can adjust the density of the color in four steps.

To select user color, press [User Color], and then select the color.

5. **Place the originals, and then press the [Start] key.**

Note

- To cancel the selection, press the selected (highlighted) key.
- When the Full Color is selected, the full color counter will advance by "1". When the Black & White is selected, the mono-color counter will advance by "1".
- When copied using the registered color, the original will be copied lighter than the registered color.

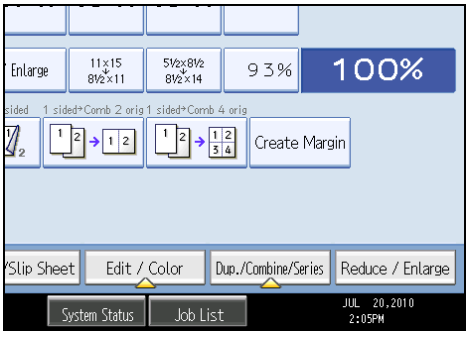
Adjusting Color and Image Quality

This section describes how to adjust color balance and image quality. Also explains how to register user colors.

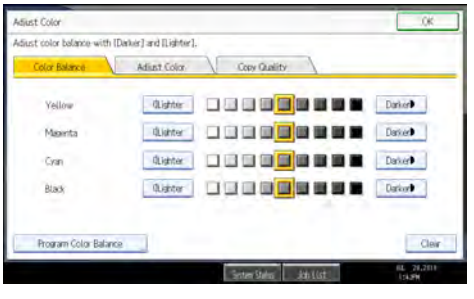
Color Balance

Adjusts the overall color tone when the copy is reddish or bluish.

1. **Press [Edit / Color].**



2. **Press [Color], and then press [Adjust Color].**
3. **Press [Color Balance].**
4. **Adjust the color balance by pressing [Lighter] or [Darker].**



5. **Press [OK] twice.**

Note

- The adjusted settings will be deleted and the initial values will be reset, when Auto Clear has been performed, when the [Clear Modes] key has been pressed or when the power has been turned off.
- For explanations about and examples of what you can do with the color adjustment function, see “Available Color Functions”.

Reference

- p.9 "Available Color Functions"

Color Balance Program

You can store the color balance setting as a color balance program and recall it when you want to use it.

You can store up to three programs.

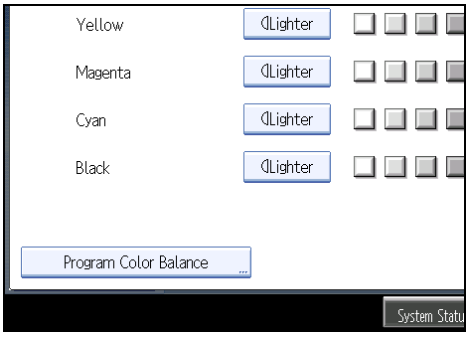
Note

- If you want to change the registered settings, register them one more time. In this case, the previously registered settings will be overwritten.

Registering the adjusted color balance

Register adjusted color balance settings so that you can use them later.

1. **Press [Edit / Color].**
2. **Press [Color], and then press [Adjust Color].**
3. **Press [Color Balance].**
4. **Adjust the color balance.**
5. **Press [Program Color Balance].**



6. **Press [Program].**
7. **Select a program number (1-3).**

   The color balance setting will be registered in the selected number.
8. **Press [OK] twice.**

Note

- If you select the program number key where ➔ is displayed, the previously registered settings will be overwritten.
- For details about how to adjust the color balance, see “Color Balance”.

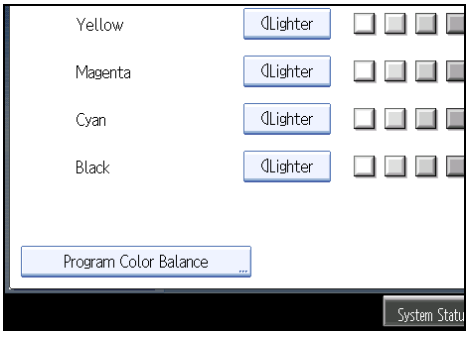
Reference

- p.112 "Color Balance"

Changing the color balance

Changes the settings stored in color balance programs.

1. **Press [Edit / Color].**
2. **Press [Color], and then press [Adjust Color].**
3. **Press [Color Balance], and then press [Program Color Balance].**



4. **Select the program number (1-3) to be changed.**

   The programmed color balance appears.
5. **Change the registered settings.**
6. **Press [Program Color Balance].**
7. **Press [Program], and then press the program number to be overwritten.**
8. **Press [Yes].**

   The program is overwritten.
9. **Press [OK] twice.**

Recalling the color balance

Applies settings registered in color balance programs to the copy job.

1. **Press [Edit / Color].**
2. **Press [Color], and then press [Adjust Color].**
3. **Press [Color Balance], and then press [Program Color Balance].**
4. **Select the program number you want to use.**
5. **Press [OK] twice.**

Note

- The adjusted settings will be deleted and the initial values will be reset, when Auto Clear has been performed, when the [Clear Modes] key has been pressed, or when the power has been turned off.

Deleting the color balance

Deletes the settings stored in color balance programs.

1. **Press [Edit / Color].**
2. **Press [Color], and then press [Adjust Color].**
3. **Press [Color Balance], and then press [Program Color Balance].**
4. **Press [Delete], and then select the program number you want to delete.**
5. **Press [Yes].**
6. **Press [OK] twice.**

Color Adjustment

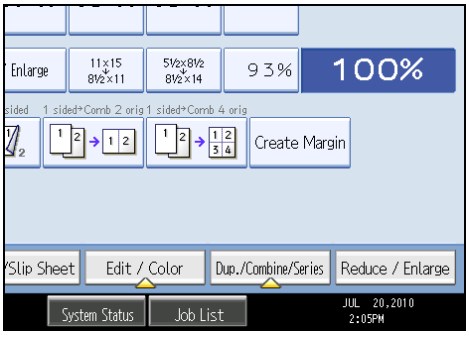
Adjusts the specific colors (yellow, red, magenta, blue, cyan, and green) by mixing them with adjacent colors in the color circle.

You can adjust up to three colors from yellow, red, magenta, blue, cyan, or green.

Important

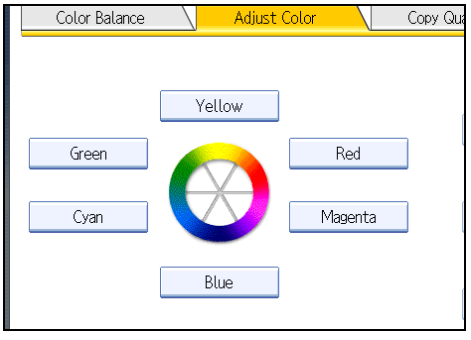
- **This function is not available if Black & White is selected.**

1. **Press [Edit / Color].**



2. **Press [Color], and then press [Adjust Color].**
3. **Press [Adjust Color].**
4. **Select the colors you want to adjust.**

   You can select up to three colors.



5. **Adjust the color tastes using [←] or [→].**
6. **Press [OK] twice.**

Note

- The adjusted settings will be deleted and the initial values will be reset, when Auto Clear has been performed, when the [Clear Modes] key has been pressed or when the power has been turned off.
- For explanations about and examples of what you can do with the color adjustment function, see "Available Color Functions".

Reference

- p.9 "Available Color Functions"

Image Adjustment

Adjusts image qualities.

The following five types of image adjustments are available:

Sharp / Soft

Adjusts the outline of an image.

Contrast

Adjusts the shades of an image.

Background Density

Adjusts the background density of an image.

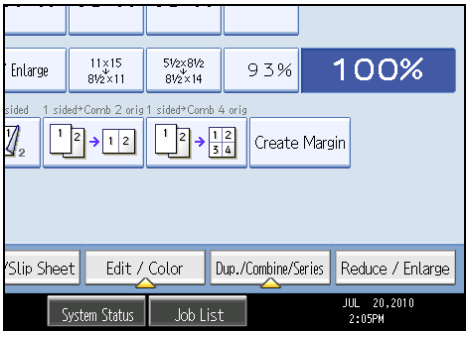
Adjust U.C.R.

Adjusts the amount of black toner to express vividly the black areas in an image.

Text / Photo Sensitivity

Adjusts the standard level in judging the image in the text and photo part when using "Text / Photo".

1. **Press [Edit / Color].**



2. **Press [Color], and then press [Adjust Color].**
3. **Press [Copy Quality].**
4. **Adjust the settings.**

5. **Press [OK] twice.**

Note

- [Sharp / Soft], [Contrast], and [Background Density] can each be adjusted, however, their adjustments can affect the level of other adjustment functions.
- The adjusted settings will be deleted and the initial values will be reset, when Auto Clear has been performed, when the [Clear Modes] key has been pressed or when the power has been turned off.
- For types and examples of the image adjustment functions, see “Available Color Functions”.

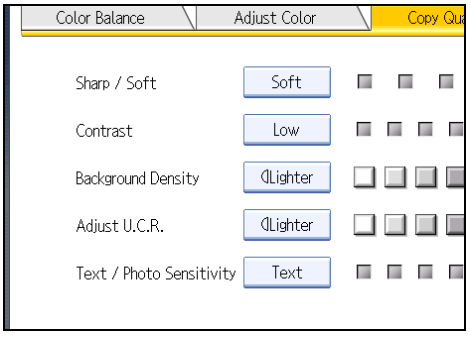
Reference

- p.9 "Available Color Functions"

Sharp / Soft

Adjusts the outline of an image.

1. **Adjust the image quality by pressing [Soft] or [Sharp].**

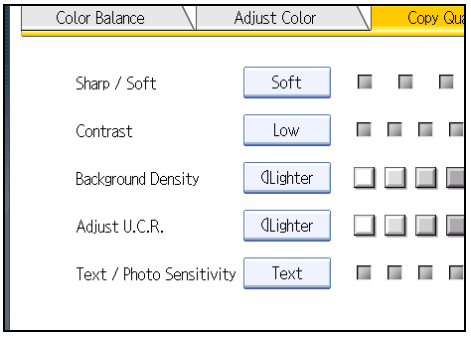


2. **Press [OK].**

Contrast

Adjusts the shades of an image.

1. **Adjust the image quality by pressing [Low] or [High].**

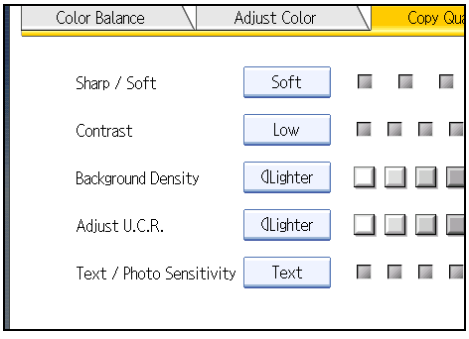


2. **Press [OK].**

Background Density

Adjusts the background density of an image.

1. **Adjust the image quality by pressing [Lighter] or [Darker].**



2. **Press [OK].**

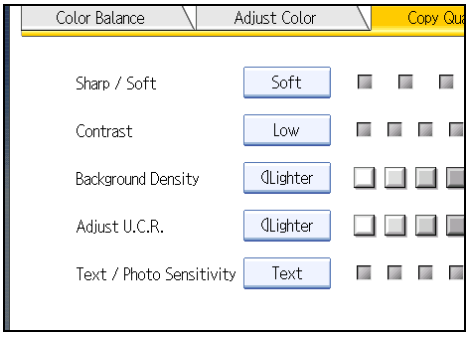
Note

- Adjustments should be made lighter when copying dark textured originals, such as newspaper or recycled paper.
- Adjustments should be made darker when darkening the color of markers or highlighters. However, as the color of highlighters is difficult to reproduce, the copy might not come out depending on the color or a different color might be copied.

Adjust U.C.R.

Adjusts the amount of black toner to express vividly the black areas in an image.

1. **Adjust the image quality by pressing [Lighter] or [Darker].**

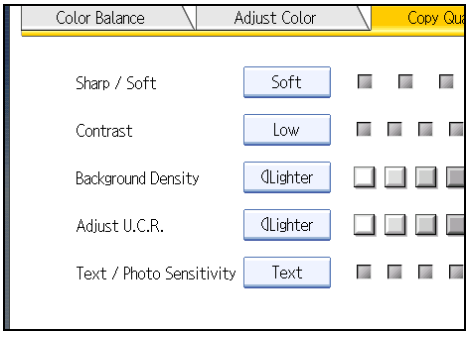


2. **Press [OK].**

Text / Photo Sensitivity

Adjusts the standard level in judging the image in the text and photo part when using “Text / Photo”.

1. **Adjust the image quality by pressing [Text] or [Photo].**



2. **Press [OK].**

Note

- Specify the original type to Text when parts of the text are faded or are not clear. Set it to Photo when the outline of photos becomes dark.

User Color

You can register user colors made by adjusting the density of yellow, magenta, cyan, and black. You can also name the colors you register, and print out a list of user colors.

You can create colors by:

- Adjusting the density of primary colors based on a chosen basic color.
- Directly specifying the density of primary colors using the number keys.

Note

- When copying using user colors, the fine shades might vary depending on the condition of the machine.
- In order to correctly reproduce originals, the values, which have been input, are corrected inside the machine, and copies are made using the best suitable values. This means that the Text setting and the Photo setting may produce slight differences in the color of the printouts.
- Up to 15 colors can be registered.
- Sample prints of user colors can be made on an A4, $8\frac{1}{2} \times 11$, A3, or 11 × 17 size paper.
- When printing a list of user colors, the full color counter will advance by "1".
- For explanations about and examples of what you can do with the color adjustment function, see "Available Color Functions".

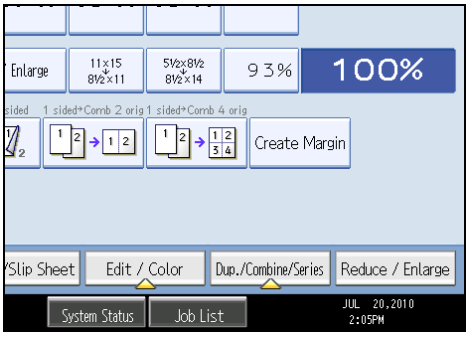
Reference

- p.9 "Available Color Functions"

Adjusting colors based on the selected color

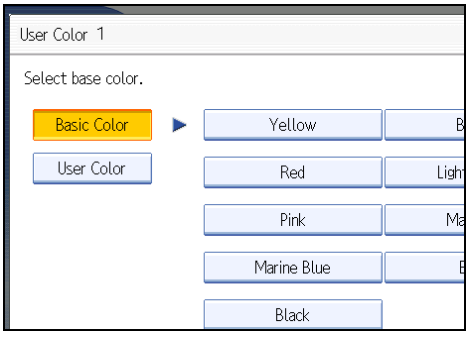
Creates colors by adjusting the density of primary colors based on a chosen basic color.

1. **Press [Edit / Color].**



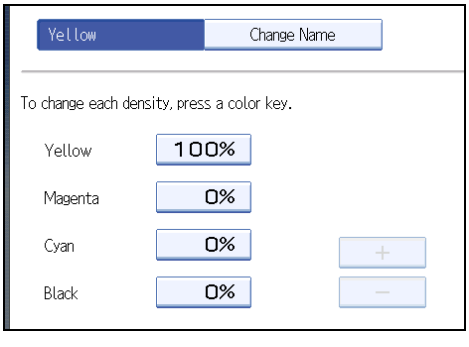
2. **Press [Color], and then press [User Color].**
3. **Press [Program], and then select the number (01-15) for the color you want to register.**
4. **Select the color to be used as base color from the basic and user colors.**

   The density of primary colors for the selected color is displayed.



   To select user color, press [User Color], and then select the color.

5. **Select the color whose density is to be specified, and then specify the density in percentages using [+] or [−].**



You can also specify the density by pressing [Adjust with Number Keys].

6. **Check the settings, and then press [OK].**
7. **Press [OK] twice.**

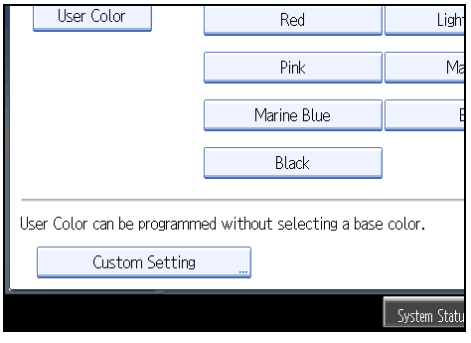
Note

- Selecting a user color key that is indicated by a solid line will change (overwrite) the contents of that color.

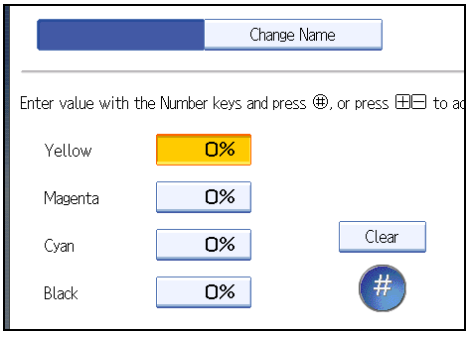
Creating colors by specifying the density of primary colors with number keys

Creates colors by directly specifying the density of primary colors using the number keys.

1. **Press [Edit / Color].**
2. **Press [Color], and then press [User Color].**
3. **Press [Program], and then select the number (01-15) for the color you want to register.**
4. **Press [Custom Setting].**



5. **Select the color whose density is to be specified.**
6. **Enter the density using the number keys, and then press [#].**



Repeat steps 5-6 if you want to specify the density of multiple colors.

You can also specify the density by pressing [Adjust with [+] [-]].

7. **Check the settings, and then press [OK].**

8. Press [OK] twice.

Note

- Selecting a user color key that is indicated by a solid line will change (overwrite) the contents of that color.

Changing the user color name

Changes the user color.

1. Press [Edit / Color].
2. Press [Color], and then press [User Color].
3. Press [Program], and then select the number (01-15) for the color you want to rename.
4. Select the color you want to rename.
5. Press [Change Name].
6. Enter the name of the color (up to 16 characters), and then press [OK].
7. Press [OK] three times.

Deleting user colors

Deletes user colors.

Important

- You cannot delete colors registered in the program or user colors that are currently being used.

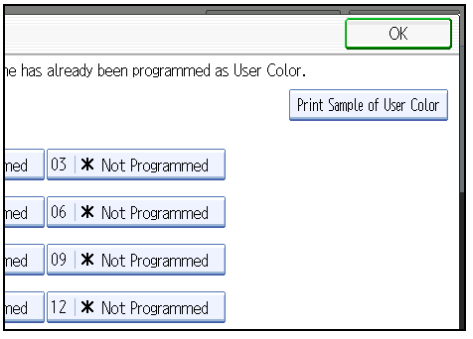
1. Press [Edit / Color].
2. Press [Color], and then press [User Color].
3. Press [Delete].
4. Select the number of the user color you want to delete.
5. Press [Yes].
6. Press [OK] twice.

Printing a list of user colors

Prints a list of user colors.

1. Press [Edit / Color].
2. Press [Color], and then press [User Color].

3. **Check the copy paper, and then press [Print Sample of User Color].**



The tray where the list of user colors is output will vary depending on which options are installed.

4. **Press [OK] twice.**

Note

- The list will be copied on an A4, $8\frac{1}{2} \times 11$, A3, or 11 × 17 sheet.

4. Advanced Copying

This chapter describes the procedure for making copies in various modes.

Adjusting Copy Image Density

There are three types of adjustment available.

Auto image density

The machine automatically adjusts the image density by scanning the densities of originals. Dark texture originals (such as newspaper or recycled paper) will be copied so that background will not be reproduced.

Manual image density

You can adjust the density of the overall original in nine steps.

Combined auto and manual image density

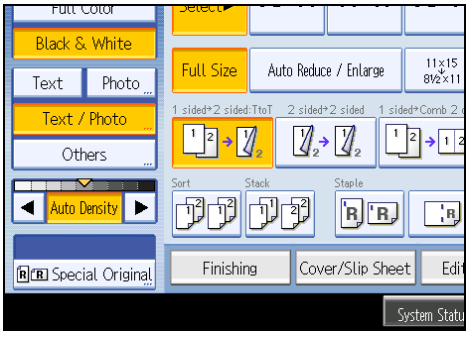
Adjusts the density of an image only for dark texture originals.

Auto Image Density

The machine automatically adjusts the image density by scanning the densities of originals. Dark texture originals (such as newspaper or recycled paper) will be copied so that background will not be reproduced.

1. **Make sure that [Auto Density] is selected.**

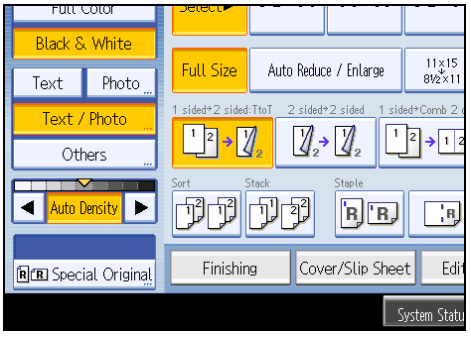
   If [Auto Density] is not selected, press [Auto Density].



Manual Image Density

You can adjust the density of the overall original in nine steps.

1. **If [Auto Density] is selected, press [Auto Density] to cancel it.**



2. **Press [◀] or [▶] to adjust the image density. The density indicator "▽" moves.**

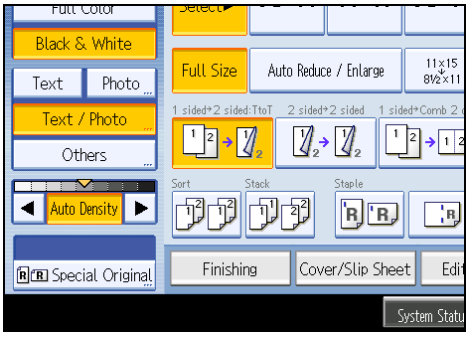
4

Combined Auto and Manual Image Density

Adjusts the density of an image only for dark texture originals.

1. **Make sure [Auto Density] is selected.**

   If [Auto Density] is not selected, press [Auto Density].



2. **Press [◀] or [▶] to adjust the density. The density indicator "▽" moves.**

Selecting the Original Type

Select an original type that is suitable for your originals.

There are six original types available:

Text

For originals that contain mainly text or printed characters.

Photo

For Photographs or pictures.

- Glossy Photo: Use when copying developed photographs
- Printed Photo: Use when copying photographs or pictures that are printed on paper (e.g. magazines)
- Copied Photo: Use when copying copies or originals generated by color copiers

Text / Photo

For originals that contain both text and photographs or pictures.

Generation Copy

For originals that are copied. The copy image can be reproduced sharply and clearly.

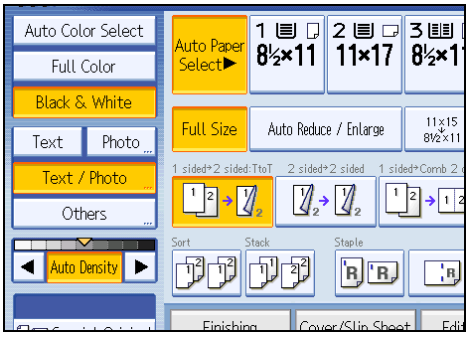
Pale

For originals that have lighter lines written in pencil, or faintly copied slips.

Map

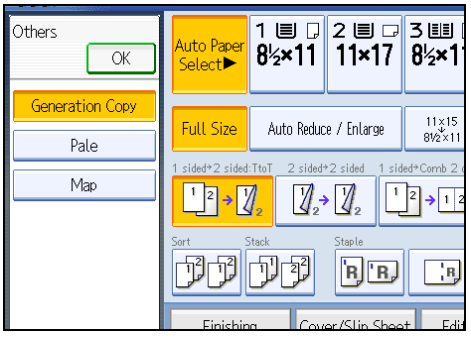
For map originals.

1. **Select the original type.**



Note

- To select [Generation Copy], [Pale], or [Map], select [Others] first.



- You can change the settings for original types shown on the initial display under General Features in User Tools. For details, see “General Features”.
- You can select whether or not to display the keys for the original on the initial display under Original Type Display in User Tools. For details about Original Type Display, see “General Features”.

Reference

- p.219 "General Features"

Selecting Copy Paper

Select paper you want to copy onto.

There are two ways to select copy paper:

Auto Paper Select

The machine selects a suitable size of copy paper automatically based on the detected original size and the reproduction ratio you select.

Manual Paper Select

Select the tray containing the paper you want to copy onto: a paper tray, the bypass tray, or the LCT.

See the following table for original sizes and orientations that can be used with Auto Paper Select (when copying at a ratio of 100%):

Original location	Original size and orientation
Exposure glass	11 × 17, $8^1/_2$ × 14, $8^1/_2$ × 11, $5^1/_2$ × $8^1/_2$
ADF	11 × 17, $8^1/_2$ × 14, $8^1/_2$ × 11, $5^1/_2$ × $8^1/_2$, 10 × 14, $7^1/_4$ × $10^1/_2$, A3, A4

Note

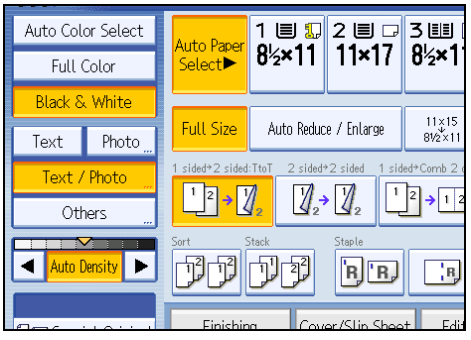
- Only the paper trays set to [Do not Display] or [Recycled Paper] in Paper Type and also set to [Yes] in Apply Auto Paper Select under Tray Paper Settings can be selected in Auto Paper Select mode. For details, see "System Settings", Network and System Settings Reference.

Auto Paper Select

The machine selects a suitable size of copy paper automatically based on the detected original size and the reproduction ratio you select.

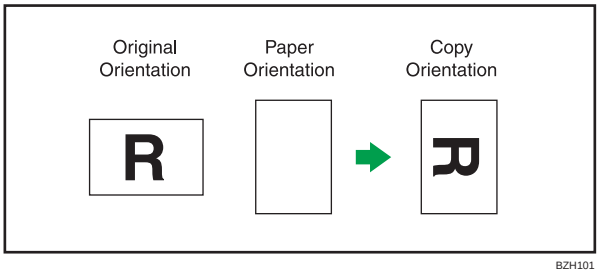
1. **Make sure that [Auto Paper Select] is selected.**

   Trays with a key mark ( ) will not be automatically selected. For details about which trays are unavailable when [Auto Paper Select] is applied, see "Tray Paper Settings", Network and System Settings Reference.



Rotate copy

If the orientation in which your original is placed is different from that of the paper you are copying onto, the machine rotates the original image by 90 degrees to fit it on the paper.



BZH101

Note

- This function works when Auto Paper Select or Auto Reduce / Enlarge is selected. See “Auto Paper Select” and “Auto Reduce / Enlarge”.
- The default setting for Auto Tray Switching is [With Image Rotation]. You cannot use the Rotate Copy function if this setting is changed to [Without Image Rotation] or [Off]. For details about Auto Tray Switching, see “General Features”.
- The Rotate Copy function is not available in combination with certain finishing settings.

Reference

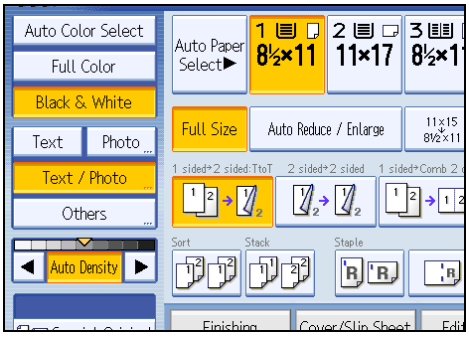
- p.60 "Auto Reduce / Enlarge"
- p.129 "Auto Paper Select"
- p.219 "General Features"

Manual Paper Select

Select the tray containing the paper you want to copy onto: a paper tray, the bypass tray, or the LCT.

1. **Select the tray you want to use.**

   The indicator corresponding to the selected paper tray is highlighted.



Advanced Reduce / Enlarge Copying

This section describes the advanced functions for reducing or enlarging images.

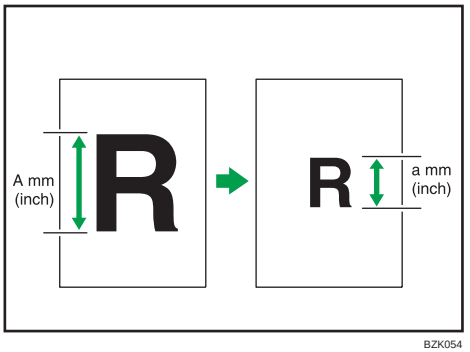
For details about the basic reduce/enlarge copy functions, see “Reducing or Enlarging Originals”.

Reference

- p.55 "Reducing or Enlarging Originals"

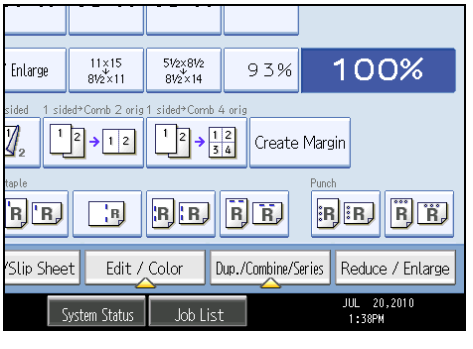
Size Magnification

This function calculates a reproduction ratio based on the lengths of the original and copy.



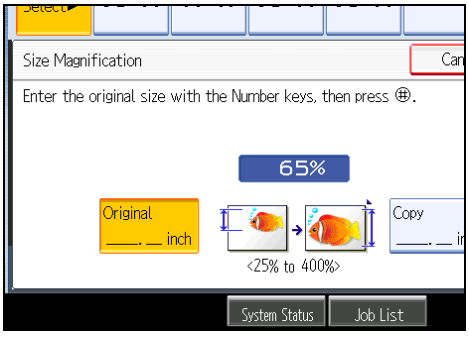
Measure and specify the lengths of the original and copy by comparing “A” with “a”.

1. **Press [Reduce / Enlarge].**



2. **Press [Size Magnification].**

3. **Enter the length of the original with the number keys, and then press [#].**



You can enter sizes between 1 to 999 mm (0.1 to 99.9 inches) in increments of 1 mm (0.1 inch).

4. **Enter the length of the copy with the number keys, and then press [#].**
5. **Press [OK] twice.**

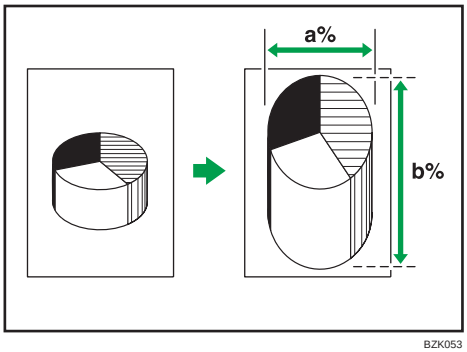
Note

- To change the value you entered, press the key you want to change, and then enter a new value.
- If the calculated ratio is over the maximum or under the minimum ratio, it is automatically adjusted to within available range. However, with some ratios, parts of the image might not be copied or margins will appear on copies.
- The machine selects reproduction ratios of between 25 and 400%.

Directional Magnification (%)

Specify the horizontal and vertical reproduction ratios, individually.

Copies can be reduced or enlarged at different reproduction ratios horizontally and vertically.



a: Horizontal ratio

b: Vertical ratio

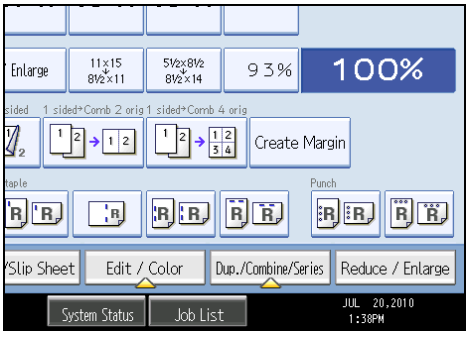
Note

- The reproduction ratios you can specify are 25 - 400%.
- When entering a percentage ratio, you can specify any value in the permitted range, regardless of original or copy paper size. However, depending on settings and other conditions, part of the image may not be copied, or margins will appear on copies.

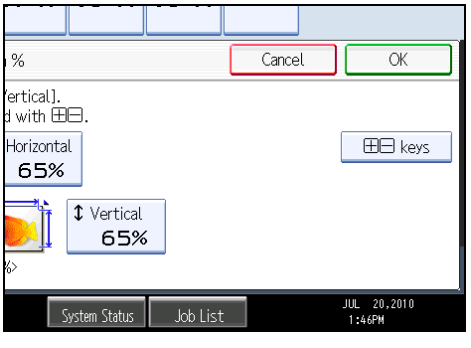
Specifying the ratio with [−] and [+]

Specify a ratio using [−] and [+].

1. **Press [Reduce / Enlarge].**

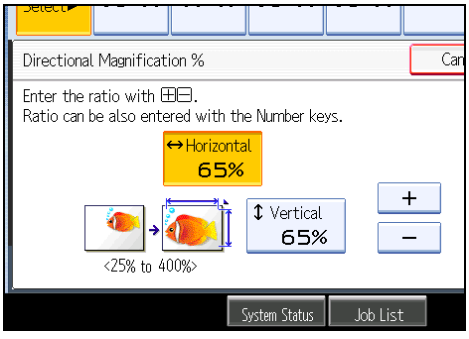


2. **Press [Direct. Mag. %].**
3. **Press [[+] [−] keys].**



4. **Press [Horizontal].**

5. **Adjust the ratio using [−] and [+].**



Pressing [−] or [+] changes the ratio in increments of 1%. Pressing and holding down [−] or [+] changes it in increments of 10%.

6. **Press [Vertical].**
7. **Adjust the ratio with [−] and [+].**
8. **Press [OK] twice.**

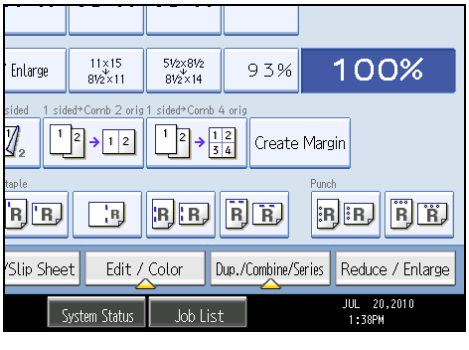
Note

- To change the value you entered, readjust it with [−] and [+].

Entering the ratio with the number keys

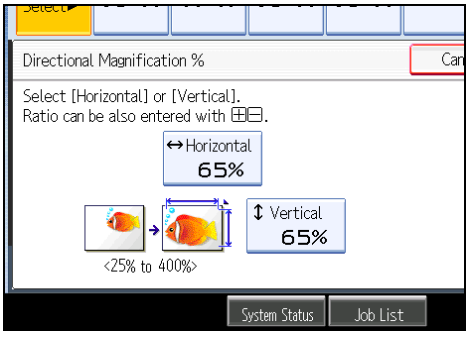
Enter a ratio using the number keys.

1. **Press [Reduce / Enlarge].**



2. **Press [Direct. Mag. %].**

3. **Press [Horizontal].**



4. **Enter the desired ratio with the number keys, and then press [#].**
5. **Press [Vertical].**
6. **Enter the desired ratio with the number keys, and then press [#].**
7. **Press [OK] twice.**

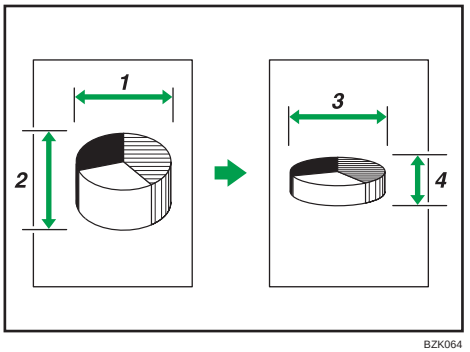
Note

- To change the value you entered, press the key you want to change, and then enter a new value.

Directional Size Magnification (inch)

Specify the horizontal and vertical lengths of the original and copy image.

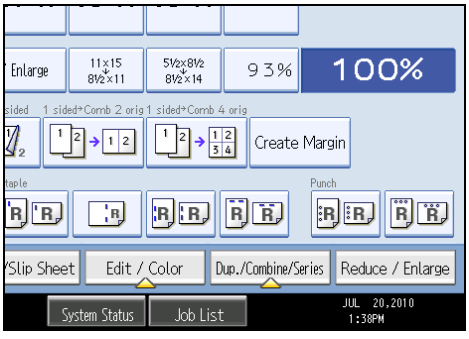
Copies can be reduced or enlarged at different reproduction ratios horizontally and vertically.



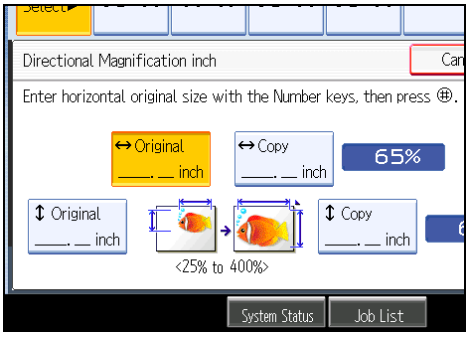
1. **Horizontal original size: A mm (inch)**
2. **Vertical original size: B mm (inch)**
3. **Horizontal copy size: a mm (inch)**
4. **Vertical copy size: b mm (inch)**

Measure and specify the lengths of the original and copy by comparing "A" with "a" and "B" with "b".

1. **Press [Reduce / Enlarge].**



2. **Press [Dir. Size Mag. inch].**
3. **Enter the horizontal size of the original with the number keys, and then press [#].**



4. **Enter the horizontal size of the copy with the number keys, and then press [#].**
5. **Enter the vertical size of the original with the number keys, and then press [#].**
6. **Enter the vertical size of the copy with the number keys, and then press [#].**
7. **Press [OK] twice.**

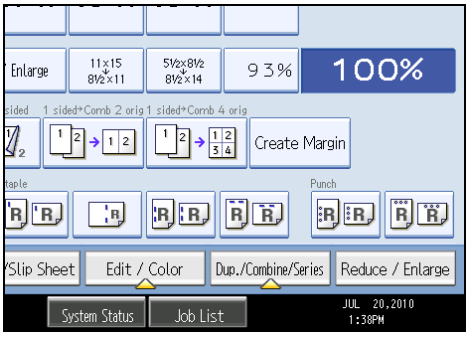
Note

- The horizontal and vertical length of an original can be entered in steps of 1 mm (0.1 inch). The horizontal length of an original can be 1 to 9999 mm (0.1 to 99.9 inches); the vertical length of an original can be 1 to 999 mm (0.1 to 99.9 inches). The horizontal and vertical length of copies can also be entered in steps of 1 mm (0.1 inch). Both the horizontal and vertical length of copies can be 1 to 999 mm (0.1 to 99.9 inches).
- To change the value you entered, press the key you want to change, and then enter a new value.
- The machine selects reproduction ratios of between 25 and 400%.
- When entering a size in mm (inch), if the calculated ratio is over the maximum or under the minimum ratio, it is automatically adjusted to within available range. However, with some ratios, parts of the image might not be copied or margins will appear on copies.

Create Margin

Reduces the image to 93% of its original size and places the reduced image at the center. By combining it with the Reduce / Enlarge functions, you can further increase a margin.

1. **Press [Create Margin].**



2. **Select the reproduction ratio, if necessary.**

Note

- You can change the ratio for Create Margin under Reproduction Ratio in User Tools. For details about Reproduction Ratio, see “Reproduction Ratio”.

Reference

- p.223 "Reproduction Ratio"

Stamps

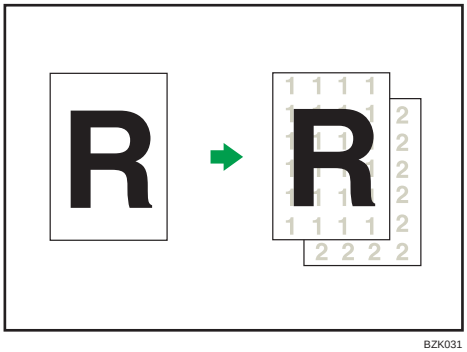
Copies with the date, page numbers, etc.

The stamp color can be yellow, red, cyan, magenta, green, blue, and black.

Background Numbering

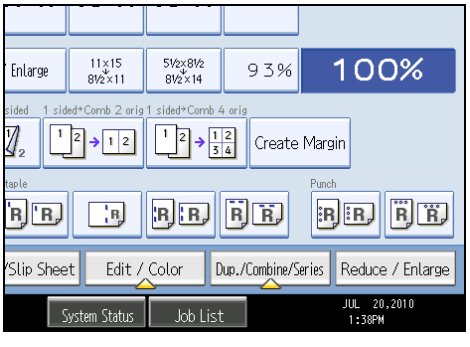
Use this function to have numbers printed on the background of copies.

If this function is used in conjunction with Sort, the same numbers are printed on each set of copies, helping you keep track of confidential documents.



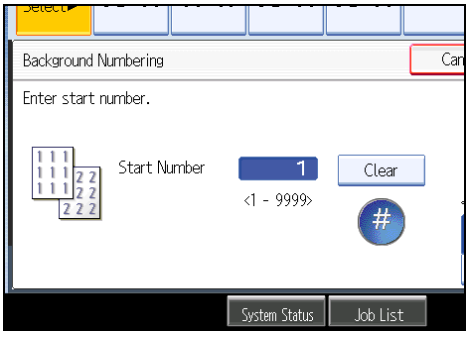
BZK031

1. **Press [Edit / Color].**



2. **Press [Stamp].**
3. **Press [Background Numbering].**

4. **Enter the number to start counting from with the number keys, and then press [#].**



You can change the stamp color.

5. **Press [OK] twice.**

Note

- To change the value you entered, press [Clear], and then enter a new value.
- When the Full Color is selected, the full color counter will advance by "1".
- The default color is black.
- You can enter a number between 1 and 9999.
- You can change the settings for Background Numbering under Stamp in User Tools. For details about Stamp, see "Stamp".
- The numbers appear to overlap the copied image in some cases.

Reference

- p.229 "Stamp"

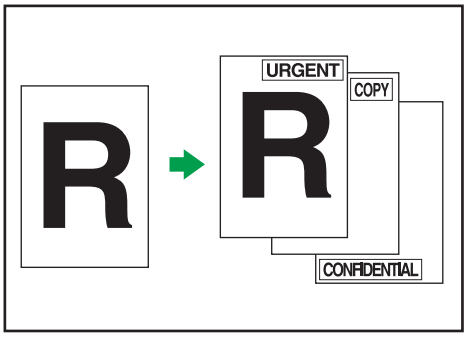
Changing the stamp color

Changes the stamp color.

1. **Press [Stamp Color] under Stamp Color.**
2. **Select the stamp color, and then press [OK].**

Preset Stamp

Messages are stamped on copies.



BZH108

Important

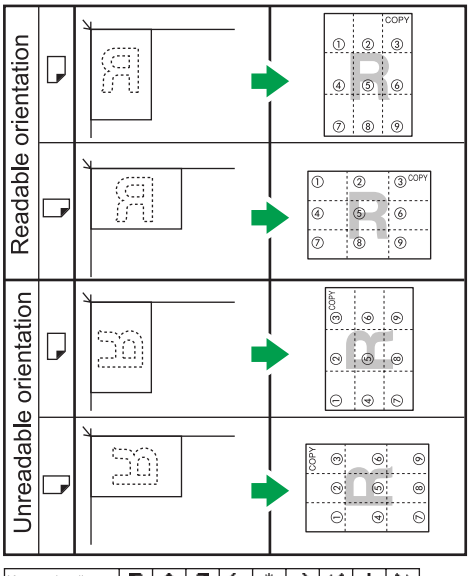
- **You cannot use the bypass tray with this function.**
- **Only one message can be stamped at a time.**

The following eight messages are available for Preset Stamp:

"COPY", "URGENT", "PRIORITY", "For Your Info.", "PRELIMINARY", "For Internal Use Only", "CONFIDENTIAL", "DRAFT"

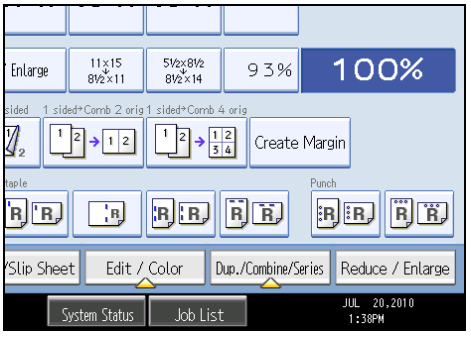
Stamp position and original orientation

The stamp positions differ according to the orientation in which you place the originals.

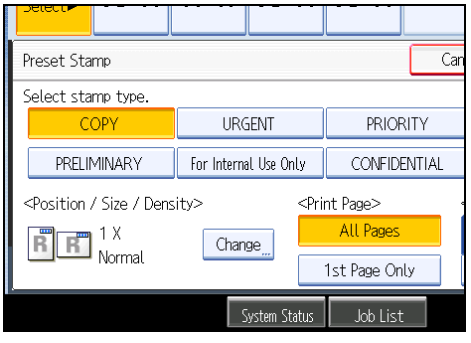


BZK032

1. **Press [Edit / Color].**



2. **Press [Stamp].**
3. **Press [Preset Stamp].**
4. **Select the desired message.**



You can change the color, position, size, and density of the stamp.

5. **Press [All Pages] or [1st Page Only] to select the print page.**
6. **After making all settings, press [OK].**
7. **Press [OK].**

Note

- When the Full Color is selected, the full color counter will advance by "1".
- The default color is black.
- You can change the settings for Preset Stamp under Stamp in User Tools. Depending on the setting, density may change. For details about Stamp, see "Stamp".
- Depending on paper size, if you change the stamp size, parts of the stamp might not be printed.

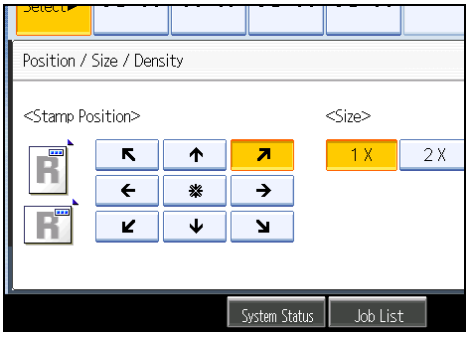
Reference

- p.229 "Stamp"

Changing the stamp position, size, and density

Changes the stamp position, size, and density.

1. **Press [Change] under Position / Size / Density.**
2. **Select the stamp position, size, and density, and then press [OK].**



Changing the stamp color

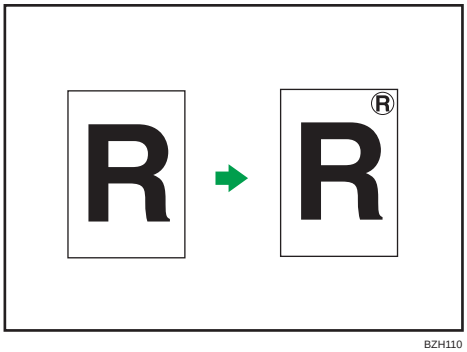
Changes the stamp color.

1. **Press [Stamp Color] under Stamp Color.**
2. **Select the stamp color, and then press [OK].**

User Stamp

Copies a scanned image as a stamp.

Letters or images you use frequently can be registered.



BZH110

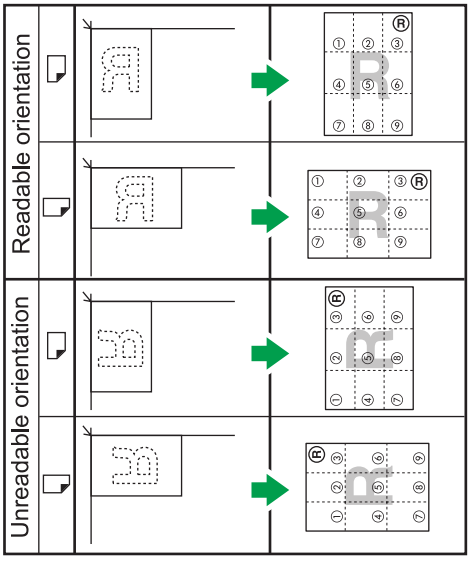
Important

- You have to register a user stamp before using this function. For details, see "Registering a user stamp".
- You cannot use the bypass tray with this function.

- Only one message can be stamped each time.

Stamp position and original orientation

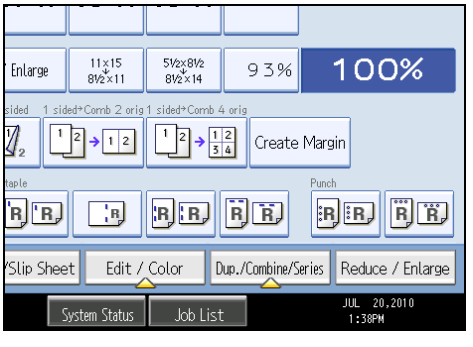
The user stamp positions differ according to the orientation in which you place the originals.



Key on the display	↖	↑	↗	←	✲	→	↙	↓	↘
Stamp position	①	②	③	④	⑤	⑥	⑦	⑧	⑨

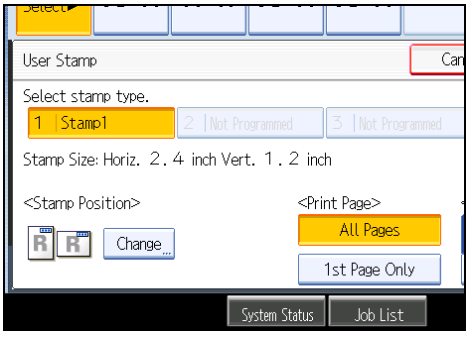
BZK033

1. Press [Edit / Color].



2. Press [Stamp].
3. Press [User Stamp].

4. **Select the stamp you require.**



You can change the stamp color and position.

5. **Press [All Pages] or [1st Page Only] to select the print page.**
6. **After making all settings, press [OK].**
7. **Press [OK].**

Note

- When the Full Color is selected, the full color counter will advance by "1".
- The default color is black.
- You can change the settings for User Stamp under Stamp in User Tools. For details about Stamp, see "Stamp".

Reference

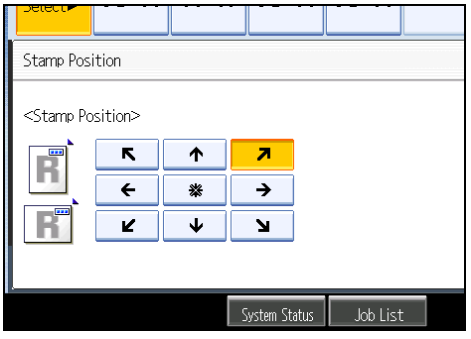
- p.146 "Registering a user stamp"
- p.229 "Stamp"

Changing the user stamp position

Changes the stamp position.

1. **Press [Change] under Stamp Position.**

2. **Select the stamp position, and then press [OK].**



4

Changing the stamp color

Changes the stamp color.

1. **Press [Stamp Color] under Stamp Color.**
2. **Select the stamp color, and then press [OK].**

Registering a user stamp

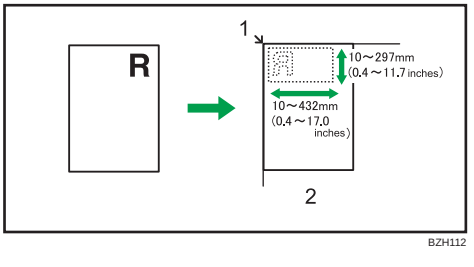
Scans an image that is used as a user stamp.

The size range for stamp images is 10 - 297 mm (0.4 - 11.7 inches) high and 10 - 432 mm (0.4 - 17.0 inches) wide. However, if the stamp's size exceeds the maximum value of the area (5,000 mm^2, 7.75 $inch^2$), it will be automatically corrected to a size that is within the range of the area.

Important

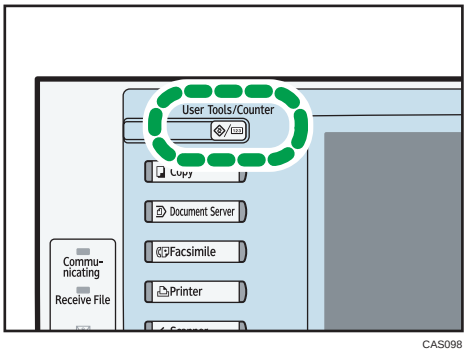
- **User stamps will be one color even if the originals were full color.**

Up to four frequently used images can be stored in memory.



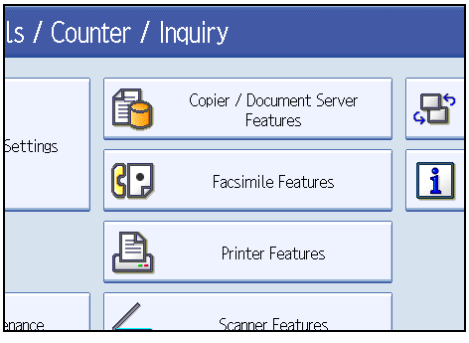
1. **Base point**
2. **Exposure glass**

1. **Press the [User Tools/Counter] key.**



CAS098

2. **Press [Copier / Document Server Features].**



3. **Press [Stamp].**
4. **Press [User Stamp].**
5. **Press [Program / Delete Stamp].**
6. **Press [Program], and then press the stamp number you want to program.**
7. **Enter the user stamp name (up to 10 characters) with the letter keys, and then press [OK].**
8. **Enter the horizontal size of the stamp with the number keys, and then press [#].**
9. **Enter the vertical size of the stamp with the number keys, and then press [#].**
10. **Place the original for user stamp on the exposure glass, and then press [Start Scanning].**

    The original will be scanned, and the stamp will be registered.
11. **Press [Exit].**
12. **Press [Exit].**

    The display returns to the User Tools / Counter / Inquiry screen.
13. **Press [Exit].**

    Exits settings and gets ready to copy.

Note

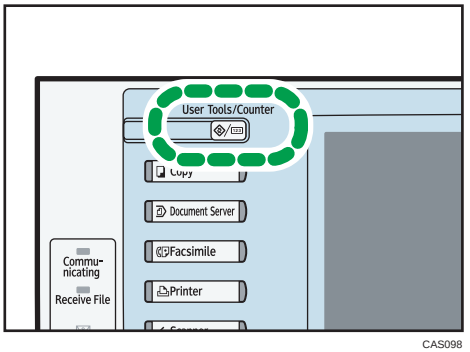
- Stamp numbers with ⇨ already have settings in them. Stamp numbers that are not registered yet are marked with "Not Programmed".
- If the stamp number is already being used, the machine will ask you if you want to overwrite it. Press [Yes] or [Stop].
- You cannot restore the overwritten stamp.
- Originals cannot be scanned from the ADF when programming the user stamp.
- For details about how to enter text, see “Entering Text”, About This Machine.

Deleting the user stamp

Deletes an image registered as a user stamp.

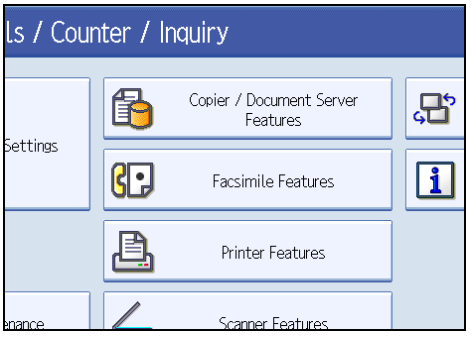
You cannot restore a deleted stamp.

1. **Press the [User Tools/Counter] key.**



CAS098

2. **Press [Copier / Document Server Features].**



3. **Press [Stamp].**
4. **Press [User Stamp].**
5. **Press [Program / Delete Stamp].**

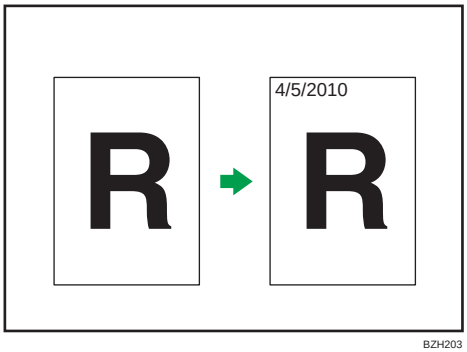
6. **Press [Delete], and then press the stamp number you want to delete.**
7. **Select [Yes], and then press [Exit].**
8. **Press [Exit].**

   The display returns to the User Tools / Counter / Inquiry screen.
9. **Press [Exit].**

   Exits settings and gets ready to copy.

Date Stamp

Use this function to print dates on your copies.



Important

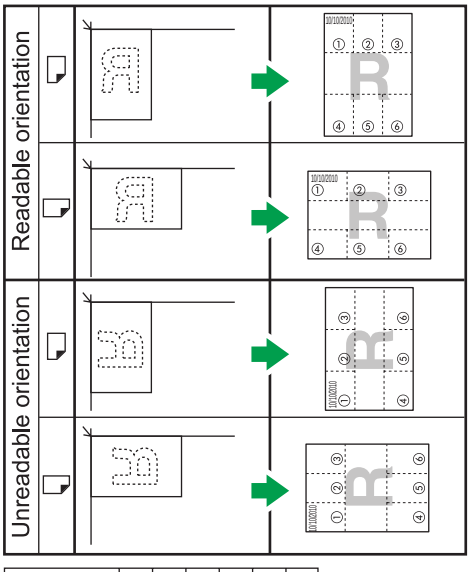
- **You cannot use the bypass tray with this function.**

You can select from the following styles:

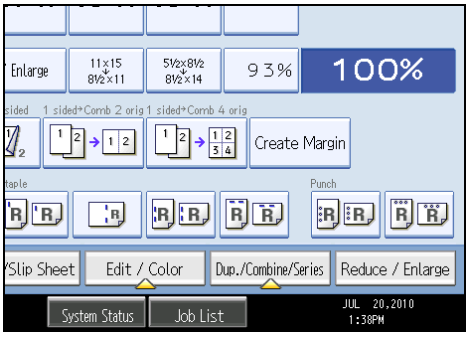
- MM/DD/YYYY
- MM.DD.YYYY
- DD/MM/YYYY
- DD.MM.YYYY
- YYYY.MM.DD

Stamp position and original orientation

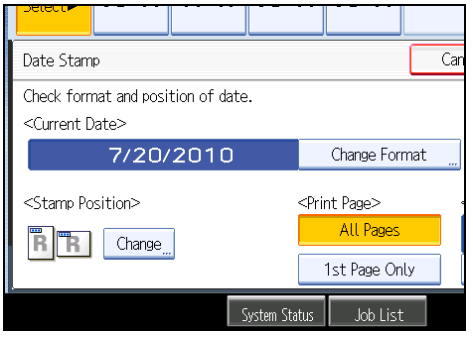
The date stamp positions differ according to the orientation in which you place the originals.



1. Press [Edit / Color].



2. Press [Stamp].
3. Press [Date Stamp].
4. Select the stamp format.

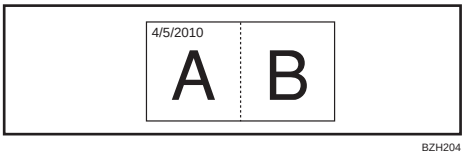


You can change the color, style, and position of the date.

5. **Press [All Pages] or [1st Page Only] to select the print page.**
6. **After making all settings, press [OK].**
7. **Press [OK].**

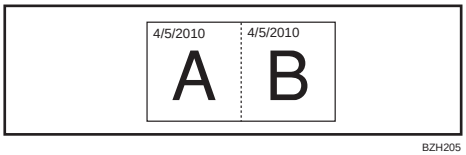
Note

- The default color is black.
- You can change the settings for Date Stamp under Stamp in User Tools. For details about Stamp, see “Stamp”.
- When Date Stamp is used with the Combine, Magazine, or Booklet function, the date stamp is printed as follows:
  - With the Combine function



BZH204

  - With the Magazine or Booklet function



BZH205

Reference

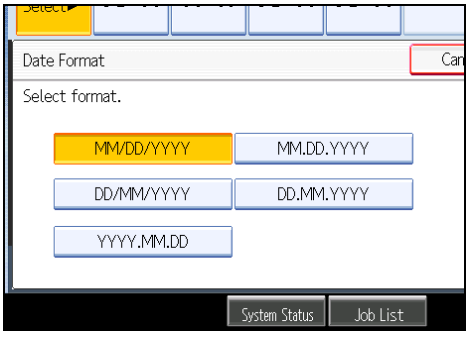
- p.229 "Stamp"

Changing the format of date

Changes the format of date.

1. **Press [Change Format] under Current Date.**

2. **Select the date format, and then press [OK].**

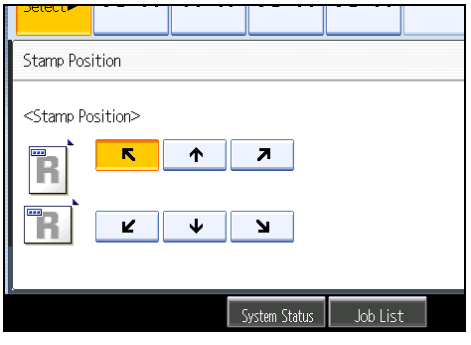


4

Changing the date stamp position

Changes the stamp position.

1. **Press [Change] under Stamp Position.**
2. **Select the stamp position, and then press [OK].**



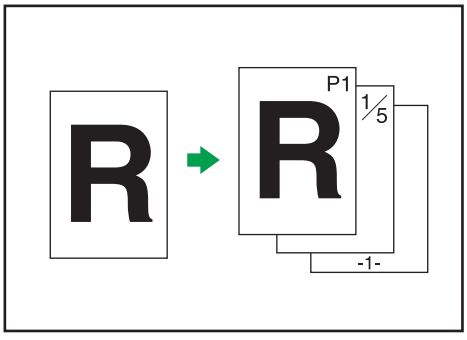
Changing the date stamp color

Changes the stamp color.

1. **Press [Stamp Color] under Stamp Color.**
2. **Select the stamp color, and then press [OK].**

Page Numbering

Use this function to print page numbers on your copies.



BZH115

Important

- **You cannot use the bypass tray with this function.**

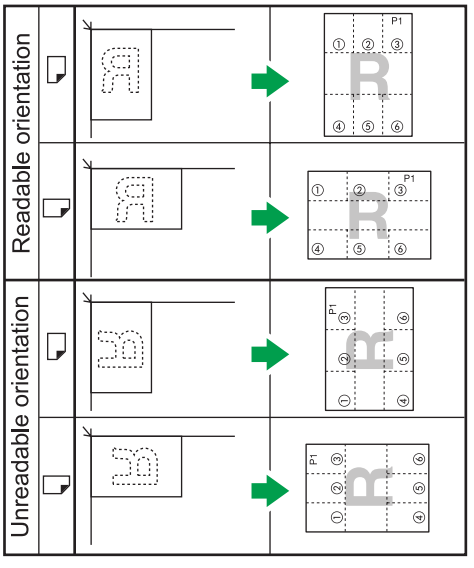
Page number formats

There are six formats available for page numbering.

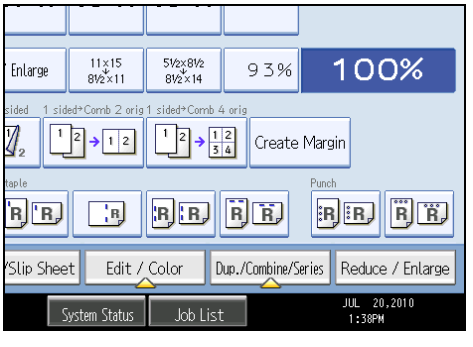
- P1,P2...
- 1/5,2/5...
- -1-,-2-...
- P.1,P.2...
- 1,2...
- 1-1,1-2...

Stamp position and original orientation

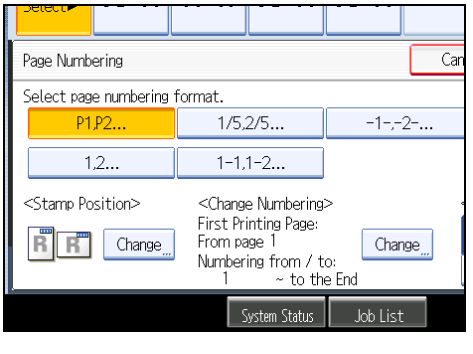
The page stamp positions differ according to the orientation in which you place the originals.



1. Press [Edit / Color].



2. Press [Stamp].
3. Press [Page Numbering].
4. Select the page numbering format.



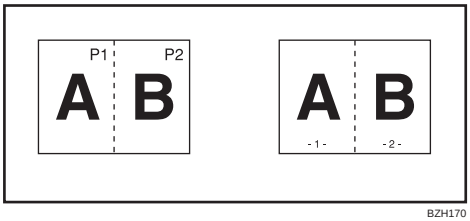
You can change the stamp color, position, pages to be stamped, and numbering.

5. **After making all settings, press [OK].**
6. **Press [OK].**

Note

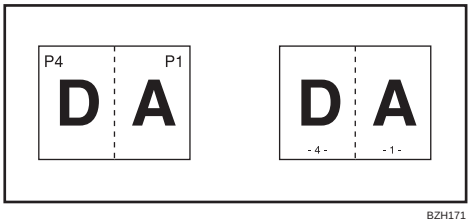
- The default color is black.
- You can change the settings for Page Numbering under Stamp in User Tools. For details about Stamp, see "Stamp".
- You can change the stamp position if Combine or Duplex is specified for use with this function under Duplex Back Page Stamping Position or Page Numbering in Combine in User Tools. For details about these settings, see "Stamp".
- When Page Numbering is used with Combine, Magazine, or Booklet function, page numbers are printed as follows:
  - Per Original is selected in Page Numbering in Combine:

    With 1 Sided/2 Sided using the Combine function

    BZH170

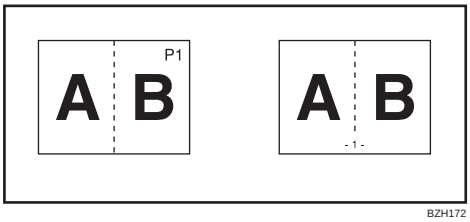
    With the Magazine or Booklet function

    BZH171

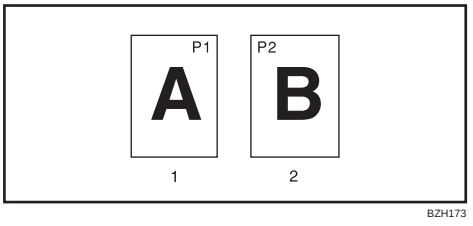
  - Per Copy is selected in Page Numbering in Combine:

    With 1 Sided/2 Sided using the Combine function

    BZH172

  - If you combine this function with the Duplex (Top to Top) function and select [P1,P2...] or [1/5,2/5...], page numbers on the back are printed as follows:



1. **Front**
2. **Back**

Reference

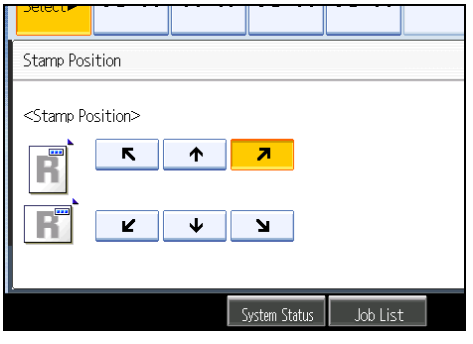
- p.229 "Stamp"

4

Changing the stamp position

Changes the stamp position.

1. **Press [Change] under Stamp Position.**
2. **Select the stamp position, and then press [OK].**



Changing the stamp color

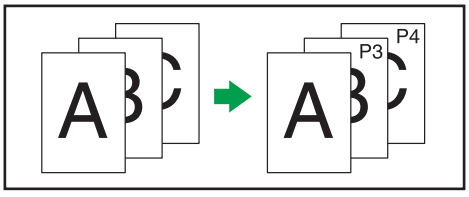
Changes the stamp color.

1. **Press [Stamp Color] under Stamp Color.**
2. **Select the stamp color, and then press [OK].**

Specifying the first printing page and start number ("P1,P2...", "-1-,-2-...", "P.1,P.2...", "1,2...")

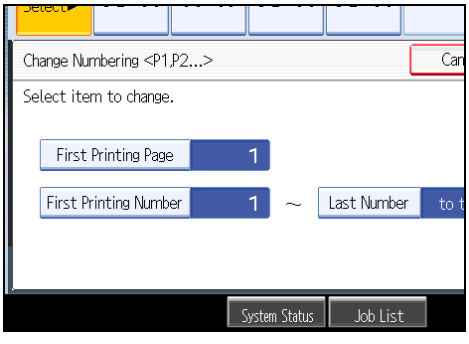
Specify the first printing page and start number.

The example below shows when the first printing page is "2" and the start number is "3".



In the following procedure, "P1,P2..." is selected, but the procedure is the same regardless of the format you select.

1. **Press [Change] under Change Numbering.**
2. **Press [First Printing Page], enter the original sheet number from which to start printing, and then press [#].**



3. **Press [First Printing Number], enter the number of page from which to start numbering with the number keys, and then press [#].**
4. **Press [Last Number], enter the number of the page at which to stop numbering with the number keys, and then press [#].**

   If you want to number all pages to the end, press [to the End].

   To change the number entered, press [Clear] and then enter a new number.
5. **After making all settings, press [OK].**
6. **Press [OK] twice.**

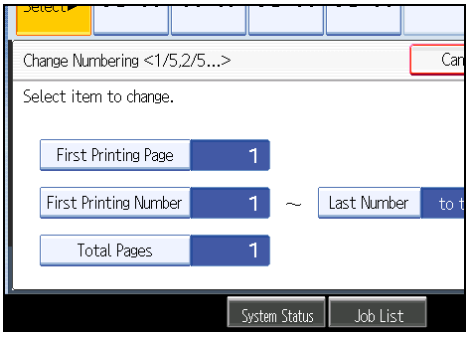
Note

- The last number is the last page number to print. For example, if Total Pages is ten, when you want to print up to seven pages and do not want to print from page 8 on, enter "7" for Last Number. Normally, you do not need to enter the number.
- You can set a value from 1 to 9999 for [First Printing Page], [First Printing Number], and [Last Number].

Specifying the first printing page and start number ("1/5,2/5...")

Specify the first printing page and start number.

1. **Press [Change] under Change Numbering.**
2. **Press [First Printing Page], enter the original sheet number from which to start printing, and then press [#].**



3. **Press [First Printing Number], enter the number of page from which to start numbering with the number keys, and then press [#].**
4. **Press [Last Number], enter the number of page at which to stop numbering with the number keys, and then press [#].**

   If you want to number all pages to the end, press [to the End].
5. **Press [Total Pages], enter the total number of original pages with the number keys, and then press [#].**

   To change the number entered, press [Clear] and then enter a new number.
6. **After making all settings, press [OK].**
7. **Press [OK] twice.**

Note

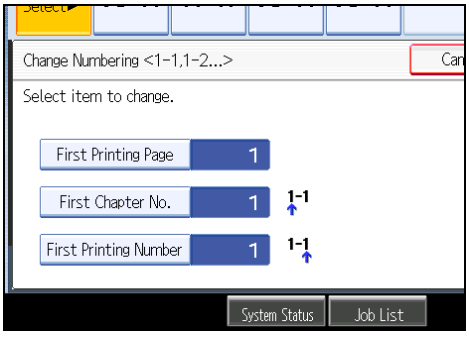
- The last number is the last page number to print. For example, if Total Pages is ten, when you want to print up to seven pages and do not want to print from page 8 on, enter "7" for Last Number. Normally, you do not need to enter the number.
- You can set a value from 1 to 9999 for [First Printing Page], [First Printing Number], [Last Number], and [Total Pages].

Specifying the first printing page and start number ("1-1,1-2...")

Specify the first printing page and start number.

1. **Press [Change] under Change Numbering.**

2. **Press [First Printing Page], enter the original sheet number from which to start printing, and then press [#].**



3. **Press [First Chapter No.], enter the chapter number from which to start numbering with the number keys, and then press [#].**
4. **Press [First Printing Number], enter the page number from which to start printing with the number keys, and then press [#].**
5. **After making all settings, press [OK].**
6. **Press [OK] twice.**

Note

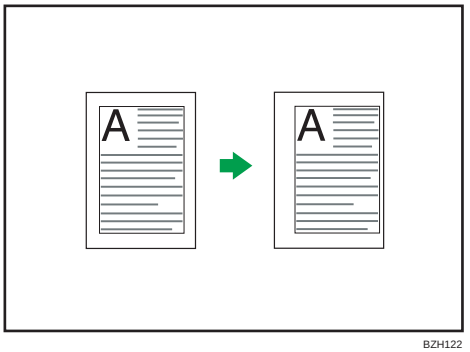
- You can set a value from 1 to 9999 for [First Printing Page], [First Chapter No.], and [First Printing Number].
- To change the value you entered, press [Clear], and then enter the new value.

Advanced Copier Functions

This section describes the machine's advanced copy functions.

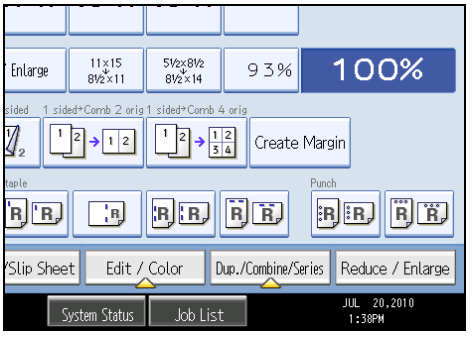
Margin Adjustment

Copies originals leaving a binding margin.

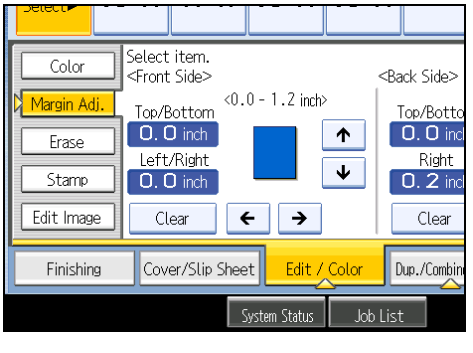


BZH122

1. **Press [Edit / Color].**



2. **Make sure that [Margin Adj.] is selected. If [Margin Adj.] is not selected, press [Margin Adj.].**
3. **Specify a binding margin for the front side pages.**



4. **Specify a binding margin for the back side pages. Then press [OK].**

   If you do not need to specify the margins for the back side pages, press [OK].

Note

- To change the value you entered, press [←], [→], [↓] or [↑], or press [Clear], and then specify a new value.
- Press [↓] and [↑] to set the top or bottom position. Press [←] and [→] to set the left or right position.
- You can set the binding margin up to 30 mm (1.2 inches) in 1 mm (0.1 inch) increments.
- Margin on the back side of the page is valid when 1 Sided → 2 Sided or Combine 2 Sides is selected.
- You can change the settings for Margin Adjustment under Edit in User Tools. For details about Edit, see “Edit”.
- If you set a binding margin that is too wide, part of the image may not be copied.
- When making copies in Combine mode, the binding margin is added to the copies after the combination is finished.

Reference

- p.225 "Edit"

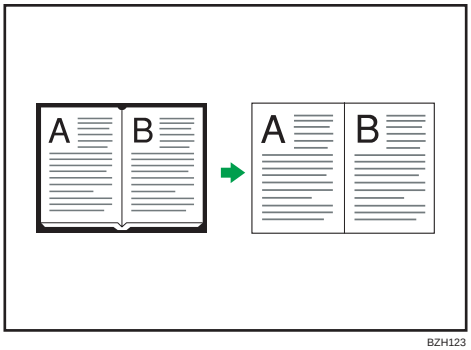
Erase Center / Border

This function erases the center and/or all four sides of the original image.

This function has the following three types:

Erase Border

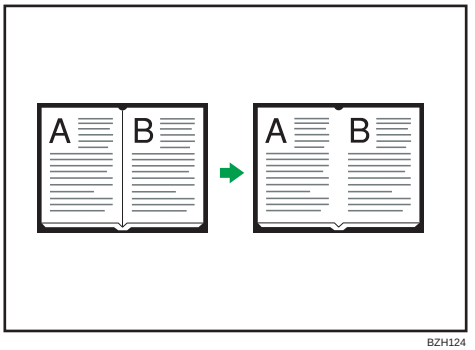
Erases the edge margin of the original image.



BZH123

Erase Center

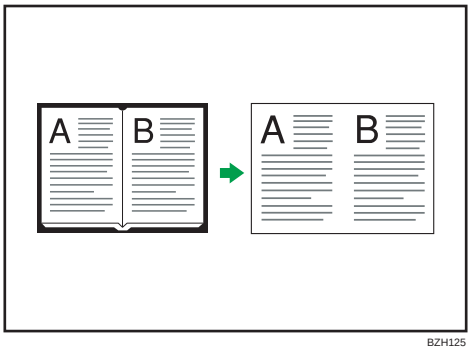
Erases the center margin of the original image.



BZH124

Erase Center / Border

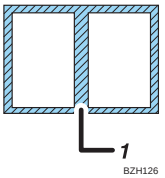
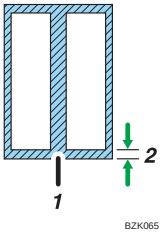
Erases both the center and edge margins of the original image.



BZH125

Note

- The relationship between the original orientation and the erased part is as follows:

original	original
 BZH126	 BZK065

1. Erased part
2. 2 - 99 mm (0.1 - 3.9 inches)

- The erase width is set to 10 mm (0.4 inch) as a default. You can change this setting under Edit in User Tools. For details about Edit, see "Edit".
- The width of the erased margin varies depending on the reproduction ratio.

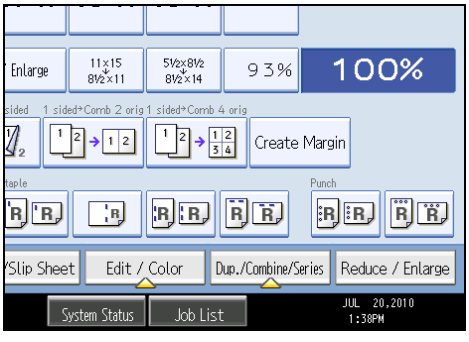
Reference

- p.225 "Edit"

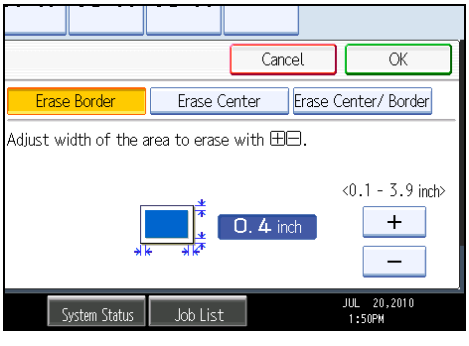
Erase Border (same width)

Erases the edge margin of the original image.

1. **Press [Edit / Color].**



2. **Press [Erase].**
3. **Press [Erase Center / Border].**
4. **Press [Erase Border].**
5. **Press [Same Width].**
6. **Specify an erase border width with [+] and [−].**



Pressing [+] or [−] changes the width in increments of 1 mm (0.1 inch). Pressing and holding down the relevant key changes the width in increments of 10 mm (1 inch).

7. **Press [OK] twice.**

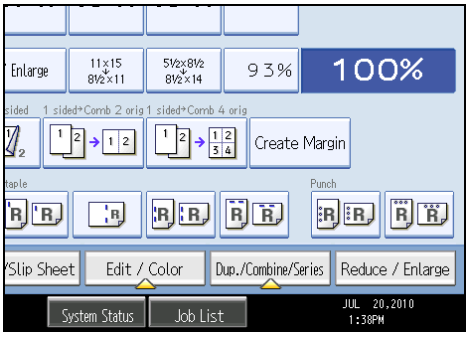
Note

- To change the value you entered, press [+] and [−], and then specify a new value.

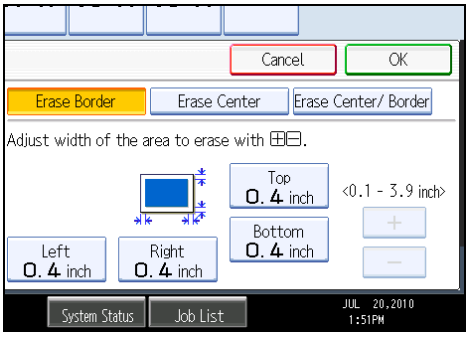
Erase Border (different width)

Erases the edge margins of the original image.

1. **Press [Edit / Color].**



2. **Press [Erase].**
3. **Press [Erase Center / Border].**
4. **Press [Erase Border].**
5. **Press [Different Width].**
6. **Press the key you want to change and specify an erase width with [+] and [−].**



Pressing [+] or [−] changes the width in increments of 1 mm (0.1 inch). Pressing and holding down the relevant key changes the width in increments of 10 mm (1 inch).

To specify another erase width, repeat step 6.

7. **Press [OK] twice.**

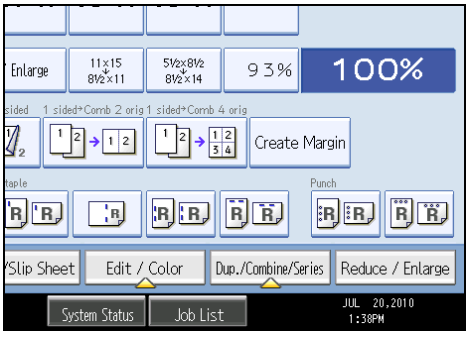
Note

- To change the value you entered, press [+] and [−], and then specify a new value.

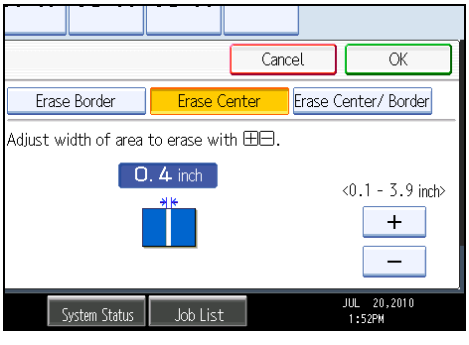
Erase Center

Erases the center margin of the original image.

1. **Press [Edit / Color].**



2. **Press [Erase].**
3. **Press [Erase Center / Border].**
4. **Press [Erase Center].**
5. **Specify the erase width with [+] and [−].**



   Pressing [+] or [−] changes the width in increments of 1 mm (0.1 inch). Pressing and holding down the relevant key changes the width in increments of 10 mm (1 inch).

6. **Press [OK] twice.**

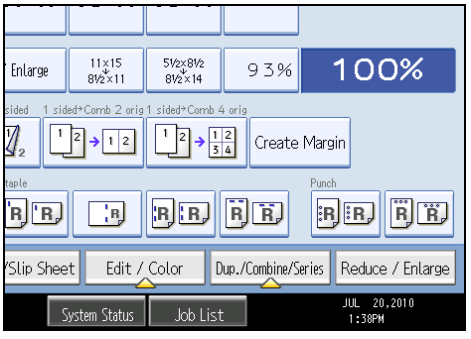
Note

- To change the value you entered, press [+] and [−], and then specify a new value.

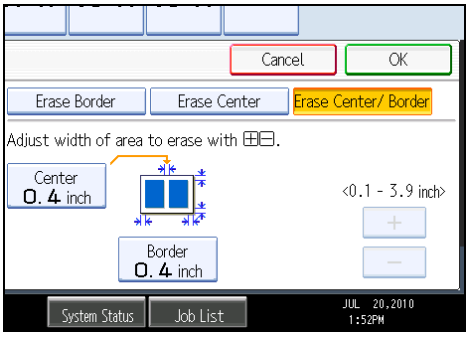
Erase Center / Border (same width)

Erases both the center and edge margins of the original image.

1. **Press [Edit / Color].**



2. **Press [Erase].**
3. **Press [Erase Center / Border].**
4. **Press [Erase Center / Border].**
5. **Press [Same Width].**
6. **Press [Center], and then specify the erase width with [+] and [−].**



Pressing [+] or [−] changes the width in increments of 1 mm (0.1 inch). Pressing and holding down the relevant key changes the width in increments of 10 mm (1 inch).

7. **Press [Border], and then specify the erase width with [+] and [−].**
8. **Press [OK] twice.**

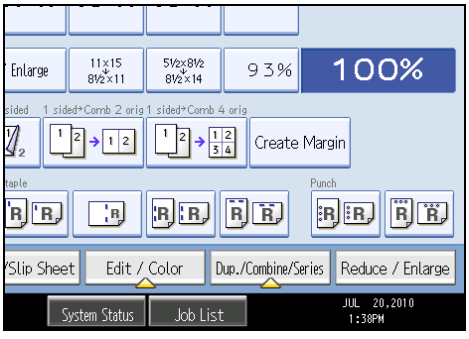
Note

- To change the value you entered, press [+] and [−], and then specify a new value.

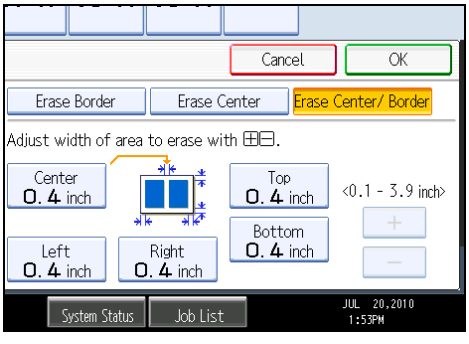
Erase Center / Border (different width)

Erases both the center and edge margins of the original image.

1. **Press [Edit / Color].**



2. **Press [Erase].**
3. **Press [Erase Center / Border].**
4. **Press [Erase Center / Border].**
5. **Press [Different Width].**
6. **Press the key you want to change and specify an erase width with [+] and [−].**



Pressing [+] or [−] changes the width in increments of 1 mm (0.1 inch). Pressing and holding down the relevant key changes the width in increments of 10 mm (1 inch).

To specify another erase width, repeat step 6.

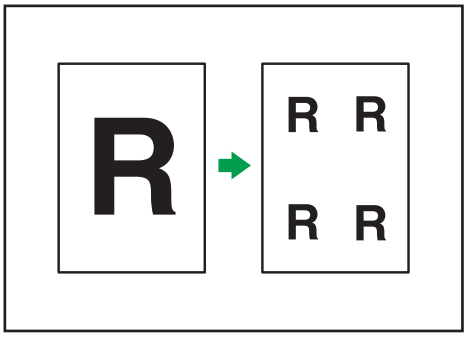
7. **Press [OK] twice.**

Note

- To change the value you entered, press [+] and [−], and then specify a new value.

Image Repeat

The original image is copied repeatedly.



BZH131

There are two ways to specify an image to be repeated.

Whole Area Repeat

Repeatedly copies the entire image.

Specified Area Repeat

Repeatedly copies a specified area of the image.

Note

- You can change the settings for Image Repeat under Edit in User Tools. For details about Edit, see "Edit".
- Depending on the paper size, ratio, and orientation, parts of repeated images may not be copied.

Reference

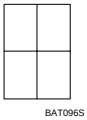
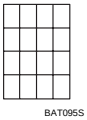
- p.225 "Edit"

Whole Area Repeat

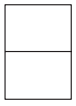
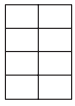
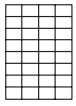
Repeatedly copies the entire image.

The number of repeated images depends on the original size, paper size, and reproduction ratio. For example, see the following table:

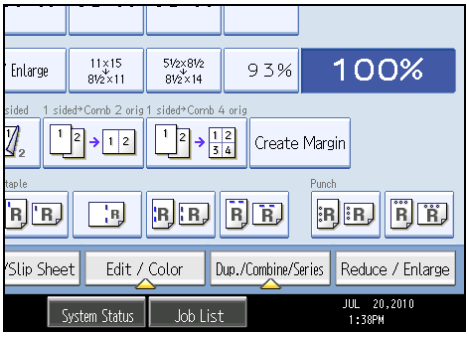
Original: A5↕/Copy paper: A4↕, Original: A5↔/Copy paper: A4↔, Original: $5^1/_2 \times 8^1/_2$↕/Copy paper: $8^1/_2 \times 11$↕, or Original: $5^1/_2 \times 8^1/_2$↔/Copy paper: $8^1/_2 \times 11$↔

4 repeats (71 %)	16 repeats (35 %)
 BAT096S	 BAT095S

Original: A5/Copy paper: A4, Original: A5/Copy paper: A4, Original: $5^1/_2 \times 8^1/_2$/Copy paper: $8^1/_2 \times 11$, or Original: $5^1/_2 \times 8^1/_2$/Copy paper: $8^1/_2 \times 11$

2 repeats (100 %)	8 repeats (50 %)	32 repeats (25 %)
 BAT086S	 BAT087S	 BAT088S

1. **Select the size of copy paper and the reproduction ratio.**
2. **Press [Edit / Color].**



3. **Press [Edit Image].**
4. **Press [Image Repeat].**
5. **Make sure that [Whole Area] is selected, and then press [OK].**
6. **Press [OK].**

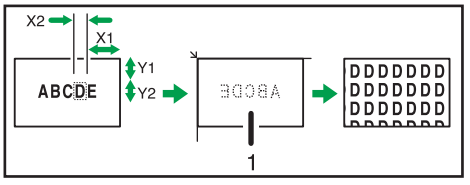
Specified Area Repeat

Repeatedly copies a specified portion of the image.

Important

- **You cannot use this function from the ADF.**
- **If Margin Adjustment is selected, cancel the setting.**

To specify the area you want to repeat, you have to define the value of X1, Y1, X2, and Y2 on the original. Measure the area you want to specify before entering the area settings.



1. **Set the original on the exposure glass**

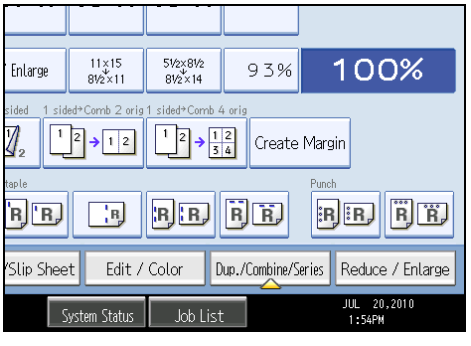
X1: 0 - 412 mm (0 - 16.2 inches)

X2: 20 - 432 mm (0.8 - 17.0 inches)

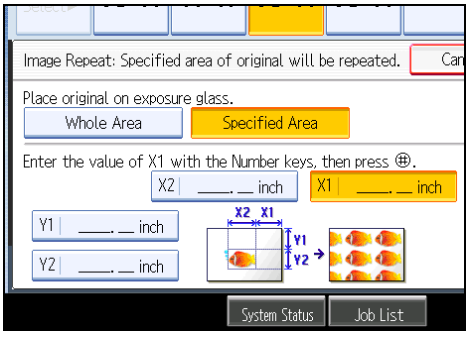
Y1: 0 - 277 mm (0 - 10.8 inches)

Y2: 20 - 297 mm (0.8 - 11.6 inches)

1. **Select the size of copy paper and the reproduction ratio.**
2. **Press [Edit / Color].**



3. **Press [Edit Image].**
4. **Press [Image Repeat].**
5. **Press [Specified Area].**
6. **Enter the length of [X1] with number keys, and then press [#].**

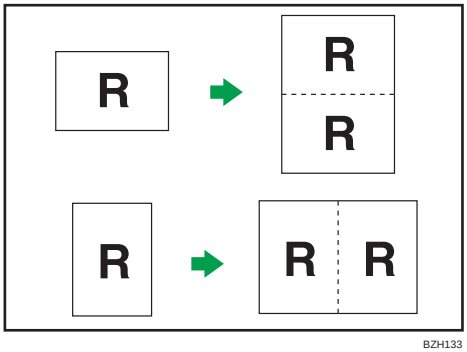


7. **Enter the length of [Y1] with the number keys, and then press [#].**
8. **Enter the length of [X2] with the number keys, and then press [#].**

9. Enter the length of [Y2] with the number keys, and then press [#].
10. Press [OK] twice.

Double Copies

One original image is copied twice on one sheet.



BZH133

Important

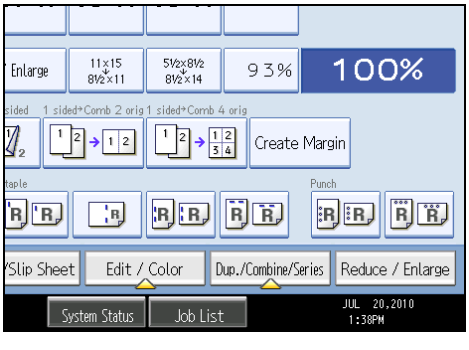
- You cannot use the bypass tray with this function.
- The following original size cannot be detected properly on the exposure glass. Be sure to select the copy paper manually or place the originals in the ADF.
  - $5^1/_2 \times 8^1/_2$□, 10 × 14□, $7^1/_4 \times 10^1/_2$□, A3□, A4□□

See the following table for original and copy paper sizes when using a 100% ratio:

Original size and Orientation	Copy paper size and Orientation
$5^1/_2 \times 8^1/_2$ □	$8^1/_2 \times 11$ □
$5^1/_2 \times 8^1/_2$ □	$8^1/_2 \times 11$ □
$8^1/_2 \times 11$ □	11 × 17 □

BZH135

1. Press [Edit / Color].



2. **Press [Edit Image].**
3. **Press [Double Copies].**
4. **Press [OK].**
5. **Select the paper size.**

Note

- You can change the settings for Double Copies under Edit in User Tools. For details about Edit, see "Edit".

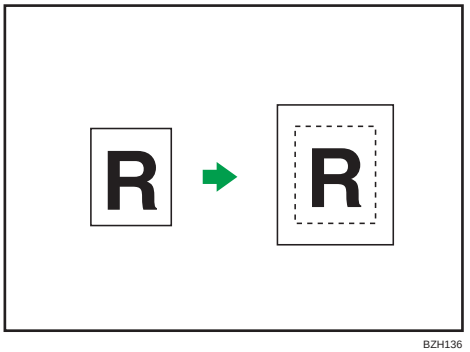
Reference

- p.225 "Edit"

4

Centering

You can make copies with the image moved to the center of the copy paper.



BZH136

Important

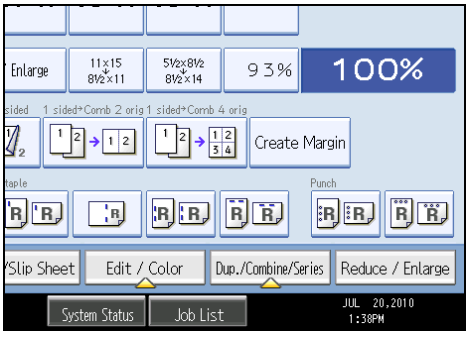
- **You cannot use the bypass tray with this function.**

The original sizes and orientations you can use with this function are as follows:

Original location	Original size and orientation
Exposure glass	11 × 17⬓, $8^1/_2$ × 14⬓, $8^1/_2$ × 11⬓⬓, $5^1/_2$ × $8^1/_2$⬓
ADF	11 × 17⬓, $8^1/_2$ × 14⬓, $8^1/_2$ × 11⬓⬓, $5^1/_2$ × $8^1/_2$⬓⬓, 10 × 14⬓, $7^1/_4$ × $10^1/_2$⬓, A3⬓, A4⬓⬓

1. **Select the paper size.**

2. **Press [Edit / Color].**



3. **Press [Edit Image].**
4. **Press [Centering].**
5. **Press [OK].**

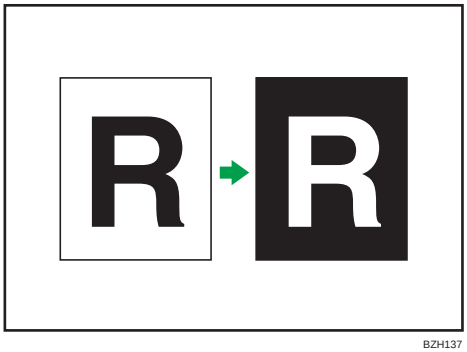
Note

- Though the original is set to a different orientation from the paper loaded, the machine will not rotate the image by 90 degrees (Rotate copy).

Positive/Negative

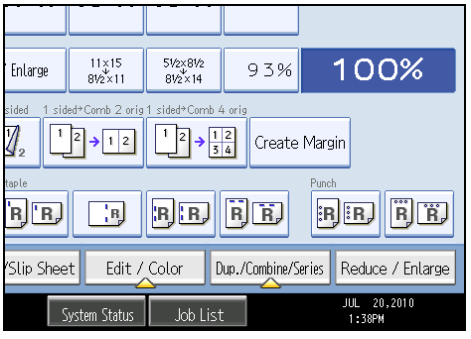
Copies an image inverted.

If your original is black and white, copy images are inverted. If your original is color, the density, darkness and brightness of each color will be reversed and inverted to complimentary colors.



BZH137

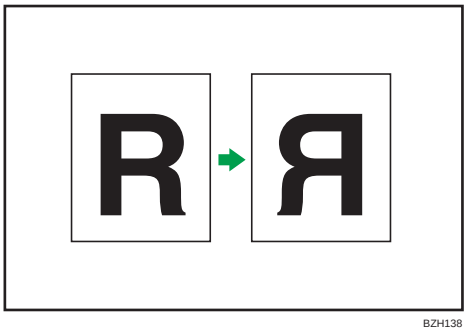
1. **Press [Edit / Color].**



2. **Press [Edit Image].**
3. **Press [Positive/Negative].**
4. **Press [OK].**

Mirror Image

Copies by reversing the image from left to right, as reflected in a mirror.

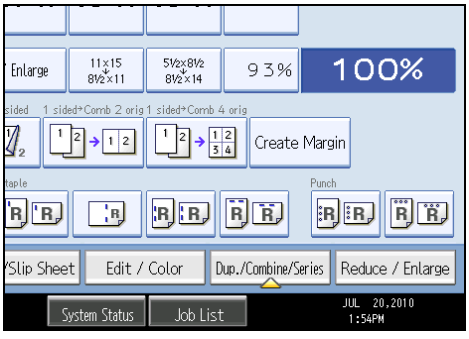


BZH138

Important

- If Margin Adjustment is selected, cancel the setting.

1. **Press [Edit / Color].**



2. **Press [Edit Image].**
3. **Press [Mirror Image].**
4. **Press [OK].**

Series Copies

Separately copies the front and back of a 2-sided original or the two facing pages of a bound original onto two sheets.

Important

- **You cannot use the Book → 1 Sided function from the ADF.**

The following table shows the paper sizes for Book → 1 Sided when the reproduction ratio is 100%:

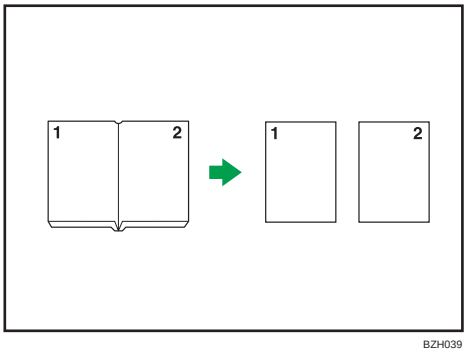
Original	Paper for 1-sided copy
11 × 17	$8^1/_2 \times 11$ × 2 sheets
$8^1/_2 \times 11$	$5^1/_2 \times 8^1/_2$ × 2 sheets

BZH141

There are two types of Series Copies.

Book → 1 Sided

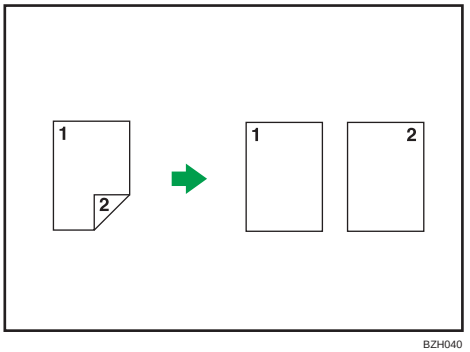
You can make 1-sided copies from two facing pages of a bound original (book).



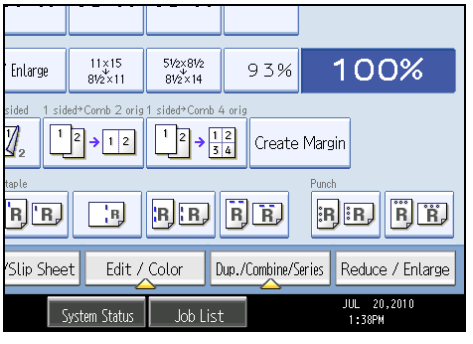
BZH039

2 Sided → 1 Sided

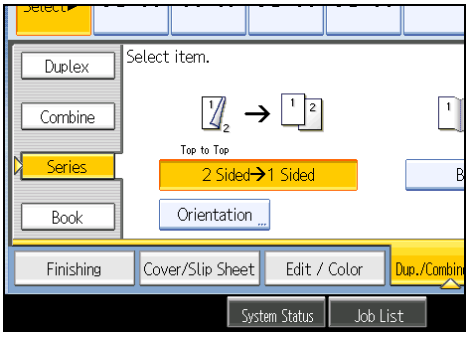
You can make 1-sided copies from 2-sided originals.



1. **Press [Dup./Combine/Series].**



2. **Press [Series].**
3. **Select [2 Sided → 1 Sided] or [Book → 1 Sided], and then press [OK].**



If you specified [2 Sided → 1 Sided], you can specify the orientation. For details, see "Originals and Copy Orientation".

Note

- When placing originals on the exposure glass or in the ADF using Batch mode, press the [#] key after all originals have been scanned.

Reference

- p.65 "Originals and Copy Orientation"

Booklet/Magazine

Copies two or more originals in page order.

Important

- **The following functions cannot be used with the bypass tray: 1 Sided → Booklet, 2 Sided → Booklet, 1 Sided → Magazine, and 2 Sided → Magazine**

The following table shows the paper sizes for Book → 2 Sided when the reproduction ratio is 100%:

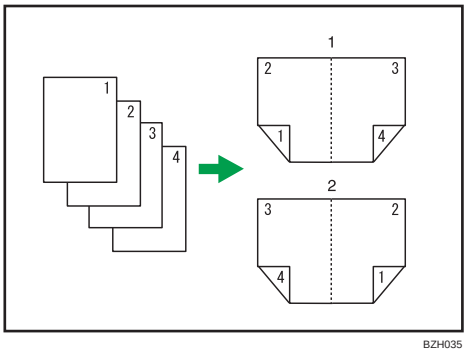
Original	Paper
11 × 17	$8^1/_2 \times 11$ (2-sided)
$8^1/_2 \times 11$	$5^1/_2 \times 8^1/_2$ (2-sided)

BZH143

There are six types of Booklet/Magazine.

1 Sided → Booklet

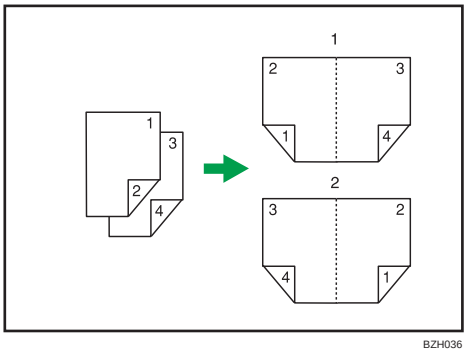
Make copies in page order for a folded booklet as shown.



1. **Open to left**
2. **Open to right**

2 Sided → Booklet

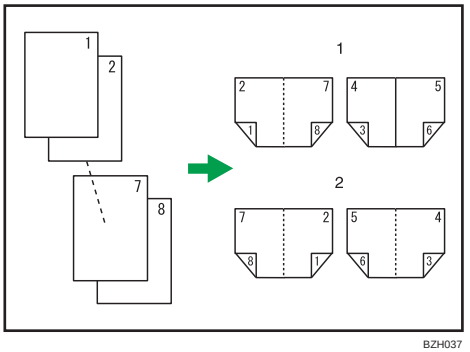
Make 2-sided originals to copies in page order for a folded booklet as shown.



1. **Open to left**
2. **Open to right**

1 Sided → Magazine

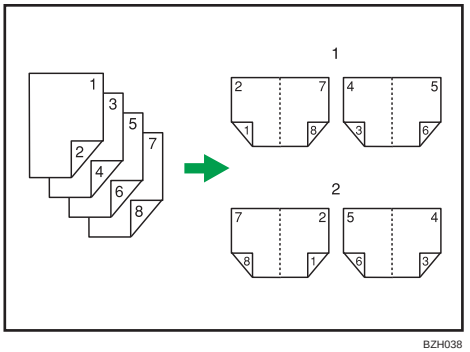
Copies two or more originals to make copies in page order when they are folded and stacked.



1. **Open to left**
2. **Open to right**

2 Sided → Magazine

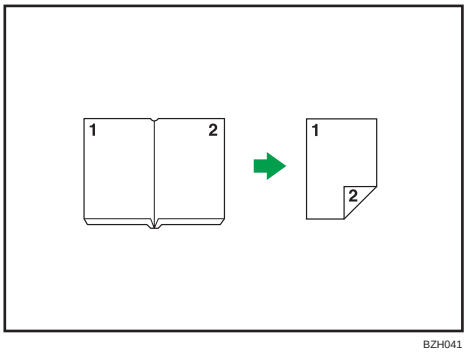
Copies two or more originals of 2-sided to make copies in page order when they are folded and stacked.



1. **Open to left**
2. **Open to right**

Book → 2 Sided

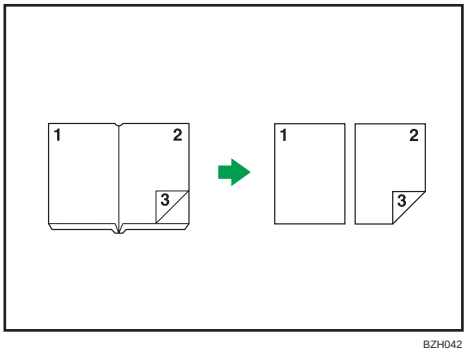
Copies a two-page spread original onto one sheet with one page per side.



BZH041

Front&Back → 2 Sided

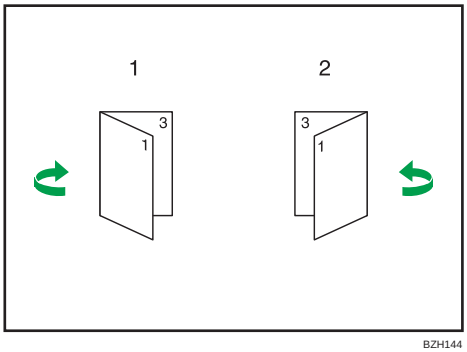
Copies each two-page spread original as it is onto both sides of a sheet.



BZH042

How to fold and unfold copies to make a booklet

Fold a copy along the centerline, and open.



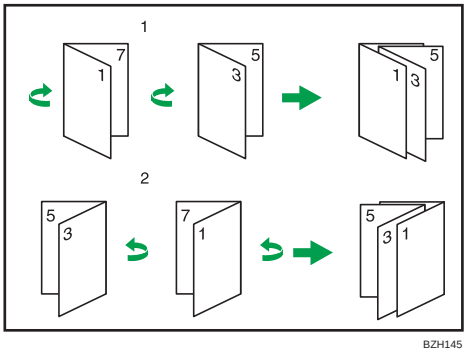
BZH144

1. **Open to left**

2. Open to right

How to fold and unfold copies to make a magazine

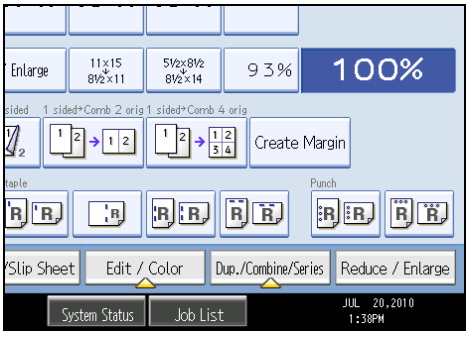
Fold and stack copies to make a magazine, and open.



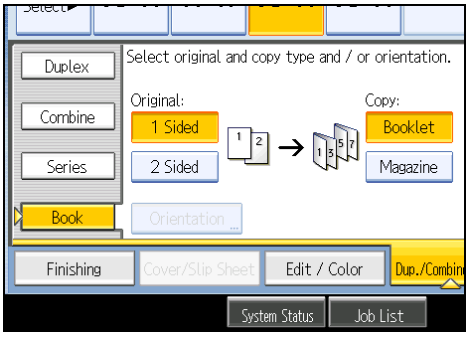
BZH145

1. Open to left
2. Open to right

1. Press [Dup./Combine/Series].



2. Press [Book].
3. Select a book type separately for the original ([1 Sided] or [2 Sided]) and copy ([Booklet] or [Magazine]), or select a book type from [Book → 2 Sided] and [Front&Back → 2 Sided].



If you specified [2 Sided] for the original, [Book → 2 Sided], or [Front&Back → 2 Sided], you can specify the orientation of originals or copies. For details, see "Originals and Copy Orientation".

4. **Select the paper size.**
5. **Press [OK].**

Note

- When placing originals on the exposure glass, or in the ADF using Batch mode, press the [#] key after all the originals have been scanned.
- The default setting for the orientation of Booklet and Magazine is [Open to Left]. You can change the default under Orientation: Booklet, Magazine in User Tools. For details, see "Edit".
- In the Booklet or Magazine mode, the machine sets the reproduction ratio automatically to meet the paper size and copies the originals together onto the paper.
- The machine selects reproduction ratios of between 25 and 400%.
- If the calculated ratio is under the minimum ratio, it is automatically adjusted to within available range. However, with some ratios, parts of the image might not be copied.
- If the orientation of originals is different from that of the copy paper, the machine will automatically rotate the image by 90 degrees to make copies properly.
- You cannot copy with originals different in size and orientation.
- If the number of originals scanned is less than a multiple of 4, the last page is copied blank.
- In Magazine mode, the copying may take some time after scanning originals.
- When the booklet finisher is installed, if you select Staple: Center in Magazine mode, the machine staples and folds the paper in the center, then delivers the paper folded.

Reference

- p.225 "Edit"

Covers

You can use this function to create cover sheets by adding additional pages of different paper, or copying existing pages onto different paper.

Important

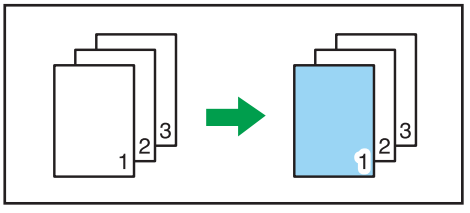
- **Before using this function, select the trays for covers under Cover Sheet Tray in Tray Paper Settings. For details, see "System Settings", Network and System Settings Reference.**
- **You cannot specify the bypass tray as the Main Sheet Tray.**
- **When selecting [Copy], select whether the front and back covers are copied 1-sided or 2-sided.**

The Covers function includes Front Cover and Front/Back Cover.

Front Cover

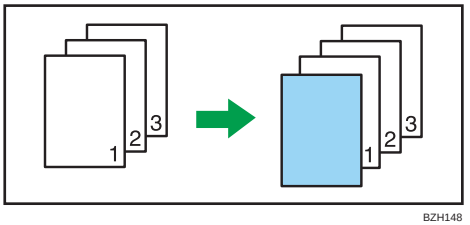
This function copies the first page of an original onto paper that has been specified for covers, or places a cover sheet before the first copy page.

- Copy



BZH147

- Blank

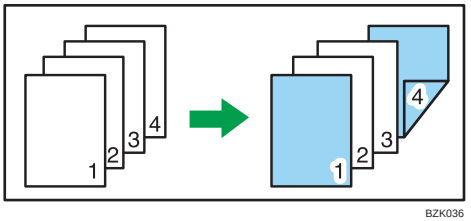


BZH148

Front/Back Cover

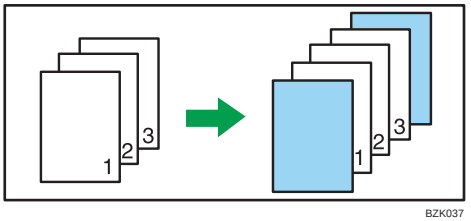
This function copies the first and last pages of an original onto paper that has been specified for covers, or places a cover sheet before the first copy page and after the last copy page.

- Copy



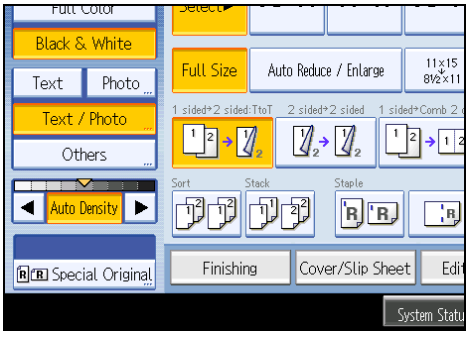
BZK036

- Blank



BZK037

1. **Press [Cover/Slip Sheet].**



2. **Select [Copy] or [Blank] for the cover sheet, and then press [OK].**

3. **Select the main sheet tray that contains the paper to copy the originals.**

Note

- You cannot specify both Front Cover and Front/Back Cover at the same time.
- The cover sheets should be the same size and orientation as the main sheets.
- You can make a combined copy on the front cover sheet. For details about Front Cover Copy in Combine, see “Edit”.
- If Blank mode is selected, the cover will not be counted as a copy.
- The settings made under Cover Sheet Tray in User Tools determine whether or not the front and back covers are duplex printed.
  - At Mode Selected... Settings made in Cover Sheet Tray will take priority.
  - Full Time... Settings made in Paper Type will take priority.

  For details, see “System Settings”, Network and System Settings Reference.

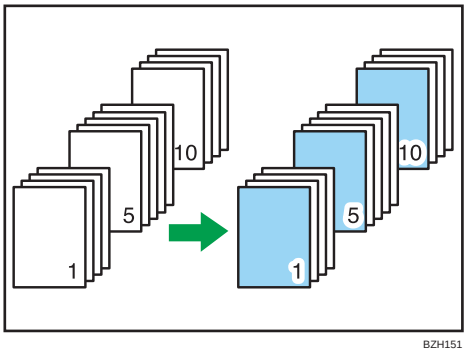
Reference

- p.225 "Edit"

Designate

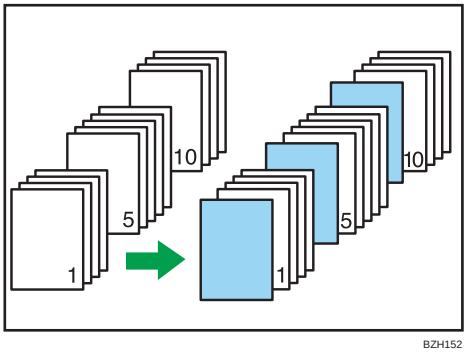
Use this function to have certain pages of your original copied onto designation sheets or to insert a designation sheet for each page specified.

- Copy



BZH151

- Blank

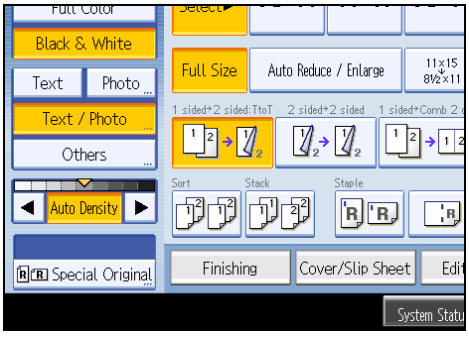


BZH152

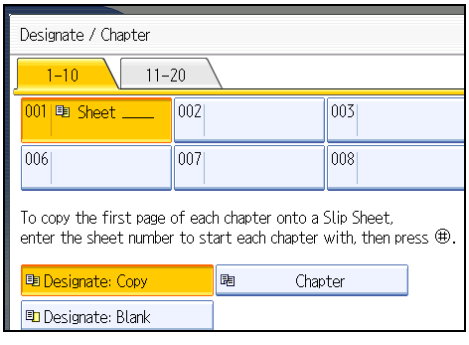
Important

- You cannot specify the bypass tray as the Main Sheet Tray.
- Before using this function, select the tray for designation sheets under Slip Sheet Tray in User Tools. For details, see "System Settings", Network and System Settings Reference.

1. **Press [Cover/Slip Sheet].**



2. **Press [Designate / Chapter].**
3. **Select [Designate: Copy] or [Designate: Blank].**
4. **Press the key to select the chapter number.**



   To select pages 11 to 20 (chapter), press [11-20].

5. **Enter the page location of the first page of the chapter with the number keys, and then press the [#] key.**
6. **To specify another page location, repeat steps 3 to 5.**

   Up to 20 locations can be specified.

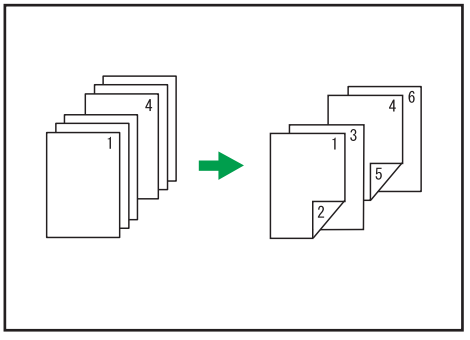
7. **Select the main sheet tray that contains the paper to copy the originals.**
8. **After making all settings, press [OK] twice.**

Note

- To change the value you entered, press the key you want to change, and then enter a new value.
- When placing the designation sheets in the bypass tray, it should be the same size and orientation as the main sheets.
- If you select [Designate: Blank], the specified pages will be excluded from the copy count.
- When Duplex (1 Sided → 2 Sided) has been selected, specified pages will always be copied on the front of copies in the same way as in Chapters mode.

Chapters

The page locations you specify with this function will appear on the front of copy sheets.

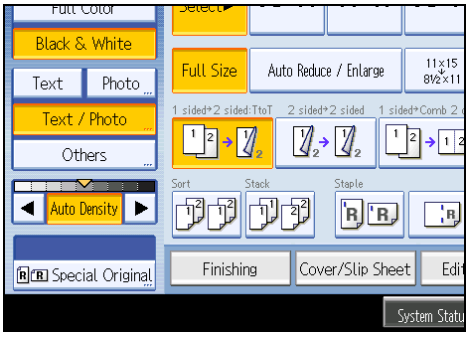


BZH153

Important

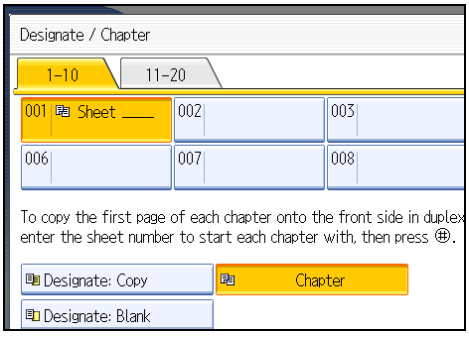
- Before selecting this function, press [Dup./Combine/Series] and then select [1 Sided → 2 Sided] or [Combine].
- This function can be used only when you use the Duplex (1 Sided → 2 Sided) or Combine function.

1. Press [Cover/Slip Sheet].



2. Press [Designate / Chapter].
3. Press [Chapter].

4. **Press the key to select the chapter number.**



   To select chapters 11 to 20, press [11-20].

5. **Enter the page location of the first page of the chapter with the number keys, and then press the [#] key.**

   Up to 20 locations can be specified.

6. **To specify another page location, repeat steps 4 to 5.**
7. **Select the main sheet tray that contains the paper to copy the originals.**
8. **After making all settings, press [OK] twice.**

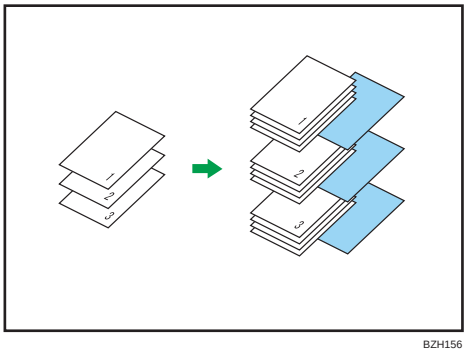
Note

- To change the value you entered, press the key you want to change, and then enter a new value.

Slip Sheet

Every time an original page changes, a slip sheet is inserted. You can also print on the inserted slip sheet.

Since a slip sheet is inserted for every page, you can protect printed surfaces. This function is useful in copying onto OHP transparencies.



BZH156

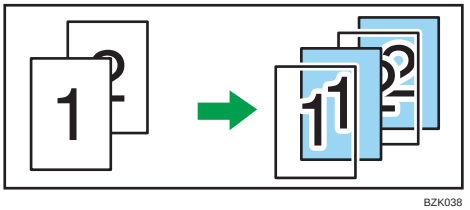
Important

- **If [1 Sided → 2 Sided] is set, cancel the setting.**

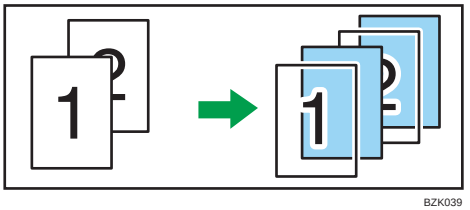
- Before using this function, select the tray for slip sheets under Slip Sheet Tray in Tray Paper Settings. For details, see "System Settings", Network and System Settings Reference.

When copying onto OHP transparencies

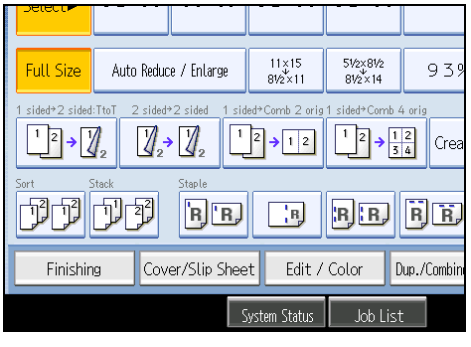
- Copy



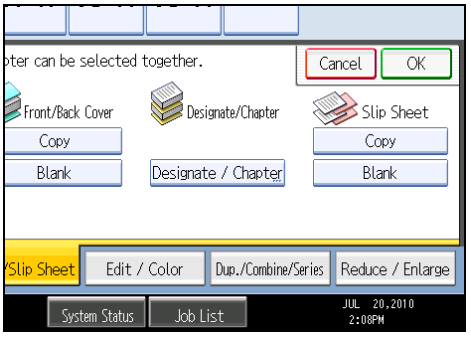
- Blank



1. Press [Cover/Slip Sheet].



2. Select [Copy] or [Blank] for the slip sheets, and then press [OK].



3. **Select the main sheet tray that contains the paper to copy the originals.**

   When copying onto OHP transparencies, use the bypass tray.

Note

- When setting OHP transparencies on the bypass tray, press the [#] key and select [OHP (Transparency)] in Paper Type. For details, see “Copying onto OHP Transparencies or Thin Paper”.
- The slip sheets should be the same size and orientation as the copy paper or the OHP transparency.
- When copying onto OHP transparencies, copy paper is output in the internal tray even if you specified a different tray.
- If you do not copy onto slip sheets, they are excluded from the number of copies counted.

Reference

- p.48 "Copying onto OHP Transparencies or Thin Paper"

5. Document Server

The Document Server enables you to store documents on the hard disk of this machine. Thus you can print them later applying necessary conditions.

Relationship between Document Server and Other Functions

State of the Document Server varies depending on the function used.

Copier functions

- Storing method: Copy/Document Server
- List display: Available
- Printing: Available
- Transmission: Unavailable

Printer functions

- Storing method: Personal computer
- List display: Available
- Printing: Available
- Transmission: Unavailable

Facsimile functions

- Storing method: Fax
- List display: Available
- Printing: Available
- Transmission: Available

  The data can be transferred by the facsimile feature. For details, see “Sending Stored Documents”, Facsimile Reference.

Scanner functions

- Storing method: Scanner
- List display: Unavailable

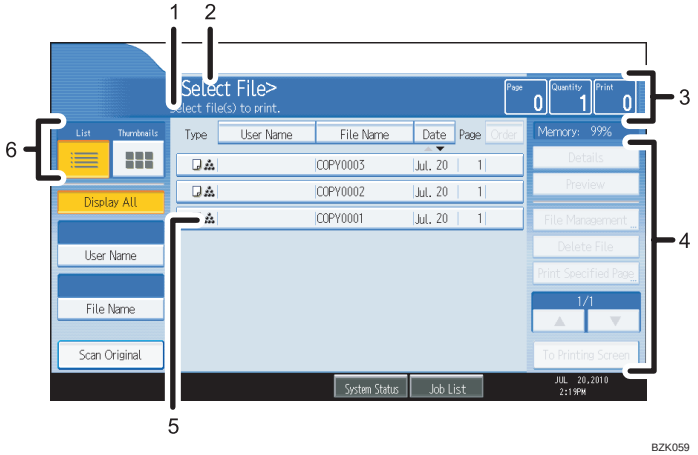
  When documents are stored with the scanner feature, you can confirm them from the scanner feature screen. For details, see “Displaying the List of Stored Files”, Scanner Reference.
- Printing: Unavailable
- Transmission: Available

  The data can be transferred by the scanner feature. For details, see “Sending a Stored File”, Scanner Reference.

Document Server Display

Explains the screens and icons displayed in the Document Server function.

Document Server initial display



1. **Displays operational status and messages.**
2. **Displays the title of the current screen.**
3. **Displays the numbers of originals stored into the memory, copies set, and copies made.**
4. **Displays keys for the operation.**
5. **Displays an icon that indicates the function and color mode used to store the document.**
6. **Displays keys for switching the display between list and thumbnails.**

The following icons appear in the list of the Document Server to indicate the function and color mode used to store a document.

Function	Copier	Facsimile	Printer
Icons			

Color icons	Full color	Black and white
Icons		

Thumbnail screen

In thumbnail view, miniature images of the stored documents are displayed. This is useful for checking a document's content.

Note

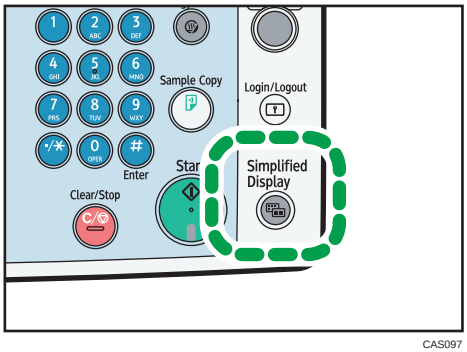
- All the stored documents may not be displayed depending on the security function specified.

Simplified Display

This section explains how to switch to the simplified display.

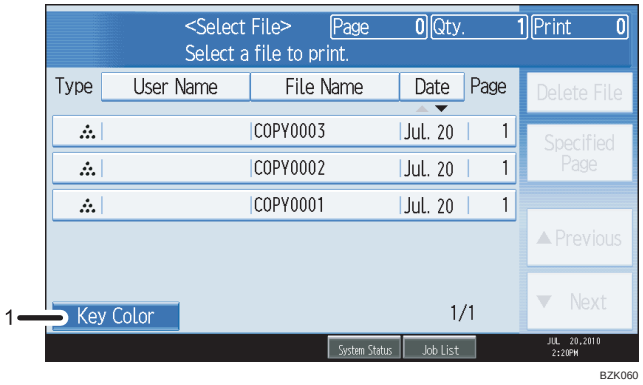
When you press the [Simplified Display] key, the screen changes from the initial display to the simplified display.

Letters and keys are displayed at a larger size, making operations easier.



CAS097

Simplified Document Server Screen



BZK060

1. **[Key Color]**

   Press to increase screen contrast by changing the color of the keys.

   This is available only for the simplified display.

Note

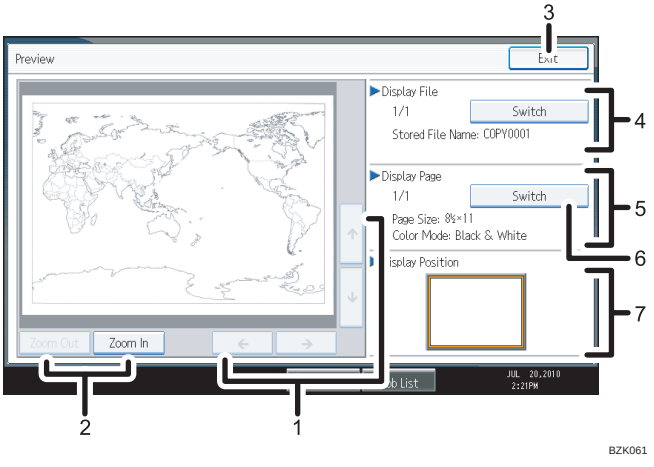
- To return to the initial display, press the [Simplified Display] key again.
- Certain keys do not appear on the simplified display.

Preview Display

This section explains the items that appear on the preview display and how to preview stored documents.

To preview stored documents, select the documents you want to preview on the Document Server initial display, and then press [Preview]. The preview display denotes the screen that allows confirming contents of the scanned documents.

Preview Display



1. **[←][→][↑][↓]**

   Moves the display area in the direction indicated by the arrow.

2. **[Zoom Out], [Zoom In]**

   Scales the displayed page down or up.

3. **[Exit]**

   Closes the preview display.

4. **Display File**

   Displays the file name.

   If you have selected two or more files for preview, press [Switch] to switch between them.

5. **Display Page**

   Displays the number of the currently displayed page, total number of pages, and page size.

6. **[Switch]**

   Flips the page of the selected file.

7. **Display Position**

   Indicates the location of the displayed preview image when the image is enlarged.

Note

- When the preview is already selected from another function, the preview screen function may become unusable.
- The preview display is also not available when the paper size is larger than A3. If the image file is corrupt, store it again.

Using the Document Server

The following describes how to use the Document Server.

Storing Data

The following describes the procedure for storing documents on the Document Server.

Important

- **Data stored in the machine might be lost if some kind of failure occurs. The manufacturer shall not be responsible for any damage resulting from loss of data.**
- **Be careful not to let anyone know your password, especially when entering a password or recording it. Keep any record of your password in a secure place.**
- **Avoid using a single number or consecutive numbers for a password such as "0000" or "1234", since the numbers like this are easy to guess, so using them will not provide a worthwhile level of security.**
- **A document accessed with a correct password remains selected even after operations are complete, and it can be accessed by other users. After the operation, be sure to press the [Clear Modes] key to cancel the document selection.**
- **The user name registered to a stored document in the Document Server is to identify the document creator and type. It is not to protect confidential documents from others.**
- **When turning on the fax transmission or scanning by the scanner, make sure that all other operations are ended.**

File Name

A document name such as "COPY0001" and "COPY0002" is automatically attached to the scanned document. You can change the document name.

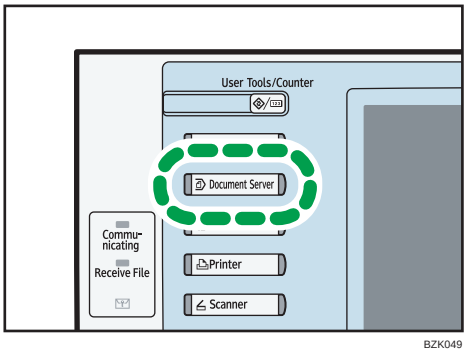
User Name

You can register a user name to identify the user or user group that stored the documents. To assign it, select the user name registered in the Address Book, or enter the name directly.

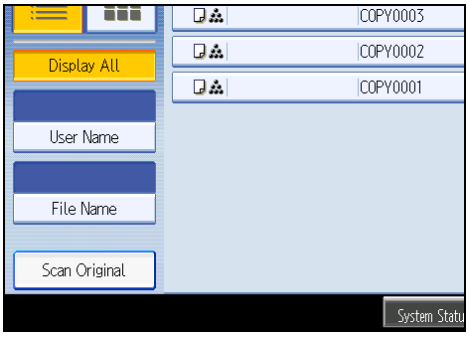
Password

To prevent unauthorized printing, you can set a password for any stored document. A protected document can only be accessed if its password is entered. If a password is set for the documents, the key icon appears next to the documents.

1. **Press the [Document Server] key.**



2. **Press [Scan Original].**



3. **Enter a user name, file name, and password, if necessary.**

   When not changing a file name, the name will be automatically set.

4. **Set the original.**

5. **Specify the original scanning conditions.**

6. **Press the [Start] key.**

   The original is scanned. The document is saved in the Document Server.

Note

- Enter the password in the range of four and eight digits.
- To stop scanning, press the [Clear/Stop] key. To restart a paused scanning job, press [Continue] in the confirmation display. To delete saved images and cancel the job, press [Stop]. The original placed in the ADF will be ejected.
- If a password is set, the key icon appears on the left side of the file name.
- After scanning, a list of stored documents will be displayed. If the list does not appear, press [Finish Scanning].
- Data stored in the Document Server is set to be deleted after three days (72 hours) by the factory default. You can specify the period after which the stored data is deleted automatically under Auto

Delete File in Document Server in User Tools. See “System Settings”, Network and System Settings Reference.

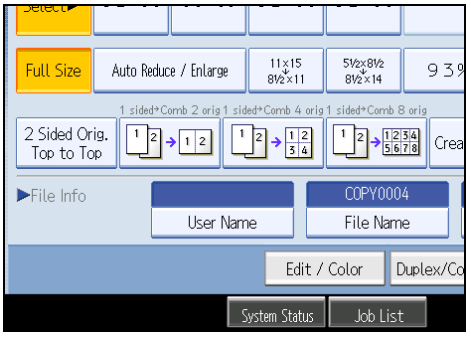
- If you do not want stored documents to be automatically deleted, select [Off] in Auto Delete File in Document Server before storing a document. If you select [On] later, data stored after will be automatically deleted.
- When storing another document in the Document Server after storing a document from the copy feature, be sure that its copy is completed.
- If the ADF cannot detect the size of an original automatically, the scan will be made at the closest available size.
- Depending on the security setting, [Access Privileges] may appear instead of [User Name]. For details about specifying [Access Privileges], consult the administrator.
- For details about how to enter text, see “Entering Text”, About This Machine.

5

Specifying a user name

You can specify a user name for the stored file.

1. **Press [Scan Original].**
2. **Press [User Name].**



A list of user names appears.

3. **Select a user name, and then press [OK].**

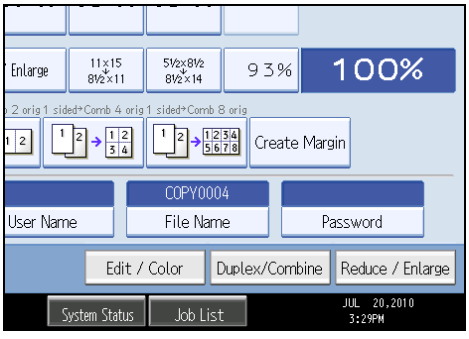
The user names shown are names that were registered in the Address Book. To specify a name not shown in the display, press [Manual Entry], and then enter a user name.

Specifying a file name

You can change the name of a stored document.

1. **Press [Scan Original].**

2. **Press [File Name].**



The soft keyboard appears.

3. **Press [Delete All] to delete automatically generated document name.**

Pressing [Backspace] allows you to delete up to any desired position.

4. **Enter a document name, and then press [OK].**

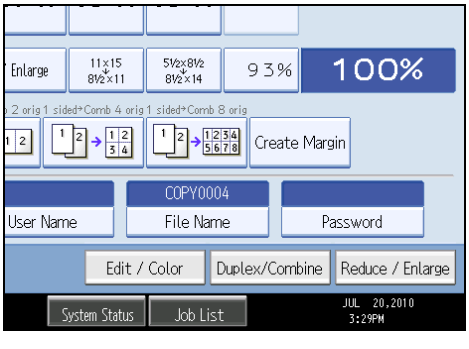
Note

- You can enter up to 20 characters for a document name. In the list, however, up to 16 characters are displayed as the document name. If above limits are exceeded, the list will display up to 15 characters for the document name.

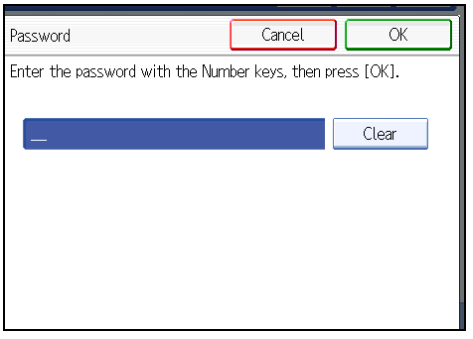
Specifying a password

You can specify a password for the stored document.

1. **Press [Scan Original].**
2. **Press [Password].**



3. **Enter a password with the number keys, and then press [OK].**



You can use four to eight digits for the password.

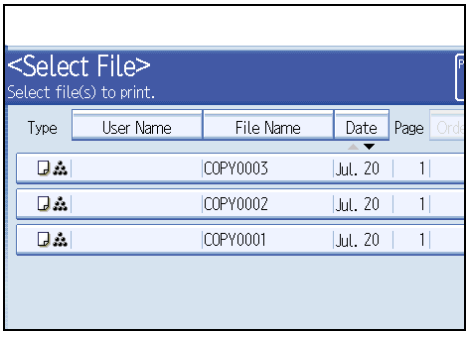
4. **For double-check, enter the password again, and then press [OK].**

5

Changing the User Name of a Stored Document

You can change the user name for a stored document.

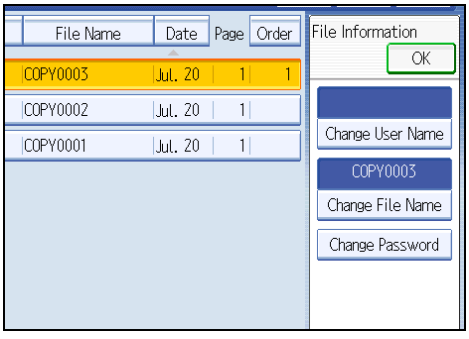
1. **Select the document whose user name you want to change.**



If a password is set, enter it, and then press [OK].

2. **Press [File Management].**

3. **Press [Change User Name].**



4. **Enter a new user name, and then press [OK].**
5. **Press [OK].**

Note

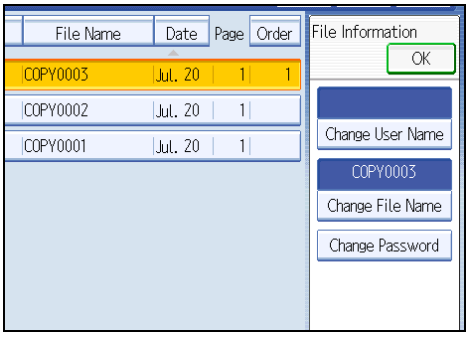
- To cancel the selection, press the selected (highlighted) key.
- Depending on the security setting, [Access Privileges] may appear instead of [User Name]. For details about specifying [Access Privileges], consult the administrator.
- For details about how to enter text, see "Entering Text", About This Machine.

Changing the File Name of a Stored Document

You can change the file name of a stored document.

1. **Select the document whose name you want to change.**

   If a password is set, enter it, and then press [OK].
2. **Press [File Management].**
3. **Press [Change File Name].**



4. **Enter a new file name, and then press [OK].**
5. **Press [OK].**

Note

- To cancel the selection, press the selected (highlighted) key.
- Depending on the security setting, [Access Privileges] may appear instead of [User Name]. For details about specifying [Access Privileges], consult the administrator.
- For details about how to enter text, see "Entering Text", About This Machine.

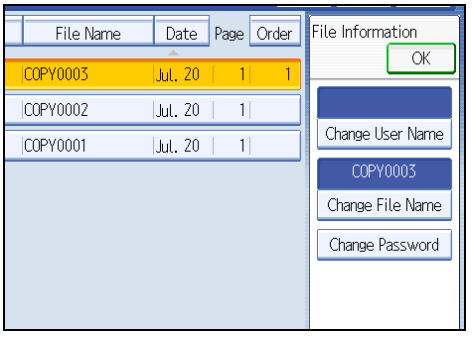
Changing the Password of a Stored Document

You can change the password of a stored document.

1. **Select the document whose password you want to change.**

   If a password is set, enter it, and then press [OK].

2. **Press [File Management].**
3. **Press [Change Password].**



4. **Enter a new password, and then press [OK].**
5. **For double-check, enter the password again and then press [OK].**
6. **Press [OK].**

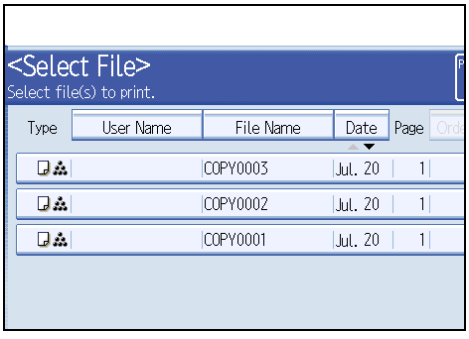
Note

- To cancel the selection, press the selected (highlighted) key.
- Depending on the security setting, [Access Privileges] may appear instead of [User Name]. For details about specifying [Access Privileges], consult the administrator.
- For details about how to enter text, see "Entering Text", About This Machine.

Checking the Details of a Stored Document

You can confirm the details of a stored document.

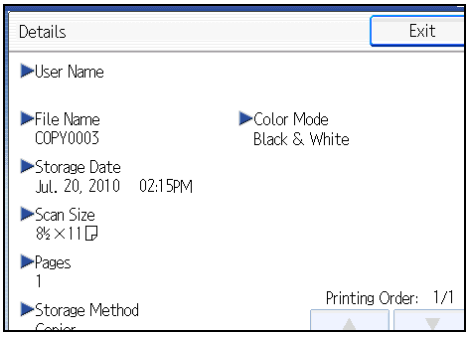
1. **Select the document whose details are to be displayed.**



If a password is set, enter it, and then press [OK].

2. **Press [Details].**

Details of the document will be displayed.



Note

- If you have selected two or more documents, press [▲] or [▼] to view their information.
- To cancel the selection, press the selected (highlighted) key.
- Pressing [Exit] restores the document selection screen.

Searching for Stored Documents

Searches for stored documents by user name or file name.

You can rearrange the currently chronologically ordered documents in any desired order.

Searching by file name

Searches for stored documents by file name.

Searching by user name

Searches for stored documents by user name.

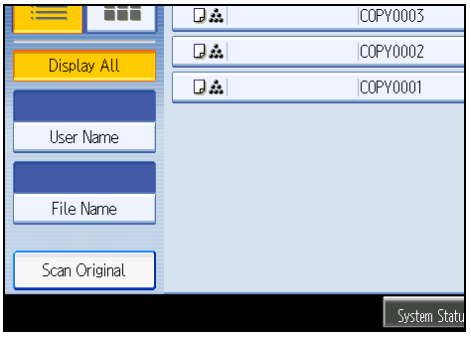
Note

- Web Image Monitor enables searching and reordering of stored documents from computers.
- For details about Web Image Monitor, see Help of Web Image Monitor.
- For details about how to enter text, see “Entering Text”, About This Machine.

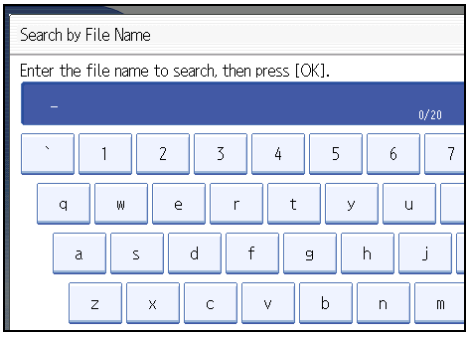
Searching by file name

Searches for stored documents by file name.

1. **Press [File Name].**



2. **Enter the document name to be searched, and then press [OK].**



Document names that match completely from the starting character will be searched and displayed on the screen.

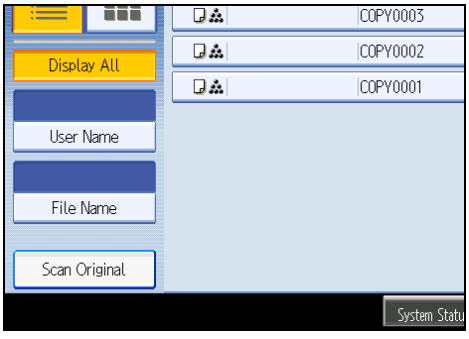
Note

- Pressing [Display All] displays all stored documents.

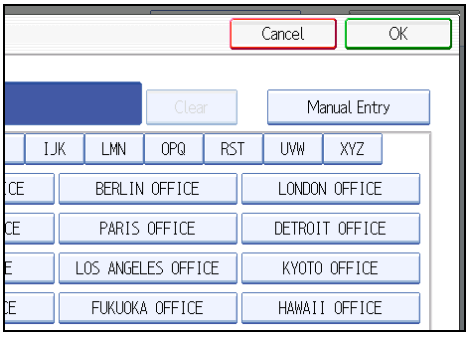
Searching by user name

Searches for stored documents by user name.

1. **Press [User Name].**



2. **When specifying a registered user name, select it.**
3. **When the user name is not registered, press [Manual Entry], and then enter it from the input screen to be displayed. Then press [OK].**



4. **Press [OK].**

   User names that match completely from the starting character will be searched and displayed on the screen.

Note

- Pressing [Display All] displays all stored documents.

Printing Stored Documents

Prints stored documents.

Web Image Monitor allows you to print documents stored in the Document Server from your computer.

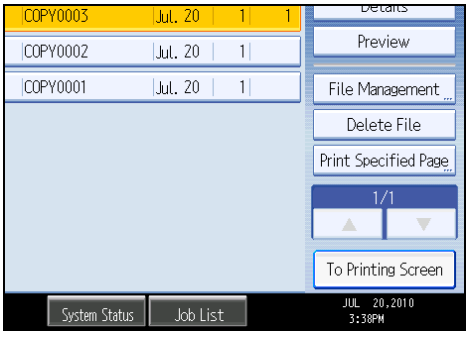
1. **Select a document to be printed.**

   If a password is set, enter it, and then press [OK].

2. **When printing two or more documents at a time, repeat step 1.**

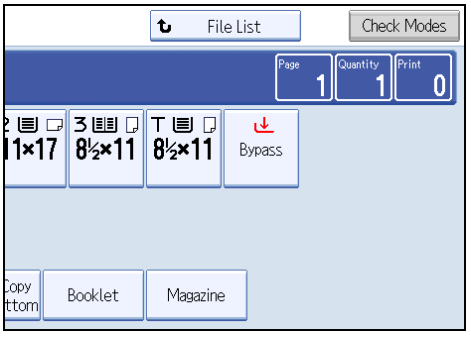
   Up to 30 documents can be printed.

3. **When specifying printing conditions, press [To Printing Screen].**



The printing condition screen will appear. The user name, file name, and printing order of the document will be displayed.

4. **Enter the number of print copies with the number keys.**



The maximum quantity that can be set is 999.

5. **Press the [Start] key.**

Printing will be started.

Note

- You can search the target document using [User Name] or [File Name] situated in the left side of the screen. For details about searching the target document, see “Searching for Stored Documents”.
- You can sort the documents by user name, file name, or creation date. Press the item to be used for the sorting on the top of the list.
- To cancel the selection, press the selected (highlighted) key.
- Some of the selected documents may not be printed due to the difference in the size or resolution.
- When changing the printing order, cancel the highlight and then specify the order correctly.
- Pressing the [Clear Modes] key cancels every selection.
- Pressing [Order] displays the selected documents in the printing order.

- The copy and printer features hold the specified printing conditions after the operation is over and apply them at the next printing. The facsimile features do not have the function of storing the printing conditions.
- When two or more documents are specified, the printing conditions are stored on the first document but not on the succeeding documents.
- Following settings are available for the printing conditions. For respective printing results, see “Basic Copying” and “Advanced Copying”.
  - Paper tray
  - The number of prints
  - 2 Sided Copy (Top to Top, Top to Bottom), Booklet, Magazine
  - Finishing (Sort / Rotate Sort / Stack / Staple / Punch)
  - Cover/Slip Sheet (Front Cover, Front/Back Cover, Designate / Chapter, Slip Sheet)
  - Edit / Stamp (Margin Adj., Stamp)
- When printing two or more copies while selecting the Sort function, you can confirm the finish by printing only one copy. For details about sample print function, see “Sample print”.
- When printing two or more documents at a time, you can print them as a single continuous document by specifying the order of their printing.
- When printing two or more documents at a time, the printing conditions set for the first document are applied to all the remaining documents.
- When two or more documents are selected, press [▲] [▼] to confirm the user name, document name and printing order of the document.
- Pressing [File List] restores the document selection screen.
- The Stamp function is not specifiable to the documents being stored from the facsimile features.
- You can change the maximum print quantity under Max. Copy Quantity in User Tools. For details about Max. Copy Quantity, see “General Features”.
- Web Image Monitor allows you to print a document stored in the Document Server from your computer. For the Web Image Monitor starting procedure, see “Displaying Stored Documents with Web Image Monitor”.

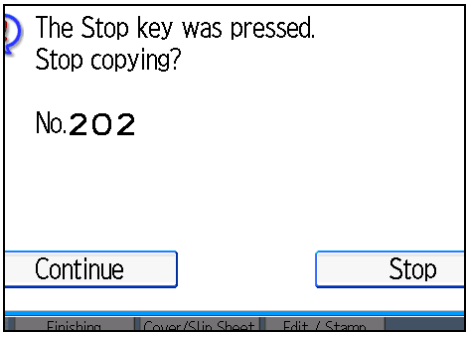
Reference

- p.203 "Searching for Stored Documents"
- p.209 "Sample print"
- p.212 "Displaying Stored Documents with Web Image Monitor"
- p.219 "General Features"

Interrupting a print job

Interrupts a print job.

1. **Press the [Clear/Stop] key.**
2. **Press [Stop].**



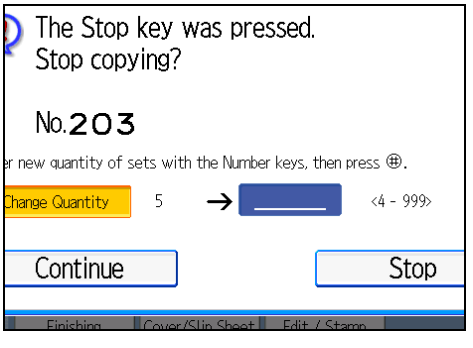
Changing the number of print copies while printing is in progress

You can change the number of sets during printing.

Important

- **This function can be used only when the Sort function is selected in the printing conditions.**

1. **Press the [Clear/Stop] key.**
2. **Press [Change Quantity].**
3. **Enter the number of sets anew with the number keys.**



4. **Press the [#] key.**
5. **Press [Continue].**

   Printing will be resumed.

Note

- The number of sets you can enter in step 3 differs depending on when the [Clear/Stop] key is pressed.

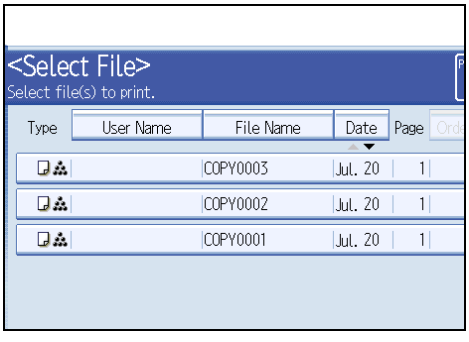
Sample print

When the number of sets is massive, you can print a single set in advance to check the printing order and the printing conditions of the selected documents.

Important

- **This function can be used only when the Sort function is selected in the printing conditions.**

1. **Select the document to be printed.**



   If a password is set, enter it, and then press [OK].

2. **Press [To Printing Screen].**
3. **Enter the number of print copies with the number keys.**
4. **Select [Sort].**
5. **Press the [Sample Copy] key.**

   Only one set will be printed.

6. **Press [Continue].**

   Printing will be resumed.

Note

- To cancel the printing, press [Suspend]. The print screen will appear, enabling to set another item.

Printing the first page

In order to confirm the print results, you can print the first page alone of the document selected on the Select File screen.

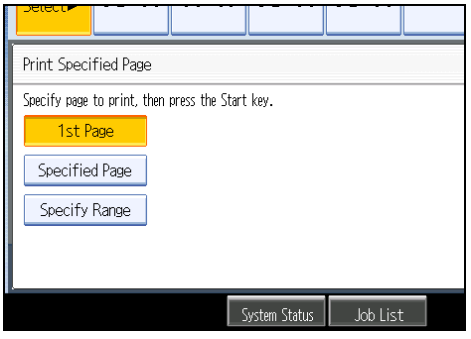
When two or more documents are selected, the first page of the respective documents is printed.

1. **Select the document to be printed.**

   If a password is set, enter it, and then press [OK].

2. **Press [Print Specified Page].**

3. **Press [1st Page].**



4. **Press the [Start] key.**

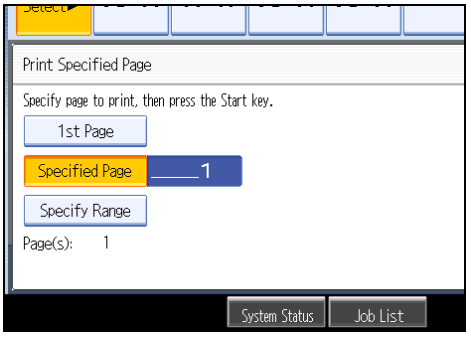
Printing a specified page

You can print the specified page alone of the document selected on the Select File screen.

1. **Select the document to be printed.**

   If a password is set, enter it, and then press [OK].

2. **Press [Print Specified Page].**
3. **Press [Specified Page].**
4. **Specify the page to be printed with the number keys, and then press [#].**



5. **Press the [Start] key.**

Note

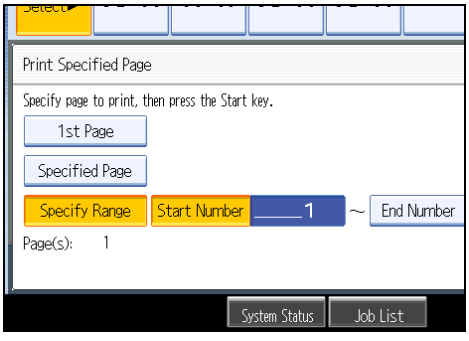
- To change the value you entered, press the key you want to change, and then enter a new value.

Printing a specified range

You can print the pages in the specified range alone of the document selected on the Select File screen.

1. **Select the document to be printed.**

   If a password is set, enter it, and then press [OK].
2. **Press [Print Specified Page].**
3. **Press [Specify Range].**
4. **Specify the printing start page with the number keys, and then press [#].**



5. **Specify the printing end page with the number keys, and then press [#].**
6. **Press the [Start] key.**

Note

- To change the value you entered, press the key you want to change, and then enter a new value.

Deleting a Stored Document

Deletes a stored document.

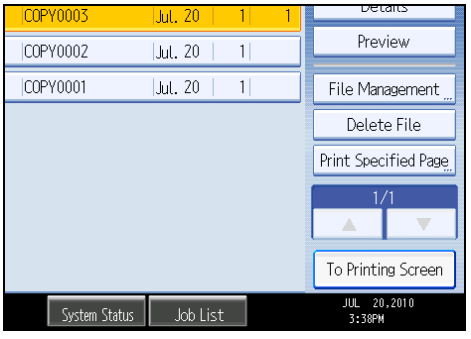
Important

- **The Document Server can store up to 3,000 documents. As the number of stored documents reaches the limit, storing of a new document becomes unavailable. Thus, you should delete unnecessary documents as much as practicable.**

1. **Select the document to be deleted.**

   If a password is set, enter it, and then press [OK].

2. **Press [Delete File].**



3. **Press [Yes].**

Note

- You can delete all documents stored in the Document Server under Delete All Files in Document Server in User Tools. For details about Delete All Files in Document Server, see "System Settings", Network and System Settings Reference.
- It is also possible to select two or more documents and delete them.
- You can search the target document using [File Name] or [User Name] situated in the left side of the screen.
- You can sort the documents by user name, file name, or creation date. Press the item to be used for the sorting on the top of the list.
- When you could not identify the target document from the document name, print the first page alone of the document in order to confirm the print results.
- To cancel the selection, press the selected (highlighted) key.
- Web Image Monitor allows you to delete a document stored in the Document Server from your computer. For details about how to start Web Image Monitor, see "Displaying Stored Documents with Web Image Monitor".

Reference

- p.212 "Displaying Stored Documents with Web Image Monitor"

Displaying Stored Documents with Web Image Monitor

You can display stored documents in the Document Server on the computer screen with Web Image Monitor.

1. **Start a Web browser.**
2. **Enter "http://(IPv4 address, IPv6 address or host name of this machine)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros.

For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

The top page of Web Image Monitor will be displayed.

3. **Click [Document Server].**

   The list of documents in the Document Server will be displayed.

4. **Click of the document you want to confirm.**

   Information of the document will be displayed.

5. **Confirm contents of the document.**

Note

- You can change the format of the list. Click the (Thumbnails), (Icons), or (Details).
- When you want to enlarge the preview display, click [Enlarge Image].

Downloading Stored Documents with Web Image Monitor

You can download stored documents to the computer with Web Image Monitor.

Important

- **The file format converter is required if you want to download documents saved under the copy or printer function.**

1. **Start a Web browser.**
2. **Enter "http://(IPv4 address, IPv6 address or host name of this machine)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros.

   For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor will be displayed.

3. **Click [Document Server].**

   The list of documents in the Document Server will be displayed.

4. **Click of the document you want to download.**
5. **Select the format for the file you want to download, and then click [Download].**

   The data will be downloaded.

6. **Click [OK].**

Note

- You can change the format of the list. Click the (Thumbnails), (Icons), or (Details).

- To download a color document saved using the copy or printer function as a Multi-page TIFF file, you must convert it to monochrome.
- You can select [JPEG] only for files that are full color or gray scale and compressed using the scanner function.
- If you are using Internet Explorer 8, downloading will be slower than with other browsers. To download faster with Internet Explorer 8, open the browser's [Internet Options] menu and register the machine's URL as a trusted site. Then disable SmartScreen filter for trusted sites. For details about these settings, see the Internet Explorer 8 Help files.

Registering Frequently Used Functions for Printing Stored Documents from the Document Server

You can store frequently used Document Server print job settings in the machine memory and recall them for future use.

The settings you can store are as follows:

- The number of prints
- 2 Sided Copy, Booklet, Magazine
- Finishing (Sort, Rotate Sort, Stack, Staple, Punch)
- Cover/Slip Sheet (Front Cover, Front/Back Cover, Designate / Chapter, Slip Sheet)
- Edit / Stamp (Margin Adj., Stamp)

For details about how to store these settings, see “Registering Frequently Used Functions”.

Reference

- p.101 "Registering Frequently Used Functions"

Changing the Default Functions of the Document Server's Initial Display

You can configure the settings of the initial document print screen or the initial scan original screen.

The initial document print screen appears when [To Printing Screen] on the document selection screen is pressed. The initial scan original screen appears when [Scan Original] on the document selection screen is pressed.

The functions you can specify as the default functions of the initial screens are as follows:

- Initial document print screen

  Finishing, Cover/Slip Sheet, Edit / Stamp, 2 Sided Copy, Booklet, Magazine, number of prints

- Initial scan original screen

  Color mode, Paper Tray, Original Type, Density, Special Original, Original Orientation, Edit / Color, Duplex/Combine, Reduce / Enlarge

For details about how to configure the default functions displayed on the initial document print screen, see “Changing the Default Functions of the Copy's Initial Display”.

To configure the default functions displayed on the initial scan original screen, press the [Program] key and then press [Program].

Reference

- p.105 "Changing the Default Functions of the Copy's Initial Display"

6. Copier and Document Server Features

This chapter describes user tools in the Copier / Document Server Features menu.

Accessing User Tools

This section describes how to access User Tools menu.

User Tools allow you to change or set defaults.

Note

- Operations for system settings differ from normal operations. Always quit User Tools when you have finished. For details about how to end User Tools, see “Quitting User Tools”.
- Any changes you make with User Tools remain in effect even if the main power switch or operation switch is turned off, or the [Energy Saver] or [Clear Modes] key is pressed.

Reference

- p.218 "Quitting User Tools"

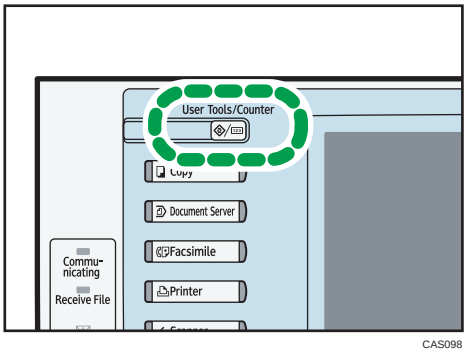
Changing Default Settings

This section describes how to change the settings of User Tools.

Important

- **If the Administrator Authentications Management is specified, contact your administrator.**

1. **Press the [User Tools/Counter] key.**



CAS098

2. **Press [Copier / Document Server Features].**
3. **Select the user tool you want to change.**
4. **Change settings by following instructions on the display, and then press [OK].**

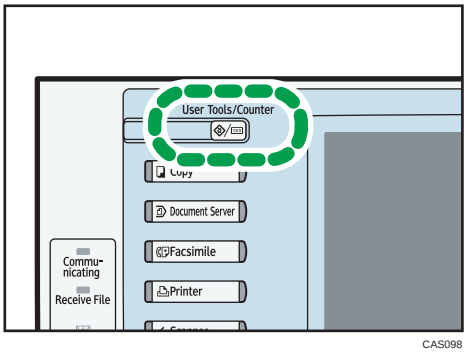
Note

- To cancel changes made to settings and return to the initial display, press the [User Tools/Counter] key.

Quitting User Tools

This section describes how to quit the settings of User Tools.

1. **Press the [User Tools/Counter] key.**



CAS098

Note

- You can also quit User Tools by pressing [Exit].

General Features

This section describes the user tools in the General Features menu under Copier / Document Server Features.

Auto Image Density Priority

You can set whether Auto Image Density is "On" or "Off" when the machine is turned on, reset, or modes are cleared.

Default for "Full Color: Photo": **[Off]**

Default for "Full Color: Non-photo": **[Off]**

Default for "B & W: Photo": **[Off]**

Default for "B & W: Non-photo": **[On]**

Original Type Priority

You can select the original type effective when the power is turned on, or modes cleared.

Default for "Full Color": **[Text / Photo]**

Default for "B & W": **[Text / Photo]**

Original Photo Type Priority

You can specify which original photo type has priority when you select "Text / Photo" or "Photo".

Default for "Text / Photo": **[Printed Photo]**

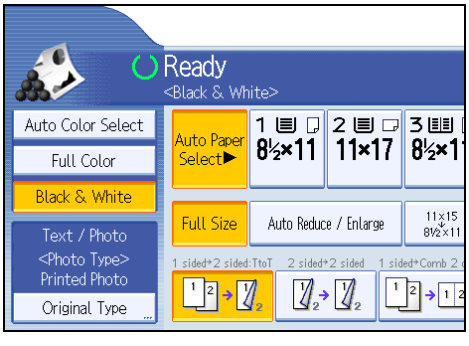
Default for "Photo": **[Printed Photo]**

Original Type Display

You can have the original types shown on the initial display.

Default: **[Display]**

If you select "Hide", the display is as below.



Paper Display

Choose to have the available paper trays and sizes shown on the initial display.

Default: **[Display]**

If you select “Hide”, the display is shown as below.

Press [Auto Paper Select] to display paper sizes.

Original Orientation in Duplex Mode

You can set the orientation of the originals when copying two-sided originals.

Default: **[Top to Top]**

Copy Orientation in Duplex Mode

You can set the orientation of the copies when making two-sided copies.

Default: **[Top to Top]**

Max. Copy Quantity

The maximum copy quantity can be set between 1 and 999.

Default: **[999 sheet(s)]**

Auto Tray Switching

If you load paper of the same size in two or more trays, the machine automatically shifts to the other when the first tray runs out of paper (when Auto Paper Select is selected). This function is called “Auto Tray Switching”. This setting specifies whether to use Auto Tray Switching or not.

Default: **[With Image Rotation]**

- With Image Rotation

  Use to copy when using the Auto Tray Switching function.

- Without Image Rotation

  Only copies with Auto Tray Switching if you load paper of the same size and in the same orientation in two or more trays. If the paper is not the same size and in the same orientation, copying is interrupted and the message "Load paper." is displayed.

- Off

  When a paper tray runs out of paper, copying is interrupted and the message "Load paper." is displayed.

Alert Sound: Original left on Exposure Glass

You can set whether to use a buzzer to alert you when you forget to remove an original.

Default: **[On]**

If Panel Key Sound of General Features (System Settings) during system settings is set to "Off", this function is invalidated even if it is set to "On".

Job End Call

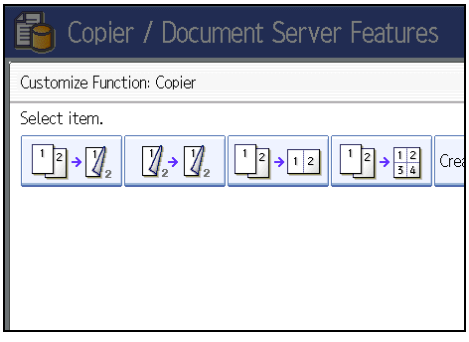
You can set whether to generate a buzzer sound ("pi") when a copy is completed.

If Panel Key Sound of General Features (System Settings) is "Lowest", "Low", "Medium", or "High", the machine beeps to notify you that it did not complete a job for reasons such as copying was interrupted, the paper tray ran out of paper, or a paper jam occurred.

Default: **[On]**

Customize Function: Copier

You can assign up to six frequently-used functions to Copy Function keys.



Default for "Customize Function: Copier 1": **[1 sided → 2 sided: TtoT]**

Default for "Customize Function: Copier 2": **[2 sided → 2 sided]**

Default for "Customize Function: Copier 3": **[1 sided → Comb 2 orig]**

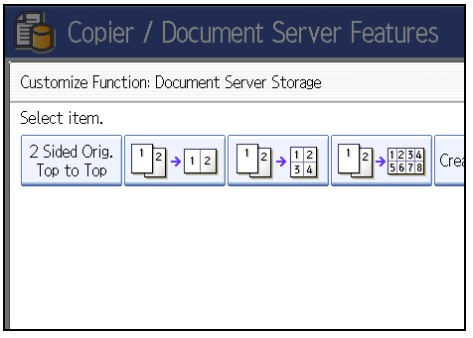
Default for "Customize Function: Copier 4": **[1 sided → Comb 4 orig]**

Default for "Customize Function: Copier 5": **[Create Margin]**

Default for "Customize Function: Copier 6": **[Off]**

Customize Function: Document Server Storage

You can assign up to six frequently-used functions for scanning documents on the Document Server Storage keys.



Default for "Customize Function: Document Server Storage 1": **[2 Sided Orig. Top to Top]**

Default for "Customize Function: Document Server Storage 2": **[1 sided → Comb 2 orig]**

Default for "Customize Function: Document Server Storage 3": **[1 sided → Comb 4 orig]**

Default for "Customize Function: Document Server Storage 4": **[1 sided → Comb 8 orig]**

Default for "Customize Function: Document Server Storage 5": **[Create Margin]**

Default for "Customize Function: Document Server Storage 6": **[Off]**

Reproduction Ratio

This section describes the user tools in the Reproduction Ratio menu under Copier / Document Server Features.

Shortcut Reduce/Enlarge

You can register up to three frequently used Reduce/Enlarge ratios other than the fixed Reduce/Enlarge ratio and have them shown on the initial display.

You can also change registered Reduce/Enlarge ratios.

When you select [User Reduce/Enlarge Ratio], the ratio can be set from 25 to 400%, using the number keys.

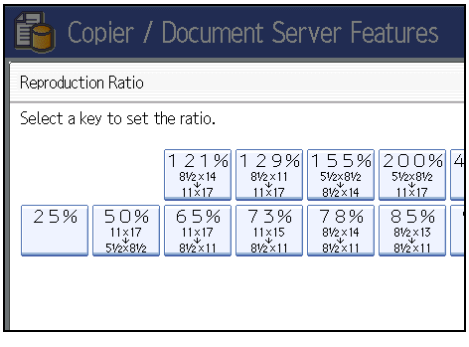
Default for "F1": **[73%]**

Default for "F2": **[155%]**

Default for "F3": **[93%]**

Reproduction Ratio

You can specify the enlargement and reduction ratios that appear if [Reduce / Enlarge] is pressed on the copier screen.



- 25%
- 11 × 17 → $5^1/_2$ × $8^1/_2$ (50%)
- 11 × 17 → $8^1/_2$ × 11 (65%)
- 11 × 15 → $8^1/_2$ × 11 (73%)
- $8^1/_2$ × 14 → $8^1/_2$ × 11 (78%)
- $8^1/_2$ × 13 → $8^1/_2$ × 11 (85%)
- 93%
- $8^1/_2$ × 14 → 11 × 17 (121%)
- $8^1/_2$ × 11 → 11 × 17 (129%)
- $5^1/_2$ × $8^1/_2$ → $8^1/_2$ × 14 (155%)
- $5^1/_2$ × $8^1/_2$ → 11 × 17 (200%)

- 400%
- User Reduce/Enlarge Ratio (25 - 400%)

Reduce/Enlarge Ratio Priority

You can set the ratio with priority when [Reduce / Enlarge] is pressed.

Default: **[65%]**

Ratio for Create Margin

You can set a Reduce/Enlarge ratio when registering Create Margin in a shortcut key.

Enter a ratio using number keys (in the range of 90 to 99%).

Default: **[93%]**

Edit

This section describes the user tools in the Edit menu under Copier / Document Server Features.

Enter the width of the binding margin with the number keys as follows:

- 0 ~ 1.2 inches (in increments of 0.1 inch)

Enter the width of the erased margin with the number keys as follows:

- 0.1 ~ 3.9 inches (in increments of 0.1 inch)

An image of approximately 1.5 mm (0.06 inch) will not be displayed as the width of the separation line, when specifying solid or broken lines.

Front Margin: Left / Right

Specify left and right margins on the front side of copies in Margin Adjustment mode.

Default: **[Left: 0.2 inch]**

Back Margin: Left / Right

Specify left and right margins on the back side of copies in Margin Adjustment mode.

Default: **[Right: 0.2 inch]**

Front Margin: Top / Bottom

Specify top and bottom margins on the front side of copies in Margin Adjustment mode.

Default: **[T / B: 0.0 inch]**

Back Margin: Top / Bottom

Specify top and bottom margins on the back side of copies in Margin Adjustment mode.

Default: **[T / B: 0.0 inch]**

1 Sided → 2 Sided Auto Margin: TtoT

In 1 sided → 2 sided Duplex mode, you can specify the margins on the back side.

The margin is set to the same value of "Back Margin: Left/Right".

Default: **[Right: 0.2 inch]**

1 Sided → 2 Sided Auto Margin: TtoB

In 1 sided → 2 sided Duplex mode, you can specify the margins on the back side.

The value set for "Back Margin: Top/Bottom" is used.

Default: **[T / B: 0.0 inch]**

Erase Border Width

Specify the width for erasing border.

Default: **[0.4 inch]**

Erase Original Shadow in Combine

In Combine mode, you can specify whether to erase a 3 mm, 0.1 inch boundary margin around all four edges of each original.

Default: **[On]**

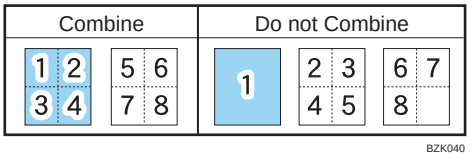
Erase Center Width

Specify the width of the erased center margins with this function.

Default: **[0.4 inch]**

Front Cover Copy in Combine

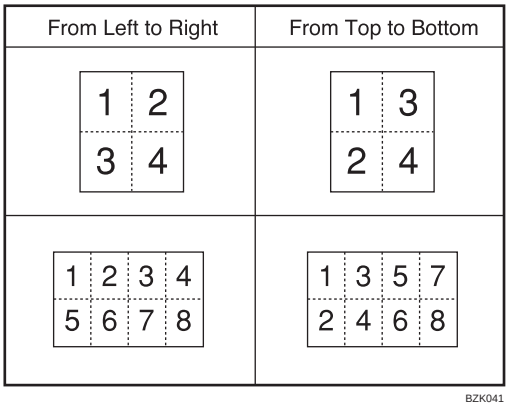
You can make a combined copy on the front cover sheet when you select Front Cover mode.



Default: **[Combine]**

Copy Order in Combine

You can set the copy order in Combine mode to From Left to Right or From Top to Bottom.



Default: **[From Left to Right]**

Orientation: Booklet, Magazine

Select the opening orientation of copies made using Booklet or Magazine mode.

Default: **[Open to Left]**

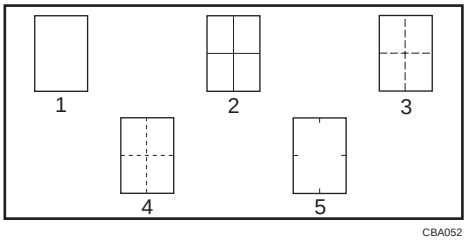
Copy on Designating Page in Combine

Specify whether to make a combined copy on the inserted slip sheets in Desig./Chapter mode.

Default: **[Combine]**

Image Repeat Separation Line

You can select a separation line using the Image Repeat function from: None, Solid, Broken A, Broken B, or Crop Marks.



CBA052

1. **None**
2. **Solid**
3. **Broken A**
4. **Broken B**
5. **Crop Marks**

Default for "Type of Separation Line": **[None]**

In "Full Color", you can also select the color of the separation line.

Default for "Color of Separation Line in Full Color": **[Black]**

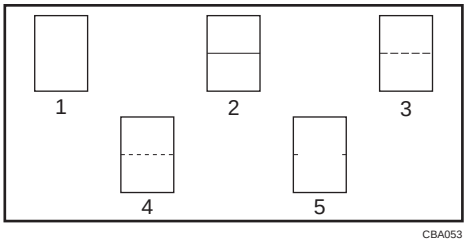
Separation line color cannot be specified when selecting [None].

In "Black & White", printing will be done in black.

Selecting solid or broken lines might produce a blank area of approximately 1.5 mm (0.06 inch) in width along the separation line.

Double Copies Separation Line

You can select a separation line using the Double Copies function from: None, Solid, Broken A, Broken B, or Crop Marks.



CBA053

1. **None**
2. **Solid**
3. **Broken A**
4. **Broken B**

5. **Crop Marks**

Default for "Type of Separation Line": **[None]**

In "Full Color", you can also select the color of the separation line.

Default for "Color of Separation Line in Full Color": **[Black]**

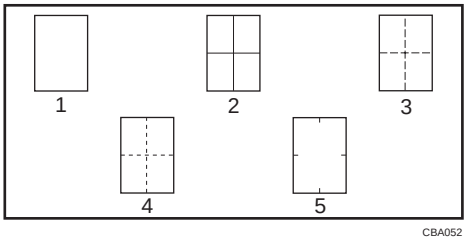
Separation line color cannot be specified when selecting [None].

In "Black & White", printing will be done in black.

Selecting solid or broken lines might produce a blank area of approximately 1.5 mm (0.06 inch) in width along the separation line.

Separation Line in Combine

You can select a separation line using the Combine function from: None, Solid, Broken A, Broken B, or Crop Marks.



CBA052

1. **None**
2. **Solid**
3. **Broken A**
4. **Broken B**
5. **Crop Marks**

Default for "Type of Separation Line": **[None]**

In "Full Color", you can also select the color of the separation line.

Default for "Color of Separation Line in Full Color": **[Black]**

Separation line color cannot be specified when selecting [None].

In "Black & White", printing will be done in black.

Selecting solid or broken lines might produce a blank area of approximately 1.5 mm (0.06 inch) in width along the separation line.

Stamp

This section describes the user tools in the Stamp menu under Copier / Document Server Features.

Background Numbering

This section describes the user tools in the Background Numbering menu under Stamp.

Size

You can set the size of the numbers.

Default: **[Normal]**

Density

You can set the density of the numbers.

Default: **[Normal]**

Stamp Color

You can set the color of the numbers.

Default: **[Black]**

Preset Stamp

This section describes the user tools in the Preset Stamp menu under Stamp.

Stamp Language

You can select the language of the message printed in Stamp mode.

- English, German, French, Italian, Spanish, Dutch, Portuguese, Polish, Czech, Swedish, Finnish, Hungarian, Norwegian, Danish, Russian, Japanese, Simplified Chinese, Traditional Chinese, Hangul, Catalan, Turkish

Default: **[English]**

Stamp Priority

You can select the stamp type given priority when [Preset Stamp] is pressed.

Default: **[COPY]**

Stamp Format

Specify how each of stamps is printed.

- Stamp Position

  Specify where to print the stamp.

  Default: **[Top Right]**

- Adjust Stamp Position

  You can adjust the print position of the stamp within the available ranges shown below.

  "Top Left" T/B: 0.1 - 5.7 inches, L/R: 0.1 - 5.7 inches

  "Top Center" T/B: 0.1 - 5.7 inches, L/R: 2.8 - 2.8 inches

  "Top Right" T/B: 0.1 - 5.7 inches, L/R: 0.1 - 5.7 inches

  "Center Left" T/B: 2.8 - 2.8 inches, L/R: 0.1 - 5.7 inches

  "Center" T/B: 2.8 - 2.8 inches, L/R: 2.8 - 2.8 inches

  "Center Right" T/B: 2.8 - 2.8 inches, L/R: 0.1 - 5.7 inches

  "Bottom Left" T/B: 0.1 - 5.7 inches, L/R: 0.1 - 5.7 inches

  "Bottom Center" T/B: 0.1 - 5.7 inches, L/R: 2.8 - 2.8 inches

  "Bottom Right" T/B: 0.1 - 5.7 inches, L/R: 0.1 - 5.7 inches

- Size

  You can set the size of the stamp.

  Default: **[1 X]**

- Density

  You can set the pattern used to print the stamp.

  Default: **[Normal]**

  - Normal

    The stamp is printed on the image. You cannot check which parts will overlap.

  - Lighter

    The image can be seen through the stamp.

  - Lightest

    The image appears even clearer than in the Lighter setting.

- Page to Stamp

  You can have the stamp printed on the first page or all pages.

  Default: **[All Pages]**

Stamp Color

Sets the stamp print color.

Default: **[Black]**

User Stamp

This section describes the user tools in the User Stamp menu under Stamp.

Program / Delete Stamp

You can register, change, or delete user stamps.

You can register up to four custom stamps with your favorite designs.

For details about how to program the user stamp, see “User Stamp”.

Stamp Format:1 - 4

Specify how each of registered user stamps 1 to 4 is printed.

- Stamp Position

  Specify where to print the user stamp.

  Default: **[Top Right]**

- Adjust Stamp Position

  You can adjust the position of the user stamp within the available ranges shown below.

  “Top Left” T/B: 0.1 - 5.7 inches, L/R: 0.1 - 5.7 inches

  “Top Center” T/B: 0.1 - 5.7 inches, L/R: 2.8 - 2.8 inches

  “Top Right” T/B: 0.1 - 5.7 inches, L/R: 0.1 - 5.7 inches

  “Center Left” T/B: 2.8 - 2.8 inches, L/R: 0.1 - 5.7 inches

  “Center” T/B: 2.8 - 2.8 inches, L/R: 2.8 - 2.8 inches

  “Center Right” T/B: 2.8 - 2.8 inches, L/R: 0.1 - 5.7 inches

  “Bottom Left” T/B: 0.1 - 5.7 inches, L/R: 0.1 - 5.7 inches

  “Bottom Center” T/B: 0.1 - 5.7 inches, L/R: 2.8 - 2.8 inches

  “Bottom Right” T/B: 0.1 - 5.7 inches, L/R: 0.1 - 5.7 inches

- Page to Stamp

  Sets whether to print the stamp on all pages or only the first page.

  Default: **[All Pages]**

Stamp Color: 1 - 4

Sets the priority of the colors selected for user stamp (1 to 4).

Default: **[Black]**

Reference

- p.143 "User Stamp"

Date Stamp

This section describes the user tools in the Date Stamp menu under Stamp.

Format

You can select the date format for Date Stamp mode.

Default: **[MM / DD / YYYY]**

Font

You can select the date stamp font.

Default: **[Font 1]**

Size

You can set the date stamp size.

Default: **[Auto]**

Superimpose

You can have the date stamp printed in white when it overlaps black parts of the image.

Default: **[Off]**

Stamp Color

Sets the selected priority color when printing the date.

Default: **[Black]**

Stamp Setting

Specify how the date stamp is printed.

- Stamp Position

  Specify where to print the date stamp.

  Default: **[Top Left]**

- Adjust Stamp Position

  You can adjust the position of the date stamp within the available ranges shown below.

  "Top Left" T/B: 0.1 - 5.7 inches, L/R: 0.1 - 5.7 inches

  "Top Center" T/B: 0.1 - 5.7 inches, L/R: 2.8 - 2.8 inches

  "Top Right" T/B: 0.1 - 5.7 inches, L/R: 0.1 - 5.7 inches

  "Bottom Left" T/B: 0.1 - 5.7 inches, L/R: 0.1 - 5.7 inches

  "Bottom Center" T/B: 0.1 - 5.7 inches, L/R: 2.8 - 2.8 inches

  "Bottom Right" T/B: 0.1 - 5.7 inches, L/R: 0.1 - 5.7 inches

- Page to Stamp

  Sets whether to print the stamp on all pages or only the first page.

  Default: **[All Pages]**

Page Numbering

This section describes the user tools in the Page Numbering menu under Stamp.

Stamp Format

You can select the page number format given priority when [Page Numbering] is pressed.

Default: **[P1,P2...]**

Font

You can select the font in Page Numbering mode.

Default: **[Font 1]**

Size

You can set the size of the stamp printed in Page Numbering mode.

Default: **[Auto]**

Duplex Back Page Stamping Position

You can set the position of the duplex back page number printed in Duplex mode.

Default: **[Opposite Position]**

Page Numbering in Combine

You can set page numbering when using the Combine function and the Page Numbering function together.

Default: **[Per Original]**

Stamp on Designating Slip Sheet

You can select whether or not to print the page number onto slip sheets when using the Designate function set to "Copy" and the Page Numbering function together.

Default: **[Off]**

Stamp Position

Specify how each of stamps is printed.

- Stamp Position

  Specify where to print the stamp.

  Default for the patterns of "P1,P2...", "1/5,2/5...", "P.1,P.2...", and "1,2...": **[Top Right]**

  Default for the patterns of "-1-,-2-..." and "1-1,1-2...": **[Bottom Center]**

- Adjust Stamp Position

  You can adjust the position of the stamp within the available ranges shown below.

  "Top Left" T/B: 0.1 - 5.7 inches, L/R: 0.1 - 5.7 inches

  "Top Center" T/B: 0.1 - 5.7 inches, L/R: 2.8 - 2.8 inches

  "Top Right" T/B: 0.1 - 5.7 inches, L/R: 0.1 - 5.7 inches

"Bottom Left" T/B: 0.1 - 5.7 inches, L/R: 0.1 - 5.7 inches

"Bottom Center" T/B: 0.1 - 5.7 inches, L/R: 2.8 - 2.8 inches

"Bottom Right" T/B: 0.1 - 5.7 inches, L/R: 0.1 - 5.7 inches

Superimpose

You can have page numbers printed in white when they overlap black parts of the image.

Default: **[Off]**

Stamp Color

Sets the priority of the colors selected for the page numbers.

Default: **[Black]**

Page Numbering Initial Letter

You can select the page numbering initial letter between "P1,P2.../P.1,P.2..." and "S1,S2.../S.1,S.2...".

Default: **[P1,P2.../P.1,P.2...]**

Input / Output

This section describes the user tools in the Input / Output menu under Copier / Document Server Features.

Switch to Batch

You can select to have Batch mode or SADF mode displayed when you press [Special Original].

Default: **[Batch]**

SADF Auto Reset

In SADF mode, an original must be set within a specified time after the previous original has been fed.

Default: **[5 seconds]**

You can adjust this time from 3 to 99 seconds in increments of 1 second.

Rotate Sort: Auto Paper Continue

Specify whether or not the machine continues copying when paper of the required orientation runs out during rotate sort.

Default: **[Off]**

- On

  Copying continues using copy paper of a different orientation. The copy job will finish even if you have left the machine.

- Off

  When paper of the required orientation runs out, the machine stops copying and prompts you to supply copy paper. After you have loaded paper, the machine will continue copying.

Memory Full Auto Scan Restart

When memory becomes full while scanning originals, the machine can make copies of scanned originals first, and then automatically proceed scanning remaining originals.

Default: **[Off]**

- On

  You can leave the machine unattended to make copies, but sorted pages will not be sequential.

- Off

  When memory becomes full, the machine stops operation allowing you to remove the copy pages delivered on the output tray.

Letterhead Setting

If you select [Yes] in this function, the machine rotates the image correctly.

Default: **[No]**

Orientation-fixed (top to bottom) or two-sided paper might not be printed correctly depending on how the originals and paper are placed.

Staple Position

Specify which staple type has priority to be shown on the initial display.

- When Finisher SR790 is installed:

  Default for "Staple Position 1": **[Staple: Top 1]**

  Default for "Staple Position 2": **[Staple: Bottom 1]**

  Default for "Staple Position 3": **[Staple: Left 2]**

  Default for "Staple Position 4": **[Staple: Top 2]**

- When Finisher SR3050 is installed: (Type 1 and 2)

  Default for "Staple Position 1": **[Staple: Slant]**

  Default for "Staple Position 2": **[Staple: Bottom Slant]**

  Default for "Staple Position 3": **[Staple: Left 2]**

  Default for "Staple Position 4": **[Staple: Top 2]**

- When Booklet Finisher SR3000 is installed: (Type 1 and 2)

  Default for "Staple Position 1": **[Staple: Top 1]**

  Default for "Staple Position 2": **[Staple: Center]**

  Default for "Staple Position 3": **[Staple: Left 2]**

  Default for "Staple Position 4": **[Staple: Top 2]**

- When Finisher SR3030 is installed: (Type 3 and 4)

  Default for "Staple Position 1": **[Staple: Top 1]**

  Default for "Staple Position 2": **[Staple: Slant]**

  Default for "Staple Position 3": **[Staple: Left 2]**

  Default for "Staple Position 4": **[Staple: Top 2]**

- When Booklet Finisher SR3020 is installed: (Type 3 and 4)

  Default for "Staple Position 1": **[Staple: Top 1]**

  Default for "Staple Position 2": **[Staple: Center]**

  Default for "Staple Position 3": **[Staple: Left 2]**

  Default for "Staple Position 4": **[Staple: Top 2]**

Punch Type

Specify which punch type has priority to be shown on the initial display.

Default for "Punch Type 1": **[Punch: 3 Holes Left]**

Default for "Punch Type 2": **[Punch: 3 Holes Top]**

Simplified Screen: Finishing Types

You can select which key is displayed with higher priority for "Finishing Types" on the Simplified Screen.

Default for "Simplified Screen: Finishing Types 1": **[Do not Display]**

Default for "Simplified Screen: Finishing Types 2": **[Do not Display]**

Default for "Simplified Screen: Finishing Types 3": **[Do not Display]**

Adjust Color Image

This section describes the user tools in the Adjust Color Image menu under Copier/Document Server Features.

Background Density of ADS (Full Color)

The background density is adjusted to skip the texture and copy. You can adjust the background density up to five levels when in Full Color.

The default setting is the middle of five adjustment levels.

Color Sensitivity

You can adjust the color specified to convert in "Convert Color" and the color specified for "Erase Color", in five levels.

The default setting is the middle of five adjustment levels.

When the color width has been set to "Wider", and the color to be deleted, for example is red, all the colors that are close to magenta and orange are deleted. If it's set to "Narrower" the color red will be deleted.

A.C.S. Sensitivity

This five-step setting determines the level of the standard used for discriminating between black & white originals and full color originals when "Auto Color Select" is selected.

The default setting is the middle of five adjustment levels.

A.C.S. Priority

This setting determines the copy priority between "Black & White" and "Full Color" when "Auto Color Select" is selected.

Default: **[Full Color]**

Administrator Tools

This section describes the User Tools in the Administrator Tools menu under Copier / Document Server Features.

Menu Protect

You can prevent unauthenticated users from changing the user tools settings.

For details, consult the administrator.

7. Appendix

This chapter describes the copy machine's specifications and the function compatibility.

Function Compatibility

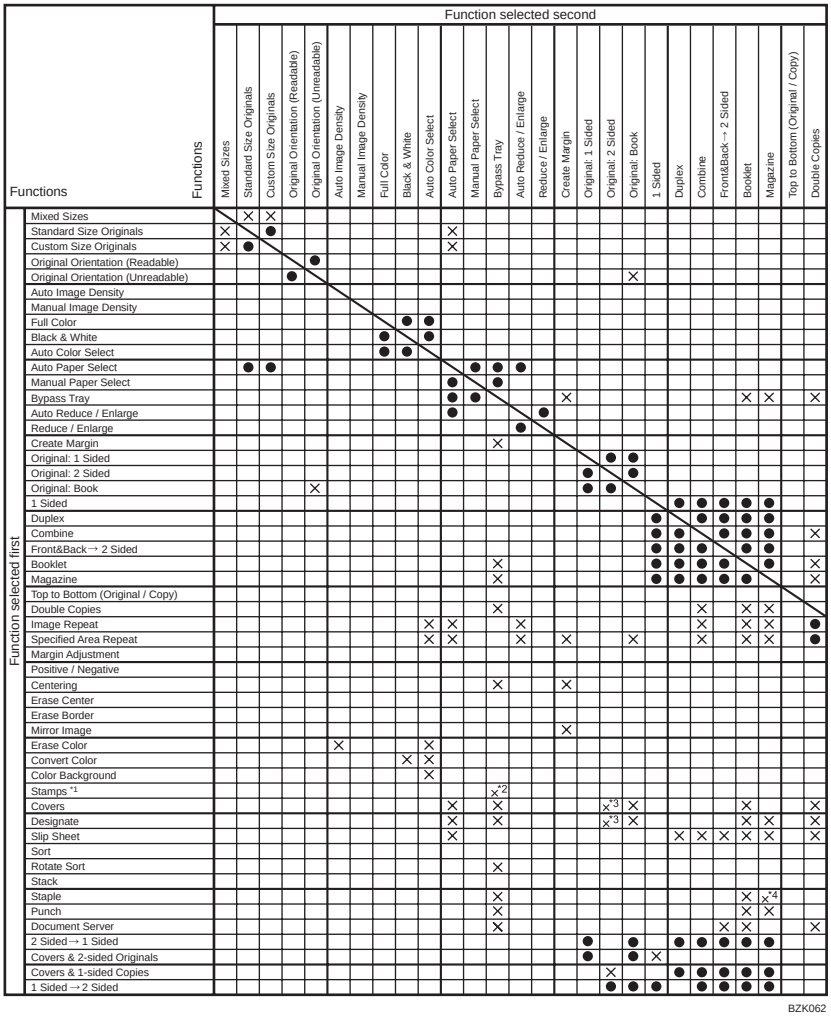
The combination chart given below shows which modes can be used together.

Blank: These modes can be used together.

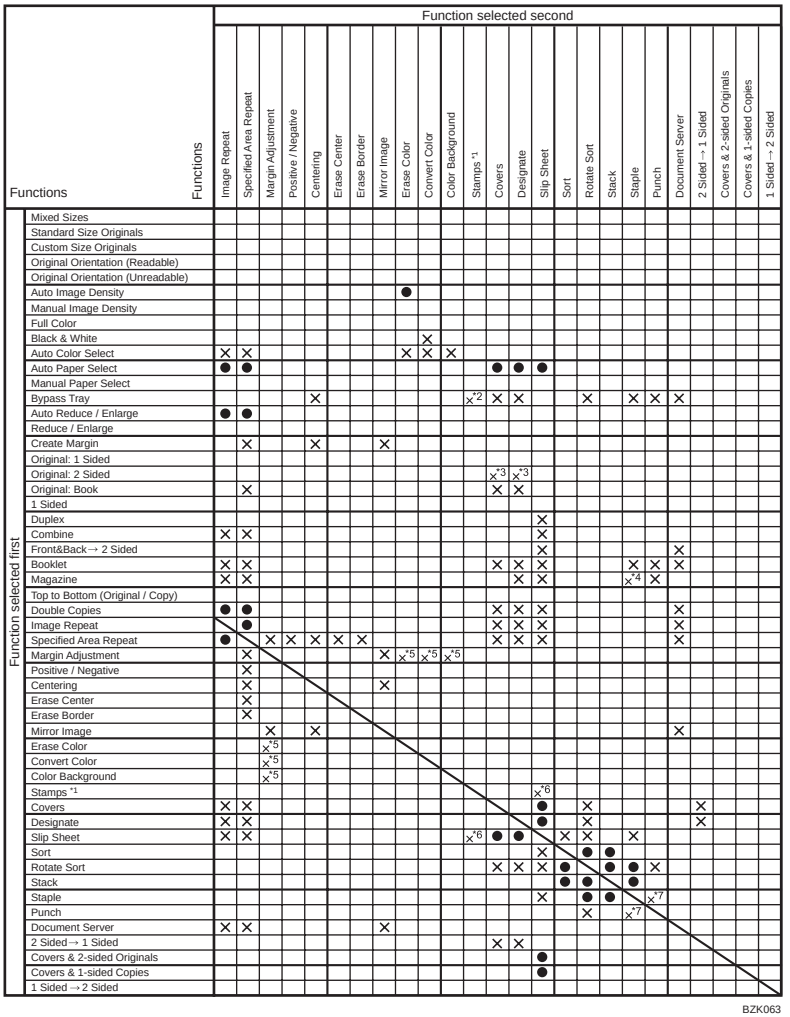
×: These modes cannot be used together. The first mode selected will be the mode you are working in.

●: These modes cannot be used together. The second mode selected will be the mode you are working in.

The following shows the combinations of functions:



BZK062



BZK063

*1 Stamps include Background Numbering, Preset Stamp, User Stamp, Date Stamp, and Page Numbering.

The following combinations are not possible:

*2 Preset Stamp, User Stamp, Date Stamp, or Page Numbering with Bypass Tray

*3 Front Cover, Front/Back Cover, or Designate with 2 Sided → 1 Sided

*4 Top 1/Slant/Bottom Slant/Bottom 1/Left2/Top 2 of Staple with Magazine

*5 You can use these combinations, but the functions indicated will not be applied to the binding margin.

*6 Background Numbering with Slip Sheet

*7 Top 2 of Staple with Left 2/Left 3 of Punch, Center of Staple with Left 2/Left 3 of Punch, Center of Staple with Top 2/Top 3 of Punch, or Bottom 1/Slant/Left 2 of Staple with Top 2/Top 3 of Punch

Trademarks

Windows® is either a registered trademark or a trademark of Microsoft Corporation in the United States and /or other countries.

Adobe, Acrobat, Acrobat Reader, PostScript, and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

UNIX is a registered trademark in the United States and other countries, licensed exclusively through X/Open Company Limited.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights to those marks.

INDEX

1 Sided 2 Sided Auto Margin TtoB.....225
1 Sided 2 Sided Auto Margin TtoT.....225

A

A.C.S. Priority.....238
A.C.S. Sensitivity.....238
Accessing User Tools.....217
ADF.....16, 21, 22, 23, 29
Adjust Color.....12, 115
Adjust Color Image.....238
Adjust U.C.R.....116, 119
Adjusting colors.....12, 112
Adjusting colors based on the selected color.....121
Adjusting copy image density.....125
Adjusting image qualities.....13, 112
Administrator Tools.....239
Alert Sound Original left on Exposure Glass.....220
ARDF.....16
Auto Color Select.....107
Auto document feeder.....16, 22
Auto Image Density.....125
Auto Image Density Priority.....219
Auto Paper Select.....23, 129
Auto Reduce/Enlarge.....60
Auto reverse document feeder.....16
Auto Start.....41
Auto Tray Switching.....220
Available color functions.....9

B

Back Cover.....181
Back Margin Left / Right.....225
Back Margin Top / Bottom.....225
Background Density.....13, 116, 118
Background Density of ADS (Full Color).....238
Background Numbering.....11, 139, 229
Base point of Reduce/Enlarge.....55
Basic procedure.....39
Batch.....32
Binding margin.....160
Black & White.....9, 107
Booklet.....177
Booklet/Magazine.....177
Border Erase.....161
Bypass tray.....43, 45, 46

C

Center Erase.....161
Centering.....172
Changing a stored program.....102
Changing default settings.....217
Changing the color balance.....114
Changing the default functions.....105
Changing the file name.....201
Changing the number of print copies.....208
Changing the number of sets.....80
Changing the order of jobs.....98
Changing the password.....202
Changing the user color name.....123
Chapters.....186
Checking the contents of jobs.....97
Checking the details of a stored document.....202
Checking the job history.....100
Color Background.....9, 111
Color Balance.....12, 112
Color Balance Program.....113
Color functions.....107
Color Sensitivity.....238
Combine.....66
Combined auto and manual image density.....126
Contrast.....13, 116, 118
Convert Colors.....9, 108
Copier functions.....160, 191
Copy on Designating Page in Combine.....226
Copy Order in Combine.....226
Copy Orientation in Duplex Mode.....220
Copying.....39
Copying from the bypass tray.....43
Copying onto envelopes.....50, 53
Copying onto OHP transparencies.....48
Copying onto thick paper.....49
Copying onto thin paper.....48
Copying originals of various sizes.....34
Covers.....181

Create Margin.....138
Creating colors by specifying the density.....122
Custom size originals.....36
Custom size paper.....46
Customize Function Copier.....221
Customize Function Document Server Storage.....
.....221

D

Date.....151
Date format.....151
Date Stamp.....11, 149, 231
Default settings.....105, 214
Deleting a stored document.....211
Deleting a stored program.....103
Deleting jobs.....99
Deleting the color balance.....115
Deleting the user stamp.....148
Deleting user colors.....123
Density.....229
Designate.....184
Detectable original sizes.....23
Directional Magnification.....133, 134
Directional Size Magnification (mm).....136
Display panel.....19
Displaying stored documents.....212
Document Server.....94, 191, 214
Document Server Display.....192
Double Copies.....171
Double Copies Separation Line.....227
Downloading stored documents.....213
Duplex.....62
Duplex Back Page Stamping Position.....233

E

Edit.....225
Enlarging originals.....55
Erase.....161
Erase Border.....163, 164, 165, 166
Erase Border Width.....225
Erase Center.....164, 165, 166
Erase Center / Border.....161, 165, 166
Erase Center Width.....226
Erase Color.....109
Erase Original Shadow in Combine.....226
Erase Specified Color.....9
Exposure glass.....21, 23, 28

F

Facsimile functions.....191
Finishing.....74
First Printing Number.....156, 157, 158
First Printing Page.....156, 157, 158
Folding copies to make a booklet.....177
Folding copies to make a magazine.....177
Font.....232, 233
Format.....232
Frequently used functions.....101, 214
Front Cover.....181
Front Cover Copy in Combine.....226
Front Margin Left / Right.....225
Front Margin Top / Bottom.....225
Full Color.....9, 107
Function compatibility.....241

G

General Features.....219
Generation Copy.....127

H

Holding jobs.....98
How to read this manual.....15

I

Image density.....125
Image position of Combine.....66
Image Repeat.....167
Image Repeat Separation Line.....227
Important.....8
Initial display.....19, 105, 192, 214
Input / Output.....235
Interrupt Copy.....40
Interrupting a print job.....208
Invert.....173
Item.....16

J

Job End Call.....221
Job List screen.....96

Job Order....96
Job Preset....41

L

Large capacity tray....16
Last Number....156, 157
Laws....17
LCT....16
Left Original Beeper....28
Legal prohibition....17
Letterhead Setting....235

M

Machine types....15
Magazine....177
Managing jobs....96
Manual Image Density....125
Manual Paper Select....130
Manuals for this machine....6
Map....127
Margin Adjustment....160
Max. Copy Quantity....220
Memory Full Auto Scan Restart....235
Menu Protect....239
Mirror Image....174
Missing image area....25
Mixed Sizes....34

N

Names of major items....16
New job....41
Non-compatible originals....22
Notes....16
Notice....8

O

OHP transparencies....48
One-Sided Combine....66
Options....18
Orientation
Booklet, Magazine....226
Original orientation....26, 140, 143, 149, 152
Original orientation and completed copies....62
Original Orientation in Duplex Mode....220
Original Photo Type Priority....219
Original size....21
Original type....127
Original Type Display....219
Original Type Priority....219
Original weight....21
Originals....21
Originals and copy orientation....65

P

Page Numbering....11, 152, 233
Page Numbering in Combine....233
Page Numbering Initial Letter....234
Pale....127
Paper Display....219
Photo....127
Placing originals....21, 26
Placing originals in the ADF....29
Placing originals of different sizes....34
Placing originals on the exposure glass....28
Positive/Negative....173
Preset Reduce/Enlarge....55
Preset Stamp....11, 140, 229
Preview Display....194
Primary colors....9
Printer functions....191
Printing a list of user colors....123
Printing a specified page....210
Printing a specified range....210
Printing stored documents....205
Printing the first page....209
Program....101, 105
Program/Delete Stamp....231
Punch....18, 74, 90
Punch hole positions....90
Punch Type....236

Q

Quitting User Tools....218

R

Ratio for Create Margin....224
Readable orientation....26
Recalling a stored program....103
Recalling the color balance....114

Recalling the registered custom size.....47
Recommended originals.....21
Reduce/Enlarge.....132
Reduce/Enlarge Ratio Priority.....224
Reducing originals.....55
Registering a custom size.....47
Registering a user stamp.....146
Registering functions.....101
Registering the color balance.....113
Regular size originals.....35
Regular size paper.....45
Regulations.....17
Repeat.....167
Reproduction Ratio.....223
Rotate copy.....130
Rotate Sort
Auto Paper Continue.....235

S

SADF.....33
SADF Auto Reset.....235
Sample Copy.....79
Sample print.....209
Scanner functions.....191
Searching by file name.....204
Searching by user name.....204
Searching for stored documents.....203
Selecting a color mode.....107
Selecting a preset ratio.....55
Selecting copy paper.....129, 130
Separation Line in Combine.....228
Series Copies.....175
Sharp / Soft.....13, 116, 117
Shift Sort.....18
Shift Stack.....80
Shortcut Reduce/Enlarge.....223
Simplified Display.....20, 193
Simplified Screen
Finishing Types.....237
Size.....229, 232, 233
Size Magnification.....132
Sizes difficult to detect.....24
Slip Sheet.....187
Small size paper tray.....53
Sort.....74
Specified Area Repeat.....167, 169
Specifying a file name.....198
Specifying a password.....199
Specifying a reproduction ratio.....57, 58
Specifying a user name.....198
Specifying original sizes.....35
Specifying the reproduction ratio.....134, 135
Stack.....18, 74, 80
Stamp.....139, 229
Stamp color.....140, 143, 146, 152, 156
Stamp Color.....229, 230, 232, 234
Stamp Color 1-4.....231
Stamp density.....143
Stamp Format.....229, 233
Stamp Format 1-4.....231
Stamp Language.....229
Stamp on Designating Slip Sheet.....233
Stamp position.....140, 143, 145, 149, 152, 156
Stamp Position.....233
Stamp Priority.....229
Stamp Setting.....232
Stamp size.....143
Stamping on copies.....11
Staple.....18, 74, 83
Staple (Center).....18
Staple Position.....236
Stapling position.....83
Storing data.....196
Storing data in the Document Server.....94
Superimpose.....232, 234
Switch to Batch.....235
Symbols.....15

T

Text.....127
Text / Photo.....127
Text / Photo Sensitivity.....116, 119
Thick paper.....49
Thin paper.....48
Trademarks.....243
Two-Sided Combine.....70

U

Unreadable orientation.....26
User Color.....120
User Stamp.....11, 143, 148, 230
Using the Document Server.....196

W

Web Image Monitor.....212, 213
Whole Area Repeat.....167, 168

Z

Zoom.....57

MEMO

MEMO

MEMO

© 2010

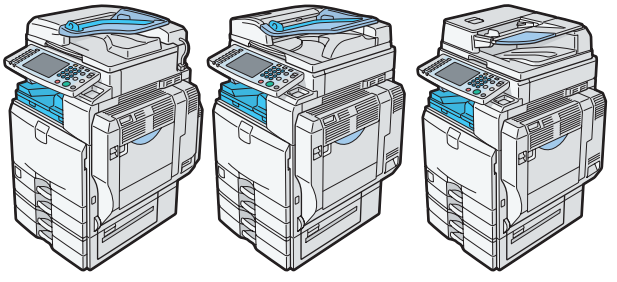
Operating Instructions

Copy and Document Server Reference

C9130/C9135/C9145/C9145A/C9155/C9155A
C9130G/C9135G/C9145G/C9145AG/C9155G/C9155AG
LD630C/LD635C/LD645C/LD645CA/LD655C/LD655CA
LD630CG/LD635CG/LD645CG/LD645CAG/LD655CG/LD655CAG
Aficio™ MP C3001/C3501/C4501/C4501A/C5501/C5501A
Aficio™ MP C3001G/C3501G/C4501G/C4501AG/C5501G/C5501AG

Operating Instructions

Facsimile Reference



1 Transmission
2 Other Transmission Features
3 Reception
4 Changing/ Confirming Communication Information
5 Storing a Document
6 Fax via Computer
7 Facsimile Features
8 Appendix

Read this manual carefully before you use this machine and keep it handy for future reference. For safe and correct use, be sure to read the Safety Information in "About This Machine" before using the machine.

TABLE OF CONTENTS

Manuals for This Machine....10
Notice....12
Important....12
How to Read This Manual....13
Symbols....13
Machine Types....13
Names of Major Items....14
Names of Major Functions....14
Notes....14
Laws and Regulations....15
Legal Prohibition....15
Notes to users in the United States of America....15
Notes to users in Canada....16
Reading the Display....17
Reading the Display Panel and Using Keys....17
Simplified Display....20

1. Transmission

Transmission Modes....23
Selecting Type of Transmission....24
Memory Transmission....26
Immediate Transmission....32
Displaying Confirmation of Transmission....34
IP-Fax Functions....36
Terminology....38
Notes on Using IP-Fax....38
Functions Not Available for IP-Fax Transmission....39
E-Mail Functions and Folder Transmission....40
Internet Fax Transmission....41
Notes on Using Internet Fax....42
Functions Not Available by Internet Fax Transmission....43
Functions Not Available by Internet Fax Reception....44
T.37 Full Mode....44
E-mail Encryption....45

E-mail Transmission....47
Functions Not Available for E-mail Transmission....48
E-mail Encryption....48
Folder Transmission....51
Functions Not Available for Folder Transmission....51
Placing Originals....53
Setting the Original Orientation....55
Scanning Two-Sided Originals....56
Acceptable Original Sizes....59
Paper Size and Scanned Area....60
Types of Original whose Sizes are Difficult to Detect....61
Transmission with Image Rotation....63
Stamp....63
Checking the Content of a Scanned Original (Preview Before Transmission)....65
Detecting Blank Sheet....67
Scan Settings....69
Original Type....69
Resolution....71
Scan Size....73
Density (Contrast)....79
Mixing Scan Settings for a Multiple Page Original....81
Selecting the File Format....82
Changing the Line Port....84
Simultaneous Broadcast Using Multiple Line Ports....86
Specifying a Destination....88
Sending over a Fax Line (Fax Destinations)....88
Sending by IP-Fax (IP-Fax Destinations)....91
Sending by Internet Fax (Internet Fax Destinations)....95
Sending an E-mail (E-mail Destinations)....101
Sending to Folder Destinations (Folder Destinations)....107
Using the Address Book to Specify Destinations....109
Specifying Group Destinations....111
International TX Mode....112

Selecting Destinations from Recent Destinations....112
Preventing Transmission to the Wrong Destination....114
Registering Destinations in the Address Book....118
Registering a Fax Destination....118
Changing a Fax Destination....121
Deleting a Fax Destination....123
Registering Destinations to the Address Book from [Prg. Dest.]....124
Registering Entered Destinations to the Address Book....125
Searching for a Destination in the Address Book....127
Search by Destination Name....127
Search by Fax Number/IP-Fax Destination....130
Search by Internet Fax Destination....132
Search by E-mail Destination....134
Search by Folder Destination....136
Search Using Advanced Search....139
Search by Registration Number....141
On Hook Dial....144
Manual Dial....146
Sender Settings....148
Advanced Features....151
Setting SUB Codes for Transmission....151
Setting SEP Codes for Reception....154
SEP Code RX Reserve Report....157
SEP Code RX Result Report....158
Canceling a Transmission....159
Before the Original Is Scanned....159
While the Original Is Being Scanned....159
While the Original Is Being Transmitted....160
Before the Transmission Is Started....162
Confirming a Transmission....166
Checking the Storage Result (Memory Storage Report)....168
Changing the Default Functions of the Fax's Initial Display....169

2. Other Transmission Features

Sending at a Specific Time (Send Later)....171
Requesting a Reception Notice....173
Setting an Internet Fax/E-mail Destination as a BCC....175
Confirming Transmission Results by E-mail....177
Entering the Subject....179
Specifying Auto-Generated Subjects for E-mail....181
Entering the Text....182
Transmission Options....184
Standard Message Stamp....184
Auto Reduce....185
Label Insertion....187
Closed Network....189
SUB Code Transmission....190
SEP Code Reception....191
Fax Header Print....193

3. Reception

Types of Reception....195
Immediate Reception....195
Memory Reception....196
Substitute Reception....196
Reception Modes....200
Manual Reception....200
Auto Reception....200
Receiving E-mail....201
Receiving Internet Fax Documents....202
Mail to Print....205
Reception Functions....207
Routing Received Documents....207
Transferring Received Documents....209
Forwarding Received Documents....210
SMTP Reception of E-mail....212
JBIG Reception....215

Auto Fax Reception Power-Up....215
Printing Options....216
Print Completion Beep....216
Checkered Mark....216
Center Mark....216
Reception Time....217
Two-Sided Printing....217
Multi-Copy Reception....220
Image Rotation....221
Combine Two Originals....221
Page Separation and Length Reduction....222
Page Reduction....223
TSI Print (Transmitting Subscriber Identification Print)....224
If There Is No Paper of the Correct Size....224
Where Incoming Documents Are Delivered - Output Tray....228
Specifying Tray for Lines....228
Tray Shift....228

4. Changing/ Confirming Communication Information

Changing the Settings of Files in Memory....231
Deleting a Destination from a Broadcast....231
Adding a Destination....233
Changing the Transmission Time....236
Changing the SMTP Server Setting....238
Printing a File from Memory....242
Printing a List of Files in Memory (Print TX File List)....244
Resending a File....246
Checking the Transmission Result (Transmission File Status)....248
Confirming on Display....248
Confirming by Report....249
Confirming by E-mail....250
Confirming by Report and E-mail....251
Communication Result Report (Memory Transmission)....251
Immediate TX Result Report (Immediate Transmission)....252

Communication Failure Report....252
Checking the Reception Result (Reception File Status)....254
Confirming on Display....254
Confirming by Report....255
Print Journal....256
Printing the Journal....256
Journal....260
Transmitting Journal by E-mail....263
Confirming/Printing/Deleting Received and Stored Documents....265
Confirming Received and Stored Documents....266
Printing Received and Stored Documents....267
Deleting Received and Stored Documents....268
Printing a File Received with Memory Lock....270
Personal Boxes....273
Personal Boxes....273
Printing Personal Box Documents....274
Confidential File Report....276
Information Boxes....277
Information Boxes....277
Storing Documents in Information Boxes....278
Printing Information Box Documents....280
Deleting Information Box Documents....281

5. Storing a Document

Sending a Stored File....283
Storing a Document....284
Sending Stored Documents....288
Printing Stored Documents....294
Changing Stored Document Information....295
Deleting a Stored Document....299

6. Fax via Computer

Sending Fax Documents from Computers....303
Before Use....304
Using the Software....304

Installing Individual Applications....306
Setting LAN-Fax Driver Properties....309
Basic Transmission....310
Specifying Options....315
Checking Transmission Using LAN-Fax Driver....317
Confirming Transmission Results by E-mail....318
LAN-Fax Result Report....318
Printing and Saving....319
Editing Address Book....320
Editing Fax Cover Sheets....322
Managing Facsimile Functions Using SmartDeviceMonitor for Admin....323
Using the Machine's Address Book as the LAN-Fax Destination List....324
LAN-Fax Operation Messages....326
Viewing Fax Information Using a Web Browser....327
Viewing, Printing, and Deleting Received Fax Documents Using Web Image Monitor....327
Programming Destination Information from Web Browser....329
Delivering Files Received by Fax....332

7. Facsimile Features

Accessing User Tools....333
Changing Default Settings....333
Quitting User Tools....334
General Settings....335
Scan Settings....338
Send Settings....339
Reception Settings....342
Initial Settings....347
Memory File Transfer....353
Selecting a Line Port or Protocol....354
Setting a SUB Code....354
Setting a Password....354
Forwarding....355
Programming an End Receiver....356
Quitting the Forwarding Function....358

Forwarding Mark....358
Reception File Setting....360
Specifying Automatic Deletion of Incoming Faxes when an Error Occurs....361
Reception Report e-mail....362
Stored Reception File User Setting....363
SMTP Reception File Delivery Settings....365
Program / Change / Delete Scan Size....368
Programming/Changing a Scan Size....368
Deleting a Scan Size....369
Registering Fax Information....371
Registering Fax Information....372
Changing Fax Information....373
Deleting Fax Information....374
Parameter Settings....375
User Parameter List....375
Changing the User Parameters....384
Special Senders to Treat Differently....386
Authorized Reception....387
Reception File Print Quantity....387
Forwarding....388
Print 2 Sided....388
Memory Lock....388
Paper Tray....389
Programming/Changing Special Senders....389
Authorized Reception per Sender....391
Reception File Print Qty per Sender....391
Forwarding per Sender....392
Print 2 Sided per Sender....394
Memory Lock per Sender....395
Paper Tray per Sender....395
Programming Initial Set Up of a Special Sender....395
Deleting a Special Sender....398
Box Settings....399

Programming/Changing Personal Boxes....399
Deleting Personal Boxes....403
Programming/Changing Information Boxes....404
Deleting Information Boxes....406
Programming/Changing Transfer Boxes....407
Deleting Transfer Boxes....411
Printing the Box List....412

8. Appendix

Checking the Memory Status....413
Registering Frequently Used Settings....414
Registering and Changing Keystroke Programs....414
Deleting a Program....417
Using a Program....418
Optional Equipment....420
Expansion Memory....420
Handset....420
Extra G3 Interface Unit....420
Specifications....421
Specifications Required for the Internet Fax Destination Machines....425
Maximum Values....427
Trademarks....430
INDEX....433

Manuals for This Machine

Read this manual carefully before you use this machine.

Refer to the manuals that are relevant to what you want to do with the machine.

Important

- **Media differ according to manual.**
- **The printed and electronic versions of a manual have the same contents.**
- **Adobe Acrobat Reader/Adobe Reader must be installed in order to view the manuals as PDF files.**
- **A Web browser must be installed in order to view the html manuals.**

About This Machine

Before using the machine, be sure to read the section of this manual entitled Safety Information.

This manual introduces the machine's various functions. It also explains the control panel, preparation procedures for using the machine, how to enter text, how to install the CD-ROMs provided, and how to replace paper, toner, staples, and other consumables.

Troubleshooting

Provides a guide for resolving common usage-related problems.

Copy and Document Server Reference

Explains Copier and Document Server functions and operations. Also refer to this manual for explanations on how to place originals.

Facsimile Reference

Explains Facsimile functions and operations.

Printer Reference

Explains Printer functions and operations.

Scanner Reference

Explains Scanner functions and operations.

Network and System Settings Reference

Explains how to connect the machine to a network, configure and operate the machine in a network environment, and use the software provided. Also explains how to change User Tools settings and how to register information in the Address Book.

Security Reference

This manual is for administrators of the machine. It explains security functions that you can use to prevent unauthorized use of the machine, data tampering, or information leakage. For enhanced security, we recommend that you first make the following settings:

- Install the Device Certificate.
- Enable SSL (Secure Sockets Layer) Encryption.

- Change the user name and password of the administrator using Web Image Monitor.

For details, see “Setting up the Machine”, Security Reference.

Be sure to read this manual when setting the enhanced security functions, or user and administrator authentication.

PostScript 3 Supplement

Explains how to set up and use PostScript 3.

VM Card Extended Feature Settings Device Reference

Explains how to set up the extended features settings with the machine.

VM Card Extended Feature Settings Web Reference

Explains how to set up the extended features settings using Web Image Monitor.

Other manuals

- UNIX Supplement
- Quick Reference Copy Guide
- Quick Reference Printer Guide
- Quick Reference Fax Guide
- Quick Reference Scanner Guide
- App2Me Start Guide

Note

- Manuals provided are specific to machine types.
- For “UNIX Supplement”, please visit our Web site or consult an authorized dealer. This manual includes descriptions of functions and settings that might not be available on this machine.
- The following software products are referred to using general names:

Product name	General name
DeskTopBinder Lite and DeskTopBinder Professional*1	DeskTopBinder
ScanRouter EX Professional*1 and ScanRouter EX Enterprise*1	the ScanRouter delivery software

*1 Optional

Notice

Important

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

For good copy quality, the manufacturer recommends that you use genuine toner from the manufacturer.

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

How to Read This Manual

Symbols

This manual uses the following symbols:

Important

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

Note

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys on the machine's display or control panels.

Machine Types

This machine comes in several models which vary in copy/print speed.

Machine types for users of type 1 and 2

	Type 1	Type 2
Copy/print speed (Full Color)	30 sheets/minute (A4, $8^1/_2 \times 11$)	35 sheets/minute (A4, $8^1/_2 \times 11$)
Copy/print speed (B&W)	30 sheets/minute (A4, $8^1/_2 \times 11$)	35 sheets/minute (A4, $8^1/_2 \times 11$)

Machine types for users of type 3 and 4[*1]

	Type 3	Type 4
Copy/print speed (Full Color)	45 sheets/minute (A4, $8^1/_2 \times 11$)	55 sheets/minute (A4, $8^1/_2 \times 11$)
Copy/print speed (B&W)	45 sheets/minute (A4, $8^1/_2 \times 11$)	55 sheets/minute (A4, $8^1/_2 \times 11$)

*1 Type 3 and 4 are equipped with the one-pass duplex scanning ADF as standard, or can be fitted with the optional ARDF or exposure glass cover.

Names of Major Items

Major items of this machine are referred to as follows in this manual:

- Auto Reverse Document Feeder → ARDF
- Auto Document Feeder → ADF (in this manual, "ADF" refers to the ARDF and the one-pass duplex scanning ADF)

Names of Major Functions

This section tells you the names of this machine's major functions.

- Internet Fax (by specifying an e-mail address) → Internet Fax
- Internet Fax (by specifying an IP address) → IP-Fax

Notes

Contents of this manual are subject to change without prior notice.

Colors on color keys or the color circle may differ slightly from the colors of actual copies.

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Depending on which country you are in, certain units may be optional. For details, please contact your local dealer.

Laws and Regulations

Legal Prohibition

Do not copy or print any item for which reproduction is prohibited by law.

Copying or printing the following items is generally prohibited by local law:

bank notes, revenue stamps, bonds, stock certificates, bank drafts, checks, passports, driver's licenses.

The preceding list is meant as a guide only and is not inclusive. We assume no responsibility for its completeness or accuracy. If you have any questions concerning the legality of copying or printing certain items, consult with your legal advisor.

This machine is equipped with a function that prevents making counterfeit bank bills. Due to this function the original images similar to bank bills may not be copied properly.

Notes to users in the United States of America

FCC Requirements

1. This equipment complies with Part 68 of the FCC rules. On the cover of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.
2. This equipment uses the RJ11C USOC jack.
3. A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for detail.
4. The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company.
5. If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.
6. The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

7. If trouble is experienced with this equipment, for repair or warranty information, please contact Ricoh Americas Corporation Customer Support Department at 1-800-FASTFIX. If this device is causing problems with your telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.
8. In the event of operation problems (document jam, copy jam, communication error indication), see the manual provided with this machine for instruction on resolving the problem.
9. Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.
10. If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this equipment does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

WHEN PROGRAMMING EMERGENCY NUMBERS AND/OR MAKING TEST CALLS TO EMERGENCY NUMBERS:

1. Remain on the line and briefly explain to the dispatcher the reason for the call before hanging up.
2. Perform such activities in the off-peak hours, such as early morning hours or late evenings.

Notice about the Telephone Consumer Protection Act (Valid in USA only)

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including FAX machines, to send any message unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business or other entity, or other individual sending the message and the telephone number of the sending machine or such business, other entity, or individual. (The telephone number provided may not be a 900 number or any other number for which charges exceed local or long-distance transmission charges.)

In order to program this information into your FAX machine, you should complete the following steps: Follow the FAX HEADER programming procedure in the Programming chapter of the operating instructions to enter the business identification and telephone number of the terminal or business. This information is transmitted with your document by the FAX HEADER feature. In addition to the information, be sure to program the date and time into your machine.

Notes to users in Canada

This product meets the applicable Industry Canada technical specifications.

The Ringer Equivalence Number is an indication of the maximum number of devices allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the RENs of all the devices does not exceed five.

Reading the Display

This section explains how to use control panel and screen-displayed keys.

The display guides you through operations, shows messages, machine status, and destinations registered in the destination lists.

If you press the [Facsimile] or [Clear Modes] key during operation, the standby display appears.

Note

- This machine automatically returns to standby mode if you do not use the machine for a certain period of time. You can select the period using the Facsimile Auto Reset Timer in System Settings.
- The Facsimile Features menu includes a user parameter setting (switch 17, bit 3) that enables you to configure the machine to return to standby mode whenever it finishes scanning an original, see "Parameter Settings".
- To manually return to the standby display, do one of the following:
  - If you have placed the original in the Auto Document Feeder (ADF) and have not pressed the [Start] key, remove the original.
  - If you have not placed an original, press the [Clear Modes] key.
  - If you are in User Tools mode, press the [User Tools/Counter] key.

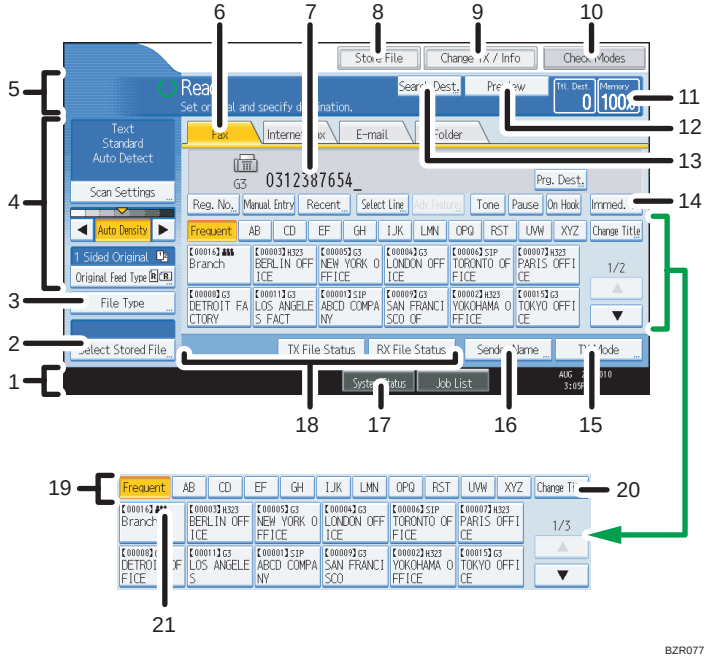
Reference

- p.375 "Parameter Settings"

Reading the Display Panel and Using Keys

This section explains key functions and messages that appear on the control panel.

Initial Display



1. **Displays the date, time, and machine status. Displays the name, facsimile number of the destination, and the size of the original when transmitting.**

   When user authentication is set, a login user name appears.

2. **Allows you to send or print the documents stored in the Document Server.**

3. **Allows you to select the file type.**

4. **Allows you to set scan settings and original feed types.**

5. **Displays messages and the machine status.**

6. **Press a tab to switch the transmission type between "Fax", "Internet Fax", "E-mail", and "Folder".**

   - When Fax (Fax) is selected, you can specify fax numbers or IP-Fax destinations.
   - When Internet Fax (Internet Fax) is selected, you can specify Internet Fax destinations.
   - When E-mail (E-mail) is selected, you can specify e-mail destinations.
   - When Folder (Folder) is selected, you can specify folder destinations.

7. **Displays the entered number of a destination.**

8. **Allows you to store documents in the Document Server.**

   For details about storing documents, see "Sending a Stored File".

9. **Press to display various information about communication.**

   For details about confirming information, see "Changing/Confirming Communication Information".

10. **Allows you to confirm the transmission settings.**

11. **Displays the percentage of free memory space.**

12. **Allows you to check the scanned original before sending it.**
13. **Allows you to search for a destination by destination name, fax number, e-mail address or registration number.**

    For details about a destination search, see “Searching for a Destination in the Address Book”.
14. **Switches transmission mode to Immediate Transmission.**

    When [Immed. TX] is not highlighted, the machine is in the Memory Transmission mode.
15. **Allows you to set various features for transmission.**

    For details about setting the features, see “Other Transmission Features”.
16. **Allows you to set a sender.**
17. **Allows you to check the number of “Transmission Standby File(s)”, “Memory Lock File(s)”, and “RX Print Standby File(s)”.**

    For details about checking the status in [System Status], see “Checking the Memory Status”.
18. **Displays Quick Operation keys set for frequently used functions. [TX File Status] and [RX File Status] are preset.**

    For details about Quick Operation Key, see “General Settings”.
19. **Title word keys appear. Allows you to switch from one page (display) to another on the destination list.**
20. **Switches the type of title word keys.**

    For details, see “Switching the type of title in the Address Book”.
21. **Appears on Destination keys programmed as a group destination.**

Note

- The display will differ depending on installed optional units.
- When the following settings are set to “On” in the Facsimile Features menu, transmission type tabs are displayed. For details about these settings, see “Initial Settings”.
  -

(Internet Fax): When “Internet Fax Setting” is set to “On”.
  -

(E-mail): When “E-mail Setting” is set to “On”.
  -

(Folder): When “Folder Setting” is set to “On”.
- Information about documents sent using the facsimile function cannot be checked in [Job List]. Use [Change TX / Info].

Reference

- p.111 "Switching the type of title in the Address Book"
- p.127 "Searching for a Destination in the Address Book"
- p.283 "Sending a Stored File"
- p.335 "General Settings"
- p.347 "Initial Settings"

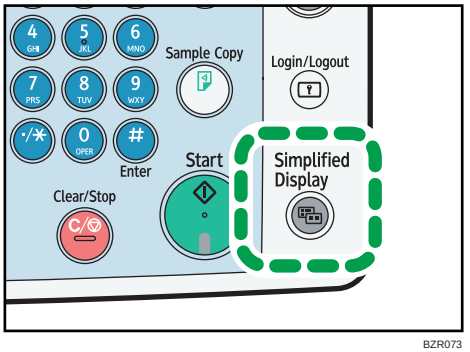
- p.413 "Checking the Memory Status"

Simplified Display

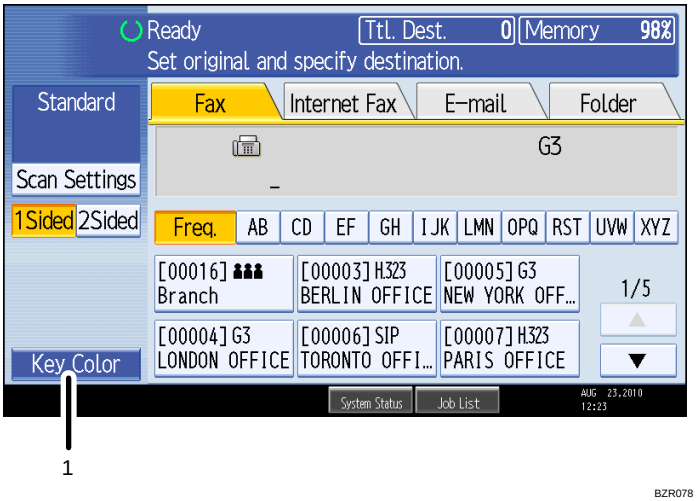
This section explains how to switch to the simplified display.

When you press the [Simplified Display] key, the screen changes from the initial display to the simplified display.

Letters and keys are displayed at a larger size, making operations easier.



Example of a simplified display



1. **Key Color**

   Press to increase screen contrast by changing the color of the keys.

   This is available only for the simplified display.

Note

- To return to the initial display, press the [Simplified Display] key again.

- Certain keys do not appear on the simplified display.

1. Transmission

This section explains basic transmission operations such as specifying a transmission mode or destination.

Transmission Modes

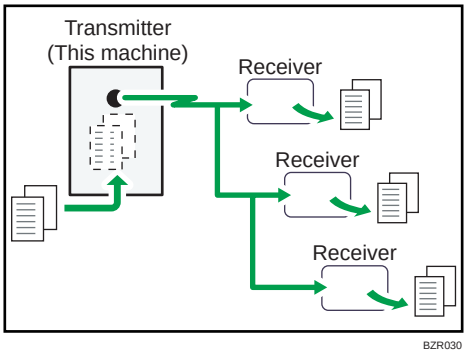
There are two types of transmission: Memory Transmission and Immediate Transmission.

Important

- **It is recommended that you call the receivers and confirm with them when sending important documents.**

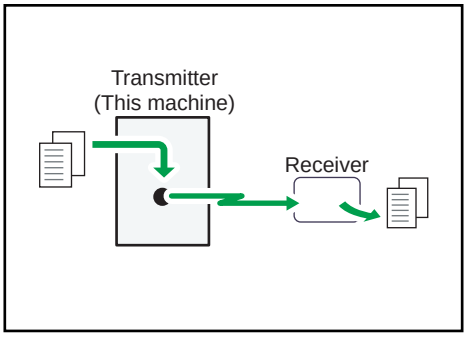
Memory Transmission

Transmission starts automatically after the original is stored in memory. This is convenient when you are in a hurry and want to take the document away with you. You can also send the same original to several destinations (broadcasting). For details about a broadcast and Parallel Memory Transmission, see "Parallel Memory Transmission" and "Broadcasting sequence".

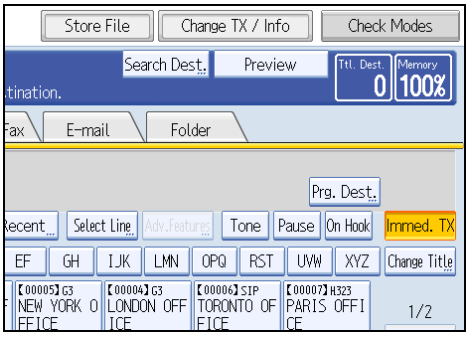


Immediate Transmission

Immediately dials the destination number, and while scanning the original, sends to it. It is very convenient when you want to send an original quickly or when you want to check the destination you are sending to. When using this type of transmission, the original is not stored in memory. You can only specify one address.



Normally the machine is in the Memory Transmission mode. To switch the mode to Immediate Transmission, press [Immed. TX].



Note

- You can set the machine to enter Memory Transmission mode or Immediate Transmission mode right after the power is turned on or whenever the [Clear Modes] key is pressed. See “Changing the Default Functions of the Fax's Initial Display”.

Reference

- p.29 "Parallel Memory Transmission"
- p.31 "Broadcasting sequence"
- p.169 "Changing the Default Functions of the Fax's Initial Display"

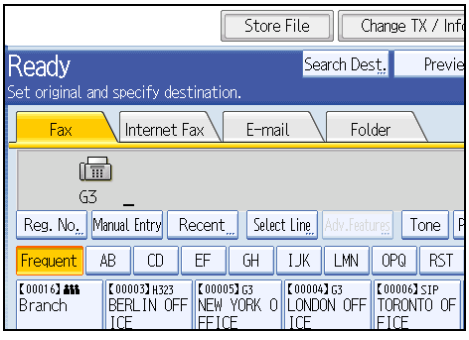
Selecting Type of Transmission

You can select the transmission type: standard fax, IP-Fax, Internet Fax, e-mail transmission, or folder transmission.

Press the tab in the standby display to select the transmission type.

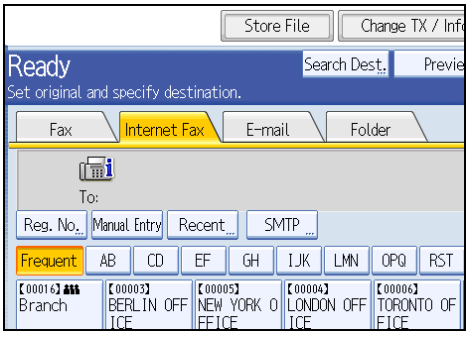
When sending to a standard fax or IP-Fax destination

Make sure that [Fax] is selected.



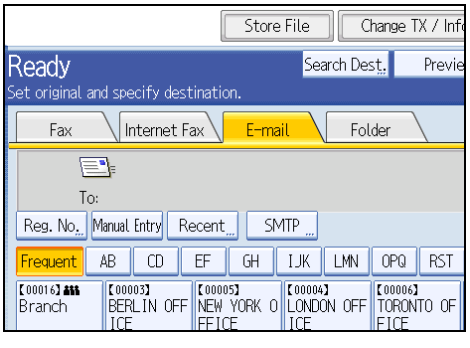
When sending to an Internet Fax destination

Press [Internet Fax] to switch the type of transmission to Internet Fax.



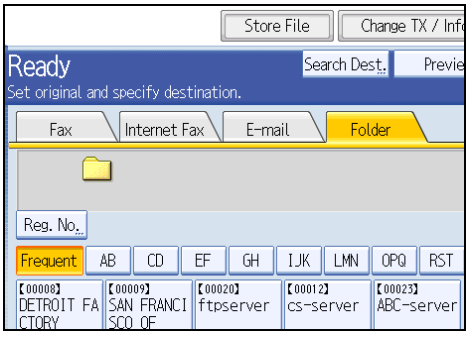
When sending to an e-mail destination

Press [E-mail] to switch the type of transmission to e-mail.



When sending to a folder destination

Press [Folder] to switch the type of transmission to folder.



Note

- For details about each transmission type, see "IP-Fax Functions", "Internet Fax Transmission", "E-mail Transmission", and "Folder Transmission".

Reference

- p.36 "IP-Fax Functions"
- p.41 "Internet Fax Transmission"
- p.47 "E-mail Transmission"
- p.51 "Folder Transmission"

Memory Transmission

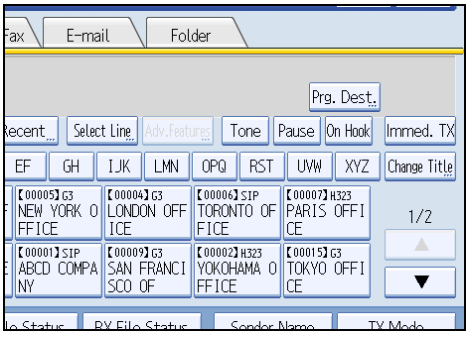
Memory Transmission mode has standard fax, Internet Fax, IP-Fax, e-mail transmission, and folder transmission.

Important

- **If there is a power failure (the main power switch is turned off) or the machine is unplugged for about one hour, all the documents stored in memory are deleted. As soon as the main power switch is turned on, the Power Failure Report is printed to help you check the list of deleted files. Simply turning off the power by pressing the operation switch does not delete stored documents. See "Turning Off the Main Power / In the Event of Power Failure", Troubleshooting.**
- **If memory is full (0% appears in "Memory" at the upper right of the screen), Memory Transmission is disabled. Use Immediate Transmission instead.**

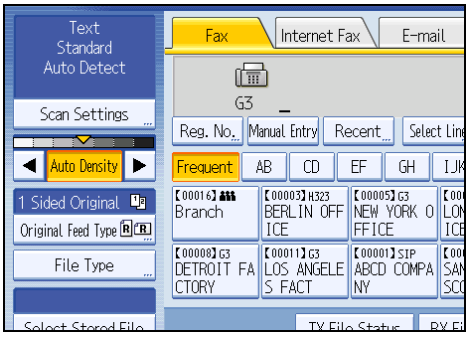
1. **Make sure [Immed. TX] is not highlighted.**

   Normally Memory Transmission mode is selected.



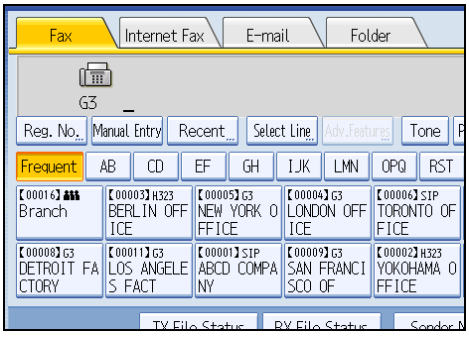
2. **Place the original into the ADF.**

3. **Make the scan settings you require.**



For details about the scan settings, see “Scan Settings”.

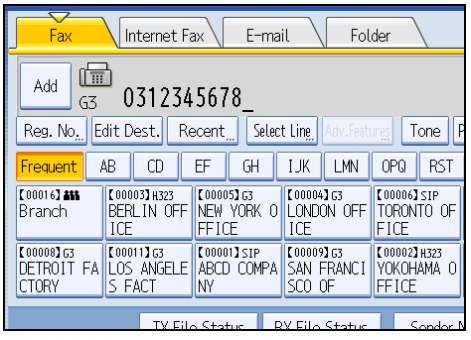
4. **Using the number keys or a Destination key, specify a destination.**



If you make a mistake, press the [Clear/Stop] key, and then enter the correct number.

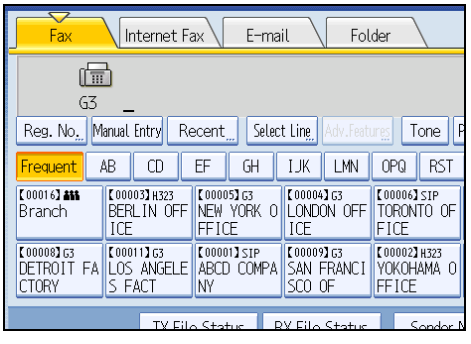
For details about specifying a destination, see “Specifying a Destination”.

5. **When sending the same original to several destinations (broadcasting), press [Add] to specify the destinations.**



You do not have to press [Add] when adding a destination using the destination list.

6. **Specify the next destination.**



Press the transmission type tab to switch the transmission type between fax/IP-Fax, Internet Fax, e-mail, and folder.

Multiple transmission types can be specified simultaneously.

7. **Press the [Start] key.**

Note

- If the combined total number of programmed destinations exceeds the maximum value, only Immediate Transmission is possible.
- For the maximum values of the following items, see “Maximum Values”.
  - Number of documents you can store in memory for Memory Transmission
  - Number of pages you can store in memory (using A4 Standard <ITU-T #1 Chart>)
  - Number of destinations you can specify per file
  - Number of destinations you can specify for all files (including files in memory)

Reference

- p.69 "Scan Settings"

- p.88 "Specifying a Destination"
- p.427 "Maximum Values"

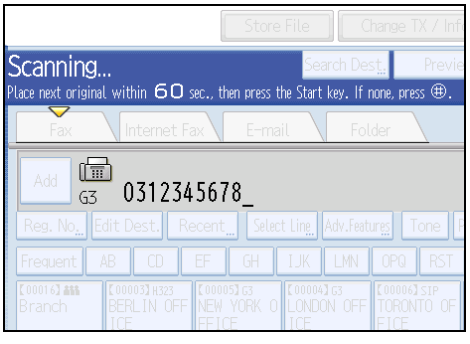
Sending originals using the exposure glass (Memory Transmission)

This section explains how to send originals by Memory Transmission using the exposure glass.

1. **Make sure [Immed. TX] is not highlighted.**
2. **Place the first page of the original face down on the exposure glass.**
3. **Specify a destination.**
4. **Make the scan settings you require.**
5. **Press the [Start] key.**

   The machine starts scanning.
6. **Place the next original on the exposure glass within 60 seconds when you send multiple originals, and then repeat steps 4 and 5.**

   Repeat this step for each page.



7. **Press the [#] key.**

   The machine dials the destination and starts transmission.

Parallel Memory Transmission

This function dials while the original is being scanned.

Standard Memory Transmission stores the original in memory, and then dials the destination. However, Parallel Memory Transmission allows you to confirm the connection status quickly. In addition, this function scans the original faster than Immediate Transmission. This is useful when you are in a hurry and need to use the original for another purpose.

Important

- **Standard Memory Transmission is used instead of Parallel Memory Transmission in the following cases:**

1

- When the line is busy and could not be connected to
- With Send Later
- When you store an original for Memory Transmission while another communication is in progress
- When two or more destinations are specified
- When an original is placed on the exposure glass, and then sent
- When you send documents stored in the Document Server
- When the machine has been switched to the Preview mode with the [Preview] key.

Note

- You can turn this function on or off with the User Parameter (switch 07, bit 2) in the Facsimile Features menu. See “Parameter Settings”.
- Standard Memory Transmission may be used instead of Parallel Memory Transmission depending on the optional equipment installed if there is not enough free memory left.
- If you use this function, the Memory Storage Report will not be printed.
- If the [Clear/Stop] key is pressed, the original jams or memory runs out, Parallel Memory Transmission will stop. The Communication Result Report is printed and files are deleted.
- When using Parallel Memory Transmission, only the page number is printed on the header of the fax, the total number of originals is not automatically printed.

Reference

- p.375 "Parameter Settings"

Automatic Redial

If a fax document could not be sent because the line was busy or an error occurred during transmission, the line is switched to another at five-minute intervals and redial is attempted up to five times.

If redialing fails after four redials, the machine cancels the transmission and prints a Communication Result Report or Communication Failure Report.

Note

- If there are a large number of files stored in memory, documents might not be sent in the order they were scanned.

Dual Access

The machine can scan other documents into memory even while sending a fax document from memory, receiving a document into memory, or automatically printing a report.

Since the machine starts sending the second document immediately after the current transmission ends, the line is used efficiently.

Note

- During Immediate Transmission or when in User Tools mode, the machine cannot scan an original.

Broadcasting sequence

Use the broadcasting function to send the same original to multiple destinations simultaneously.

You can broadcast via multiple transmission types (fax, IP-Fax, Internet Fax, e-mail, and folder) at the same time.

To specify multiple destinations, specify the first destination, and then specify the next destination by pressing [Add].

If you dial several destinations for the same document (broadcasting), the documents are sent in the order in which they were dialed. If the fax document could not be transmitted, the machine redials that destination after the last destination specified for broadcasting. For example, if you specify four destinations, A through D, for broadcasting, and if the lines to destinations A and C are busy, the machine dials the destinations in the following order: A, B, C, D, A, and C.

To check the transmission progress, print the TX file list. See "Printing a List of Files in Memory (Print TX File List)".

If the optional extra G3 interface unit is installed, you can use the Simultaneous Broadcast function to send faxes simultaneously on different phone lines. See "Simultaneous Broadcast Using Multiple Line Ports".

If you specify a second transmission while broadcasting to several destinations, faxes are transmitted alternately to each remaining destination in the current and second broadcast.

For example, if you specify a broadcast to destinations A and B, and then specify a broadcast to destinations C and D while transmission to destination A is in progress, the machine sends the faxes in the following order: A, C, B, and then D.

If the previous file and next file are both on standby, these are also sent in the same order.

Note

- To avoid accidentally specifying multiple destinations, you can disable broadcasting. You cannot specify group destinations if you disable broadcasting. You can specify only one address at a time. For details about how to disable broadcasting, contact your service representative.
- The Facsimile Features menu includes a user parameter setting (switch 17, bit 2) that enables you to configure the machine to force the user to press [Add] whenever s/he specifies a destination using a destination key. This prevents users accidentally sending documents to the wrong destination. See "Parameter Settings".

Reference

- p.86 "Simultaneous Broadcast Using Multiple Line Ports"
- p.244 "Printing a List of Files in Memory (Print TX File List)"
- p.375 "Parameter Settings"

Immediate Transmission

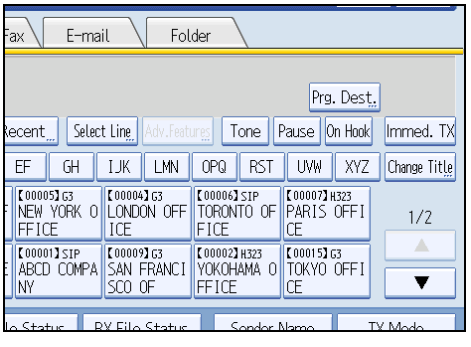
Immediate Transmission is possible with standard fax transmission and IP-Fax transmission.

1

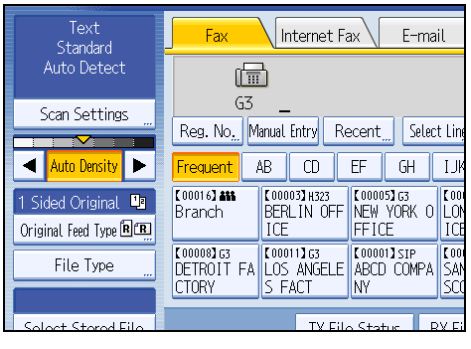
Important

- Internet Fax, e-mail transmission and folder transmission are performed using Memory Transmission, which automatically starts transmission after storing documents in memory. If you switch the type of transmission to them while the machine is in Immediate Transmission mode, the transmission mode is automatically switched to Memory Transmission.
- Group cannot be used for Immediate Transmission. You cannot send the same document to multiple destinations (broadcasting). If you specify broadcast or transmission for a group, the machine changes automatically to Memory Transmission.

1. **Press [Immed. TX].**

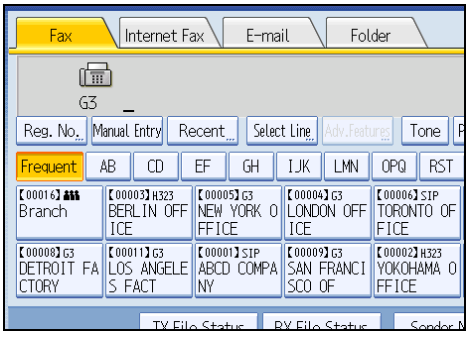


2. **Place the original into the ADF.**
3. **Select the scan settings you require.**



For details about the scan settings, see “Scan Settings”.

4. **Using the number keys or a Destination key, specify a destination.**



If you make a mistake, press the [Clear/Stop] key, and then enter the correct number.

For details about specifying a destination, see "Specifying a Destination".

5. **Press the [Start] key.**

The machine dials a destination.

Note

- Documents are not stored in memory.

Reference

- p.69 "Scan Settings"
- p.88 "Specifying a Destination"

Sending originals using the exposure glass (Immediate Transmission)

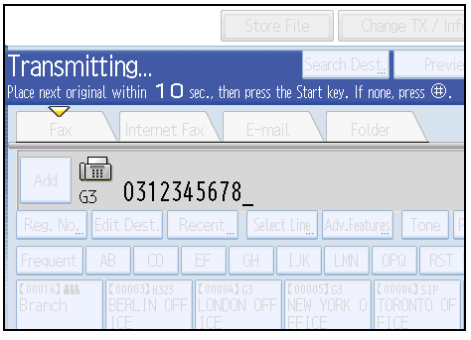
This section explains how to send originals by Immediate Transmission using the exposure glass.

1. **Press [Immed. TX].**
2. **Place the first page face down on the exposure glass.**
3. **Specify a destination.**
4. **Make the scan settings you require.**
5. **Press the [Start] key.**

The machine dials the destination.

6. **Place the next original on the exposure glass within 10 seconds when you send multiple originals, and then repeat steps 4 and 5.**

Repeat this step for each page.

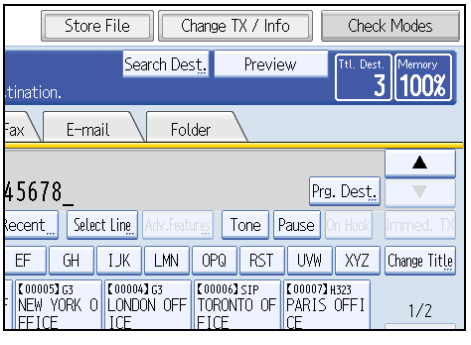


7. **Press the [#] key.**

Displaying Confirmation of Transmission

On this screen you can check the destination, transmission mode, and other transmission settings before transmission.

1. **Press [Check Modes], and then check the transmission settings.**



The following display appears.

2. **After checking the settings on the display, press [Exit].**

Note

- To prevent users sending files to the wrong destination, you can configure the machine to display the destination again for users to confirm, or to require users to enter the destination twice. To use this

function, contact your sales or service representative. For details, see “Preventing Transmission to the Wrong Destination”.

Reference

- p.114 "Preventing Transmission to the Wrong Destination"

IP-Fax Functions

The IP-Fax function sends or receives documents between two facsimiles directly via a TCP/IP network.

This function has the following advantages and is suitable for communication within the same LAN:

- Reducing communication costs
- Communicating between IP-Faxes at higher speed than by standard fax

IP-Fax uses SIP and H.323 as the network protocol.

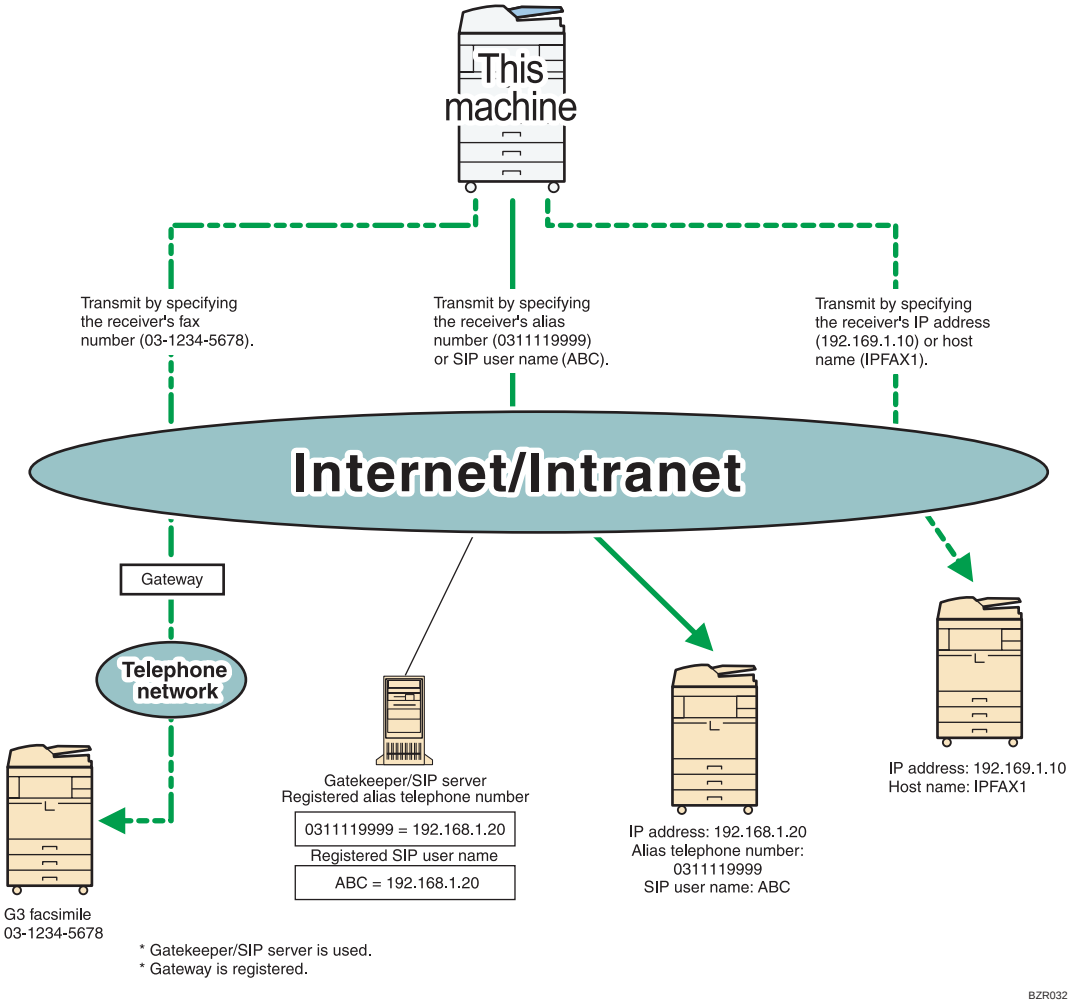
Specify an IP address or host name instead of a fax number for sending. When using a gatekeeper, specify an alias telephone number.

When using a SIP server, you can send by specifying SIP user name.

You can also transmit to a G3 facsimile connected to the public switched telephone network (PSTN) via a gateway (T.38-compliant).

Specify addresses of the gatekeeper or SIP server (proxy server, registrar server, redirect server) as appropriate under H.323 Settings, SIP Settings, or Program / Change / Delete Gateway in the Initial Settings.

You can receive IP-Faxes in the same manner as standard faxes. For details about reception, see “Types of Reception”.



Important

- **To use IP-Fax functions, this machine must be connected to a LAN and its IP-Fax settings correctly specified under Initial Settings in the Facsimile Features menu. For details about these settings, see "Initial Settings".**
- **Before using this function, configure the network in the System Settings menu. For details about the required settings, see "Connecting the Machine", Network and System Settings Reference.**

Note

- IP-Fax supported by this machine is ITU-T Recommendation T.38 compliant.
- SIP allows you to transmit and receive documents over an IPv6 network.
- For details about H.323 Settings, SIP Settings, or Program / Change / Delete Gateway, see "Initial Settings".
- This function supports both IPv4 and IPv6 addresses.

Reference

- p.195 "Types of Reception"
- p.347 "Initial Settings"

1

Terminology

This section introduces you to useful IP-Fax-related terminology.

H.323

A multimedia communication protocol that sends or receives files via one-to-one communication over a LAN or the Internet.

SIP

A communication control protocol for Internet telephone that utilizes VoIP (which converts voice information to IP packets) and is equipped with functions such as creating, modifying, and terminating sessions with one or more participants.

Gatekeeper (VoIP gatekeeper)

A gatekeeper manages devices connected to an IP network and converts alias telephone numbers to IP addresses and performs authentication functions. In addition, a gatekeeper governs band (transmission rate assignment) and access control.

SIP server

A SIP server mediates connection requests between devices connected to an IP network and is composed mainly of servers that have the following three functions:

- Proxy server: Receives SIP requests and forwards them on behalf of the requestor.
- Registrar server: Receives information about a device's address within an IP network and registers them in the database.
- Redirect server: Used to inquire the destination address.

Gateway (VoIP gateway)

A gateway connecting a telephone network and IP network, it has functions such as protocol conversion for connecting these different networks, and also connects communication devices (telephones, facsimiles, etc.) to a LAN or other network.

Notes on Using IP-Fax

This section describes notes on using IP-Fax.

- You may not be able to send to a firewall-protected network.
- You cannot use telephones on a LAN.

- If there is a power failure (the main power switch is turned off) or the machine is unplugged for about one hour, all the documents stored in memory are deleted. As soon as the main power switch is turned on, the Power Failure Report is printed to help you check the list of deleted files. Simply turning off the power by pressing the operation switch does not delete stored documents. See "Turning Off the Main Power / In the Event of Power Failure", Troubleshooting.
- IP-fax communication might not be available if connection is by wireless LAN.

Functions Not Available for IP-Fax Transmission

This section tells you which functions are not available for IP-Fax transmission.

You can use the following functions with standard fax transmission, but not IP-Fax transmission:

- On Hook Dial
- Manual Dial

E-Mail Functions and Folder Transmission

This section explains e-mail and folder transmission.

E-Mail Functions

There are two methods of sending faxes from this machine using e-mail:

- Internet Fax Transmission
- E-mail Transmission

To send a fax by Internet Fax, you must specify an Internet Fax destination.

To send a fax by e-mail, you must specify an E-mail destination.

In both transmission methods, the fax data is sent as a graphics file attached to e-mail. The format of this graphics file depends on the transmission method, as shown in the table below.

Transmission Method	File Format
Internet Fax	TIFF-F
E-Mail	TIFF or PDF

For details about the E-Mail Transmission, see “Internet Fax Transmission” or “E-mail Transmission”.

Folder Transmission

You can send faxes to network folders that are registered in the Address Book. To do this, select the path to the folder in the Address Book.

Faxes are sent as graphics in TIFF or PDF format files using the selected protocol (SMB, FTP, or NCP).

For details about the Folder Transmission, see “Folder Transmission”.

Reference

- p.41 "Internet Fax Transmission"
- p.47 "E-mail Transmission"
- p.51 "Folder Transmission"

Internet Fax Transmission

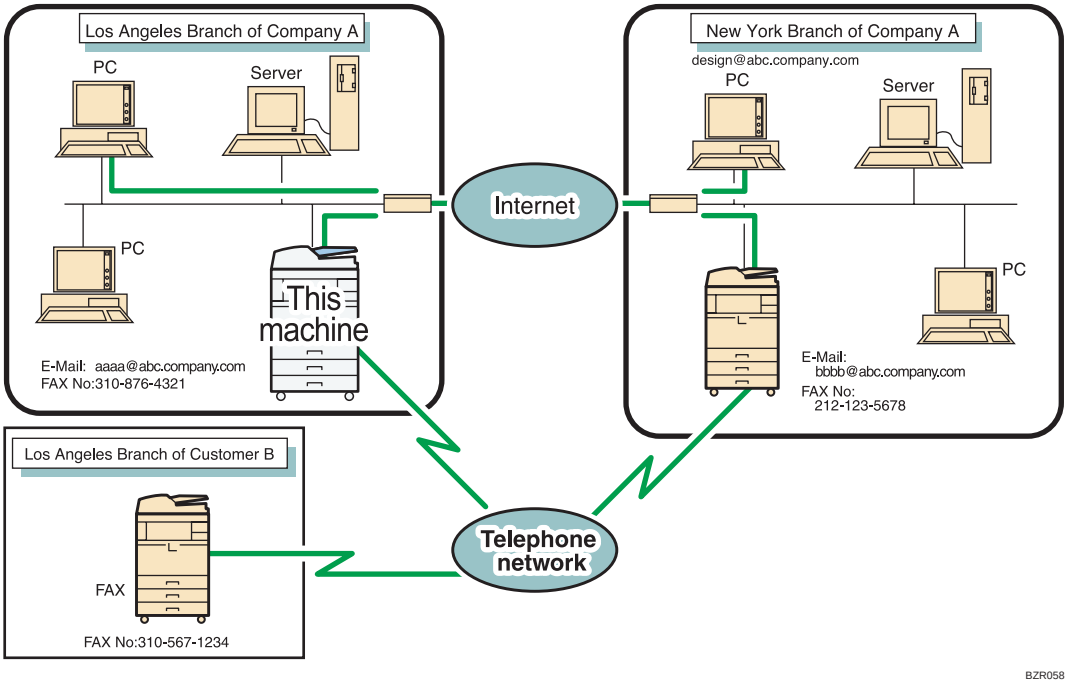
This machine converts scanned document images to e-mail format and transmits the data over the Internet.

The e-mail sent by this machine can be received by another Internet Fax machine. Instead of dialing the telephone number of the destination you want to send to, you enter the relevant e-mail address (Internet Fax destination). If the machine at the other end supports T.37 full mode, bi-directional exchange of data such as available paper size and resolution is possible.

You can receive e-mail messages with an attached TIFF-F image from computers.

You can send the same document to fax destination, IP-Fax destination, and an e-mail destination, folder destination, simultaneously.

You can also print or forward received e-mail messages.



Important

- To use Internet Fax Transmission, this machine must be connected to a LAN and set up correctly in "System Settings". For details about the required settings, see "Connecting the Machine", Network and System Settings Reference.
- You can also enter a computer's e-mail address as the destination. In this case, you can send TIFF files only.
- To send Internet Fax documents, in the Facsimile Features menu, under Initial Settings, set [Internet Fax Setting] to [On]. However, documents can still be forwarded or delivered to Internet Fax destinations even if [Off] is selected. See "Initial Settings".

- **To receive Internet Fax documents, in the System Settings menu, in File Transfer, under [Fax E-mail Account], set Account to [Receive]. See "File Transfer", Network and System Settings Reference.**

Note

- The Internet Fax function supported by this machine is compliant with ITU-T Recommendation T.37.
- Though Internet Fax documents are normally sent via an SMTP server, you can also send Internet Fax documents directly to their destinations without going through an SMTP server. To do this, set whether or not to bypass the SMTP server on the standby display. For details about using this function, see "Bypassing the SMTP server".
- When sending Internet Fax documents, "Subject", "Text", "Reception Notice", "BCC Transmission" can be selected in [TX Mode]. For details about setting these options, see "Other Transmission Features".
- You can limit the size of transmitted e-mail messages in "Max. E-mail Size" of "Facsimile Features". For details about the setting, see "Send Settings".
- See "Received images" for how e-mail is actually received by the computer.
- The CC function is disabled.
- If you send Internet Fax documents specifying a user code, and the e-mail address is set as the routing destination of the specified user code, a Communication Result Report is sent after the transmission is completed. This makes it possible to verify the result of a transmission.
- For details about how to confirm the transmission result, see "Checking the Transmission Result (Transmission File Status)".
- This function supports both IPv4 and IPv6 addresses.

Reference

- p.104 "Bypassing the SMTP server"
- p.203 "Received images"
- p.248 "Checking the Transmission Result (Transmission File Status)"
- p.339 "Send Settings"
- p.347 "Initial Settings"

Notes on Using Internet Fax

This section describes notes on using Internet Fax.

- When using the Internet Fax function, originals are sent at A4 size. Originals larger than A4 are reduced to A4 size. If the receiver's machine is compliant with the T.37 full mode, originals are sent at the size specified in the Address Book.

- When using Internet Fax transmission, documents are sent at "Detail" resolution, even if you have specified "Super Fine". To send a document at "Super Fine", configure the Full Mode when registering the destinations in the Address Book.
- If a transmission is not successful, this machine usually receives error notification e-mail. However, error notification e-mail may not be transmitted for various reasons. It is recommended that you confirm receipt of important document by calling the other party.
- The level of security for Internet communications is low. It is recommended that you use the telephone network for confidential communications.
- Voice communication is not supported over a LAN.
- Internet Fax delivery might be delayed due to network congestion. Use Internet Fax transmission that bypasses the SMTP server, a public telephone line fax, or IP-Fax whenever communication time is a concern. For details about using this function, see "Bypassing the SMTP server".
- If there is a power failure (the main power switch is turned off) or the machine is unplugged for about one hour, all the documents stored in memory are deleted. As soon as the main power switch is turned on, the Power Failure Report is printed to help you check the list of deleted files. Simply turning off the power by pressing the operation switch does not delete stored documents. See "Turning Off the Main Power / In the Event of Power Failure", Troubleshooting.
- You may not be able to send large files as e-mail, depending on e-mail environment conditions.
- When available memory is low, you may not be able to send Internet Fax documents.
- Because the machine sends documents as e-mail messages with an attached TIFF-F image, viewer applications are required in order to view documents when they are received on a computer.
- With a large volume of document, it may take some time before transmission starts. This is due to the time the machine requires to convert the data in memory.
- POP before SMTP is available in IPv4 environments only.

Note

- For details about the T.37 full mode, see "T.37 Full Mode".

Reference

- p.44 "T.37 Full Mode"
- p.98 "Bypassing the SMTP server"

Functions Not Available by Internet Fax Transmission

This section tells you which functions are not available for Internet Fax transmission.

The following functions are supported with standard fax transmission, but not with Internet Faxing.

- Immediate Transmission
- Closed Network Transmission

- SUB Code Transmission
- On Hook Dial
- Manual Dial
- JBIG Transmission
- ECM (Error Correction Mode)
- Memory File Transfer

Functions Not Available by Internet Fax Reception

This section tells you which functions are not available for Internet Fax reception.

The following functions are available for standard fax reception, but not for Internet Faxing:

- Memory Lock Reception
- SEP Code Reception
- Authorized Reception per Sender
- Reception File Print Quantity per Sender

T.37 Full Mode

This machine is T.37 full mode compatible. T.37 full mode is an international standard for Internet Fax transmission. (ITU-T Recommendation, RFC2532)

When an Internet Fax communication is made between T.37 full mode compatible machines, the receiver side sends the return receipt (dispatched) in response to the reception notice request attached to the sent e-mail. This return receipt includes the receiver's reception capability information (compression type, paper size, and resolution). When the receiver is programmed in the Address Book as the full mode destination, the sender side automatically registers the received information in the Address Book. This allows you to send a subsequent Internet Fax document to that receiver based on this information.

Returning a Return Receipt

When e-mail is received, if the sender requests reception notice, the receiver sends a return receipt that includes the receiving machine's capability (compression type, paper size, and resolution).

Registering the Received Reception Confirmation Contents

When the sender receives the return receipt that includes the receiver's reception capability, the sender checks that the final recipient address sent is programmed in the Address Book. If it is programmed as a full mode destination, the sender automatically registers the receiver's reception capability. The registered reception capability is updated each time the sender receives new reception capability information. The sender can send documents to the receiver based on this information.

If the receiver is programmed as the simple mode machine or not programmed in the Address Book, the receiver's reception capability cannot be registered.

If you know the receiver's reception capability, you can set it manually.

Requesting a Reception Notice

When the receiver's machine supports T.37 full mode and is programmed as a full mode machine in the Address Book, the machine requests the reception notice from the receiver. Then, the machine will receive the return receipt (sent) that includes the receiver's reception capability.

Note

- For details about requesting reception notice from this machine, see "Requesting a Reception Notice".
- Use Web Image Monitor to manually program a receiver's reception capability information. For details about programming receiver's information, see "Programming Destination Information from Web Browser".
- If you use Internet Fax transmission, you can send documents to multiple destinations at once. However, if you specify full mode destinations, since each destination may have a different reception capability, transmission is done one by one in the specified transmission order.

Reference

- p.173 "Requesting a Reception Notice"
- p.329 "Programming Destination Information from Web Browser"

E-mail Encryption

For security, this machine can apply encryption and/or digital signatures to the e-mail it receives for forwarding and routing.

Use of encryption and/or digital signatures helps prevent e-mail spoofing and information leakage.

Encryption and digital signatures can be used with the following functions:

- Routing documents to addresses registered in Personal Boxes.
- Transferring documents to addresses registered in Transfer Boxes.
- E-mail forwarding
- Routing e-mail received via SMTP

Important

- **First register the forwarding/routing destinations' e-mail addresses in the Address Book, and then specify the encryption settings in both Address Book and Web Image Monitor for each destination that you want to send encrypted e-mail to. For details about these settings, ask your administrator.**
- **E-mail encryption and digital signatures are not available with standard transmission to Internet Fax destinations. Encryption is only available for forwarding, routing, or transferring to Internet Fax destinations.**

Note

- The encryption method of this machine is S/MIME. For details about S/MIME, ask the administrator.

- If you specify “Encrypt All” in Web Image Monitor's Address Book settings, all e-mail is forwarded and routed in encrypted form, regardless of the encryption settings specified on the Facsimile Features menu.
- If you specify “Use Signatures” in Web Image Monitor's security settings, all e-mail is forwarded and routed with digital signatures applied, regardless of the digital signature settings specified on the Facsimile Features menu.
- Encrypted e-mail cannot be broadcasted. When specifying multiple destinations, broadcasted documents are sent one by one in the order in which the destinations were specified.
- This machine cannot receive e-mails encrypted with S/MIME. When configuring the S/MIME encryption settings, you should confirm that the receiver can receive S/MIME-encrypted e-mail.
- For details about how to specify encryption and digital signature settings, see the following:
  - “Forwarding”
  - “SMTP Reception File Delivery Settings”
  - “Special Senders to Treat Differently”
  - “Box Settings”
- For details about forwarding/routing/transferring functions, see the following:
  - “Routing Received Documents”
  - “Transferring Received Documents”
  - “Forwarding Received Documents”
  - “Routing e-mail received via SMTP”

Reference

- p.207 "Routing Received Documents"
- p.209 "Transferring Received Documents"
- p.210 "Forwarding Received Documents"
- p.213 "Routing e-mail received via SMTP"
- p.365 "SMTP Reception File Delivery Settings"
- p.355 "Forwarding"
- p.386 "Special Senders to Treat Differently"
- p.399 "Box Settings"

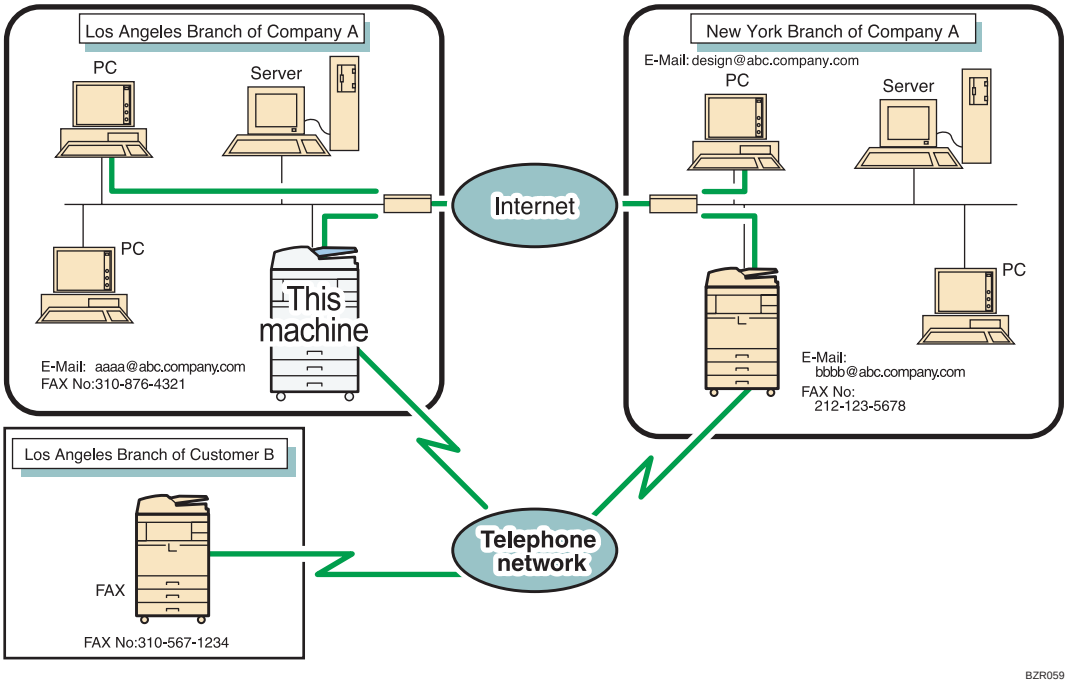
E-mail Transmission

This machine uses its fax function to send scanned documents over the network to computers.

Specify an e-mail address of a computer.

You can send the same document to an e-mail destination, folder destination, fax destination, IP-Fax destination, and Internet Fax destination simultaneously. If you specify a destination fax number (of another party's fax machine) and a destination folder on your computer at the same time, you can view the sent document on your computer.

When sending to e-mail/folder destinations, you can select PDF or TIFF as the file type of the document you are sending.



Important

- To send to e-mail destinations, this machine must be connected to a LAN and set up correctly in "System Settings".
- You can also enter the e-mail address of another machine that supports Internet Fax. In this case, select TIFF as the file format. Depending on the model of the destination machine, PDF files might not be accepted.
- To send e-mail documents, set [E-mail Setting] to [On] in the Facsimile Features menu, under Initial Settings. See "Initial Settings".

- **To use an e-mail address registered in the Address Book as an e-mail destination, specify "Use E-mail Address for" for [E-mail / Internet Fax Destination]. Use the same procedure for e-mail addresses that are registered in group destinations in the Address Book.**

1

Note

- Black and white images are sent in the same way as standard fax transmissions.
- This function supports both IPv4 and IPv6 addresses.

Reference

- p.347 "Initial Settings"

Functions Not Available for E-mail Transmission

This section tells you which functions are not available for e-mail transmission.

The following functions are available for standard fax transmission, but not for e-mail transmission:

- Immediate Transmission
- Closed Network Transmission
- SUB Code Transmission
- On Hook Dial
- Manual Dial
- JBIG Transmission
- ECM (Error Correction Mode)
- Memory File Transfer

E-mail Encryption

For security, this machine can apply encryption and/or digital signatures to the e-mail it receives for forwarding and routing.

Use of encryption and/or digital signatures helps prevent e-mail spoofing and information leakage.

Encryption and digital signatures can be used with the following functions:

- Routing documents to addresses registered in Personal Box.
- Transferring documents to addresses registered in Transfer Box.
- E-mail forwarding
- Routing e-mail received via SMTP

Important

- **First register the forwarding/routing destinations' e-mail addresses in the Address Book, and then specify the encryption settings in both Address Book and Web Image Monitor for each destination that you want to send encrypted e-mail to. For details about these settings, ask your administrator.**
- **E-mail encryption and digital signatures are not available with standard transmission to e-mail destinations. Encryption is only available for forwarding, routing, or transferring to e-mail destinations.**

Note

- The encryption method of this machine is S/MIME. For details about S/MIME, ask the administrator.
- If you specify "Encrypt All" in Web Image Monitor's Address Book settings, all e-mail is forwarded and routed in encrypted form, regardless of the encryption settings specified on the Facsimile Features menu.
- If you specify "Use Signatures" in Web Image Monitor's security settings, all e-mail is forwarded and routed with digital signatures applied, regardless of the digital signature settings specified on the Facsimile Features menu.
- Encrypted e-mail cannot be broadcasted. When specifying multiple destinations, broadcasted documents are sent one by one in the order in which the destinations were specified.
- This machine cannot receive e-mails encrypted with S/MIME. When configuring the S/MIME encryption settings, you should confirm that the receiver can receive S/MIME-encrypted e-mail.
- For details about how to specify encryption and digital signature settings, see the following:
  - "Forwarding"
  - "SMTP Reception File Delivery Settings"
  - "Special Senders to Treat Differently"
  - "Box Settings"
- For details about forwarding/routing/transferring functions, see the following:
  - "Routing Received Documents"
  - "Transferring Received Documents"
  - "Forwarding Received Documents"
  - "Routing e-mail received via SMTP"

Reference

- p.207 "Routing Received Documents"
- p.209 "Transferring Received Documents"
- p.210 "Forwarding Received Documents"
- p.213 "Routing e-mail received via SMTP"
- p.365 "SMTP Reception File Delivery Settings"
- p.355 "Forwarding"

- p.386 "Special Senders to Treat Differently"
- p.399 "Box Settings"

Folder Transmission

This machine uses its fax function to send scanned documents over the network to computers.

Specify the path to the destination folder.

To send to a folder, you must first register the path to the folder in the Address Book. Then, for the transmission (communication) protocol, select SMB, FTP, or NCP.

When sending to folder destinations, you can select PDF or TIFF as the file type of the document you are sending.

You can send the same document to folder destination, fax destination, IP-Fax destination, Internet Fax destination, and an e-mail destination simultaneously.

If you specify a destination fax number (of another party's fax machine) and a destination folder on your computer at the same time, you can view the sent document on your computer.

Important

- **To send to folder destinations, this machine must be connected to a LAN and set up correctly in "System Settings".**
- **To send to folder destinations, set [Folder Setting] to [On] in the Facsimile Features menu, under Initial Settings. See "Initial Settings"**

Note

- Black and white images are sent in the same way as standard fax transmissions.
- To send to a folder destination, you must first register the path for the folder in the Address Book. You cannot enter the path manually on the standby display.
- This function supports both IPv4 and IPv6 addresses.

Reference

- p.347 "Initial Settings"

Functions Not Available for Folder Transmission

This section tells you which functions are not available for folder transmission.

The following functions are available for standard fax transmission, but not for folder transmission:

- Immediate Transmission
- Closed Network Transmission
- SUB Code Transmission
- On Hook Dial
- Manual Dial
- JBIG Transmission

- ECM (Error Correction Mode)
- Memory File Transfer
- Selecting destinations from recent destinations
- Simultaneous Broadcast using multiple line ports
- Directly entering destinations

Placing Originals

Place the original on the exposure glass or the ADF.

For details about how to place originals, see the following:

- Placing originals on the exposure glass

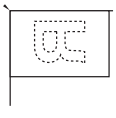
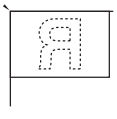
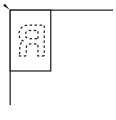
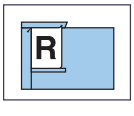
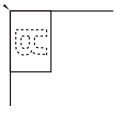
  See “Placing Originals on the Exposure Glass” in “Placing Originals”, Copy and Document Server Reference.

- Placing originals into the ADF

  See “Placing Originals in the Auto Document Feeder” in “Placing Originals”, Copy and Document Server Reference.

Note that [Special Original] of the copy function cannot be used with the facsimile function.

Place the originals according to their paper size.

Original size	Placing on the exposure glass	Placing into the ADF
A4, B4 JIS, A3, $8^1/_2 \times 11$, $8^1/_2 \times 14$, 11×17		
A4, B4 JIS, A3, $8^1/_2 \times 11$, $8^1/_2 \times 14$, 11×17		
A5, B5 JIS, $5^1/_2 \times 8^1/_2$		
A5, B5 JIS, $5^1/_2 \times 8^1/_2$		

Important

- **If you place A5□ size originals on the exposure glass, they are not detected. Place A5□ size originals into the ADF.**

- **Do not lift the ADF while using it to scan originals.**

Note

- Originals that are clipped or creased cannot be scanned using the ADF. For details about originals that are not recommended for the ADF, see “Originals”, Copy and Document Server Reference.
- To scan multiple originals using the ADF, set originals in a stack.
- When sending a fax, the image output at the other end depends on the size and orientation of paper used in the receiver's machine. If the receiver does not use paper of the same size and orientation as that of the original, the fax image may be reduced in size, trimmed at both edges, or divided across two or more sheets. When sending an important original, ask the receiver about the size and orientation of the paper in their machine.
- An original of irregular (i.e. custom) size originals are scanned as regular size originals, so the receiver may find extra blank margins or edges of images missing. When sending a custom size or part of a large original, you can specify the scan area precisely. If you specify a scan area, only that area is scanned regardless of the actual size of the original. For details about specifying the scan area, see “Scan Size”.
- Documents longer than 800 mm (32 inches) must be sent by Memory Transmission (Immediate Transmission may not be possible).
- If an original jams, press the [Clear/Stop] key, and then carefully remove the original.
- Make sure that all ink, correcting fluid etc., has completely dried before placing your original. If it is still wet, the exposure glass will become marked and those marks will appear on the received image.
- Generally, place A4, $8\frac{1}{2} \times 11$ originals in the landscape orientation (⧉). If you place an A4, $8\frac{1}{2} \times 11$ original in the portrait orientation (🗋), the image is sent rotated by 90 degrees. See “Transmission with Image Rotation”.
- You can send the first page from the exposure glass then the remaining pages from the ADF. You cannot change from the ADF to the exposure glass.
- When using the Internet Fax function, originals are sent at A4 size. Originals larger than A4 are reduced to A4 size. If the receiver's machine is compliant with the T.37 full mode, originals are sent at the size specified in the Address Book. See “T.37 Full Mode”.
- Information about this machine is printed at the destination. This information is printed on the side of the paper that is to your left when placing the documents on the exposure glass or the ADF. However, the information is also printed rotated by 90 degrees if an A4, $8\frac{1}{2} \times 11$ original is placed in the portrait orientation (🗋). For details about the fax information, see “Registering Fax Information”. For details about the transmission with image rotation, see “Transmission with Image Rotation”.
- For acceptable types of originals, see “Acceptable Original Sizes”, “Paper Size and Scanned Area” and “Types of Original whose Sizes are Difficult to Detect”.

Reference

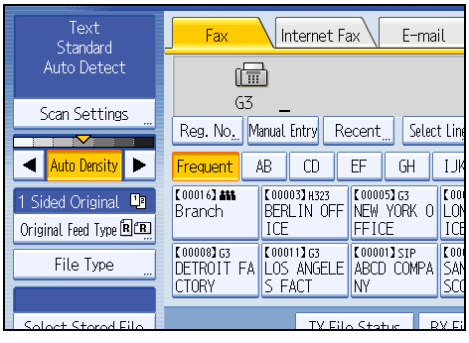
- p.44 "T.37 Full Mode"
- p.59 "Acceptable Original Sizes"

- p.60 "Paper Size and Scanned Area"
- p.61 "Types of Original whose Sizes are Difficult to Detect"
- p.63 "Transmission with Image Rotation"
- p.73 "Scan Size"
- p.372 "Registering Fax Information"

Setting the Original Orientation

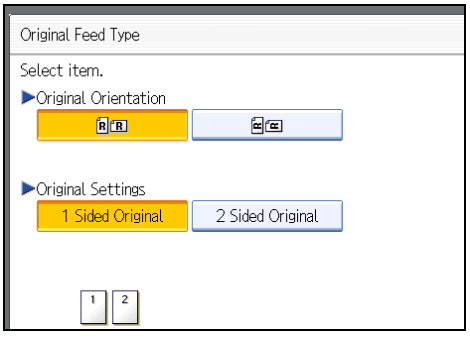
To preview scanned originals or documents using Document Server, configure the "Original Orientation" setting to display the top/bottom orientation of the original correctly in the preview.

1. **Place the original, and then select the scan settings you require.**
2. **Press [Original Feed Type].**



3. **Specify the original orientation.**

   Check the orientation of the placed document, and then press [R R] or [R R].



4. **Press [OK].**

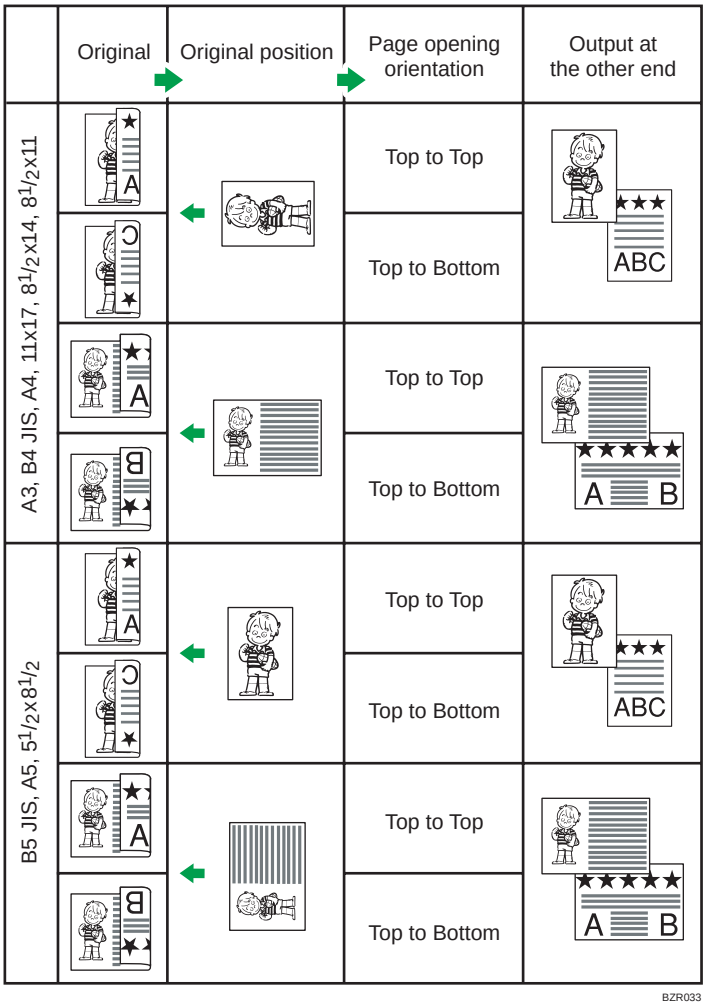
   The selected original orientation appears in "Original Feed Type".

5. **Specify a destination, and then press the [Start] key.**

Scanning Two-Sided Originals

Use this function to send two-sided originals.

The front and back of the scanned original will be printed in order on separate sheets at the other end. The orientation of alternate sheets may be reversed at the other end. If you want to print the original with the same orientation at the other end, specify the “Original position” and “Page opening orientation”.

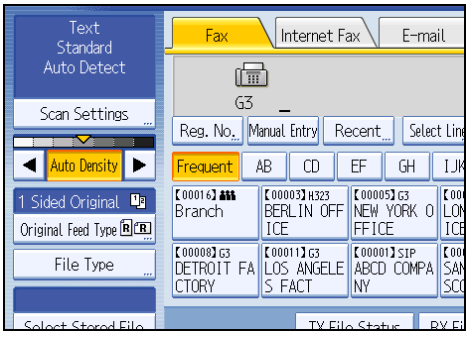


Important

- When you use [2 Sided Original] under [Original Feed Type], the originals cannot be sent by using just the exposure glass.
- Two-sided originals are only sent with Memory Transmission. Immediate Transmission is not possible.

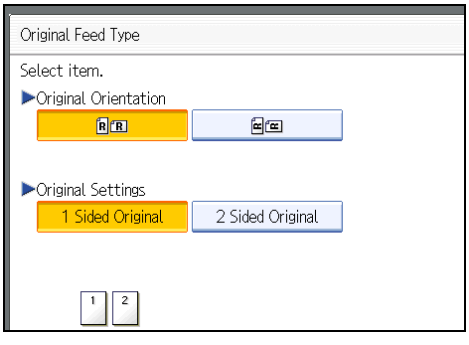
1. Place the original, and then select the scan settings you require.

2. **Press [Original Feed Type].**



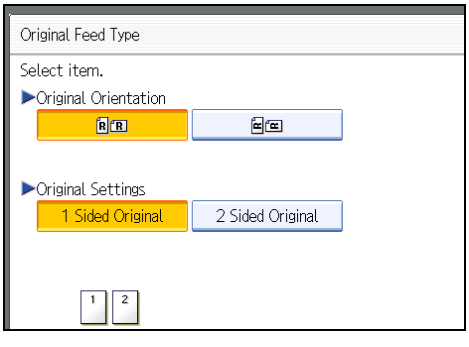
3. **Specify the original orientation.**

   Check the orientation of the placed document, and then press [R R] or [R R].

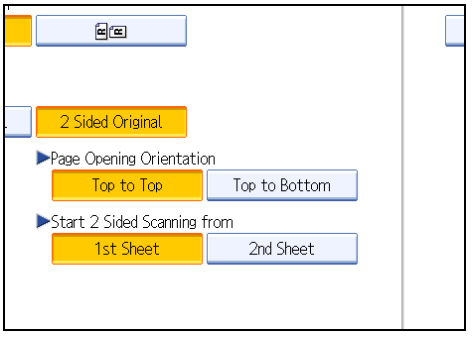


   Make sure that the specified original orientation matches the orientation of originals loaded in the ADF.

4. **Press [2 Sided Original].**



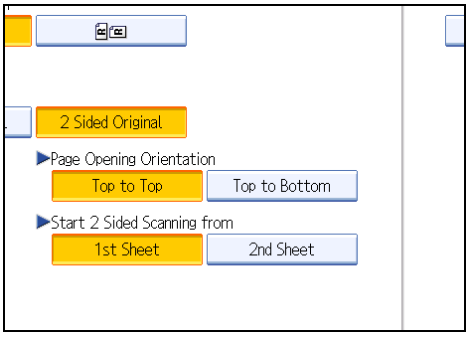
5. **Select [Top to Top] or [Top to Bottom].**



6. **Select [1st Sheet] or [2nd Sheet].**

   To cancel two-sided transmission, press [1 Sided Original]. The display returns to that of step 4.

   Select [2nd Sheet] if you want to send a cover sheet as the first page.



7. **Press [OK].**

   "2 Sided Original" appears above [Original Feed Type].

8. **Specify a destination, and then press the [Start] key.**

Note

- You can confirm whether both sides were properly scanned using the Stamp function. For details about Stamp, see “Stamp”
- For details about acceptable original size and paper thickness for two-sided scanning with the ADF, see “Acceptable Original Sizes”.
- You can set the original feed types that are selected right after the power is turned on or whenever the [Clear Modes] key is pressed. See “Changing the Default Functions of the Fax's Initial Display”.

Reference

- p.59 "Acceptable Original Sizes"
- p.63 "Stamp"
- p.169 "Changing the Default Functions of the Fax's Initial Display"

Acceptable Original Sizes

This section describes the size and thickness limitations that apply to originals placed on the exposure glass or the ADF.

Original sizes and thickness (Type 1 and 2)

Where original is set	Acceptable original size	Maximum number of sheets	Paper thickness
Exposure glass	Up to A3 (297 × 420 mm), 11 × 17 (279 × 432 mm)	1 sheet	–
ADF, one-sided original	A5 to A3 (up to 1200 mm long) $5^1/_2 \times 8^1/_2$ to 11 × 17	50 sheets: Less than 80 g/m^2 (20 lb. Bond)*1	40-128 g/m^2 (11-34 lb. Bond)
ADF, two-sided original	A5 to A3 (up to 432 mm long) $5^1/_2 \times 8^1/_2$ to 11 × 17	50 sheets: Less than 80 g/m^2 (20 lb. Bond)*1	52-105 g/m^2 (14-28 lb. Bond)

*1 Above specification depends on the paper type and condition

Original sizes and thickness (Type 3 and 4)

Where original is set	Acceptable original size	Maximum number of sheets	Paper thickness
Exposure glass	Up to A3 (297 × 420 mm), 11 × 17 (279 × 432 mm)	1 sheet	–
ADF, one-sided original	B6 JIS to A3 (up to 1200 mm long) $5^1/_2 \times 8^1/_2$ to 11 × 17	100 sheets: Less than 80 g/m^2 (20 lb. Bond)*1	40-128 g/m^2 (11-34 lb. Bond)
ADF, two-sided original	A5 to A3 (up to 432 mm long) $5^1/_2 \times 8^1/_2$ to 11 × 17	100 sheets: Less than 80 g/m^2 (20 lb. Bond)*1	52-128 g/m^2 (14-34 lb. Bond)

*1 Above specification depends on the paper type and condition

Note

- The weight range for originals in the Mixed Original Sizes mode is 52 - 80 g/m^2 (14 - 20 lb. Bond).

Paper Size and Scanned Area

This section explains the size of the area the machine can scan and detect.

Note

- There may be a difference in the size of the image when it is printed at the destination.
- Even if an original is correctly placed on the exposure glass or in the ADF, a margin of 3 mm (0.1 inch) around each edge of the original may not be sent.
- If the receiver uses paper of a smaller width than the original, the image is reduced to fit that paper. See “Auto Reduce”.

Reference

- p.185 "Auto Reduce"

When placing an original on the exposure glass

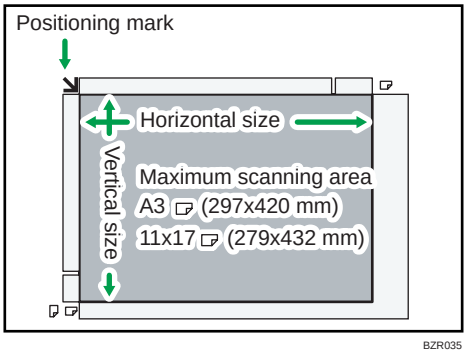
This section explains how to place an original on the exposure glass.

Important

- **If you place an original larger than A3, 11 × 17 on the exposure glass, only an A3, 11 × 17 area is scanned.**
- Maximum scan area

  The following shows the maximum scan area:

  297 ×420 mm, 11 × 17 inches (W × L)



Note

- If the machine cannot detect the size of the original you placed, specify the scan area (original size) manually. For details about specifying the scan area, see “Scan Size”.

Reference

- p.73 "Scan Size"

When placing an original into the Auto Document Feeder

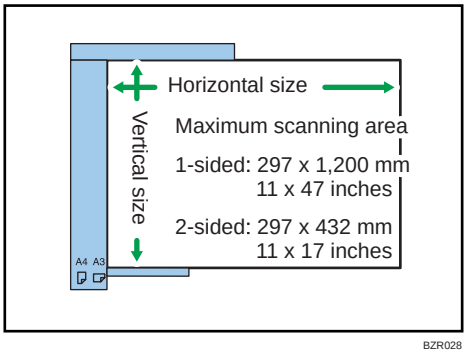
This section explains how to place an original into the ADF.

- Maximum scan area

  The following shows the maximum scan area:

  Memory Transmission: 297 × 1200 mm/11 × 47 inches (W × L)

  Immediate Transmission: 297 × 1200 mm/11 × 47 inches (W × L)



Note

- During Immediate Transmission, the length of the scanning range can decrease to less than 1200 mm (47 inches), depending on the resolution of the image and the configuration of the receiving machine.

Types of Original whose Sizes are Difficult to Detect

This section describes the kinds of original whose sizes might be difficult to detect.

If the original type is one of the following, the machine might not detect its size correctly and the receiver's machine might print it on paper of the wrong size:

- originals placed on the exposure glass that are of a size not listed in the following table
- originals with index tabs, tags, or protruding parts
- transparent originals, such as OHP transparencies or translucent paper
- dark originals with dense text or images
- originals that contain areas of solid print

- originals that have solid print around their edges
- originals with glossy surfaces
- bound originals of more than 10 mm (0.3 inch) in thickness, such as books.

Paper sizes that are auto-detectable in facsimile mode (Type 1 and 2):

Where original is placed	11 × 17 ▭	8 1/2 × 14 ▭	8 1/2 × 11 ▯ ▭	5 1/2 × 8 1/2 ▯ ▭	10 × 14 ▭	7 1/4 × 10 1/2 ▭	A3 ▭	A4 ▯ ▭
Exposure glass	Auto detect	Auto detect	Auto detect *1	Auto detect *2	×	×	×	×
ADF	Auto detect *3	Auto detect *4	Auto detect *5 *6	Auto detect	Auto detect	Auto detect	Auto detect	Auto detect

× - Cannot auto detect

*1 Default is 8 1/2 × 11. If you want to switch the detectable size from 8 1/2 × 11 to A4, contact your service representative.

*2 If you want to make 5 1/2 × 8 1/2 ▭ size detectable, contact your service representative.

*3 Default is 11 × 17. If you want to switch the detectable size from 11 × 17 to 11 × 15, contact your representative.

*4 Default is 8 1/2 × 14. If you want to switch the detectable size from 8 1/2 × 14 to 8 1/2 × 13, contact your service representative.

*5 Default is 8 1/2 × 11 ▭. If you want to switch the detectable size from 8 1/2 × 11 ▭ to 8 × 10, contact your service representative.

*6 Default is 8 1/2 × 11 ▯. If you want to switch the detectable size from 8 1/2 × 11 ▯ to 7 1/4 × 10 1/2 ▯, contact your representative.

Paper sizes that are auto-detectable in facsimile mode (Type 3 and 4):

Where original is placed	11 × 17 ▭	8 1/2 × 14 ▭	8 1/2 × 11 ▯ ▭	5 1/2 × 8 1/2 ▯ ▭	10 × 14 ▭	7 1/4 × 10 1/2 ▭	A3 ▭	A4 ▯ ▭
Exposure glass	Auto detect	Auto detect	Auto detect *1	Auto detect *2	×	×	×	×
ADF	Auto detect *3	Auto detect *4	Auto detect *5 *6	Auto detect	Auto detect	Auto detect	Auto detect	Auto detect

× - Cannot auto detect

*1 Default is $8^1/_2$ × 11. If you want to switch the detectable size from $8^1/_2$ × 11 to A4, contact your service representative.

*2 If you want to make $5^1/_2$ × $8^1/_2$ size detectable, contact your service representative.

*3 Default is 11 × 17. If you want to switch the detectable size from 11 × 17 to 11 × 15, contact your representative.

*4 Default is $8^1/_2$ × 14. If you want to switch the detectable size from $8^1/_2$ × 14 to $8^1/_2$ × 13, contact your service representative.

*5 Default is $8^1/_2$ × 11. If you want to switch the detectable size from $8^1/_2$ × 11 to 8 × 10, contact your service representative.

*6 Default is $8^1/_2$ × 11. If you want to switch the detectable size from $8^1/_2$ × 11 to $7^1/_4$ × $10^1/_2$, contact your representative.

Note

- Originals whose size is non-auto detectable will be scanned at the wrong paper size if fed in from the ADF.

Transmission with Image Rotation

As a general rule, place A4, $8^1/_2$ × 11 originals in the landscape orientation (). If you place an A4, $8^1/_2$ × 11 original in the portrait orientation (), the image is sent rotated by 90 degrees.

Providing the receiver has A4, $8^1/_2$ × 11 landscape paper (), the document is printed at the same size as the original.

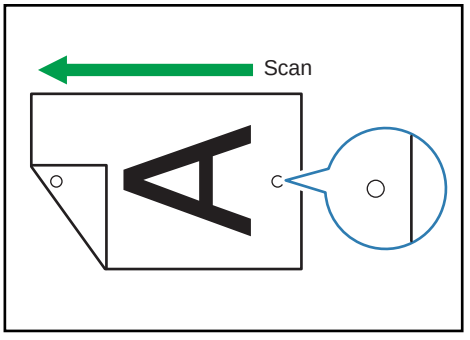
Note

- This function is unavailable with Immediate Transmission.
- This function is unavailable when using Mixed Original Sizes.

Stamp

When sending a fax document using the ARDF, the machine can stamp a circle mark at the bottom of the original.

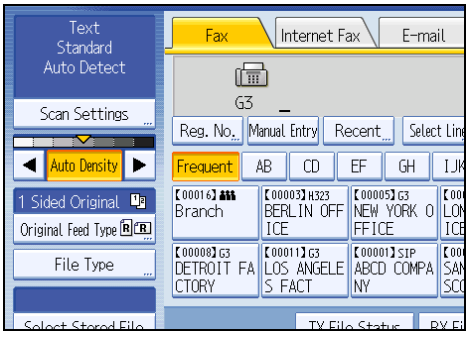
When sending a two-sided document, the document is marked at the bottom of the front page and top of the rear page.



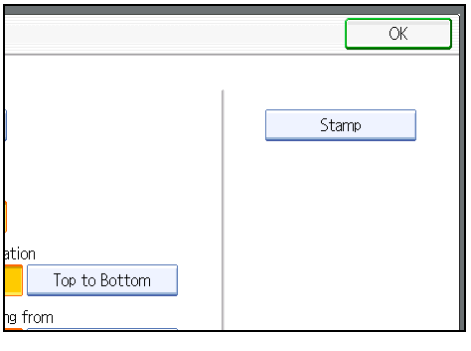
Important

- Stamp only works when scanning from the ARDF.
- One-pass duplex scanning ADF does not support the Stamp function.

1. Place the original, and then select the scan settings you require.
2. Press [Original Feed Type].



3. Press [Stamp].



To cancel the stamp, press [Stamp] again before pressing [OK].

4. Press [OK].
5. Specify the destination, and then press the [Start] key.

Note

- This stamp indicates that the original has been successfully stored in memory for Memory Transmission, or successfully sent by Immediate Transmission.
- When the stamp starts getting lighter, replace the cartridge. For details, see “Replacing the Stamp Cartridge”, About This Machine.
- If a multi-page feed or paper jam occurs, the originals are not sent properly and not stamped. If you find a page that is not stamped, send only that page again.
- You can have the machine select the Stamp function right after the power is turned on or whenever the [Clear Modes] key is pressed. For details, see “Changing the Default Functions of the Fax's Initial Display”.
- You can program one of the Quick Operation keys with operations for this function. Using the Quick Operation key allows you to omit steps 2 and 4. For details about Quick Operation Key, see “General Settings”.
- A paper jam during Parallel Memory Transmission may cause the transmission to fail even if stamping is performed.
- You cannot turn the Stamp function on or off while an original is being scanned.

Reference

- p.169 "Changing the Default Functions of the Fax's Initial Display"
- p.335 "General Settings"

Checking the Content of a Scanned Original (Preview Before Transmission)

The Preview Before Transmission function allows you to check the content of a scanned original before you send it.

Important

- **This function cannot be used with the following functions:**
  - **Immediate Transmission**
  - **Parallel Memory Transmission**
  - **On Hook Dial**
  - **Manual Dial**
  - **SEP Code Reception**
  - **When [Store Only] is set for [Store File]**
  - **Transmission of a stored file only**
  - **Memory File Transfer**

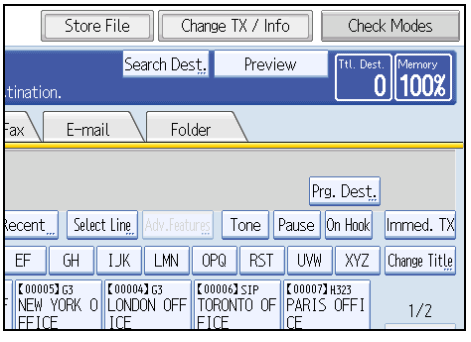
1

1. **Place the original, and then specify the scan settings you require.**

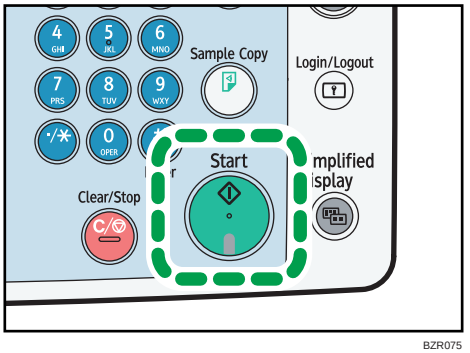
   Specify the "Original Orientation" setting correctly. If you do not, the top/bottom orientation of the original will not be displayed correctly in the preview.

   For details about the setting, see "Setting the Original Orientation".

2. **Press [Preview].**



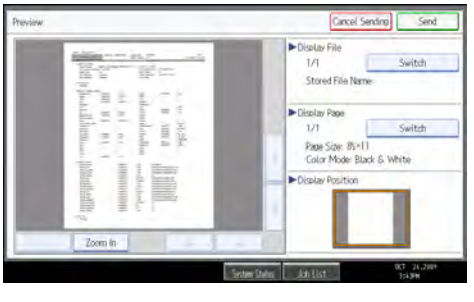
3. **Specify the destination, and then press the [Start] key.**



   The machine starts to scan the original. When scanning ends, a preview is displayed.

   If you want to cancel a preview, press [Cancel].

4. **Check the preview.**



   - Press [Zoom Out] or [Zoom In] to reduce or enlarge the preview image.
   - Press [←] [→] [↑] [↓] to scroll the preview image.

- Press [Switch] under “Display File” to display another selected file.
- Press [Switch] under “Display Page” to change the displayed page.

5. **Press [Send].**

   Transmission starts.

   To cancel the transmission, press [Cancel Sending].

   After transmission, the standby display appears.

Note

- You can have the machine select Preview Before Transmission right after the power is turned on or whenever the [Clear Modes] key is pressed. For details, see “Changing the Default Functions of the Fax's Initial Display”.

Reference

- p.55 "Setting the Original Orientation"
- p.169 "Changing the Default Functions of the Fax's Initial Display"

Detecting Blank Sheet

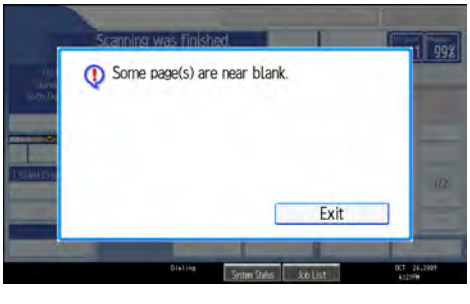
Upon completion of the first page scanning, an alarm sounds if the page is nearly blank.

Important

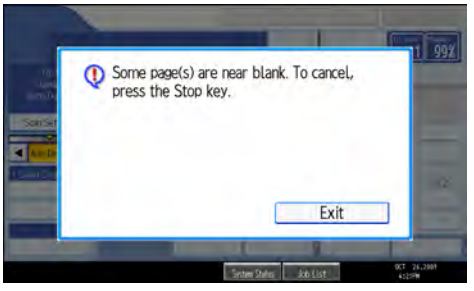
- **The blank sheet-detecting function works only when an original is scanned using the ADF.**
- **The blank sheet-detecting function is ineffective for second and subsequent pages.**
- **The machine cannot detect blank sheets if the user has put it into Preview mode using the [Preview] key.**

This function notifies you if an original is placed wrong side down on the scanner. When this happens, a message appears for a few seconds. The message differs depending on number of pages to be scanned and transmission mode.

- When sending a document using Immediate Transmission or when all pages have been scanned in Memory Transmission:



- When some pages are left unscanned in Parallel Memory Transmission or Memory Transmission:



Note

- Even if a near blank sheet is detected, it is transmitted as normal.
- You can turn this function on or off with the User Parameter (switch 11, bit 2). See “Parameter Settings”.
- To cancel scanning if a blank sheet is detected, press the [Clear/Stop] key.

Reference

- p.375 "Parameter Settings"

Scan Settings

You can configure the scan settings according to the original you are scanning.

You may want to send many different types of fax documents. Some of these may be difficult to reproduce at the receiver's end. However, the machine has four settings that you can adjust to help you transmit the document with the best possible image quality.

Original Type:

Text, Text / Line Art, Text / Photo, Photo

Resolution:

Standard, Detail, Super Fine (optional)

Scan Size:

Auto Detect, Regular, Area, Mixed Original Sizes

Density (Contrast):

Auto Density, Manual Density (seven levels), Combined Auto and Manual Density

Note

- When scanning an original with a large number of pages, there may be a long pause between each page depending on the nature of the original or the machine settings.

Original Type

If the original contains photographs, illustrations, or diagrams with complex shading patterns or grays, select the appropriate original type to optimize image clarity.

Text

Select [Text] to send high-contrast black-and-white image originals. Use this setting when you only want to send clearer text, even if the original contains text and photographs.

Text / Line Art

Select [Text / Line Art] to send high-contrast black-and-white graphic originals at improved resolution. The [Text] mode gives priority to scanning speed; [Text / Line Art] mode gives priority to scanning quality.

Text / Photo

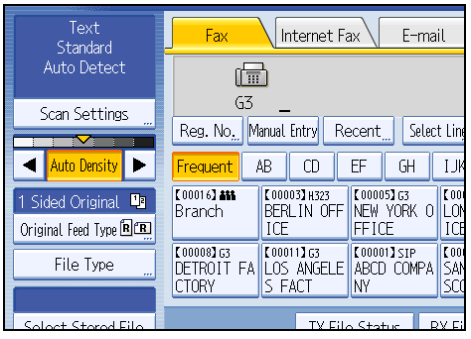
Select [Text / Photo] to send an original containing both a high-contrast black-and-white image, such as text, and a halftone image, such as a photograph.

Photo

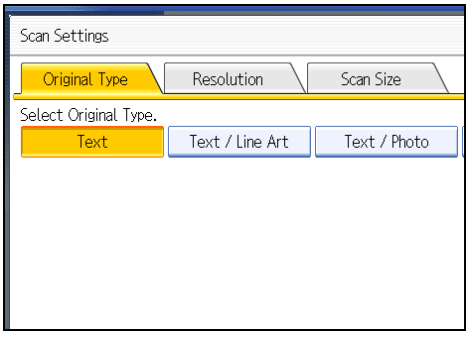
Select [Photo] to send an original containing a halftone image, such as a photograph or a color original.

1

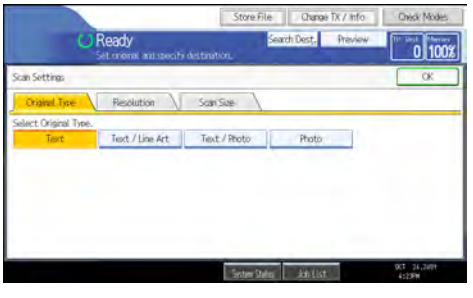
1. **Press [Scan Settings].**



2. **Make sure that [Original Type] is selected.**



3. **Select the original type you require, and then press [OK].**



Note

- If you select [Text / Line Art], [Text / Photo], or [Photo], the transmission will take longer than when [Text] is selected.
- If you send a fax document with [Text / Line Art], [Text / Photo], or [Photo] and the background of the received image is dirty, reduce the density setting and resend the fax. For details about setting the image density, see “Density (Contrast)”.
- You can set the original type that is selected right after the machine is turned on or whenever the [Clear Modes] key is pressed. See “Changing the Default Functions of the Fax's Initial Display”.

Reference

- p.79 "Density (Contrast)"
- p.169 "Changing the Default Functions of the Fax's Initial Display"

JBIG Transmission

If you use JBIG (Joint Bi-level Image experts Group) compression, you can send originals scanned using [Photo] faster than with other compression methods.

Important

- **This function is not available with a transmission to Internet Fax destination, e-mail destination, and folder destination.**
- **This function requires that the other party's fax machine has both the JBIG function and ECM function (G3 communication only).**

Resolution

Specify the resolution according to the size of the text on the original.

Images and text are scanned into the machine by converting them to a sequence of dots. The density of the dots determines the quality of the image and how long it takes to transmit. Therefore, images scanned at high resolution (Super Fine) have high quality but transmission takes longer. Conversely, low resolution (Standard) scanning results in lower quality but the original is sent more quickly. Select the setting that matches your needs based upon this trade off between speed and image clarity.

Standard (8 × 3.85 lines/mm, 200 × 100 dpi)

Select for originals containing normal size characters.

Detail (8 × 7.7 lines/mm, 200 × 200 dpi)

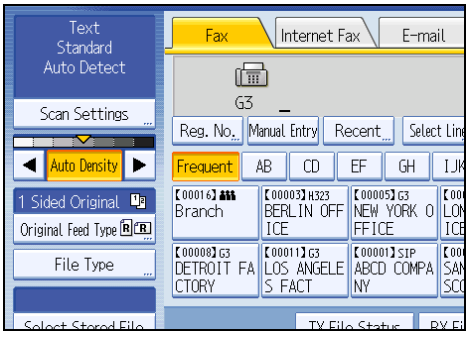
Select for originals containing small characters or when you require greater clarity. This resolution is twice as fine as Standard.

Super Fine (optional expansion memory required: 16 × 15.4 lines/mm, 400 × 400 dpi)

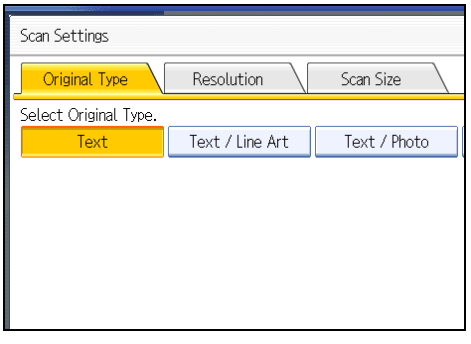
Select for originals with very fine details or when you require the best possible image clarity. This resolution is eight times finer than Standard.

1

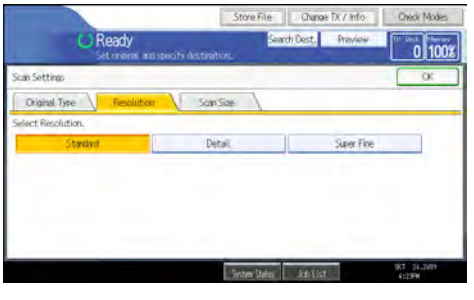
1. **Press [Scan Settings].**



2. **Press [Resolution].**



3. **Select the resolution you require, and then press [OK].**



Note

- If you install the optional expansion memory, “Super Fine” appears in the Resolution screen.
- If the other party's machine does not support the resolution at which you are sending, this machine automatically switches to a resolution that is supported. You can check the resolution at which you actually sent by printing the Journal. For details about printing the Journal, see “Print Journal”.
- Sending with Super Fine resolution requires that the machine has the optional expansion memory, and the other party's machine has the capability to receive fax documents at Super Fine resolution.
- The machine supports Standard, Detail, Fine (with the optional expansion memory), and Super Fine (with the optional expansion memory) resolutions for reception.

- You can set the resolution type that is selected right after the machine is turned on or whenever the [Clear Modes] key is pressed. See “Changing the Default Functions of the Fax's Initial Display”.
- When using Internet Fax transmission, documents are sent at “Detail” resolution, even if you have specified “Super Fine”. To send a document at “Super Fine”, configure the Full Mode when registering the destinations in the Address Book. See “T.37 Full Mode”.

Reference

- p.44 "T.37 Full Mode"
- p.169 "Changing the Default Functions of the Fax's Initial Display"
- p.256 "Print Journal"

Scan Size

Specify a scan area within an original.

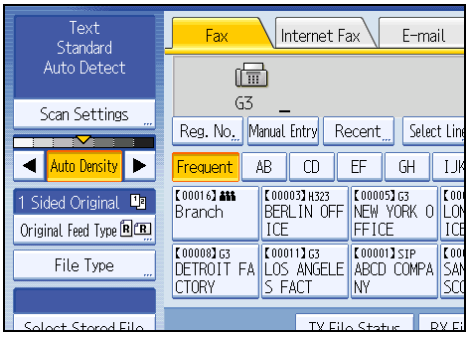
Normally, originals are scanned according to their size, which the machine detects automatically. However, you can specify the scan area manually also. Specifying the scan area manually can be useful for cropping excess border space around an image.

Auto Detect

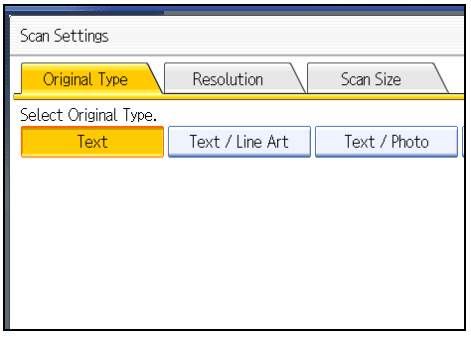
Detects the size of the first page and scans all pages using that size.

If the machine cannot detect the original size, a confirmation message appears. Place the original again.

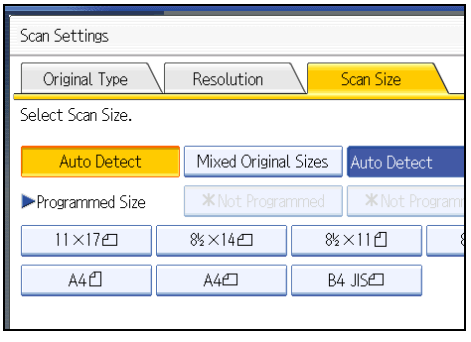
1. **Press [Scan Settings].**



2. **Press [Scan Size].**

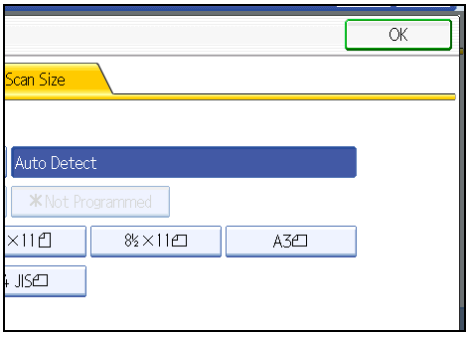


3. **Make sure that [Auto Detect] is selected.**



If it is not, press [Auto Detect].

4. **Press [OK].**



"Auto Detect" appears above [Scan Settings].

Note

- For details about an original the machine cannot detect its size correctly, see “Types of Original whose Sizes are Difficult to Detect”.

Reference

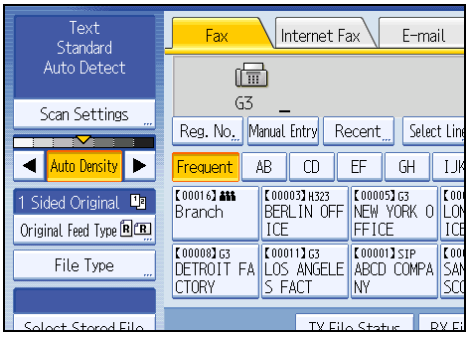
- p.61 "Types of Original whose Sizes are Difficult to Detect"

Regular

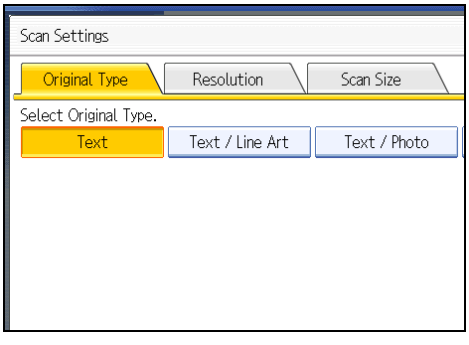
The placed original is scanned according to specified standard size regardless of actual size.

The sizes that can be specified are A4, B4 JIS, A3, $8^1/_2 \times 11$, $8^1/_2 \times 14$, and 11 × 17.

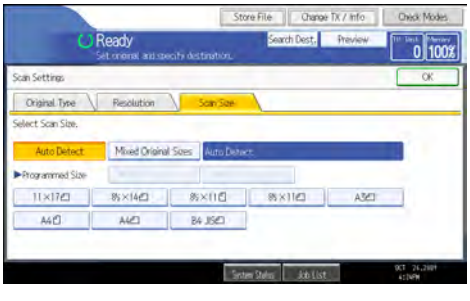
1. **Press [Scan Settings].**



2. **Press [Scan Size].**

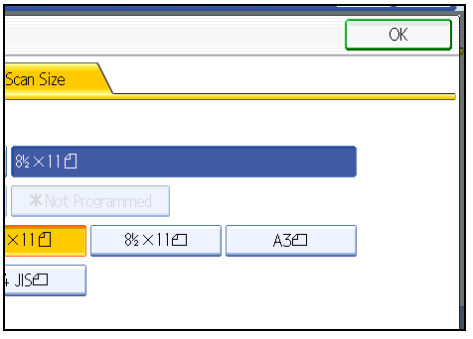


3. **Press the size of the originals to be sent.**



$8^1/_2 \times 11$ indicates LT. $8^1/_2 \times 14$ indicates LG. 11 × 17 indicates DLT.

4. **Press [OK].**



The selected size appears above [Scan Settings].

To cancel the selected scan size, select [Auto Detect] before pressing [OK].

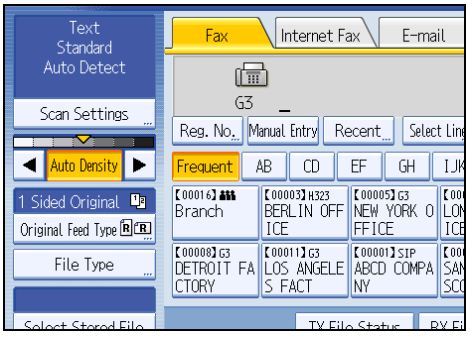
Area

Only the area in the specified size is scanned regardless of the actual size of a placed original.

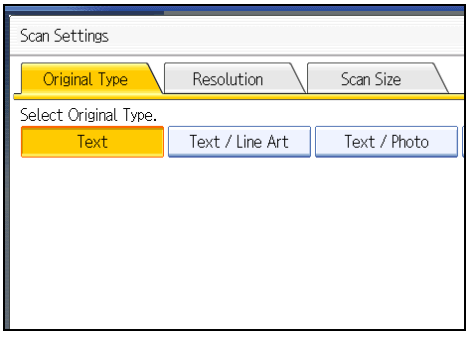
Important

- **You must first register the sizes of the originals that you want to scan in "Program / Change / Delete Scan Size" on the Facsimile Features menu. See "Program / Change / Delete Scan Size".**

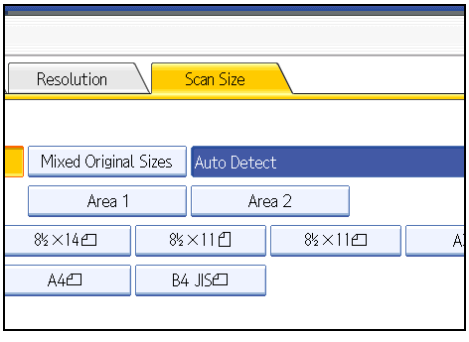
1. **Press [Scan Settings].**



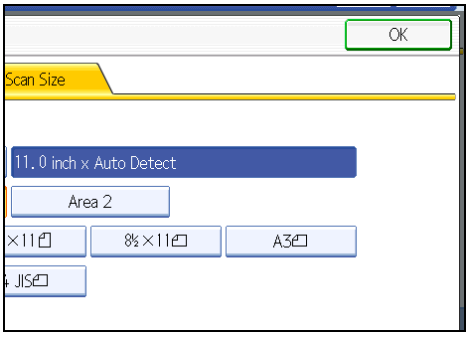
2. **Press [Scan Size].**



3. **Press [Area 1] or [Area 2].**



4. **Press [OK].**



The specified size appears above [Scan Settings].

To cancel the selected scan size, select [Auto Detect] before pressing [OK].

Reference

- p.368 "Program / Change / Delete Scan Size"

Mixed Original Sizes

You can send the different size of originals simultaneously.

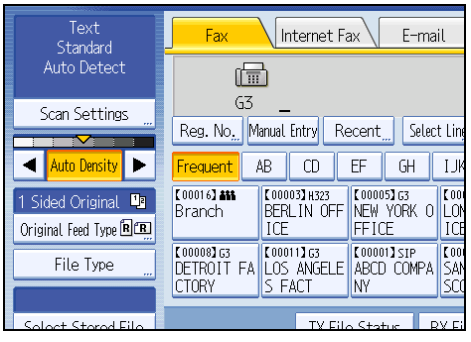
Select this to individually scan the size of originals loaded into the ADF. For example, when A3 and A4 size originals are sent together, usually all are sent using the size of the first original. By selecting Mixed Original Sizes, the machine scans and sends each original according to its size.

1

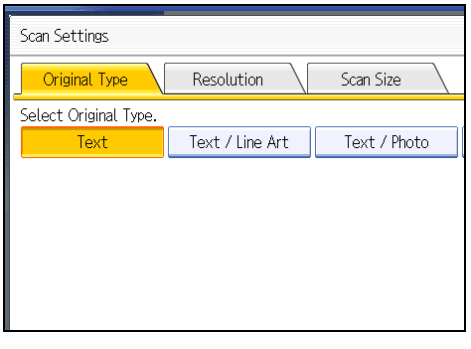
Important

- **The sizes of the originals that can be placed in this mode are 11 × 17, $8\frac{1}{2}$ × 14, $8\frac{1}{2}$ × 11 .**
- **When placing originals in the ADF, align their rear and left edges against the ADF, and adjust the document guide according to the largest original.**
- **Since small originals may not be correctly aligned with the original guide, the scanned image may be slanted.**

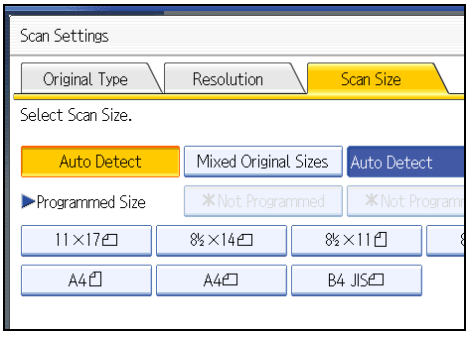
1. **Press [Scan Settings].**



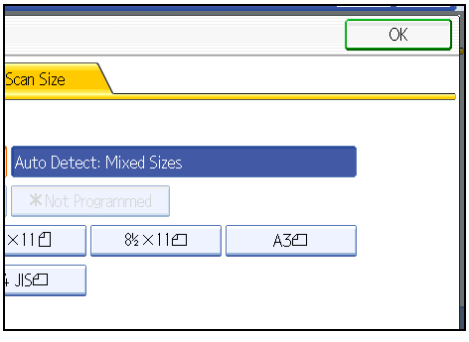
2. **Press [Scan Size].**



3. **Press [Mixed Original Sizes].**



4. **Press [OK].**



"Auto Detect: Mixed Sizes" appears above [Scan Settings].

To cancel Mixed Original Sizes, press [Mixed Original Sizes] again before pressing [OK].

Note

- When using Mixed Original Sizes, the machine sends the originals by Memory Transmission.
- When using Mixed Original Sizes, rotation transmission is disabled.
- You can have the machine select Mixed Original Sizes right after the power is turned on or whenever the [Clear Modes] key is pressed. See “Changing the Default Functions of the Fax's Initial Display”.

Reference

- p.169 "Changing the Default Functions of the Fax's Initial Display"

Density (Contrast)

You can adjust the density at which the originals are scanned.

The text and diagrams on originals should stand out clearly from the paper they are on.

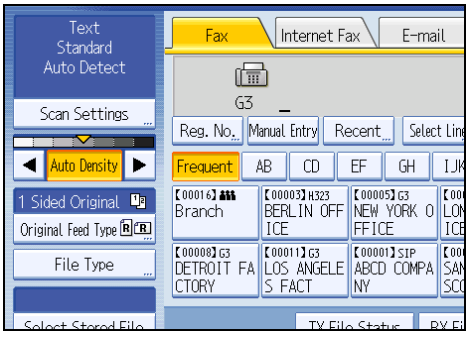
If the original has a darker background than normal (for example, a newspaper clipping), or if the writing is faint, adjust the density.

1

Auto Density

The appropriate density setting for the original is automatically selected.

1. Make sure that [Auto Density] is selected.



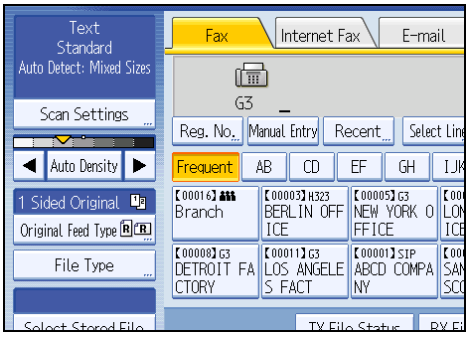
Manual Density

Use manual density to set density manually.

You can select one of seven density levels.

1. If [Auto Density] is selected, press [Auto Density] to turn it off.
2. Press [◀] or [▶] to adjust the density.

   The indicator moves.



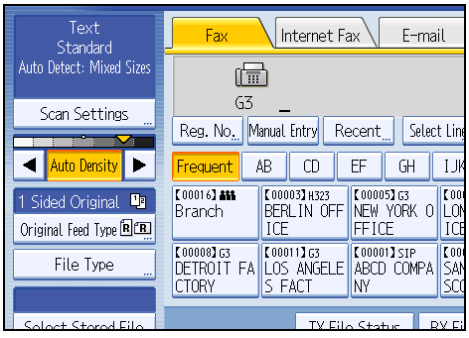
Combined Auto and Manual Density

You can only adjust density for photographs, illustrations, or diagrams if the original has a dark background.

You can select one of seven density levels.

1. Make sure that [Auto Density] is selected.
2. Press [◀] or [▶] to adjust the density.

   The indicator moves.



Note

- Selecting [Text], [Text / Line Art], or [Text / Photo] for the original type causes [Auto Density] to be selected.
- You can set the density that is selected right after the machine is turned on or whenever the [Clear Modes] key is pressed. See “Changing the Default Functions of the Fax's Initial Display”.

Reference

- p.169 "Changing the Default Functions of the Fax's Initial Display"

Mixing Scan Settings for a Multiple Page Original

When sending an original of several pages, you can select a different scan setting for each page.

It is recommended that originals be placed on the exposure glass when mixing scan settings for a multiple page original.

Important

- **If you are using the ADF, do not change the “Resolution” setting while originals are being scanned.**

When placing originals on the exposure glass

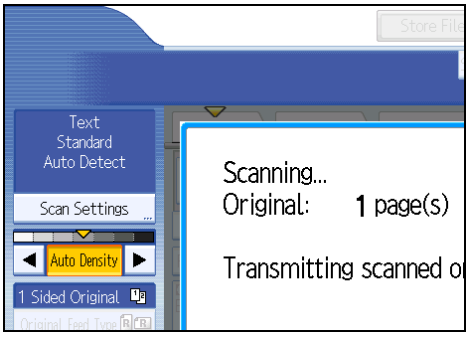
1. Check which pages you want to scan with different settings.
2. Remove the previous page and place the next page that you checked on the exposure glass.
3. Make the scan settings.

   You have about 60 seconds (10 seconds for Immediate Transmission) to make the scan settings. The time remaining is shown on the display.

Adjust the settings for each page before you press the [Start] key.

When placing originals in the Auto Document Feeder (ADF)

1. Check which pages you want to scan with different settings.
2. Make the scan settings before the page you want to change the settings for starts being scanned.



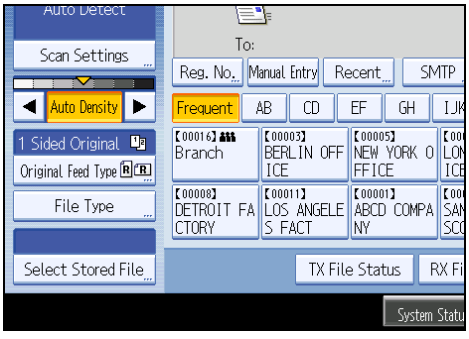
Depending on what time the scan settings are adjusted, the settings may not be reflected in the resulting operation.

Selecting the File Format

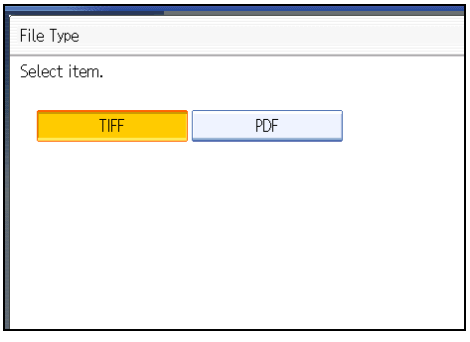
This section explains how to select the file format when sending a fax to an e-mail destination or folder destination. There are two file formats to select from:

- TIFF
- PDF

1. **Press [E-mail] or [Folder] and press [File Type].**



2. **Press [TIFF] or [PDF].**



The default setting is TIFF format.

Note

- Even if you specify a format for files being sent to fax, IP-Fax, or Internet fax destinations, the files will not be converted to the format you specify.
- For details about an e-mail destination, see “Sending an E-mail (E-mail Destinations)”.
- For details about a folder destination, see “Sending to Folder Destinations (Folder Destinations)”.

Reference

- p.101 "Sending an E-mail (E-mail Destinations)"
- p.107 "Sending to Folder Destinations (Folder Destinations)"

Changing the Line Port

Select a line port or protocol to be used for standard fax or IP-Fax transmission.

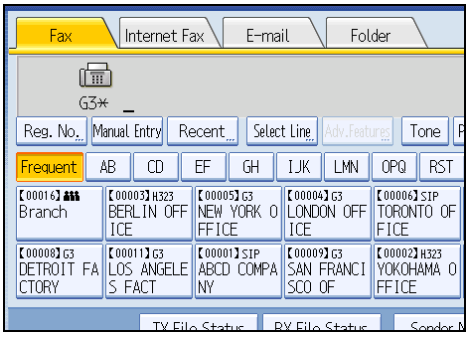
When the extra G3 interface unit is installed, you can connect to a maximum of three ports.

Important

- **To add more fax lines, the optional extra G3 interface unit is required.**

G3

G3 is selected after power up or when the machine is reset. If you install the extra G3 interface unit, you can select "G3-1", "G3-2", "G3-3", or "G3 Auto" depending on the number of the installed unit.



Multi-port

When the extra G3 interface unit is installed, communications can take place simultaneously through three lines at once.

The following list shows protocol combinations available for each line type.

Option	Available line types	Available protocol combinations
Without option	PSTN	G3
Extra G3 interface unit	PSTN + PSTN	G3 + G3
Extra G3 interface unit + Extra G3 interface unit	PSTN + PSTN + PSTN	G3 + G3 + G3

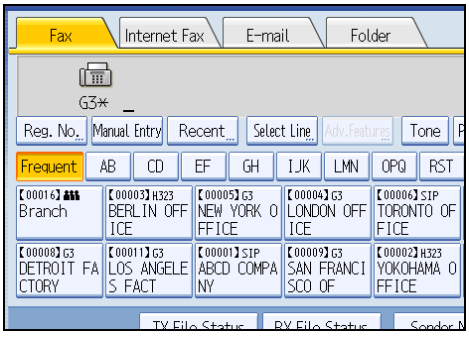
IP-Fax

When sending an IP-Fax, select either "SIP" or "H.323" as the protocol.

To display "SIP" and "H.323" on the screen, make the settings in "Initial Settings" in the Facsimile Features menu. If you are using SIP, specify "Enable SIP" and "SIP Settings". If you are using H.323, specify "Enable H.323" and "H.323 Settings". For details about these settings, see "Initial Settings".

Ask your administrator whether you should select "SIP" or "H.323" as the protocol.

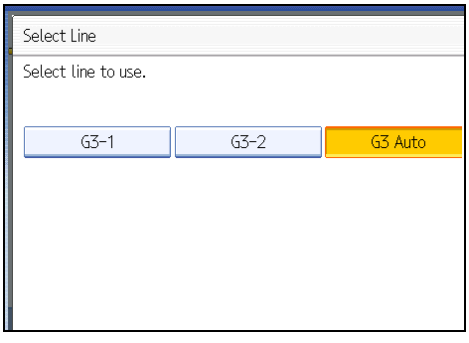
1. **Press [Select Line].**



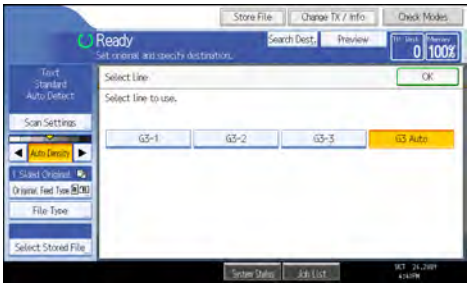
2. **Select the line you want to use.**

If you select "G3 Auto", the machine will use any available line. This increases efficiency.

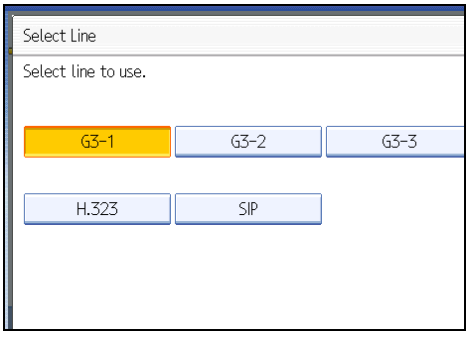
When one optional extra G3 unit is installed



When two optional extra G3 units are installed



When H.323/SIP are set to "On"



3. **Press [OK].**

   The standby display appears.

Note

- When you install the extra G3 interface unit, you can specify the line port home position. See "Changing the Default Functions of the Fax's Initial Display".
- When sending a fax, you can select the line port if dialing with the number keys.
- A maximum of three simultaneous communications are possible. You cannot perform three Immediate Transmissions simultaneously.
- If three communications are in progress, the display shows the first communication that was initiated.

Reference

- p.169 "Changing the Default Functions of the Fax's Initial Display"
- p.347 "Initial Settings"

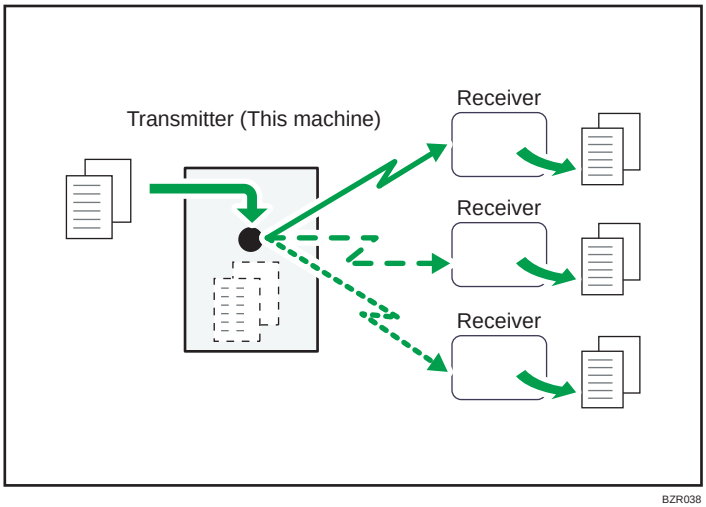
Simultaneous Broadcast Using Multiple Line Ports

The standard broadcast function sends faxes one at a time to multiple destinations in the order of specified destinations. However, the Simultaneous Broadcast function can simultaneously send faxes to multiple destinations using different lines.

This results in a shorter overall transmission time.

Important

- **The optional extra G3 interface unit is required.**



Note

- A maximum of three simultaneous transmissions (including LAN) are possible.
- When using the optional extra G3 interface unit, if you set the line selection as "G3 Auto" beforehand, the machine will use whichever G3 line is not busy. This increases efficiency.
- This function is available when using LAN-Fax Driver.

Specifying a Destination

This section explains how to specify a destination.

Fax numbers, IP-Fax destinations, Internet Fax destinations, e-mail destinations, and folder destinations can be specified.

Note

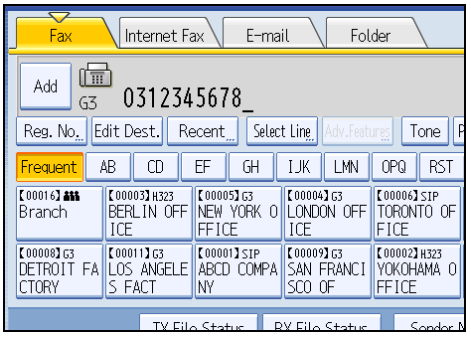
- The display shows the percentage of free memory space for storing originals. Since destinations are programmed in separate memory, dialing fax numbers using the number keys does not change the percentage on the display.

Sending over a Fax Line (Fax Destinations)

This section explains how to enter a fax number.

Use the number keys on the right side of the control panel to enter numbers.

1. **Make sure that [Fax] is selected.**
2. **Enter the fax number using the number keys.**



If you make a mistake, press the [Clear/Stop] key, and then enter again.

When adding a destination, pressing the transmission type tab switches the transmission type between fax/IP-Fax, Internet Fax, e-mail, and folder.

3. **Press the [Start] key.**

The machine starts to scan the original and stores it in memory. When scanning ends, the Communicating indicator lights and transmission starts.

Note

- To select a destination from the Address Book, see “Using the Address Book to Specify Destinations”.
- You can insert pauses and tones in a fax number. For details, see “Entering a pause” or “Entering a tone”.

- If the optional extra G3 interface unit is installed, select the line you want to use before pressing the [Start] key. For details about selecting a line, see “Changing the Line Port”.
- Press [Prg. Dest.] after entering the fax number to store the fax number in the destination list. For details about storing numbers you entered, see “Registering Entered Destinations to the Address Book”.
- For the maximum number of digits that can be included in a destination, see “Maximum Values”.

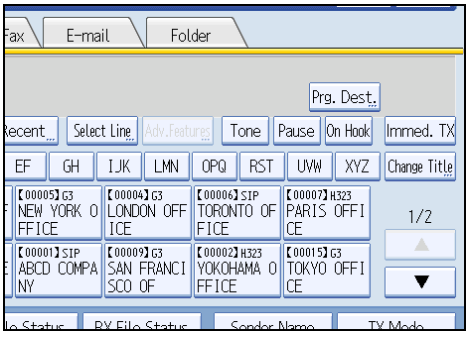
Reference

- p.84 "Changing the Line Port"
- p.89 "Entering a pause"
- p.90 "Entering a tone"
- p.109 "Using the Address Book to Specify Destinations"
- p.125 "Registering Entered Destinations to the Address Book"
- p.427 "Maximum Values"

Entering a pause

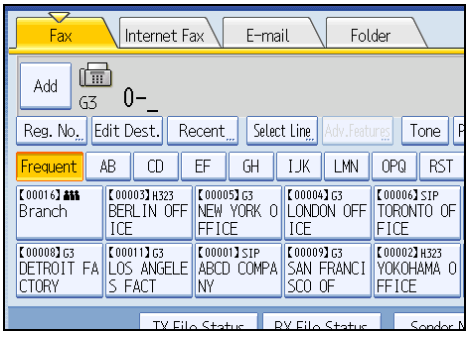
This section explains how to enter a pause.

Press [Pause] when dialing or storing a number to insert a pause of about two seconds.



Note

- A pause is shown as a “-”on the display.



- You can also program numbers including pauses in the destination list.

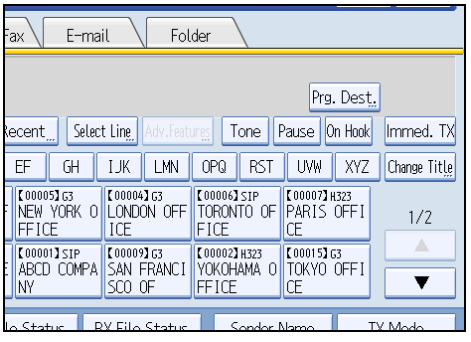
Entering a tone

This function allows a machine connected to a pulse dialing line to send tonal signals (for example if you want to use a special service on a tone dialing line).

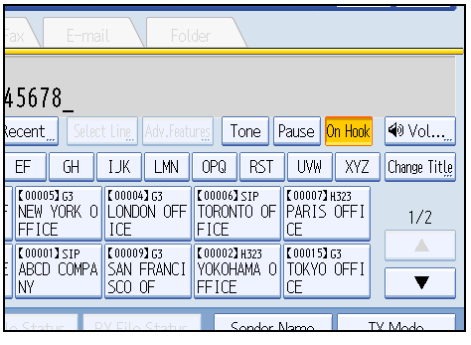
When you press [Tone], the machine dials the number using tonal signals.

This section explains how to use the tone function with On Hook Dial as an example.

1. **Press [On Hook].**



2. **Enter the fax number using the number keys.**
3. **Press [Tone].**



4. **Enter the number you want to tone dial using the number keys.**
5. **Press the [Start] key.**

   Transmission starts.

   If you want to cancel a transmission, press the [Clear/Stop] key, and then remove the originals.

   After transmission, the standby display appears.

Note

- Certain services may be unavailable even when using Tone function.
- A tone is shown as a "T" on the display and the next numbers are dialed using tonal signals.

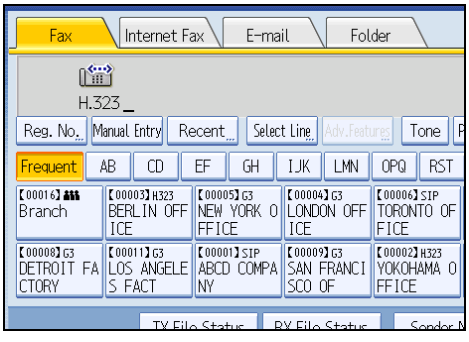
Sending by IP-Fax (IP-Fax Destinations)

This section explains how to specify a destination using IP-Fax transmission.

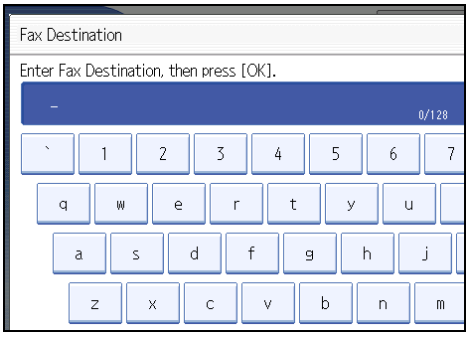
When using IP-Fax transmission, specify the IP-Fax destination (IP address, host name, or alias telephone number) in place of the fax number.

1. **Make sure that [Fax] is selected.**
2. **Specify the protocol.**

   For details, see “Changing the Line Port”.
3. **Press [Manual Entry].**



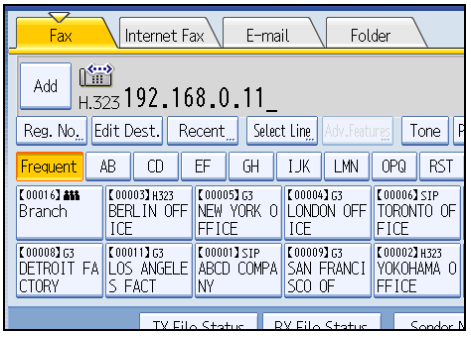
4. **Enter the IP-Fax destination, and then press [OK].**



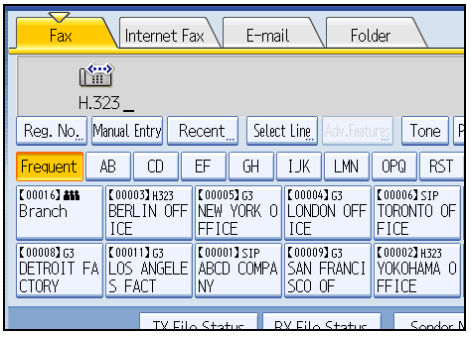
If you enter an incorrect character, press [←], [→], [Backspace], or [Delete All]. Then, re-enter the characters correctly.

To change the IP-Fax destination after pressing [OK], press [Edit Dest.], re-enter an IP-Fax destination, and then press [OK].

5. **To add a destination, press [Add].**



6. **Specify the next destination.**



To add another destination, repeat steps 4 and 5.

Press the transmission type tab to switch the transmission type between fax/IP-Fax, Internet Fax, e-mail, and folder.

7. **Press the [Start] key.**

The machine starts to scan the original and stores it in memory. When scanning ends, the Communicating indicator lights and transmission starts.

Note

- Depending on the security settings, [Manual Entry] might not appear and you might not be able to enter the IP-Fax destination.
- To select a destination from the Address Book, see “Using the Address Book to Specify Destinations”.
- IP-Fax will be available only if the gateway (T.38-compliant), gatekeeper, and SIP server are compatible with this machine. For a list of certified compatible gateways, gatekeepers, and SIP servers, contact your local retail or service representative.
- Methods of entering a destination vary depending on the network settings made by the administrator. Ask the machine administrator for details. For details about entering the IP-Fax destination, see “When using a gatekeeper server or SIP server”.
- For details about text entry, see “Entering Text”, About This Machine.

- The Facsimile Features menu includes a user parameter setting (switch 17, bit 2) that enables you to configure the machine to force the user to press [Add] whenever s/he specifies a destination using a destination key. This prevents users accidentally sending documents to the wrong destination. See “Parameter Settings”.
- If you press [Prg. Dest.], you can register an entered destination in the destination list. For details about storing a destination you entered, see “Registering Entered Destinations to the Address Book”.
- For the maximum number of digits that can be included in a destination, see “Maximum Values”.

Reference

- p.84 "Changing the Line Port"
- p.93 "When using a gatekeeper server or SIP server"
- p.109 "Using the Address Book to Specify Destinations"
- p.125 "Registering Entered Destinations to the Address Book"
- p.347 "Initial Settings"
- p.375 "Parameter Settings"
- p.427 "Maximum Values"

When using a gatekeeper server or SIP server

The IP-Fax destination details that you must specify vary depending on the machine's configuration and the configuration of the network to which it is connected.

Depending on this machine's configuration, specify the IP-Fax destination as follows:

When not using a gatekeeper/SIP server

- From IP-Fax to IP-Fax

  Specify the IP address or host name of the receiving machine.

  Example: 192.168.1.10 (IP address)

  Example: IPFAX1 (host name)
- From IP-Fax to G3 fax

  Specify the G3 fax telephone number of the receiving machine.

  Example: 0312345678

When using a gatekeeper server

- From IP-Fax to IP-Fax

  Specify the alias telephone number of the receiving machine.

  Example: 0311119999 (alias telephone number)
- From IP-Fax to G3 fax

  Specify the G3 fax telephone number of the receiving machine.

Example: 0312345678

When using a SIP server

- From IP-Fax to IP-Fax

  Specify the SIP user name of the receiving machine.

  Example: ABC (SIP user name)

- From IP-Fax to G3 fax

  Specify the G3 fax telephone number of the receiving machine.

  Example: 0312345678

Note

- To send to a G3 fax via a gateway connected to a public telephone line, you must specify it's the receiver's machine telephone number. For example, if the receiver's fax number is "0312345678", specify "5678". To send from an IP-Fax to G3 fax without using gatekeeper or SIP server, you must register the gateway also.
- An alias telephone number is a number that is registered in the gatekeeper, and is available only in the network to which the gatekeeper is connected.
- Pay attention to the number of telephone number digits set in the gateway/IP address conversion table to avoid transmission error.
- SIP allows you to transmit and receive documents via an IPv6 network. This machine does not support H.323 over IPv6.
- Although the machine can have multiple IP addresses in an IPv6 environment, only one address can receive IP-Faxes.
- To send via IPv6, you must specify, for the receiver's IPv6 address and host name, the manually configured address for the receiver's fax.
- For reception when not using SIP server in an IPv6 environment, you must specify this machine's IPv6 address manually. This is not necessary if you are using SIP server.
- To send by IPv4 when using SIP server in a mixed IPv4/IPv6 environment, enter "v4:" at the beginning of the IP-Fax destination. Likewise, to send by IPv6 when using SIP server in a mixed IPv4/IPv6 environment, enter "v6:" at the beginning of the IP-Fax destination.
- "SIP call setup" is performed either by IPv4 or IPv6, depending on the configuration of your environment.

Setting a port number

When using IP address and port number

To send to an IP-Fax destination, depending on the receiver's network configuration, you might have to specify the IPv4 address and port number of the receiving machine. For example, if the receiver's IPv4 address is "192.168.1.10" and the port number is "2100", specify "192.168.1.10:2100".

Similarly, if the receiver's IPv6 address is “fe80::0123:4567:89ab:cdef” and the port number is “2200”, specify “[fe80::0123:4567:89ab:cdef]:2200”. Ask your network administrator for details.

When using host name and port number

When you specify a host name, depending on the receiver's network configuration, you may need to specify the host name and port number of the receiving machine. For example, if the receiver's host name is “IPFAX1” and the port number is “2100”, specify “IPFAX1:2100”. Ask the network administrator for details.

Sending by Internet Fax (Internet Fax Destinations)

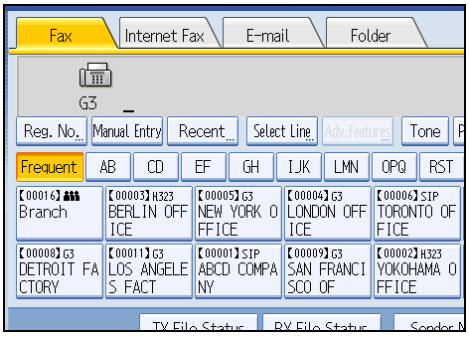
This section explains how to specify an Internet Fax destination.

When using Internet Fax transmission, specify the e-mail address (Internet Fax destination) in place of the fax number.

Important

- **You can also enter a computer's e-mail address as the destination. In this case, you can send TIFF files only.**
- **To send an Internet Fax, you must specify the sender.**
- **The sender must be registered in the Address Book in advance. Register his/her e-mail address and specify “Use Name as” for [Sender] using “Address Book Management” in “System Settings”. For details about these settings, see “Registering Addresses and Users for Facsimile/Scanner Functions”, Network and System Settings Reference.**
- **Internet Fax is performed using Memory Transmission, which automatically starts transmission after storing documents in memory. If you switch the type of transmission to Internet Fax while the machine is in Immediate Transmission mode, the transmission mode is automatically switched to Memory Transmission.**

1. **Press [Internet Fax] to switch the transmission type to Internet Fax.**

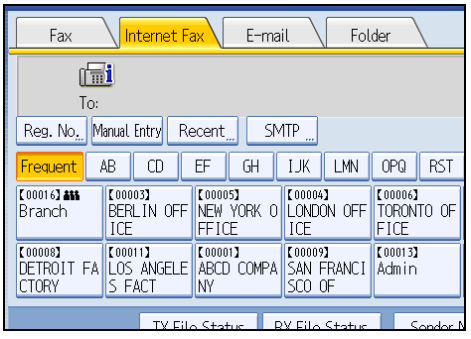


2. **Specify the sender.**

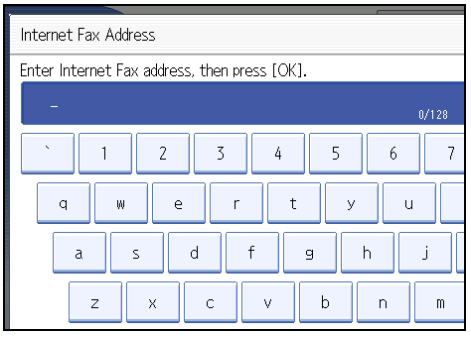
   For details, see “Sender Settings”.

1

3. **Press [Manual Entry].**



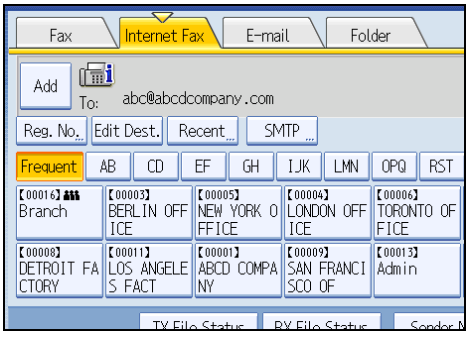
4. **Enter the Internet Fax destination, and then press [OK].**



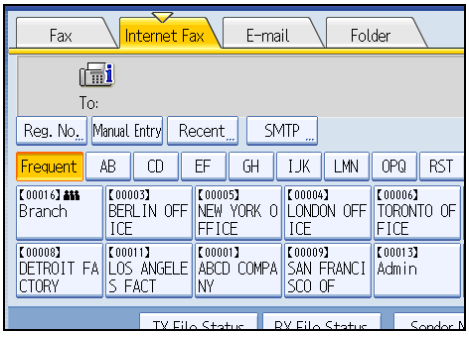
If you enter an incorrect character, press [←], [→], [Backspace], or [Delete All]. Then, re-enter the characters correctly.

To change the e-mail address after pressing [OK], press [Edit Dest.], re-enter an e-mail address, and then press [OK].

5. **To add a destination, press [Add].**



6. **Specify the next destination.**



To add another destination, repeat steps 5 and 6.

Press the transmission type tab to switch the transmission type between fax/IP-Fax, Internet Fax, e-mail, and folder.

7. **Press the [Start] key.**

The machine starts to scan the original and stores it in memory. When scanning ends, the Communicating indicator lights and transmission starts.

Note

- Depending on the security settings, [Manual Entry] might not appear and you might not be able to enter the e-mail address.
- To select a destination from the Address Book, see “Using the Address Book to Specify Destinations”.
- For details about text entry, see “Entering Text”, About This Machine.
- For details about canceling a transmission, see “Canceling a Transmission”.
- The Facsimile Features menu includes a user parameter setting (switch 17, bit 2) that enables you to configure the machine to force the user to press [Add] whenever s/he specifies a destination using a destination key. This prevents users accidentally sending documents to the wrong destination. See “Parameter Settings”.
- If you press [Prg. Dest.], you can register an entered destination in the destination list. For details about programming destinations, see “Registering Entered Destinations to the Address Book”.
- For the maximum number of digits that can be included in a destination, see “Maximum Values”.
- When the sender is specified, the transmission result etc. is sent to the sender's e-mail address.
- If “Auto Specify Sender Name” is set to “On” in “System Settings”, the sender is automatically specified and you can omit the procedure for specifying a sender. If “On” is selected, either the administrator's or this machine's e-mail address appears in the “From” field. For details about Auto Specify Sender Name, see “File Transfer”, Network and System Settings Reference.
- If “Auto Specify Sender Name” is set to “Off” in “System Settings” and no e-mail address is registered for the sender you specified, Internet Fax documents cannot be sent.

1

Reference

- p.109 "Using the Address Book to Specify Destinations"
- p.125 "Registering Entered Destinations to the Address Book"
- p.148 "Sender Settings"
- p.159 "Canceling a Transmission"
- p.375 "Parameter Settings"
- p.427 "Maximum Values"

Bypassing the SMTP server

You can send Internet Fax documents directly to their destinations without going through the SMTP server.

Normally, Internet Fax is sent through the SMTP server. With this feature however, the domain part of the destination's e-mail address is read as the SMTP server's address and transmissions bypass the SMTP server. Since this reduces the load on the server, you can send Internet Faxes without having to take into account the transfer time from server to destination.

Important

- To use this function, the following settings must be specified:
  - In "System Settings", "SMTP Server", in "File Transfer", set the port number to "25".
  - To specify the host name of the other party as the domain part of the e-mail address, register the host name of the other party on the DNS server.
  - For details about these settings, see "File Transfer", Network and System Settings Reference.
- If the other party's IP address is not registered on the DNS server, specify the IP address at the domain part of the e-mail address.
- To send a document over an IPv6 network, you must specify the other party's host name (not IP address) as the domain part.
- To use this function, the other party's fax machine must:
  - be compatible with Internet Fax
  - be connected to the same LAN as this machine
  - support SMTP reception and have its reception protocol set to SMTP
- SMTP authentication set on the other party's fax machine is disabled when Internet Fax is transmitted using this function.
- If an Internet Fax is transmitted from the other party using this function, even if reception fails, Error Mail Notification is not sent to the sender.
- When an Internet Fax is transmitted using this function, even if transmission fails, the server does not send error notification e-mail.

- **When using this function, you cannot send Internet Fax to the administrator e-mail address that is registered on this machine.**

There are two ways of specifying a destination, as follows:

By specifying the other party's host name

Specify a destination's e-mail address by adding the other party's host name to the domain part of the e-mail address. Specify the address after the @ as follows: "host name", ". (dot)", and "domain name".

xxxx@host name of the other party.domain name

For example, if the other party's e-mail address is "abc@defcompany.com" and the host name is "HOST":

abc@HOST.defcompany.com

By specifying the other party's IP address

Specify a destination's e-mail address by changing the domain part of the e-mail address to the other party's IP address.

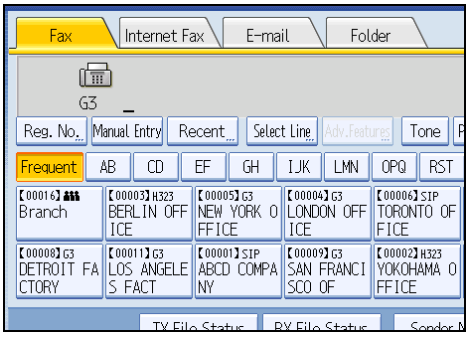
xxxx@[the other party's IP address]

For example, if the other party's e-mail address is "abc@defcompany.com" and the IP address is "192.168.1.10":

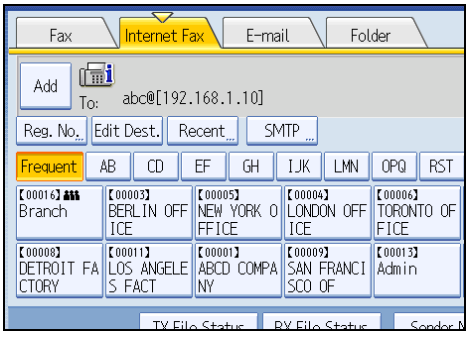
abc@[192.168.1.10]

Use the following procedure to bypass the SMTP server.

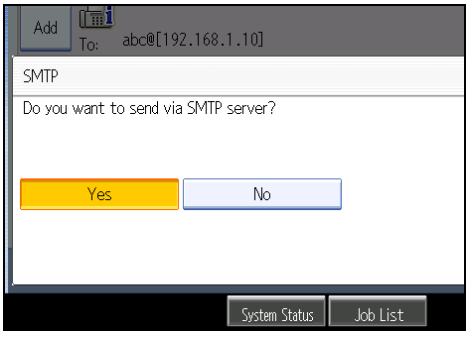
1. **Press [Internet Fax] to switch the transmission type to Internet Fax.**



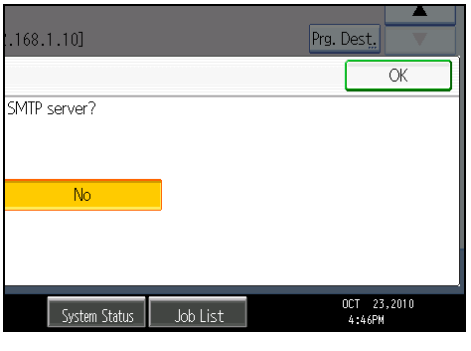
2. **Press [SMTP].**



3. **Press [No].**



4. **Press [OK].**



Note

- If you use [Manual Entry] to specify the destinations directly, you can also specify whether or not to use SMTP server for each destination.
- If you use the destination list to select the destinations, the SMTP server setting specified in the Address Book is enabled. For details about making the SMTP server settings in the Address Book, see "Registering Addresses and Users for Facsimile/Scanner Functions", Network and System Settings Reference.

- To send Internet Fax documents from a computer, use LAN-Fax Driver to specify whether or not to bypass the SMTP server. When sending with the [Use device address] check box selected, the SMTP server setting specified on this machine is enabled.

Sending an E-mail (E-mail Destinations)

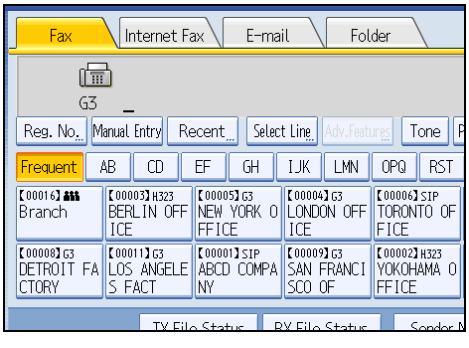
This section explains how to send a document to a computer by specifying an e-mail address.

To use e-mail transmission, specify the e-mail address in place of the fax number.

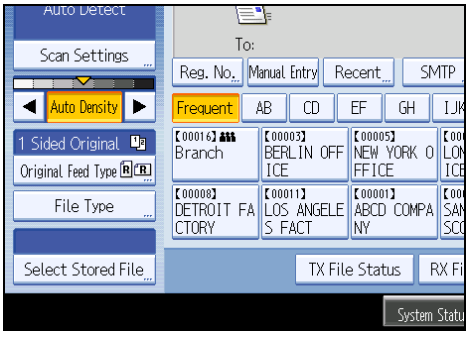
Important

- You can also enter the e-mail address of another machine that supports Internet Fax. Note however that only TIFF-F files can be sent by Internet Fax. Depending on the model of the destination machine, PDF files might not be accepted.
- To send an e-mail, you must specify the sender.
- The sender must be registered in the Address Book in advance. Register his/her e-mail address and specify "Use Name as" for [Sender] using "Address Book Management" in "System Settings". For details about these settings, see "Registering Addresses and Users for Facsimile/Scanner Functions", Network and System Settings Reference.
- To use an e-mail address registered in the Address Book as an e-mail destination, set "Use E-mail Address for" as [E-mail / Internet Fax Destination]. Use the same procedure for e-mail addresses that are registered in group destinations in the Address Book.
- E-mail transmission is performed using Memory Transmission, which automatically starts transmission after storing documents in memory. If you switch the type of transmission to e-mail while the machine is in Immediate Transmission mode, the transmission mode is automatically switched to Memory Transmission.

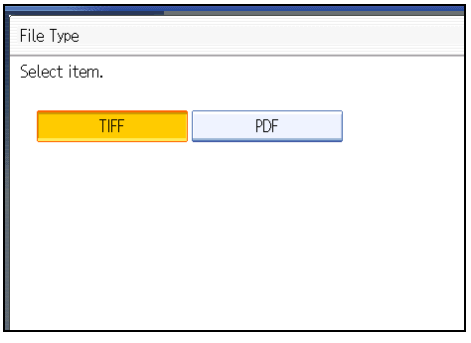
1. Press [E-mail] to switch the transmission type to e-mail.



2. **To set the file type, press [File Type].**



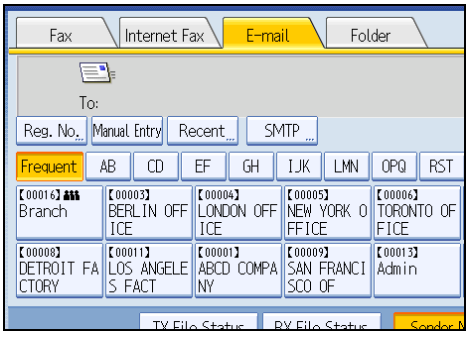
Select [TIFF] or [PDF], and then press [OK].



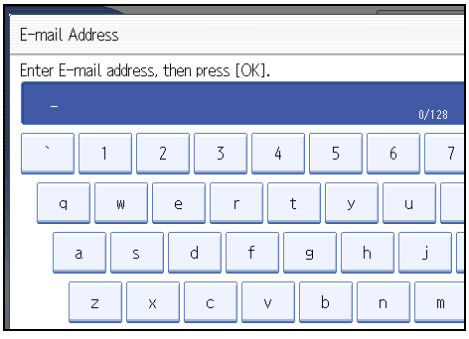
3. **Specify the sender.**

For details, see “Sender Settings”.

4. **Press [Manual Entry].**



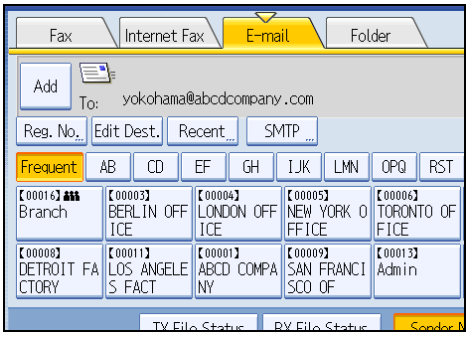
5. **Enter the e-mail destination, and then press [OK].**



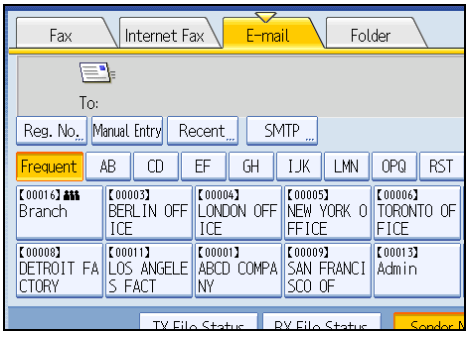
If you enter an incorrect character, press [←], [→], [Backspace], or [Delete All]. Then, re-enter the character correctly.

To change the e-mail address after pressing [OK], press [Edit Dest.], re-enter the e-mail address, and then press [OK].

6. **To add a destination, press [Add].**



7. **Specify the next destination.**



To add another destination, repeat steps 6 and 7.

Press the transmission type tab to switch the transmission type between fax/IP-Fax, Internet Fax, e-mail, and folder.

8. **Press the [Start] key.**

   The machine starts to scan the original and stores it in memory. When scanning ends, the Communicating indicator lights and transmission starts.

1

Note

- Depending on the security settings, [Manual Entry] might not appear and you might not be able to enter the e-mail address.
- To select a destination from the Address Book, see “Using the Address Book to Specify Destinations”.
- For details about text entry, see “Entering Text”, About This Machine.
- For details about canceling a transmission, see “Canceling a Transmission”.
- The Facsimile Features menu includes a user parameter setting (switch 17, bit 2) that enables you to configure the machine to force the user to press [Add] whenever s/he specifies a destination using a destination key. This prevents users accidentally sending documents to the wrong destination. See “Parameter Settings”.
- If you press [Prg. Dest.], you can register an entered destination in the destination list. For details about programming destinations, see “Registering Entered Destinations to the Address Book”.
- For the maximum number of digits that can be included in a destination, see “Maximum Values”.
- When the sender is specified, the transmission result etc. is sent to the sender's e-mail address.
- If “Auto Specify Sender Name” is set to “On” in “System Settings”, the sender is automatically specified and you can omit the procedure for specifying a sender. If “On” is selected, the either administrator's or this machine's e-mail address appears in the “From” field. For details about Auto Specify Sender Name, see “File Transfer”, Network and System Settings Reference.
- If “Auto Specify Sender Name” is set to “Off” in “System Settings” and no e-mail address is registered for the sender you specified, e-mail documents cannot be sent.
- For details about an e-mail destination, see “E-mail Transmission”.

Reference

- p.47 "E-mail Transmission"
- p.109 "Using the Address Book to Specify Destinations"
- p.125 "Registering Entered Destinations to the Address Book"
- p.148 "Sender Settings"
- p.159 "Canceling a Transmission"
- p.375 "Parameter Settings"
- p.427 "Maximum Values"

Bypassing the SMTP server

You can send e-mail documents directly to their destinations without going through the SMTP server.

Normally, e-mail is sent through the SMTP server. With this feature however, the domain part of the destination's e-mail address is read as the SMTP server's address and transmissions bypass the SMTP server. Since this reduces the load on the server, you can send e-mails without having to take into account the transfer time from server to destination.

Important

- To use this function, the following settings must be specified:
  - In "System Settings", "SMTP Server", in "File Transfer", set the port number to "25".
  - To specify the host name of the other party as the domain part of the e-mail address, register the host name of the other party on the DNS server.
  - For details about these settings, see "File Transfer", Network and System Settings Reference.
- If the other party's IP address is not registered on the DNS server, specify the IP address at the domain part of the e-mail address.
- To send a document over an IPv6 network, you must specify the other party's host name (not IP address) as the domain part.
- To use this function, the other party's computer or server must:
  - be in an environment where e-mail can be received
  - be connected to the same LAN as this machine
  - support SMTP reception and have its reception protocol set to SMTP
- SMTP authentication set on the other party's computer or server is disabled when e-mail is sent using this function.
- If e-mail is sent from the other party using this function, even if reception fails, Error Mail Notification is not sent to the sender.
- When e-mail is sent using this function, even if transmission fails, the server does not send error notification e-mail.
- When using this function, you cannot send e-mail to the administrator e-mail address that is registered on this machine.

There are two ways of specifying a destination, as follows:

By specifying the other party's host name

Specify a destination's e-mail address by adding the other party's host name to the domain part of the e-mail address. Specify the address after the @ as follows: "host name", ". (dot)", and "domain name".

xxxx@host name of the other party.domain name

For example, if the other party's e-mail address is "abc@defcompany.com" and the host name is "HOST":

abc@HOST.defcompany.com

1

By specifying the other party's IP address

Specify a destination's e-mail address by changing the domain part of the e-mail address to the other party's IP address.

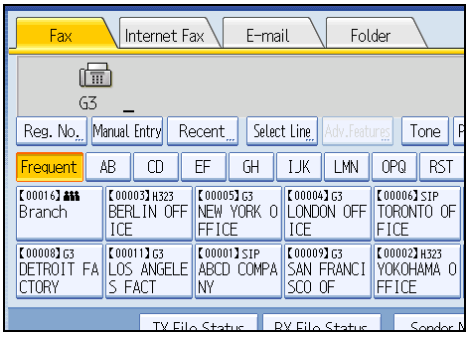
xxxx@[the other party's IP address]

For example, if the other party's e-mail address is “abc@defcompany.com” and the IP address is “192.168.1.10”:

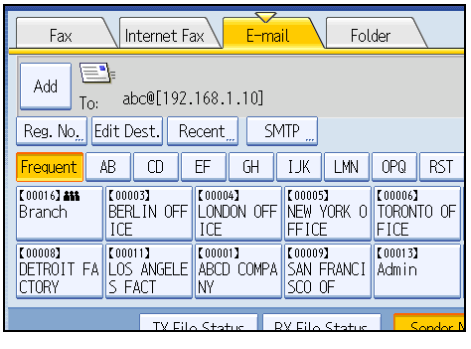
abc@[192.168.1.10]

Use the following procedure to bypass the SMTP server.

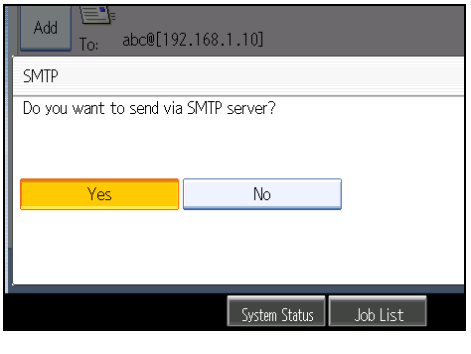
1. **Press [E-mail] to switch the transmission type to e-mail.**



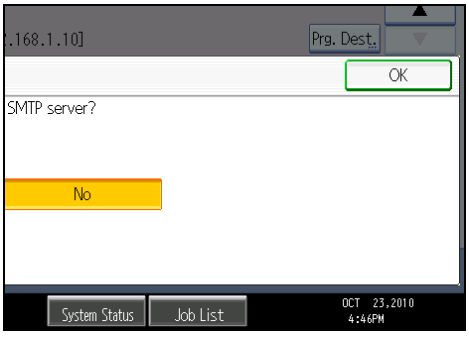
2. **Press [SMTP].**



3. **Press [No].**



4. Press [OK].



Note

- If you use [Manual Entry] to specify the destinations directly, you can also specify whether or not to use SMTP server for each destination.
- If you use the destination list to select the destinations, the SMTP server setting specified in the Address Book is enabled.

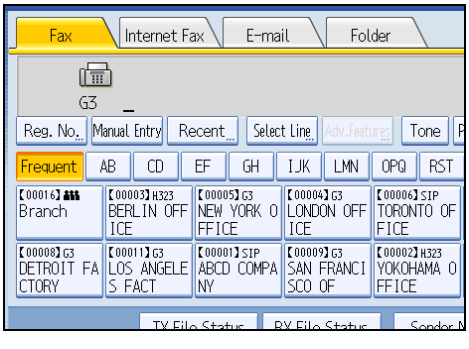
Sending to Folder Destinations (Folder Destinations)

You can specify a folder destination by selecting a Destination key from the destination list.

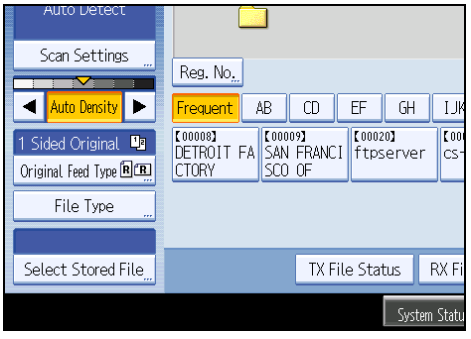
Important

- **To send to a folder destination, you must first register the path for the folder in the Address Book. You cannot enter the path on the standby display. For details about how to register a folder destination, see "Registering Addresses and Users for Facsimile/Scanner Functions", Network and System Settings Reference.**

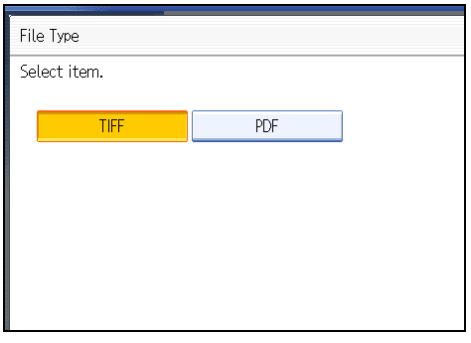
1. Press [Folder] to switch the transmission type to folder.



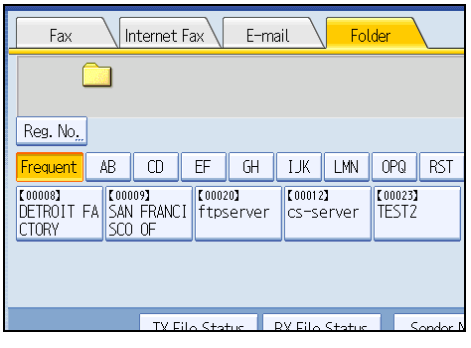
2. To set the file type, press [File Type].



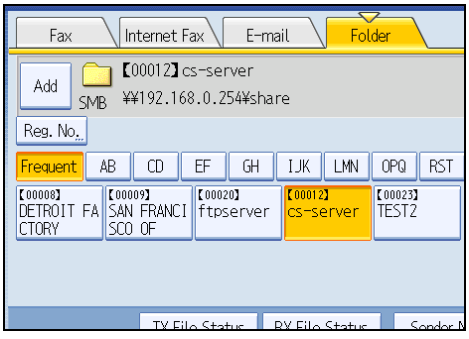
Select [TIFF] or [PDF], and then press [OK].



3. Press the Destination key to specify a destination.



4. **Specify the next destination.**



To add another folder destination, press the next Destination key.

Press the transmission type tab to switch the transmission type between fax/IP-Fax, Internet Fax, e-mail, and folder.

5. **Press the [Start] key.**

The machine starts to scan the original and stores it in memory. When scanning ends, the Communicating indicator lights and transmission starts.

Note

- Folder transmission is performed using Memory Transmission, which automatically starts transmission after storing documents in memory. If you switch the type of transmission to folder while the machine is in Immediate Transmission mode, the transmission mode is automatically switched to Memory Transmission.
- For details about canceling a transmission, see “Canceling a Transmission”.
- The Facsimile Features menu includes a user parameter setting (switch 17, bit 2) that enables you to configure the machine to force the user to press [Add] whenever s/he specifies a destination using a destination key. This prevents users accidentally sending documents to the wrong destination. See “Parameter Settings”.
- For details about a folder destination, see “Folder Transmission”.

Reference

- p.51 "Folder Transmission"
- p.159 "Canceling a Transmission"
- p.375 "Parameter Settings"

Using the Address Book to Specify Destinations

When destinations are programmed in a destination list, you can specify a destination by selecting a Destination key from the destination list.

The programmed name appears on Destination key.

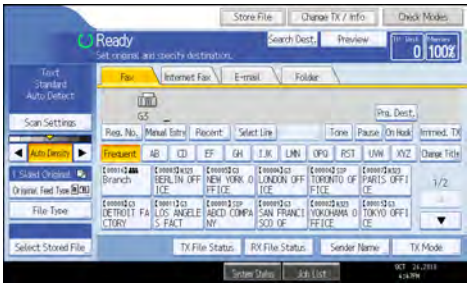
Press the transmission type tab to switch the transmission type between fax/IP-Fax, Internet Fax, e-mail, and folder.

Important

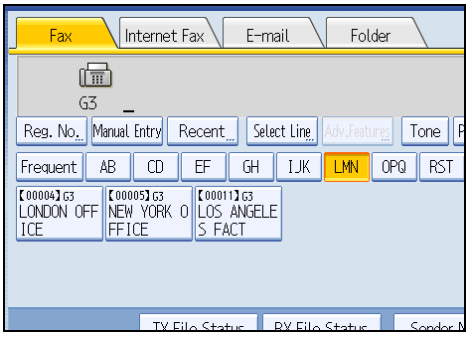
- **In the destination list, program destinations in advance. For details about programming destinations, see "Registering Addresses and Users for Facsimile/Scanner Functions", Network and System Settings Reference.**

1. **Press the transmission type tab to switch the transmission type to fax/IP-Fax, Internet Fax, e-mail, or folder.**
2. **Press the title word key where the desired destination is programmed.**

   For example, if you want to specify "NewYork Office" programmed in "LMN", press [LMN].



3. **Press the Destination key programmed with the desired destination.**



   If the desired Destination key is not shown, press [▲] and [▼] to look through the list.

   To cancel the selection, press the selected Destination key again. You can also press the [Clear/Stop] key to cancel the selection.

   To select more destinations, repeat steps 2 and 3.

   The destination is set and the Destination key is highlighted.

4. **Press the [Start] key.**

Note

- To check the contents of Destination keys, print the destination list using Print Address Book: Destination List under System Settings. For details about the printing method, see "Administrator Tools", Network and System Settings Reference.

Switching the type of title in the Address Book

There are three types of titles for destination lists; "Title 1", "Title 2", and "Title 3".

1. Press [Change Title].
2. Select the type of the title, and then press [OK].

Specifying Group Destinations

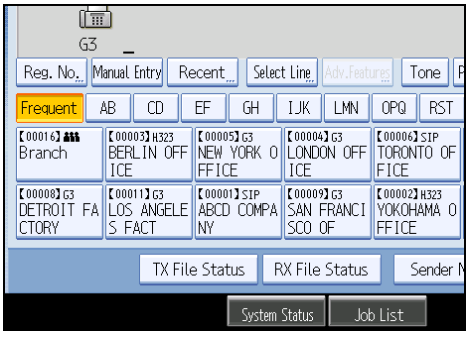
If you program multiple destinations into a group, you can send documents to all destinations in that group using just a few keystrokes.

Destinations programmed in a group are indicated by a group icon .

Important

- In the destination list, program groups in advance. For details about programming destinations, see "Registering Addresses and Users for Facsimile/Scanner Functions", Network and System Settings Reference.
- Group destination can be used only for Memory Transmission; it cannot be used for Immediate Transmission. The machine automatically changes to Memory Transmission when you use group destination.
- The total number of destinations programmed in multiple groups should not exceed the maximum number of destinations you can specify per file, see "Maximum Values".

1. Press the transmission type tab to switch the transmission type to fax/IP-Fax, Internet Fax, e-mail, or folder.
2. Press the Destination key programmed with the desired group.



The destination is set and the Destination key is highlighted.

To select more groups, repeat step 2.

3. **Press the [Start] key.**

Note

- To view which destinations are registered in a group, print the group list using the Print Address Book: Destination List function under System Settings. For details about the printing method, see "Administrator Tools", Network and System Settings Reference.
- A confirmation message appears if the destination group includes an address that is incompatible with the specified transmission type. Press [Select] to specify destinations where the numbers or addresses of the specified transmission type are registered. Press [Cancel] to change the destination.
- To cancel any destination(s) among the group, press [Expand Group Dest.] in [Check Modes]. Then, on the standby display, press [▲] and [▼] to display the desired destination, and then press the [Clear/Stop] key. You can also cancel a transmission by pressing the highlighted Destination key to deselect it.

Reference

- p.427 "Maximum Values"

International TX Mode

If you set the International TX mode to [On], the machine sends faxes at lower speed. This improves the chances of successful reception, but increases the time required for sending.

To send a fax using International TX Mode, you must first set the International TX mode to [On] and register the destination in the Address Book. For details about how to register destinations for International TX Mode, see "Registering Addresses and Users for Facsimile/Scanner Functions", Network and System Settings Reference.

Selecting Destinations from Recent Destinations

The machine stores the latest destinations specified for each transmission method.

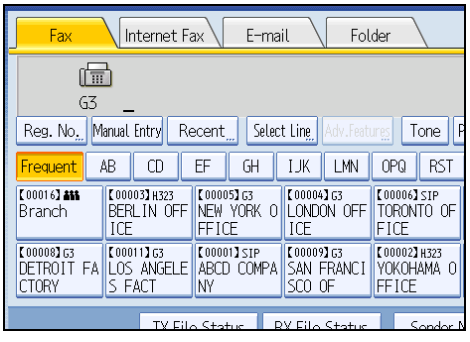
This function saves time when you are sending to the same destination repeatedly, as you do not have to enter the destination again.

Important

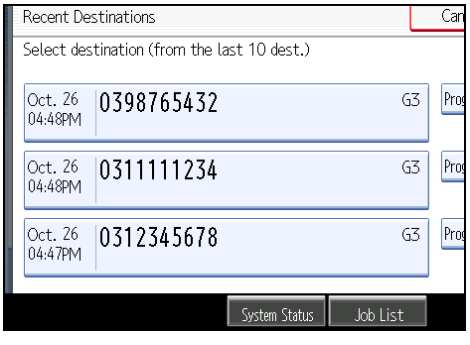
- **The following kinds of destinations are not stored:**
  - **Destinations specified using the destination list**
  - **Destinations specified as a group destination**
  - **Destinations specified under Memory File Transfer**

- Destinations selected from Recent Destinations (regarded as already stored in memory)
- Second and later destinations broadcasted to
- Destinations specified in the LAN-Fax Driver on the computer
- Folder destination

1. Place the original, and then select the scan settings you require.
2. Press [Recent].



3. Select the destination you want to redial to, and then press [OK].



4. Press the [Start] key.

Note

- You can select Internet Fax, IP-Fax, and e-mail destinations from Recent Destinations as well.
- When you press [Program Dest.], you can register a selected destination in the destination list. For details about storing a destination you selected, see “Registering Entered Destinations to the Address Book”.
- For the maximum number of recent destinations the machine can store, see “Maximum Values”.
- You can delete destinations stored in “Recent Destinations” using the [Delete Recent Destinations] function in the Facsimile Features menu. For details about this function, see “General Settings”.

Reference

- p.125 "Registering Entered Destinations to the Address Book"

- p.335 "General Settings"
- p.427 "Maximum Values"

1

Preventing Transmission to the Wrong Destination

If you want to prevent documents being sent to the wrong destination, you can configure the machine to prompt users twice for the destination, or to display the entered destination prior to transmission.

Re-entering a fax number to confirm destination

Enter the fax number again to confirm the destination is correct.

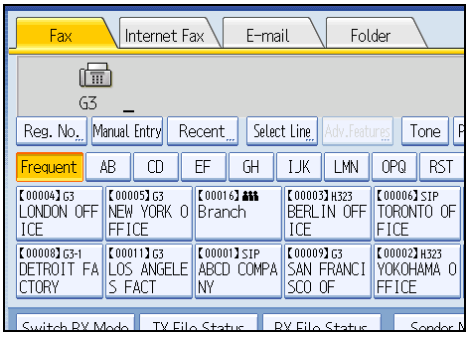
Transmission is disabled if the confirmation fax number does not match the first fax number. This function helps prevent users accidentally sending faxes to the wrong destination.

If you want to enable this function, contact your service representative.

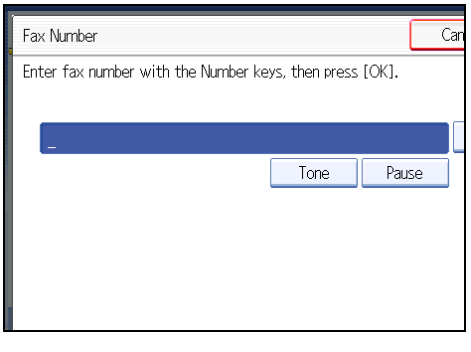
Important

- **When using this function, you must press [Manual Entry] on the standby display to enter the fax number.**

1. **Press [Manual Entry].**

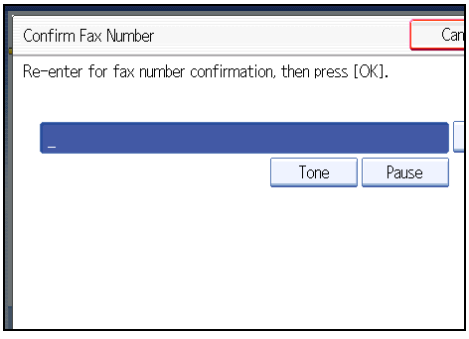


2. **Enter the fax number using the number keys, and then press [OK].**



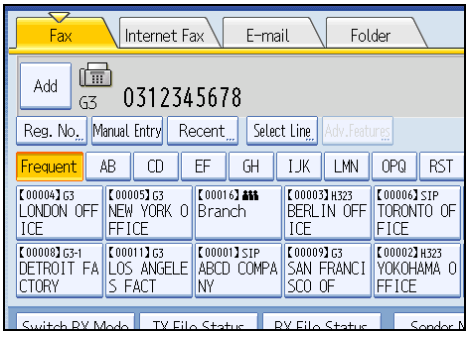
If you make a mistake, press [Clear], and then enter the number again.

3. **Enter the fax number again, and then press [OK].**



The destination is specified.

4. **Press the [Start] key.**



Transmission starts.

After transmission, the standby display appears.

Note

- If the "Entered destination is not correct." message appears, press [Exit] and check the fax number again, and then repeat the procedure from step 1.
- Please contact your service representative if specifying the number of times (1 to 15) that the fax number must be re-entered. Step 3 must be repeated as many times as is set here.
- You cannot edit the first fax number that is entered.
- You cannot use this function from the simplified display.

Displaying the destination prior to transmission

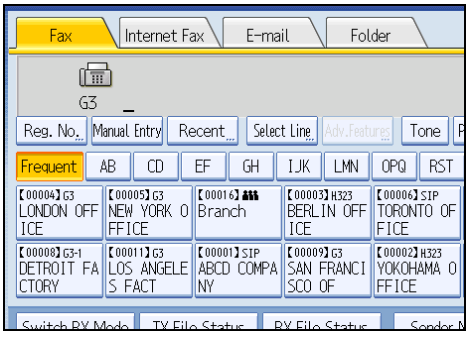
To prevent documents being sent to the wrong destination, you can configure the machine to display the destination again after it has been entered and before the file is sent.

If you want to enable this function, contact your service representative.

Note that the entered destination will not be displayed again if you are sending the fax by any of the following means:

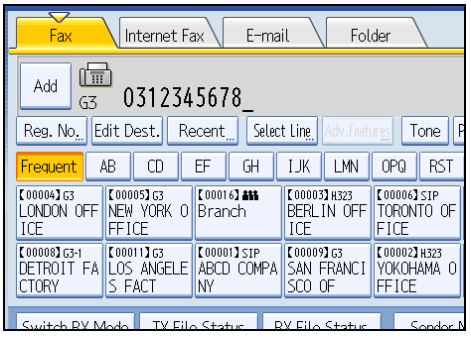
- Scanning without entering a destination (storing documents, storing documents in Information Boxes)
- On Hook Dial
- Manual Dial
- the [Simplified Display]

1. **Specify the destination.**



If you make a mistake, press the [Clear/Stop] key, and then enter the number again.

2. **Press the [Start] key.**



Displays the destination and the transmission settings.

To change the destination, press [Exit], and then specify the destination again.

3. **Press the [Start] key again.**

   Transmission starts.

   After transmission, the standby display appears.

Registering Destinations in the Address Book

This section explains how to register a fax number in the Address Book.

You can register fax numbers, IP-Fax destinations, Internet Fax destinations, e-mail destinations, and folder destinations in the Address Book. For details about how to register IP-Fax destinations, Internet Fax destinations, e-mail destinations, and folder destinations, see “Registering Addresses and Users for Facsimile/Scanner Functions”, Network and System Settings Reference.

You can back up the contents of the Address Book. For details about how to do this, see “Administrator Tools”, Network and System Settings Reference.

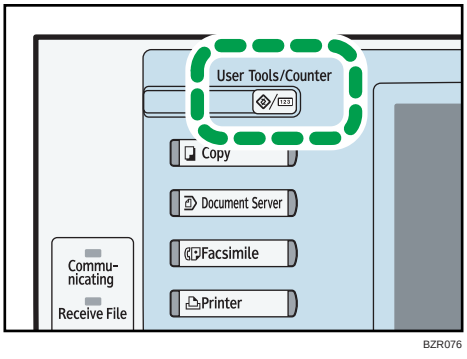
Note

- You can also register Address Book fax numbers, IP-Fax destinations, Internet Fax destinations, e-mail destinations, and folder destinations to groups.
- On the facsimile initial display, press [Prg. Dest.] to display the registration screen of the Address Book. You can register destinations on this screen.
- To register destinations, press [Prg. Dest.] after entering Fax destinations, IP-Fax destinations, Internet Fax destinations or e-mail destinations. You cannot register folder destinations using this screen. For details about registering folder destinations, see “Registering Addresses and Users for Facsimile/Scanner Functions”, Network and System Settings Reference.
- In the facsimile initial display, if you change the contents of the Address Book, the “Destination list / machine settings are updated.” message appears. Press [Exit] to bring back the facsimile initial display.
- You can register destinations in the Address Book using Web Image Monitor. For details about operation of Web Image Monitor, see “Monitoring and Configuring the Machine”, Network and System Settings Reference, or, for information about the Address Book, see the Web Image Monitor's Help.

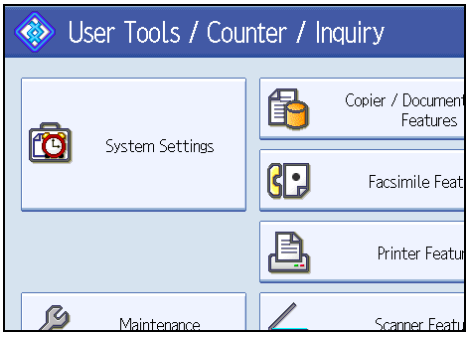
Registering a Fax Destination

This section explains how to register a name and fax number to the Address Book.

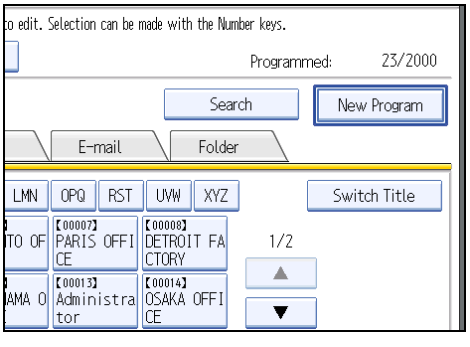
1. Press the [User Tools/Counter] key.



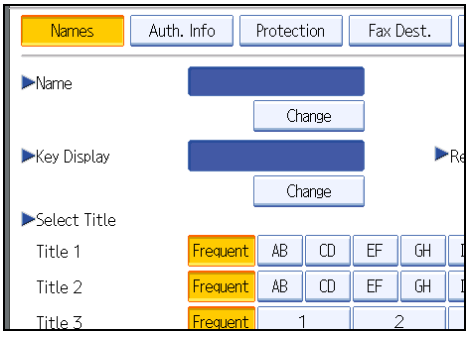
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Press [New Program].



7. **Press [Change] under "Name".**



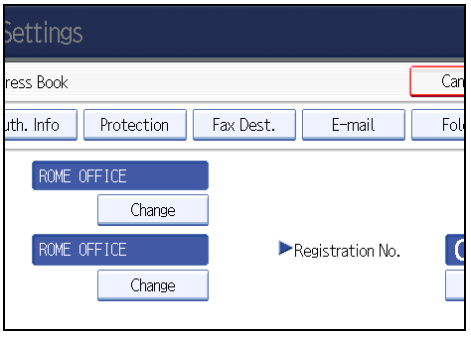
The name entry display appears.

8. **Enter the name, and then press [OK].**

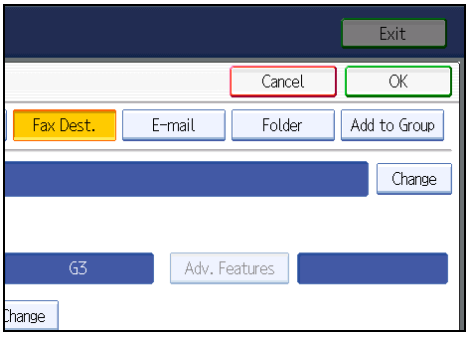
If necessary, press [Change] under "Key Display", and then enter the name of the key to which the destination is assigned.

9. **Press the key for the classification you want to use under "Select Title".**

10. **Press [Fax Dest.].**



11. **Press [Change] under "Fax Destination".**



12. **Enter the fax number using the number keys, and then press [OK].**

13. **Specify the following functions for each destination, as necessary:**

- Select Line: specify a line port for each destination.

- Adv. Features: program SUB/SID/SEP/PWD Codes.
- International TX Mode: set whether or not to use International TX Mode.
- Fax Header: specify the header that appears on your faxes when the receiver prints them.
- Label Insertion: specify label information such as the destination name that appears on your faxes when the receiver prints them.

14. **Press [OK].**
15. **Press [Exit].**
16. **Press the [User Tools/Counter] key.**

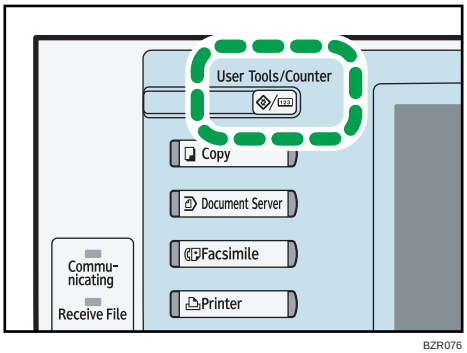
Note

- For details about the procedure in step 13, see "Registering Addresses and Users for Facsimile/ Scanner Functions", Network and System Settings Reference.

Changing a Fax Destination

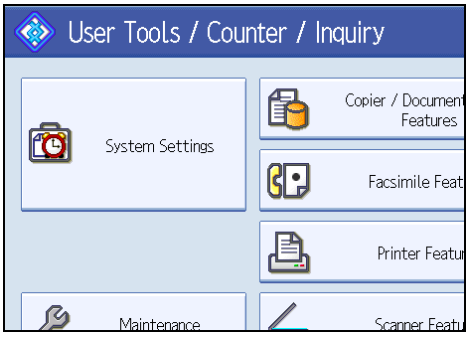
This section explains how to change a name and fax number registered in the Address Book.

1. **Press the [User Tools/Counter] key.**



BZR076

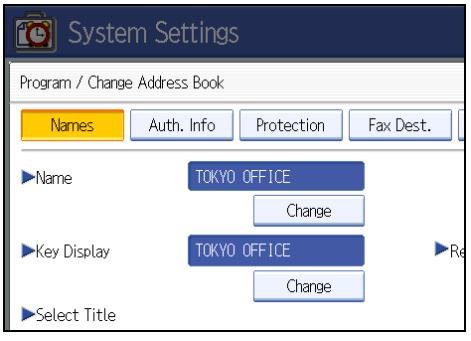
2. **Press [System Settings].**



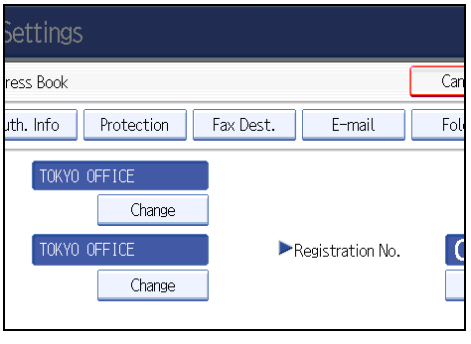
3. **Press [Administrator Tools].**

4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the name whose fax destination you want to change.**

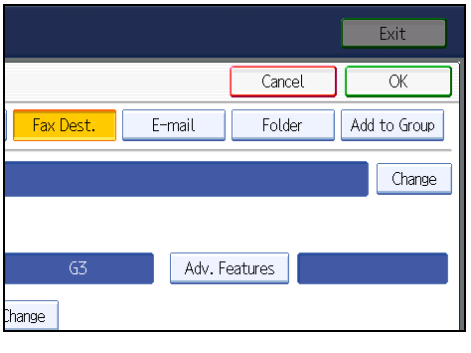
   Press the name key, or enter the registration number using the number keys.
7. **To change the name or key display, press [Change] under "Name" or "Key Display".**



8. **Enter the name or key display, and then press [OK].**
9. **To change the title, press the key for the classification you want to use from "Select Title".**
10. **Press [Fax Dest.].**



11. **Press [Change] under "Fax Destination".**



12. **Enter the new fax number using the number keys, and then press [OK].**

13. **Change the settings of "Select Line", "Adv. Features", "International TX Mode", "Fax Header", and "Label Insertion", as necessary.**
14. **Press [OK].**
15. **Press [Exit].**
16. **Press the [User Tools/Counter] key.**

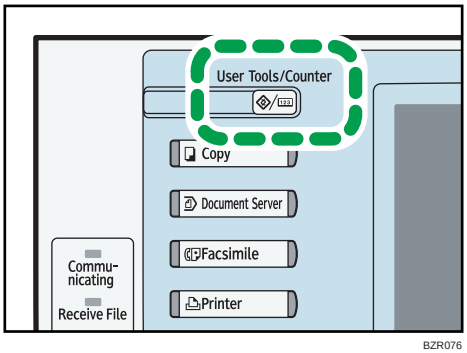
Note

- For details about the procedure in step 13, see "Registering Addresses and Users for Facsimile/ Scanner Functions", Network and System Settings Reference.

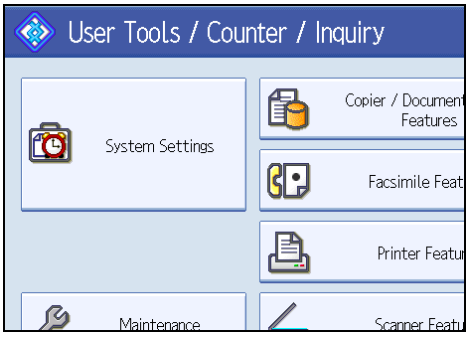
Deleting a Fax Destination

This section explains how to delete destination information from the Address Book.

1. **Press the [User Tools/Counter] key.**

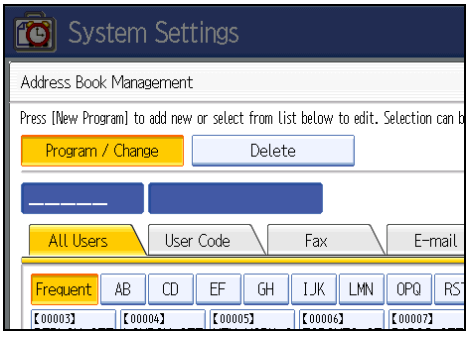


2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**

5. **Press [Delete].**



6. **Select the name you want to delete.**

   Press the name key, or enter the registration number using the number keys.

7. **Press [Yes].**
8. **Press [Exit].**
9. **Press the [User Tools/Counter] key.**

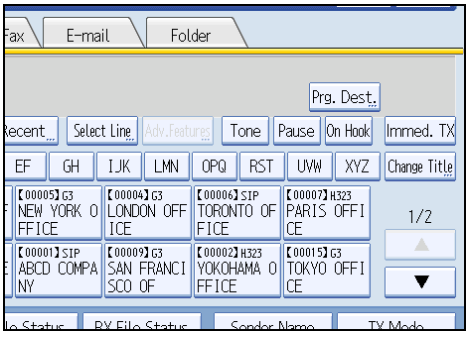
Registering Destinations to the Address Book from [Prg. Dest.]

This section explains how to register a directly entered fax number, IP-Fax destination, Internet Fax destination, e-mail destination, or folder destination to the Address Book from [Prg. Dest].

Important

- **To use an e-mail address registered in the Address Book as an e-mail destination, specify "Use E-mail Address for" for [E-mail / Internet Fax Destination]. Use the same procedure for e-mail addresses that are registered in group destinations in the Address Book.**

1. **Press [Prg. Dest.].**



2. **Enter the destination.**

3. **Press [Names] and enter any necessary information.**

4. **Press [OK].**

Note

- For details about registering destinations, see "Registering Addresses and Users for Facsimile/ Scanner Functions", Network and System Settings Reference.
- Depending on the security settings, [Prg. Dest.] might not appear and you might not be able to register the destination.

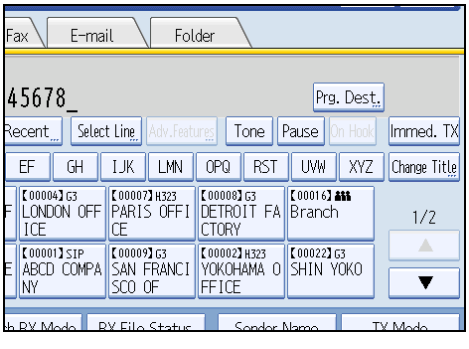
Registering Entered Destinations to the Address Book

This section explains how to register a directly entered fax number, IP-Fax destination, Internet Fax destination, or e-mail destination to the Address Book.

Important

- **To use an e-mail address registered in the Address Book as an e-mail destination, specify "Use E-mail Address for" for [E-mail / Internet Fax Destination]. Use the same procedure for e-mail addresses that are registered in group destinations in the Address Book.**

1. **Press [Prg. Dest.].**



2. **Press [Names] and enter any necessary information.**

3. **Press [OK].**

Note

- For details about registering destinations, see “Registering Addresses and Users for Facsimile/ Scanner Functions”, Network and System Settings Reference.
- Depending on the security settings, [Prg. Dest.] might not appear and you might not be able to register the destination.

Searching for a Destination in the Address Book

Use this function to search for a destination registered in the destination list or on the LDAP server.

Important

- **To search for a destination from an LDAP server, the LDAP server must be registered in advance. For details about registering LDAP servers, see "Administrator Tools", Network and System Settings Reference.**

Note

- Press the transmission type tab on the Search Destination screen to switch the transmission type between fax/IP-Fax, Internet Fax, e-mail, and folder.
- The search returns only destinations whose first characters match the entered characters.
- A warning message appears if the search returns more than the maximum number of destinations you can search for at a time. Press [Exit] and change the destination name to view fewer destinations.
- For the maximum number of destinations you can search at a time using [Search Dest.], see "Maximum Values".
- Although one user can program multiple e-mail addresses, only one address can be retrieved by the search. The address retrieved by the search depends on the searching method supported by the LDAP server. However, the address programmed first is normally retrieved.

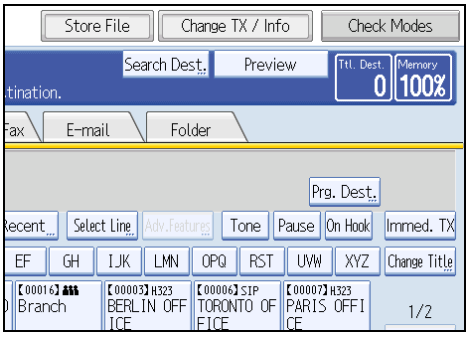
Reference

- p.427 "Maximum Values"

Search by Destination Name

This section explains how to search for a destination registered in the Address Book by name.

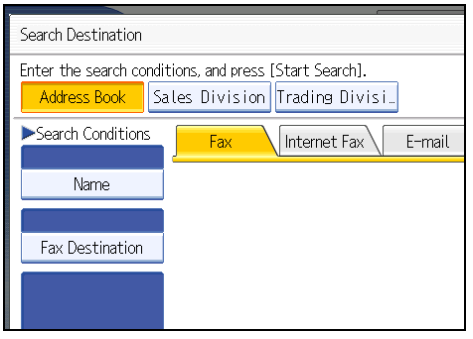
1. **Press [Search Dest.].**



2. **Select a search destination.**

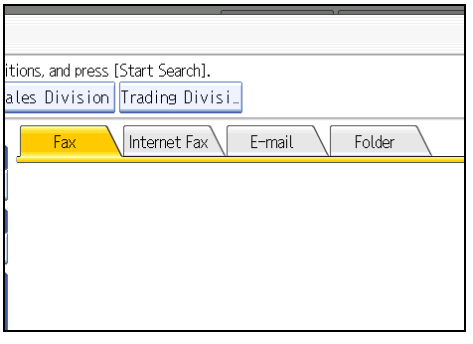
   To search through the Address Book, select [Address Book].

To search through an LDAP server, select the relevant LDAP server.

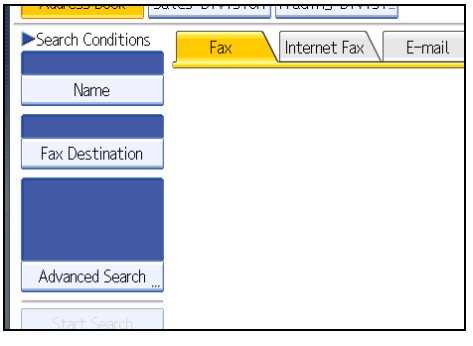


3. **Press the transmission type tab to switch the transmission type to fax/IP-Fax, Internet Fax, e-mail, or folder.**

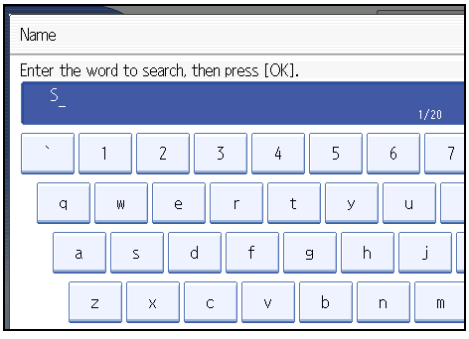
   If you selected an LDAP server in step 2, you cannot select [Folder].



4. **Press [Name].**

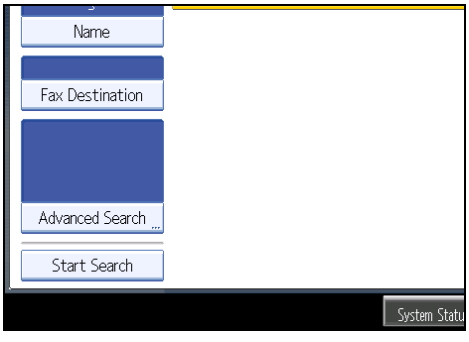


5. **Enter the destination name you want to search for, and then press [OK].**



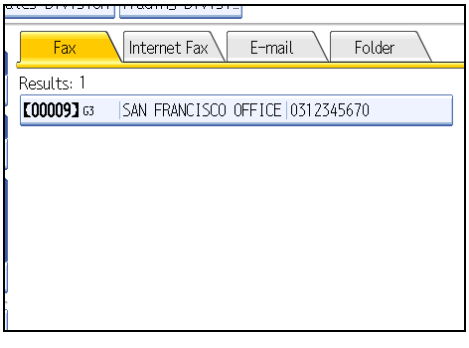
If you enter a wrong destination name, press [←], [→], [Backspace], or [Delete All], and then enter the destination name again.

6. **Check the characters you have entered are correct, and then press [Start Search].**



When the search is finished, a result appears.

7. **Select a destination.**



If the destination you require does not appear, use [▲] or [▼] to scroll through the list.

Press [Details] to display the details of a selected destination.

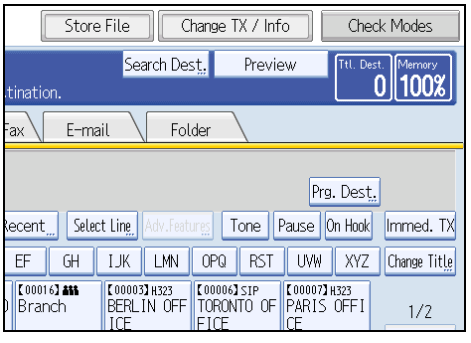
Note

- For details about text entry, see “Entering Text”, About This Machine.

Search by Fax Number/IP-Fax Destination

This section explains how to search for a destination registered in the Address Book by fax number or IP-Fax destination.

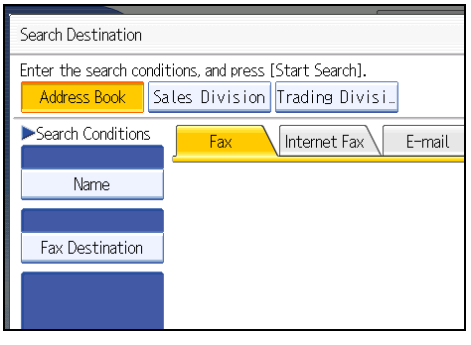
1. **Press [Search Dest.].**



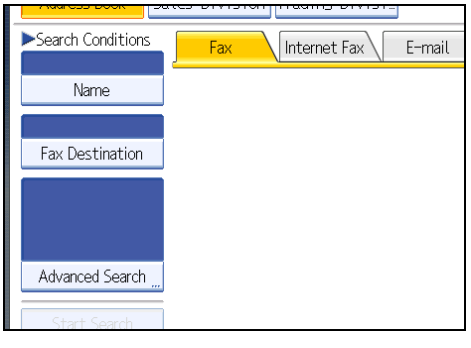
2. **Select a search destination.**

   To search through the Address Book, select [Address Book].

   To search through an LDAP server, select the relevant LDAP server.

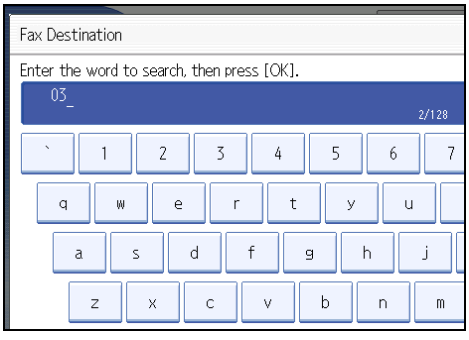


3. **Press [Fax Destination].**



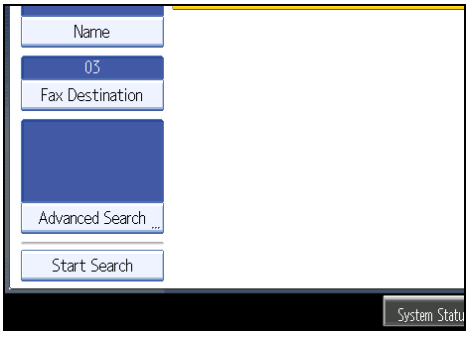
4. **Enter the number you want to search for, and then press [OK].**

   To search for an IP-Fax destination, enter the IP-Fax destination that you want to find.



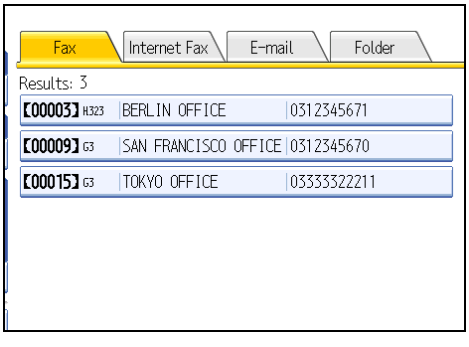
If you enter a wrong number, press [←], [→], [Backspace], or [Delete All], and then enter the number again.

5. **Check the fax numbers you have entered are correct, and then press [Start Search].**



When the search is finished, a result appears.

6. **Select a destination.**



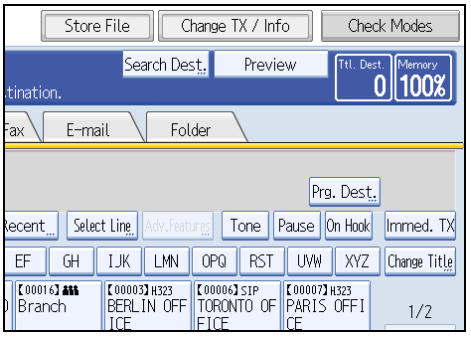
If the destination you require does not appear, use [▲] or [▼] to scroll through the list.

Press [Details] to display the details of a selected destination.

Search by Internet Fax Destination

This section explains how to search for a destination registered in the Address Book by Internet Fax destination.

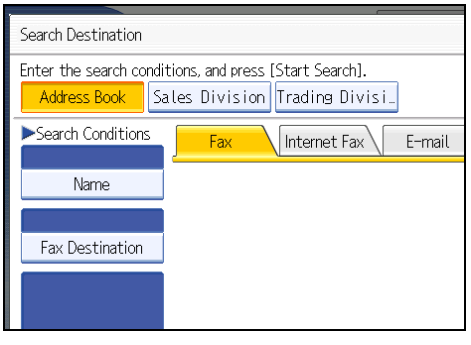
1. **Press [Search Dest.].**



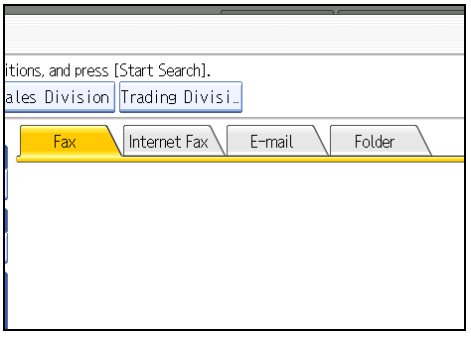
2. **Select a search destination.**

   To search through the Address Book, select [Address Book].

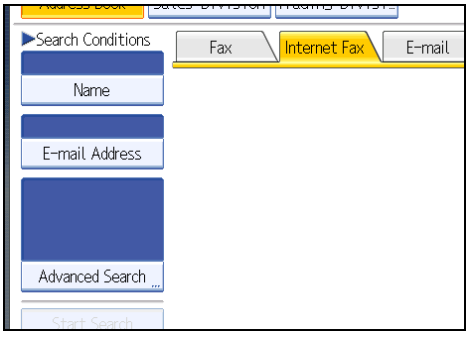
   To search through an LDAP server, select the relevant LDAP server.



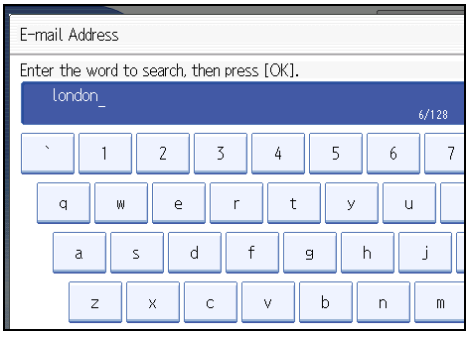
3. **Press [Internet Fax] to switch the transmission type to Internet Fax.**



4. **Press [E-mail Address].**

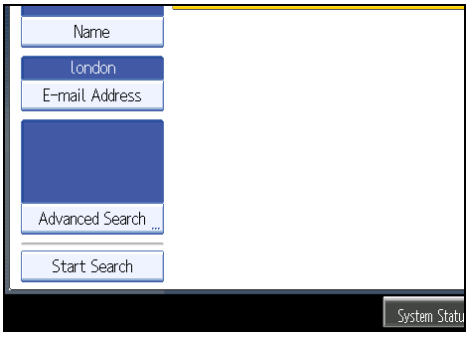


5. **Enter the e-mail address (Internet Fax destination) you want to search for, and then press [OK].**



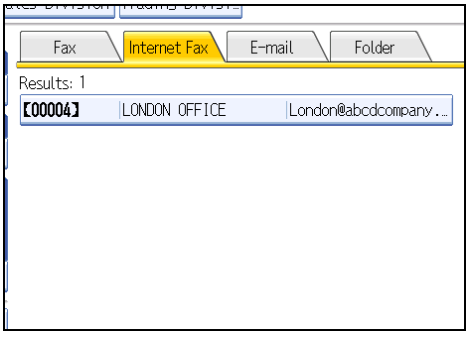
If you enter a wrong character, press [←], [→], [Backspace], or [Delete All], and then enter the character again.

6. **Check the characters you have entered are correct, and then press [Start Search].**



When the search is finished, a result appears.

7. **Select a destination.**



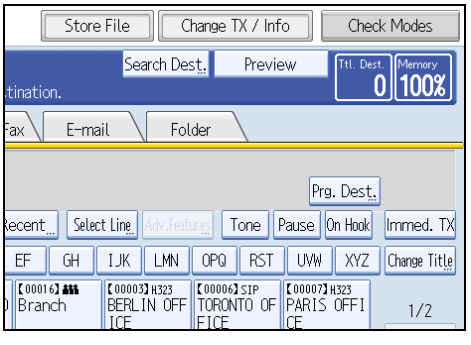
If the destination you require does not appear, use [▲] or [▼] to scroll through the list.

Press [Details] to display the details of a selected destination.

Search by E-mail Destination

This section explains how to search for a destination registered in the Address Book by e-mail destination.

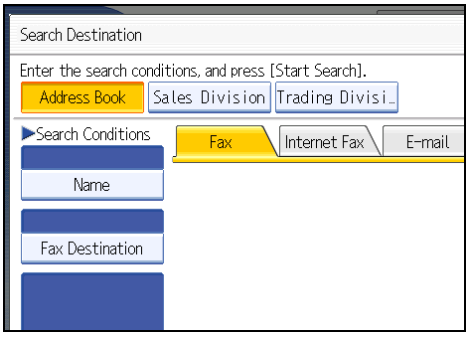
1. **Press the [Search Dest.].**



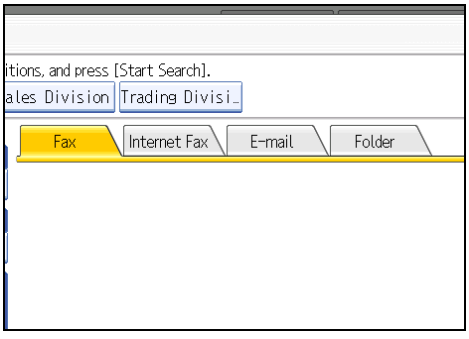
2. **Select a search destination.**

To search through the Address Book, select [Address Book].

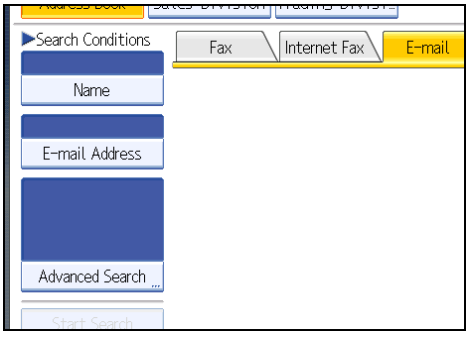
To search through an LDAP server, select the relevant LDAP server.



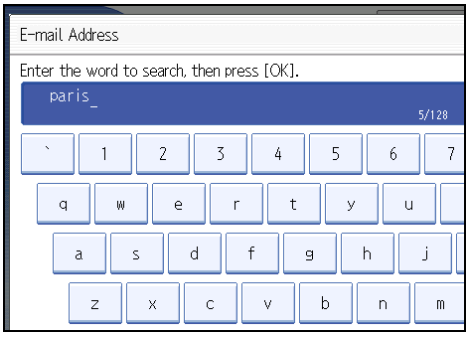
3. **Press [E-mail] to switch the transmission type to e-mail.**



4. **Press [E-mail Address].**

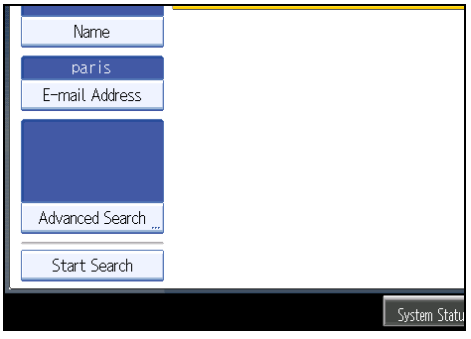


5. **Enter the e-mail address (e-mail destination) you want to search for, and then press [OK].**



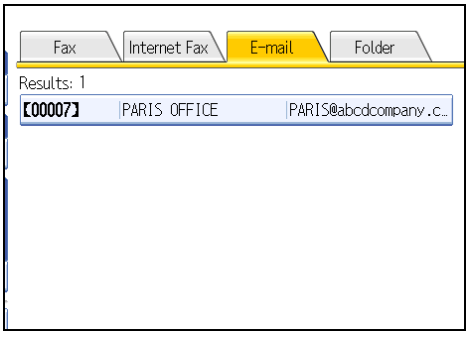
If you enter a wrong character, press [←], [→], [Backspace], or [Delete All], and then enter the character again.

6. **Check the characters you have entered are correct, and then press [Start Search].**



When the search is finished, a result appears.

7. **Select a destination.**



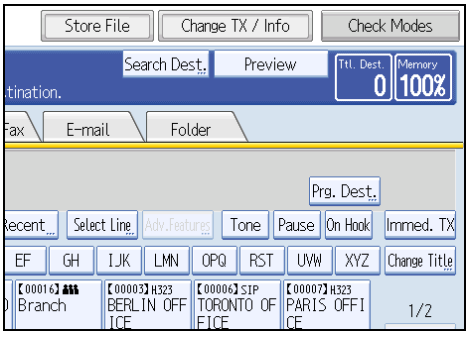
If the destination you require does not appear, use [▲] or [▼] to scroll through the list.

Press [Details] to display the details of a selected destination.

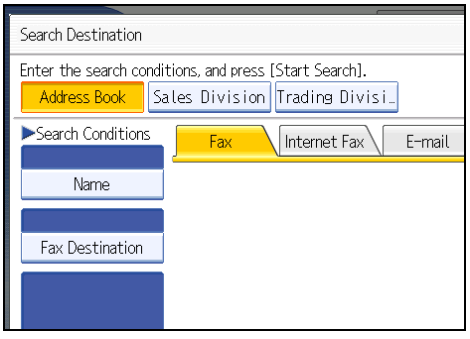
Search by Folder Destination

This section explains how to search for a destination registered in the Address Book by folder destination.

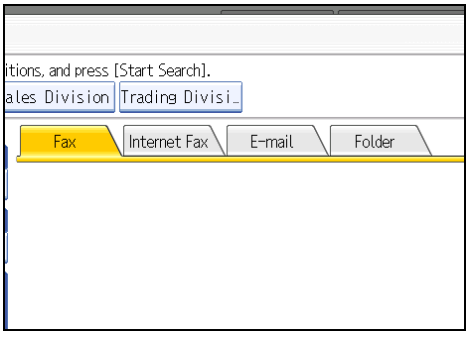
1. **Press the [Search Dest.].**



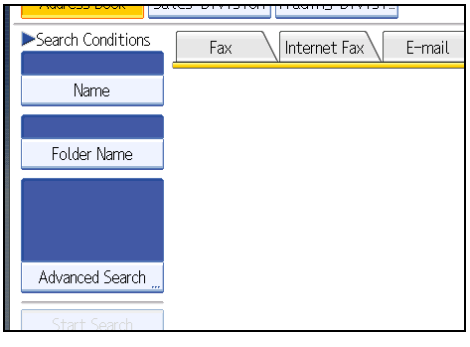
2. **Make sure that [Address Book] is selected.**



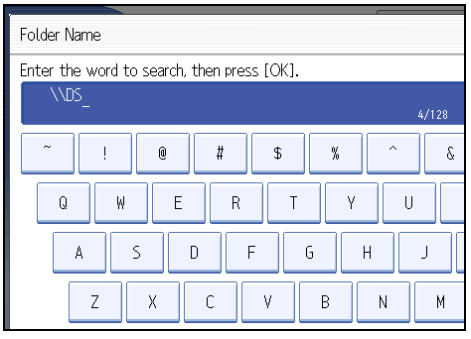
3. **Press [Folder] to switch the transmission type to folder.**



4. **Press [Folder Name].**

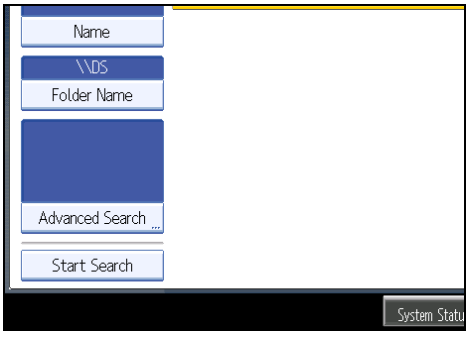


5. **Enter the folder name you want to search for, and then press [OK].**



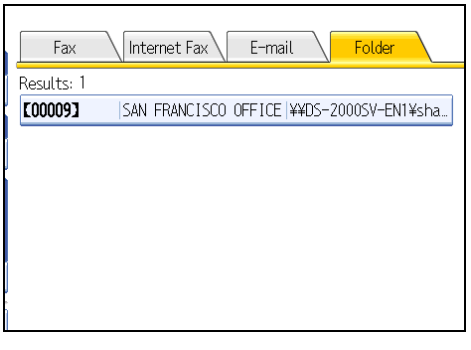
If you enter a wrong character, press [←], [→], [Backspace], or [Delete All], and then enter the character again.

6. **Check the characters you have entered are correct, and then press [Start Search].**



When the search is finished, a result appears.

7. **Select a destination.**



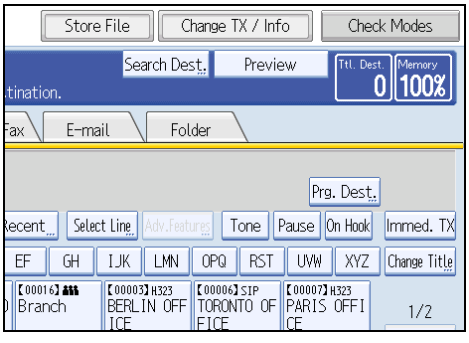
If the destination you require does not appear, use [▲] or [▼] to scroll through the list.

Press [Details] to display the details of a selected destination.

Search Using Advanced Search

This section explains how to search for a destination registered in the Address Book by specifying search criteria.

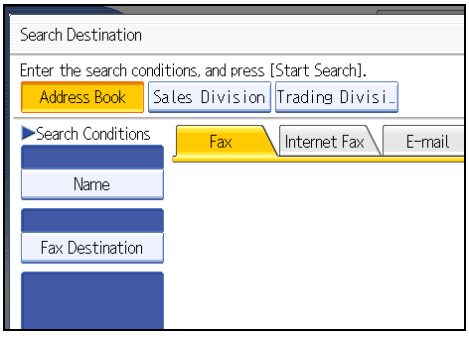
1. **Press [Search Dest.].**



2. **Select a search destination.**

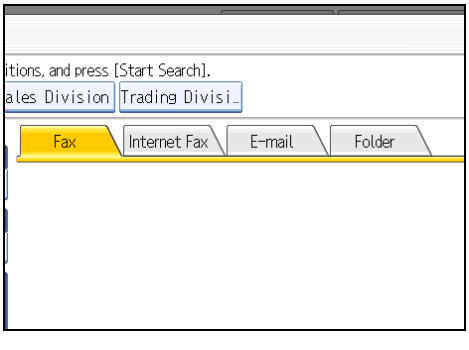
   To search through the Address Book, select [Address Book].

   To search through an LDAP server, select the relevant LDAP server.

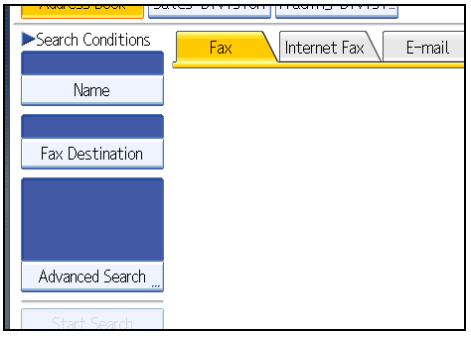


3. **Press the transmission type tab to switch the transmission type to fax/IP-Fax, Internet Fax, e-mail, or folder.**

   If you selected an LDAP server in step 2, you cannot select [Folder].



4. **Press [Advanced Search].**



5. **Press the key for each condition, and then enter a partial string.**

The following conditions can be specified for Address Book searches: Name, Fax Destination, E-mail Address, and Folder Name.

The following conditions can be specified for LDAP server searches: Name, Fax Destination, E-mail Address, Company Name, and Department Name.

6. **Select search criteria for each condition.**

The meanings of the search criteria are as follows:

- [Beginning Word]: Search for strings that start with the specified character.

  Example: When searching for "ABC", enter "A".
- [End Word]: Search for strings that end with the specified character.

  Example: When searching for "ABC", enter "C".
- [Exact Match]: Search for strings that fully match the specified character.

Example: When searching for "ABC", enter "ABC".

- [Include one Word]: Search for strings that include the specified character.

  Example: When searching for "ABC", enter "A", "B", or "C".

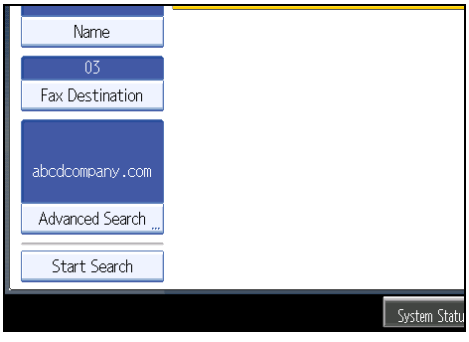
- [Exclude Words]: Search for strings that do not include the specified character.

  Example: When searching for "ABC", enter "D".

- [Fuzzy Search]: Perform a fuzzy search.

  This item appears when selecting an LDAP server in step 2. The performance of fuzzy search depends on the search method supported by the LDAP server.

7. **Press [OK].**
8. **Press [Start Search].**



When the search is finished, the search result appears.

9. **Select a destination.**

   If the destination you require does not appear, press [▲] or [▼] to display it.

   Press [Details] to display the details of a selected destination.

Note

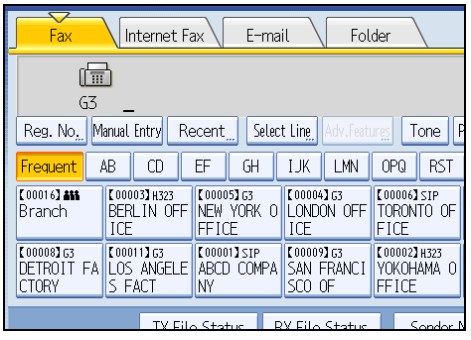
- You can add one additional search condition for LDAP servers by specifying the Search Options under Program / Change / Delete LDAP Server under System Settings. See "Administrator Tools", Network and System Settings Reference.
- When searching via LDAP servers, the string you enter in the [Name] condition field is read as the first or last name, depending on the administrator's setting. For example, to search for the name "John Smith", ask the system administrator whether you should enter "John" or "Smith".
- For details about text entry, see "Entering Text", About This Machine.

Search by Registration Number

This section explains how to search for a destination by specifying a registration number stored in the destination list.

1

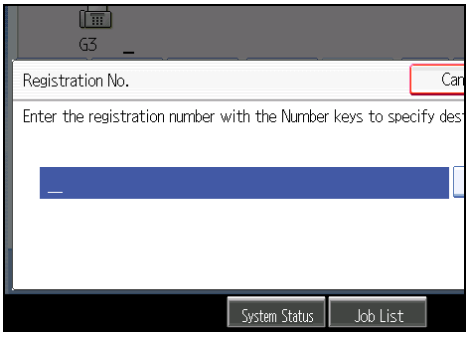
1. **Press the transmission type tab to switch the transmission type to fax/IP-Fax, Internet Fax, e-mail, or folder.**



2. **Press [Reg. No.].**

   The registration number entry display appears.

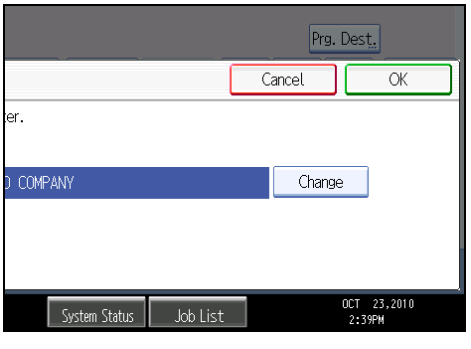
3. **Enter a registration number using the number keys, and then press [#].**



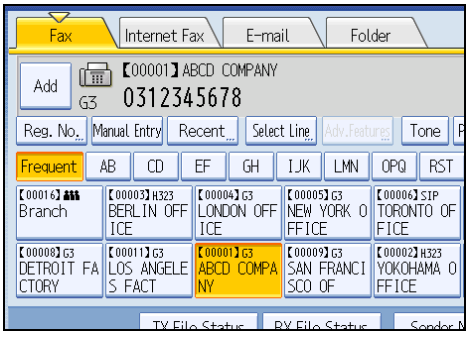
   While usually a registration number is displayed in the five-digit format, you do not need to enter the first zeros of a registration number.

   If you make a mistake, press [Clear] before pressing [#], and then try again.

4. **Press [OK].**



   The corresponding destination appears.



Note

- If the "Cannot find the specified Registration No." message appears, the specified registration number or selected type of transmission is wrong or does not exist. Press [Exit], check the registration number again, and then follow the procedure from step 1 or 3.

On Hook Dial

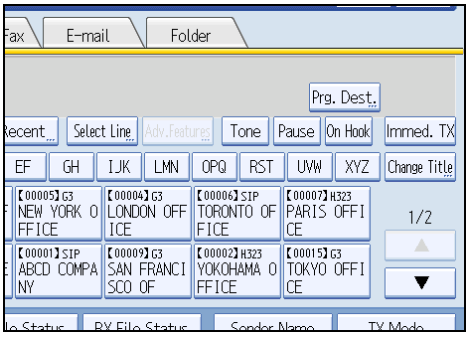
The On Hook Dial function allows you to dial while listening to the tone from the internal speaker.

You can send a fax checking the connection.

Important

- **This function is not available for the extra G3 line, Internet Fax, IP-Fax, and transmission to e-mail/ folder destinations.**

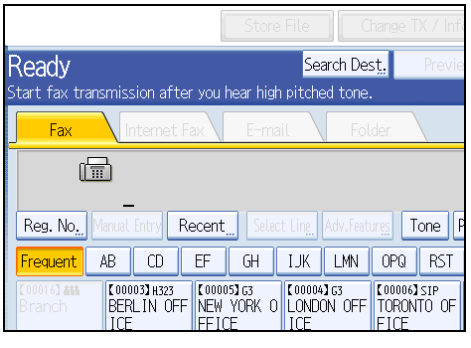
1. **Place the original, and then select the scan settings you require.**
2. **Press [On Hook].**



You will hear a low tone from the internal speaker.

If you want to cancel this operation, press [On Hook] again.

3. **Dial.**



The machine immediately dials the destination.

If you make a mistake, press [On Hook] or the [Clear Modes] key, and then try again.

4. **When the line is connected and you hear a high-pitched tone, press the [Start] key.**

Transmission starts.

If you want to cancel a transmission, press the [Clear/Stop] key, and then remove the originals.

After transmission, the standby display appears.

Note

- This function is unavailable in some countries.
- To select a destination from the Address Book, see “Using the Address Book to Specify Destinations”.
- Press [Vol...] to display the Adjust Sound Volume screen, and then press [Louder] or [Lower] to adjust the volume of the on-hook sound. The volume can also be preprogrammed in the Facsimile Features menu.
- If you have the optional handset or an external telephone on the fax machine, you can speak with the other party when you hear a voice. If you hear a voice before pressing the [Start] key, pick up the optional handset or the external telephone and tell the receiver you want to send a fax document (ask them to switch to facsimile mode).
- The Facsimile Features menu contains the On Hook Mode Release Time setting, which allows you to specify the time after which On Hook mode is deactivated. See “General Settings”.

Reference

- p.109 "Using the Address Book to Specify Destinations"
- p.335 "General Settings"

Manual Dial

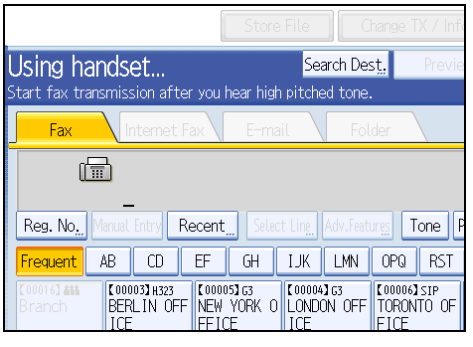
Pick up the optional handset or the hand set of the external telephone and dial. If you hear a voice at the other end, continue conversation as normal.

Important

- **The optional handset or an external telephone is required.**
- **This function is not available for the extra G3 line, Internet Fax, IP-Fax, and transmission to e-mail/ folder destinations.**

1. **Place the original, and then select the scan settings you require.**
2. **Pick up the handset.**

   You will hear a dial tone.
3. **Dial.**



   The machine immediately dials the destination.

   If you make a mistake, replace the handset, and then try again from step 2.
4. **When the line is connected and you hear a high-pitched tone, press the [Start] key to send your fax document.**

   If you hear a voice, tell the receiver that you want to send them a fax document (ask them to switch to facsimile mode).

   Transmission starts.
5. **Replace the handset.**

   If you want to cancel a transmission, press the [Clear/Stop] key, and then remove the originals.

   After transmission, the standby display appears.

Note

- To select a destination from the Address Book, see “Using the Address Book to Specify Destinations”.

- When the operation switch is off, even if the main power switch is on, you cannot operate this machine using only the optional handset or the external telephone. You must first press the operation switch to turn on the machine.

Reference

- p.109 "Using the Address Book to Specify Destinations"

Sender Settings

Select a user that you want to specify as a sender.

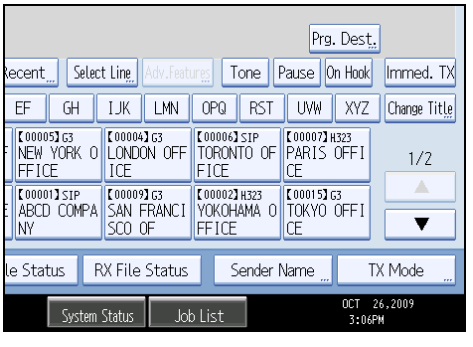
If the sender's e-mail address is registered in the destination list, the sender can receive transmission results by e-mail.

Also, if you enable the Stamp Sender Name, the registered sender's name (user name) appears on the receiver's sheet, lists, and report.

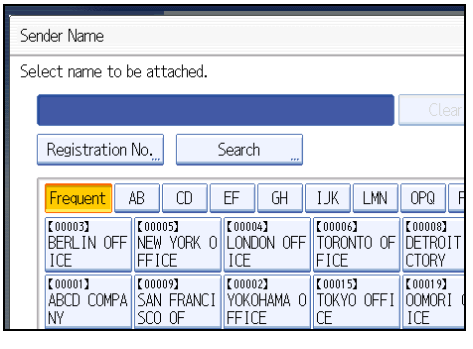
Important

- **You must first register the senders in the destination list using "Address Book Management" in "System Settings" to specify their e-mail addresses, and then specify "Use Name as" for [Sender]. If you want senders to receive e-mail notification of transmission results, specify "Use Name as" for both [Sender] and [Destination]. For details about these settings, see "Registering Addresses and Users for Facsimile/Scanner Functions", Network and System Settings Reference.**
- **If user authentication is set, the user logged in is set as sender. The transmission result is sent to the logged-in user's e-mail address.**

1. **Place the original, and then select the scan settings you require.**
2. **Press [Sender Name].**



3. **Select a sender.**

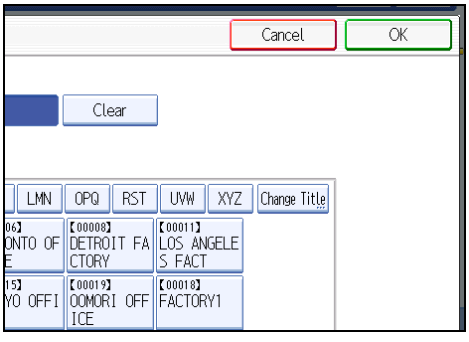


To select a sender by specifying the registration number registered in the Address Book, press [Registration No.].

To search for a sender from the Address Book, press [Search].

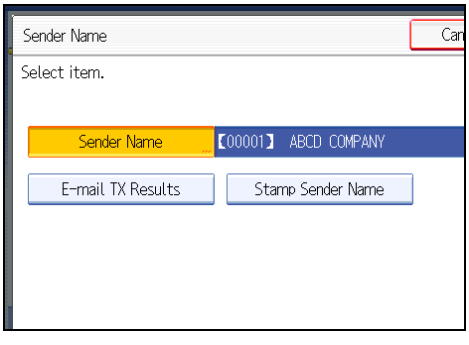
If a destination protection code is set, the entry screen appears. Enter the protection code for destination using the number keys, and then press [OK].

4. **Confirm the selected sender, and then press [OK].**



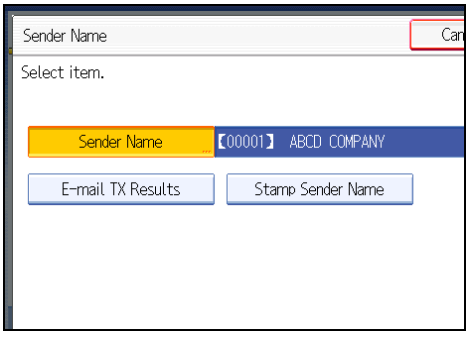
5. **To print the sender's name on the receiver's sheet, press [Stamp Sender Name] to highlight it.**

If you enable this function, the sender's name (user name) appears on the receiver's sheet, lists, and report.



6. **To confirm the transmission results by e-mail notification, press [E-mail TX Results] to highlight it.**

If the sender's e-mail address is registered, you can send the transmission result to the registered e-mail address.



7. **Press [OK].**

   The standby display appears.

   To check the settings, press [Sender Name].

8. **Specify the destination, and then press the [Start] key.**

Note

- You can confirm transmission results by using both the E-mail TX Results function, which sends the results by e-mail, and the Communication Result Report printed by the machine. You can set whether to use both of these together in User Parameter (switch 10, bit 6) in the Facsimile Features menu. See “Parameter Settings”.
- You can use Communication Result Report, etc. to check usage status by specified users. If user authentication is set, you can check usage by logged-in users. If User Code is set to sender, you can count the number of uses by each user.
- To cancel the Sender Name, cancel the transmission. See “Canceling a Transmission”.

Reference

- p.159 "Canceling a Transmission"
- p.375 "Parameter Settings"

Advanced Features

This section describes how to specify a destination using advanced features.

1

Setting SUB Codes for Transmission

This section explains how to send a document with a SUB Code as a confidential transmission.

A SUB Code is an ID consisting of numbers, #, *, and spaces. Document transmitted with a SUB Code is stored in the other party's memory, and not printed automatically. The other party inputs the SUB Code to print the received document. Privacy can be mutually protected when transmitting a confidential document intended for a particular receiver, since only a person who knows the SUB Code can print the document.

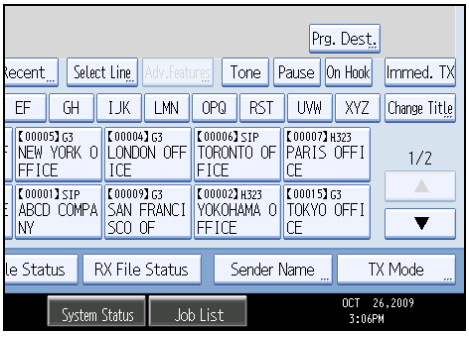
Documents can also be sent via facsimiles that have the Transfer Station function.

This function helps you save costs when you send the same document to more than one place in a distant area, and saves time since many documents can be sent in a single operation.

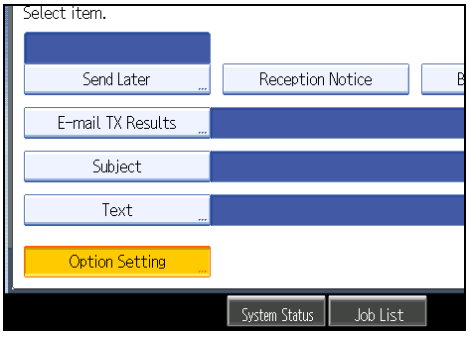
Important

- Documents can be sent to facsimiles that have the Personal Box function.
- A SUB Code cannot be used with Internet Fax, e-mail transmission, and folder transmission.
- To use this function, set [SUB Code Transmission] to on. For details about [SUB Code Transmission], see "SUB Code Transmission".
- Obtain the SUB Code of the other party in advance.
- When sending a confidential document, inform the other party of the SUB Code in advance.

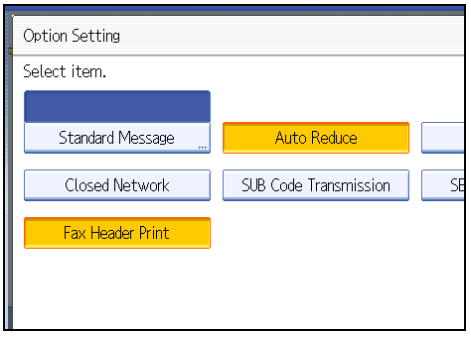
1. Place the original, and then select the scan settings you require.
2. Press [TX Mode].



3. **Press [Option Setting].**



4. **Press [SUB Code Transmission].**

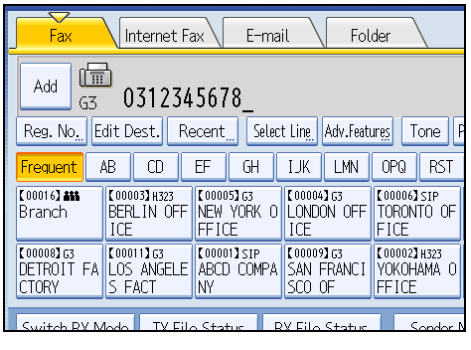


5. **Press [OK] twice.**

   The standby display appears.

6. **Enter the fax number of a destination or an IP-Fax destination.**

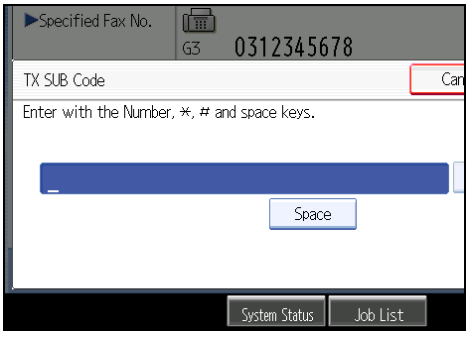
7. **Press [Adv.Features].**



8. **Make sure that [SUB Code] is selected.**

9. **Press [Transmission SUB Code].**

10. **Enter a SUB Code, and then press [OK].**



If you make a mistake, press [Clear] before pressing [OK], and then try again.

11. **When a password is required, press [Password (SID)], enter the password with the number keys, and then press [OK].**
12. **Press [OK].**
13. **Press the [Start] key.**

If you use Immediate Transmission and the fax machine at the destination does not support the SUB Code function, a message will appear on the display to inform you of this. When this happens, press [Exit] to cancel the transmission.

Note

- Make sure the number of digits in the SUB Code matches the specification of the machine to which you are sending. For the maximum number of digits for the SUB Code of this machine, see "Maximum Values".
- You can store SUB Codes as well as names and fax numbers in the destination list and Keystroke Programs. For registering into the destination list, see "Registering Addresses and Users for Facsimile/ Scanner Functions", Network and System Settings Reference. For registering into the Keystroke Programs, see "Registering and Changing Keystroke Programs".
- When a SUB Code is stored in the destination list, the SUB Code can be modified or deleted after selecting a destination using the Destination keys.
- The SUB Code is printed on lists and reports.

Reference

- p.190 "SUB Code Transmission"
- p.414 "Registering and Changing Keystroke Programs"
- p.427 "Maximum Values"

Setting a password

There are times when you may want to use an “SID” (Sender ID) when sending confidential faxes with the SUB Code function.

When you use a Transfer Box that has a password, enter the SID Code as the password.

Note

- For the maximum number of digits for the SID Code, see “Maximum Values”.
- You can enter numbers, ✳, #, and spaces.
- You can store SID Codes as well as names and fax numbers in the destination list and Keystroke Programs. For registering into the destination list, see “Registering Addresses and Users for Facsimile/ Scanner Functions”, Network and System Settings Reference. For registering into the Keystroke Programs, see “Registering and Changing Keystroke Programs”.
- The SID Code is printed on lists and reports.

Reference

- p.414 "Registering and Changing Keystroke Programs"
- p.427 "Maximum Values"

Setting SEP Codes for Reception

This section explains how to enter a SEP Code to request the destination to transmit a document.

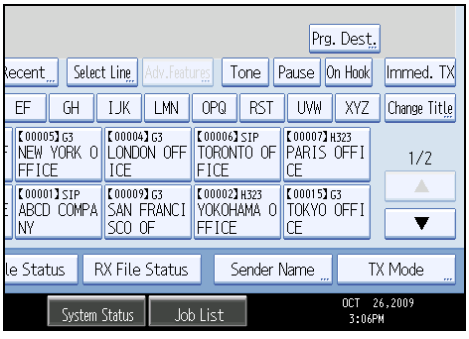
You can receive a document stored in the destination's memory if the document has the same SEP Code as the SEP Code you entered.

This function enables the machine to receive documents from multiple destinations.

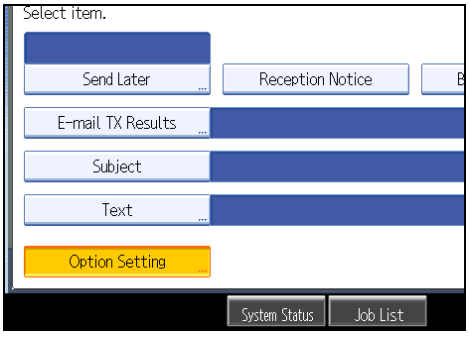
Important

- **Documents can be received from facsimiles that have Information Boxes.**
- **A SEP Code cannot be used with Internet Fax and e-mail.**
- **To use this function, set [SEP Code Reception] to on. For details about [SEP Code Reception], see “SEP Code Reception”.**

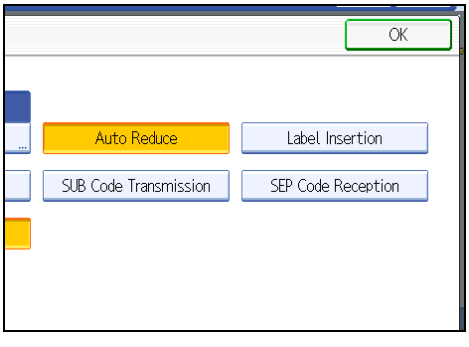
1. **Press [TX Mode].**



2. **Press [Option Setting].**



3. **Press [SEP Code Reception].**

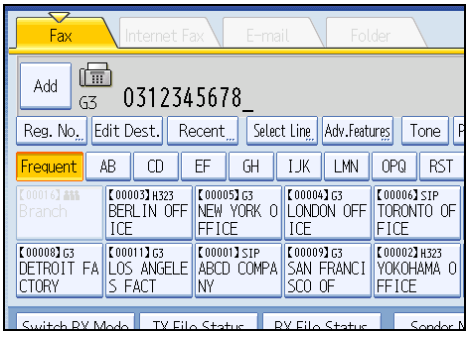


4. **Press [OK] twice.**

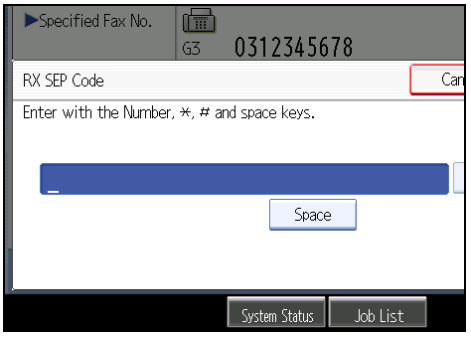
   The standby display appears.

5. **Enter the fax number of a destination or an IP-Fax destination.**

6. **Press [Adv.Features].**



7. **Make sure that [SEP Code] is selected.**
8. **Press [Reception SEP Code].**
9. **Enter a SEP Code, and then press [OK].**



If you make a mistake, press [Clear] before pressing [OK], and then try again.

10. **When a password is required, press [Password (PWD)], enter the password using the number keys, and then press [OK].**
11. **Press [OK].**
12. **Press the [Start] key.**

Note

- Make sure the number of digits in the SEP Code matches the specification of the machine from which you are receiving. For the maximum number of digits for the SEP Code of this machine, see "Maximum Values".
- You can enter numbers, ✳, #, and spaces.
- You can store SEP Codes as well as names and fax numbers in the destination list and Keystroke Programs. For registering into the destination list, see "Registering Addresses and Users for Facsimile/ Scanner Functions", Network and System Settings Reference. For registering into the Keystroke Programs, see "Registering and Changing Keystroke Programs".
- When a SEP Code is stored in the destination list, the SEP Code can be modified or deleted after selecting a destination using the Destination keys.

- The SEP Code is printed on lists and reports.

Reference

- p.191 "SEP Code Reception"
- p.414 "Registering and Changing Keystroke Programs"
- p.427 "Maximum Values"

Entering a password

There are times you may want to use a password when receiving faxes by SEP Code Reception.

Note

- For the maximum number of digits for the PWD Code, see “Maximum Values”.
- You can enter numbers, ✱, #, and spaces.
- You can store PWD Codes as well as names and fax numbers in the destination list and Keystroke Programs. For registering into the destination list, see “Registering Addresses and Users for Facsimile/Scanner Functions”, Network and System Settings Reference. For registering into the Keystroke Programs, see “Registering and Changing Keystroke Programs”.
- The PWD Code is printed on lists and reports.

Reference

- p.414 "Registering and Changing Keystroke Programs"
- p.427 "Maximum Values"

SEP Code RX Reserve Report

This report is printed after SEP Code Reception is set up.

You can use this report to check the reservations for SEP Code Reception.

Note

- You can turn this function on or off with the User Parameter (switch 03, bit 3) in the Facsimile Features menu.
- If user authentication is set, you can select whether to display a destination with the User Parameter (switch 04, bit 4) in the Facsimile Features menu.
- If user authentication is set, you can select whether to display a sender name with the User Parameter (switch 04, bit 5) in the Facsimile Features menu.
- For details about Parameter Setting, see “Parameter Settings”.

Reference

- p.375 "Parameter Settings"

SEP Code RX Result Report

This report is printed after each SEP Code Reception is completed and shows its result.

If E-mail TX Results is programmed in a Quick Operation Key, you can select whether a report e-mail is sent after reception. For details about Quick Operation Key, see “General Settings”.

Note

- You can turn this function on or off with the User Parameter (switch 03, bit 4) in the Facsimile Features menu.
- If user authentication is set, you can select whether to display a destination with the User Parameter (switch 04, bit 4) in the Facsimile Features menu.
- If user authentication is set, you can select whether to display a sender name with the User Parameter (switch 04, bit 5) in the Facsimile Features menu.
- For details about Parameter Setting, see “Parameter Settings”.
- You can also check the result of a SEP Code Reception with the Journal.
- To view the report without text disruption, select a font of even character width in your e-mail application's settings.

Reference

- p.335 "General Settings"
- p.375 "Parameter Settings"

Canceling a Transmission

This section explains how to cancel a fax transmission.

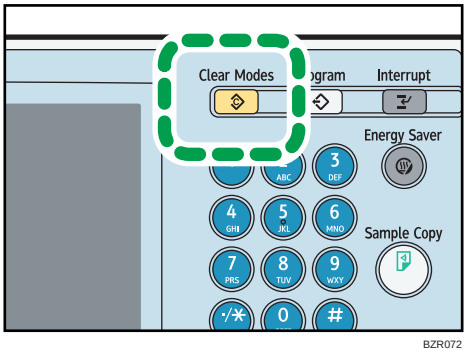
Important

- **Remember that the Communicating indicator turns off almost immediately when an Internet Fax, e-mail transmission, or folder transmission is being executed.**

Before the Original Is Scanned

Use this procedure to cancel a transmission before pressing the [Start] key.

1. **Press the [Clear Modes] key.**



Note

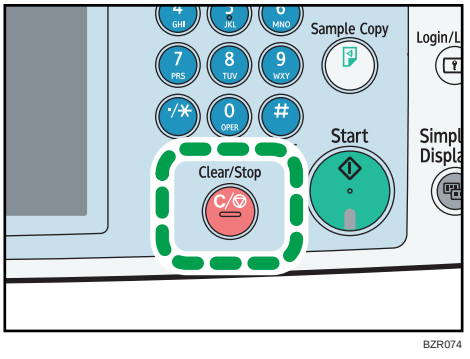
- When originals are placed into the ADF, you can cancel transmission simply by removing them.

While the Original Is Being Scanned

Use this procedure to cancel a transmission while the originals are being scanned after the [Start] key has been pressed.

1

1. **Press the [Clear/Stop] key.**



The machine stops scanning.

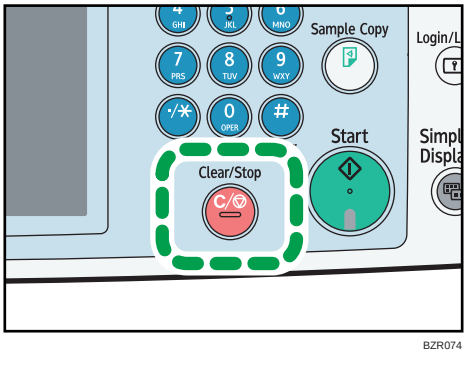
Note

- Scanning may be completed while you are performing the cancel operation.

While the Original Is Being Transmitted

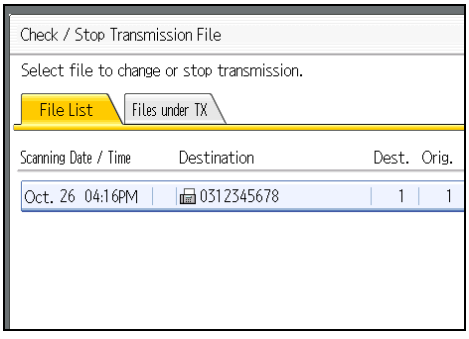
This section explains how to cancel a transmission while the Communicating indicator is lit.

1. **Press the [Clear/Stop] key.**



The screen shown in step 2 can also be displayed by pressing [Check / Stop Transmission File] under [Change TX / Info].

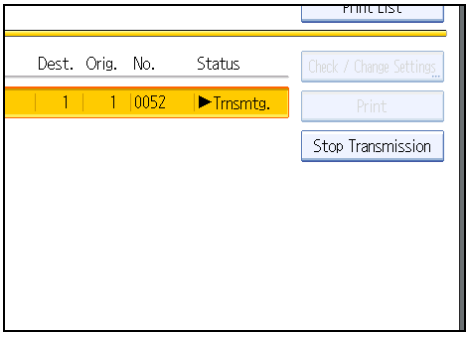
2. **Select the file you want to cancel.**



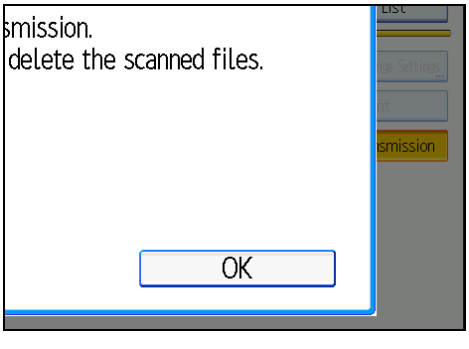
If the desired file is not shown, press [▲] or [▼] to find it.

There are cases when a destination may not be selected as the destination appears as "✱", depending on the security settings.

3. **Press [Stop Transmission].**



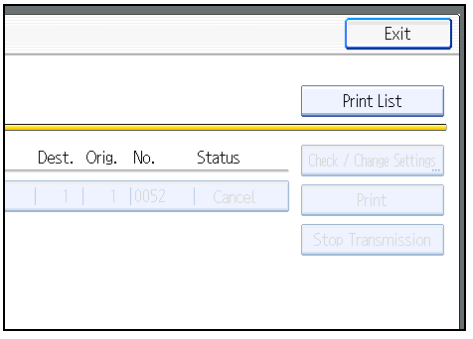
4. **Press [OK].**



To cancel another file, repeat steps 2 through 4.

To cancel stopping transmission, press [Cancel].

5. **Press [Exit].**



After pressing [Check / Stop Transmission File] under [Change TX / Info] in step 1, press [Exit] twice.

The standby display appears.

Note

- If you cancel a document while it is being sent, the transmission is halted as soon as you finish the cancellation procedure. However, some pages of the document may already have been sent and received at the other end.
- If the transmission finishes while you are carrying out this procedure, it will not be canceled.
- If multiple destinations were specified, only one destination number appears.

Before the Transmission Is Started

Use this procedure to cancel a transmission after the original is scanned.

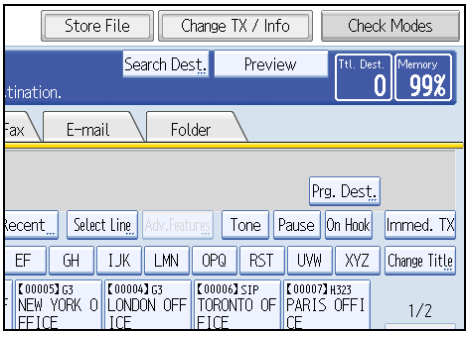
This function is useful to cancel a transmission when you notice a mistake in destination or with the originals after storing. To cancel Memory Transmission, search for the file to be canceled among the files stored in memory, and then delete it.

You can cancel transmission of a file while the file is being sent, stored in memory, or fails to transmit. All the scanned data is deleted from memory.

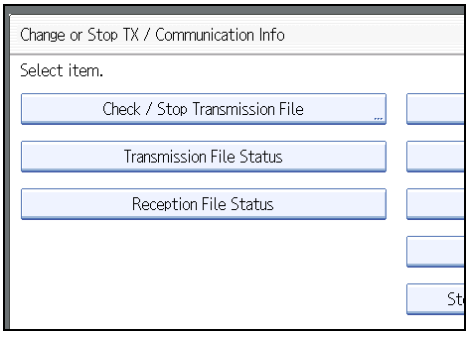
Important

- **This function is unavailable with Immediate Transmission.**

1. **Press [Change TX / Info].**



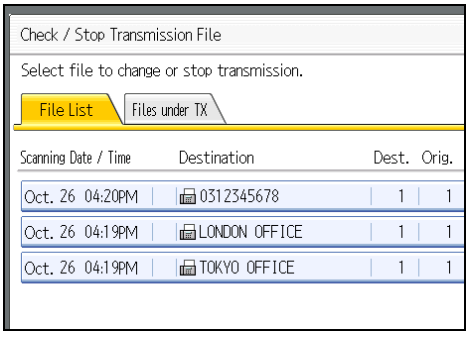
2. **Press [Check / Stop Transmission File].**



The list of stored files being transmitted or waiting for transmission appears.

To display only the files being sent, press [Files under TX].

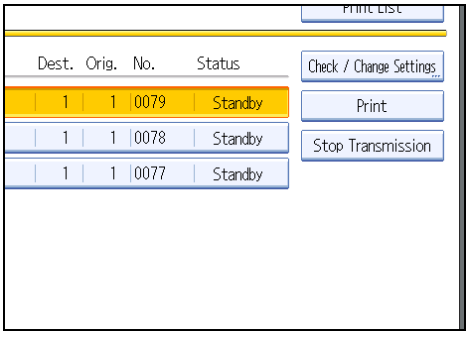
3. **Select the file you want to cancel.**



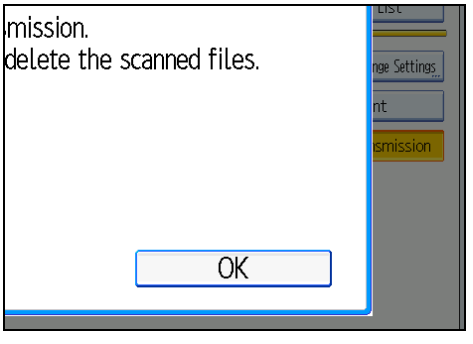
If the desired file is not shown, press [▲] or [▼] to find it.

There are cases when a destination may not be selected as the destination appears as "✳", depending on the security settings.

4. **Press [Stop Transmission].**



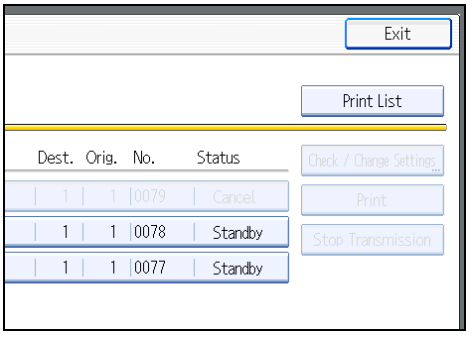
5. **Press [OK].**



To cancel another file, repeat steps 3 through 5.

To cancel stopping transmission, press [Cancel].

6. **Press [Exit] twice.**



The standby display appears.

Note

- To delete some destinations from a broadcast, see “Deleting a Destination from a Broadcast”.
- If you cancel a transmission while the file is being sent, some pages of your file may have already been sent and is received at the other end.

- If the transmission finishes while you are carrying out this procedure, transmission cannot be canceled.
- If multiple destinations were specified, only the number of the destinations that have not received the document you sent is shown.
- If multiple destinations were specified, only one destination number appears. To display all destinations, press [Check / Change Settings].

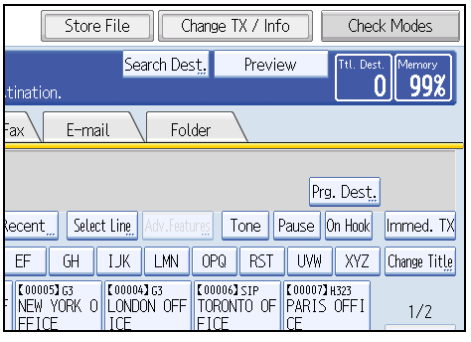
Reference

- p.231 "Deleting a Destination from a Broadcast"

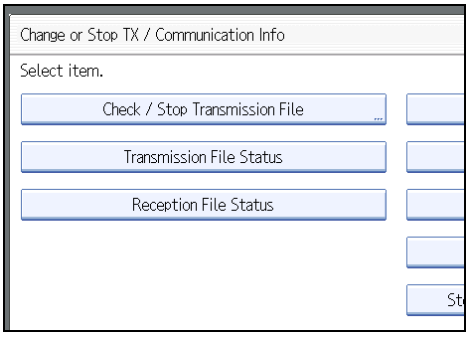
Confirming a Transmission

Check the contents of a file that is stored in memory and not yet sent.

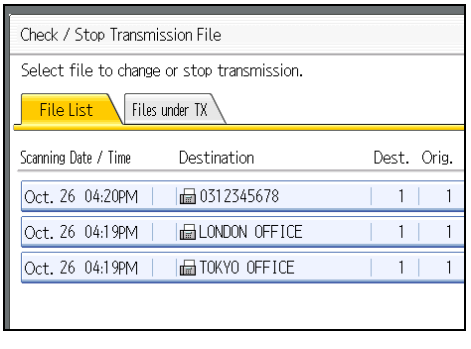
1. **Press [Change TX / Info].**



2. **Press [Check / Stop Transmission File].**

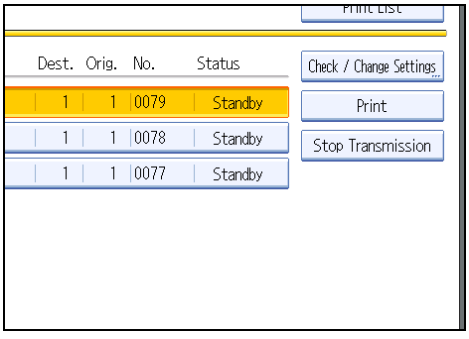


3. **Select a file to check.**



If multiple destinations were specified, only the name of the destination you specify first and only the number of destinations that have not received the document you sent are shown.

4. **Press [Check / Change Settings].**



5. **Confirm a transmission, and then press [Exit].**
6. **Press [Exit] twice.**

   The standby display appears.

Note

- You cannot view or edit a file that is in the process of being sent or a file that was sent by LAN-Fax and is stored in memory.

Checking the Storage Result (Memory Storage Report)

This report is printed after an original is stored in memory. It helps you review the contents and the destinations of stored originals.

Important

- **If you use Parallel Memory Transmission, the Memory Storage Report is not printed.**

Note

- You can turn this report on and off with the User Parameter (switch 03, bit 2) in the Facsimile Features menu.
- Even if the machine is set up not to print this report, it is still printed if an original could not be stored.
- You can select whether to include part of the original image on the report with the User Parameter (switch 04, bit 7) in the Facsimile Features menu.
- If user authentication is set, you can select whether to display a destination with the User Parameter (switch 04, bit 4) in the Facsimile Features menu.
- If user authentication is set, you can select whether to display a sender name with the User Parameter (switch 04, bit 5) in the Facsimile Features menu.
- For details about Parameter Setting, see “Parameter Settings”.

Reference

- p.375 "Parameter Settings"

Changing the Default Functions of the Fax's Initial Display

You can specify the default values of document transmission function settings.

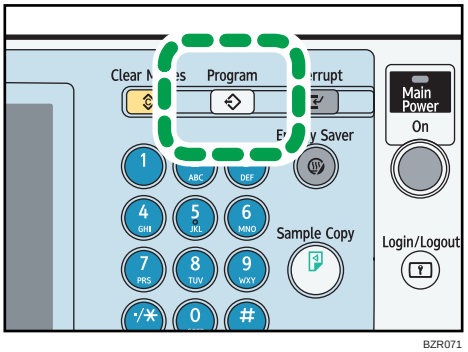
"Default" refers to the value of a setting on the initial display when the machine is first turned on or when modes are cleared.

The following procedure allows you to specify the default values only of settings that can be changed from the initial display.

You can specify default values for the following settings:

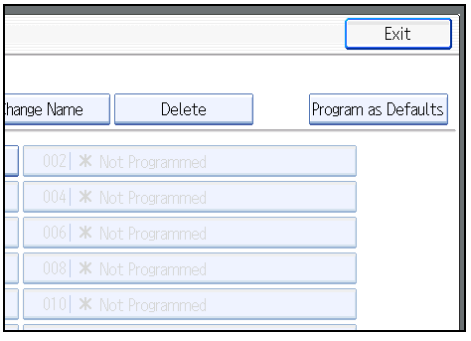
Memory Transmission/Immediate Transmission, transmission type, Original Type, Resolution, Scan Size, Mixed Original Sizes, Auto Density, Manual Density, Original Orientation, Original Settings, Stamp, Select Line, Send Later, Reception Notice, BCC Transmission, E-mail TX Results, Text, Standard Message, Auto Reduce, Label Insertion, Closed Network, SUB Code Transmission, SEP Code Reception, Fax Header Print, TX Status Report, Store File, File Type, Preview before transmission

1. **On the initial display, configure a setting with the default value you want to specify.**
2. **Press the [Program] key.**



BZR071

3. **Press [Program as Defaults].**



4. **Press [Program].**

5. **When a confirmation message appears, press [Yes].**

   The value currently specified for the setting becomes the default.

Note

- To restore the factory default settings for the settings on the initial display, press [Restore Factory Defaults].
- You can set the default settings of the normal and simplified screens separately.

2. Other Transmission Features

This section explains functions you can apply using the [TX Mode] setting, such as Sending at a Specific Time (Send Later) and Label Insertion. [TX Mode] allows you to use various functions with transmissions.

Sending at a Specific Time (Send Later)

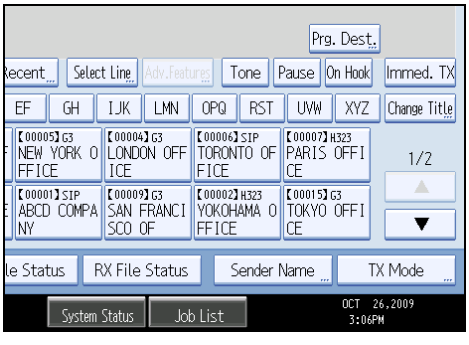
Using this function, you can instruct the machine to delay transmission of your fax document until a specified later time.

This allows you to take advantage of off-peak telephone charges without having to be by the machine at the time.

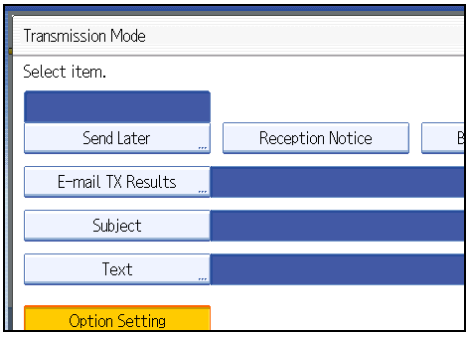
Important

- If the machine is switched off for about one hour, all fax documents stored in memory are lost. If documents are lost for this reason, a Power Failure Report is automatically printed when the operation switch is turned on. Use this report to check the list of lost documents. See "Turning Off the Main Power / In the Event of Power Failure", Troubleshooting.
- This function is unavailable with Immediate Transmission. Use Memory Transmission.

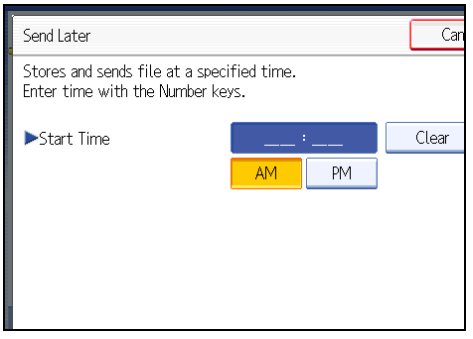
1. Place the original, and then select the scan settings you require.
2. Press [TX Mode].



3. Press [Send Later].



4. **Enter the time using the number keys, and select [AM] or [PM]. Then press [OK].**



When entering numbers smaller than 10, add a zero at the beginning.

If you make a mistake, press [Clear] before pressing [OK], and then try again.

To cancel Send Later, press [Cancel]. The display returns to that of step 3.

The specified time is shown above the highlighted [Send Later].

5. **Press [OK].**

The standby display appears.

To check the settings, press [TX Mode].

6. **Specify a destination, and then press the [Start] key.**

Note

- You can specify a time within 24 hours of the current time.
- If the current time shown is not correct, change it using [Set Time] under [System Settings]. For details about the setting, see "Timer Settings", Network and System Settings Reference.
- You can program one of the Quick Operation keys with operations for this function. Using the Quick Operation Key allows you to omit step 2 and 5. For details about Quick Operation Key, see "General Settings".
- You can cancel the transmission setup for Send Later. See "Canceling a Transmission".

Reference

- p.159 "Canceling a Transmission"
- p.335 "General Settings"

Requesting a Reception Notice

You can confirm sent documents were properly received using e-mail or the Journal.

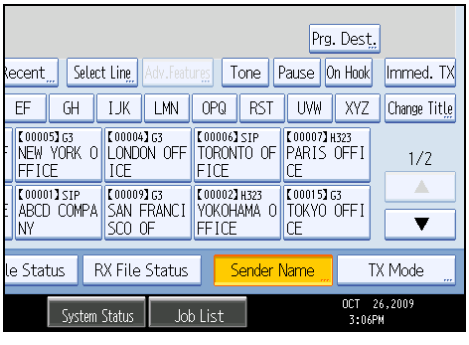
The receiver sends back a reception notice message. Once the reception notice message is received, "OK" appears in the Result column of the Journal, allowing the originator to verify the transmission was received.

Important

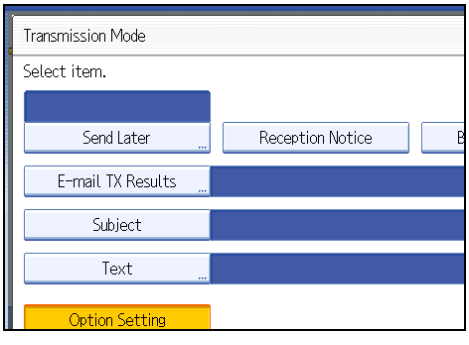
- **The Reception Notice feature is only available if the receiver supports MDN (Message Disposition Notification).**

1. **Place the original, and then select the scan settings you require.**
2. **Specify the sender.**

   For details, see "Sender Settings".
3. **Press [TX Mode].**



4. **Press [Reception Notice] to highlight it.**



5. **Press [OK].**

   The standby display appears.

   To check the settings, press [TX Mode].
6. **Specify a destination, and then press the [Start] key.**

Note

- If the Internet Fax or e-mail is not received normally, “Error” appears in the Result column.
- Only the last 50 communications appear in the Journal. If you do not receive a reception notice message before the last 50 communications are finished, “OK” might not be printed in the Journal's Result column. This may happen even if the mail is received normally at the other end.
- If you specify mailing list addresses, do not set for Reception Notice. Otherwise, you will receive multiple reception notice messages from e-mail recipients, and the Result column will be overwritten each time a new notice message is received. However, if you receive a reception notice message indicating an error, “Error” appears in the Result column and will not be overwritten, even if you subsequently receive a reception notice message as “OK” following the error message.
- Reception notice results are only shown in the Journal. The Result column in all other files, lists, and transmission reports show “--”.
- Reception notice messages themselves are not recorded in the Journal.
- You can select whether or not to print the Reception Notice. This can be set with User Parameter (switch 21, bit 0) in the Facsimile Features menu. See “Parameter Settings”.
- You can program one of the Quick Operation keys with operations for this function. Using the Quick Operation Key allows you to omit steps 3 and 5. For details about Quick Operation Key, see “General Settings”.
- You cannot broadcast Internet Fax or e-mail using Reception Notice. The documents are sent to the destinations in the order in which they were specified.

Reference

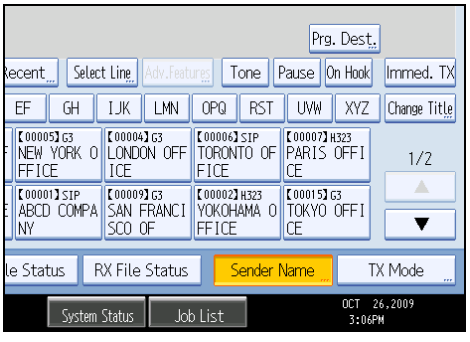
- p.148 "Sender Settings"
- p.335 "General Settings"
- p.375 "Parameter Settings"

Setting an Internet Fax/E-mail Destination as a BCC

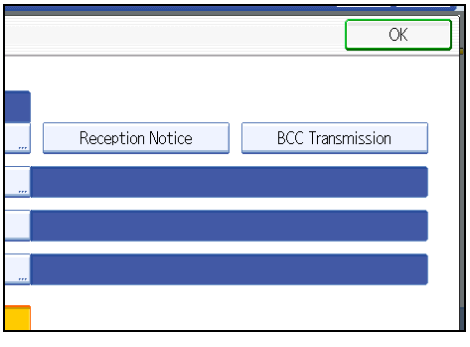
E-mail is sent to all specified Internet Fax or e-mail destinations as bcc.

1. **Place the original, and then select the scan settings you require.**
2. **Specify the sender.**

   For details, see “Sender Settings”.
3. **Press [TX Mode].**



4. **Press [BCC Transmission] to highlight it.**



5. **Press [OK].**

   The standby display appears.

   To check the settings, press [TX Mode].
6. **Specify a destination, and then press the [Start] key.**

Note

- You can program one of the Quick Operation keys with operations for this function. Using the Quick Operation Key allows you to omit steps 3 and 5. For details about Quick Operation Key, see “General Settings”.

Reference

- p.148 "Sender Settings"
- p.335 "General Settings"

Confirming Transmission Results by E-mail

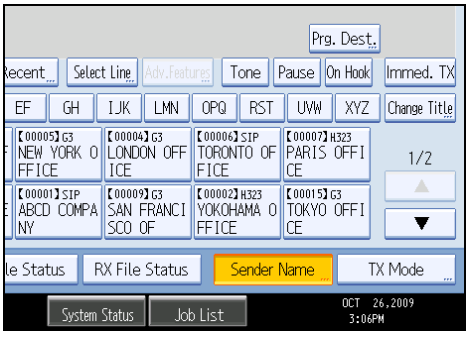
Use this function to confirm the transmission results by sending an e-mail notification to the specified destination.

Important

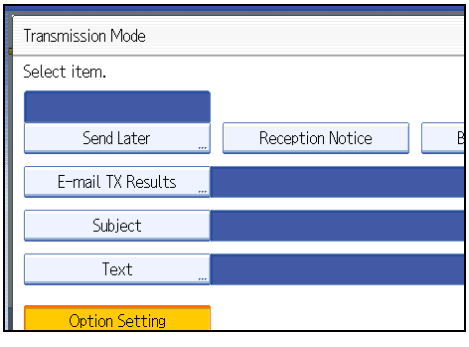
- **Register the e-mail address of the destination for e-mail notification in the destination list in advance.**

1. **Place the original, and then select the scan settings you require.**
2. **Specify the sender.**

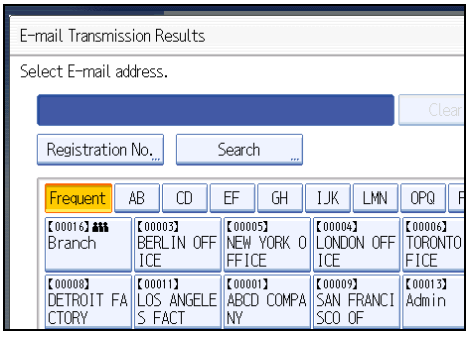
   For details, see “Sender Settings”.
3. **Press [TX Mode].**



4. **Press [E-mail TX Results].**



5. **Select the destination of notification, and then press [OK].**



If you make a mistake, before pressing [OK], press [Clear] or press the selected Destination key again to turn the highlight off.

[E-mail TX Results] gets highlighted and the destination of notification selected appears.

6. **Press [OK].**

The standby display appears.

To check the settings, press [TX Mode].

7. **Specify a destination, and then press the [Start] key.**

Note

- You can program one of the Quick Operation keys with operations for this function. Using the Quick Operation Key allows you to omit steps 3 and 6. For details about Quick Operation Key, see "General Settings".

Reference

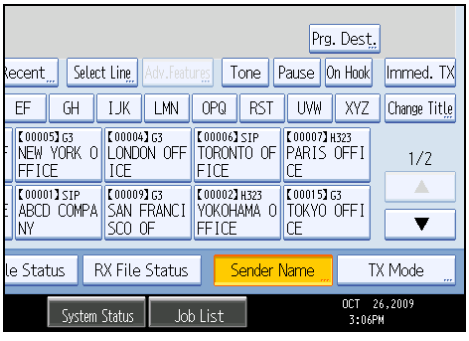
- p.148 "Sender Settings"
- p.335 "General Settings"

Entering the Subject

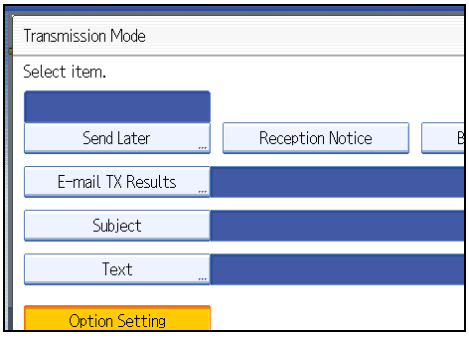
Allows you to enter a subject for the Internet Fax or e-mail document you want to send.

1. **Place the original, and then select the scan settings you require.**
2. **Specify the sender.**

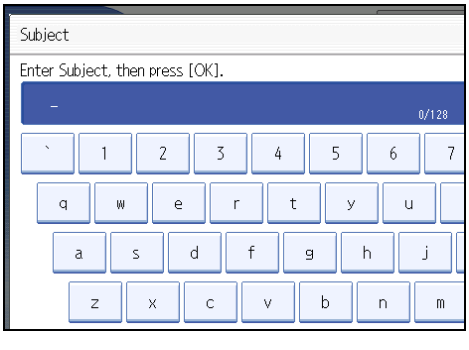
   For details, see “Sender Settings”.
3. **Press [TX Mode].**



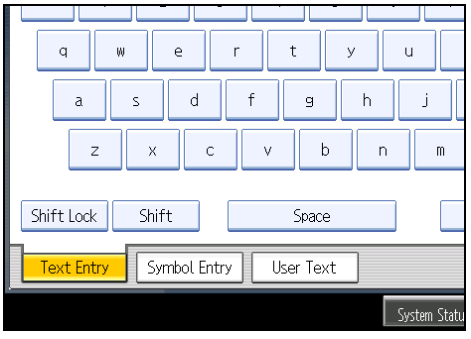
4. **Press [Subject].**



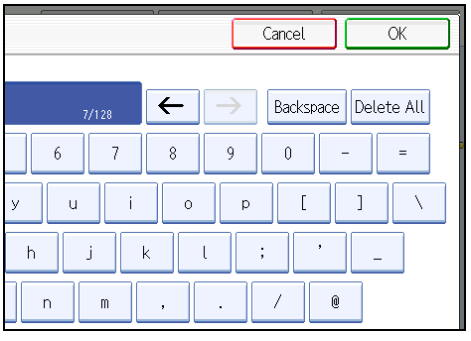
5. **Enter the subject.**



6. **To enter the character strings programmed in the machine, press [User Text], and then select the character strings you want to enter.**



7. **Press [OK].**



The entered subject appears in the Subject field.

8. **Press [OK].**

The standby display appears.

9. **Specify a destination, and then press the [Start] key.**

Note

- For convenience, program frequently-used subjects in advance in "Program / Change / Delete User Text" in "System Settings". For details about the programming method, see "General Features", Network and System Settings Reference.
- If you send Internet Fax or e-mail without setting a subject, a subject is automatically inserted. For details about how the subject is automatically inserted, see "Specifying Auto-Generated Subjects for E-mail" and "Received images".
- You cannot send a subject only as Internet Fax or e-mail without an original.
- For details about text entry, see "Entering Text", About This Machine.
- You can program one of the Quick Operation keys with operations for this function. Using the Quick Operation Key allows you to omit steps 3 and 8. For details about Quick Operation Key, see "General Settings".
- For the maximum number of characters for an e-mail subject, see "Maximum Values".

Reference

- p.148 "Sender Settings"
- p.181 "Specifying Auto-Generated Subjects for E-mail"
- p.203 "Received images"
- p.335 "General Settings"
- p.427 "Maximum Values"

Specifying Auto-Generated Subjects for E-mail

If you do not enter a subject when sending e-mail, a subject will be auto generated. This section explains how to specify the content of auto-generated subjects.

Subjects differ depending on Stamp Sender Name settings. For details about using the Stamp Sender Name function, see "Sender Settings".

When Stamp Sender Name is set to on:

From Sender Name (Fax Message NO.xxxx)

When Stamp Sender Name is set to off:

- If Own Fax Number and Own Name are programmed:

  From "Own Fax Number" ("Own Name") (Fax Message NO.xxxx)
- If only Own Fax Number is programmed:

  From "Own Fax Number" (Fax Message NO.xxxx)
- If only Own Name is programmed:

  From "Own Name" (Fax Message NO.xxxx)
- If neither Own Fax Number nor Own Name are programmed:

  Fax Message NO.xxxx

Note

- "xxxx" is the document number that appears in the Journal.

Reference

- p.148 "Sender Settings"

Entering the Text

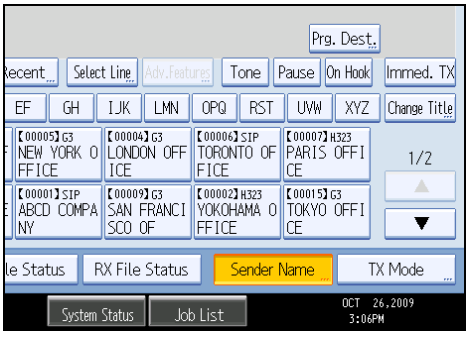
Allows you to enter the text for the Internet Fax or e-mail document you want to send.

Important

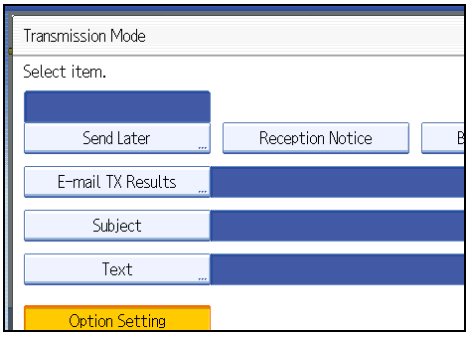
- **Program text strings in advance in "Program / Change / Delete E-mail Message" in "System Settings". For details about the programming method, see "File Transfer", Network and System Settings Reference.**

1. **Place the original, and then select the scan settings you require.**
2. **Specify the sender.**

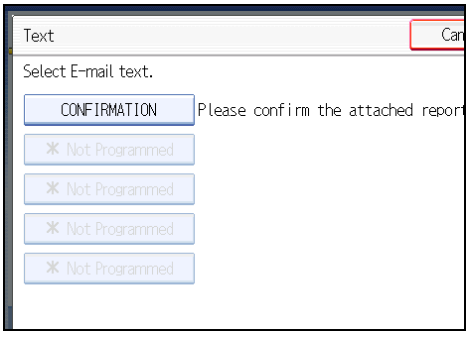
   For details, see "Sender Settings".
3. **Press [TX Mode].**



4. **Press [Text].**



5. **Select a text, and then press [OK].**



6. **Press [OK].**

   The standby display appears.

7. **Specify a destination, and then press the [Start] key.**

Note

- You cannot send text only without an original.
- You can program one of the Quick Operation keys with operations for this function. Using the Quick Operation Key allows you to omit steps 3 and 6. For details about Quick Operation Key, see "General Settings".

Reference

- p.148 "Sender Settings"
- p.335 "General Settings"

Transmission Options

This section describes various functions that you can switch on and off for any particular transmission, following the procedures given here.

2 Standard Message Stamp

Use this function to stamp a standard message at the top of the first original sent.

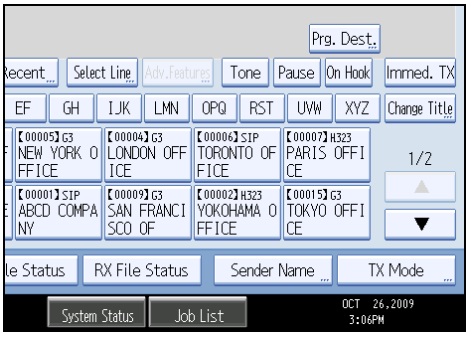
There are four types of standard messages: "Confidential", "Urgent", "Please phone", and "Copy to corres. Section"

You can also program other messages.

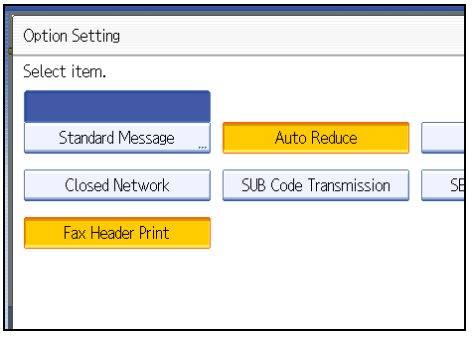
Important

- **While this function is in use, the third line of the Label Insertion is not printed.**
- **When there is an image around the area where the standard message is to be stamped, that image is deleted.**

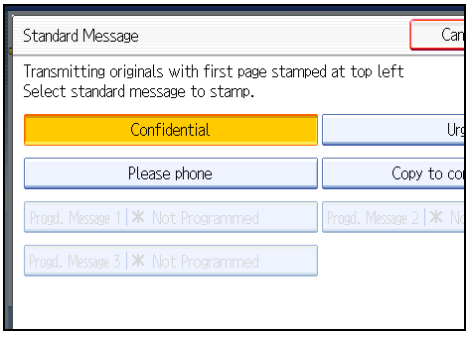
1. **Place the originals, and then select the scan settings you require.**
2. **Press [TX Mode].**



3. **Select [Option Setting].**
4. **Press [Standard Message].**



5. **Select the standard message to be stamped, and then press [OK].**



The selected standard message is shown above the highlighted [Standard Message].

6. **Press [OK] twice.**
7. **Specify the destination, and then press the [Start] key.**

The machine cannot stamp multiple standard messages.

Note

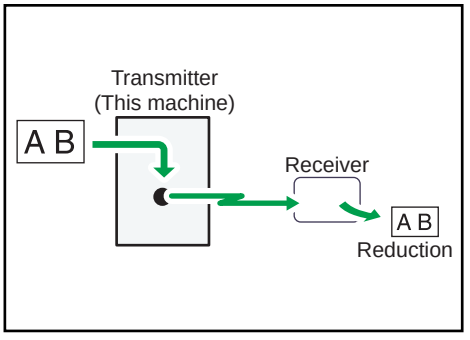
- To print a standard message that is not programmed as a default, program it in advance in "Program / Change / Delete Standard Message" in the Facsimile Features menu. For details about the programming method, see "Send Settings".
- You can program one of the Quick Operation keys with operations for this function. Using the Quick Operation Key allows you to omit steps 2, 3, and 6. For details about Quick Operation Key, see "General Settings".

Reference

- p.335 "General Settings"
- p.339 "Send Settings"

Auto Reduce

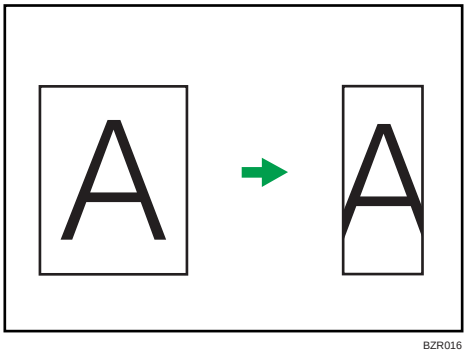
When this function is turned on, if the receiver's paper is smaller than the size of the original you are sending, the document is automatically reduced to fit onto the paper available at the other end.



BZR039

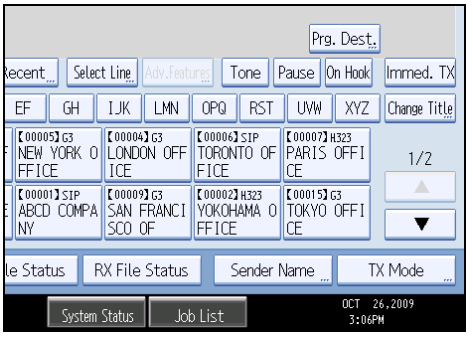
Important

- If you turn this function off, the scale of the original is maintained and some parts of the image may be deleted when printed at the other end.



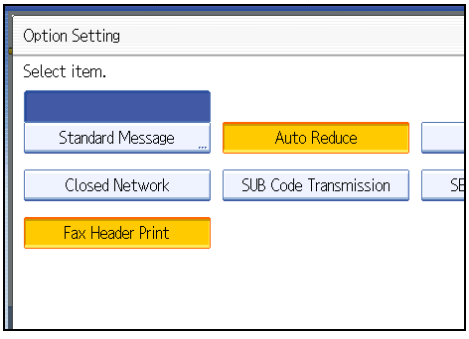
BZR016

1. Place the original, and then select the scan settings you require.
2. Press [TX Mode].



3. Select [Option Setting].

4. **Make sure that [Auto Reduce] is highlighted.**



To cancel an Auto Reduce, press [Auto Reduce] to turn the highlight off.

5. **Press [OK] twice.**
6. **Specify the destination, and then press the [Start] key.**

Label Insertion

With this function you can have the receiver's name printed on the document that is received at the other end.

Important

- **To use this function, set Label Insertion to [On] when registering fax destinations in the Address Book, and also set "Label Insertion" to on when sending fax documents.**
- **When there is an image around the area where the Label is to be printed, that image is deleted.**

The receiver's name is printed as follows:

- Receiver's name: printed at the top of the page and preceded by "To:".
- Standard message: the programmed message is printed within the next two lines.

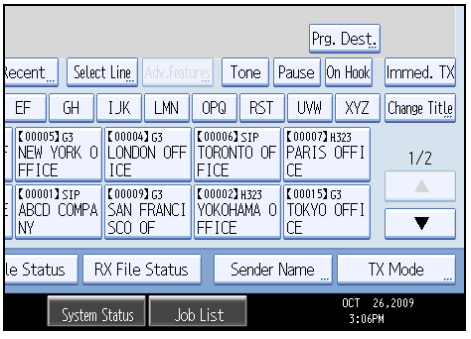
Set this function as follows:

- Set Label Insertion to [On] when programming fax destinations.
- Set Label Insertion to on when sending fax documents.
- On the Standard Message screen, select the standard message you want to print.

1. **Place the original, and then select the scan settings you require.**

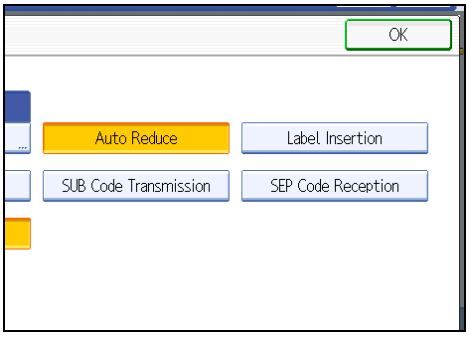
2

2. **Press [TX Mode].**



3. **Select [Option Setting].**

4. **Press [Label Insertion] to highlight it.**



To cancel Label Insertion, press [Label Insertion] again.

5. **Press [OK] twice.**

6. **Specify the destination, and then press the [Start] key.**

Note

- To print a standard message that is not programmed as a default, program it in advance in “Program / Change / Delete Standard Message” in the Facsimile Features menu. For details about the programming method, see “Send Settings”.
- You can program one of the Quick Operation keys with operations for this function. Using the Quick Operation Key allows you to omit steps 2, 3, and 5. For details about Quick Operation Key, see “General Settings”.

Reference

- p.335 "General Settings"
- p.339 "Send Settings"

Closed Network

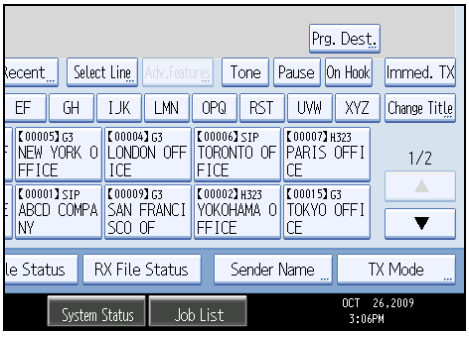
Transmission will only take place if the destination's Closed Network Code is the same as yours.

This function can stop you accidentally sending information to the wrong place.

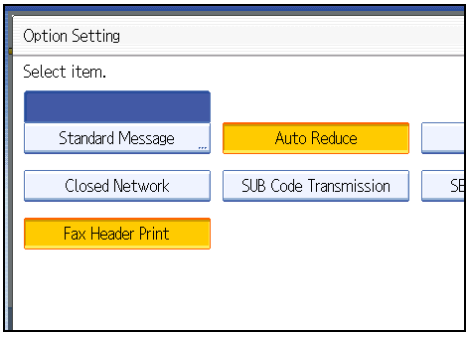
Important

- **You must program a Closed Network Code beforehand, using Program Closed Network Code under Facsimile Features. For details about the programming method, see "Initial Settings".**
- **This function is not available with Internet Fax, e-mail transmission, and folder transmission.**

1. **Place the original, and then select the scan settings you require.**
2. **Press [TX Mode].**



3. **Select [Option Setting].**
4. **Press [Closed Network] to highlight it.**



To cancel a Closed Network Transmission, press [Closed Network] again.

5. **Press [OK] twice.**
6. **Specify the destination, and then press the [Start] key.**

Note

- You can program one of the Quick Operation keys with operations for this function. Using the Quick Operation Key allows you to omit steps 2, 3, and 5. For details about Quick Operation Key, see "General Settings".

Reference

- p.335 "General Settings"
- p.347 "Initial Settings"

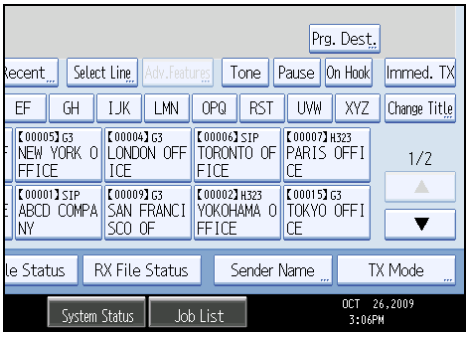
SUB Code Transmission

Enable this function to perform SUB Code Transmission.

Important

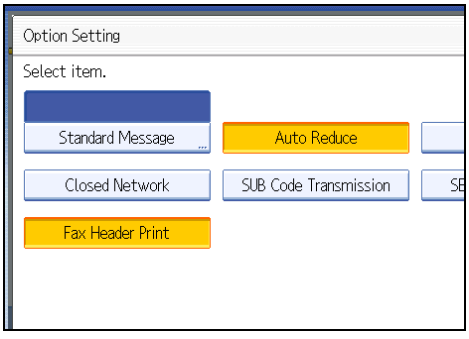
- **This function is not available with Internet Fax, e-mail transmission, and folder transmission.**
- **To perform SUB Code Transmission, a SUB Code must be set in [Adv.Features], the Address Book, or Keystroke Programs in advance. Even though "SUB Code Transmission" is set to on, if the SUB Code is not appended to the specified destination, transmission is in standard fax mode.**
- **When you select a destination that has a registered SUB Code from the Address Book, if "SUB Code Transmission" is set to off, the SUB Code is not appended and transmission is in standard fax mode.**

1. **Place the original, and then select the scan settings you require.**
2. **Press [TX Mode].**



3. **Select [Option Setting].**

4. **Press [SUB Code Transmission] to highlight it.**



To cancel a SUB Code Transmission, press [SUB Code Transmission] again.

5. **Press [OK] twice.**
6. **Specify the destination, and then press the [Start] key.**

Note

- For details about specifying SUB Codes, see the following:
  - To specify SUB Codes in "Adv.Features", see "Setting SUB Codes for Transmission".
  - To register SUB Codes in the Address Book, see "Registering Addresses and Users for Facsimile/ Scanner Functions", Network and System Settings Reference.
  - To register SUB Codes in Keystroke Programs, see "Registering and Changing Keystroke Programs".
- You can program one of the Quick Operation keys with operations for this function. Using the Quick Operation Key allows you to omit steps 2, 3, and 5. For details about Quick Operation Key, see "General Settings".

Reference

- p.151 "Setting SUB Codes for Transmission"
- p.335 "General Settings"
- p.414 "Registering and Changing Keystroke Programs"

SEP Code Reception

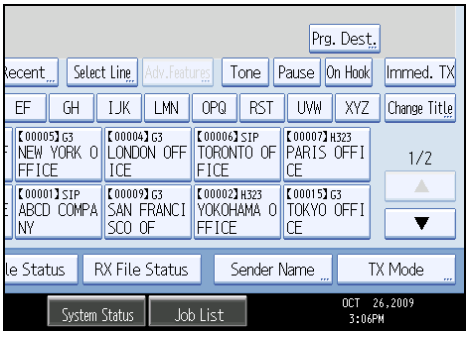
Enable this function to perform SEP Code Reception.

Important

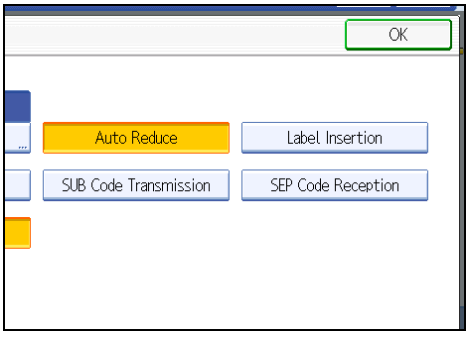
- **This function is not available with Internet Fax and e-mail.**
- **To perform SEP Code Reception, a SEP Code must be set in [Adv.Features], the Address Book, or Keystroke Programs in advance. Otherwise, even if "SEP Code Reception" is set to on, reception is not performed.**

- When you select a destination that has a registered SEP Code from the Address Book, if "SEP Code Reception" is set to off, the SEP Code is not appended and transmission is in standard fax mode.

1. **Press [TX Mode].**



2. **Select [Option Setting].**
3. **Press [SEP Code Reception] to highlight it.**



To cancel SEP Code Reception, press [SEP Code Reception] again.

4. **Press [OK] twice.**
5. **Specify the destination, and then press the [Start] key.**

Note

- For details about specifying SEP Codes, see the following:
  - To specify SEP Codes in "Adv.Features", see "Setting SEP Codes for Reception".
  - To register SEP Codes in the Address Book, see "Registering Addresses and Users for Facsimile/ Scanner Functions", Network and System Settings Reference.
  - To register SEP Codes in Keystroke Programs, see "Registering and Changing Keystroke Programs".
- You can program one of the Quick Operation keys with operations for this function. Using the Quick Operation Key allows you to omit steps 1, 2, and 4. For details about Quick Operation Key, see "General Settings".

Reference

- p.154 "Setting SEP Codes for Reception"
- p.335 "General Settings"
- p.414 "Registering and Changing Keystroke Programs"

Fax Header Print

When the Fax Header is set to on, the stored name is printed on the receiver's paper.

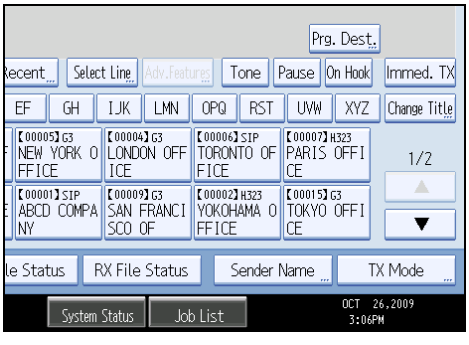
You can store two Fax Headers; “First Name” and “Second Name”.

For example, if you store your department name in one and your organization name in the other, you could use the first when sending internal faxes and the second for external faxes.

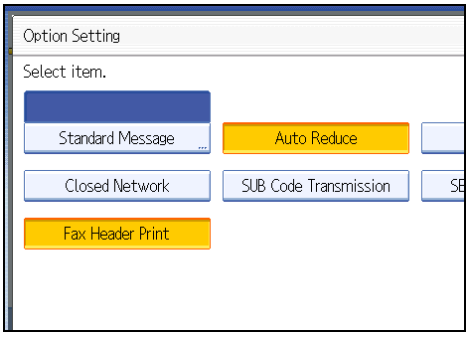
Important

- **In the USA, the Fax Header must contain the telephone number of the line your machine is connected to. It will be printed on the header of every page you send. Required in the USA.**

1. **Place the original, and then select the scan settings you require.**
2. **Press [TX Mode].**



3. **Select [Option Setting].**
4. **Make sure that [Fax Header Print] is highlighted.**



To cancel Fax Header Print, press [Fax Header Print] to turn the highlight off.

5. **Press [OK] twice.**
6. **Specify the destination, and then press the [Start] key.**

Note

- You can program fax header names using the Program Fax Information function in the Facsimile Features menu. For details about the programming method, see “Registering Fax Information”.
- You can select whether or not dates, fax header names, file numbers, or page numbers are printed by changing their respective User Parameters (switch 18, bit 3, 2, 1, 0) in the Facsimile Features menu. See “Parameter Settings”.
- If you used the number keys to specify the receiver, the first header name is printed on the receiver's paper. To print the second header name, contact your service representative.
- You can program one of the Quick Operation keys with operations for this function. Using the Quick Operation Key allows you to omit steps 2, 3, and 5. For details about Quick Operation Key, see “General Settings”.
- In the USA, law requires that your telephone number be included in the Fax Header. Register the telephone number (own fax number) and switch on Fax Header Print with User Parameters (switch 18, bit 1) in the Fax Features menu.

Reference

- p.335 "General Settings"
- p.371 "Registering Fax Information"
- p.375 "Parameter Settings"

3. Reception

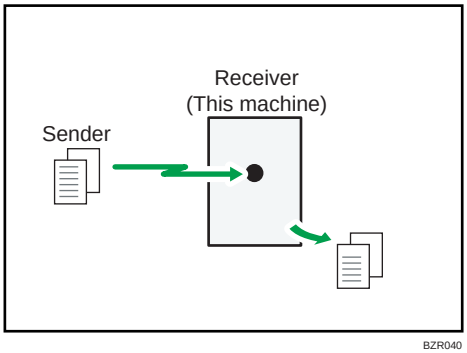
This section explains reception and reception functions such as printing received documents or routing received documents to other fax machines.

Types of Reception

This section explains different ways of receiving fax documents.

Immediate Reception

Each page of a fax document is printed as soon as it is received. This method is used for standard fax documents.



Important

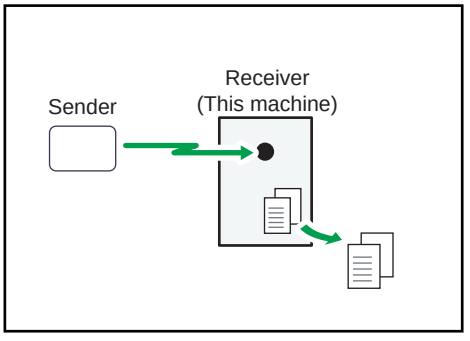
- **When receiving important fax documents, it is recommended that you confirm the contents of the received documents with the senders.**
- **The machine may not be able to receive fax documents when free memory space is low.**
- **If free memory reaches 0% during Immediate Reception, any further reception becomes impossible and the current communication is terminated.**

Note

- Reception is always by Immediate Reception unless "Combine Two Originals" or [2 Sided Print] is set to "On", or [Reception File Print Quantity] is set to "2" or higher, in which cases the machine switches to Memory Reception.
- If the Substitute Reception is used, a fax document is not printed: it is stored in memory.
- This machine supports Standard, Detail, Fine (with the optional expansion memory), and Super Fine (with the optional expansion memory) resolutions for reception. If you do not have the optional expansion memory, faxes sent at Super Fine resolution is printed on your machine at Detail resolution. This may differ from the sender's intended resolution.

Memory Reception

The machine waits until all pages of the document have been received into memory before printing it.



Important

- **If there is a power failure (the main power switch is turned off) or the machine is unplugged for about one hour, all the documents stored in memory are deleted. As soon as the main power switch is turned on, the Power Failure Report is printed to help you check the list of deleted files. Simply turning off the power by pressing the operation switch does not delete stored documents. See "Turning Off the Main Power / In the Event of Power Failure", Troubleshooting.**
- **The machine might not be able to receive large numbers of documents or documents with high data content. If this is the case, we recommend that you set "Reception File Print Quantity" to "1" and disable "Combine Two Originals" or "2 Sided Print". Alternatively, install the optional expansion memory.**
- **The machine may not be able to receive fax documents when free memory space is low.**
- **If free memory reaches 0% during Memory Reception, any further reception becomes impossible and the current communication is terminated.**

Note

- Reception is always by Immediate Reception unless "Combine Two Originals" or [2 Sided Print] is set to "On", or [Reception File Print Quantity] is set to "2" or higher, in which cases the machine switches to Memory Reception.
- If you have selected Store for Reception File Setting in the Facsimile Features menu, received document is saved on the hard disk and will not be printed. You can print those documents by operating the machine or a connected computer, as necessary.

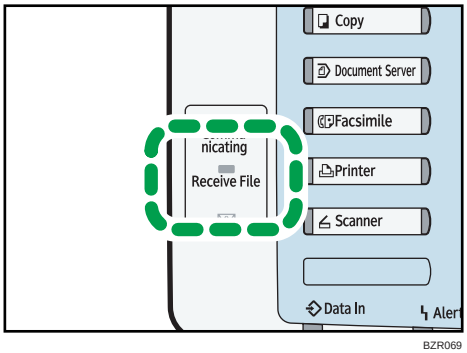
Substitute Reception

Substitute Reception is used when the machine cannot print any fax documents.

In Substitute Reception, a received fax document is stored in memory instead of being printed. Fax documents received using Substitute Reception are automatically printed when the condition which caused the machine to use Substitute Reception is rectified.

Depending on why the machine cannot print, Substitute Reception might be used for all fax documents received, or for only those documents that match a condition specified in the User Parameters in the Facsimile Features menu.

The Receive File indicator lights to let you know when fax documents have been received using Substitute Reception.



Important

- **Reception may not take place if there is not enough free memory.**
- **If free memory reaches 0% during Substitute Reception, any further reception becomes impossible and the current communication is terminated.**

Note

- When a fax document is received after [Store] is selected for Reception File Setting in the Facsimile Features menu, the Receive File indicator lights. For details about Reception File Setting, see "Reception File Setting".
- The Receive File indicator may light even when receiving documents using Immediate Reception.

Reference

- p.360 "Reception File Setting"

Receiving documents unconditionally

When faxes cannot be printed as normal, Substitute Reception allows fax reception. This section describes the conditions under which this will occur.

If one of the conditions in the following list occurs, the machine receives all fax documents using Substitute Reception.

Problems	Causes	Solutions
The machine is printing with a different function.	The machine is busy printing with a different function.	The document is automatically printed after the current job finishes.
The message "Output Tray is full." "Remove paper." appears.	The output tray is full.	Remove paper from the output tray.
↳ is lit.	The cover is open.	Close the cover shown in the display.

Receiving documents according to parameter-specified settings

When faxes cannot be printed as normal, Substitute Reception allows reception of faxes that match the criteria specified in User Parameters. This section describes the conditions under which this will occur.

If any of the conditions listed below applies, the machine receives only faxes that match the criteria specified in User Parameters.

Problems	Causes	Solutions
↳ is lit.	Paper is jammed.	Remove the jammed paper. For details about removing the paper, see “Removing Jammed Paper”, Troubleshooting.
↳ is lit.	All trays are out of paper.	Add paper. For details about adding paper, see “Adding Paper”, About This Machine.
↳ is lit.	Toner is empty.	Replace the toner cartridge. For details about replacing the toner cartridge, see “Adding Toner”, About This Machine.
The message "This tray is out of order." appears.	The tray is out of order.	Call your service representative.

In User Parameters (switch 05, bit 2, 1) on the Facsimile Features menu, specify the following conditions for Substitute Reception:

- When Own Name or Own Fax Number is received

  The machine switches to Substitute Reception only when the sender has programmed their Own Name or Own Fax Number. If the power is switched off for more than an hour, all the documents stored in

memory are deleted. In this case, the Journal can be used to identify the senders of the deleted documents, so you can ask them to resend.

If a sender has not programmed their Own Name or Own Fax Number, the machine may fail to receive an important fax document. It is recommended that you ask important senders to program an Own Name or Own Fax Number in advance.

- Free

  The machine switches to Substitute Reception regardless of whether or not the sender has programmed their Own Name or Own Fax Number.

- Closed Network Code match

  The machine switches to Substitute Reception only when the programmed Closed Network Code of the other end matches the Closed Network Code of this machine.

- Disable

  The machine does not receive any documents.

Note

- For details about Parameter Setting, see “Parameter Settings”.

Reference

- p.375 "Parameter Settings"

Reception Modes

There are two ways you can set up the machine to handle incoming calls.

- Manual Reception (the optional handset or an external telephone required)
- Auto Reception

The reception mode can be switched under Switch Reception Mode in the Facsimile Features menu. See "Reception Settings".

You can change the reception mode only if a standard G3 line is used.

You cannot change the reception mode when a line other than the standard G3 line (G3-2 or G3-3) is used.

Note

- The optional handset or an external telephone is required to use this machine as a telephone.

Reference

- p.342 "Reception Settings"

Manual Reception

When a telephone call comes in, the machine rings. If the call is a fax document, you must switch manually to facsimile mode.

1. **When the machine rings, pick up the handset of the optional handset or the handset of the external telephone.**
2. **If you hear beeps, press the [Start] key, or hold the [Facsimile] key down for a few seconds. (The [Start] key is only available in facsimile mode when an original is not placed.)**
3. **Replace the optional handset or the handset of the external telephone. The machine will start receiving.**

Note

- When the operation switch is off, even if the main power switch is on, you cannot operate this machine using only the optional handset or the handset of the external telephone. You must first press the operation switch to turn on the machine.

Auto Reception

When a telephone call comes in, the machine automatically receives it as a fax document.

Use this setting on a dedicated fax line.

Receiving E-mail

This section explains this machine's e-mail reception functions.

If a TIFF-F file is attached to an e-mail, the machine receives the e-mail by Internet Fax. If a JPEG or PDF file is attached to an e-mail, the machine receives the e-mail by Mail to Print.

Only one attached file can be printed from a received e-mail.

When multiple files are attached to an e-mail, the reception method and the file that is printed vary according to the file type and the order of the attached files.

File type attached	File to be printed	Reception method
Text	Text	Internet Fax
Text+TIFF	Text+TIFF	Internet Fax
Text+JPEG	JPEG	Mail to Print
Text+TIFF+JPEG	JPEG	Mail to Print
Text+JPEG+TIFF	JPEG	Mail to Print
TIFF+TIFF+....	TIFF+TIFF+....	Internet Fax
JPEG(1)+JPEG(2)+....	JPEG(1)	Mail to Print
TIFF+JPEG	JPEG	Mail to Print
JPEG+TIFF	JPEG	Mail to Print
Text+PDF	PDF	Mail to Print
TIFF+PDF	PDF	Mail to Print
JPEG+PDF	JPEG	Mail to Print
PDF+JPEG	PDF	Mail to Print
PDF(1)+PDF(2)+....	PDF(1)	Mail to Print

If JPEG or PDF files are attached along with other types of file, the machine receives the e-mail by Mail to Print. Only the first JPEG or PDF file is printed and the other files are deleted.

Note

- If Reception Protocol is set to POP3 or IMAP4, you can use the E-mail Storage in Server (in System Settings) to configure the machine to either retain or delete the received e-mail from the server. See "File Transfer", Network and System Settings Reference.

- To specify whether or not the machine prints the header (title) and text (body) of each e-mail it receives, use Parameter Setting (switch 21 bit 5) in Facsimile Features. See “Parameter Settings”.

Reference

- p.375 "Parameter Settings"

Receiving Internet Fax Documents

You can receive e-mail documents by Internet Fax.

There are two methods of receiving e-mail: Auto E-mail Reception and Manual E-mail Reception.

You can print, store, and transfer received files.

The following functions cannot be used with Internet Fax:

Immediate Reception, SEP Code Reception, Closed Network Code, Resolution setting, Memory Lock Reception, Authorized Reception

Important

- **If [Require Secure Password Authentication (SPA) for all client connections] is selected in Windows Server 2003/2003 R2/2008/2008 R2, reception is not possible.**

Note

- With User Parameter (switch 21, bit 1) in the Facsimile Features menu, you can have the machine send the return receipt in response to the reception notice request attached to the sent e-mail. See “Parameter Settings”.

Reference

- p.375 "Parameter Settings"

Auto e-mail reception

When this function is turned on, the machine periodically checks the e-mail server for incoming e-mail and downloads it as necessary.

Note

- If memory runs out, e-mail will not be received at the specified intervals. Reception will resume when sufficient memory becomes available.
- E-mail auto-reception should be set in “System Settings”. When you select auto-reception, set the reception interval in minutes under E-mail Reception Interval, in System Settings. See “File Transfer”, Network and System Settings Reference.
- E-mail can also be received manually. For details about the manual reception, see “Manual e-mail reception”.

Reference

- p.203 "Manual e-mail reception"

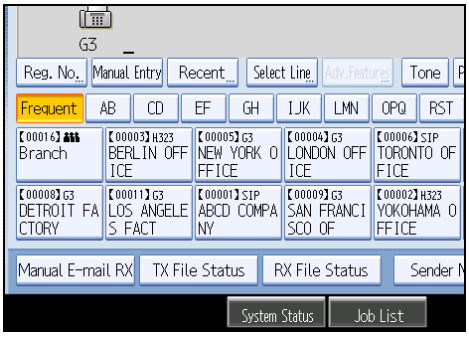
Manual e-mail reception

Use this function to receive an e-mail by accessing the e-mail server manually.

Important

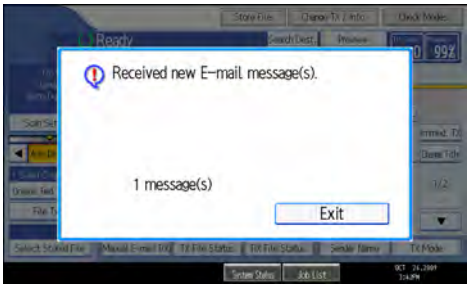
- **Program the Manual E-mail RX function to a Quick Operation Key beforehand. For details about Quick Operation Key, see "General Settings".**

1. **Press [Manual E-mail RX].**



The machine accesses the server to check for e-mail and receives any new e-mail.

2. **Check the message, and then press [Exit].**



The standby display appears.

Reference

- p.335 "General Settings"

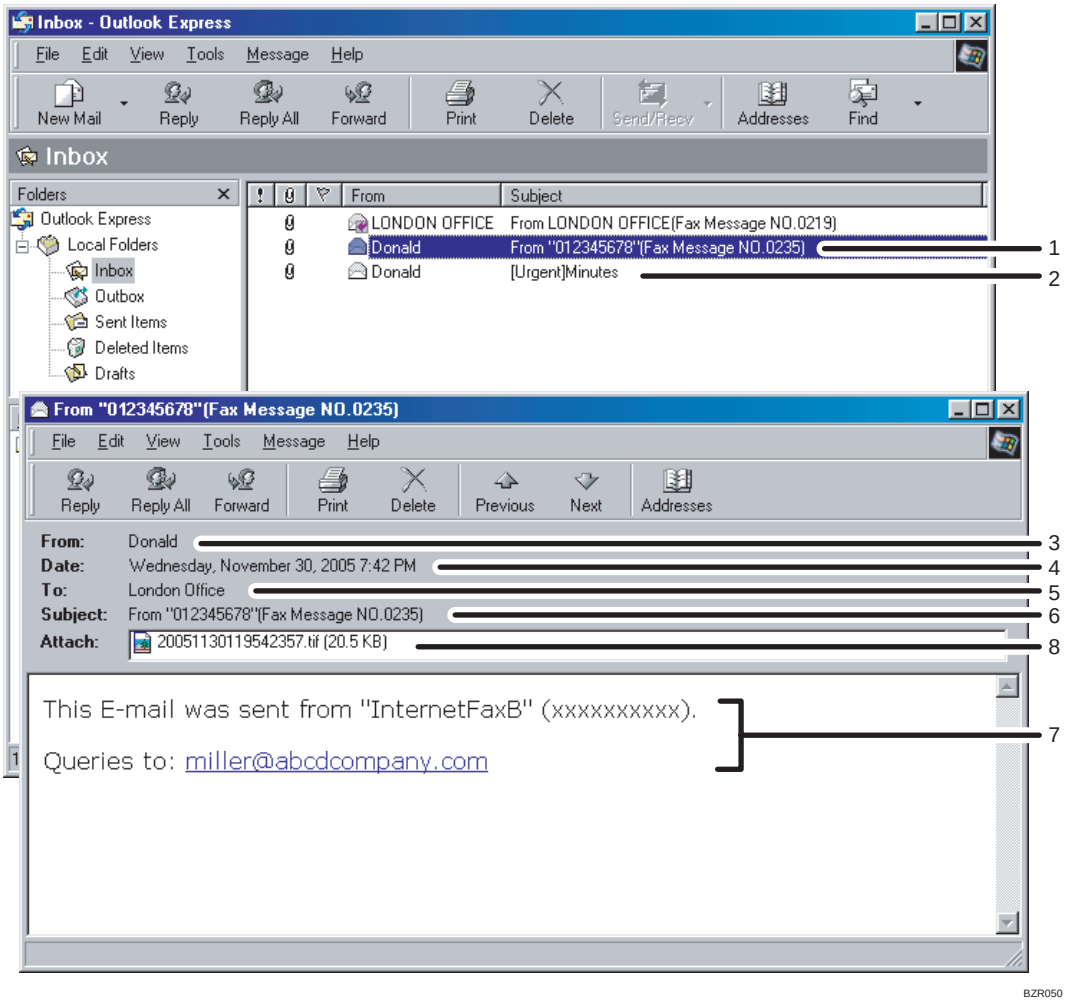
Received images

Here is an example of an Internet Fax document sent from this machine and received on a computer using the Outlook Express e-mail application.

The received image varies according to the e-mail application.

Important

- When Internet Fax e-mail is sent to computer, the following information is always inserted in the e-mail text: "This E-mail was sent from "Host Name" (product name) Queries to: "Administrator's e-mail address"" To check the machine's host name and administrator's e-mail address, use Host Name or Administrator's E-mail Address under System Settings. For details about Host Name and Administrator's E-mail Address, see "System Settings", Network and System Settings Reference.



BZR050

1. **E-mail transmitted without specifying a subject in "TX Mode".**
2. **E-mail transmitted with a subject specified in "TX Mode".**
3. **From**

   The name (e-mail address) of the sender

4. **Date**

   The date and time of e-mail transmission

5. **To**

   The e-mail address of the recipient

6. **Subject**

   Shows the subject specified in "TX Mode" at the time of transmission. If no subject is specified, one is automatically assigned in the format shown in 1 above.

7. **The message is inserted in all e-mail. "xxxx" is the machine name.**

8. **Attachment File**

   Any document included by the sender is displayed as an attached document.

Note

- The display format of the sender name differs according to that of the Stamp Sender Name setting and other functions.
- The display format of the subject varies according to Stamp Sender Name and other settings. For the format of the subject, see "Specifying Auto-Generated Subjects for E-mail".

Reference

- p.181 "Specifying Auto-Generated Subjects for E-mail"

Mail to Print

JPEG or PDF files that are attached to e-mails are printed using the Mail to Print function.

The reception method for e-mail is the same as the method for Internet Fax. For details about reception methods, see "Auto e-mail reception" and "Manual e-mail reception".

Mail to Print is not available with the following functions:

Page Reduction, Checkered Mark, TSI Print (Transmitting Subscriber Identification Print), Reception Time, Auto Fax Reception Power-Up, Memory Lock, Multi-Copy Reception, Program Special Sender, Resolution, Page Separation and Length Reduction, Center Mark, Image Rotation, 2 Sided Print, Specify Tray for Lines, Tray Shift, Paper Tray, Communication Page Count, Forwarding, Auto Paper Select function, Printing on paper from the bypass tray, Just size printing

Important

- **To print a JPEG or PDF file, the optional PostScript 3 unit must be installed.**
- **Version 1.3, 1.4, 1.5, and 1.6 PDF files are printable. However, this machine might not be able to print PDF files if they were sent from certain machines or created in certain environments.**
- **Only JPEG files that are in JFIF format are compatible. This machine cannot print Exif format JPEG images captured by digital cameras, but it can print JFIF format JPEG images created on multi-function peripherals. However, this machine might not be able to print JPEG images if they were sent from certain machines or created in certain environments.**

Note

- The Facsimile Features menu provides a user parameter setting (switch 21, bit 2) that you can use to enable or disable this function. Text and TIFF files will still be printed even if this function is disabled.
- If a JPEG or PDF file is received when the Mail to Print function is disabled, the file will be detected as an error and Error Mail Notification is sent back to the sender. You can turn this function on or off with the User Parameter (switch 21, bit 7) in the Parameter Settings.
- For details about Parameter Setting, see “Parameter Settings”.
- Only one attached file can be printed from a received e-mail. If multiple JPEG or PDF files are attached, the first JPEG or PDF file is printed and the other files are deleted.
- If an e-mail contains multiple or unsupported files, its reception result is detected as an error, but an error notification is not sent to the sender.
- When the machine receives a colored image, it is printed in full color.
- Printed JPEG images and PDF files are counted as printer jobs.
- If an encrypted PDF is received, the PDF file is printed only if its password matches this machine's password.
- You can check the results of Mail to Print reception using the Journal. In the Journal, “P.1” is always printed in the number of pages column and “S”, which indicates the Standard resolution, is always printed in the communication mode column regardless of the actual page/resolution. If the machine receives files that are unprintable due to their format, “error” will be printed in the result column.
- When receiving by Mail to Print, this machine does not respond to reception notification requests attached to the received e-mail.

Reference

- p.202 "Auto e-mail reception"
- p.203 "Manual e-mail reception"
- p.375 "Parameter Settings"

Reception Functions

This section explains useful functions for receiving fax documents.

Routing Received Documents

This section describes how to route received documents using SUB Codes or optional extra G3 line.

Note

- If the receiver is an Internet Fax/e-mail destination, e-mail can be encrypted and forwarded with a digital signature. Use both "Box Setting" on the Facsimile Features menu and Web Image Monitor to specify whether or not to apply encryption and a digital signature. For details about Box Setting, see "General Settings" and "Box Settings".

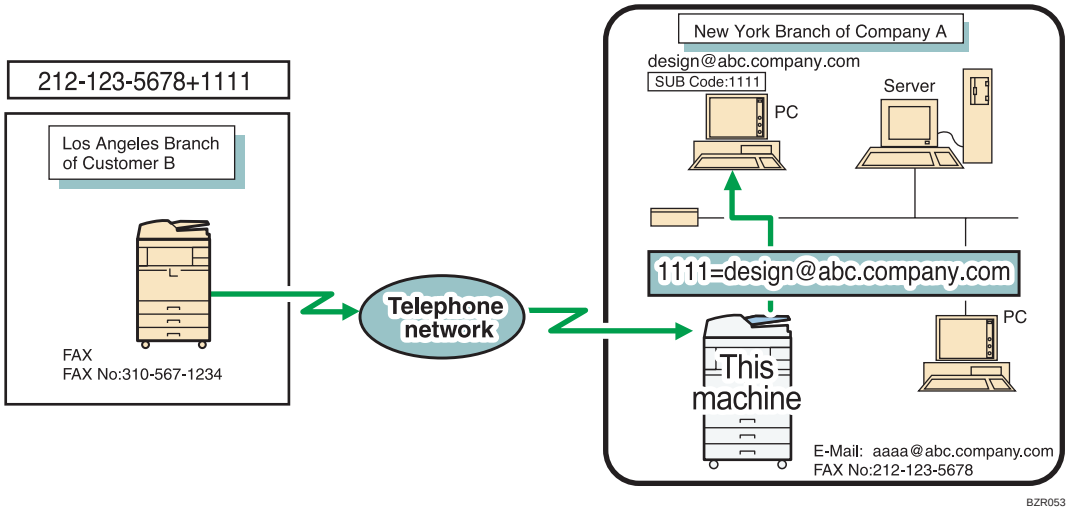
Reference

- p.335 "General Settings"
- p.399 "Box Settings"

Routing received documents with SUB Code

This machine can route received documents using SUB Codes.

When a document is received, its SUB Code is compared to SUB Codes programmed in Personal Boxes, and if a match is found, the document is routed to the destination whose SUB Code is specified.



Important

- **You must set the Personal Box and register a delivery destination beforehand. Personal Boxes can be programmed in "Box Setting" in the Facsimile Features menu. For details about the programming method, see "Box Settings".**
- **This function is not available when you set received documents to be delivered to the network delivery server. Use the Fax RX File Transmission in System Settings to configure delivery of received documents. For details about Fax RX File Transmission, see "File Transfer", Network and System Settings Reference.**

Note

- If the destination specified is an e-mail address, the received document is routed to that destination as e-mail.
- You cannot specify a group as the receiver.
- You can route documents received from any fax machine, regardless of manufacturer.

Reference

- p.399 "Box Settings"

Routing received documents to specified lines when optional extra G3 line is equipped

This machine can route received documents to specified lines when optional extra G3 line is equipped.

When optional G3 line is equipped, you can route received documents separately for each line. You need to register a SUB code for each line prior to using this function.

Register "1" for G3-1, "2" for G3-2 and "3" for G3-3.

You need to register Fax destinations, IP-Fax destinations, Internet Fax destinations, e-mail destinations, and folder destinations as transmission destinations of the Personal Box or end receiver of the Transfer Box. This function can only be used when all settings have been completed.

Important

- **The optional extra G3 interface unit is required to use this function.**
- **You must set the Personal or Transfer Box and register a transmission destination or end receiver beforehand.**
- **This function is not available when you set received documents to be delivered to the network delivery server.**

Note

- This function is not available if the Information Box is set.
- When the dialed number matches the SUB Code programmed in the Personal Box, if the destinations are not programmed, this function does not work. For details about Personal Box, see "General Settings" and "Box Settings".

- Documents received through Internet Fax and IP-Fax cannot be routed.
- You can route received documents through line G3-1 with the User Parameter (switch 32, bit 4) in the Parameter Setting. For details, see “Parameter Settings”.
- You can route received documents through line G3-2 with the User Parameter (switch 32, bit 5) in the Parameter Setting. For details, see “Parameter Settings”.
- You can route received documents through line G3-3 with the User Parameter (switch 32, bit 6) in the Parameter Setting. For details, see “Parameter Settings”.

Reference

- p.335 "General Settings"
- p.375 "Parameter Settings"
- p.399 "Box Settings"

Transferring Received Documents

The machine can transfer received documents by using SUB Codes.

Originals sent with a SUB Code that matches the SUB Code programmed as a Transfer Box are received then relayed to the programmed receiver.

Important

- **Transfer Boxes and Receiving Stations must be set up in order to transfer received documents. Transfer Boxes can be programmed in “Box Setting” in the Facsimile Features menu. For details about the programming method, see “Box Settings”.**

Note

- If the destination specified is an e-mail address, the received document is transferred to that destination as e-mail.
- If the receiver is an Internet Fax/e-mail destination, e-mail can be encrypted and forwarded with a digital signature. Use both “Box Setting” on the Facsimile Features menu and Web Image Monitor to specify whether or not to apply encryption and a digital signature. For details about Box Setting, see “General Settings” or “Box Settings”.
- Transfer results are not sent back to the requesting party.
- You can transfer data received from any fax machine, regardless of manufacturer.
- The Facsimile Features menu provides a user parameter setting (switch 32, bit 0) that allows you to select a priority order for alternative destinations for sent documents. When this parameter is set, if the specified receiver is a group destination that includes an address not registered for the specified transmission type, the document is routed to an alternative destination. See “Parameter Settings”.

Reference

- p.335 "General Settings"

- p.375 "Parameter Settings"
- p.399 "Box Settings"

SUB Code Transfer Report

You can check the results of transmission to Receiving Stations. The machine prints this report when it has finished transmitting to Receiving Stations.

Note

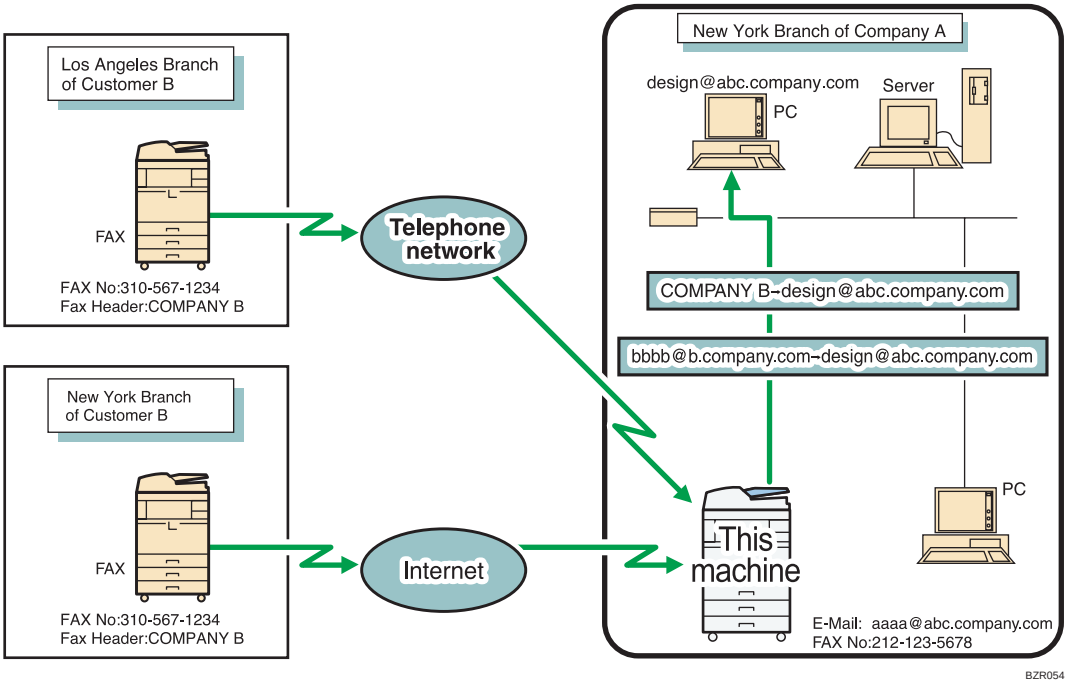
- You can select whether the SUB Code Transfer Report be automatically printed using the User Parameter (switch 04, bit 1) in the Facsimile Features menu.
- You can set whether a portion of the original image is printed on the report with the User Parameter (switch 04, bit 7) in the Facsimile Features menu.
- For details about Parameter Setting, see “Parameter Settings”.
- “Unprogrammed” indicates the document could not be sent because the end receiver is not programmed.
- “--” indicates that the e-mail or Internet Fax document was sent to the mail server programmed in this machine.
- For the maximum number of destinations you can register in a group, see “Maximum Values”.

Reference

- p.375 "Parameter Settings"
- p.427 "Maximum Values"

Forwarding Received Documents

This machine can forward received documents to other destinations programmed in this machine.



Important

- **To use this function, specify the Forwarding destination in advance. Forwarding can be specified under Forwarding on the Facsimile Features menu. See "Forwarding".**

Note

- A fax destination, IP-Fax destination, Internet Fax destination, e-mail destination, or folder destination can be set as a forwarding destination.
- If the receiver is an Internet Fax/e-mail destination, e-mail can be encrypted and forwarded with a digital signature. Use both "Forwarding" on the Facsimile Features menu and Web Image Monitor to specify whether or not to apply encryption and a digital signature. See "Forwarding".
- If you would like the machine to forward received documents to a particular destination according to the sender, specify the Forwarding destination for each sender under Facsimile Features, Program Special Sender. Documents from other senders are forwarded to the default Forwarding destination specified for this function. For details about Program Special Sender, see "Special Senders to Treat Differently".
- You can set whether or not the Folder Transfer Result Report is transmitted to the specified e-mail address if folders are programmed as the forwarding destinations to which documents are sent from all senders or Special Senders.
- For the maximum number of destinations you can register in a group, see "Maximum Values".
- With "Reception File Setting" of "Facsimile Features", you can specify whether or not to print or store forwarded documents with User Parameter (switch 11, bit 6) in the Facsimile Features menu.

- The Facsimile Features menu provides a user parameter setting (switch 32, bit 0) that allows you to select a priority order for alternative destinations for sent documents. When this parameter is set, if the specified receiver is a group destination that includes an address not registered for the specified transmission type, the document is routed to an alternative destination.
- User Parameters (switch 37, bit 4) on the Facsimile Features menu allows you to include the sender's name in the names of files sent to folders.
- Garbling of the file name and data loss can result if the receiver's operating system cannot accept certain characters in file names. To prevent this, use User Parameters (switch 37, bit 5) to limit the file names to plain characters only.
- If you limit file names to plain characters only but errors still occur, disable display of the sender's name in the file name of documents forwarded to folders.
- For details about Parameter Setting, see “Parameter Settings”.

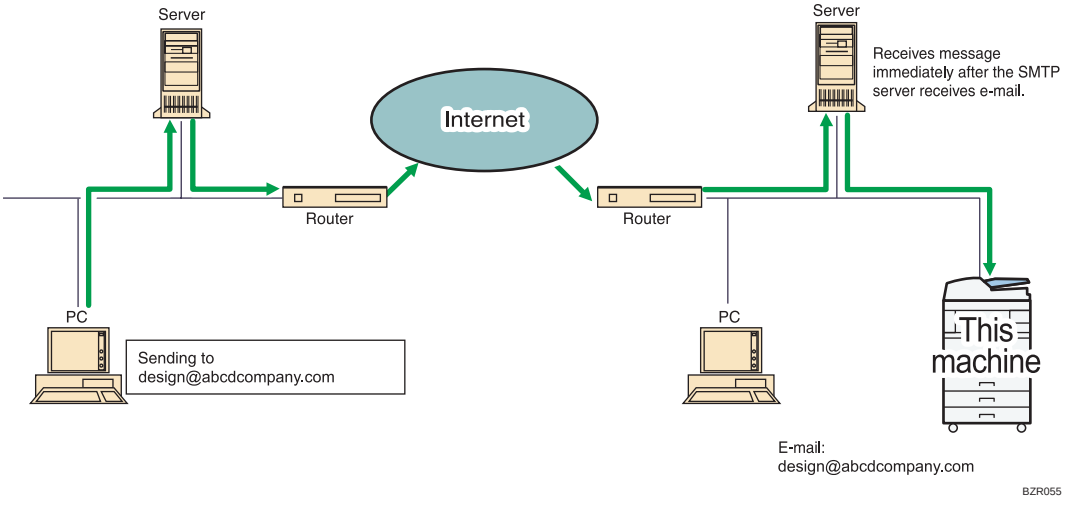
Reference

- p.355 "Forwarding"
- p.375 "Parameter Settings"
- p.386 "Special Senders to Treat Differently"
- p.427 "Maximum Values"

SMTP Reception of E-mail

You can receive a document sent by e-mail, using SMTP reception.

With SMTP reception, e-mail is received as soon as it is sent to the e-mail address set by the machine.



Important

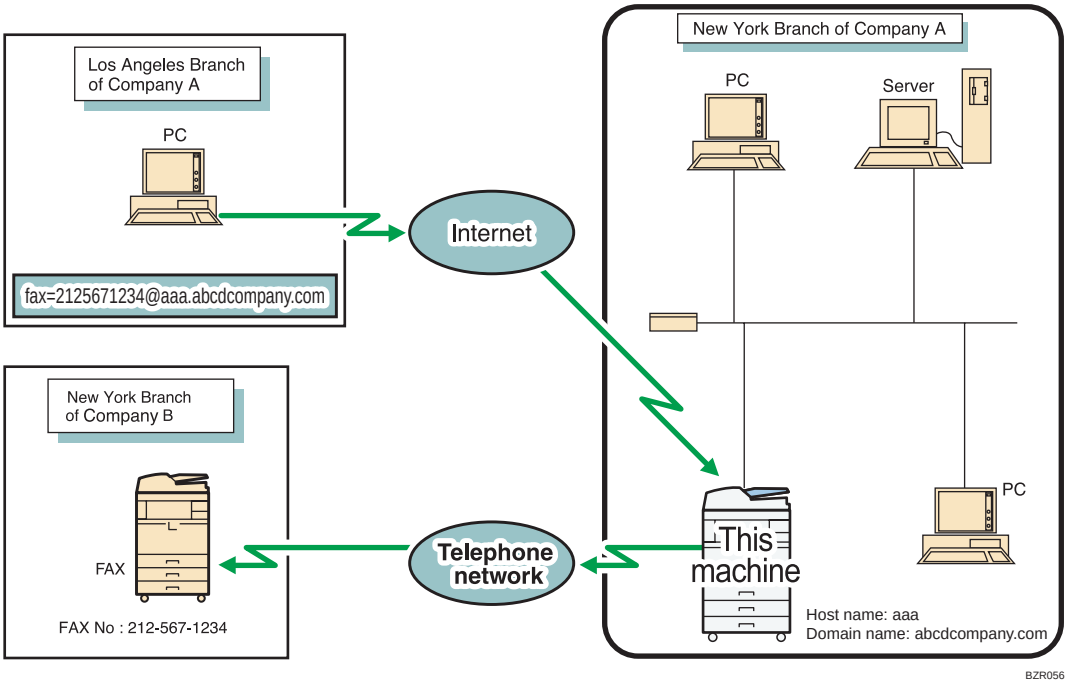
- **Set this machine beforehand using the MX record of the DNS server to enable SMTP reception.**
- **Use the Reception Protocol setting in System Settings to set the reception protocol. See "File Transfer", Network and System Settings Reference.**

Note

- You can route received e-mail to other fax machines as well.
- Even if SMTP reception is enabled on the DNS server, e-mail sent from the SMTP server will not be received and the machine reports an error if SMTP reception is not set under "System Settings". Also, the SMTP server sends error notification e-mail to the originator.
- If an error occurs while receiving e-mail, reception is aborted, the e-mail is deleted, and Error Report is printed. Also, the SMTP server will send error notification e-mail to the originator.
- When the SMTP server attempts to route received documents to this machine while the machine is transmitting e-mail, the machine will respond to the SMTP server with a "busy" signal. Then, the SMTP server usually tries resending the documents until the set timeout.

Routing e-mail received via SMTP

E-mail received via SMTP can be routed to other fax machines.



Important

- **Before routing e-mail received via SMTP, you first must set "SMTP RX File Delivery Settings" to "On" in the Facsimile Features menu. See "SMTP Reception File Delivery Settings".**
- **Depending on security settings, this function may not be available.**

The originator can request transfer of e-mail sent to another fax machine by specifying the e-mail address as follows:

Fax Number

fax=destination fax number@host name of this machine.domain name

Example: to transfer to fax number 212-567-1234:

fax=2125671234@aaa.abcdcompany.com

Single destination programmed in the destination list

fax=#registration number of 5 digits or less@host name of this machine.domain name

Example: to transfer to the destination number 00001:

fax=#00001@aaa.abcdcompany.com

Group destination programmed in the destination list

fax=#✱✱registration number of 5 digits or less@host name of this machine.domain name

Example: to transfer to the destination programmed under group number 00004:

fax=#✱✱00004@aaa.abcdcompany.com

Note

- E-mail received via SMTP can also be routed to single or group destinations programmed in the destination list.
- If the receiver is an Internet Fax/e-mail destination, e-mail can be encrypted and routed with a digital signature. Use both "SMTP RX File Delivery Settings" on the Facsimile Features menu and Web Image Monitor to specify whether or not to apply encryption and a digital signature. For details about SMTP RX File Delivery Settings, see "SMTP Reception File Delivery Settings".
- If an e-mail transfer request is received when the "SMTP RX File Delivery Settings" is "Off" in the Facsimile Features menu, this machine responds with an error message to the SMTP server.
- You can make settings that limit transfer to specified originators.
- Using this function, you can also send documents from your e-mail application to e-mail addresses and G3 fax machines' destinations through this machine simultaneously.
- For the maximum number of destinations you can register in a group, see "Maximum Values".
- The Facsimile Features menu provides a user parameter setting (switch 32, bit 0) that allows you to select a priority order for alternative destinations for sent documents. When this parameter is set, if the specified receiver is a group destination that includes an address not registered for the specified transmission type, the document is routed to an alternative destination. See "Parameter Settings".

Reference

- p.365 "SMTP Reception File Delivery Settings"
- p.375 "Parameter Settings"
- p.427 "Maximum Values"

JBIG Reception

If you use JBIG (Joint Bi-level Image Experts Group) compression, you can send photographic originals faster than with other methods of compression. It allows you to receive documents sent in the JBIG format through JBIG Transmission.

Important

- **This function is not available with Internet Fax and Mail to Print functions.**

Auto Fax Reception Power-Up

This machine can be set to shut down automatically if no one has used it for a while. In these situations, even though the operation switch is off, the machine can still receive incoming documents as long as the main power switch is on.

Important

- **Reception is not possible if both the operation switch and main power switch are turned off.**

Note

- You can set whether documents are printed as soon as they are received (Immediate Reception) with the User Parameter (switch 14, bit 0) in the Facsimile Features menu. See “Parameter Settings”.
- You can also have fax documents received by Memory Reception (Substitute Reception) printed after the machine is turned on.

Reference

- p.375 "Parameter Settings"

Printing Options

This section explains useful functions for printing received documents.

Print Completion Beep

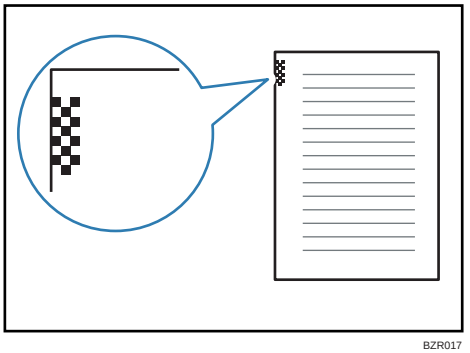
When this function is turned on, the machine beeps to let you know when a received document is printed.

Note

- You can alter the volume of the beep or turn it off completely using "Adjust Sound Volume" in the General Settings (set the volume to the minimum level). See "Adjusting the Volume", Troubleshooting.

Checkered Mark

When this function is turned on, a Checkered Mark is printed on the first page of fax documents to help you separate them.



BZR017

Note

- You can turn this function on or off using Checkered Mark in the Facsimile Features menu. See "Reception Settings".

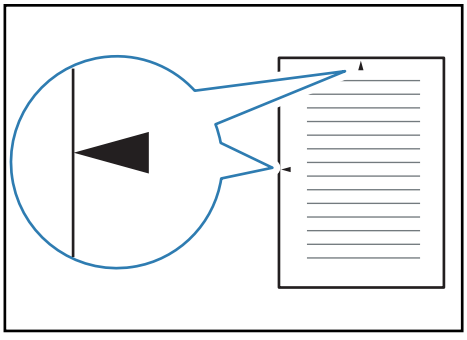
Reference

- p.342 "Reception Settings"

Center Mark

When this function is enabled, marks are printed halfway down the left side and at the top center of each page received.

This makes it easy for you to position a hole puncher correctly when you file received documents.



BZR018

Note

- The Center Mark may deviate a little from the exact center of the edge. See “Reception Settings”.
- You can enable or disable this function using Center Mark in the Reception Settings.

Reference

- p.342 "Reception Settings"

Reception Time

You can have the date, time, and file number printed at the bottom of the document when it is received.

Note

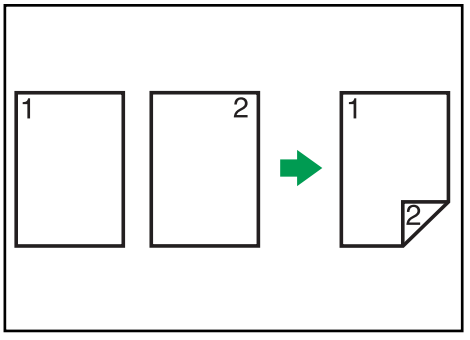
- You can turn this function on or off using Print Reception Time in the Facsimile Features menu. See “Reception Settings”.
- When a received document is split and printed on two or more sheets, the reception time is printed on the last sheet.
- The time when the document was printed can also be recorded on the document. If you need this function, contact your service representative.

Reference

- p.342 "Reception Settings"

Two-Sided Printing

You can have a received document printed on both sides of a sheet.

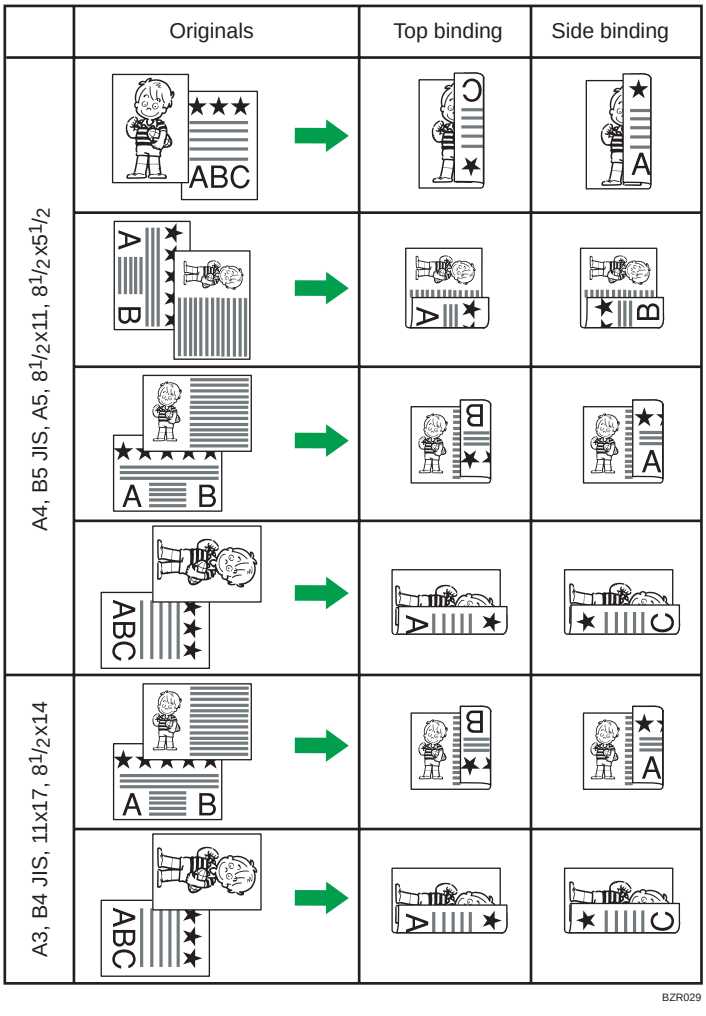


BZR004

3

Important

- To use this function, all pages of the received document must be of the same size-inform the sending party of this beforehand if necessary. You must also have paper set in the machine of the same size as that sent by the sending party. In Two-Sided Printing, this machine will correctly receive in A3⬓, B4 JIS (Japanese Industrial Standard)⬓, A4⬓⬓, B5 JIS⬓⬓, A5⬓⬓ (11 × 17⬓, $8^1/_2$ × 14⬓, $8^1/_2$ × 11⬓⬓, $5^1/_2$ × $8^1/_2$⬓⬓). The following table shows the results that can be achieved when receiving with this machine.



- **This function works only when all pages are of the same width and received into memory.**
- **This function cannot be used with Combine Two Originals.**

Note

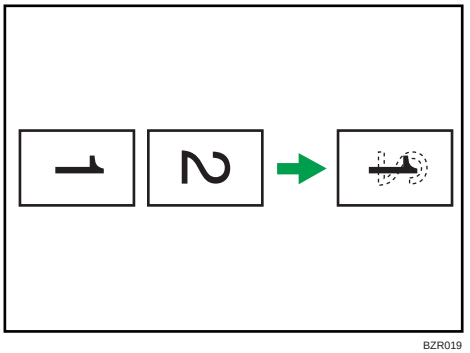
- You can turn this function on or off using 2 Sided Print in the Facsimile Features menu. For details, see "Reception Settings".
- Printouts may vary depending on how the sender sets the originals.
- You can select to have documents only from selected senders printed in this way.
- Stored documents of the same size are printed on the same paper. Some stored documents may be unavailable for this printing option.

Reference

- p.342 "Reception Settings"

180-degree rotation printing

When printing on both sides of the paper, this machine rotates images as shown in the diagram.

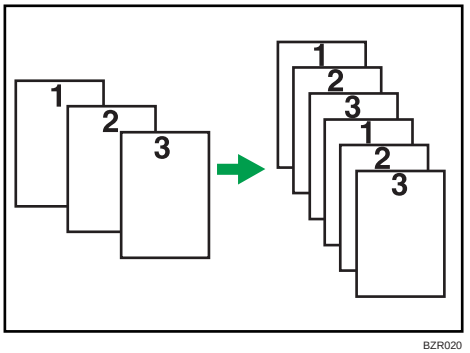


BZR019

Multi-Copy Reception

If you switch this function on, multiple copies of each incoming fax document is printed.

You can also select to have multiple copies made of documents from particular senders.



BZR020

Note

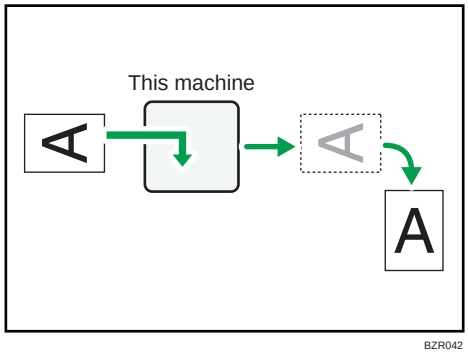
- The maximum number of copies that can be made for each document is 10.
- When using the Multi-copy function with specified senders, the maximum number of copies is 10.
- You can turn this function on or off using Reception File Print Quantity in the Facsimile Features menu. For details, see “Reception Settings”.
- The machine will use Memory Reception for Multi-copy Reception.

Reference

- p.342 "Reception Settings"

Image Rotation

If you have set paper in the ▯ orientation in the paper tray, incoming fax documents are automatically rotated to fit onto the paper.



BZR042

Note

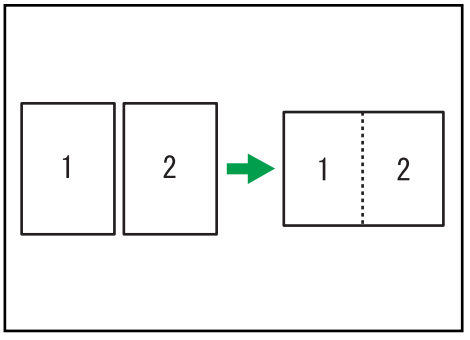
- If you specified a tray for "Paper Tray" in the Facsimile Features menu, the paper loaded in the specified tray is selected.

Combine Two Originals

When two documents of the same size and orientation are received consecutively, they are printed on a single sheet when you turn this function on. This can help you economize on paper.

Important

- This function does not work with documents larger than A5▯, B5 JIS▯, A4▯, $8^1/_2 \times 11$▯ or $8^1/_2 \times 5^1/_2$▯. When A5▯, B5 JIS▯, A4▯, $8^1/_2 \times 11$▯ or $8^1/_2 \times 5^1/_2$▯ size paper is loaded in the machine, each page of the received document is printed on a single sheet. When A5▭, B5 JIS▭, A4▭, $8^1/_2 \times 11$▭ or $8^1/_2 \times 5^1/_2$▭ size paper is loaded in the machine, each page of the received document is rotated and printed on a single sheet.
- If paper matching the size and orientation of a received document is available, Combine Two Originals is not possible.
- If Combine Two Originals and 2 Sided Print are selected at the same time, 2 Sided Print takes priority and Combine Two Originals is canceled.



BZR001

- Two A5 documents are printed side by side on a sheet of A4.
- Two B5 JIS documents are printed side by side on a sheet of B4 JIS.
- Two A4 documents are printed side by side on a sheet of A3.
- Two $8^1/_2 \times 5^1/_2$ documents are printed side by side on a sheet of $8^1/_2 \times 11$.
- Two $8^1/_2 \times 11$ documents are printed side by side on a sheet of 11×17.

Note

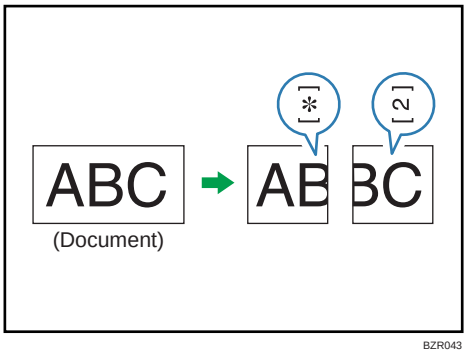
- You can turn this function on or off with the User Parameter (switch 10, bit 1) in the Facsimile Features menu. The default setting is "Off". See "Parameter Settings".
- This function uses Memory Reception.

Reference

- p.375 "Parameter Settings"

Page Separation and Length Reduction

If the size of a received document is longer than the paper loaded in the machine, each page of the document can be split and printed on several sheets, or reduced and printed on a single sheet.



BZR043

For example, this function splits the document if the document length is 20 mm (0.79 inch) or longer than the paper used. The document is reduced if it is less than 20 mm (0.79 inch). When a document is split, an

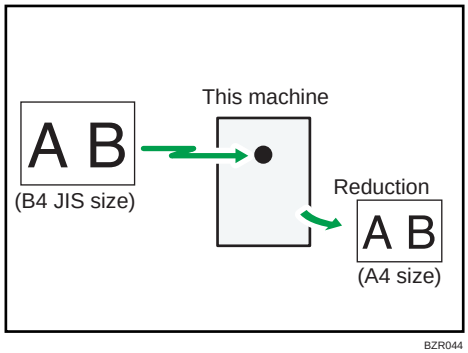
asterisk (✳) is inserted at the split position and about 10 mm (0.39 inch) of the split area is duplicated on the top of the second sheet.

Note

- Your service representative can customize this function with the following settings:
  - Reduction
  - Print split mark
  - Overprinting
  - Overprinting length
  - Guideline for split
- You can adjust the overprinting and reduction lengths within the following ranges:
  - Overprinting length: 4 mm (0.16 inch), 10 mm (0.39 inch), 15 mm (0.59 inch)
  - Guideline for split: 5-155 mm (5 mm steps)/0.2-6.1 inches (0.2 inch steps)

Page Reduction

If you receive a document that is longer than the paper in the tray, the machine usually prints it on two pages. If you turn this function on, the machine reduces the width and length of the received image so that it will fit on one page.



If A4 paper but not B4 paper is loaded and a B4 document is received, the machine automatically reduces the document size so that it can be printed onto a single A4 sheet.

Similarly, if B4 paper but not A3 paper is loaded and an A3 document is received, the machine automatically reduces the document size so that it can be printed onto a single B4 sheet.

Note

- You can turn this function on or off with the User Parameter (switch 10, bit 3) in the Facsimile Features menu. See “Parameter Settings”.
- When this function is used, the printing quality may not be as good as usual.

- To split a document into two sheets without using this function, see “Page Separation and Length Reduction”.

Reference

- p.222 "Page Separation and Length Reduction"
- p.375 "Parameter Settings"

TSI Print (Transmitting Subscriber Identification Print)

You can have the sender's Own Name or Own Fax Number printed on documents that this machine receives.

Usually the sender's Fax Header is printed on received documents. When you receive an Internet Fax document, the e-mail address of the sender is printed. If the sender has not programmed their Fax Header, you will not be able to identify them. However, if you turn this function on, the sender's Own Name or Own Fax Number is printed instead so you can find out where the document came from.

Note

- You can turn this function on or off in the User Parameter (switch 02, bit 3) in the Facsimile Features menu. See “Parameter Settings”.

Reference

- p.375 "Parameter Settings"

If There Is No Paper of the Correct Size

If there is no paper in the machine that matches the size of a received document, the machine will choose a paper size based on the paper available.

If you have not set the same size paper in the paper tray, incoming fax documents are printed on the nearest size available.

For example, if your machine does not have $8^1/_2 \times 11$ loaded and you receive an $8^1/_2 \times 11$ size document, the document is printed on 11 × 17. If your machine does not have 11 × 17 loaded and you receive an 11 × 17 size document, the document is printed on two sheets of $8^1/_2 \times 11$.

This function is available only if the following settings are made:

- Page reduction: Disabled
- Reduction in Sub-scan Direction: Enabled
- Page Separation Threshold: 20 mm (0.79 inch)
- Width or Length Priority: Width

Note

- The document is split over two sheets of paper depending on the paper size. See “Page Separation and Length Reduction”.
- Paper placed in the bypass tray is not usually selected for printing a received document. However, you can use this tray if you select the bypass tray as the main paper tray using Reception with Specified Senders.
- Widths that this machine can receive are A4, B4 JIS, LT ($8^1/_2 \times 11$) and A3. Any documents narrower than A4 or LT ($8^1/_2 \times 11$) are received at A4 or LT ($8^1/_2 \times 11$) width. The length of documents depends on the document.
- The paper size used to print a received document may be different from the size of the sent original.
- For details about page reduction, see “Page Reduction”.

Reference

- p.222 "Page Separation and Length Reduction"
- p.223 "Page Reduction"

Setting priority trays

With the same size of paper loaded into multiple trays, you can make the machine use one tray for one function and another tray for another function.

For example, you may load white A4 paper into tray 1 to use when making copies, and yellow A4 paper into tray 2 to use when printing received faxes. You can then easily identify for which purpose paper has been output. You can perform this setting in “Paper Tray Priority: Facsimile” in “System Settings”. See “Tray Paper Settings”, Network and System Settings Reference.

Note

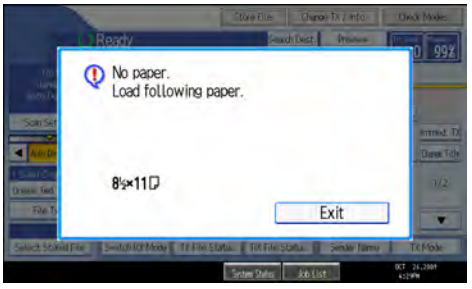
- When a different size of document from the priority tray is received, the tray containing the same size of paper as the received document is used.

Just size printing

If you enable this function, received documents are printed on the sheet that has the highest priority.

This function is enabled with User Parameter (switch 05, bit 5) in the Facsimile Features menu. See “Parameter Settings”.

If the paper tray is not stocked with paper of a suitable size to print a received document, a message appears on the display prompting you to load paper of the required size. When you have loaded new paper, press [Exit] to print the document.



Note

- After pressing [Exit], procedure varies depending on machine status when the message occurred.
  - If any received documents or reports were being printed automatically, the printer automatically continues printing from where it left off.
  - If any documents or reports were being printed manually, the printer does not resume printing. Perform the operation from the beginning again.

Reference

- p.375 "Parameter Settings"

Having incoming documents printed on paper from the bypass tray

You can print documents sent from Specified Senders on paper from the bypass tray.

In “Program Special Sender” in the Facsimile Features menu, set as follows:

- Program a special sender and select the Bypass Tray for the paper tray type.
- Turn on the “Special Reception Function” in “Initial Set Up”.

For details about Program Special Sender, see “Special Senders to Treat Differently”.

Note

- You can load a maximum of 100 sheets of standard paper in the bypass tray.
- You can use a size of paper not loaded in the paper tray(s) in the bypass tray.
- The machine can detect A6, A5, A4, A3 ($5^1/_2 \times 8^1/_2$, $8^1/_2 \times 11$, 11×17) paper sizes. When you load any other size, specify the paper size. However, if the specified paper size and size of paper set in the bypass tray do not match, paper jams may occur, or the image may be shortened.
- Documents printed on paper smaller than A4 ($8^1/_2 \times 11$) may be shortened, or split across sheets.
- Paper longer than 600 mm (23.62 inches) may be creased, not sent, or jam.
- Print area depends on optional expansion memory, resolution, and vertical length of originals.
- If you use this function, Image Rotation and 180-degree rotating printing are not possible.

Reference

- p.386 "Special Senders to Treat Differently"

Where Incoming Documents Are Delivered - Output Tray

You can specify the output tray or output position to facilitate separation of received documents.

Specifying Tray for Lines

Use this function to specify the output tray for each line port.

You can specify the document feeding tray for each port (telephone, Internet Fax, IP-Fax). For example, you can specify documents received through the G3-1 port to be fed to the "Finisher Upper Tray" and documents received through the G3-2 port to be fed to the "Finisher Shift Tray", facilitating separation of files. You can also set the machine to output Internet Fax documents and ordinary faxes onto different trays.

Important

- **The optional Internal Tray, Finisher, Booklet Finisher or External Tray is required to use this function.**
- **The optional extra G3 interface unit is required to use the extra G3 line.**

Note

- To use this function, specify the port and destination using [Specify Tray for Lines] in the Facsimile Features menu. For details about the setting, see "Reception Settings".

Reference

- p.342 "Reception Settings"

Tray Shift

Use this function to shift the output position for each document, so you can separate received documents easily.

When the optional finisher unit is selected for fax output, you can use the Tray Shift function whenever a fax or report is printed.

This is useful for separating faxes stacked in the finisher output tray. For example, if the previous incoming fax was output to the left, the next incoming fax will be output to the right and vice-versa.

Important

- **The optional Internal Shift Tray, Finisher, or Booklet Finisher is required to use this function.**

Note

- You can turn this function on or off with the User Parameter (switch 19, bit 0) in the Facsimile Features menu. See "Parameter Settings".

Reference

- p.375 "Parameter Settings"

4. Changing/ Confirming Communication Information

This section explains the features of [Change TX / Info], which you can use to confirm communication results on the screen or printed reports.

Changing the Settings of Files in Memory

After you have pressed the [Start] key (after scanning originals), you can check and edit the destination or settings of Memory Transmission. You can also cancel a transmission, change the settings of a transmission, print a stored file, print a list of stored files, and resend a file which the machine failed to transmit.

Note

- If the "No transmission files found." message appears on the screen after you press [Check / Stop Transmission File], no files are being stored or sent by Memory Transmission.
- You cannot view or edit files that are in the process of being sent, files sent by LAN-Fax, or files saved for printing as reports.
- There are cases when a destination may not be selected as the destination appears as "*", depending on the security settings.

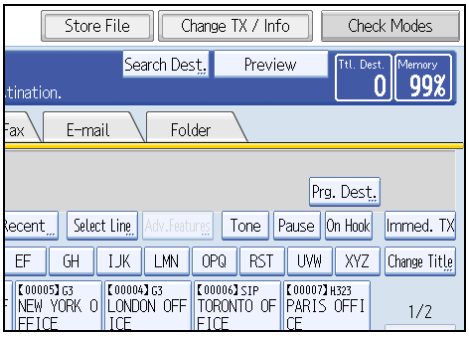
Deleting a Destination from a Broadcast

You can delete selected broadcasting destinations.

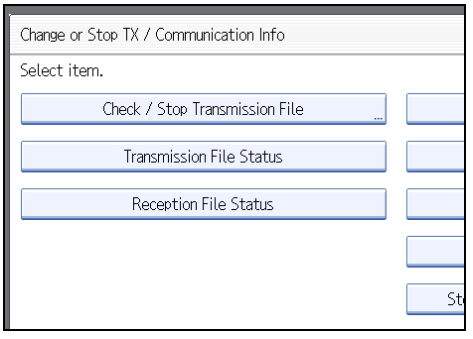
Important

- **If you delete a destination that is the only destination for a transmission, the transmission is canceled.**

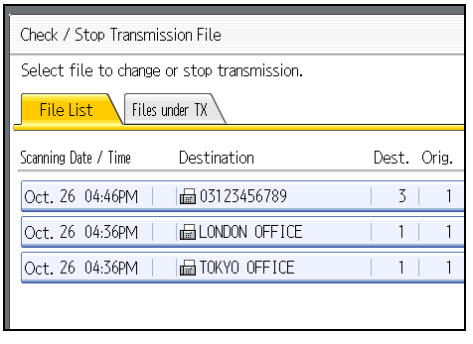
1. **Press [Change TX / Info].**



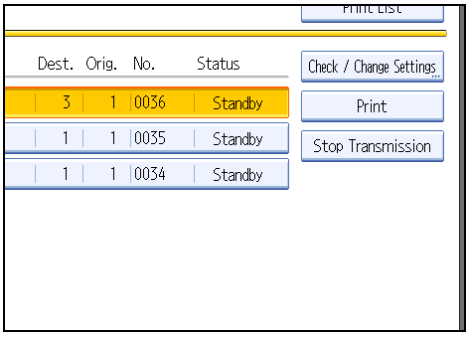
2. **Press [Check / Stop Transmission File].**



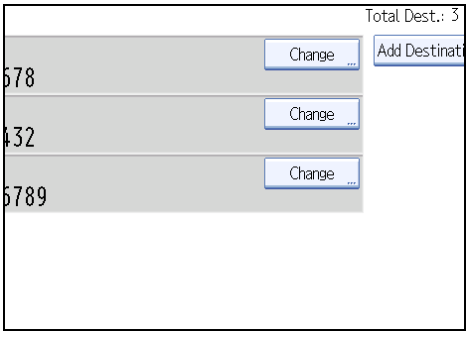
3. **Select the file from which you want to delete a destination.**



4. **Press [Check / Change Settings].**

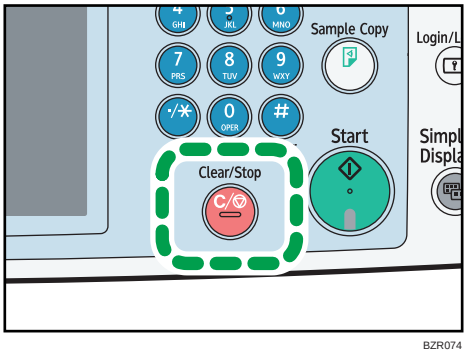


5. **Press [Change] for the destination you want to delete.**



If you delete a folder destination, press [Delete], and then press [Yes] on a confirmation message screen. Proceed to step 7.

6. **Press the [Clear/Stop] key to delete the destination, and then press [OK].**



Pressing the [Clear/Stop] key deletes by single digits the fax number or IP-Fax address. The Internet Fax destination or e-mail destination can be entirely deleted at once by pressing the [Clear/Stop] key.

7. **Press [Exit].**

To delete another destination, repeat from step 3.

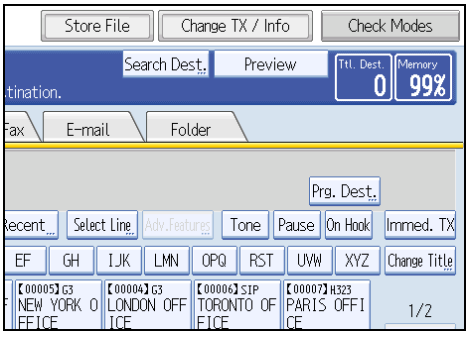
8. **Press [Exit] twice.**

The standby display appears.

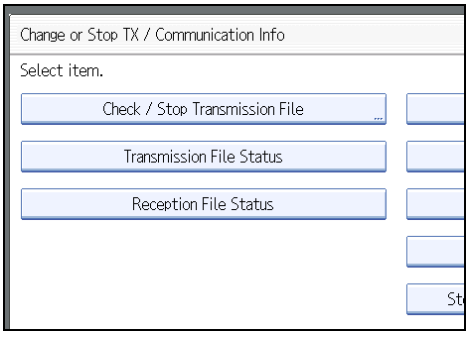
Adding a Destination

You can add a destination for broadcasting.

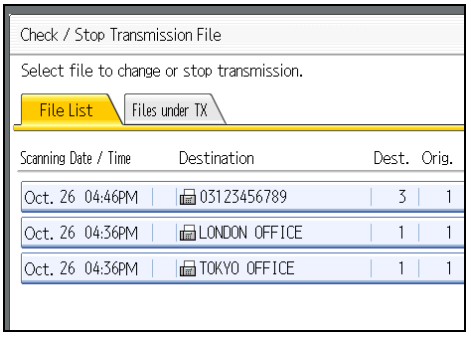
1. **Press [Change TX / Info].**



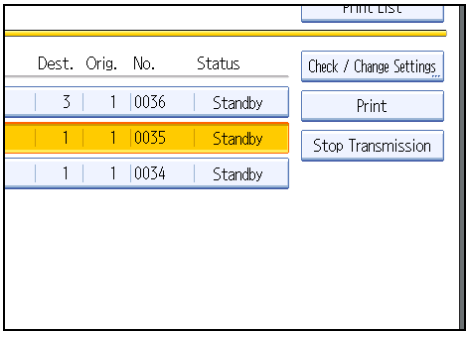
2. **Press [Check / Stop Transmission File].**



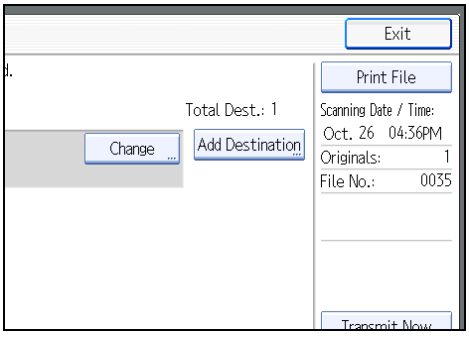
3. **Select the file to which you want to add a destination.**



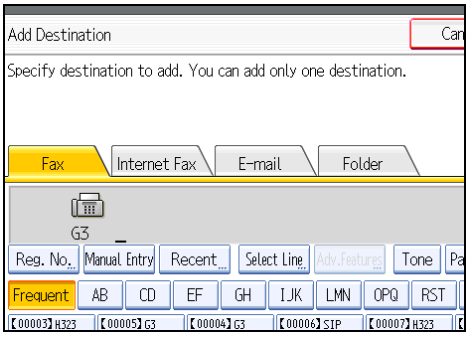
4. **Press [Check / Change Settings].**



5. **Press [Add Destination].**



6. **Specify the destination using the number keys or Destination keys, and then press [OK].**



Press the transmission type tab to switch the transmission type between fax/IP-Fax, Internet Fax, e-mail, or folder.

If you specify a sender whose e-mail address is already registered, you can add Internet Fax destinations and e-mail destinations.

You can add a folder destination only with Destination keys.

You can also program a SUB Code or SEP Code by pressing [Adv.Features].

7. **Press [Exit].**

Repeat from step 3, if you want to add another destination.

8. **Press [Exit] twice.**

   The standby display appears.

Note

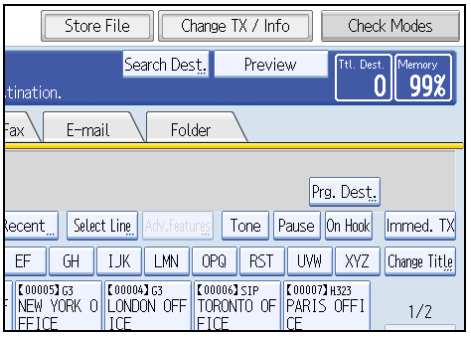
- You cannot add a destination if you have disabled broadcasting.

Changing the Transmission Time

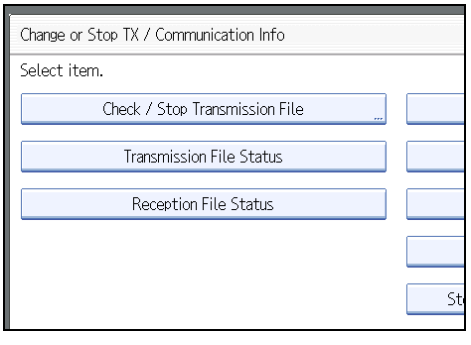
You can change the transmission time specified with Send Later.

You can also delete the transmission time. If the transmission time is deleted, the file is transmitted immediately.

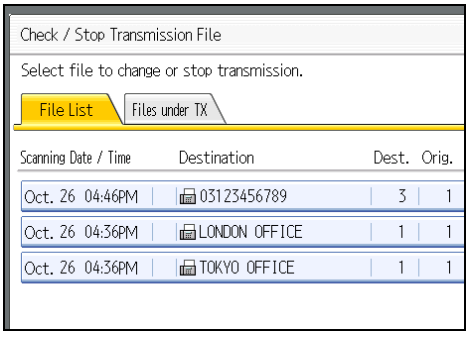
1. **Press [Change TX / Info].**



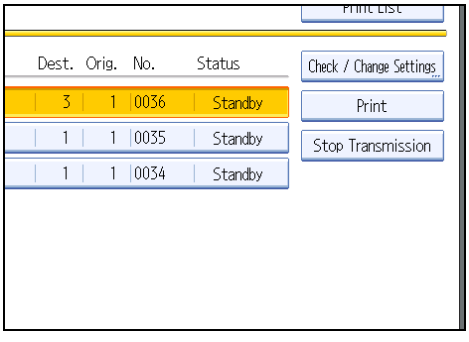
2. **Press [Check / Stop Transmission File].**



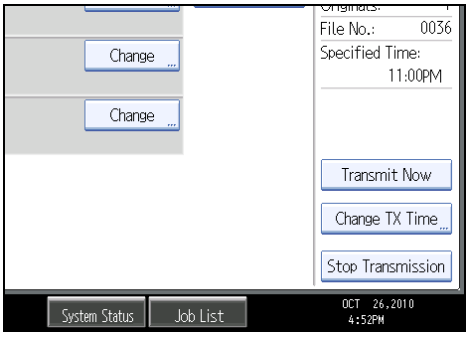
3. **Select the file for which you want to change or cancel the transmission time.**



4. **Press [Check / Change Settings].**

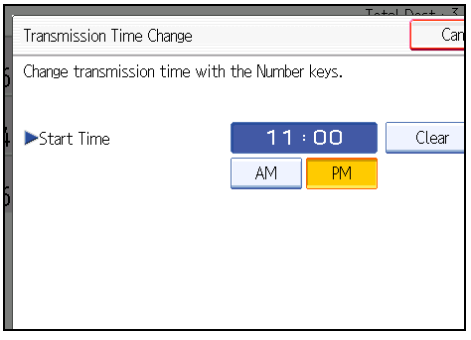


5. **Press [Change TX Time].**



If you press [Transmit Now], the file is transmitted immediately. However, if there is a file on standby, that file is sent first.

6. **Press [Clear], re-enter the transmission time using the number keys, and select [AM] or [PM]. Then press [OK].**



7. **Press [Exit].**

   Repeat from step 3, if you want to change another transmission time.

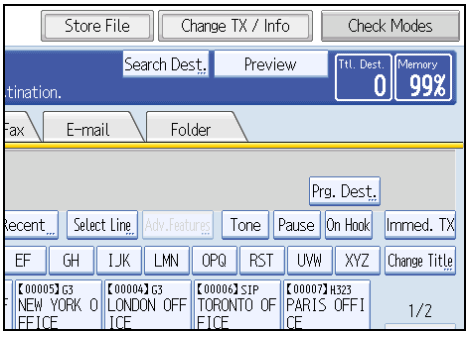
8. **Press [Exit] twice.**

   The standby display appears.

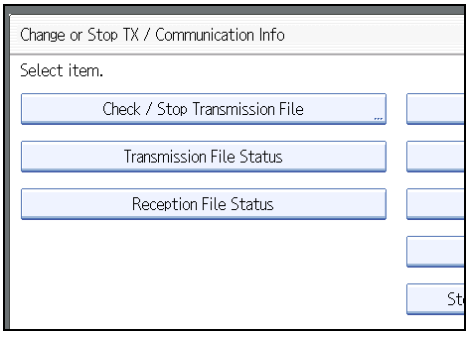
Changing the SMTP Server Setting

You can change the settings for whether or not to bypass the SMTP server.

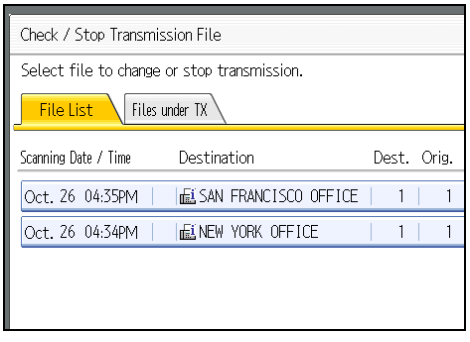
1. **Press [Change TX / Info].**



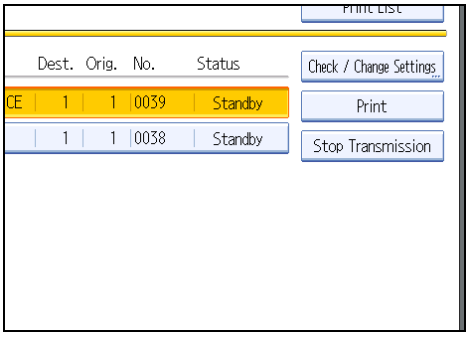
2. **Press [Check / Stop Transmission File].**



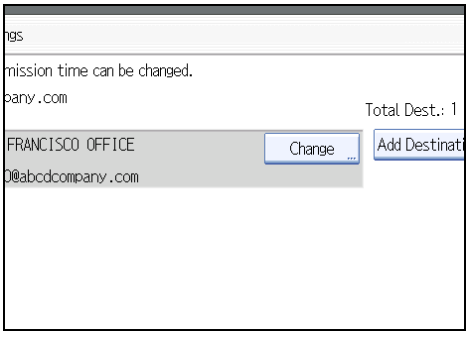
3. **Select a file whose SMTP server setting you want to change.**



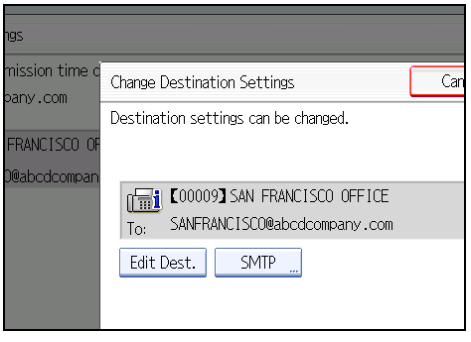
4. **Press [Check / Change Settings].**



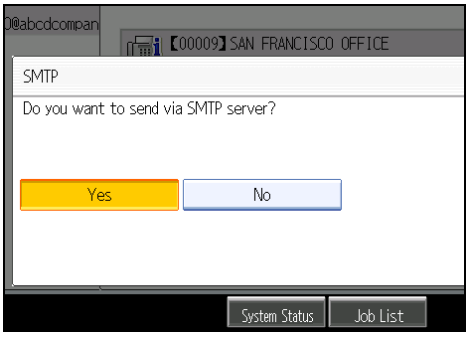
5. **Press [Change].**



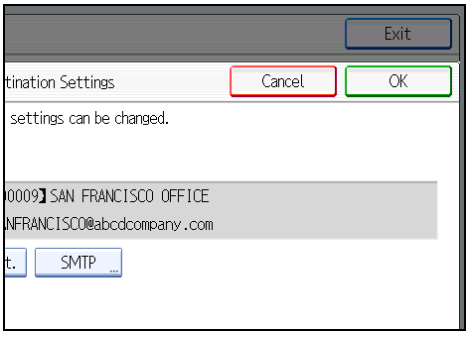
6. **Press [SMTP].**



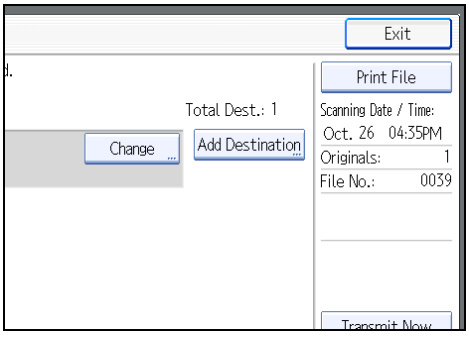
7. **Select [Yes] or [No], and then press [OK].**



8. **Press [OK].**



9. **Press [Exit].**



Repeat from step 3 to change the SMTP server settings of other recipients.

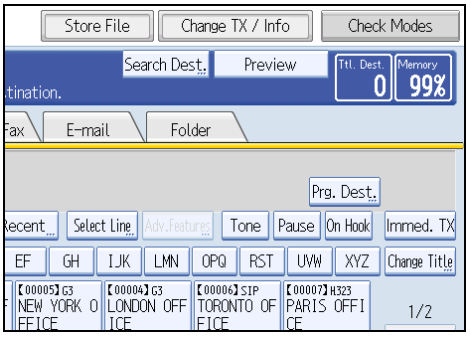
10. **Press [Exit] twice.**

The standby display appears.

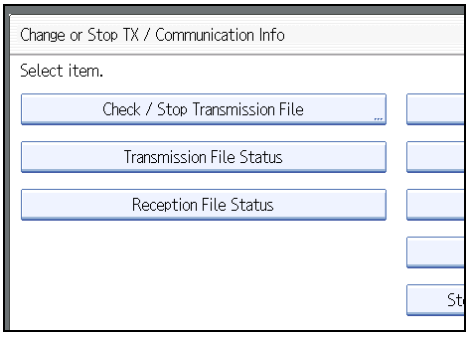
Printing a File from Memory

If you want to check the contents of a file that is stored in memory and not yet sent, use this procedure to print it out.

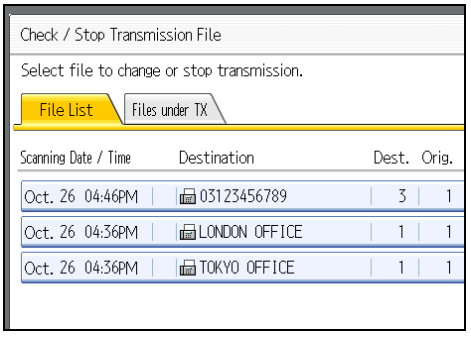
1. **Press [Change TX / Info].**



2. **Press [Check / Stop Transmission File].**

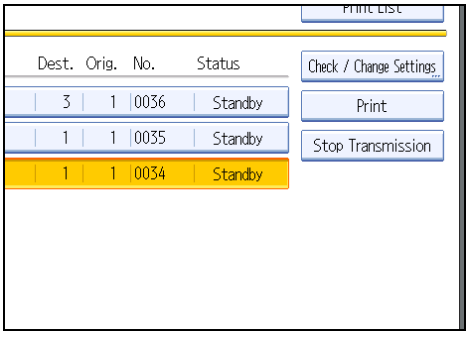


3. **Select the file you want to print.**

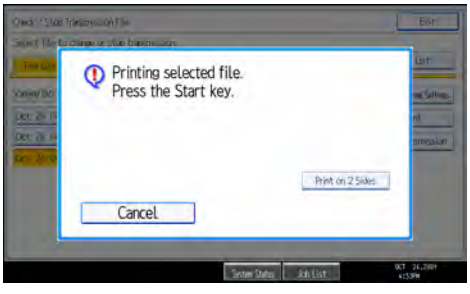


If multiple destinations were specified, only the number of the destinations that have not received the document you sent is shown.

4. **Press [Print].**



A message appears on the display.



If you want two-sided printing, press [Print on 2 Sides].

To cancel printing, press [Cancel]. The display returns to the previous one.

5. **Press the [Start] key.**

To cancel printing after pressing the [Start] key, press [Stop Printing]. The display returns to that of step 4.

Repeat from step 3, if you want to print another file.

6. **Press [Exit] twice.**

The standby display appears.

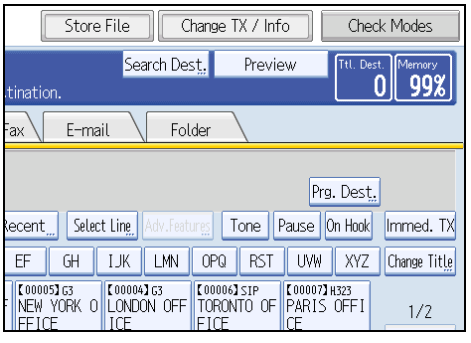
Note

- You can also print files that have not been successfully transmitted.

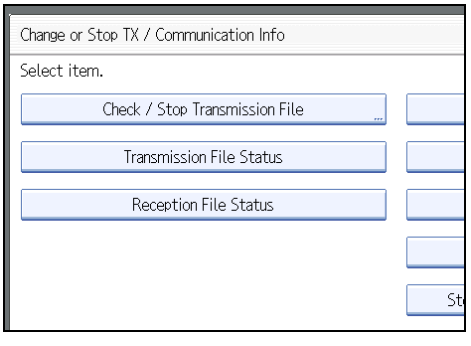
Printing a List of Files in Memory (Print TX File List)

Print this list if you want to find out which files are stored in memory and what their file numbers are. Knowing the file number can be useful (for example when erasing files).

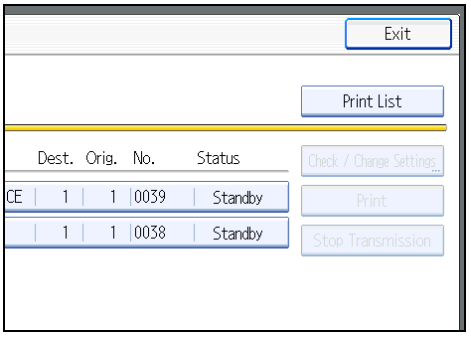
1. **Press [Change TX / Info].**



2. **Press [Check / Stop Transmission File].**



3. **Press [Print List].**



To cancel printing before pressing the [Start] key, press [Cancel]. The screen returns to that displayed before pressing [Print List].

4. **Press the [Start] key.**

   To cancel printing after pressing the [Start] key, press [Stop Printing]. The display returns to that of step 3.

5. **Press [Exit] twice.**

   The standby display appears.

Note

- The contents of a file stored in memory can also be printed.
- If user authentication is set, you can select whether to display a sender name with the User Parameter (switch 04, bit 5) in the Facsimile Features menu. See “Parameter Settings”.

Reference

- p.375 "Parameter Settings"

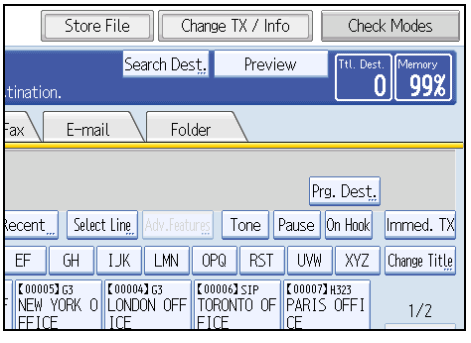
Resending a File

Machine memory stores documents that could not be successfully transmitted using Memory Transmission. Use this procedure to resend these documents.

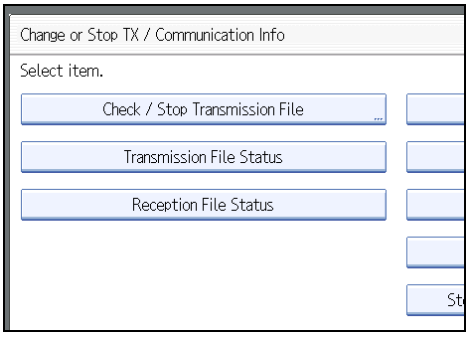
Important

- **Set "Store documents in memory that could not be transmitted" to "On" in User Parameter (switch 24, bit 0) in the Facsimile Features menu.**

1. **Press [Change TX / Info].**

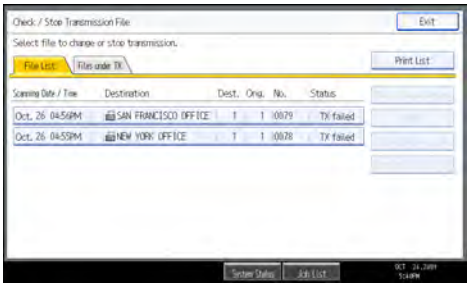


2. **Press [Check / Stop Transmission File].**



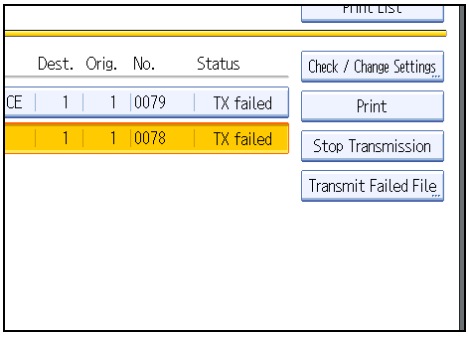
3. **Select the file you want to resend.**

"TX failed" is displayed for files that could not be sent.



If multiple destinations were specified, only the name of the destination you specify first and only the number of destinations that have not received the document you sent are shown.

4. **Press [Transmit Failed File].**



To add a destination, press [Add Destination], and then specify the destination.

5. **Press [OK].**

Transmission starts.

Repeat from step 3 to resend another file.

To cancel transmissions, press [Stop Transmission].

6. **Press [Exit] twice.**

The standby display appears.

Note

- Files that could not be transmitted are kept for either 24 or 72 hours, depending on the setting you make in User Parameter (switch 24, bit 1) in the Facsimile Features menu. See “Parameter Settings”.

Reference

- p.375 "Parameter Settings"

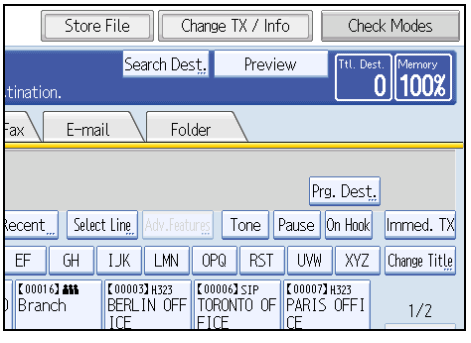
Checking the Transmission Result (Transmission File Status)

You can confirm transmission by the display, report, or e-mail.

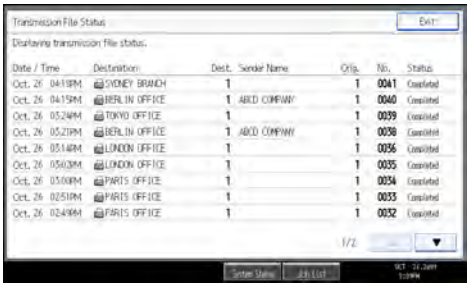
Confirming on Display

Use this function to display the transmission results.

1. **Press [Change TX / Info].**



2. **Select [Transmission File Status].**
3. **Check the transmission results.**



Transmission results are displayed, from the latest result down, in groups of nine.

When a fax is sent, “Destination” shows the Own Fax Number or Fax Header information of the receiver. When an Internet Fax or e-mail is sent, the e-mail address or name programmed in the destination list appears. For a transmission from a computer, “-- LAN-Fax -->” is shown.

Depending on security settings, the destination may appear as ✳.

4. **Press [Exit] twice.**

The standby display appears.

Note

- Only the transmission results of the latest communications are displayed. For the maximum number of communication results you can check on this machine, see “Maximum Values”.
- You can view sent fax documents and their lists, using Web Image Monitor on a network computer. For details, see the Web Image Monitor's Help.
- If a transmission is completed while you are using this function, the result will not appear. To view the latest result, exit Transmission File Status, and then try again.
- You can program one of the Quick Operation keys with operations for this function. Using the key allows you to omit step 1. For details about Quick Operation Key, see “General Settings”.
- When documents are transmitted from the computer to the machine, “--LAN-Fax -->” appears. To check if the documents are sent to the receiver, confirm the same File No.
- An encryption symbol is displayed in the routing/forwarding columns of encrypted e-mail.

Reference

- p.335 "General Settings"
- p.427 "Maximum Values"

Confirming by Report

Print reports for confirmation.

Memory Transmission

You can confirm the result with a Communication Result Report.

This report is printed each time a Memory Transmission is completed if turned on with User Parameter (switch 03, bit 0) in the Facsimile Features menu.

You can also print the report by programming the TX Status Report to a Quick Operation Key and pressing this when specifying a destination.

If you turn the Communication Result Report on, the Communication Failure Report is not printed.

For details about the contents printed in the reports, see “Communication Result Report (Memory Transmission)” or “Communication Failure Report”.

Immediate Transmission

You can confirm the result with an Immediate TX Result Report.

Select to print this report in User Parameter (switch 03, bit 5) in the Facsimile Features menu. A report is printed after every Immediate Transmission is completed.

You can also print the report by programming the TX Status Report to a Quick Operation Key and pressing this when specifying a destination.

For details about the contents printed in the report, see “Immediate TX Result Report (Immediate Transmission)”.

Note

- For details about Parameter Setting, see “Parameter Settings”.
- For details about Quick Operation Key, see “General Settings”.

Reference

- p.251 "Communication Result Report (Memory Transmission)"
- p.252 "Immediate TX Result Report (Immediate Transmission)"
- p.252 "Communication Failure Report"
- p.335 "General Settings"
- p.375 "Parameter Settings"

Confirming by E-mail

Use the E-mail TX Results function to send reports by e-mail to a computer, and then confirm them on the computer.

The available reports are:

- Communication Result Report.
- Immediate TX Result Report.
- Polling with SEP RX Result.

Important

- **You must first register the e-mail addresses of the destinations the report is to be sent to on the destination list. For details about registering e-mail addresses, see “Registering Addresses and Users for Facsimile/Scanner Functions”, Network and System Settings Reference.**

Note

- For details about E-mail TX Results, see “Confirming Transmission Results by E-mail”.
- For details about the contents of the reports, see “Communication Result Report (Memory Transmission)”, “Immediate TX Result Report (Immediate Transmission)”, “SEP Code RX Result Report”.
- By programming the E-mail TX Results to a Quick Operation Key in advance, you can send transmission results by e-mail after each transmission is completed. Select the destination for notification from the Internet Fax destinations or e-mail destinations in the destination list. For details about Quick Operation Key, see “General Settings”.
- When using the Sender Name function to select the sender, the transmission results are sent to senders' e-mail addresses that have been registered. Select the sender from the Internet Fax destinations or e-mail destinations in the destination list.
- If you send fax documents from a computer, use LAN-Fax Driver to specify whether or not the E-mail TX Results is sent to the computer.

Reference

- p.158 "SEP Code RX Result Report"
- p.177 "Confirming Transmission Results by E-mail"
- p.251 "Communication Result Report (Memory Transmission)"
- p.252 "Immediate TX Result Report (Immediate Transmission)"
- p.335 "General Settings"

Confirming by Report and E-mail

You can confirm transmission results using both the E-mail TX Results function, which sends the results by e-mail, and the Communication Result Report printed by the machine.

You can set whether to use both of these together in User Parameter (switch 10, bit 6) in the Facsimile Features menu. See “Parameter Settings”.

Reference

- p.375 "Parameter Settings"

Communication Result Report (Memory Transmission)

This report is printed when a Memory Transmission is completed, so you can check the result of the transmission.

Note

- You can turn this function on or off with the User Parameter (switch 03, bit 0) in the Facsimile Features menu.
- If user authentication is set, you can select whether to display a sender name with the User Parameter (switch 04, bit 5) in the Facsimile Features menu.
- You can select whether to include part of the original image on the report with the User Parameter (switch 04, bit 7) in the Facsimile Features menu.
- If user authentication is set, you can select whether to display a destination with the User Parameter (switch 04, bit 4) in the Facsimile Features menu.
- For details about Parameter Setting, see “Parameter Settings”.
- The Pg(s) column gives the total number of pages. The Page Not Sent column gives the number of pages that could not be sent successfully.
- “--” indicates that the e-mail or Internet Fax document was sent to the mail server programmed in this machine. (However, this does not mean the e-mail was delivered.)
- To view the report without text disruption, select a font of even character width in your e-mail application's settings.

- If two or more destinations are specified, this report is printed after the fax document is sent to all the destinations.
- If the machine is set up not to print this report and the fax document could not be successfully transmitted, a Communication Failure Report is printed. See “Communication Failure Report”.
- If E-mail TX Results is programmed in a Quick Operation Key, you can select whether a report e-mail is sent after transmission. For details about Quick Operation Key, see “General Settings”.

Reference

- p.252 "Communication Failure Report"
- p.335 "General Settings"
- p.375 "Parameter Settings"

Immediate TX Result Report (Immediate Transmission)

If you turn this report on, a report is printed after every Immediate Transmission so you have a record of whether the transmission was successful or not.

If the machine is set up not to print this report and the fax document could not be successfully transmitted, the Error Report is printed instead.

Note

- You can switch this report on or off in the User Parameter (switch 03, bit 5) in the Facsimile Features menu.
- If user authentication is set, you can select whether to display a destination with the User Parameter (switch 04, bit 4) in the Facsimile Features menu.
- For details about Parameter Setting, see “Parameter Settings”.
- To view the report without text disruption, select a font of even character width in your e-mail application's settings.
- If the page was sent successfully, the Page column gives the total number of pages sent successfully.
- If E-mail TX Results is programmed in a Quick Operation Key, you can select whether a report e-mail is sent after transmission. For details about Quick Operation Key, see “General Settings”.

Reference

- p.335 "General Settings"
- p.375 "Parameter Settings"

Communication Failure Report

This report is printed when a document could not be successfully transmitted with Memory Transmission.

If the machine is set up to print a Communication Result Report, this report is not printed. Use it to keep a record of failed transmissions so you can send them again.

Note

- You can select whether the Communication Failure Report is automatically printed using the User Parameter (switch 04, bit 1) in the Facsimile Features menu.
- This report is only printed if the Communication Result Report is turned off and a document could not be successfully transmitted with Memory Transmission.
- You can select whether to include part of the original image on the report with the User Parameter (switch 04, bit 7) in the Facsimile Features menu.
- If user authentication is set, you can select whether to display a destination with the User Parameter (switch 04, bit 4) in the Facsimile Features menu.
- If user authentication is set, you can select whether to display a sender name with the User Parameter (switch 04, bit 5) in the Facsimile Features menu.
- For details about Parameter Setting, see “Parameter Settings”.
- The Pg(s) column gives the total number of pages. The Page Not Sent column gives the number of pages that could not be sent successfully.
- “Unprogrammed” indicates that the document could not be sent because the forwarding destination is not programmed.
- “--” indicates that the e-mail or Internet Fax document was sent to the mail server programmed in this machine. (However, this does not mean the e-mail was delivered.)

Reference

- p.375 "Parameter Settings"

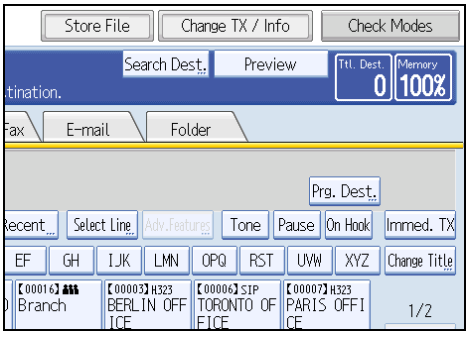
Checking the Reception Result (Reception File Status)

Confirm the reception result on the screen or in a report.

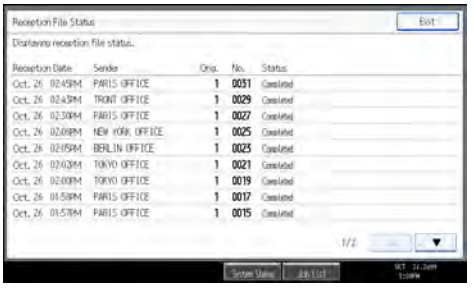
Confirming on Display

Use this function to display the reception result.

1. **Press [Change TX / Info].**



2. **Press [Reception File Status].**
3. **Check the reception results.**



Reception results are displayed, from the latest result, in groups of nine.

When a fax or IP-Fax is received, “Sender” shows the Own Fax Number or Fax Header information. When an Internet Fax is received, the sender's e-mail address appears.

4. **Press [Exit] twice.**

The standby display appears.

Note

- Only the reception results of the latest communications are displayed. For the maximum number of communication results you can check on this machine, see “Maximum Values”.

- You can view received fax documents and their lists, using Web Image Monitor on a network computer. For details, see the Web Image Monitor's Help.
- If a document is received while you are using this function, the result will not appear. To view the latest result, exit Reception File Status, and then try again.
- You can program one of the Quick Operation keys with operations for this function. Using the key allows you to omit step 1. For details about Quick Operation Key, see “General Settings”.

Reference

- p.335 "General Settings"
- p.427 "Maximum Values"

Confirming by Report

Print a report to confirm reception results.

Journal

Print the Journal to confirm the latest reception results.

For details, see “Journal”.

Reference

- p.260 "Journal"

Print Journal

You can print the Journal manually.

Important

- **The contents of a Journal printed automatically are deleted after printing. Keep the journal if you require a record of transmissions and receptions.**

Printing the Journal

To print the Journal manually, select the printing method: "All", "Print per File No.", or "Print per User".

Note

- You can set whether the Journal is automatically printed after every 50 communications in User Parameter (switch 03, bit 7) in the Facsimile Features menu.
- Depending on security settings, the Journal is not automatically printed.
- You can set whether the Journal is printed by line type with the User Parameter (switch 19, bit 1) in the Facsimile Features menu.
- If user authentication is set, you can select whether to display a sender name with the User Parameter (switch 04, bit 5) in the Facsimile Features menu.
- For details about Parameter Setting, see "Parameter Settings".
- You can program one of the Quick Operation keys with operations for this function. Using the key allows you to omit step 1. For details about Quick Operation Key, see "General Settings".
- Depending on security settings, the Destination/Sender name may not appear. You can select whether to display the Destination/Sender with the User Parameter (switch 04, bit 4) in the Facsimile Features menu.
- For the maximum number of communication results printed in the Journal, see "Maximum Values".

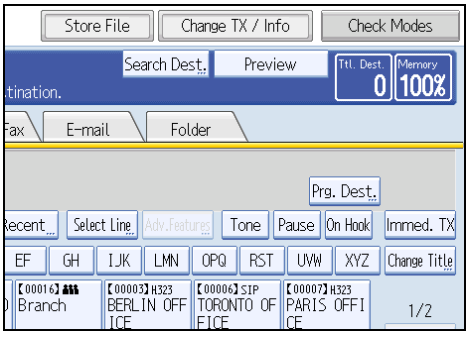
Reference

- p.335 "General Settings"
- p.375 "Parameter Settings"
- p.427 "Maximum Values"

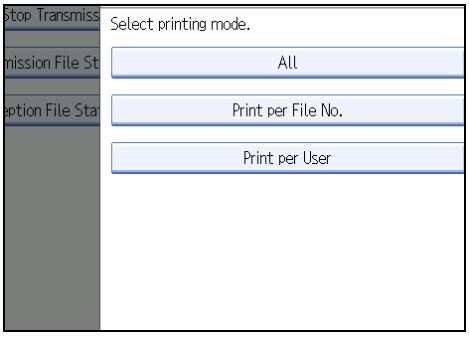
All

Prints the results of communications in the order made.

1. **Press [Change TX / Info].**



2. **Press [Print Journal].**
3. **Select [All].**



4. **Press the [Start] key.**

   To cancel a file printing before pressing the [Start] key, press [Cancel]. The display returns to that of step 3.

   To cancel a file printing after pressing the [Start] key, press [Stop Printing]. The display returns to that of step 3.

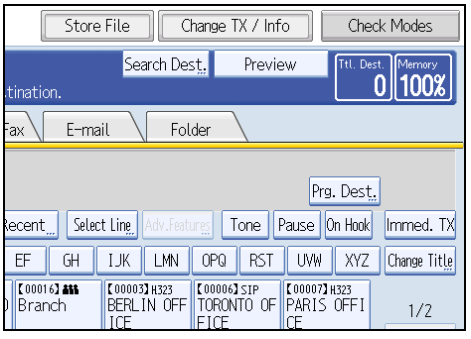
5. **Press [Exit] twice.**

   The standby display appears.

Print per File No.

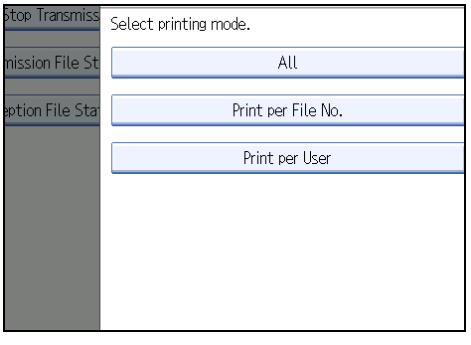
Prints only the results of communications specified by file number.

1. **Press [Change TX / Info].**

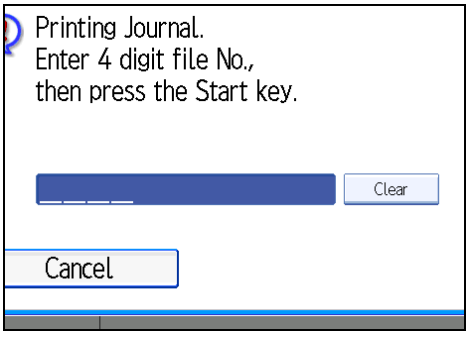


2. **Press [Print Journal].**

3. **Select [Print per File No.].**



4. **Enter a 4-digit file number.**



If you make a mistake, press [Clear], and then try again.

5. **Press the [Start] key.**

To cancel a file printing before pressing the [Start] key, press [Cancel]. The display returns to that of step 3.

To cancel a file printing after pressing the [Start] key, press [Stop Printing]. The display returns to that of step 3.

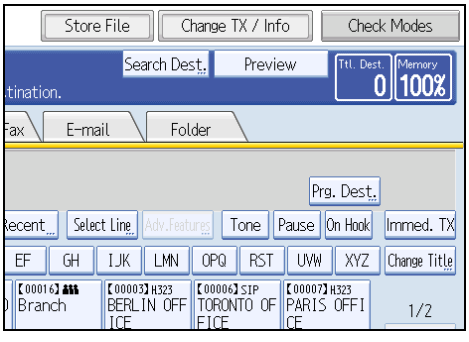
6. **Press [Exit] twice.**

   The standby display appears.

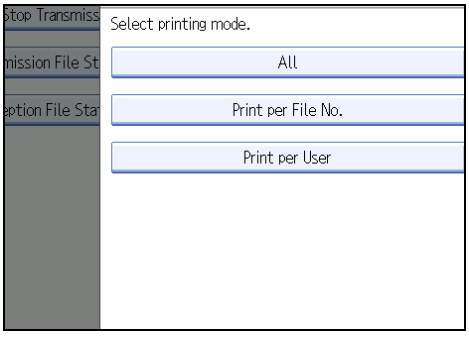
Print per User

Prints the results of communications by individual senders.

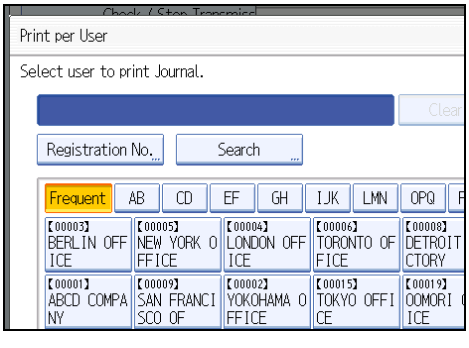
1. **Press [Change TX / Info].**



2. **Press [Print Journal].**
3. **Select [Print per User].**



4. **Select a user.**



Press [Cancel] if the user is not registered. The display returns to that of step 3.

5. **Press [OK] after checking the user name shown on the display.**

   Press [Cancel] if a wrong user name is selected. The display returns to that of step 3.

6. **Press the [Start] key.**

   To cancel a file printing before pressing the [Start] key, press [Cancel]. The display returns to that of step 3.

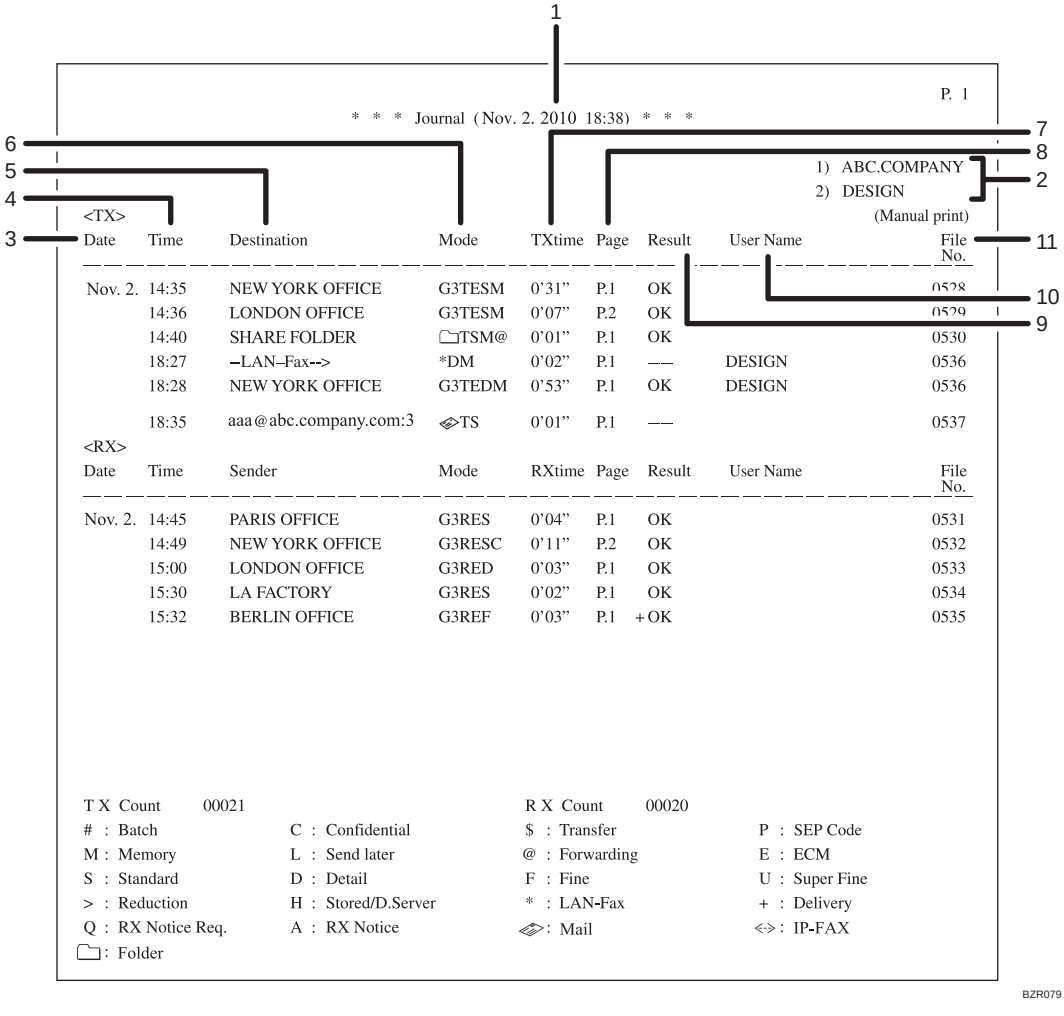
   To cancel a file printing after pressing the [Start] key, press [Stop Printing]. The display returns to that of step 3.

7. **Press [Exit] twice.**

   The standby display appears.

Journal

This section explains the items printed in the Journal.



BZR079

1. **Printing date**

   Shows the date and time the report was printed.

2. **Programmed Fax Header**

   Shows the sender name programmed for printing.

3. **Date**

   Shows the transmission or reception date.

4. **Time**

   Shows the transmission or reception start time.

5. **Other end**

   - For fax destinations

     Shows the name (for display) programmed by the other end.

     Shows the programmed fax number if the name (for display) was not programmed. The fax number may not be shown depending on sender's settings.

If neither name nor fax number was programmed by the other end, an entered fax number or a name programmed in a destination list is shown for transmissions.

- For Internet Fax/e-mail destinations

  At time of transmission, it shows the e-mail address or name programmed in the destination list. At time of reception, it shows the e-mail address of the sender.

  At time of broadcasting transmission, it shows the number of destinations after the e-mail addresses or names of destination.

  When documents are transmitted from the computer to the machine, "--LAN-Fax -->" appears. To check if the documents are sent to the receiver, confirm the same File No.

- For IP-Fax destinations

  Shows the IP-Fax destination or name programmed in the destination list. The fax destination details appear on the reception report.

- For folder destinations

  Shows the name programmed in the destination list.

6. Communication mode

- For fax transmissions and receptions

  After the line type, "T" for outgoing faxes or "R" for incoming faxes, and the communication mode appear in alphabetical letters or symbols. If the optional extra G3 interface unit is installed, "G3-1", "G3-2", or "G3-3" appears.

- For Internet Fax/e-mail transmissions and receptions

  After (e-mail mark), "T" for outgoing e-mail or "R" for incoming e-mail, and the communication mode appear in alphabetical letters or symbols. Documents sent from Internet Fax destinations are received by Internet Fax, and documents sent from e-mail destinations are received by Mail to Print. "Q" indicates outgoing e-mail for which a Reception Notice is set in "TX Mode", whereas "A" indicates reception notice e-mail.

- For IP-Fax transmissions and receptions

  After <-> (IP-Fax mark), "T" for outgoing faxes or "R" for incoming faxes, and the communication mode appear in alphabetical letters or symbols.

- For folder destinations

  After (folder mark) and "T" for outgoing faxes, the communication mode appears in alphabetical letters or symbols.

7. Communication time

Shows time taken for transmissions or receptions.

8. Number of pages

Shows the number of pages transmitted or received.

9. Communication result

Shows the result of transmissions or receptions.

OK: All pages were properly transmitted or received. When Reception Notice is activated using "TX Mode", receipt of Reception Notice is shown. The results of received documents that were routed are preceded by "+".

--: The Internet Fax or e-mail document was sent to the mail server programmed in this machine. (However, this does not mean the e-mail was delivered.) When using LAN-Fax, the results of communication from a computer to this machine are shown.

E: A communication error occurred.

D: Power was disconnected during communication. Not all fax documents were transmitted.

10. **User name**

    Shows the sender's name.

11. **File number**

    Shows file management numbers.

Note

- For Mail to Print reception, "P.1" is always printed in the number of pages column and "S", which indicates the Standard resolution, is always printed in the communication mode column regardless of the actual page/resolution.
- The information displayed under "Other end" can be either the fax number or name registered in the machine's own address book, or the fax number or name registered by the other end, depending on which you prioritize. For details about prioritizing items of journal information, contact your service representative.

Transmitting Journal by E-mail

Use this function to send the Journal to the administrator's e-mail address.

The Journal is sent automatically after every 50 communications. A CSV format Journal is attached to the e-mail.

Important

- **To transmit the Journal by e-mail, it is necessary to make settings with User Parameter (switch 21, bit 4) in the Facsimile Features menu. See "Parameter Settings".**
- **This machine does not store sent CSV files. It is recommended that you double-check the e-mail address of an administrator before the Journal is transmitted. If the e-mail address of the administrator is not correct, your important Journal may be lost. Sent CSV files are not left on the fax machine.**

Note

- If the administrator's address is wrong, you may not be able to acquire the Journal.
- If the Journal fails to be transmitted in e-mail format, the Journal is printed out.
- The name of an attached CSV file is "JOURNAL+year, month, date, hours, minutes". For example, the file name transmitted in 14:40 on 20th, December, 2007 is "JOURNAL200712201440.csv".
- The subject of a Journal sent by e-mail begins with "Journal".

Reference

- p.375 "Parameter Settings"

Journal by e-mail

If the setting is made so that the Journal is transmitted as e-mail, it is transmitted to the e-mail address of an administrator.

Note

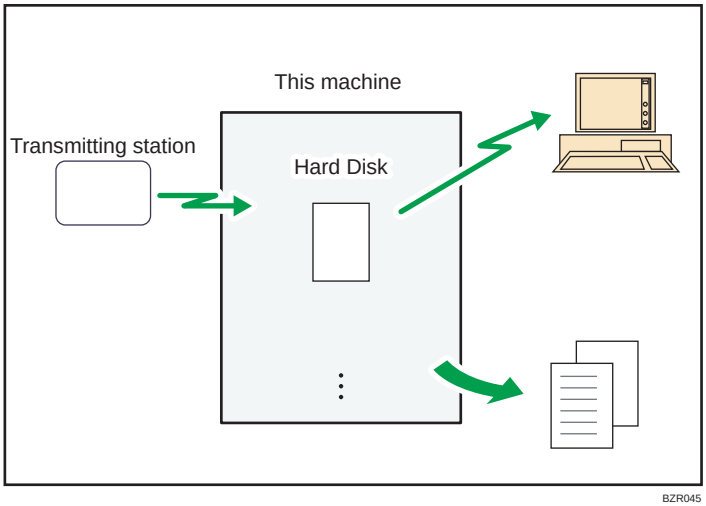
- To transmit the Journal, it is necessary to make settings with the User Parameter (switch 21, bit 4) in the Facsimile Features menu.
- If user authentication is set, you can select whether to display a sender name with the User Parameter (switch 04, bit 5) in the Facsimile Features menu.
- For details about Parameter Setting, see “Parameter Settings”.
- To confirm the administrator's e-mail address, use Administrator's E-mail Address under System Settings. See “File Transfer”, Network and System Settings Reference.
- Depending on security settings, the Destination/Sender name may not appear. You can select whether to display a destination with the User Parameter (switch 04, bit 4) in the Facsimile Features menu.

Reference

- p.375 "Parameter Settings"

Confirming/Printing/Deleting Received and Stored Documents

You can print documents that are received and stored on the hard disk. You can also delete unwanted documents.



Important

- **Make the settings for received and stored documents in "Reception File Setting" in the Facsimile Features menu before using this function. For details about the setting, see "Reception File Setting".**

Note

- If you have selected to store received documents and specified an e-mail address for notification of receipt, fax reception notification can be sent to that e-mail address.
- For the maximum number of received documents you can store on the machine's hard disk, see "Maximum Values".
- You can view and print received and stored documents using Web Image Monitor. For details, see "Viewing Fax Information Using a Web Browser".
- Control panel operations such as printing or deleting received documents, can be restricted. To do this, select "On" for the User Parameters (switch 10, bit 0) in Parameter Settings. After you do this, "Print / Delete Stored Reception File" will no longer be displayed on the screen, and received documents stored on the machine cannot be accessed using the control panel. For details about Parameter Settings, see "Parameter Settings".
- If user authentication is set on the machine, "Print / Delete Stored Reception File" is displayed only if the user who is logged on has been granted permission for these functions under "Stored Reception File User Setting" in the Facsimile Features menu logs on the machine. For details about these settings, see "Stored Reception File User Setting".

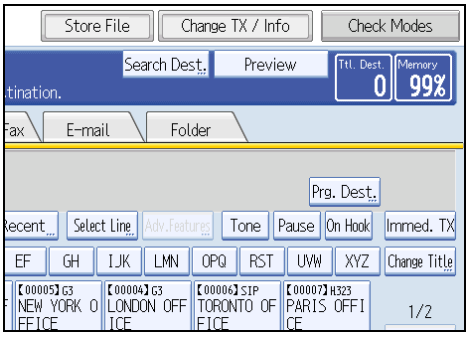
Reference

- p.327 "Viewing Fax Information Using a Web Browser"
- p.360 "Reception File Setting"
- p.363 "Stored Reception File User Setting"
- p.375 "Parameter Settings"
- p.427 "Maximum Values"

Confirming Received and Stored Documents

This section explains how to view documents stored on the hard disk.

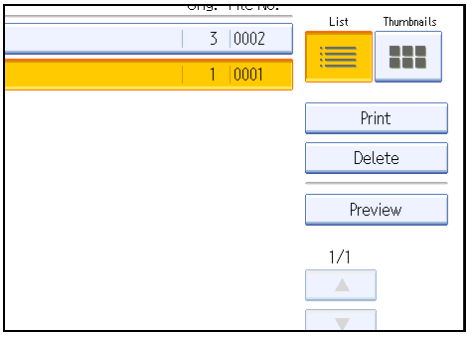
1. **Press the [Change TX / Info].**



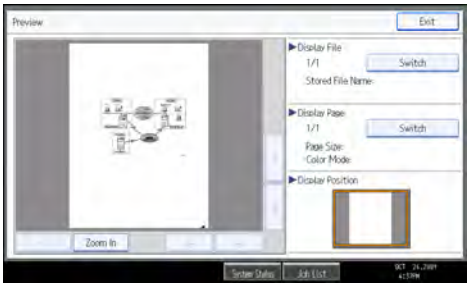
2. **Select [Print / Delete Stored Reception File].**
3. **Select the document you want to confirm.**

   Press the Thumbnails key to switch the screen to thumbnail display.

4. **Press [Preview].**



5. **Check the preview.**



- Press [Zoom Out] or [Zoom In] to reduce or enlarge the preview image.
- Press [←] [→] [↑] [↓] to scroll the preview image.
- Press [Switch] under "Display File" to display another selected file.
- Press [Switch] under "Display Page" to change the displayed page.

6. **Press [Exit].**

   The display returns to that of step 4.

7. **Press [Exit] twice.**

   The standby display appears.

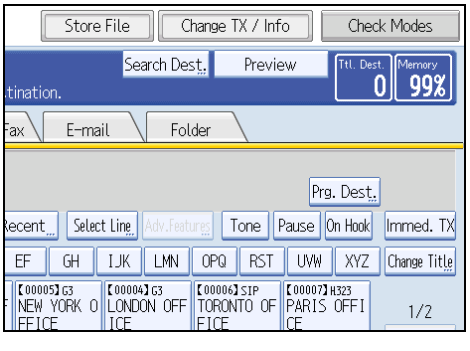
Note

- If the size of a received and stored document is larger than A3, the document is displayed in the preview as a single image, but it will be split and printed over several sheets.

Printing Received and Stored Documents

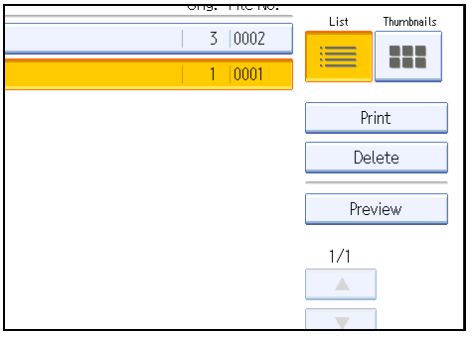
This section explains how to print documents saved on the hard disk.

1. **Press [Change TX / Info].**



2. **Select [Print / Delete Stored Reception File].**

3. **Select a file to be printed, and then press [Print].**



To cancel printing, press [Cancel].

To delete the document after printing, press [Delete File after Printing].

To perform two-sided printing, press [Print on 2 Sides] before pressing the [Start] key.

4. **Press the [Start] key.**

To stop printing after pressing the [Start] key, press [Stop Printing]. The display returns to that of step 3.

5. **Press [Exit] twice.**

The standby display appears.

Note

- This function allows you to print only received and stored documents.
- You cannot print received and stored documents using the Document Server function.
- You can program one of the Quick Operation keys with operations for this function. Using the Quick Operation Key allows you to omit step 1. For details about Quick Operation Key, see “General Settings”.
- You can specify and print multiple documents. For the maximum number of documents you can print at a time, see “Maximum Values”.

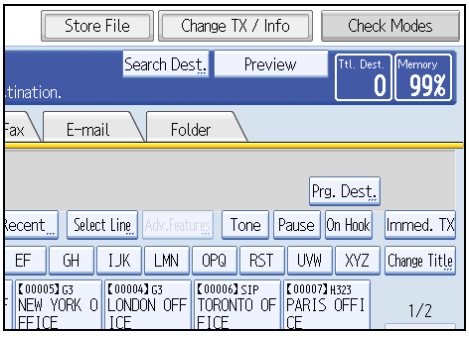
Reference

- p.335 "General Settings"
- p.427 "Maximum Values"

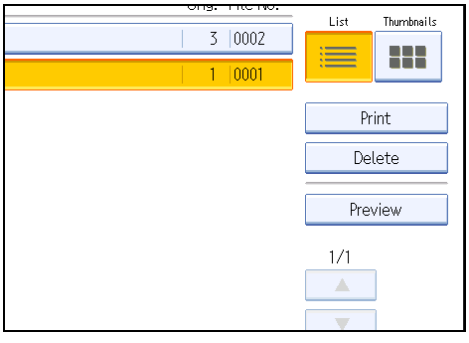
Deleting Received and Stored Documents

This section explains how to delete documents stored on the hard disk.

1. **Press [Change TX / Info].**



2. **Select [Print / Delete Stored Reception File].**
3. **Select a file to be printed, and then press [Delete].**



4. **Press [Yes].**

   To cancel a deletion, press [No]. The display returns to that of step 3.

5. **Press [Exit] twice.**

   The standby display appears.

Note

- You cannot delete received and stored documents using the Document Server function.
- You cannot delete a document while another person is printing it using Web Image Monitor.
- You can specify and delete multiple documents. For the maximum number of documents you can delete at a time, see “Maximum Values”.

Reference

- p.427 "Maximum Values"

Printing a File Received with Memory Lock

Prints files received with Memory Lock.

This is a security function designed to prevent unauthorized users from reading your documents. If Memory Lock Reception is switched on, all received documents are stored in memory and are not automatically printed. To print the documents, you have to enter the Memory Lock ID.

When your machine has received a document with Memory Lock Reception, the Confidential File (✉) indicator blinks.

Before using this function, the following preparations are required in the Facsimile Features menu.

- Program your Memory Lock ID under Program Memory Lock ID
- Set Memory Lock Reception to On under Memory Lock Reception

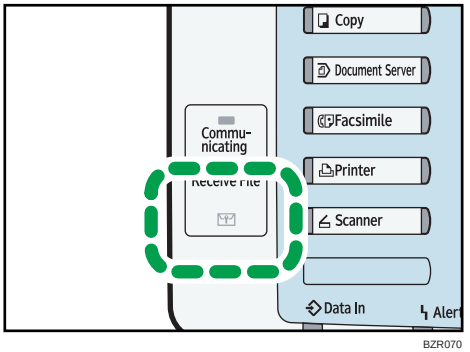
For details about Memory Lock Reception, see “Reception Settings”.

For details about Program Memory Lock ID, see “Initial Settings”.

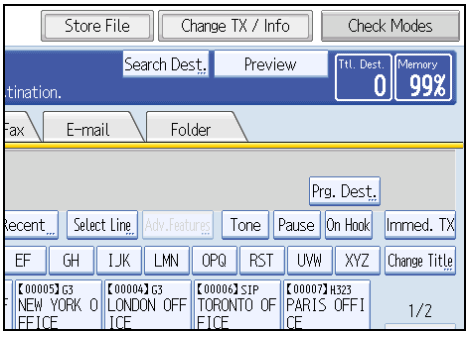
Important

- **If the main power switch is turned off for about an hour, all documents protected by Memory Lock Reception are deleted. When this happens, the Power Failure Report is printed so you can confirm which documents have been deleted. See “Turning Off the Main Power / In the Event of Power Failure”, Troubleshooting.**

1. **Confirm that the Confidential File indicator is blinking.**



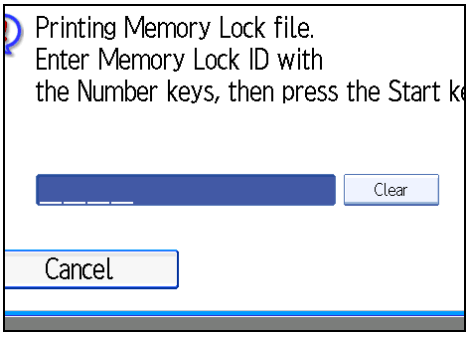
2. **Press [Change TX / Info].**



3. **Press [Print Memory Lock].**

   If no documents were received while Memory Lock Reception was switched on, the message "No reception file." is shown. Press [Exit].

4. **Enter a 4-digit Memory Lock ID with the number keys, and then press the [Start] key.**



   If you make a mistake, press [Clear], and then try again.

   To cancel printing, press [Cancel].

   If the Memory Lock ID does not match, the "Specified code does not correspond to programmed Memory Lock ID." message appears. Press [Exit] and retry after checking the Memory Lock ID.

5. **Press [Exit].**

   The standby display appears.

Note

- If Memory Lock Reception and received document storage are both set to on, Memory Lock Reception is unavailable and received documents become stored documents.
- Even when Memory Lock Reception is available, if free memory is insufficient, reception is not possible.
- You can also apply a Memory Lock Reception to documents that come only from certain senders.
- Documents received by SEP Code Reception are automatically printed even if this function is switched on.

- You can program one of the Quick Operation keys with operations for this function. Using the key allows you to omit step 2 and 5. For details about Quick Operation Key, see “General Settings”.
- If you print a Memory Lock File, it is deleted.

Reference

- p.335 "General Settings"
- p.342 "Reception Settings"
- p.347 "Initial Settings"

Personal Boxes

You can receive confidential documents to Personal Boxes.

Important

- **Before using this function, set the Personal Box in advance.**

Personal Boxes

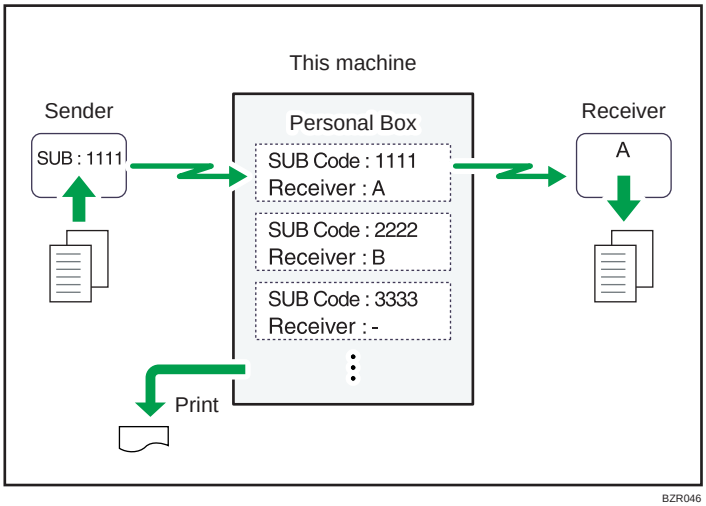
Storing your documents in a Personal Box prevents unauthorized users reading them.

When you specify a receiver for the Personal Box, incoming documents are forwarded directly to the destination you specify. You can specify a fax number, IP-Fax destination, Internet Fax destination, e-mail destination, or folder destination as the receiver.

To be able to receive documents into a Personal Box, you must inform the sender of the SUB Code programmed for that Personal Box and ask them to send the document using SUB Code Transmission with that SUB Code. When your machine has received a confidential document, the Confidential File ( ) indicator lights.

Important

- **If the main power switch is turned off for about an hour, all documents received into Personal Boxes are deleted. When this happens, the Power Failure Report is printed so you can confirm which documents have been deleted. See "Turning Off the Main Power / In the Event of Power Failure", Troubleshooting.**
- **Documents delivered to registered destinations are deleted from Personal Boxes.**



Note

- If a receiver is not assigned, you can print the received documents on this machine. For details about the printing method, see “Printing Personal Box Documents”.
- If the receiver is an Internet Fax/e-mail destination, e-mail can be encrypted and forwarded with a digital signature. Use both “Box Setting” on the Facsimile Features menu and Web Image Monitor to specify whether or not to apply encryption and a digital signature. For details about Box Setting, see “Box Settings”.
- For details about Confidential File Report, see “Confidential File Report”.

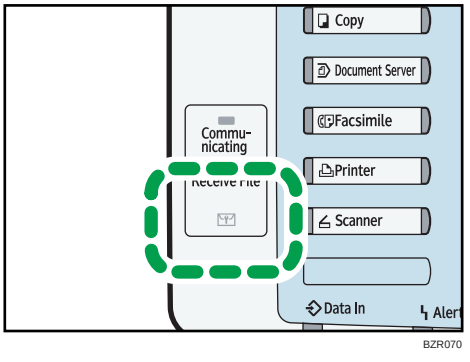
Reference

- p.274 "Printing Personal Box Documents"
- p.276 "Confidential File Report"
- p.399 "Box Settings"

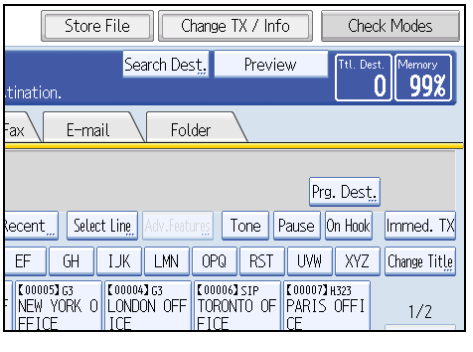
Printing Personal Box Documents

This section explains how to print a document received into a Personal Box.

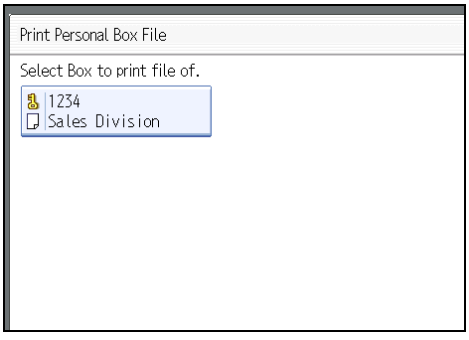
1. **Make sure that the Confidential File indicator is lit.**



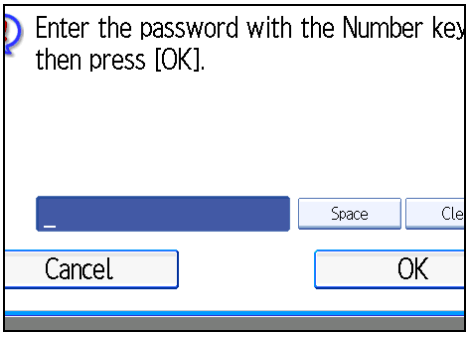
2. **Press [Change TX / Info].**



3. **Press [Print Personal Box File].**
4. **Select the box with the document you want to print.**



5. **If a password has been set for the box, enter the password, and then press [OK].**



If you make a mistake, press [Clear] before pressing [OK], and then try again.

To cancel entering a password, press [Cancel]. The display returns to that of step 4.

6. **Press the [Start] key.**

To stop printing, press [Stop Printing]. The display returns to that of step 4.

To print a document in another Personal Box, repeat from step 4.

7. **Press [Exit] twice.**

The standby display appears.

Note

- If you print a Personal Box document, it is deleted.
- The passwords for Personal Boxes can be programmed under “Box Setting” in the Facsimile Features menu. For details about the programming method, see “Box Settings”.

Reference

- p.399 "Box Settings"

Confidential File Report

You can check whether a document was received to a Personal Box.

Note

- You can turn this function on or off with the User Parameter (switch 04, bit 0) in the Facsimile Features menu. See “Parameter Settings”.

Reference

- p.375 "Parameter Settings"

Information Boxes

This section describes how to use Information Boxes.

Important

- **Before using this function, set the Information Box in advance.**

Information Boxes

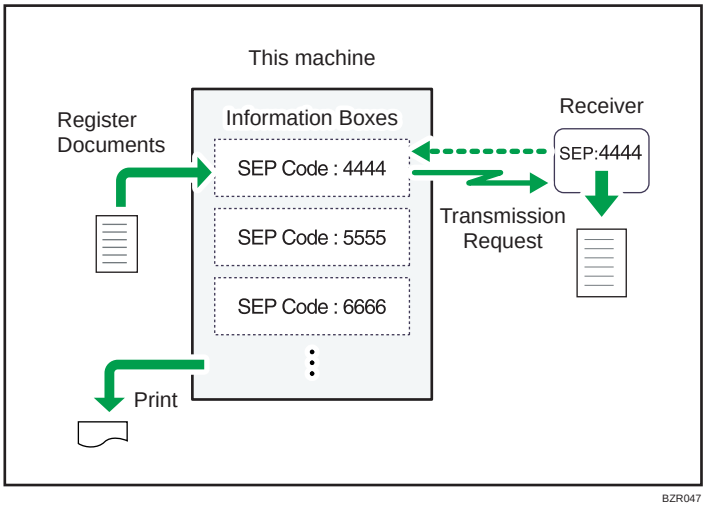
Use the Information Box function to set up the machine as a document server.

Program a document into an Information Box for others to pick up. When a request is made by another party, the SEP Code they specify is matched against the SEP Codes programmed in that Information Box. If a code matches the document stored in the Information Box the document is sent to the other party automatically.

Other parties can receive these documents whenever they request them.

Important

- **If the main power switch is turned off for about an hour, all documents stored in Information Boxes are deleted. When this happens, the Power Failure Report is printed so you can confirm which documents have been deleted. See "Turning Off the Main Power / In the Event of Power Failure", Troubleshooting.**
- **For other parties to be able to retrieve a document programmed in an Information Box, you need to inform the SEP Code assigned to that Information Box.**



Note

- For details about storing documents in the Information Boxes, see "Storing Documents in Information Boxes".

- You can set a password for Information Boxes in advance. A password can be set in “Box Setting” in the Facsimile Features menu. For details about the programming method, see “Box Settings”.

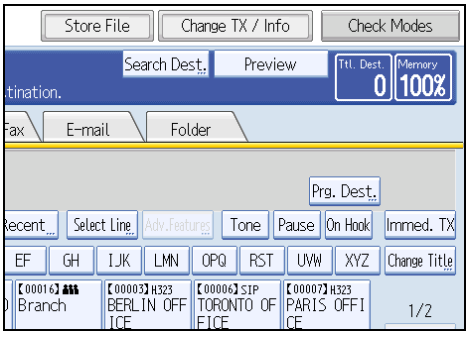
Reference

- p.278 "Storing Documents in Information Boxes"
- p.399 "Box Settings"

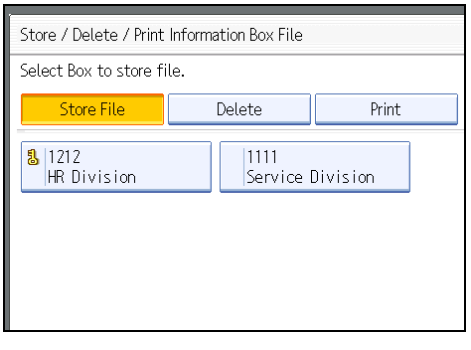
Storing Documents in Information Boxes

This section explains how to store a document in an Information Box.

1. **Press [Change TX / Info].**



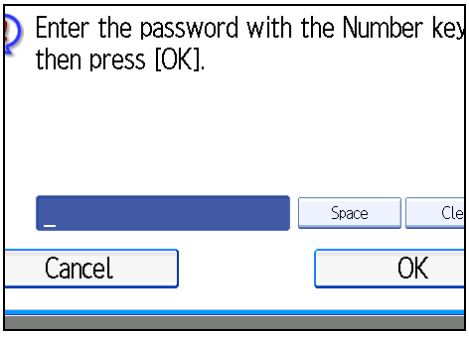
2. **Press [Store / Delete / Print Information Box File].**
3. **Select the box in which you want to store the file.**



When there are pre-programmed files, a file mark appears to the left of the box name.

A message is displayed if you select a box with a file stored in it. Press [Yes] when changing the file. The stored original file is overwritten.

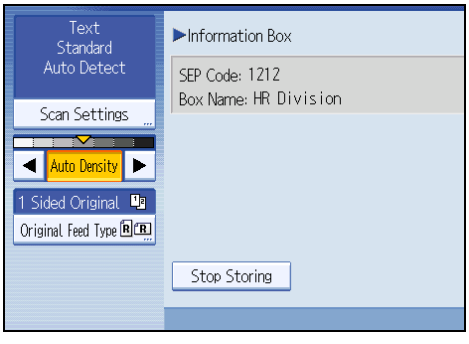
4. **If a password has been set for the box, enter the password, and then press [OK].**



If you make a mistake, press [Clear] before pressing [OK], and then try again.

To cancel entering a password, press [Cancel]. The display returns to that of step 3.

5. **Place the original, and then select the scan settings you require.**



You can also select the following settings:

- Original Orientation
- Original Settings
- Stamp

6. **Press the [Start] key.**

The machine starts to scan the original.

To stop scanning, press [Stop]. The display returns to that of step 3.

To store a document in another Information Box, repeat from step 3.

7. **Press [Exit] twice.**

The standby display appears.

Note

- One Information Box stores one file.
- The stored file is not deleted automatically. If you want to delete a stored file, see "Deleting Information Box Documents".

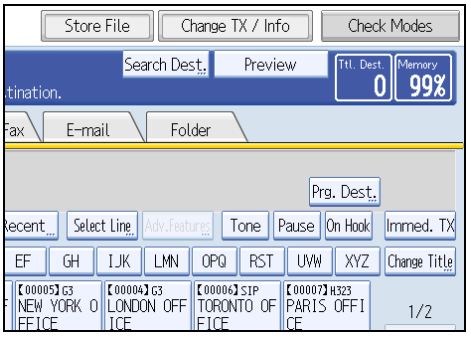
Reference

- p.281 "Deleting Information Box Documents"

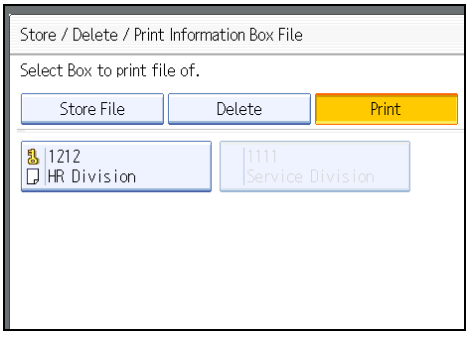
Printing Information Box Documents

This section explains how to print a document stored in an Information Box.

1. **Press [Change TX / Info].**

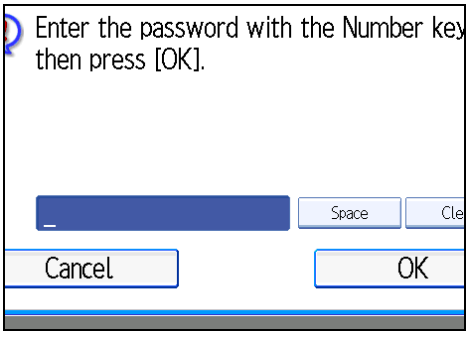


2. **Press [Store / Delete / Print Information Box File].**
3. **Press [Print].**
4. **Select the box that contains the stored file you want to print.**



You cannot select a box that has no stored file.

5. **If a password has been set for the box, enter the password, and then press [OK].**



If you make a mistake, press [Clear] before pressing [OK], and then try again.

To cancel entering a password, press [Cancel]. The display returns to that of step 4.

6. **Press the [Start] key.**

If you want two-sided printing, press [Print on 2 Sides] before pressing the [Start] key.

To stop printing before pressing the [Start] key, press [Cancel]. The display returns to that of step 4.

To stop printing after pressing the [Start] key, press [Stop Printing]. The display returns to that of step 4.

Repeat from step 4 to print another stored file in the box.

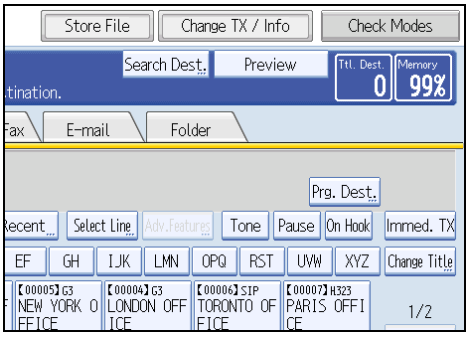
7. **Press [Exit] twice.**

The standby display appears.

Deleting Information Box Documents

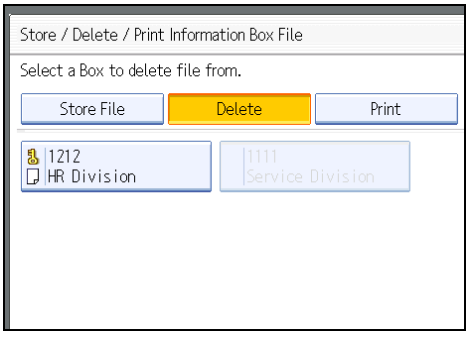
This section explains how to delete a file stored in an Information Box.

1. **Press [Change TX / Info].**

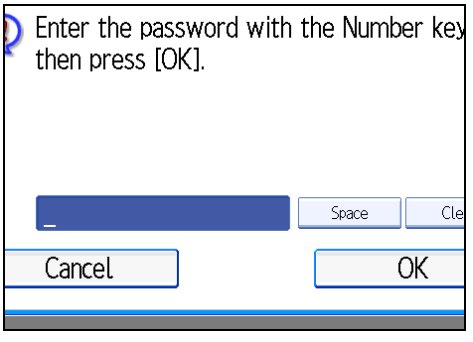


2. **Press [Store / Delete / Print Information Box File].**
3. **Press [Delete].**

4. **Select the box that contains the stored file you want to delete.**



5. **If a password has been set for the box, enter the password, and then press [OK].**



If you make a mistake, press [Clear] before pressing [OK], and then try again.

To cancel entering a password, press [Cancel]. The display returns to that of step 4.

6. **Press [Yes].**

To stop deleting, press [No]. The display returns to that of step 4.

Repeat from step 4 to delete another stored file in another box.

7. **Press [Exit] twice.**

The standby display appears.

5. Storing a Document

This section explains storing and managing documents in the Document Server.

Sending a Stored File

This section describes how to store and manage fax documents in the Document Server.

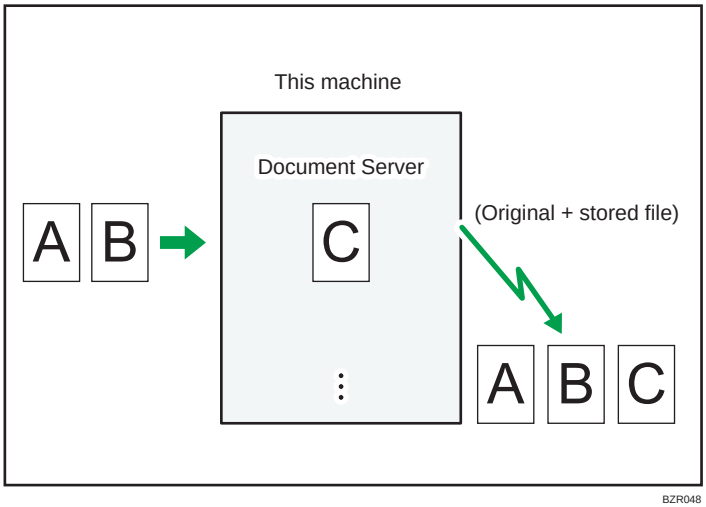
The Document Server can store documents from various applications.

The documents that are stored using the facsimile function are available to transmit by facsimile.

Storing in the Document Server enables the following:

- Once stored, a document can be sent out as many times as you want, just by selecting it.
- Storing a document does not use facsimile memory.

You can send and print multiple stored documents as a single document, and also send them with scanned originals at the same time. Follow the instructions under [Select Stored File] when sending or printing stored documents.



Important

- **Data stored in the machine can be lost if there is an error on the machine's hard disk. The manufacturer is not responsible for any damage that might result from the loss of data.**

Note

- Stored documents are not deleted even if there is a power failure, or the main power switch is turned off.
- You can specify whether or not the machine automatically deletes documents from the Document Server after a certain number of days. You can change this setting using "Auto Delete File in Document Server" under "System Settings". See "Administrator Tools", Network and System Settings Reference.

- You cannot check received and stored documents through the Document Server.
- Documents in the Document Server can be sent, printed, or deleted, and their information can be changed using the Web Image Monitor.
- Using Web Image Monitor, documents you stored in the Document Server can be downloaded and managed on the computer. See “Document Server”, Copy and Document Server Reference.
- For the maximum values of the following items, see “Maximum Values”.
  - Number of documents you can store in the Document Server using the facsimile function
  - Number of pages per document you can store in the Document Server
  - Number of pages you can store in the Document Server (in total - copy function, facsimile function, printer function, and scanner function)

Reference

- p.427 "Maximum Values"

Storing a Document

You can store and send a document at the same time. You can also just store a document.

File names

Scanned documents are automatically assigned names like “FAX0001” or “FAX0002”.

User Names

You can set this function if necessary to know who and what departments stored documents in the machine.

Password

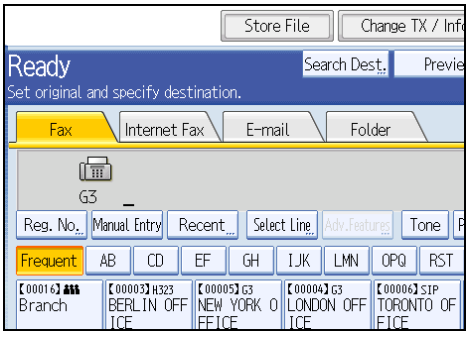
You can set this function so as not to send to unspecified people.

1. **Place the original, and then specify the scan settings you require.**

   Specify the “Original Orientation” setting correctly. If you do not, the top/bottom orientation of the original will not be displayed correctly in the preview.

   For details about the setting, see “Setting the Original Orientation”.

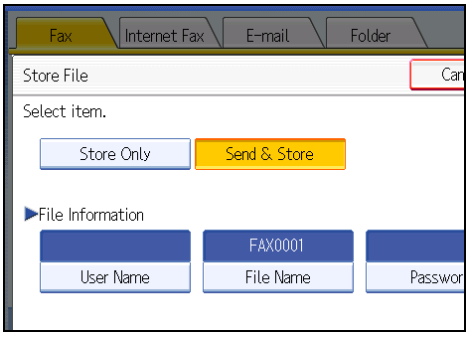
2. **Press [Store File].**



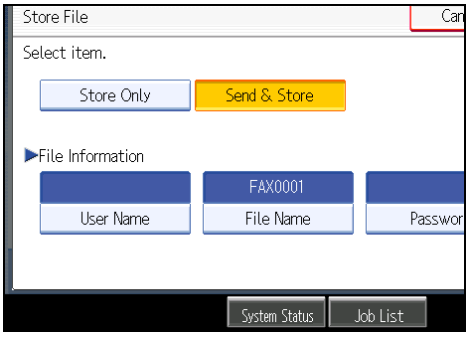
3. **Select [Send & Store] or [Store Only].**

Select [Send & Store] to send documents after they are stored.

Select [Store Only] to store documents.



4. **Set the user name, file name, and password as necessary.**



If you are not setting a user name, file name, or password, proceed to step 5.

You cannot change multiple documents at once.

5. **Press [OK].**

The file name appears to the left of [Store File].

6. **If you have selected [Send & Store], specify the receiver.**

   If you have selected [Store Only], proceed to step 7.

7. **Press the [Start] key.**

Note

- You can change file names and user names.

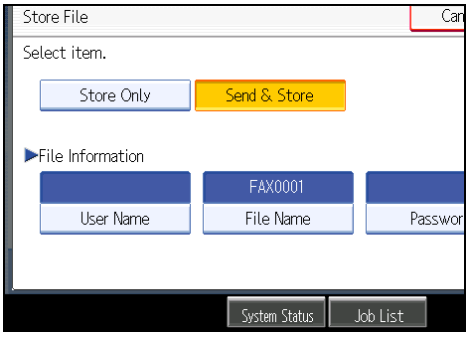
Reference

- p.55 "Setting the Original Orientation"

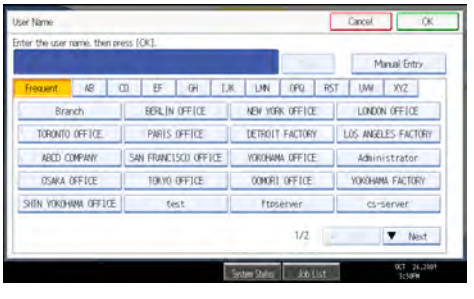
Programming a user name

Specify a user name for the file.

1. **Press [User Name].**



2. **Press the user name to be programmed.**



   Press the title key to switch between titles.

   To set a non-programmed user name, press [Manual Entry], and then enter the name. User names entered by pressing [Manual Entry] are not programmed into the user code.

3. **Press [OK].**

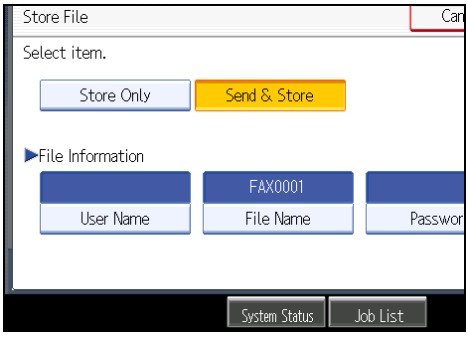
Note

- Depending on the security settings, [Access Privileges] might be displayed instead of [User Name]. For details about setting [Access Privileges], ask the administrator.

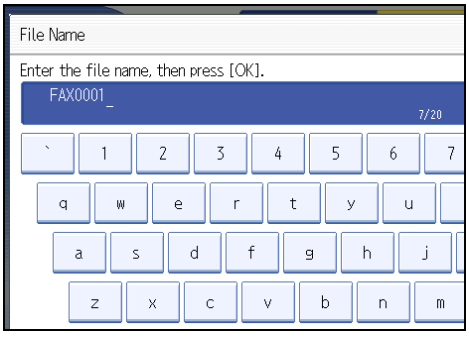
Setting a file name

Specify a name for the file.

1. **Press [File Name].**



2. **Enter the file name.**



3. **Press [OK].**

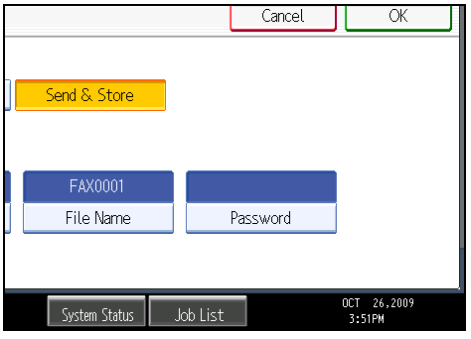
Note

- For details about text entry, see “Entering Text”, About This Machine.

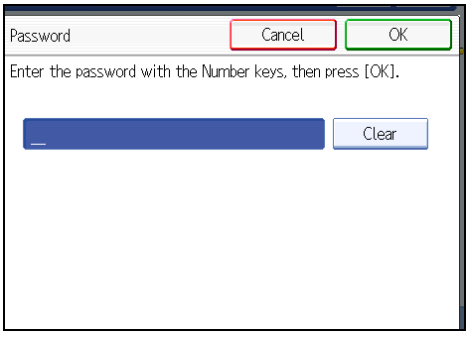
Setting a password

Set a password for the file.

1. **Press [Password].**



2. **Enter a password using the number keys, and then press [OK].**



If you make a mistake, press [Clear] before pressing [OK], and then reenter your password.

You can enter up to four to eight digits.

3. **Enter the password again, and then press [OK].**

Sending Stored Documents

The machine sends documents stored with the facsimile function in the Document Server.

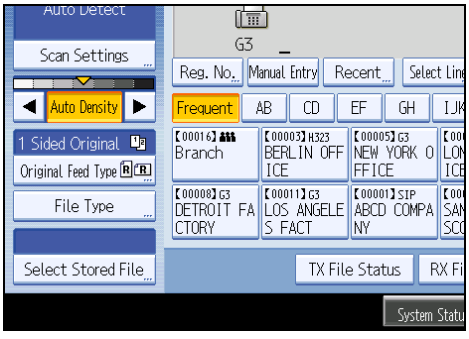
The documents stored in the Document Server can be sent again and again until they are deleted. Once sent, documents are stored in the Document Server. Therefore, you can send them in just one operation without having to set your originals again.

Important

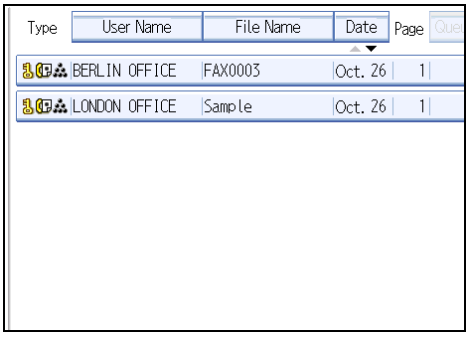
- **Store the documents to be sent in advance. You can program a password for this function. You can change the user names, file names, and passwords of stored documents.**
- **You cannot use the following transmission methods:**
  - **Immediate Transmission**
  - **Parallel Memory Transmission**
  - **On Hook Dial**

- Manual Dial

1. **Press [Select Stored File].**



2. **Select the documents to be sent.**



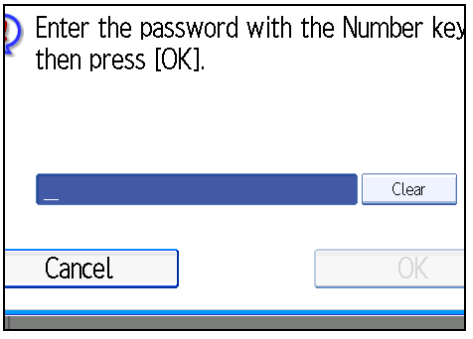
When multiple documents are selected, they are sent in the order of selection.

- Press [Queue] to arrange the order of the documents to be sent.
- Press [File Name] to place the documents in alphabetical order.
- Press [User Name] to place the documents in order by programmed user name.
- Press [Date] to place the documents in order of programmed date.

To view details about stored documents, press [Details].

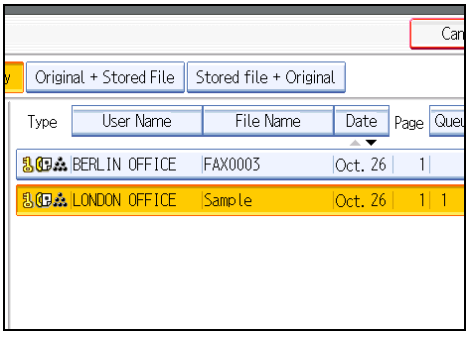
Press the Thumbnails key to switch the screen to thumbnail display.

3. **If you select a document with a password, enter the password, and then press [OK].**



If the document does not have a password, proceed to step 4.

4. **When you want to add your originals to stored documents and send them all at once, press [Original + Stored File] or [Stored file + Original].**



When sending only stored documents, proceed to step 5.

When [Original + Stored File] is pressed, the machine sends the originals, and then stored files. When [Stored file + Original] is pressed, the machine sends the stored files, and then originals.

5. **Press [OK].**

6. **Specify the destination, and then press the [Start] key.**

To add an original to stored documents, place the original, and then select any scan settings you require.

The added originals are not stored.

Note

- You can send only documents saved with the facsimile function in the Document Server. You cannot send documents stored in the Document Server using the copy, printer, or scanner functions.
- The specified documents are sent with the scan settings made when they were stored.
- To see details of the selected document, press [Details]. To return to the display in step 2, press [Exit].
- For the maximum values of the following items, see “Maximum Values”.
  - Number of stored documents you can specify at a time

- Number of stored pages you can send in one operation

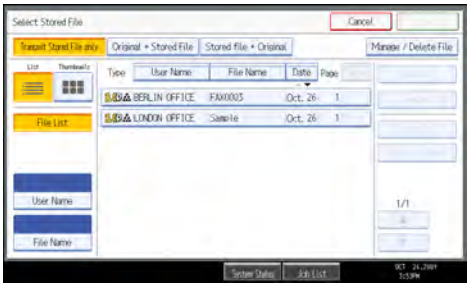
Reference

- p.427 "Maximum Values"

Specifying documents from [File List]

Search for a file from the file list.

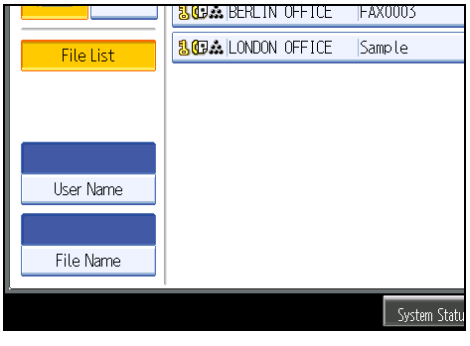
1. **Press [▲] or [▼] to display the documents to be sent.**
2. **Select the file.**



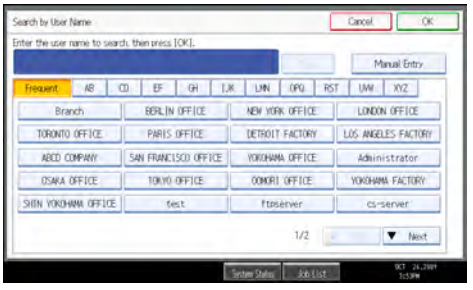
Specifying documents by [User Name]

Search for a file by user name.

1. **Select [User Name].**



2. **Select the user name of the programmed document, and then press [OK].**



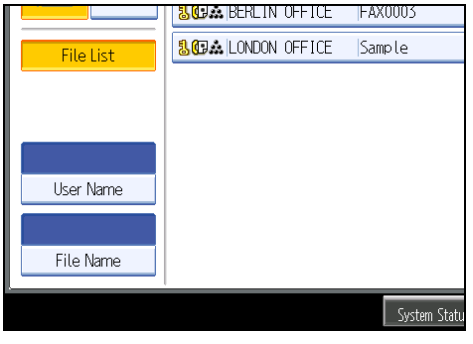
To search by directly entering a user name, press [Manual Entry], and then enter the user name. Forward matching is used when searching for a user name.

3. **Select the file to be sent.**

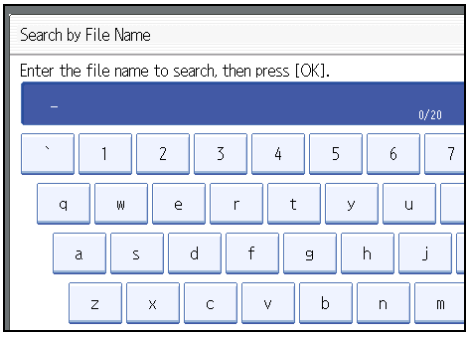
5 Specifying documents by [File Name]

Search for a file by file name.

1. **Select [File Name].**



2. **Enter the name of the document to be sent, and then press [OK].**



Forward matching is used when searching for a file name.

3. **Select the file to be sent.**

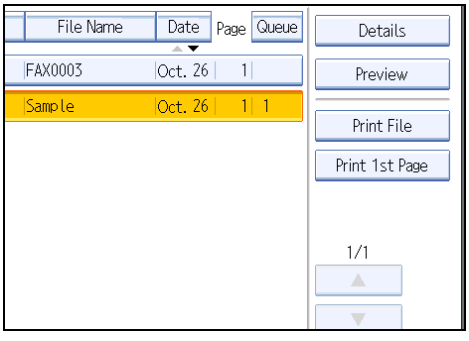
Displaying a preview

Display a preview of stored documents.

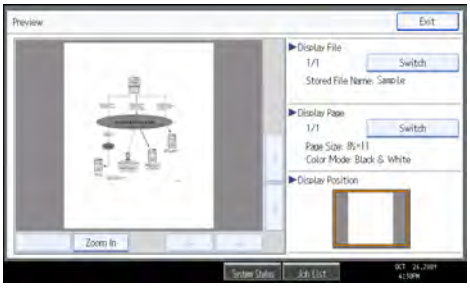
1. **Select the document you want to send.**

   Press the Thumbnails key to switch the screen to thumbnail display.

2. **Press [Preview].**



3. **Check the preview.**



   - Press [Zoom Out] or [Zoom In] to reduce or enlarge the preview image.
   - Press [←] [→] [↑] [↓] to scroll the preview image.
   - Press [Switch] under "Display File" to display another selected file.
   - Press [Switch] under "Display Page" to change the displayed page.

4. **Press [Exit].**

Note

- If image files are corrupt or are larger than A3, they are not displayed on the preview window.
- If the image file is corrupt, store it again.
- If you stored originals that had multiple mixed-size pages without using the Mixed Original Sizes function, the displayed size might differ from the actual size for pages after the first page.

Printing Stored Documents

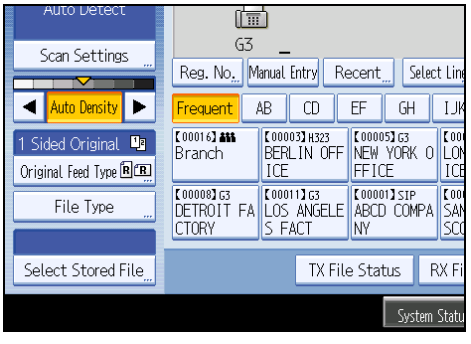
Use this function to print documents stored in the Document Server.

You can also print the first page only to check the content of the original.

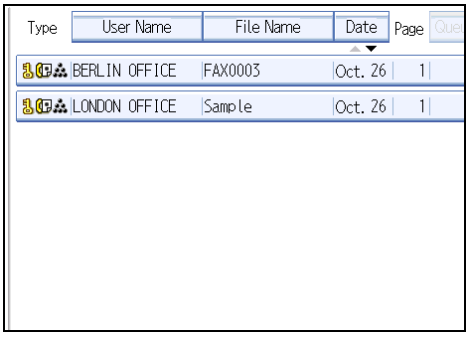
Important

- **When [Print 1st Page] is selected, originals larger than A4 size are printed after they are reduced to A4 size.**

1. **Press [Select Stored File].**

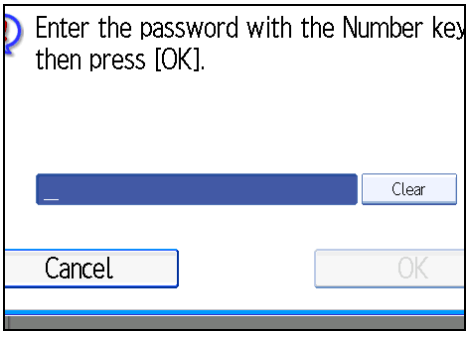


2. **Select the document to be printed.**



Press the Thumbnail key to switch the screen to thumbnail display.

3. **If you select a document with a password, enter the password, and then press [OK].**



If the document does not have a password, proceed to step 4.

4. **Press [Print File] or [Print 1st Page].**

   When [Print File] is pressed, the machine prints all the pages. When [Print 1st Page] is pressed, the machine prints only the first page.

   To print both sides, press [Print 2 Sides]. When multiple files are specified they are printed per file.

   To cancel printing, press [Stop Printing].

5. **Press the [Start] key.**

   When only the first page is printed, the file name is printed at the top of the paper.

   To cancel printing after pressing the [Start] key, press [Stop Printing].

6. **Press [Cancel].**

   The standby display appears.

Note

- Only documents stored using the facsimile function can be printed.
- When printing originals that were not stored using the Mixed Original Sizes function, paper sizes might differ according to whether printing is through the facsimile function or the Document Server.
- You can specify and print multiple documents at one time.
- For the maximum values of the following items, see “Maximum Values”.
  - Number of stored documents you can print at a time using [Print 1st Page]
  - Number of stored documents you can print at a time using [Print File]

Reference

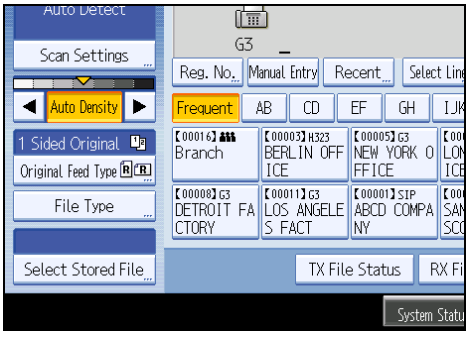
- p.427 "Maximum Values"

Changing Stored Document Information

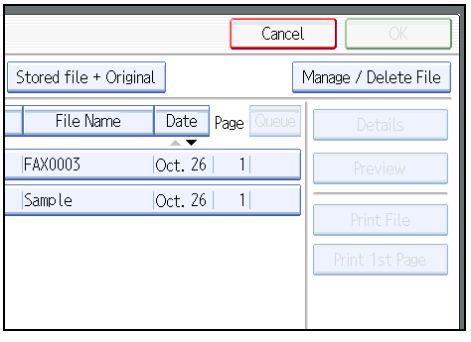
You can change the file name, user name, and password of stored documents.

To change a stored document, delete the document you no longer need, and then reprogram the new document.

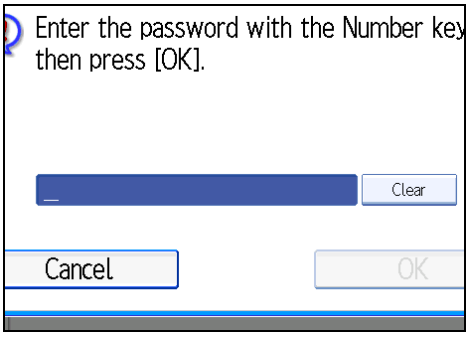
1. **Press [Select Stored File].**



2. **Select [Manage / Delete File], and then press the document to be changed.**



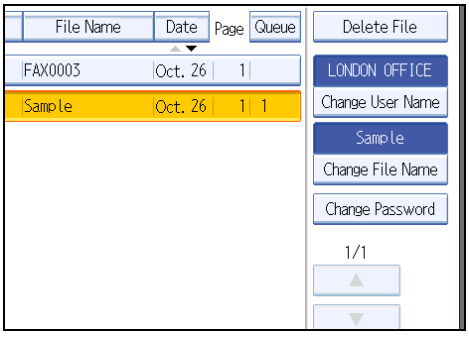
3. **If you select a document for which a password is set, enter the password, and then press [OK].**



When a selected file does not have a password, proceed to step 4.

4. **Change the desired information of the stored document.**

Press the keys for the items you want to change.



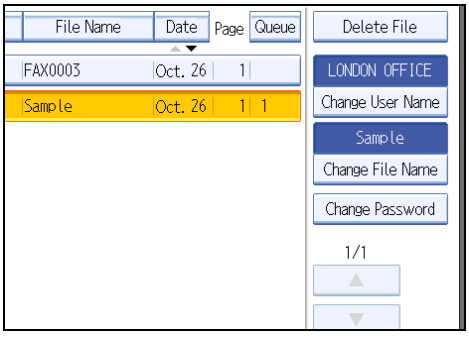
5. **Press [Exit].**

   The standby display appears.

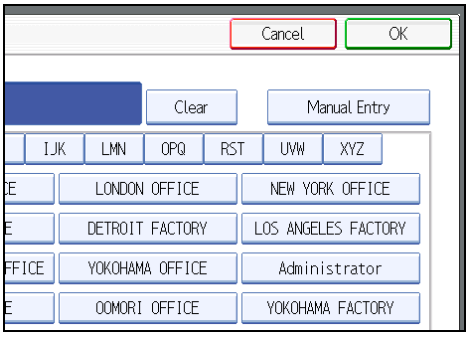
Changing a user name

Change the user name of a stored document.

1. **Press [Change User Name].**



2. **Press [Clear].**



   The user name is deleted.

3. **Enter the new user name, and then press [OK].**

   Press the title word keys to switch between titles.

To set a non-programmed user name, press [Manual Entry], and then enter the name.

User names entered by pressing [Manual Entry] are not programmed into the user code.

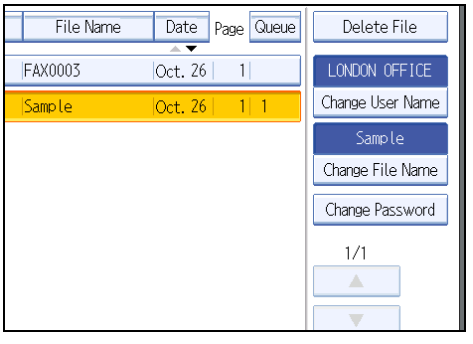
Note

- Depending on the security settings, [Change Access Priv.] might be displayed instead of [Change User Name]. For details about setting [Change Access Priv.], ask the administrator.

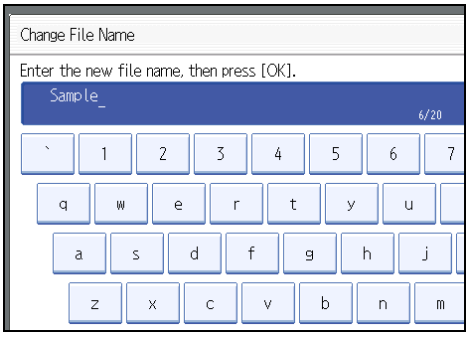
Changing the file name

Change the name of a stored document.

1. **Press [Change File Name].**



2. **Press [←], [→], [Backspace], or [Delete All], and then re-enter the file name.**



3. **Press [OK].**

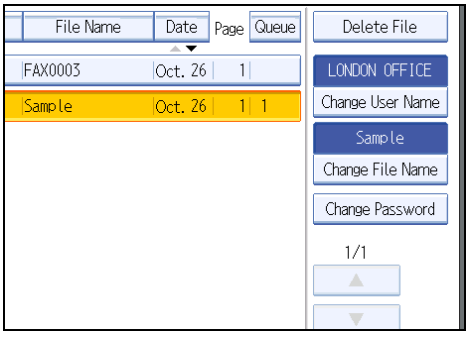
Note

- For details about text entry, see “Entering Text”, About This Machine.

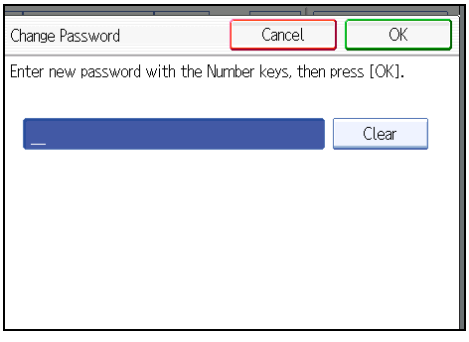
Changing the password

Change the password of a stored document.

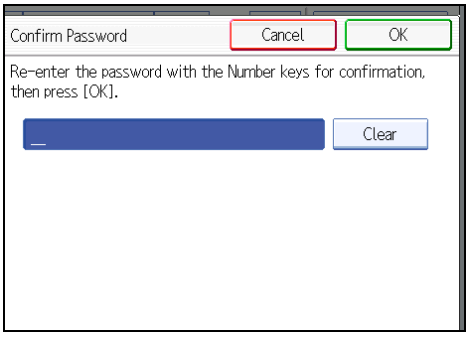
1. **Press [Change Password].**



2. **Enter a new password using the number keys, and then press [OK].**



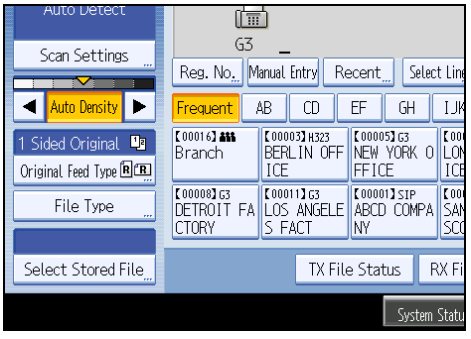
3. **Enter the password again, and then press [OK].**



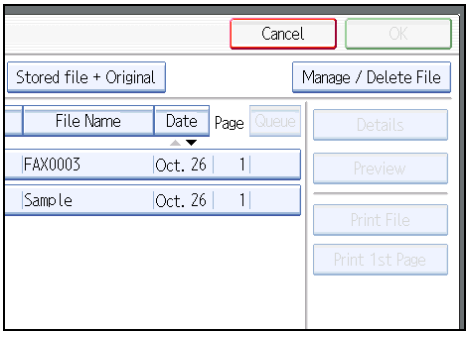
Deleting a Stored Document

Use this function to delete stored documents.

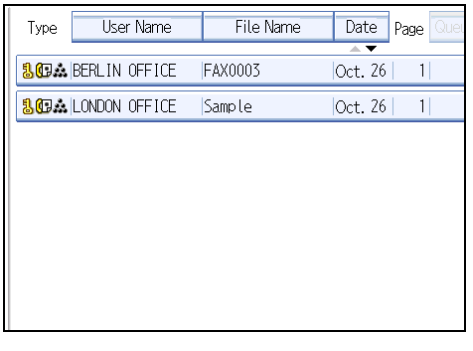
1. **Press [Select Stored File].**



2. **Press [Manage / Delete File].**

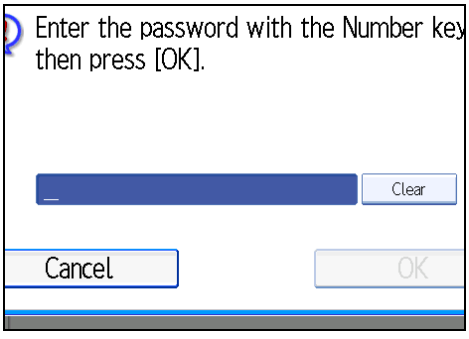


3. **Select the document you want to delete.**



You can also delete multiple documents at once.

4. **Enter a password using the number keys, and then press [OK].**



5. **Press [Delete File].**
6. **Press [Yes].**

   If you do not want to delete the document, press [No].
7. **Press [Exit].**

   The standby display appears.

6. Fax via Computer

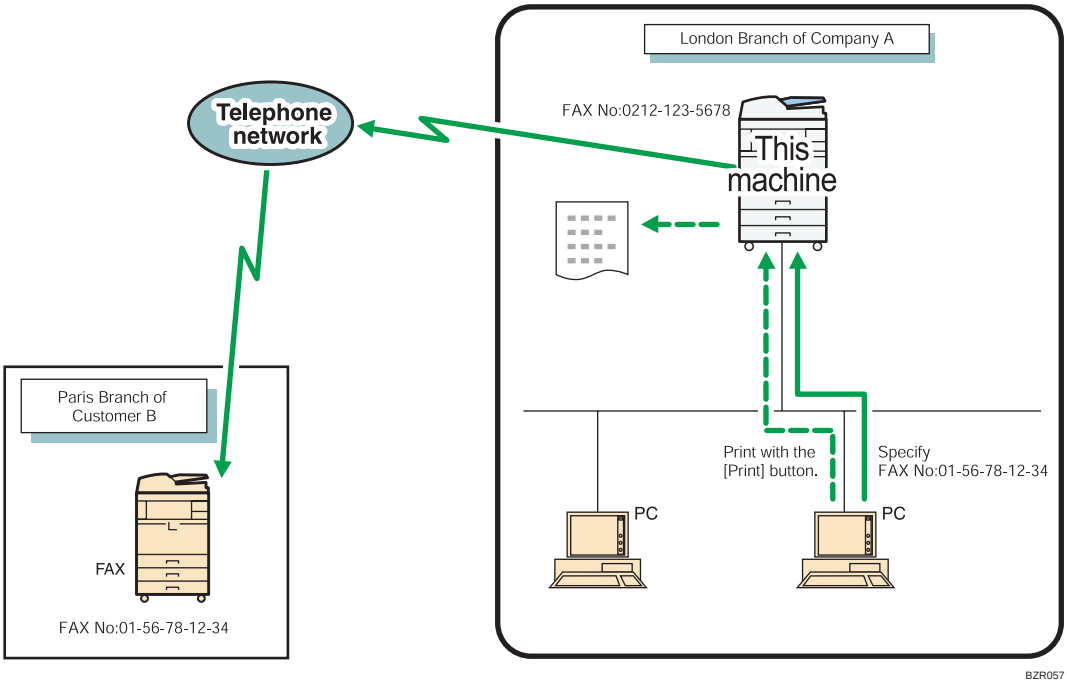
This section explains how to use this machine's facsimile function from a computer via a network.

Sending Fax Documents from Computers

You can send a document created with a Windows application from a computer connected to the machine to another fax machine.

Connect computers to the machine via parallel port, LAN, wireless LAN, or USB 2.0.

- To send a fax, simply select [Print...] from the Windows application, then select LAN-Fax as the printer, and then specify a destination. LAN-Fax enables paperless faxing from your computer to the other destinations.
- In addition to sending faxes, the LAN-Fax Driver allows this machine to be used for printing out documents prepared on a computer for proof checking.
- To use the LAN-Fax Driver, connect this machine to computers and make the necessary network settings, and then install the LAN-Fax Driver and the related utilities on your computer.



Important

- **Errors occurring when the machine is used as a LAN-Fax will not be displayed on the computer. Check for errors by using Web Image Monitor. See Web Image Monitor help.**

Note

- It is recommended that you use Web Image Monitor running under the same network environment as this machine. Otherwise, the Web browser may not open and an error may occur.
- This function supports both IPv4 and IPv6 addresses.

Before Use

To use LAN-Fax features, a LAN-Fax Driver must be installed on your computer.

You can install the LAN-Fax Driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site. You must also make the required computer to fax network settings on the machine, according to the type of connection.

Note

- When a personal computer and the machine are connected in parallel: See "Printing with Parallel Connection", Printer Reference and "Connecting the Machine", Network and System Settings Reference.
- When using Ethernet or wireless LAN, see "Connecting the Machine", Network and System Settings Reference.
- If you are using the 64-bit version of an operating system, download the LAN-Fax Driver from the manufacturer's Web site.

Using the Software

This section provides information about LAN-Fax Driver, Address Book, and LAN-Fax Cover Sheet Editor on the CD-ROM provided with this machine.

LAN-Fax Driver

This driver allows you to use LAN-Fax functions.

Important

- **All operations cannot be guaranteed depending on the system environment.**

Location of the file

The following folder is on the CD-ROM:

- LAN-Fax Driver for Windows 2000/XP/Vista/7, Windows Server 2003/2003 R2/2008

  \DRIVERS\LAN-FAX\XP_VISTA

Operating environment

- Computer

PC/AT compatible

- Operating systems

  Microsoft Windows 2000/XP/Vista/7

  Microsoft Windows Server 2003/2003 R2/2008

- Display

  VGA 640 × 480 pixels or more

Note

- Before beginning installation, exit all other applications.

Address Book

Address Book helps you edit LAN-Fax transmission destinations.

Operating systems

Microsoft Windows 2000/XP/Vista/7

Microsoft Windows Server 2003/2003 R2/2008

LAN-Fax Cover Sheet Editor

LAN-Fax Cover Sheet Editor helps you edit LAN-Fax cover sheets.

Operating systems

Microsoft Windows 2000/XP/Vista/7

Microsoft Windows Server 2003/2003 R2/2008

Auto Run program

The installers for various drivers and utilities launch automatically as Auto Run programs when you insert the CD-ROM.

LAN-Fax Driver, Address Book, and LAN-Fax Cover Sheet Editor can be installed by Auto Run.

Important

- If the plug and play function starts, click [Cancel] in the [Found New Hardware] dialog box, and then insert the CD-ROM.
- Auto Run might not work automatically with certain OS settings. If this is the case, double-click "SETUP.EXE", located on the CD-ROM root directory, or click [Run SETUP.EXE] in the [AutoPlay] dialog box.
- If you want to cancel Auto Run, hold down the left [Shift] key while inserting the CD-ROM. Keep the [Shift] key held down until the computer stops reading the CD-ROM.

- **Clicking [Cancel] during installation aborts the installation. If you cancel the installation, restart your computer and install the rest of the software or printer driver.**

Note

- Manage Printers permission is required to install the drivers. Log on as an Administrators group member.

Installing Individual Applications

You need to install a LAN-Fax Driver on your computer before using the LAN-Fax functions.

Address Book and LAN-Fax Cover Sheet Editor are installed with the LAN-Fax Driver. Address Book helps you edit LAN-Fax transmission destinations. LAN-Fax Cover Sheet Editor helps you edit LAN-Fax cover sheets.

Use the following procedure to install LAN-Fax Driver, Address Book, and LAN-Fax Cover Sheet Editor at one time.

Using the Standard TCP/IP Port

This describes how to install the LAN-Fax Driver using the Standard TCP/IP Port.

Important

- **Manage Printers permission is required to install the drivers. Log on as an Administrators group member.**
- **In an IPv6 environment, you cannot use the Standard TCP/IP Port. Use the SmartDeviceMonitor for Client port.**

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**
4. **Click [LAN-Fax Driver].**
5. **The software license agreement appears in the [License Agreement] dialog box.**

   After reading the agreement, click [I accept the agreement.], and then click [Next >].
6. **Click [Next >].**
7. **Double-click [Printer Name : <LAN-Fax M8>].**
8. **Click [Port :], and then click [Add].**
9. **Click [Standard TCP/IP Port], and then click [OK].**

   Configure the Standard TCP/IP Port settings, and then see Windows Help if [Standard TCP/IP Port] does not appear.

10. **Click [Next >] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.**
11. **Enter the machine name or IP address in the [Printer Name or IP Address :] box.**

    The [Port Name :] text box automatically obtains a port name. Change this name if necessary.
12. **Click [Next >].**
13. **Click [Finish] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.**

    The installation start dialog box reappears.
14. **Check that the port of the machine is displayed in [Port :].**
15. **Click [Continue].**

    The driver installation starts.
16. **After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].**

    Restart the computer to complete installation.

Note

- To stop installation of the selected drivers, click [Cancel] before installation is complete.
- Auto Run might not work automatically with certain OS settings. If this is the case, double-click "SETUP.EXE", located on the CD-ROM root directory, or click [Run SETUP.EXE] in the [AutoPlay] dialog box.

Using the SmartDeviceMonitor for Client port

This describes how to install the LAN-Fax Driver using the SmartDeviceMonitor for Client port.

For details about SmartDeviceMonitor for Client, see "Downloading Utility Software", About This Machine.

Important

- **To use this function, you must first download SmartDeviceMonitor for Client from the manufacturer's Web site and install it on your computer. Contact your local dealer for information on downloading SmartDeviceMonitor for Client.**
- **Manage Printers permission is required to install the drivers. Log on as an Administrators group member.**

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

    The installer starts.
3. **Select an interface language, and then click [OK].**
4. **Click [LAN-Fax Driver].**
5. **The software license agreement appears in the [License Agreement] dialog box.**

    After reading the agreement, click [I accept the agreement.], and then click [Next >].

6. **Click [Next >].**
7. **Double-click [Printer Name : <LAN-Fax M8>].**
8. **Click [Port :], and then click [Add].**
9. **Click [SmartDeviceMonitor], and then click [OK].**
10. **To configure port settings using TCP/IP, click [TCP/IP], and then click [Search].**

    A list of printers using TCP/IP appears.

    To configure port settings using IPP, proceed to step 12.
11. **Select the machine you want to use, and then click [OK].**

    Only printers that respond to a broadcast from the computer appear. To use a machine not listed here, click [Specify Address], and then enter the IP address or host name of the machine.

    Proceed to step 17.
12. **To configure port settings using IPP, click [IPP].**
13. **In the [Printer URL] box, enter "http://machine's IP address/printer" as the machine's address.**

    If the server authentication is issued, enter "https://printer's IP address/printer" to enable SSL (a protocol for encrypted communication). Internet Explorer 5.0.1, or higher version must be installed to use SSL.(example IP address: 192.168.15.16)

    http://192.168.15.16/printer

    https://192.168.15.16/printer

    You can enter "http://machine's IP address/ipp" as the machine's address.
14. **Enter a name for identifying the machine in [IPP Port Name]. Use a name different from the one of any existing ports.**

    If a name is not specified here, the address entered in the [Printer URL] box becomes the IPP port name.
15. **Click [Detailed Settings] to make necessary settings.**

    For details about the settings, see SmartDeviceMonitor for Client Help.
16. **Click [OK].**
17. **Check that the port of the machine is displayed in [Port :].**
18. **Click [Continue].**

    Installation starts.
19. **After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].**

    Restart the computer to complete installation.

Note

- To stop installation of the selected drivers, click [Cancel] before installation is complete.

- Auto Run might not work automatically with certain OS settings. If this is the case, double-click "SETUP.EXE", located on the CD-ROM root directory, or click [Run SETUP.EXE] in the [AutoPlay] dialog box.

Setting LAN-Fax Driver Properties

This section explains how to set properties required for using LAN-Fax Driver.

Note

- Manage Printers permission is required to set the properties for LAN-Fax Driver. Log on as an Administrators group member.
- The method for selecting LAN-FAX Driver will vary according to your operating system. For details, see Windows Help.

Setting print properties

This section explains how to make settings such as paper size or resolution.

1. **On the [Start] menu, select [Control Panel]. Then select [Printers and Other Hardware], and then [Printers and Faxes].**

   In Windows 2000, point to [Settings] on the [Start] menu, and then click [Printers].

   In Windows XP Professional or Windows Server 2003/2003 R2, select [Printers and Faxes] on the [Start] menu.

   In Windows Vista or Windows Server 2008, select [Control Panel] on the [Start] menu. Then select [Hardware and Sound], and then [Printers].

   In Windows 7, select [Devices and Printers] on the [Start] menu.

2. **Right click the [LAN-Fax M8], and then click [Printing Preferences...] to set the following properties.**
   - Paper Size
   - Orientation
   - Tray
   - Resolution
3. **Click [OK].**

Making settings for option configuration

Make settings for optional units installed in this machine.

1. **On the [Start] menu, select [Control Panel]. Then select [Printers and Other Hardware], and then [Printers and Faxes].**

   In Windows 2000, point to [Settings] on the [Start] menu, and then click [Printers].

   In Windows XP Professional or Windows Server 2003/2003 R2, select [Printers and Faxes] on the [Start] menu.

   In Windows Vista or Windows Server 2008, select [Control Panel] on the [Start] menu. Then select [Hardware and Sound], and then [Printers].

   In Windows 7, select [Devices and Printers] on the [Start] menu.

2. **Select to highlight [LAN-Fax M8], then click [Properties] on the [File] menu.**

   In Windows 7, right click the [LAN-Fax M8], and then click [Printer Properties].

3. **Click the [Accessories] tab, and then make the settings for the option configuration.**
4. **Select the check boxes for the installed optional units.**
5. **Click [Apply].**

   Option configuration settings are complete.

6. **Click [OK].**

[Accessories] tab

The [Accessories] tab contains the following items besides option configuration items.

- Prohibit manual destination entry

  Check this option to inhibit direct destination specification.

- Enable E-mail

  Check this when using Internet Fax with the LAN-Fax function.

- IP-Fax

  Check this option when using IP-Fax.

  After checking this option, select a protocol by clicking an appropriate radio button.

Note

- If the options on this machine are not configured as instructed, LAN-Fax functions may fail.
- If this machine is connected to a network and SmartDeviceMonitor for Client is installed on your computer, configuration of each option installed on the machine will be performed automatically. If the settings do not match the installed optional units, click [Load from Device].

Basic Transmission

This section explains how to send fax documents created using Windows applications.

To send a fax, simply select [Print...] from the Windows application, then select [LAN-Fax M8] as the printer, and then specify a destination in the [LAN-Fax] dialog box.

Open the application document you want to send or create a new document, and then perform the following procedure.

For details, see LAN-Fax Driver's Help.

Important

- **When entering a destination directly or using the destination list of the LAN-Fax to specify a destination, you cannot specify an e-mail destination and folder destination.**

1. **On the [File] menu, click [Print...].**
2. **Select [LAN-Fax M8] in the list.**
3. **Click [Print].**

   The LAN-Fax dialog box appears.

   The setting method may differ depending on the application you are using. In all cases, select [LAN-Fax M8] for the printer.
4. **Specify the destination.**

   You can specify the destination using the following methods:

   - "Specifying a destination using a destination list"
   - "Specifying a destination using Address Book"
   - "Entering a destination directly"

   When user authentication is used with this machine, click [User Settings...].
5. **Specify necessary options.**

   For details about specifying options, see "Specifying Options" and "Confirming Transmission Results by E-mail".
6. **Click [Send].**

   When you click [Send & Print], the fax is sent to the destination and your machine prints a copy of the document you sent.

Note

- The machine can retain documents sent from a LAN-Fax Driver as files to be sent.
- For the maximum values of the following items, see "Maximum Values".
  - Number of destinations you can specify per file
  - Number of documents sent from a LAN-Fax Driver that the machine can retain as files to be sent
- When the computer and machine are connected via USB 2.0, a printing error message such as "This document failed to print" might appear, even though the print job was sent to the machine correctly. If this happens, check the print job transmission result on the machine's control panel. For details about how to check the transmission result, see "Checking the Transmission Result (Transmission File Status)".

Reference

- p.248 "Checking the Transmission Result (Transmission File Status)"
- p.312 "Specifying a destination using a destination list"
- p.313 "Specifying a destination using Address Book"
- p.314 "Entering a destination directly"
- p.315 "Specifying Options"
- p.318 "Confirming Transmission Results by E-mail"
- p.427 "Maximum Values"

Specifying a destination using a destination list

This section explains how to specify destinations in the machine's Address Book using LAN-Fax Driver.

Important

- **To use a destination list to specify a destination, you must insert the machine's address book data into the destination table of the LAN-Fax Driver. See "Using the Machine's Address Book as the LAN-Fax Destination List".**

1. **Click the [Address Book] or [Specify Destination] tab.**

   The [Address Book] or [Specify Destination] tab appears.

2. **Select the [Device Address] (or [Use device address]) check box.**

   Device addresses registered by selecting the [Use device address] check box in the Address Book will appear on the [Address Book] tab.

3. **The address is displayed in the [Device Address] field on the [Address Book] tab. On the [Specify Destination] tab, enter the registration number of the Destination key in the [Device Address:] box.**

4. **Click [Set as Destination].**

   The entered destination is added and appears in the [List of Destination:] box.

   If you add a destination by mistake, click the wrong destination, and then click [Delete from List].

5. **To specify more destinations, repeat steps 3 and 4.**

Note

- For details about specifying destinations, see the LAN-Fax Driver's Help.

Reference

- p.324 "Using the Machine's Address Book as the LAN-Fax Destination List"

Specifying a destination using Address Book

This section explains how to specify a destination using Address Book.

Important

- **In order to use this method, you need to register destinations in the address list using Address Book.**
- **To use device address data as the LAN-Fax Driver destination table, you must convert the destinations registered on the machine to a CSV file and send that file to your computer. For details, see "Using the Machine's Address Book as the LAN-Fax Destination List".**

1. **Click the [Address Book] tab.**

   The [Address Book] tab appears.

2. **Select a CSV file containing the desired destination list, from the [Address Book:] dropdown menu.**

   Up to the three most recently used files appear in the dropdown menu. To use a destination list that did not appear, click [Browse...], and then select the file.

3. **Select [Contact] or [Group] in the [Name:] dropdown menu as the display format.**

   Destination list contents change as follows, depending on the option selected:

   - Contact: Individual name, company name, department name, fax number
   - Group: Group name

   If you selected [Group], proceed to step 5.

4. **If you selected [Contact] in step 3, select the type of fax from the [Type:] dropdown menu.**

   To send by standard fax or IP-Fax, select [Fax]. To send by Internet Fax, select [E-mail].

5. **Click the destination in the destination list to highlight it, and then click [Set as Destination].**

   The selected destination is added and appears in the [List of Destination:] box.

   If you add a destination by mistake, click the wrong destination, and then click [Delete from List].

   In the Address Book list box, directly enter the name you want to search for. You can then jump to the name you entered.

6. **To specify more destinations, repeat steps 2 through 5.**

Note

- For details about specifying destinations, see the LAN-Fax Driver's Help.
- Destination list contents can be narrowed down by selecting the first letter of a contact name, company name or group name in the [Search] dropdown menu.

Reference

- p.324 "Using the Machine's Address Book as the LAN-Fax Destination List"

Entering a destination directly

This section explains how to enter a destination manually.

1. **Click the [Specify Destination] tab.**

   The [Specify Destination] tab appears.

2. **Select the type of fax from the [Type:] dropdown menu.**

   To send by standard fax or IP-Fax, select [Fax]. To send by Internet Fax, select [E-mail].

   After you select the fax type, the items corresponding to the selected type appear.

3. **Specify the destination.**

   Specify the destination depending on the selected fax type as follows:

   - If you selected [Fax]: enter the fax number. To send by IP-Fax, enter the IP-Fax destination.
   - If you selected [E-mail]: enter the e-mail address.

   To enter a pause in the fax number, click [Pause]. If you selected [E-mail] in step 2, [Pause] is not available.

4. **Specify settings according to the type of fax transmission.**

   Specify settings according to the type of fax transmission selected in step 2, as follows:

   - If you selected [Fax], select a line or a protocol in the [Line:] list.
   - If you selected [E-mail], select the [Do not use SMTP server] check box if you want to bypass the SMTP server.

5. **Click [Set as Destination].**

   The entered destination is added and appears in the [List of Destination:] box.

   If you add a destination by mistake, click the wrong destination, and then click [Delete from List].

6. **To specify more destinations, repeat steps 2 through 5.**

Note

- For details about specifying destinations, see the LAN-Fax Driver's Help.
- When specifying multiple destinations, if you select different lines, the document is sent using the Simultaneous Broadcast function. For details about the Simultaneous Broadcast function, see “Simultaneous Broadcast Using Multiple Line Ports”.
- For the maximum number of digits that can be included in a destination, see “Maximum Values”.

Reference

- p.86 "Simultaneous Broadcast Using Multiple Line Ports"
- p.427 "Maximum Values"

Specifying Options

You can specify the transmission options when sending a fax.

- Sending at specific time
- Print Fax Header
- Attach a Cover Sheet
- 2 sided printing
- Preview
- Save as file
- Document Server

Note

- For details about transmission options, see the LAN-Fax Driver's Help.

To send a fax document at a specific time

Specify a time for sending fax documents.

1. **Click [Send Options].**

   The [Send Options] tab appears.

2. **Select the [Sending at specific time] check box, and then specify a transmission time.**

To print a sender stamp

Print a sender stamp that is registered in the machine.

1. **Click [Send Options].**

   The [Send Options] tab appears.

2. **Select the [Print Fax Header] check box.**

To attach a cover sheet

Attach a cover sheet to a document.

1. **Click [Send Options].**

   The [Send Options] tab appears.

2. **Select the [Attach a Cover Sheet] check box.**

   A cover sheet is added to the first page of a transmission file.

Note

- Click [Edit Cover Sheet...] to edit the cover sheet. For details, see “Editing Fax Cover Sheets”.

Reference

- p.322 "Editing Fax Cover Sheets"

To specify two-sided printing

You can configure this machine to perform two-sided printing.

1. **Click [Send Options].**

   The [Send Options] tab appears.
2. **Select the [2 sided printing] check box.**

To display preview

Selecting the [Preview] check box allows you to check how the fax document will be output at the destination.

1. **Click [Send Options].**

   The [Send Options] tab appears.
2. **Select the [Preview] check box.**
3. **Click [Send], [Print], or [Send & Print].**

   The [Preview] window appears.
4. **Click [Next] or [Previous] to check the image.**

   To close the [Preview] window, click [Cancel].

Saving as files

You can save the fax document in TIFF format (TIFF-F).

1. **Click [Send Options].**

   The [Send Options] tab appears.
2. **Select the [Save as file] check box.**
3. **Click [Save to...].**
4. **Select a folder on the folder tree.**
5. **Select a method of file naming.**

   To enter a file name manually, select the [Specify file name when saving] check box. To have the file assigned a name and saved automatically, select the [Automatically create a new file] check box.

6. **Click [OK].**
7. **Click [Save] or [Save & Send].**

   If you select [Automatically create a new file], the image file is assigned a name and saved under the specified folder.

   The file name will be RicHHMMSS.tif (HH: hours, MM: minutes, SS: seconds).
8. **Enter a file name.**

   You can also change the folder in this step.
9. **Click [Save].**

   The image file is saved in the specified folder.

Note

- Single-page documents are saved as single-page TIFF files, and multiple-page documents are saved as multi-page TIFF files.

To store the fax document on the Document Server

Store sent fax documents on the Document Server.

Important

- **If [Hard Disk Unit] is not selected in [Accessories] on the printer properties dialog box, you cannot select [Document Server].**

1. **Click [Send Options].**

   The [Send Options] tab appears.
2. **Select the [Send to Document Server] check box, and then enter a user name, file name, and password.**

Checking Transmission Using LAN-Fax Driver

From Web Image Monitor, you can check information about files sent using LAN-Fax Driver.

For the maximum number of transmission results you can check, see “Maximum Values”.

Note

- The job history may differ from the machine's transmission results. In that case, refer to the machine's transmission results.
- See the Web Image Monitor's Help for details.

Reference

- p.427 "Maximum Values"

Confirming Transmission Results by E-mail

After communicating in the LAN-Fax mode, this function transmits the communication results with the computer by e-mail.

When you have done [Send] or [Send & Print] using the LAN-Fax, and when the communication was successful, it transmits e-mail of the transmission result.

Result notification e-mail is sent when printing is complete, or if an error occurs during communication between this machine and a computer.

1. **Click the [E-mail Settings] tab.**
2. **Select the [Notify] check box under [E-mail TX results].**
3. **Enter the destination.**

   When entering the e-mail address directly, click the [Specify destinations] radio button, and then enter the e-mail address in the [Specify destinations] field.

   When entering the machine's programmed address, click the [Device Address] radio button, and then enter the registration number of the Destination key in the [Device Address] box.

   The [Device Address] box is unavailable when [Specify destinations] is selected, and you cannot enter anything in the text box.
4. **Click [Send] or [Send & Print].**

Note

- You can confirm transmission results using the E-mail TX Results function and the Communication Result Report. You can set whether to use both of these together in User Parameter (switch 10, bit 6) in the Facsimile Features menu. See “Parameter Settings”.
- If there be any insufficient configurations of the Internet Fax transmission on this machine, or if “Auto Specify Sender Name” is set to “Off”, the E-mail TX results or LAN-Fax result notification e-mail is not transmitted, and the TX results report or LAN-Fax Result Report is printed. See “Connecting the Machine”, Network and System Settings Reference. for the Internet Fax settings, and see “LAN-Fax Result Report” for the LAN-Fax Result Report.

Reference

- p.318 "LAN-Fax Result Report"
- p.375 "Parameter Settings"

LAN-Fax Result Report

This section explains the LAN-Fax Result Report.

If “E-mail TX results” is set to “Notify”, if there be any insufficient configurations of the Internet Fax transmission on this machine, or if “Auto Specify Sender Name” is set to “Off”, the E-mail TX results or

LAN-Fax result notification e-mail is not transmitted, and the TX results report or LAN-Fax Result Report is printed. If the “E-mail TX Results” of “Sender Name” has not been set to on, the LAN-Fax Result Report is printed.

Note

- Whether or not the LAN-Fax Result Report is printed, can be configured with User Parameter (Switch 20, bit 0) in the Facsimile Features menu. See “Parameter Settings”.
- When executing [Send] or [Send & Print] with LAN-Fax Driver, and when the E-mail TX Result Report has not arrived, the Communication Result Report is printed. For details about Communication Result Report, see “Communication Result Report (Memory Transmission)”.

Reference

- p.251 "Communication Result Report (Memory Transmission)"
- p.375 "Parameter Settings"

Printing and Saving

You can print documents created using Windows applications.

Open the application document you want to print or create a new document, and then perform the following procedure.

1. **On the [File] menu, click [Print...].**
2. **Select [LAN-Fax M8] in the list, and then click [Print].**

   The [LAN-Fax] dialog box appears.

   The setting method may differ depending on the application you are using. In all cases, select [LAN-Fax M8] for the printer.
3. **On the [Address Book] tab, click [Print].**

   After specifying a destination, click [Send & Print]. This function directs the machine to print any sent files.

Note

- You can also save documents in TIFF format. For details about saving in TIFF format, see “Saving as files”.
- You can select the length of time the machine keeps document data in memory if print fails due to problems such as a paper shortage or paper jams. Make this setting with User Parameters (switch 20, bit 2, 3, 4, 5) in the Facsimile Features menu. Data is deleted when the specified length of time elapses. See “Parameter Settings”.
- For details about printing the fax image, see the LAN-Fax Driver's Help.

Reference

- p.316 "Saving as files"

- p.375 "Parameter Settings"

Editing Address Book

You can program and edit destinations in the address list using the Address Book.

Note

- For details about the Address Book, see the LAN-Fax Driver's Help.
- You can use files created in CSV format as Address Book data. For this purpose, create CSV files that conform to a certain format. For more information, see Help.

Programming new destinations

Register a new destination in the LAN-Fax Address Book.

1. **On the [Start] menu, point to [All Programs], [LAN-Fax Utilities], and then click [Address Book].**

   The [Address Book] dialog box appears.

   If LAN-Fax Driver has already started up, click [Edit Address Book...].
2. **Click [New/Browse...], and then select the CSV file containing the address list to be edited.**
3. **Enter the destination and name.**

   You can enter a contact name, company name, department name, fax number, e-mail address (Internet Fax destination), and IP-Fax address. The name and destination (Fax Number, E-mail address or IP-Fax address) cannot be omitted.
4. **Click [Add].**

   The destination is added to the destination list.
5. **Click [Close].**
6. **If you made changes to a destination, a confirmation message appears. To save the changes, click [Yes].**

   If you do not want to save the changes and want to quit editing, click [No].

   To return to the editing display, click [Cancel].

   The confirmation dialog box does not appear when you have not made any changes after starting Address Book.

Note

- To program the contents of the destination list of this machine to the Address Book, select the [Use device address] check box, then enter the Destination key's registration number in the [Device Address:] field.

- For [Line:] under [Fax Number:], the following line types are selectable; G3, G3-2, G3-3, G4, G3 Dir. Auto, G3 PABX Auto, or I-G3. However, this machine does not support G4. If the machine is connected to an extension telephone line, select "G3 PABX Auto".
- For [Protocol:] under [IP-Fax address:], select [H.323] or [SIP].
- To bypass the SMTP server, under [E-mail address:], select the [Do not use SMTP server] check box.

Editing programmed destinations

Edit destinations registered in the LAN-Fax Address Book.

1. **On the [Start] menu, point to [All Programs], [LAN-Fax Utilities], and then click [Address Book].**

   The [Address Book] dialog box appears.

   If LAN-Fax Driver has already started up, click [Edit Address Book...].
2. **Click [New/Browse...], and then select the CSV file containing the address list to be edited.**
3. **Select the destination you want to edit so it is highlighted in the list.**
4. **Edit the data.**
5. **Click [Update].**
6. **Click [Close].**
7. **If you made changes to a destination, a confirmation message appears. To save the changes, click [Yes].**

   If you do not want to save the changes and want to quit editing, click [No].

   To return to the editing display, click [Cancel].

   The confirmation dialog box does not appear when you have not made any changes after starting Address Book.

Deleting programmed destinations

Delete destinations registered in the LAN-Fax Address Book.

1. **On the [Start] menu, point to [All Programs], [LAN-Fax Utilities], and then click [Address Book].**

   The [Address Book] dialog box appears.

   If LAN-Fax Driver has already started up, click [Edit Address Book...].
2. **Click [New/Browse...], and then select the CSV file containing the address list to be edited.**
3. **Select the destination you want to delete so it is highlighted in the list.**
4. **Click [Delete].**
5. **Click [Yes].**

6. **Click [Close].**
7. **If you made changes to a destination, a confirmation message appears. To save the changes, click [Yes].**

   If you do not want to save the changes and want to quit editing, click [No].

   To return to the editing display, click [Cancel].

   The confirmation dialog box does not appear when you have not made any changes after starting Address Book.

Editing Fax Cover Sheets

LAN-Fax Cover Sheet Editor allows you to edit the format for fax cover sheets.

Important

- **It is necessary to create a cover sheet file before attaching a cover sheet to fax document using LAN-Fax Driver.**

Creating a cover sheet

This section explains how to create a fax cover sheet.

You can edit the following items using LAN-Fax Cover Sheet Editor.

- Company name as destination information
- Department name as destination information
- Contact name as destination information
- Company name as sender information
- Department name as sender information
- Contact name as sender information
- Telephone number as sender information
- Fax number as sender information
- Date
- Message

1. **On the [Start] menu, point to [All Programs], [LAN-Fax Utilities], and then click [LAN-Fax Cover Sheet Editor].**

   The [LAN-Fax Cover Sheet Editor] dialog box appears.
2. **Edit the cover sheet.**

   For details about operations, see Help.
3. **Click [Save as...] on the [File] menu.**

4. **Select a folder, and then enter a file name.**
5. **Click [Save].**

Note

- Cover sheet data is stored in its own format (using "fcp" as its extension).

Attaching a created cover sheet

This section explains how to attach a created cover sheet file to a fax document.

1. **On the [File] menu, click [Print...].**
2. **Select [LAN-Fax M8] in the list, and then click [Print].**

   The [LAN-Fax] dialog box appears.
3. **Click [Edit Cover Sheet...].**

   The [Cover Sheet] dialog box appears.
4. **Select a cover sheet file from the dropdown list or after clicking [Browse...] in [Select Cover Sheet].**

   The selection made in [Select Cover Sheet] is not canceled unless you select another file. If you want to change only destination information, omit this step and proceed to step 5.
5. **Select the type of information from [To:].**

   You can select [Use Address Book], [To Whom It May Concern], [Edit Names], or [(None)]. Selecting [Edit Names] allows you to enter company, department, and contact names.
6. **To print the date, select the [With a Date] check box.**
7. **Enter the sender information.**

   You can enter company, department, and contact names, and telephone and fax numbers.

   To add a message, select the [With a Message] check box, and then enter a message.
8. **Click [OK].**
9. **Specify a destination.**
10. **Click the [Send Options] tab, and then select the [Attach a Cover Sheet] check box.**
11. **Click [Send] or [Send & Print].**

Managing Facsimile Functions Using SmartDeviceMonitor for Admin

You can check information about this machine's fax functions using a computer and save files on a computer using SmartDeviceMonitor for Admin.

Important

- **To use this function, you must first download SmartDeviceMonitor for Admin from the manufacturer's Web site and install it on your computer. Contact your local dealer for information on downloading SmartDeviceMonitor for Admin.**

Note

- For information about SmartDeviceMonitor for Admin, see "Downloading Utility Software", About This Machine.

Using the Machine's Address Book as the LAN-Fax Destination List

Using SmartDeviceMonitor for Admin, you can copy the machine's Address Book data as a CSV file to a computer. This file can then be used as the LAN-Fax Destination List, and can also be installed on the machine using [Address Management Tool]. This section explains how to use the Address Book for LAN-Fax.

Important

- **To use this function, you must first download SmartDeviceMonitor for Admin from the manufacturer's Web site and install it on your computer. Contact your local dealer for information on downloading SmartDeviceMonitor for Admin.**

Note

- When destinations registered in groups by this machine are inserted into Address Book, each person's destination is determined according to the following order of priority (check before inserting and changing the order of priority, if necessary): IP-Fax destination → Fax number → E-mail address
- Depending on the machine type, you may not be able to use the machine when it is updating the Address Book using CSV files (retrieved using SmartDeviceMonitor for Admin) that contain user codes.
- For details, see "SmartDeviceMonitor for Admin" Help.

Copying the machine's Address Book to a computer

1. **Launch SmartDeviceMonitor for Admin.**

   The machine is automatically detected and its model and IP address appear in the network list.

   If nothing appears in the list, select [Search/Monitoring Settings] in the [Searched Device List] menu, then select the [Specify Address] check box and enter the machine's IP address in the [From] and [To] boxes, and then click [Add] and [OK]. Then check the machine's IP address. To do this, on the machine's control panel, press the [User Tools/Counter] key, then press [System Settings], [Interface Settings], and then [Machine IPv4 Address]. If the machine's IP address still does not appear in the list, check the settings of any security applications that are installed, as these settings might be disabling display of the IP address.

2. **Select the model of your machine, click [Tools], and then click [Address Management Tool].**
3. **In the [Enter Authentication Information] dialog box, specify the user name and password, and then click [OK].**

   Enter the factory-set user name “admin”, and leave the password blank.

   The “Address Management Tool - Receiving Information” message appears briefly, and then the machine's Address Book appears.
4. **In the [Address Management Tool] dialog box, click [File], and then click [Export Data].**

   If the "The password information cannot be reused in any device." message appears, click [OK].
5. **Select where to store the file, and then click [Save].**

   The following three files will be stored:

   - “Machinemodel_addr.csv”
   - “Machinemodel_faxinfo.csv”
   - “Machinemodel_taginfo.csv”

   “Machinemodel_addr.csv” will be used as the Address Book file.

   The Address Book data is now stored in the computer.
6. **Close the [Address Management Tool] dialog box, and then close SmartDeviceMonitor for Admin.**

   This will be followed by a procedure for displaying the computer's Address Book file on the LAN Fax screen.

Using the Address Book stored in the computer for LAN-Fax

1. **On the [File] menu, click [Print...].**
2. **Select [LAN-Fax M8], and then click [Print].**

   The LAN-Fax dialog box appears.
3. **In [Address Book], click [Browse...].**
4. **Select the Address Book file, and then click [Open].**

   Select “Machinemodel_addr.csv”.

   The Address Book appears.
5. **Specify the destination.**

   For details about sending the file, see “Sending Fax Documents from Computers”.

Reference

- p.303 "Sending Fax Documents from Computers"

LAN-Fax Operation Messages

This section explains typical operation error messages displayed on the computer when using the LAN-Fax Driver, and solutions to those messages.

Message	Causes and Solutions
The number of entries in Destinations exceed the limits. Up to 500 entries can be entered.	The number of destinations specified exceeds the maximum possible. The maximum number of destinations that can be specified at one time is 500.
"LAN-Fax" has already been launched. Cannot launch it again.	The [LAN-Fax] dialog box is already open. Quit LAN-Fax once, and then start it up again.
Failed to allocate memory.	Available memory on the computer is insufficient. Quit applications currently not in use.

Viewing Fax Information Using a Web Browser

You can view received fax documents and their lists or print these documents using Web Image Monitor on a network computer.

Note

- It is recommended that you use Web Image Monitor running under the same network environment as this machine. Otherwise, the Web browser may not open and an error may occur.
- When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.
- You need to select "Store" as the "Reception File Setting" in the Facsimile Features menu. For details about Reception File Setting, see "Reception File Setting".
- For details about using Web Image Monitor, see "Monitoring and Configuring the Machine", Network and System Settings Reference.

Reference

- p.360 "Reception File Setting"

Viewing, Printing, and Deleting Received Fax Documents Using Web Image Monitor

This section explains how to view and/or print received fax documents using Web Image Monitor.

Viewing received fax documents using a Web browser

Check the content of received documents stored in the machine.

1. **Start a Web browser.**
2. **Enter "http://(IPv4 address, IPv6 address or host name of this machine)/" in the address bar.**

   The top page of Web Image Monitor is displayed.
3. **Click [Fax Received File] in the left pane.**
4. **If you have programmed a user code for the stored reception file, enter the code, and then press [OK].**

   A list of the received fax documents appears.

   If the programmed user code was deleted using the Address Book Management function under System Settings, a message indicating incorrect user code entry appears. If this is the case, reprogram a user code.

5. **Click the property icon of the desired fax document.**

   When viewing a list of the fax documents, you can select the thumbnail display, icon display, or detail display. Click , , or .

6. **View the content of the fax document.**

7. **To download the received fax document, click [PDF] or [Multi-page: TIFF], and then click [Download].**

   A downloading confirmation dialog box appears.

   When you select [PDF], make the necessary "PDF File Security Settings" before clicking [Download]. Acrobat Reader starts and the selected document is displayed.

8. **Close the Web browser.**

Note

- If your computer cannot be connected to Web Image Monitor, see "Monitoring and Configuring the Machine", Network and System Settings Reference.
- To enlarge the preview image, click [Enlarge Image]. Enlargement cannot be performed without Acrobat Reader installed. For more information, see Help on the Web Image Monitor.
- To download the document data on the list of received fax documents, click [TIFF] or [PDF]. For details about downloading, see the Web Image Monitor Help.
- The method for downloading differs depending on the selected format. For more information, see Help on the Web Image Monitor.

Printing fax information using a Web browser

Print received documents stored in the machine.

1. **Start a Web browser.**
2. **Enter "http://(IPv4 address, IPv6 address or host name of this machine)/" in the address bar.**

   The top page of Web Image Monitor is displayed.

3. **Click [Fax Received File] in the left pane.**

   The list of received fax documents appears.

4. **Select the check box of the fax document to be printed.**

   When viewing a list of the fax documents, you can select the thumbnail display, icon display, or detail display. Click , , or .

5. **Click [Print].**
6. **Click [Print].**

   To cancel printing, press [Cancel] before clicking [Print].

7. **Click [OK].**

   The display returns to that of step 5.

8. **Close the Web browser.**

Note

- You can change the printing order of selected multiple documents. You can also have documents printed on both sides of the paper. For more information, see Help on the Web Image Monitor.

Deleting fax information using a Web browser

Delete received documents stored in the machine.

1. **Start a Web browser.**
2. **Enter "http://(IPv4 address, IPv6 address or host name of this machine)/" in the address bar.**

   The top page of Web Image Monitor is displayed.

3. **Click [Fax Received File] in the left pane.**

   The list of received fax documents appears.

4. **Select the check box of the fax document to be deleted.**

   When viewing a list of the fax documents, you can select the thumbnail display, icon display, or detail display. Click , , or .

5. **Click [Delete].**
6. **Click [Delete File(s)].**

   To cancel deletion, press [Cancel] before clicking [Delete File(s)].

7. **Click [OK].**

   The display returns to that of step 5.

8. **Close the Web browser.**

Note

- After selecting multiple documents, you can also cancel deletion of some of the selected documents. For more information, see Help on the Web Image Monitor.

Programming Destination Information from Web Browser

If the receiving machine is compliant with T.37 full mode Internet Fax, you can program the receiver's properties from Web Image Monitor.

You can program the following properties:

- Compression Type

- Paper size
- Resolution

Note

- For a detailed description, see Help for Web Image Monitor.
- For details about the T.37 full mode, see “T.37 Full Mode”.
- When a receiver that is programmed as full mode in the Address Book returns a Reception Notice e-mail, the contents of the newly received e-mail overwrite the existing information.

Reference

- p.44 "T.37 Full Mode"

To edit machine properties already programmed

Use Web Image Monitor to edit information about the destination machine registered in the Address Book.

1. **Start a Web browser.**
2. **Enter “http://(IPv4 address, IPv6 address or host name of this machine)/” in the address bar.**

   The top page of Web Image Monitor is displayed.
3. **Click [Login], and then enter the Administrator's name and password.**
4. **Click [Address Book] in the left pane.**

   The Address Book is displayed.
5. **Click the radio button to the left of the machine you want to modify, and then click [Change].**

   The [Change User] page appears.
6. **Set the properties for Internet Fax data format other than the mode selection.**

   If you change the mode to “Simple Mode”, you cannot set machine properties.
7. **Click [OK] at the upper or lower left of the screen.**

   To cancel the setting, click [Cancel] at the upper or lower left of the screen.

   The Address Book is displayed.
8. **Close the Web browser.**

To add new receiver

Use Web Image Monitor to add a new destination to the Address Book.

1. **Start a Web browser.**

2. **Enter "http://(IPv4 address, IPv6 address or host name of this machine)/" in the address bar.**

   The top page of Web Image Monitor is displayed.

3. **Click [Login], and then enter the Administrator's name and password.**
4. **Click [Address Book] in the left pane.**

   The Address Book is displayed.

5. **Click [Add User].**

   The [Add User] page appears.

6. **Enter the registration number, name, and e-mail address, then set the necessary properties.**

   You can set the Internet Fax data format after entering the e-mail address.

7. **Click [Full Mode] under [Internet Fax Data Format], and set the properties according to the receiver's properties.**

   If you change the mode to "Simple Mode", you cannot set machine properties.

8. **Click [OK] at the upper or lower left of the screen.**

   To cancel the setting, click [Cancel] at the upper or lower left of the screen.

   The Address Book is displayed.

9. **Close the Web browser.**

Delivering Files Received by Fax

Documents received by the machine can be viewed on or downloaded to a computer using the network delivery server ScanRouter delivery software.

This is a useful function, enabling you to view and store documents on your computer without printing them.

Important

- **The ScanRouter delivery software*1 is required as a delivery server.**
- **To view or download documents stored in the delivery server inbox, you must first download DeskTopBinder Lite from the manufacturer's Web site and install it on your computer. Contact your local dealer for information on downloading DeskTopBinder Lite.**

*1 For details to purchase ScanRouter delivery software, contact your local dealer. With the GlobalScan NX (optional), you can also use this function.

Using the delivery server, you can eliminate the task of retrieving and delivering documents.

Functions

Delivery server provides the following functions:

- Use the delivery server to associate incoming documents (SUB Code, Own Name, and Own Fax Number) with receivers, so documents are delivered to the intended receivers.
- You can select the delivery method for incoming documents: “Save in the delivery server inbox”, “Send as an e-mail attachment”, or “Save in the designated folder on the computer”. Incoming documents with no SUB Code, Own Name, or Own Fax Number are saved in the delivery server inbox. You can also set it so that the received documents are stored in the specified delivery server inbox according to the line used for reception.
- You can check or download received documents stored in the delivery server inbox using DeskTopBinder.

Note

- Documents received in Personal Boxes are also forwarded to the delivery server.
- To send received documents to your computer as e-mail attachments, your computer must have an e-mail application that is compatible with the ScanRouter delivery software.
- To create a network using the delivery server, you must specify the machine's Fax RX File Transmission settings under System Settings. The delivery server must also be configured. For details about Fax RX File Transmission, see “File Transfer”, Network and System Settings Reference.
- For details about the delivery server (ScanRouter delivery software), see the ScanRouter delivery software's Help or instructions.
- For information about DeskTopBinder, see DeskTopBinder's manual and Help.

7. Facsimile Features

This chapter describes user tools in the Facsimile Features menu.

Accessing User Tools

User Tools allow you to change or set defaults.

Note

- Operations for system settings differ from normal operations. Always quit User Tools when you have finished.
- Any changes you make with User Tools remain in effect even if the main power switch or operation switch is turned off, or the [Energy Saver] or [Clear Modes] key is pressed.
- Default settings are shown in bold type.

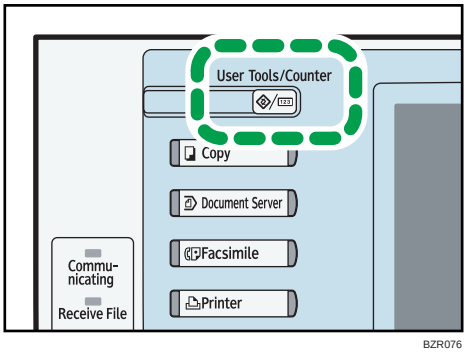
Changing Default Settings

This section describes how to change the settings of User Tools.

Important

- If Administrator Authentication Management is specified, contact your administrator.

1. **Press the [User Tools/Counter] key.**



BZR076

2. **Select the menu.**

   To change the Facsimile Features, press [Facsimile Features].

3. **Select the user tool you want to change.**
4. **Change settings by following instructions on the display, and then press [OK].**

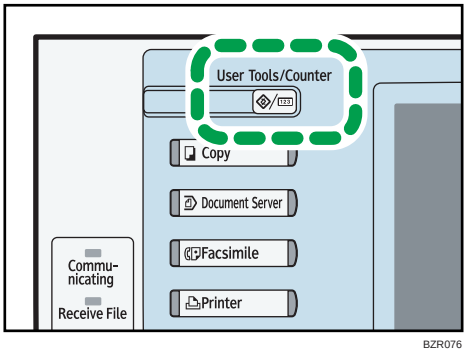
Note

- To cancel changes made to settings and return to the initial display, press the [User Tools/Counter] key.

Quitting User Tools

This section describes how to end User Tools.

1. **Press the [User Tools/Counter] key.**



BZR076

Note

- You can also quit User Tools by pressing [Exit].

General Settings

This section describes the user tools in the General Settings menu under Facsimile Features.

Quick Operation Key (1-3)

Frequently used functions programmed as Quick Operation keys are shown on the menu immediately after the power is turned on.

If [On] is selected, the Quick Operation keys can be programmed with the following items:

- On
  - Manual E-mail RX
  - Send Later
  - Subject
  - Text
  - Recept. Notice
  - E-mail TX Results
  - BCC Transmission
  - Std. Message
  - Fax Header Print
  - Label Insertion
  - Closed Network
  - SUB Code TX
  - SEP Code Reception
  - Stamp
  - Print Memory Lock
  - TX File Status
  - RX File Status
  - Journal
  - Print Stored RX File
  - TX Status Report
  - Forwarding
  - Switch RX Mode
- Off

Up to three functions can be programmed to Quick Operation keys.

Functions that are highlighted have already been set.

Default for Quick Operation Key 1: **[No]** (not programmed)

Default for Quick Operation Key 2: **[TX File Status]**

Default for Quick Operation Key 3: **[RX File Status]**

Switch Title

Select the title to be shown on the destination list.

Default: **[Title 1]**

Search Destination

Select a destination list to be used in "Search Destination".

You can select from the Address Book, or a registered LDAP Server.

To search from an LDAP server, it is necessary to register the LDAP server in [System Settings] and set [LDAP Search] to [On].

Default: **[Address Book]**

For details about "LDAP Search", see "Administrator Tools", Network and System Settings Reference.

Communication Page Count

Checks the transmission and reception, and totals on the display.

- Pages Sent:

  Total number of transmitted pages
- Pages Received:

  Total number of received pages

1. Press [Facsimile Features].
2. Press [General Settings].
3. Press [Communication Page Count].
4. After checking the display, press [Exit].
5. Press the [User Tools/Counter] key.

Adjust Sound Volume

Adjust the sound volume during On Hook Mode and Immediate Transmission.

Default: **[level 2]**

Box Setting

The following functions are for delivery and transfer of documents:

- Personal Box
- Information Box
- Transfer Box

For details about Box Setting, see "Box Settings".

Box Setting: Print List

You can print a list of the currently registered Personal Boxes, Information Boxes, and Transfer Boxes.

On Hook Mode Release Time

Use this function to specify a time to cancel On Hook mode after you transmit using On Hook dialing.

Default: **[3 minutes]**

Delete Recent Destinations

You can delete destinations stored in “Recent Destinations”.

When you press [Delete Recent Destinations], a confirmation message appears. To delete the recent destinations, select [Delete].

Reference

- p.399 "Box Settings"

Scan Settings

This section describes the user tools in the Scan Settings menu under Facsimile Features.

Program / Change / Delete Scan Size

You can program, change, or cancel frequently used scan sizes.

For details about programming Scan Size, see “Program / Change / Delete Scan Size”.

Reference

- p.368 "Program / Change / Delete Scan Size"

Send Settings

This section describes the user tools in the Send Settings menu under Facsimile Features.

Max. E-mail Size

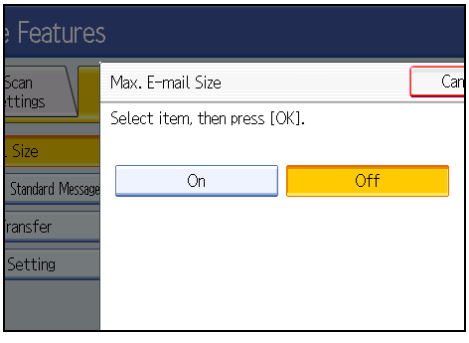
When the other party has a limit on the size of e-mail messages that can be received, or sending data heavy e-mail causes problems, you can make settings to limit the size of sent e-mail. When this function is set to on, transmission of e-mail that exceeds the set size is aborted.

Default: **[Off]**

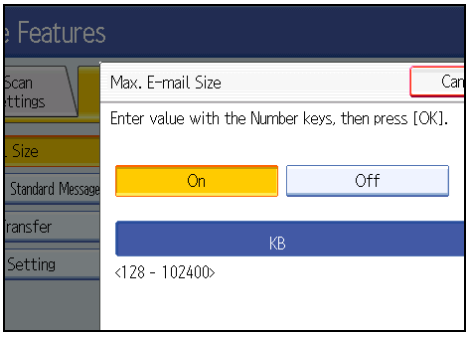
When e-mail exceeds the maximum file size, an Error Report is output, and the e-mail is deleted.

Even when e-mail does not exceed the size limit, it may be rejected if it does not meet the requirements of the server settings.

1. Press [Facsimile Features].
2. Press [Send Settings].
3. Press [Max. E-mail Size].
4. Press [On].



5. Enter the maximum e-mail size using the number keys.



Maximum e-mail size can be between 128 and 102,400 KB.

If you make a mistake, press [Clear], and then enter again.

6. Press [OK].

Program / Change / Delete Standard Message

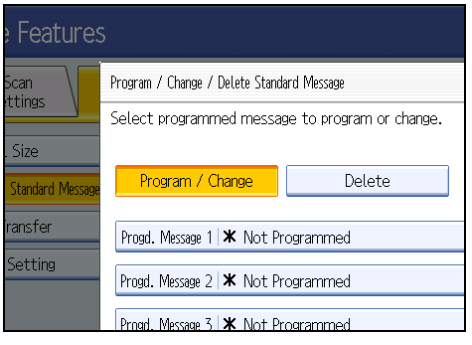
Program standard messages to be printed at the top of the first page of the original of the opposite party. It is useful for personalizing messages such as sending greetings.

You can program three standard messages. You cannot change the "Confidential", "Urgent", "Please phone", or "Copy to corres. Section" messages.

The procedure is the same for both programming and changing.

For details about how to enter the text, see "Entering Text", About this Machine.

1. Press [Facsimile Features].
2. Press [Send Settings].
3. Press [Program / Change / Delete Standard Message].
4. Check that [Program / Change] is selected.



To delete a registered standard message, press [Delete], then select the message you want to delete, and then press [Delete]. Then proceed to step 8.

5. Select the message you want to program or change.
6. Enter a new message.
7. Press [OK].

   To cancel a registration, press [Cancel].
8. Press [Exit].
9. Press the [User Tools/Counter] key.

Memory File Transfer

If the printer has stopped functioning or run out of toner or paper, you can transfer the files in facsimile memory to another machine for printing. Note that this function forwards all documents that are stored in memory, including files that were received with Memory Lock. Use this function only in emergencies. For details, see "Memory File Transfer".

Backup File TX Setting

You can specify whether or not to send to a selected folder the backup of a file sent by Memory Transmission.

By setting [Backup File TX Setting] to [On] and selecting the destination folder, you can automatically send to the selected folder the backup of a file sent by Memory Transmission using the machine's control panel, Web Image Monitor or LAN-Fax.

Select the destination folder for the backup file from the address book.

Default: **[Off]**

If you set [Backup File TX Setting] to [On] but the Backup File TX fails, the machine automatically prints a backup file TX communication failure report.

Using the parameter settings (switch 37 bit 2, 3), you can specify whether or not the backup file is printed along with the failure report when a backup file TX communication failure occurs.

The backup file format will be the same as that specified for files forwarded to folder destinations. Using the parameter settings (switch 21, bit 3), select TIFF or PDF as the format for sending a file. The format is factory-preset to TIFF.

Using the parameter settings, you can specify the redial interval (switch 35, bits 0-7) and the maximum number of redials (switch 36, bits 0-7). The redial interval is factory-preset to 15 minutes; the maximum number of redials, to 192.

Using the parameter settings, (switch 37, bit 0) you can specify whether to stop sending a backup file if the destination folder becomes full while the machine is sending or waiting to send a fax or the backup file.

For details about Parameter Setting, see “Parameter Settings”.

1. Press [Facsimile Features].
2. Press [Send Settings].
3. Press [Backup File TX Setting].
4. Press [On].

   If there is a folder already programmed, a folder name is shown. If you want to change the folder, press [Folder] and proceed to step 5.
5. Specify a folder for back up, and then press [OK].

   The folder name is shown to the right of [Folder].
6. Press [OK].
7. Press the [User Tools/Counter] key.

Reference

- p.353 "Memory File Transfer"
- p.375 "Parameter Settings"

Reception Settings

This section describes the user tools in the Reception Settings menu under Facsimile Features.

Switch Reception Mode

Specify the method for receiving fax documents.

Default: **[Auto Reception]**

1. Press [Facsimile Features].
2. Press [Reception Settings].
3. Press [Switch Reception Mode].
4. Select the reception mode, and then press [OK].

   To cancel the selection, press [Cancel].
5. Press the [User Tools/Counter] key.

For details about reception mode, see "Reception Modes".

Program Special Sender

By programming particular receivers as Special Sender in advance, you can have Special Senders treated differently.

For details about how to program Special Sender, see "Special Senders to Treat Differently".

Program Special Sender: Print List

You can print the Special Sender List.

1. Press [Facsimile Features].
2. Press [Reception Settings].
3. Press [Program Special Sender: Print List].
4. Press the [Start] key.

   To cancel printing a list before pressing the [Start] key, press [Cancel].

   To cancel printing a list after pressing the [Start] key, press [Stop Printing].
5. Press the [User Tools/Counter] key.

Forwarding

Specify whether or not received fax documents are to be forwarded to a programmed receiver.

Default: **[Off]**

For details about Forwarding, see "Forwarding".

Reception File Setting

Select whether received documents are saved on the hard disk to be printed later or printed immediately without being saved.

Default: **[Print]**

For details about Reception File Setting, see “Reception File Setting”.

Stored Reception File User Setting

The administrator can be specified for managing documents stored on the machine after fax documents are received. To specify the administrator, enter the administrator user code for managing documents using Web Image Monitor. You can also restrict control panel operations such as printing or deleting received documents.

Default: **[Off]**

For details about Stored Reception File User Setting, see “Stored Reception File User Setting”.

SMTP RX File Delivery Settings

This function is available on systems that allow routing of e-mail received via SMTP.

Default: **[Off]**

For details about SMTP RX File Delivery Settings, see “SMTP RX File Delivery Settings”.

2 Sided Print

Specify whether or not received fax documents are to be printed on both sides of the paper.

Default: **[Off]**

Checkered Mark

Specify whether or not a checkered mark is to be printed on the first page of received fax documents.

Default: **[On]**

Center Mark

Specify whether or not a center mark is to be printed halfway down the left side and at the top center of each page received.

Default: **[Off]**

Print Reception Time

Specify whether or not the received date, time, and file number are printed at the bottom of received fax documents.

Default: **[Off]**

Reception File Print Quantity

Specify the number of copies to be printed for each fax document received.

- 1 to 10 set(s)

Default: **[1 set(s)]**

Paper Tray

Use this function to print fax documents received from programmed senders and fax documents from other senders, using different paper trays.

Display of tray names may differ depending on the options installed.

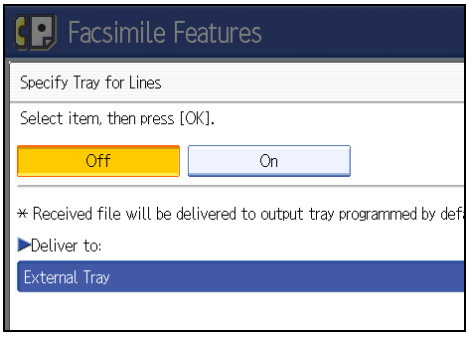
Default: **[Auto Select]**

Specify Tray for Lines

Specify a paper tray for each line (telephone, Internet Fax, IP-Fax).

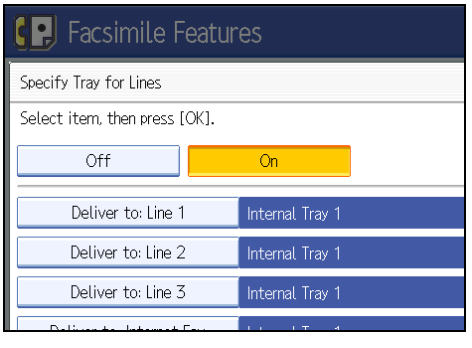
Default: **[Off]**

1. Press [Facsimile Features].
2. Press [Reception Settings].
3. Press [▼Next].
4. Press [Specify Tray for Lines].
5. Press [On].



If you select [Off], the received fax is delivered to a default tray.

6. Select the line type.



7. Select a tray to deliver the received paper onto, and then press [OK].

   If you want to specify another line type, repeat from step 6.

8. Press [OK].
9. Press the [User Tools/Counter] key.

Folder Transfer Result Report

You can set whether the Folder Transfer Result Report is transmitted to the specified e-mail address, when folders are programmed as the forwarding destinations to which documents are sent from all senders or Special Senders.

You must first register the destination for the Folder Transfer Result Report in the destination list. See "Registering a Fax Destination".

Specify a group destination to transfer documents to multiple destinations. A maximum of 500 parties can be specified in a group. See "Registering Names to a Group", Network and System Settings Reference.

Even if the Folder Transfer Result Report is not successfully transmitted, the report is not printed on this machine.

Default: **[Do not E-mail]**

1. Press [Facsimile Features].
2. Press [Reception Settings].
3. Press [▼Next].
4. Press [Folder Transfer Result Report].
5. To send the Folder Transfer Result Report, press [E-mail].

   To not send the Folder Transfer Result Report, press [Do not E-mail], and then press [OK].
6. Press the Destination key of the e-mail address for notification, and then press [OK].
7. Check the selected destination, and then press [OK].
8. Press [Exit].
9. Press the [User Tools/Counter] key.

Memory Lock Reception

When you switch Memory Lock on, received documents are stored in memory and not printed automatically. When a document is received in the Memory Lock mode, the Confidential File indicator blinks. To print this document, enter the Memory Lock ID. A user without the ID cannot print the document.

This prevents unauthorized users from accessing the document. To use Memory Lock, program the Memory Lock ID, and then switch Memory Lock on. To store incoming documents from Special Senders only in Memory Lock, program each sender with "Special Senders to Treat Differently".

This function cannot be used with Internet Fax or Mail to Print.

Default: **[Off]**

1. Press [Facsimile Features].
2. Press [Reception Settings].
3. Press [▼Next].
4. Press [Memory Lock Reception].
5. Select [On] or [Off], and then press [OK].
6. Press [Exit].
7. Press the [User Tools/Counter] key.

Reference

- p.118 "Registering a Fax Destination"
- p.200 "Reception Modes"
- p.360 "Reception File Setting"
- p.363 "Stored Reception File User Setting"
- p.365 "SMTP Reception File Delivery Settings"
- p.355 "Forwarding"
- p.386 "Special Senders to Treat Differently"

Initial Settings

This section describes the user tools in the Initial Settings menu under Facsimile Features.

Parameter Setting

User Parameters allow you to customize various settings to suit your needs.

For details about Parameter Setting, see “Parameter Settings”.

Parameter Setting: Print List

You can print Parameter Setting list.

Print this list to see the current User Parameter settings. However, not all the parameter settings are printed.

1. Press [Facsimile Features].
2. Press [Initial Settings].
3. Press [Parameter Setting: Print List].
4. Press the [Start] key.

   To cancel printing a list before pressing the [Start] key, press [Cancel].

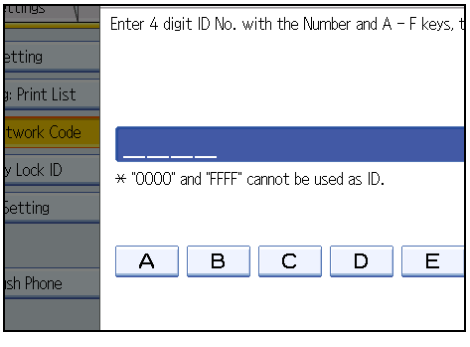
   To cancel printing a list after pressing the [Start] key, press [Stop Printing].
5. Press the [User Tools/Counter] key.

Program Closed Network Code

Register an ID required for Closed Network communication.

1. Press [Facsimile Features].
2. Press [Initial Settings].
3. Press [Program Closed Network Code].
4. Enter an ID using the number keys and [A] to [F], and then press [OK].

   Register a four-digit number using 0 to 9 and A to F (except for 0000 and FFFF).



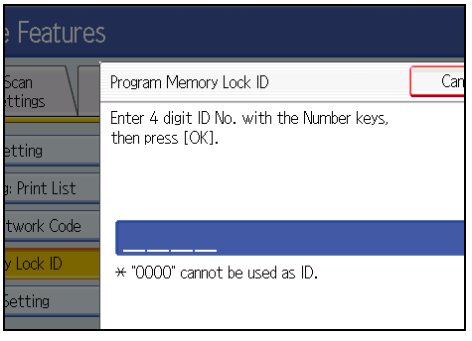
5. Press the [User Tools/Counter] key.

Program Memory Lock ID

Program a Memory Lock ID to be entered before printing documents when the Memory Lock function is activated.

1. Press [Facsimile Features].
2. Press [Initial Settings].
3. Press [Program Memory Lock ID].
4. Enter an ID using the number keys, and then press [OK].

   A Memory Lock ID can be any four-digit number, except 0000.



   If you make a mistake, press [Clear] before pressing [OK], and then try again.

5. Press the [User Tools/Counter] key.

For details about printing a file received with Memory Lock, see "Printing a File Received with Memory Lock".

Internet Fax Setting

You can select to display the Internet Fax tab or not. When you want to send an Internet Fax, set On to display the tab.

Default: **[Off]**

Select Dial / Push Phone

Use this function to select a line type when the machine is connected to a G3 analog line.

Dial and Push lines are available for selection.

If the optional extra G3 interface unit is installed, settings for the extra G3 lines appear.

This function is not available in some regions.

Default: **[Push Button Phone]**

1. Press [Facsimile Features].
2. Press [Initial Settings].
3. Press [Select Dial / Push Phone].
4. Press [Push Button Phone] or [Dial Phone (10PPS)] to select the line, and then press [OK].

5. Press the [User Tools/Counter] key.

Program Fax Information

Program information to be shown on the display of the other machine and printed as a report. The following information can be programmed.

- Fax Header
- Own Name
- Own Fax Number

For details about how to program Fax Information, see "Registering Fax Information".

Enable H.323

Specify whether or not H.323 is used for IP-Fax transmission.

Default: **[Off]**

Enable SIP

Specify whether or not SIP is used for IP-Fax transmission.

Default: **[Off]**

H.323 Settings

Set the IPv4 address or host name, and alias telephone number of the gatekeeper.

If you select "On" using the User Parameters, you can use the gatekeeper server. See "Parameter Settings" (switch 34, bit 0).

You can use numbers, and symbols ("#" and "*") for registration of the alias telephone number in H.323 Settings. Make sure you enter these characters correctly.

1. Press [Facsimile Features].
2. Press [Initial Settings].
3. Press [H.323 Settings].
4. Press [Change] for each property.
5. Enter the IPv4 address or host name, and alias telephone number and press [OK].
6. Press [OK].
7. Press the [User Tools/Counter] key.

SIP Settings

Set the SIP server's IP address or host name, and SIP user name. You can register either an IPv4 or IPv6 address for the SIP server. You cannot register an IPv4-mapped address.

If you select "On" using the User Parameters, you can use the SIP server. See "Parameter Settings" (switch 34, bit 1).

You can use alphanumeric symbols (lower and upper cases) and symbols ("; ", "? ", ": ", "&", "=", "+", "$", ",", "!", "-", "_", ".", "! ", "~", "*", "#", "'", "(", ") ", "%", "/", "[", "]", and "@") for registration of the SIP User Name in SIP Settings. Make sure you enter these characters correctly.

Use numbers and periods (".") to enter the correct IPv4 addresses for the gatekeeper, SIP server, and gateway. To obtain the correct IP addresses, consult the administrator.

1. Press [Facsimile Features].
2. Press [Initial Settings].
3. Press [SIP Settings].
4. Press [Change] for each property.

   A proxy server relays call requests and responses.

   A redirect server processes request destination inquiries.

   A register server registers location information of user agents (which correspond to telephones or facsimiles on public telephone lines) on an IP network.
5. Enter the IP address or host name, and SIP user name, and then press [OK].
6. Specify whether to perform SIP digest authentication.

   If you select [On], enter the password using up to 128 characters.

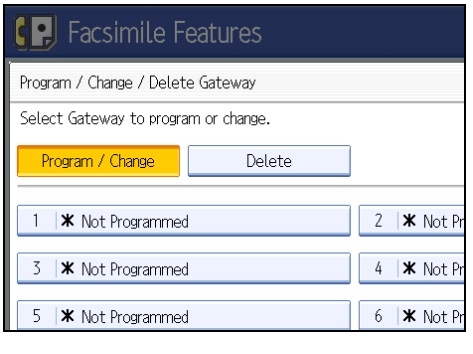
   Re-enter the password after the message "Confirm Password" appears on the screen.
7. Press [OK].
8. Press the [User Tools/Counter] key.

Program / Change / Delete Gateway

Register, change, or delete the gateway used for transmission to IP-Fax. You can register either an IPv4 or IPv6 address for the Gateway. You cannot register an IPv4-mapped address.

- Program / Change
  1. Press [Facsimile Features].
  2. Press [Initial Settings].
  3. Press [Program / Change / Delete Gateway].
  4. Check that [Program / Change] is selected.
  5. Press a VoIP gateway to register.

     When registering a new VoIP gateway, press [Not Programmed].

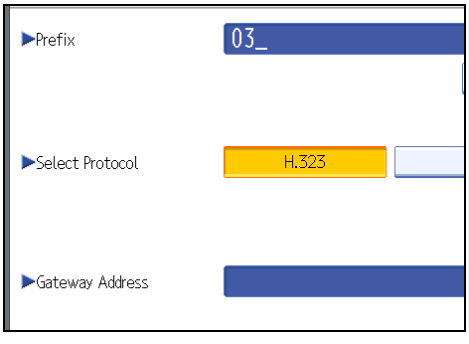


6. Press [Change] for "Prefix".
7. Enter the Prefix using the number keys, and then press [OK].

   To change the existing prefix, press [Clear], and then enter a new prefix.

   For documents sent using a VoIP gateway to G3 Fax, prefixes can be used. If the first several digits of IP-Fax number and the gateway- specific prefix are identical, documents can be transmitted using the registered digits of the gateway. For example, if both 03 and 04 have been registered as gateway number while 0312345678 is also specified, documents can be transmitted via a VoIP gateway for which 03 is used as a prefix.

   When you wish to use the gateways regardless of the IP-Fax destination numbers, register only the gateway addresses without registering the prefix.
8. Select a protocol.



9. Press [Change] for "Gateway Address".
10. Enter the gateway address, and then press [OK].
11. Press [OK].
12. Press [Exit].
13. Press the [User Tools/Counter] key.

- Delete
  1. Press [Facsimile Features].
  2. Press [Initial Settings].
  3. Press [Program / Change / Delete Gateway].
  4. Press [Delete], and then select a VoIP gateway to delete.
  5. Press [Delete] on the confirmation message.

     If you do not want to delete the gateway you have selected, press [Do not Delete].
  6. Press [Exit].
  7. Press the [User Tools/Counter] key.

Menu Protect

You can prevent unauthenticated users from changing the user tools settings.

For details, consult your administrator.

E-mail Setting

Set whether or not to use “E-mail” in the fax functions.

Default: **[Off]**

Folder Setting

Set whether or not to use “folder” in the fax functions.

Default: **[Off]**

Reference

- p.270 "Printing a File Received with Memory Lock"
- p.371 "Registering Fax Information"
- p.375 "Parameter Settings"

Memory File Transfer

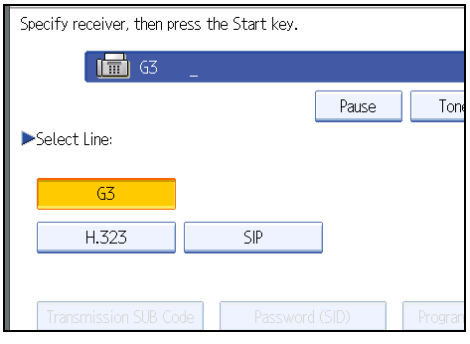
If the printer has stopped functioning or run out of toner or paper, you can transfer the files in facsimile memory to another machine for printing. Note that this function forwards all documents that are stored in memory, including files that were received with Memory Lock. Use this function only in emergencies.

Important

- **A fax or IP-Fax destination can be specified as a forwarding destination. An Internet Fax, e-mail, or folder destination cannot be specified as a forwarding destination.**

1. **Press [Facsimile Features].**
2. **Press [Send Settings].**
3. **Press [Memory File Transfer].**

   The display will differ depending on installed optional units.
4. **Select the line of the forwarding destination.**



5. **Enter the forwarding destination.**

   If you make a mistake, press [Clear], and then enter the destination again.

   To cancel forwarding, press [Cancel]. The display returns to that of step 3.
6. **Press the [Start] key.**

   After transmission, the display returns to that of step 3.
7. **Press the [User Tools/Counter] key.**

Note

- The document is not deleted after you forward it. It is stored in the machine.
- All documents stored in facsimile memory are forwarded, including files received with Memory Lock or as confidential documents. Note that this function also forwards received documents stored on the hard disk.
- You can use SUB Codes and a password to specify a forwarding destination. Take care to change only those settings that are required.

Selecting a Line Port or Protocol

This procedure explains how to select a line port or protocol under [Memory File Transfer]. To specify an IP-Fax address as a forwarding destination, you must first select a protocol.

1. **From "Select Line", select the line port or protocol you require.**

   You must select either [H.323] or [SIP] if you are specifying an IP-Fax address as a forwarding destination.

Setting a SUB Code

This procedure explains how to set a SUB Code under [Memory File Transfer].

1. **Press [Transmission SUB Code].**
2. **Enter a SUB Code using the number keys, and then press [OK].**

Setting a Password

This procedure explains how to set a password under [Memory File Transfer].

1. **Press [Password (SID)].**
2. **Enter a password using the number keys, and then press [OK].**

Forwarding

Print documents received and forward to a specified End Receiver. This is useful if, for example, you are visiting another office and would like a copy of your documents to be sent to that office. You can also specify a "e-mail" and "folder" as the forwarding destination.

Important

- **You can select end receivers only from among destinations programmed in the Address Book.**

A fax number, IP-Fax destination, Internet Fax destination, e-mail address, and folder destination can be set as the forwarding destination.

When you wish to change the end receivers depending on the senders, specify the end receivers by the senders, at "Program Special Sender". Documents not received from specified senders are sent to the destination specified in this function. For details about how to program Special Sender, see "Special Senders to Treat Differently".

According to the "Reception File Setting" setting in the "Facsimile Features", you can specify whether or not to print or store forwarded documents. See "Parameter Settings" (switch 11, bit 6).

Deleting a destination specified as a forward destination from the destination list causes the settings of the forward destination to be deleted, so they must be registered again. When a destination is changed, a document is transmitted to the new destination. If there is no destination of the specified type, you can set which destination to be used as an alternative destination. See "Parameter Settings" (switch 32, bit 0).

You can program one of the Quick Operation keys with operations for this function. See "General Settings".

If you have specified folder destination for forwarding, you can specify the file format used for forwarding. See "Parameter Settings" (switch 21, bit 3).

User Parameters (switch 37, bit 4) on the Facsimile Features menu allows you to include the sender's name in the names of files sent to folders. However, garbling of the file name and data loss can result if the receiver's operating system cannot accept certain characters in file names. To prevent this, use User Parameters (switch 37, bit 5) to limit the file names to plain characters only. If you limit file names to plain characters only but errors still occur, disable display of the sender's name in the file name of documents forwarded to folders. For details, see "Parameter Settings".

Reference

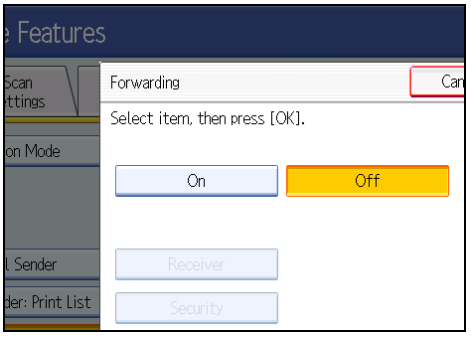
- p.335 "General Settings"
- p.375 "Parameter Settings"
- p.386 "Special Senders to Treat Differently"

Programming an End Receiver

Important

- **One end receiver can be registered for each special sender. To register two or more end receivers, use group destination. However, a maximum of 498 destinations can be specified in a group.**

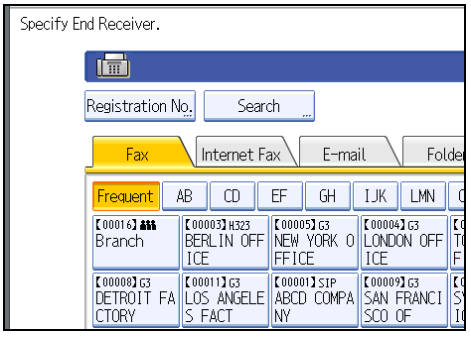
1. **Press [Facsimile Features].**
2. **Press [Reception Settings].**
3. **Press [Forwarding].**
4. **Press [On].**



If there is an End Receiver already programmed, a receiver name is shown. If you want to change the receiver, press [Receiver] and proceed to step 5.

To cancel Forwarding, press [Off] and proceed to step 9.

5. **Specify an End Receiver using the destination list, and then press [OK].**



Press the transmission type tab to switch the destination between fax number, Internet Fax destination, e-mail address, and folder destination.

IP-Fax destination appears in the fax destination list.

Set an e-mail destination in Address Book Management under Administrator Tools in the System Settings menu. See “E-mail Destination”, Network and System Settings Reference.

Set a folder destination in Address Book Management under Administrator Tools in the System Settings menu. See “Registering Folders”, Network and System Settings Reference.

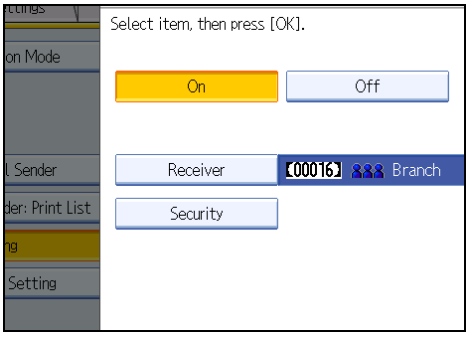
If you have specified folder destination for forwarding, you can specify the file format used for forwarding. See “Parameter Settings” (switch 21, bit 3).

If you make a mistake, press [Clear] before pressing [OK], and then try again.

6. **Press [Security].**

   If not specifying the security function, proceed to step 9.

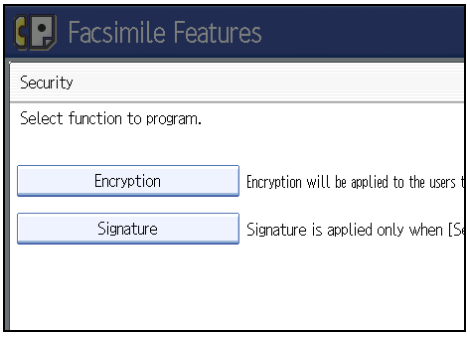
   Security is set to use S/MIME authentication. For details about the security settings, consult your administrator.



7. **Select the security functions.**

   To specify encryption for documents for Forwarding, press [Encryption]. To use the encryption function, the address must be stored in the Address Book and have the encryption option enabled. For details about Encryption, consult your administrator.

   To attach a signature to documents for Forwarding, press [Signature]. For details about Signature, consult your administrator.



8. **Press [OK].**
9. **Press [OK].**
10. **Press the [User Tools/Counter] key.**

Note

- Select [Encrypt All] in the encryption settings and encrypted e-mail is sent regardless of the encryption settings in [Security]. For details about encryption, consult your administrator.
- The electronic signature is limited in the following ways, depending on the S/MIME settings on Web Image Monitor. For details about the electronic signature, consult your administrator.
  - If [Set Individually] is set:

    You can set [Signature] in [Security] and attach an electronic signature to email for every transmission.
  - If [Do not Use Signatures] is set:

    Even if you press [Security], [Signature] does not appear.
  - If [Use Signatures] is set:

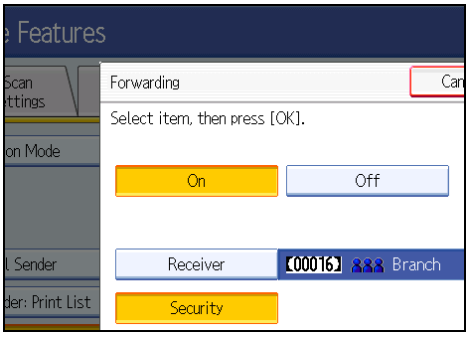
    An electronic signature is attached when you send email. The [Signature] setting in [Security] cannot be cancelled.

Reference

- p.375 "Parameter Settings"

Quitting the Forwarding Function

1. **Press [Facsimile Features].**
2. **Press [Reception Settings].**
3. **Press [Forwarding].**
4. **Press [Off], and then press [OK].**



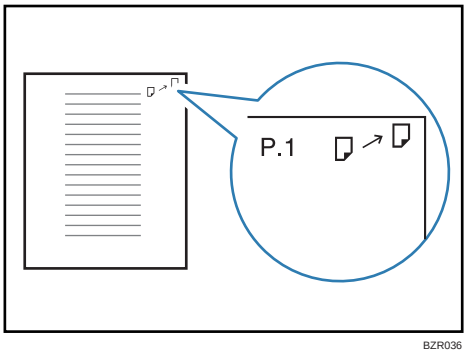
5. **Press the [User Tools/Counter] key.**

Forwarding Mark

This section describes Forwarding Mark.

You can print a Forwarding Mark on receiver's documents that have been forwarded.

The receiver can distinguish between forwarded and normally received documents.



This function is not available when memory forwarding is performed to an e-mail destination or folder destination.

You can specify whether or not to print a Forwarding Mark in the User Parameters (switch 02, bit 0). See “Parameter Settings”.

Reference

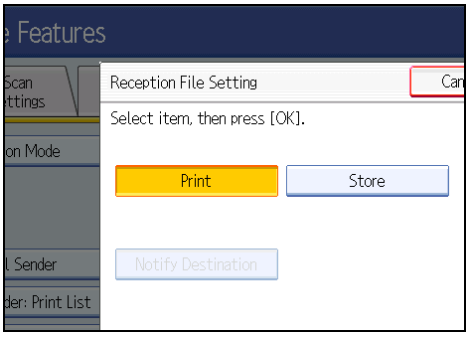
- p.375 "Parameter Settings"

Reception File Setting

Specify whether received documents are to be saved on the hard disk or printed immediately without being saved. You can print stored documents repeatedly and download them as images to a computer using Web Image Monitor. If you select printing without saving, documents are printed each time they are received.

If you have used System Settings to specify to have received faxes distributed to the delivery server, the documents cannot be saved on the hard disk.

1. **Press [Facsimile Features].**
2. **Press [Reception Settings].**
3. **Press [Reception File Setting].**
4. **Press [Print] or [Store], and then press [OK].**



To cancel your selection, press [Cancel]. The display returns to that of step 3.

When [Store] is selected, you can select whether or not to send notice of reception to a specific e-mail address. To notify of reception, press [Notify Destination] and select an e-mail address from the Internet Fax and e-mail destinations programmed in the address book. Further, you can register a group destination. In such a case, a maximum of 500 destinations can be specified in a group.

5. **Press the [User Tools/Counter] key.**

Note

- You can use "Parameter Settings" (switch 10, bit 5) to select whether or not to print stored received documents. See "Parameter Settings".
- If [Store] is selected and a destination for notification is specified, notification of document reception can be sent to the specified e-mail address.
- Documents saved on the hard disk are categorized as received and stored documents.
- You cannot change to a different setting if received documents have been stored on the hard disk. To change to different setting, print documents stored on the hard disk if necessary, and then delete them.
- Received confidential documents are stored in memory. Use the Print Personal Box File function to print them.

- With [Store] selected, more memory space is used as the number of saved documents increases. After memory space becomes insufficient, no more documents are saved on the hard disk. When this happens, the machine starts printing and then overwriting old documents, or it deletes the received document data without printing it and then prints the Reception File Erased Report.
- You can store received documents up to a total of approximately 320 pages or 2,240 pages of A4 size Standard <ITU-T #1Chart>.
- You cannot send received documents.
- You cannot manage stored documents from the Document Server display.
- It is recommended that you use Web Image Monitor running under the same network environment as this machine. Otherwise, the Web browser may not open and an error may occur.

Reference

- p.375 "Parameter Settings"

Specifying Automatic Deletion of Incoming Faxes when an Error Occurs

Even if the machine is set to store documents on its hard disk when it cannot print them if they cannot be stored normally because of the following conditions, the machine usually prints them.

- Error occurs on the hard disk of the machine
- The memory is full
- The number of received documents exceeds the number of received documents you can store on the machine's hard disk or facsimile memory

In this case, you can have machine delete the document data without printing it. The machine prints the Reception File Erased Report to confirm information in the received document instead.

Using the User Parameters (switch 10, bit 7) on the Facsimile Features menu, you can select whether or not to turn on this function. See “Parameter Settings”.

Note

- For details about storing documents on the machine's hard disk, see “Reception File Setting”.
- You cannot change to a different setting if received documents have been stored on the hard disk. To change to different setting, print documents stored on the hard disk if necessary, and then delete them.

Reference

- p.360 "Reception File Setting"
- p.375 "Parameter Settings"

Reception Report e-mail

When a received document is stored, this report is sent to the e-mail address set as the destination for notification.

Note

- Depending on your e-mail application, a phishing warning might appear after you receive a "Reception Report e-mail". To prevent phishing warnings appearing after you receive a "Reception Report e-mail", you must add the sender to your e-mail application's exclusion list. For details about how to do this, see your e-mail application's Help.

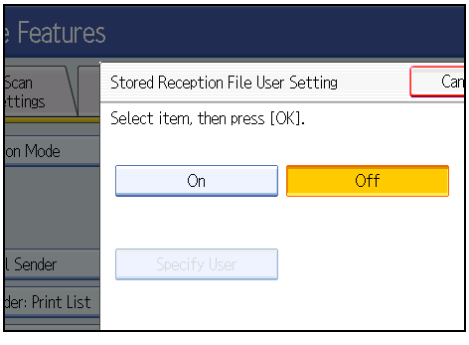
Stored Reception File User Setting

The administrator can be specified for managing documents stored on the machine after fax documents are received. To specify the administrator, enter the administrator user code for managing documents using Web Image Monitor. You can also restrict control panel operations such as printing or deleting received documents.

Important

- **You must register the administrator's User Code to the destination list in advance.**
- **It is recommended that you use Web Image Monitor operating under the same network environment as this machine. Otherwise, the Web browser may not open and an error may occur.**

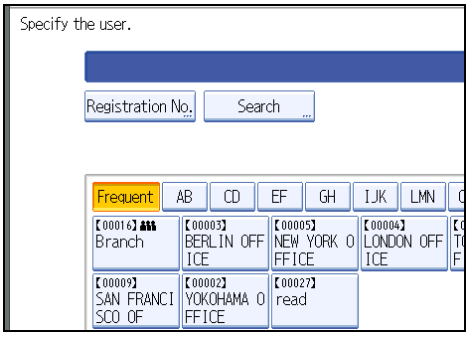
1. **Press [Facsimile Features].**
2. **Press [Reception Settings].**
3. **Press [Stored Reception File User Setting].**
4. **If you want to use a user code, press [On].**



If you do not use a user code, press [Off] and proceed to step 6.

To cancel your selection, press [Cancel]. The display returns to that of step 3.

5. **Press the Destination key of the user you wish to specify, and then press [OK].**



6. **Check the selected user, and then press [OK].**

   When a programmed user is deleted from the destination list, message "Destinations are invalid." is displayed. Enter the user again.

7. **Press the [User Tools/Counter] key.**

Note

- This function is only available when [Store] is selected in “Reception File Setting”.
- If the programmed user code was deleted using the Address Book Management function under System Settings, you cannot view received and saved documents using Web Image Monitor or the machine's control panel. Select [Off] in step 4 or reprogram the user code. See “Administrator Tools”, Network and System Settings Reference.
- To restrict control panel operations such as printing or deleting received documents, select “On” for the User Parameters (switch 10, bit 0). See “Parameter Settings”.

Reference

- p.375 "Parameter Settings"

SMTP Reception File Delivery Settings

This section describes the SMTP Reception File Delivery Settings menu under Facsimile Features.

When an authorized e-mail address is set, e-mail received from addresses that do not match the authorized address is discarded, and an error message is returned to the SMTP server.

The authorized e-mail address is compared with the addresses of e-mail originators, as described by the following examples.

- When the authorized e-mail address is set to "@aaa.abcd.com":

  abc@aaa.abcd.com - accepted

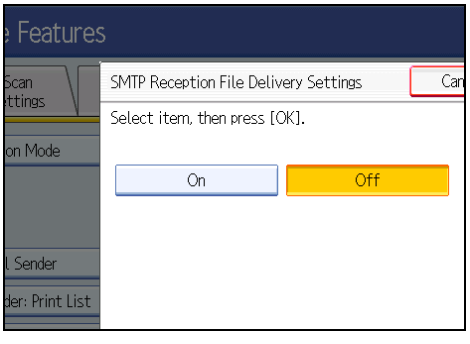
  def@aaa.xyz.com - not accepted

  abc@abcd.com - not accepted

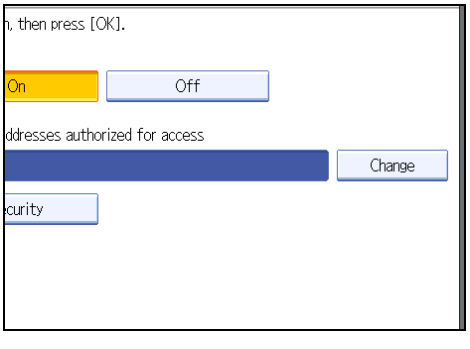
No Error Report is output even when e-mail is discarded.

This function is available on systems that allow routing of e-mail received via SMTP.

1. **Press [Facsimile Features].**
2. **Press [Reception Settings].**
3. **Press [SMTP RX File Delivery Settings].**
4. **Press [On].**



5. **Press [Change].**



6. **Enter the sending e-mail address to be authorized.**

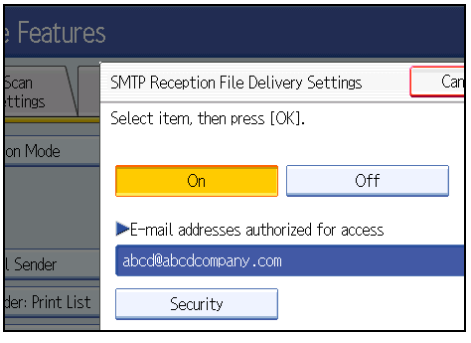
   If you make a mistake, press [←], [→], [Backspace], or [Delete All], and then enter again.

7. **Press [OK].**

8. **Press [Security].**

   If not specifying the security function, proceed to step 11.

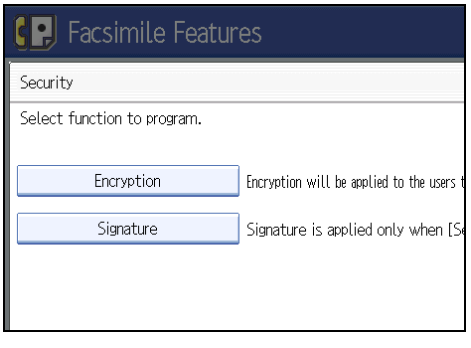
   Security is set to use S/MIME authentication. For details about the security settings, consult your administrator.



9. **Select the security functions.**

   To specify encryption for documents for delivery, press [Encryption]. To use the encryption function, the address must be stored in the Address Book and have the encryption option enabled. For details about Encryption, consult your administrator.

   To attach a signature to documents for delivery, press [Signature]. For details about Signature, consult your administrator.



10. **Press [OK].**

11. **Press [OK].**

12. **Press the [User Tools/Counter] key.**

Note

- Select [Encrypt All] in the encryption settings and encrypted e-mail is sent regardless of the encryption settings in [Security]. For details about encryption, consult your administrator.

- The electronic signature is limited in the following ways, depending on the S/MIME settings on Web Image Monitor. For details about the electronic signature, consult your administrator.
  - If [Set Individually] is set:

    You can set [Signature] in [Security] and attach an electronic signature to email for every transmission.
  - If [Do not Use Signatures] is set:

    Even if you press [Security], [Signature] does not appear.
  - If [Use Signatures] is set:

    An electronic signature is attached when you send email. The [Signature] setting in [Security] cannot be cancelled.

Program / Change / Delete Scan Size

This section describes how to program, change, and delete a Scan Size.

Important

- **When programming or changing a scan size, it is recommended that you make a record of the new size.**

When you select a scan size to scan a custom size original, two custom sizes are available (Program Size 1 and Program Size 2). Use these functions to program a custom size in advance. The procedure is the same for programming and changing.

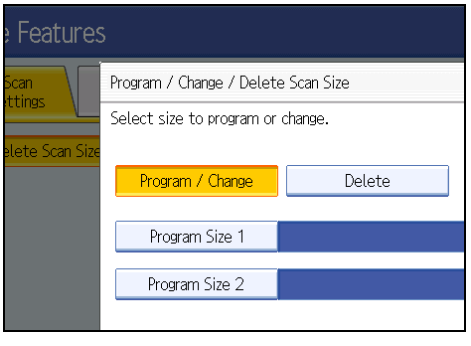
You can program up to two sizes.

Specify a horizontal length from 128 to 1200 mm, or from 5.5 to 47.0 inches.

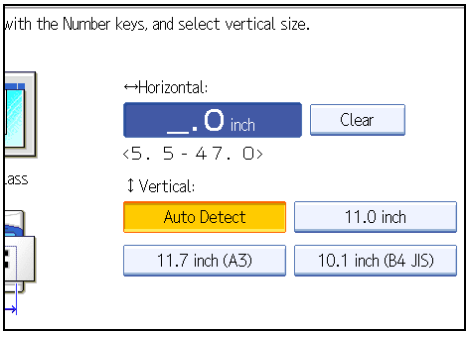
Programming/Changing a Scan Size

This section describes how to program a Scan Size.

1. **Press [Facsimile Features].**
2. **Press [Scan Settings].**
3. **Press [Program / Change / Delete Scan Size].**
4. **Make sure that [Program / Change] is selected.**
5. **Select [Program Size 1] or [Program Size 2].**



6. **Enter a horizontal size using the number keys.**



Each time you press [mm] or [inch], the units switch between "mm" and "inch".

If you enter a length and press [mm] or [inch], the length is converted automatically according to the unit (fractions are rounded off). For example, when you enter [2], [2], and [0] in millimeters and change to "inch", the length 8.7 "inch" is shown on the display. If you press [mm] again, "221 mm" is displayed.

If you make a mistake, press [Clear], and then try again.

To cancel a scan size, press [Cancel].

7. **Select a vertical size, and then press [OK].**

The displayed vertical size differs depending on the selected unit. When [mm] is selected, [Auto Detect], [210 mm (A4)], [257 mm (B4 JIS)], [297 mm (A3)], [216 mm (8 1/2)], and [279 mm (11)] are shown. When [inch] is selected, [Auto Detect], [8.3 inch (A4)], [10.1 inch (B4 JIS)], [11.7 inch (A3)], [8.5 inch], and [11.0 inch] are shown.

To cancel a scan size, press [Cancel].

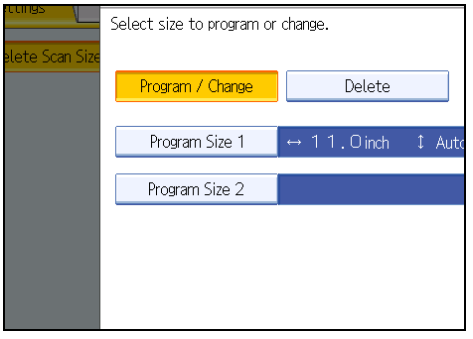
8. **Press [Exit].**
9. **Press the [User Tools/Counter] key.**

Deleting a Scan Size

This section describes how to delete the programmed Scan Size.

1. **Press [Facsimile Features].**
2. **Press [Scan Settings].**
3. **Press [Program / Change / Delete Scan Size].**

4. **Press [Delete], and then select [Program Size 1] or [Program Size 2].**



5. **Press [Delete].**

   To cancel deleting, press [Do not Delete]. The display returns to that of step 4.

6. **Press [Exit].**

7. **Press the [User Tools/Counter] key.**

Registering Fax Information

This section describes Fax Information.

You can send information to the other party when transmitting or receiving a fax document. This information is shown on the display of the other machine and printed as a report. The following information can be sent.

Important

- **You can confirm programmed settings from the User Parameter List. It is recommended that you print and keep the User Parameter List when you program or change settings. See "Initial Settings".**

Fax Header

The Fax Header is printed as the header of every fax you send. You should include your name in the Fax Header.

You can program First Name or Second Name. When you send originals using the destination list, you can select which Fax Header is printed on the document received by the other party.

You can register "Fax Header" using up to 32 alphanumeric characters and symbols.

You can use characters, symbols, numbers, and spaces.

You can set whether or not to print a Fax Header using [Fax Header Print] under "Option Setting". See "Fax Header Print".

Own Name

The Own Name is sent to the other party when you send or receive a fax. This name should include your name. The Own Name is shown on the display of the other machine and printed in a report.

Own Name can be used only if the other machine is of the same manufacturer and has the Own Name function.

You can register "Own Name" using up to 20 alphanumeric characters and symbols.

Own Fax Number

The sender's Own Fax Number is sent to the other party when sending a fax.

The received facsimile number is shown on the display of the other machine and printed in a report.

This function is available regardless of the manufacturer of the other party's machine.

You can register "Own Fax Number" using up to 20 numbers, space, and "+"symbol.

Note

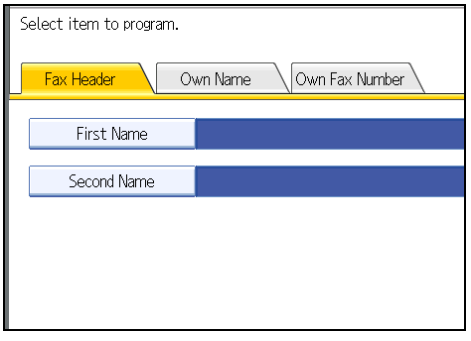
- For details about how to print Fax Header, see "Fax Header Print".

Reference

- p.193 "Fax Header Print"
- p.347 "Initial Settings"

Registering Fax Information

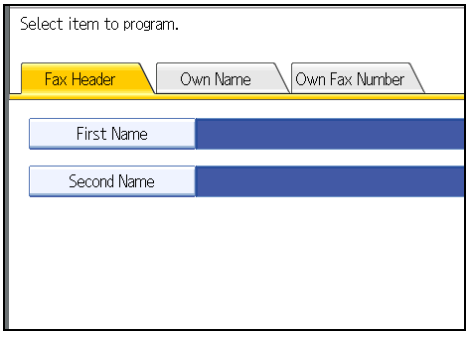
1. Press [Facsimile Features].
2. Press [Initial Settings].
3. Press [Program Fax Information].
4. Select the Fax Information you want to register.



5. Register the name and facsimile number.
6. Press [Exit].
7. Press the [User Tools/Counter] key.

Registering a Fax Header

1. Check that [Fax Header] is selected.
2. Press [First Name] or [Second Name].

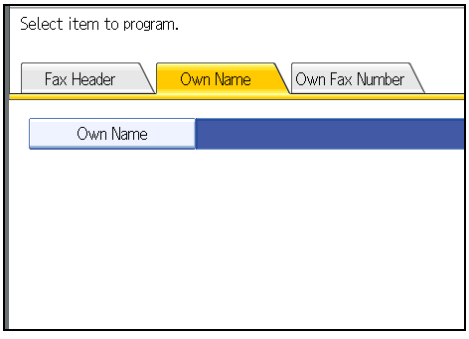


3. Enter a fax header including your Own Name and Fax Number, and then press [OK].

Registering an Own Name

1. Press [Own Name].

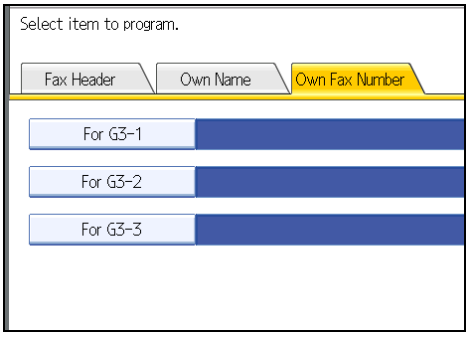
2. **Press [Own Name].**



3. **Enter your own name, and then press [OK].**

Registering an Own Fax Number

1. **Press [Own Fax Number].**
2. **Select line type to program.**



The display differs depending on the optional units installed on the machine.

3. **Enter your own facsimile's number using the number keys, and then press [OK].**

To enter a + sign or a space, press [+] or [Space].

Changing Fax Information

1. **Press [Facsimile Features].**
2. **Press [Initial Settings].**
3. **Press [Program Fax Information].**
4. **Select the Fax Information you want to change.**

To change a Fax Header, see “Registering a Fax Header”.

To change Own Name, see “Registering an Own Name”.

To change Own Fax Number, “Registering an Own Fax Number”.

5. **Press [Exit].**
6. **Press the [User Tools/Counter] key.**

Reference

- p.372 "Registering a Fax Header"
- p.372 "Registering an Own Name"
- p.373 "Registering an Own Fax Number"

Deleting Fax Information

1. **Press [Facsimile Features].**
2. **Press [Initial Settings].**
3. **Press [Program Fax Information].**
4. **Press [Fax Header], [Own Name], or [Own Fax Number] to delete.**
5. **Press the item you want to delete.**
6. **Press [Backspace] or [Delete All], and then press [OK].**

   When deleting your own facsimile's number, press [Clear], and then press [OK].
7. **Press [Exit].**
8. **Press the [User Tools/Counter] key.**

Parameter Settings

User Parameters allow you to customize various settings to suit your needs. To change function settings, set the User Parameter Switches.

Switches and Bits

Each User Parameter has a set of switches, and each of the switches consist of eight bits, whose values are "0" or "1". The right most bit is bit 0 and the left most is bit 7. You can adjust the settings to match your needs by switching the value of bits between "0" and "1".

- Switch 02

0	0	1	1	1	0	1	1
↓	↓	↓	↓	↓	↓	↓	↓
7	6	5	4	3	2	1	0

User Parameter List

User Parameter Switches are outlined in the following table.

Switch: 02, Bit: 0

Forwarding Mark

- 0: Off
- 1: On

Switch: 02, Bit: 3

TSI Print

- 0: Off
- 1: On

Switch: 03, Bit: 0

Automatic printing of the Communication Result Report

- 0: Off
- 1: On

Switch: 03, Bit: 2

Automatic printing of the Memory Storage Report

- 0: Off
- 1: On

Switch: 03, Bit: 3

Whether or not to print the SEP Code RX Reserve Report automatically

- 0: Off
- 1: On

Switch: 03, Bit: 4

Whether or not to print the SEP Code RX Result Report automatically

- 0: Off
- 1: On

Switch: 03, Bit: 5

Automatic printing of the Immediate TX Result Report

- 0: Off
- 1: On

Switch: 03, Bit: 7

Automatic printing of the journal

- 0: Off
- 1: On

Switch: 04, Bit: 0

Automatic printing of the Confidential File Report

- 0: Off
- 1: On

Switch: 04, Bit: 1

Automatic printing of Communication Failure Report and Transfer Result Report

- 0: Off
- 1: On

Switch: 04, Bit: 4

Indicates the parties

- 0: Off
- 1: On

Switch: 04, Bit: 5

Include sender's name on reports

- 0: Off
- 1: On

Switch: 04, Bit: 7

Include a portion of the image on reports

- 0: Off
- 1: On

Switch: 05, Bit: 0

Receive Service Call (SC) Condition (Substitute Reception during service call)

- 0: Possible (Substitute RX)
- 1: Not possible (Reception off)

Switch: 05, Bit: 2, 1

Substitute the reception when the machine cannot print (because paper is jammed, all paper trays have run out of paper, toner is empty, or all paper trays are out of order)

- 00: Enabled Unconditionally (Free)
- 01: Enabled when Own Name/Own Fax Number is received
- 10: Enabled for Closed Network Code match
- 11: Disabled (Reception off)

Switch: 05, Bit: 5

Print sheet is limited to that which has highest priority (Just size printing)

- 0 : Off
- 1 : On

Switch : 05, Bit: 7

Empty tray alert (Paper Empty Warning) even when one paper tray is empty

- 0: Off
- 1: On

Switch: 07, Bit: 2

Parallel Memory Transmission

- 0: Off
- 1: On

Switch: 08, Bit: 2

Authorized Reception Type

- 0: Receive from specified senders only
- 1: Receive all documents except from specified senders

Switch: 10, Bit 0

Restrict control panel operations such as printing or deleting received documents.

- 0: Off
- 1: On

Switch: 10, Bit: 1

Combine Two Originals

- 0: Off
- 1: On

Switch: 10, Bit: 3

Page reduction when printing

- 0: Off
- 1: On

Switch: 10, Bit: 5

Whether or not to print stored received documents

- 0: Off
- 1: On

Switch: 10, Bit: 6

Use both e-mail notification and printed reports to confirm the transmission result

- 0: Off
- 1: On

Switch: 10, Bit: 7

Have the machine delete the document data without printing it when an error occurs

- 0: Off
- 1: On

Switch: 11, Bit: 2

Detect and report nearly blank documents when scanning.

- 0: Off
- 1: On

Switch: 11, Bit: 6

Whether or not to print or store when forwarding according to "Reception File Setting" in "Facsimile Features"

- 0: Off
- 1: On

Switch: 14, Bit: 0

Print documents received with Auto Power-On Reception (Night Printing mode)

- 0: Immediate Printing (On)
- 1: When turning on the operation switch (Off)

Switch: 14, Bit: 3

Reset when function changed

- 0: Off
- 1: On

Switch: 15, Bit: 2, 1, 0

Selecting the available paper feed tray

(Only the numbers listed below can be entered)

- 001: Tray 1
- 010: Tray 2
- 011: Tray 3
- 100: Tray 4
- 101: Large Capacity Tray (LCT)

Switch: 15, Bit: 5

Whether or not to select the available paper feed tray

- 0: Off
- 1: On

Switch: 17, Bit: 2

Whether you need to press [Add Destination] after specifying a destination with the Destination key when broadcasting

- 0: Not necessary
- 1: Necessary

Switch : 17, Bit 3

Whether or not to reset the settings when original is scanned

- 0: On
- 1: Off

Switch: 17, Bit: 7

Receive documents by pressing the [Start] key when originals are not set

- 0: Off (no documents Received after pressing the [Start] key)
- 1: On (documents received after Pressing the [Start] key)

Switch: 18, Bit: 0

Print date with Fax Header

- 0: Off
- 1: On

Switch: 18, Bit: 1

Print transmitter origin with Fax Header

- 0: Off
- 1: On

Switch: 18, Bit: 2

Print file number with Fax Header

- 0: Off
- 1: On

Switch: 18, Bit: 3

Print page number with Fax Header

- 0: Off
- 1: On

Switch: 19, Bit: 0

Use paper delivery shift function (Offset Print)

- 0: Off
- 1: On

Switch: 19, Bit: 1

Sort Journal by line type

- 0: Off
- 1: On

Switch: 20, Bit: 0

Automatic printing of the LAN-Fax Result Report

- 0: Off
- 1: On

Switch: 20, Bit: 5, 4, 3, 2

Reprinting time of stored documents in memory that could not be printed using LAN-Fax Driver

- 0000: 0 minutes
- 0001: 1 minutes
- 0010: 2 minutes
- 0011: 3 minutes
- 0100: 4 minutes

- 0101: 5 minutes
- 0110: 6 minutes
- 0111: 7 minutes
- 1000: 8 minutes
- 1001: 9 minutes
- 1010: 10 minutes
- 1011: 11 minutes
- 1100: 12 minutes
- 1101: 13 minutes
- 1110: 14 minutes
- 1111: 15 minutes

Switch: 21, Bit: 0

Print results of sending Reception Notice Request message

- 0: Off (print only when an error occurs)
- 1: On

Switch: 21, Bit: 1

Respond to e-mail reception acknowledgment request

- 0: Off
- 1: On

Switch: 21, Bit: 2

Choose whether to print JPEG or PDF files attached to incoming e-mail

- 0: Do not print
- 1: Print

Switch: 21, Bit: 3

File format for files forwarded to folder destinations

- 0: TIFF
- 1: PDF

Switch: 21, Bit: 4

Transmit Journal by E-mail

- 0: Off
- 1: On

Switch: 21, Bit: 5

Limit printing of specified data in normal e-mail (attached TIFF files).

- 0: No
- 1: Yes

Switch: 21, Bit: 6

Display Network error

- 0: Display (On)
- 1: Not display (Off)

Switch: 21, Bit: 7

Transmit Error Mail Notification

- 0: On
- 1: Off

Switch: 22, Bit: 0

Detect a dial tone before sending faxes when using the telephone line (LINE)

- 0: Not detect (Off)
- 1: Detect (On)

Switch: 22, Bit: 1

Detect a dial tone before sending faxes when using the telephone line (LINE2)

- 0: Not detect (Off)
- 1: Detect (On)

Switch: 22, Bit: 2

Detect a dial tone before sending faxes when using the telephone line (LINE3)

- 0: Not detect (Off)
- 1: Detect (On)

Switch: 24, Bit: 0

Store documents that could not be transmitted in memory

- 0: Off
- 1: On

Switch: 24, Bit: 1

Length of time documents that could not be transmitted are stored in memory

- 0: 24 hours
- 1: 72 hours

Switch: 24, Bit: 2

Whether to retain the stored file permanently

- 0: No

- 1: Yes

Switch: 32, Bit: 0

Select which order of priority to be used to select an alternative

- 0: Paper Output Priority

  <Priority Order>

  1. IP-Fax destination
  2. Fax number
  3. Internet Fax
  4. E-mail address
  5. Folder

- 1: Electronic Output Priority

  <Priority Order>

  1. Internet Fax
  2. E-mail address
  3. Folder
  4. IP-Fax destination
  5. Fax number

Switch: 32, Bit: 4

Whether or not to route a document received through G3-1

- 0: No
- 1: Yes

Switch: 32, Bit: 5

Whether or not to route a document received through G3-2

- 0: No
- 1: Yes

Switch: 32, Bit: 6

Whether or not to route a document received through G3-3

- 0: No
- 1: Yes

Switch: 34, Bit: 0

Use gatekeeper with IP-Fax

- 0: Off
- 1: On

Switch: 34, Bit: 1

Use SIP server with IP-Fax

- 0: Off
- 1: On

Switch: 35, Bit: 7, 6, 5, 4, 3, 2, 1, 0

Redial interval when sending a backup file

- 00000000: 0 minute(s) ~ 11111111: 255 minute(s)

Switch: 36, Bit: 7, 6, 5, 4, 3, 2, 1, 0

Maximum number of redials when sending a backup file

- 00000000/00000001: 1 time(s) ~ 11111110/11111111: 254 time(s)

Switch: 37, Bit: 0

Whether to stop sending a backup file if the destination folder becomes full while the machine is sending or waiting to send a fax or the backup file

- 0: No
- 1: Yes

Switch: 37, Bit: 3, 2

Specify whether or not the backup file is printed along with the TX communication failure report when a backup file transmission failure occurs

- 00: Do not print
- 01: Print first page only
- 10: Print whole file

Switch: 37, Bit: 4

Display the sender's information in the file name of documents that are forwarded to folder destinations

- 0: Off
- 1: On

Switch: 37, Bit: 5

Specify whether or not to limit the file names of documents that are forwarded to folder destinations to plain characters only

- 0: Off
- 1: On

Changing the User Parameters

This section describes how to set parameters.

Important

- Access to some User Parameter Settings may require options, or other settings may need to be made beforehand.
- It is recommended that you print and keep a User Parameter list when you program or change a User Parameter.
- Do not change any bit switches other than those shown on the previous pages.

1. Press [Facsimile Features].
2. Press [Initial Settings].
3. Press [Parameter Setting].
4. Select the switch number you want to change.
5. Select the bit number you want to change.

   When the bit number is pressed, the current value switches between 1 and 0.

   Repeat from step 5 to change another bit number for the same switch.
6. Press [OK].

   To cancel these settings, press [Cancel]. The display returns to that of step 4.
7. Repeat step 4 through step 6 to change the switch settings.
8. After all the settings are finished, press [Exit].
9. Press the [User Tools/Counter] key.

Special Senders to Treat Differently

This section describes Special Senders settings.

By programming particular senders in advance, you can set the following function for each sender:

- Authorized Reception
- Forwarding
- Reception File Print Qty
- Print 2 Sided
- Memory Lock
- Paper Tray

Use Own Name or Own Fax Number to program your senders. If the sender has a machine of the same manufacturer, program an Own Name that has already been programmed as a sender. If the machine is not from the same manufacturer, Own Fax Number is used.

You can apply the same settings to all programmed numbers. You can then customize the settings for individual numbers as necessary using the Special Sender Registration function.

The following items can be programmed.

- Special Senders

  Up to 250 Special Senders can be registered. A maximum of 24 characters can be used for each name when using G3.

- Full/Partial agreement

  When you program own names and facsimile names for multiple destinations, you can program a common sequence of characters to identify destinations.

Destination to be programmed (Own Name)	Number of programmed identifications
NEW YORK BRANCH HONG KONG BRANCH SYDNEY BRANCH	3

  Using Partial matching

Destination to be programmed (Own Name)	Number of programmed identifications
BRANCH	1

  You can program up to 250 wild cards.

  Spaces are ignored when identifications are compared.

You can use wild cards for the following functions:

- Forwarding
- Special Reception Function
- Authorized Reception

When using Partial agreement, you can enter up to the first 24 characters of an e-mail address to use it as an own name or facsimile name.

Note

- You cannot program senders as Special Senders if they do not have Own Name or Own Fax Number programmed.
- The machine cannot differentiate between SEP Code RX documents from Special Senders.
- You cannot use the following functions with Internet Fax receptions.
  - Authorized Reception per Sender
  - Reception File Print Qty per Sender
  - Memory Lock per Sender
- You can program up to 24 characters for the sender.
- To use Forwarding, Print 2 Sided, or Paper Tray with Internet Fax reception, program the sender's e-mail address.
- You can check Own Name and Own Fax Number using the Journal. You can check programmed Special Senders using the specified sender list.

Authorized Reception

Use this function to limit incoming senders.

The machine only receives faxes from programmed Special Senders, and therefore, it helps you screen out unwanted documents, such as junk mail, and prevents wasting fax paper.

Note

- Without programming Special Senders, the Authorized Reception function will not work, even if you select “On”.
- You can change Special Senders in the same way as you program them.

Reception File Print Quantity

Print the specified number of copies of documents received from programmed senders (Special Senders).

If you do not program any Special Senders, the machine prints the specified number of copies for all received documents.

Note

- You cannot use multi-copy printing with Memory Lock.
- You can specify up to 10 copies.

Forwarding

Print received documents, and then transfer them to those receivers programmed beforehand.

It is also possible to forward faxes sent only by senders programmed as Special Senders.

Note

- If you select [Same as Basic Settings], the fax document is forwarded to the receivers programmed in "Forwarding" under Facsimile Features.
- If you do not program any Special Senders, the machine transfers all incoming documents to the other end receivers specified in "Forwarding" under Facsimile Features.
- You can set the fax destination, Internet Fax destination, IP-Fax destination, e-mail destination, or folder destination, as a forward destination.
- If you have specified folder destination for forwarding, you can specify the file format used for forwarding. See "Parameter Settings" (switch 21, bit 3).

Reference

- p.375 "Parameter Settings"

Print 2 Sided

Print on both sides of the paper.

Note

- If you select "Custom Size" for the "Bypass Tray Paper Size" setting in "Initial Set Up", duplex printing will be disabled.

Memory Lock

Store incoming documents from programmed senders (Special Senders) in memory without printing them. People without the Memory Lock ID cannot print the documents, and therefore this function is useful for receiving confidential documents. If you do not program any senders, the machine receives fax document from all senders using Memory Lock reception.

Important

- **You must register Memory Lock ID in advance. For details about how to register Memory Lock ID, see "Initial Settings".**
- **If you program the same sender in Memory Lock and Forwarding, Forwarding is disabled.**

Reference

- p.347 "Initial Settings"

Paper Tray

Print documents received from programmed senders (Special Senders) and the documents from other senders on different types of paper.

For example, if blue paper is in Tray 1 and white paper is in Tray 2, the machine prints the documents from Special Senders on the blue paper and prints the documents from other senders on the white paper, making it easy for you to separate the two.

If you do not program any Special Senders, the machine outputs documents received from all senders using the default paper tray.

Note

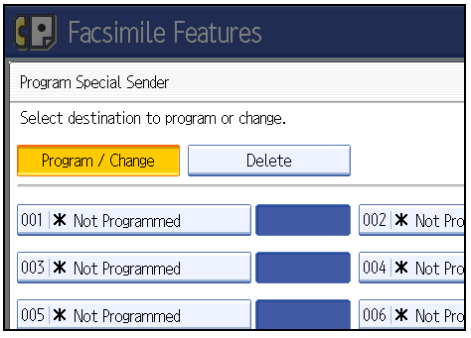
- Selection of the bypass tray enables you to specify the paper size in "Scan Area".

Programming/Changing Special Senders

This section describes how to program and change Special Senders.

1. **Press [Facsimile Features].**
2. **Press [Reception Settings].**
3. **Press [Program Special Sender].**
4. **Check that [Program / Change] is selected.**
5. **Select the sender to program or change.**

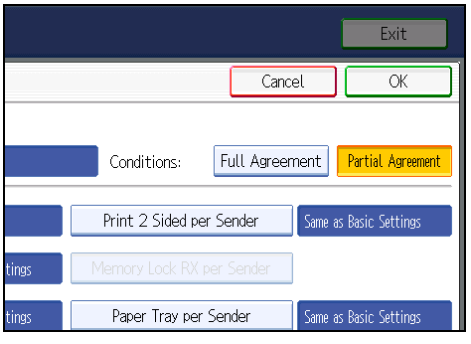
   To program new sender, press [Not Programmed].



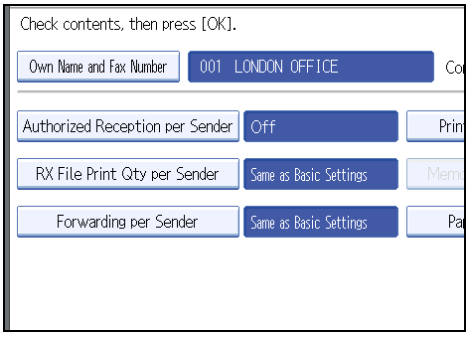
6. **Enter a sender name, and then press [OK].**

   Enter a destination name using Own Name or Own Fax Number.

7. **Press [Full Agreement] or [Partial Agreement].**



8. **Select the item you want to program.**



   You must select only the item you want to program.

   To cancel these settings, press [Cancel]. The display returns to that of step 5.

9. **Press [OK].**

   A Special Sender is programmed.

   To program another sender, repeat the procedure from step 5.

10. **Press [Exit].**

11. **Press the [User Tools/Counter] key.**

Note

- To specify Authorized Reception, see “Authorized Reception per Sender”.
- To specify Reception File Print Qty, see “Reception File Print Qty per Sender”.
- To specify Forwarding, see “Forwarding per Sender”.
- To specify print 2 sided, see “Print 2 Sided per Sender”.
- To specify Memory Lock, see “Memory Lock per Sender”.
- To specify paper tray, see “Paper Tray per Sender”.

Reference

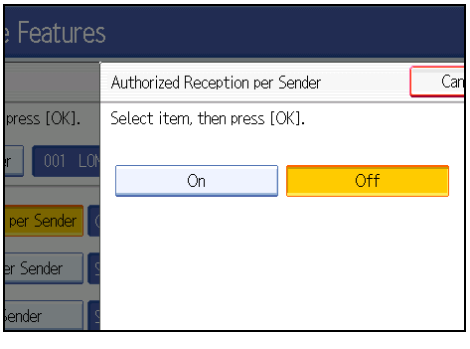
- p.391 "Authorized Reception per Sender"
- p.391 "Reception File Print Qty per Sender"
- p.392 "Forwarding per Sender"
- p.394 "Print 2 Sided per Sender"
- p.395 "Memory Lock per Sender"
- p.395 "Paper Tray per Sender"

Authorized Reception per Sender

This section describes how to specify Authorized Reception.

Specify when programming a Special Sender.

1. **Press [Authorized Reception per Sender].**
2. **Press [On] or [Off], and then press [OK].**

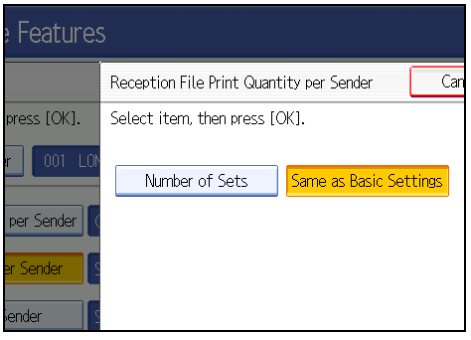


Reception File Print Qty per Sender

This section describes how to specify Reception File Print Qty.

Specify when programming a Special Sender.

1. **Press [RX File Print Qty per Sender].**
2. **Press [Number of Sets].**



3. **Enter the print quantity using the number keys, and then press [OK].**

Note

- Selecting [Same as Basic Settings] will result in the same setting made for "Reception File Print Quantity" of "Reception Settings".
- If you make a mistake, press [Clear] before pressing [OK], and then try again.

7

Forwarding per Sender

This section describes how to specify Forwarding.

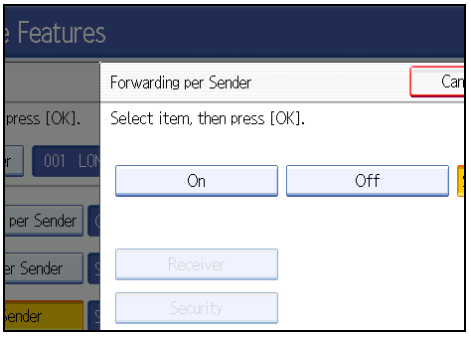
Specify when programming a Special Sender.

Important

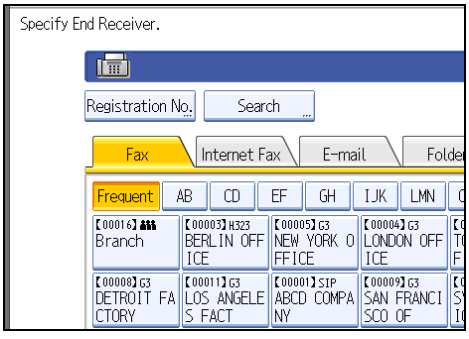
- **One forward destination can be registered for each Special Sender. To register two or more forward destinations, use group destinations. However a maximum of 498 destinations can be specified in a group.**

1. **Press [Forwarding per Sender].**
2. **Select [On] or [Off].**

   If you select [Off], proceed to step 7.



3. **Specify an End Receiver using the destination list, and then press [OK].**



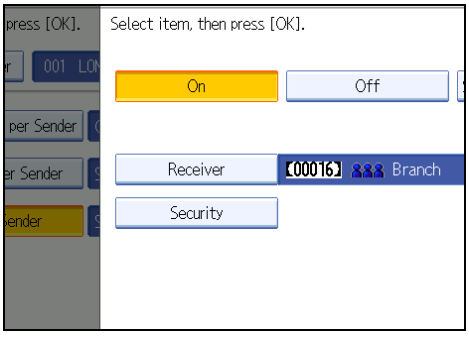
Press the transmission type tab to switch the destination between fax number, Internet Fax destination, e-mail address, and folder destination.

IP-Fax destination appears in the fax destination list.

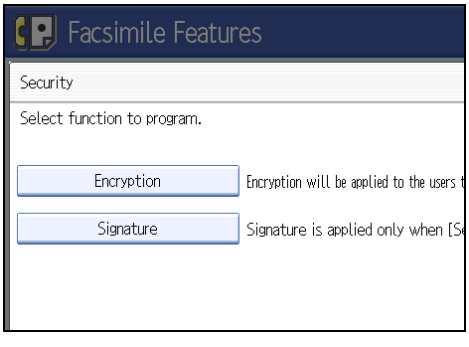
4. **Press [Security].**

If not specifying the security function, proceed to step 7.

Security is set to use S/MIME authentication. For details about the security settings, consult your administrator.



5. **Select the security functions.**



To specify encryption for documents for Forwarding, press [Encryption]. To use the encryption function, the address must be stored in the Address Book and have the encryption option enabled. For details about Encryption, consult your administrator.

To attach a signature to documents for Forwarding, press [Signature]. For details about Signature, consult your administrator.

6. **Press [OK].**
7. **Press [OK].**

Note

- Selecting [Same as Basic Settings] will result in the same setting made for "Forwarding" under "Reception Settings".
- If you have specified folder destination for forwarding, you can specify the file format used for forwarding. See "Parameter Settings" (switch 21, bit 3).
- Deleting a destination specified as a forward destination from the destination list causes the settings of the forward destination to be deleted, so they must be registered again. When a destination is changed, a document is transmitted to the new destination. If there is no destination of the specified type, you can set which destination to be used as an alternative destination. See "Parameter Settings" (switch 32, bit 0).
- Select [Encrypt All] in the encryption settings and encrypted e-mail is sent regardless of the encryption settings in [Security]. For details about encryption, consult your administrator.
- The electronic signature is limited in the following ways, depending on the S/MIME settings on Web Image Monitor. For details about the electronic signature, consult your administrator.
  - If [Set Individually] is set:

    You can set [Signature] in [Security] and attach an electronic signature to email for every transmission.
  - If [Do not Use Signatures] is set:

    Even if you press [Security], [Signature] does not appear.
  - If [Use Signatures] is set:

    An electronic signature is attached when you send email. The [Signature] setting in [Security] cannot be cancelled.

Reference

- p.375 "Parameter Settings"

Print 2 Sided per Sender

This section describes how to specify Print 2 Sided.

Specify when programming a Special Sender.

1. **Press [Print 2 Sided per Sender].**
2. **Press [On] or [Off], and then press [OK].**

Note

- Selecting [Same as Basic Settings] will result in the same setting made for "2 Sided Print" of "Reception Settings".

Memory Lock per Sender

This section describes how to specify Memory Lock.

Specify when programming a Special Sender.

1. **Press [Memory Lock RX per Sender].**
2. **Press [On] or [Off], and then press [OK].**

Note

- Selecting [Same as Basic Settings] will result in the same setting made for "Memory Lock Reception" under "Reception Settings".

Paper Tray per Sender

This section describes how to specify Paper Tray.

Specify when programming a Special Sender.

1. **Press [Paper Tray per Sender].**
2. **Select the tray you want to use, and then press [OK].**

Note

- Selecting [Same as Basic Settings] will result in the same setting made for "Paper Tray" of "Reception Settings".

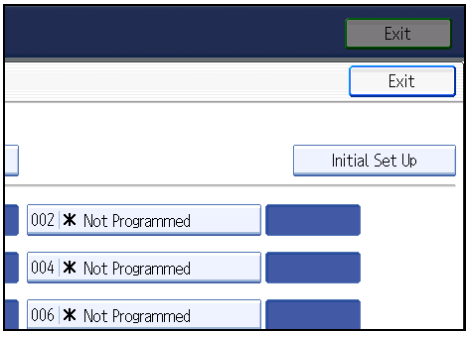
Programming Initial Set Up of a Special Sender

This section describes how to program Initial Set Up of a Special Sender.

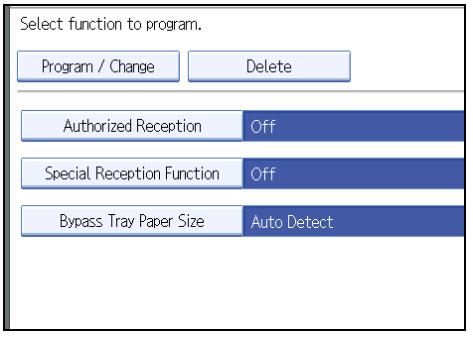
Program the "Initial Set Up" of a Special Sender. You can also specify the Bypass Tray Paper Size.

1. **Press [Facsimile Features].**
2. **Press [Reception Settings].**
3. **Press [Program Special Sender].**

4. **Press [Initial Set Up].**

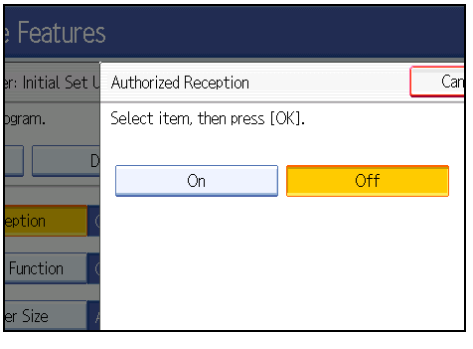


5. **Select the function you want to program.**



6. **To program Authorized Reception and Special Reception Function, press [Authorized Reception] or [Special Reception Function].**
7. **Press [On] or [Off], and then press [OK].**

   The illustration shows the "Authorized Reception" display as an example.



8. **To program Bypass Tray Paper Size, press [Bypass Tray Paper Size].**
9. **Select the size you want to program.**

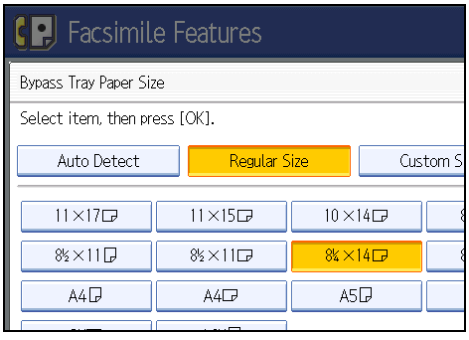
   You can select a size from [Auto Detect], [Regular Size], or [Custom Size].

   If you select [Auto Detect], proceed to step 14.

   If you select [Regular Size], proceed to step 10.

If you select [Custom Size], proceed to step 11.

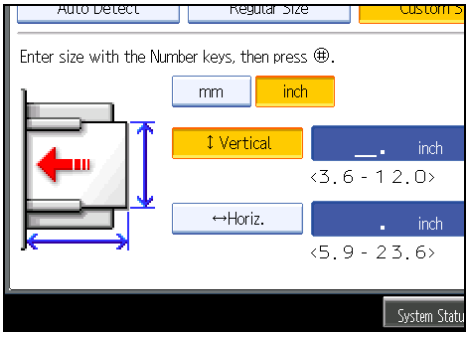
10. Select the size you want to program from the sizes shown.



After selecting the size, proceed to step 14.

11. Make sure that [Vertical] is selected.

12. Enter the vertical size of the paper using the number keys, and then press the [#] key.

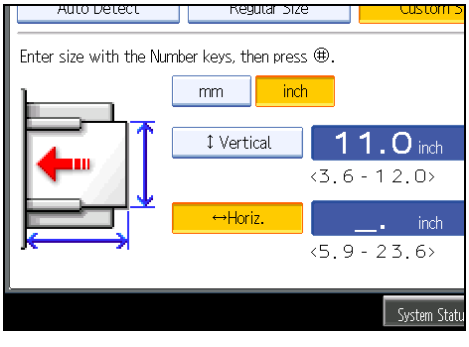


Specify a vertical size from 90 mm (3.6 inches) to 305 mm (12.0 inches).

Each time you press [mm] or [inch], the units switch between "mm" and "inch".

If you enter a length and change the units by pressing [mm] or [inch], it is converted automatically (fractions are rounded off).

13. Enter the horizontal size of the paper using the number keys, and then press the [#] key.



Specify a horizontal size from 148 mm (5.9 inches) to 600 mm (23.6 inches).

Each time you press [mm] or [inch], the units switch between "mm" and "inch".

If you enter a length and change the units by pressing [mm] or [inch], it is converted automatically (fractions are rounded off).

14. **Press [OK].**
15. **Press [Exit].**
16. **Press the [User Tools/Counter] key.**

Note

- If you select [Auto Detect], the machine recognizes the paper size automatically.

Deleting a Special Sender

This section describes how to delete a Special Sender.

Use this function to delete "Initial Set Up" of a Special Sender. The Bypass Tray Paper Size can also be deleted.

1. **Press [Facsimile Features].**
2. **Press [Reception Settings].**
3. **Press [Program Special Sender].**
4. **Press [Delete], and then select the Special Sender you want to delete.**
5. **Press [Delete].**

   To cancel deleting a special sender, press [Do not Delete]. The display returns to that of step 4.
6. **Press [Exit].**
7. **Press the [User Tools/Counter] key.**

Box Settings

This section describes Box Settings.

The following functions are for delivery and transfer of documents:

- Personal Box
- Information Box
- Transfer Box

SUB Code and SEP Code

SUB Code and SEP Code are IDs consisting of up to 20 digits, and can include numbers, [#], [*], and spaces.

To use this function, you must program a box and SUB/SEP Code beforehand. The other party can send documents to, and retrieve stored documents from, this box using the code.

Note

- The combined total of items that can be stored using the Personal Box, Information Box, and Transfer Box functions is 150.
- You cannot set the same Box code on two different boxes.
- Transmission or programming may not be allowed if there is not enough free memory left. The amount of free memory left differs depending on the optional equipment installed.

Programming/Changing Personal Boxes

This section describes how to program Personal Boxes.

You can program the following items:

- Box Name (required)

  Up to 20 characters long.

- SUB Code (required)

  Up to 20 characters long and can be composed of digits [0]-[9], [#], [*], and spaces (the first character cannot be a space).

- Password (optional)

  Up to 20 characters long and can be composed of digits [0]-[9], [#], [*], and spaces (the first character cannot be a space).

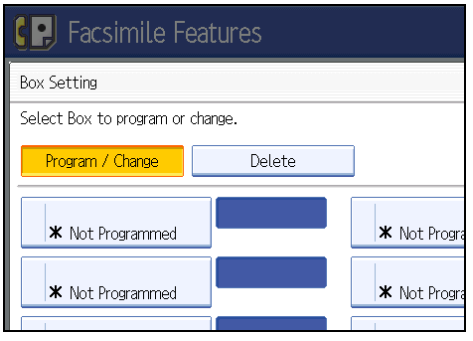
  When programming a password, a mark is displayed before the Box name.

- Receiver (optional)

  You can program one delivery destination for each Personal Box. Specify a delivery destination programmed in Destination key.

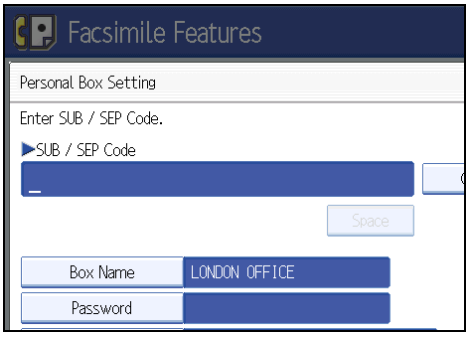
1. **Press [Facsimile Features].**
2. **Press [General Settings].**
3. **Press [Box Setting].**
4. **Check that [Program / Change] is selected.**
5. **Select a box to program.**

   When programming a new box, press [Not Programmed].



   To change a box already programmed, press it and proceed to step 8.

6. **Press [Personal Box].**
7. **Enter a box name, and then press [OK].**
8. **Enter a SUB Code.**



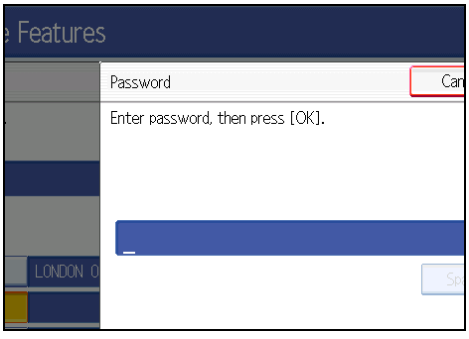
   To change the SUB Code, press [Clear], and then try again. To change a Box name, press [Box Name], and then repeat from step 7.

9. **Specify the settings you require.**

   If you do not want to program a password or receiver, proceed to step 16.

10. **Press [Password].**

11. **Enter a password, and then press [OK].**



If you make a mistake, press [Clear] before pressing [OK], and then try again.

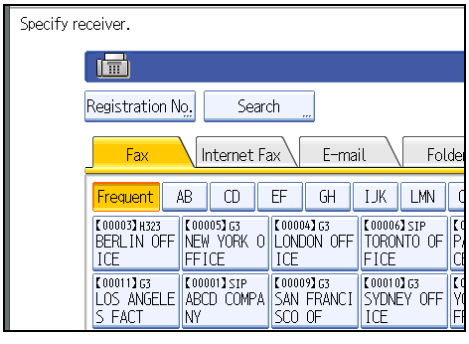
12. **Re-enter the password, and then press [OK].**

If you make a mistake, press [Clear] before pressing [OK], and then try again.

To change the password after pressing [OK], press [Password] and repeat step 11 and 12, or press [Cancel] and repeat from step 10.

13. **Press [Receiver].**

14. **Select a destination using the destination list, and then press [OK].**



Press the transmission type tab to switch the destination between fax number, Internet Fax destination, e-mail address, and folder destination.

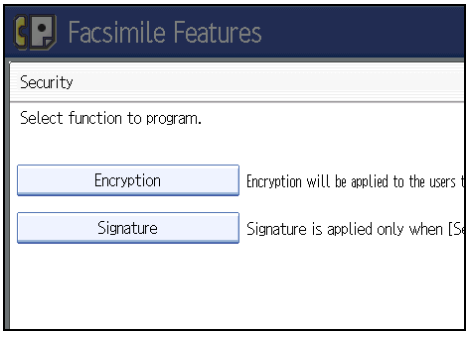
IP-Fax destination appears in the fax destination list.

15. **Press [Security].**

If not specifying the security function, proceed to step 18.

Security is set to use S/MIME authentication. For details about the security settings, consult your administrator.

16. **Select the security functions.**



To specify encryption for documents for delivery, press [Encryption]. To use the encryption function, the address must be stored in the Address Book and have the encryption option enabled. For details about Encryption, consult your administrator.

To attach a signature to documents for delivery, press [Signature]. For details about Signature, consult your administrator.

17. **Press [OK] twice.**
18. **Press [Exit].**
19. **Press the [User Tools/Counter] key.**

7

Note

- When programming a password, a mark is displayed before the Box name.
- You can set the fax destination, IP-Fax destination, Internet Fax destination, e-mail destination, or folder destination, as a transmission destination.
- If you have specified folder destination for the transmission destination, you can specify the file format used for delivery. See "Parameter Settings" (switch 21, bit 3).
- The Fax Header is not printed on delivered documents.
- If a document cannot be delivered, a Communication Failure Report is printed and the document is saved as a Confidential Reception document.
- You can edit boxes in the same way you program them. However, boxes that are being used cannot be edited.
- If a destination in the destination table is deleted after being registered, delivery is not performed and the settings of the delivery destination are also deleted. Also, when a delivery destination is changed, a document is sent to the changed destination. If there is no destination of the specified type, you can set which destination to be used as an alternative destination. See "Parameter Settings" (switch 32, bit 0).
- Select [Encrypt All] in the encryption settings and encrypted e-mail is sent regardless of the encryption settings in [Security]. For details about encryption, consult your administrator.

- The electronic signature is limited in the following ways, depending on the S/MIME settings on Web Image Monitor. For details about the electronic signature, consult your administrator.
  - If [Set Individually] is set:

    You can set [Signature] in [Security] and attach an electronic signature to email for every transmission.
  - If [Do not Use Signatures] is set:

    Even if you press [Security], [Signature] does not appear.
  - If [Use Signatures] is set:

    An electronic signature is attached when you send email. The [Signature] setting in [Security] cannot be cancelled.

Reference

- p.375 "Parameter Settings"

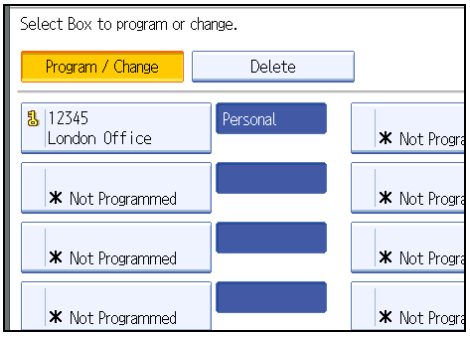
Deleting Personal Boxes

This section describes how to delete Personal Boxes.

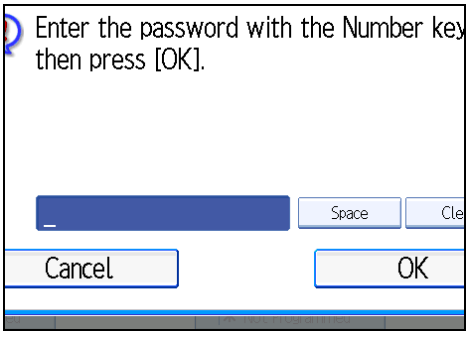
Important

- **If there are documents in the box, you cannot delete the box.**

1. **Press [Facsimile Features].**
2. **Press [General Settings].**
3. **Press [Box Setting].**
4. **Press [Delete], and then select the box you want to delete.**



5. **If the password is programmed, enter a password using the number keys, and then press [OK].**



If you make a mistake, press [Clear], and then try again.

6. **Press [Delete].**

To cancel deleting a box, press [Do not Delete]. The display returns to that of step 4.

7. **Press [Exit].**
8. **Press the [User Tools/Counter] key.**

7

Programming/Changing Information Boxes

This section describes how to set up an Information Box.

You can store the following items:

- Box Name (required)

  Up to 20 characters long.

- SEP Code (required)

  Up to 20 characters long and can be composed of digits [0]-[9], [#], [*], and spaces (the first character cannot be a space).

- Password (optional)

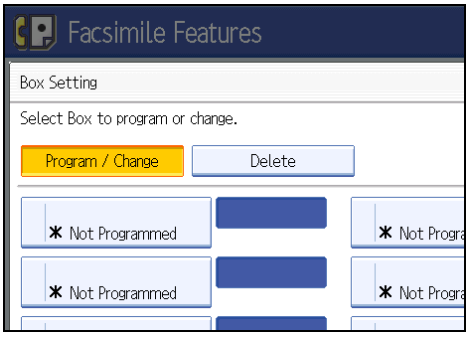
  Up to 20 characters long and can be composed of digits [0]-[9], [#], [*], and spaces (the first character cannot be a space).

  When programming a password, a mark is displayed before the Box name.

1. **Press [Facsimile Features].**
2. **Press [General Settings].**
3. **Press [Box Setting].**
4. **Check that [Program / Change] is selected.**

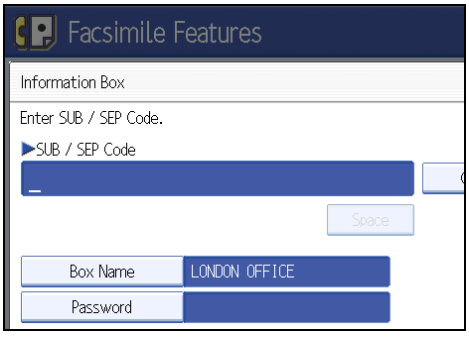
5. **Select the box to program.**

   When programming a new box, press [Not Programmed].



   To change a box already programmed, press it, and then proceed to step 8. If a password is programmed, enter the password, press [OK], and then proceed to step 8.

6. **Press [Information Box].**
7. **Enter a box name, and then press [OK].**
8. **Enter the SEP Code.**

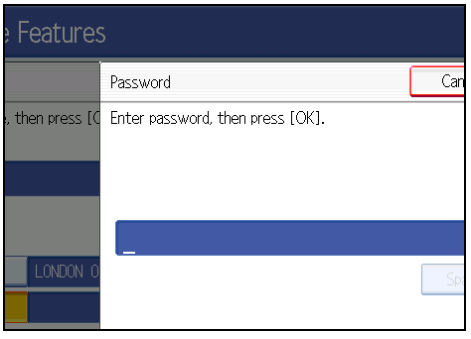


   To change the SEP Code, press [Clear], and then try again. To change the box name, press [Box Name], and then repeat the procedure from step 7.

9. **Press [Password].**

   If you do not want to program a password, proceed to step 12.

10. **Enter a password, and then press [OK].**



If you make a mistake, press [Clear] before pressing [OK], and then try again.

11. **Re-enter the password, and then press [OK].**

If you make a mistake, press [Clear] before pressing [OK], and then try again.

To change the password after pressing [OK], press [Password] and repeat step 10 and 11, or press [Cancel] and repeat from step 9.

12. **Press [OK].**
13. **Press [Exit].**
14. **Press the [User Tools/Counter] key.**

Note

- You can edit boxes in the same way you program them. However, boxes that are being used cannot be edited.

Deleting Information Boxes

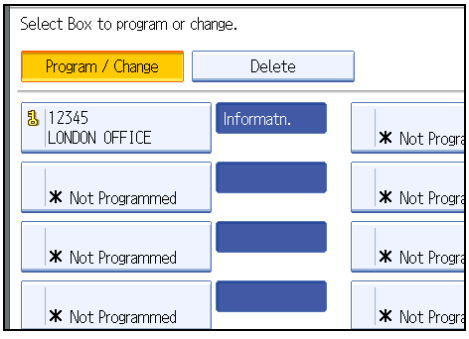
This section describes how to delete Information Boxes.

Important

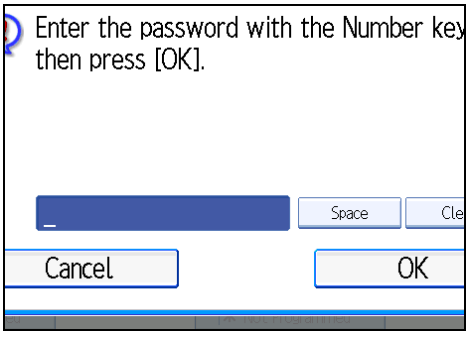
- **If there are documents in the box, you cannot delete the box.**

1. **Press [Facsimile Features].**
2. **Press [General Settings].**
3. **Press [Box Setting].**

4. **Press [Delete], and then select the box you want to delete.**



5. **If the password is programmed, enter a password using the number keys, and then press [OK].**



If you make a mistake, press [Clear], and then try again.

6. **Press [Delete].**

To cancel deleting a box, press [Do not Delete]. The display returns to that of step 4.

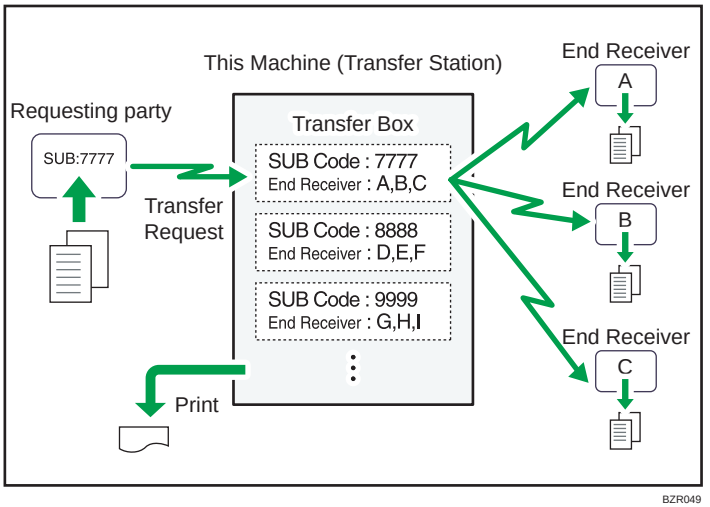
7. **Press [Exit].**
8. **Press the [User Tools/Counter] key.**

Programming/Changing Transfer Boxes

This section describes how to set up a Transfer Box.

This function turns the machine into a fax relay station. Documents sent with a SUB Code that matches the SUB Code programmed as a Transfer Box are received, and then relayed to a programmed receiver.

Since documents can be sent to multiple destinations in a single transfer request, you can economize on call charges when sending to distant destinations.



Inform the Requesting Party of the SUB Code assigned to the Transfer Box. When they want to have a document transferred by your machine, ask them to send the document using SUB Code Transmission and specify this SUB Code. If a password has also been programmed, inform them of this too, and ask them to enter it as the SID code.

You can store the following items:

- Box Name (required)

  Up to 20 characters.

- SUB Code (required)

  Up to 20 characters long and can be composed of digits [0]-[9], [#], [*], and spaces (the first character cannot be a space).

- End Receiver (required)

  You can store five End Receivers (destinations to which documents are forwarded) for each box. Specify End Receivers using a single or group destination programmed in the destination list beforehand.

- Password (optional)

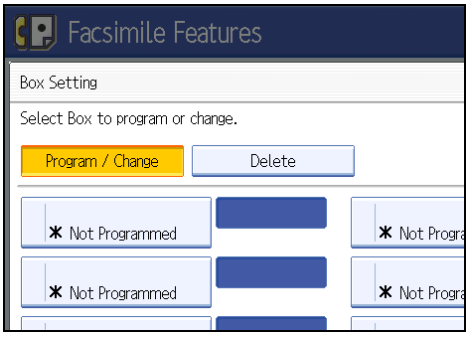
  Up to 20 characters long and can be composed of digits [0]-[9], [#], [*], and spaces (the first character cannot be a space).

  When programming a password, a mark is displayed in front of the Box name.

1. **Press [Facsimile Features].**
2. **Press [General Settings].**
3. **Press [Box Setting].**
4. **Check that [Program / Change] is selected.**

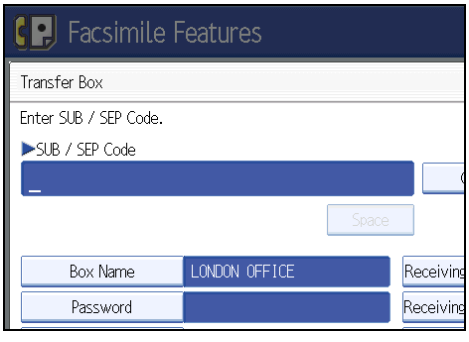
5. **Select the box to program.**

   When programming a new box, press [Not Programmed].



   To change a box already programmed, press it, and then proceed to step 8.

6. **Press [Transfer Box].**
7. **Enter a Box name, and then press [OK].**
8. **Enter a SUB Code.**

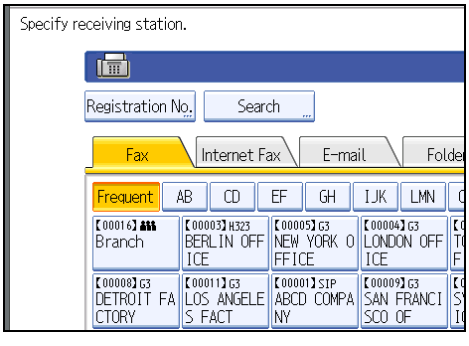


   To change the SUB Code, press [Clear], and then try again. To change Box name, press [Box Name], and then repeat from step 7.

9. **To program End Receivers, select a Receiving Station.**

   You can store five Receiving Stations.

10. **Specify End Receivers with Destination keys, and then press [OK].**



Press the transmission type tab to switch the destination between fax number, Internet Fax destination, e-mail address, and folder destination.

IP-Fax destination appears in the fax destination list.

A reception station can also be registered as a group destination. In such a case, a maximum of 498 parties including End Receivers 1-5 can be specified in a group.

11. **To program a password, press [Password].**

    If you do not want to program a password, proceed to step 14.

12. **Enter a password, and then press [OK].**

    If you make a mistake, press [Clear] before pressing [OK], and then try again.

13. **Re-enter the password, and then press [OK].**

    If you make a mistake, press [Clear] before pressing [OK], and then try again.

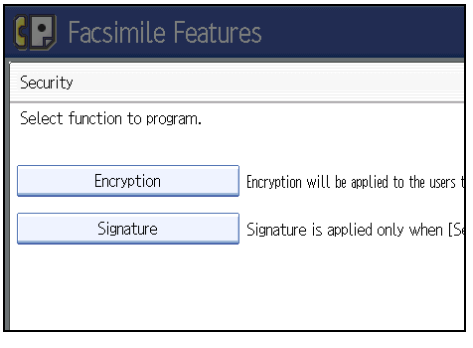
    To change the password after pressing [OK], press [Password] and repeat step 12 and 13, or press [Cancel] and repeat from step 11.

14. **Press [Security].**

    If not specifying the security function, proceed to step 17.

    Security is set to use S/MIME authentication. For details about the security settings, consult your administrator.

15. **Select the security functions.**



    To specify encryption for documents for transfer to receiving station, press [Encryption]. To use the encryption function, the address must be stored in the Address Book and have the encryption option enabled. For details about Encryption, consult your administrator.

    To attach a signature to documents for documents for transfer to receiving station, press [Signature]. For details about Signature, consult your administrator.

16. **Press [OK].**

17. **Press [OK].**

18. **Press [Exit].**

19. **Press the [User Tools/Counter] key.**

Note

- After documents are transferred, SUB Code Transfer Report is not sent back to the sender.
- You can set the fax destination, IP-Fax destination, Internet Fax destination, e-mail destination, or folder destination, as a reception station.
- If you have specified folder destination for the transmission destination, you can specify the file format used for transferring to receiving station. See “Parameter Settings” (switch 21, bit 3).
- After documents are transferred, they are deleted.
- When this function is enabled, the machine will print the documents it transfers and a SUB Code Transfer Report each time it completes a transfer. You can disable printing of the report using User Parameters. See “Parameter Settings” (switch 04, bit 1).
- You can edit boxes in the same way you program them.
- If you delete a destination specified as a reception destination using the destination list, the settings of the reception destination are also deleted, so they must be registered again. When a destination is changed, a document is transmitted to the new destination. If there is no destination of the specified type, you can set which destination to be used as an alternative destination. See “Parameter Settings” (switch 32, bit 0).
- Select [Encrypt All] in the encryption settings and encrypted e-mail is sent regardless of the encryption settings in [Security]. For details about encryption, consult your administrator.
- The electronic signature is limited in the following ways, depending on the S/MIME settings on Web Image Monitor. For details about the electronic signature, consult your administrator.
  - If [Set Individually] is set:

    You can set [Signature] in [Security] and attach an electronic signature to email for every transmission.
  - If [Do not Use Signatures] is set:

    Even if you press [Security], [Signature] does not appear.
  - If [Use Signatures] is set:

    An electronic signature is attached when you send email. The [Signature] setting in [Security] cannot be cancelled.

Reference

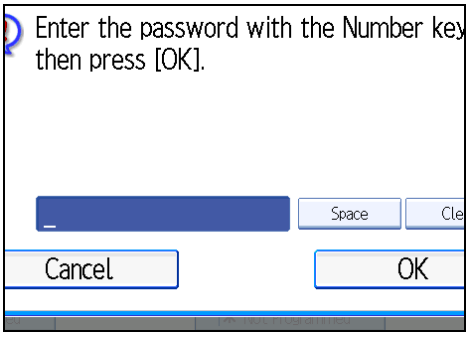
- p.375 "Parameter Settings"

Deleting Transfer Boxes

This section describes how to delete Transfer Boxes.

1. **Press [Facsimile Features].**
2. **Press [General Settings].**

3. **Press [Box Setting].**
4. **Press [Delete], and then select the box you want to delete.**
5. **If the password is programmed, enter a password using the number keys, and then press [OK].**



If you make a mistake, press [Clear], and then try again.

6. **Press [Delete].**

To cancel deleting a Transfer Box, press [Do not Delete]. The display returns to that of step 4.

7. **Press [Exit].**
8. **Press the [User Tools/Counter] key.**

7

Printing the Box List

This section describes how to print the Box List.

Print a list showing the currently programmed Personal Boxes, Information Boxes, and Transfer Boxes.

1. **Press [Facsimile Features].**
2. **Press [General Settings].**
3. **Press [Box Setting: Print List].**
4. **Press the [Start] key.**

After printing the list, you can then start from step 3.

To cancel printing a list before pressing the [Start] key, press [Cancel]. The display returns to that of step 3.

To cancel printing a list after pressing the [Start] key, press [Stop Printing]. The display returns to that of step 3.

5. **Press the [User Tools/Counter] key.**

8. Appendix

This section explains features and specifications of the facsimile function.

Checking the Memory Status

Use this function to display a summary of current memory usage.

On the standby display you can check the percentage of free memory space. Note that destinations are stored in a separate memory location, not in free memory space.

In addition, in [System Status] you can check the number of "Transmission Standby File(s)", "Memory Lock File(s)", and "RX Print Standby File(s)". "Others" shows the total number of documents registered in Information Box and received in Personal Box. See "Checking Machine Status and Settings", Troubleshooting.

If available memory falls below the specified minimum, a message reporting this will appear. Delete stored files as required.

Note

- If you set the "Reception File Setting" in the Facsimile Features menu to "Store", you can check the number of received documents using "RX Print Standby File(s)".

Registering Frequently Used Settings

If you regularly send documents to a particular destination or transmit using the same functions, you can save repetitive number keys operations by registering this information in a Keystroke Program. Programs can be recalled by just pressing a programmed key.

Registering and Changing Keystroke Programs

This section explains how to program a new Keystroke Program or overwrite an old one.

You can register the following items in Keystroke Programs:

- Memory Transmission/Immediate Transmission, transmission type, destinations (except for folder destinations), Original Type, Resolution, Scan Size, Mixed Original Sizes, Auto Density, Manual Density, Original Orientation, Original Settings, Stamp, Select Line, SUB/SID/SEP/PWD Code entry, Send Later, Reception Notice, BCC Transmission, E-mail TX Results, Text, Standard Message, Auto Reduce, Label Insertion, Closed Network, SUB Code Transmission, SEP Code Reception, Fax Header Print, TX Status Report, Store File, File Type, Preview before transmission
- Program name

The following procedure explains using Send Later with the fax number "0123456789" as an example of how to register a program.

1. **Make sure that the machine is in facsimile mode and the standby display is shown.**

   If the standby display is not shown, press the [Facsimile] key.

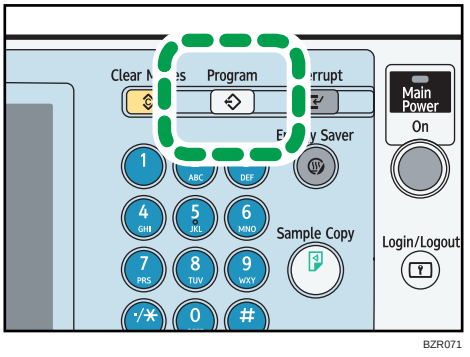
2. **Make the settings you want to register in the program.**

   The procedure for programming differs depending on the items you want to register.

   Press the [Clear Modes] key to cancel programming.

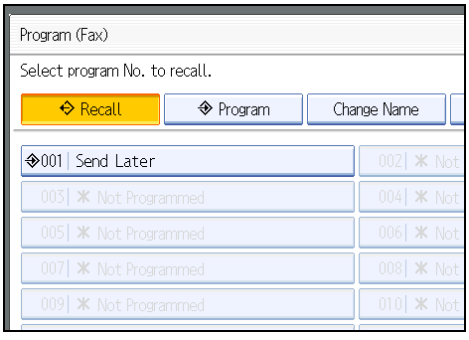
   Press the number keys [0], [1], [2], [3], [4], [5], [6], [7], [8], [9], and then continue doing the Send Later setting until the standby display appears when you press [OK].

3. **Press the [Program] key.**

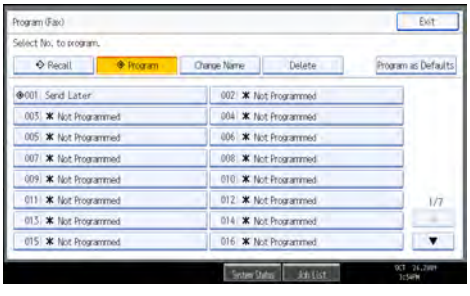


4. **Press [Program].**

   When no programs are registered, proceed to step 5.



5. **Select a program number in which "Not Programmed" is shown.**



   If you make a mistake, press [Cancel] and select a program number again.

   When you change a Keystroke Program, press [Yes] after pressing the program number you want to change. If you make a mistake, press [No] and try again.

6. **Enter the program name, and then press [OK].**

   The standby display appears.

   If the program name is already registered, the name is displayed. To change the program name, press [←], [→], [Backspace], or [Delete All], and then try again.

   You should register the program name.

   To cancel a program, press [Cancel]. The display returns to that of step 5.

Note

- Use the same procedure to register and change programs. In step 5, select the program number you want to change.
- For details about text entry, see "Entering Text", About This Machine.
- The method of registering or changing programs for the copy function is different from that of the fax function.
- For the maximum values of the following items, see "Maximum Values".
  - Number of destinations you can register into a Keystroke Program

- Number of Keystroke Programs you can register
- Number of characters you can enter for a program name

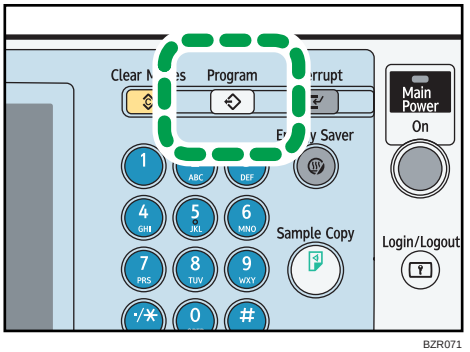
Reference

- p.427 "Maximum Values"

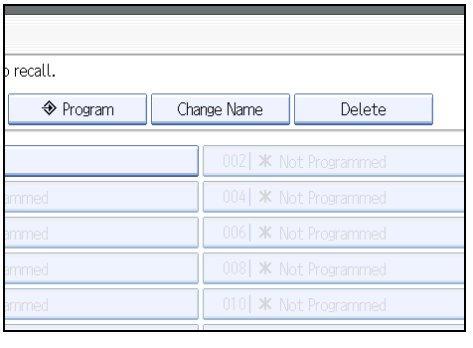
Changing a program name

This section explains how to change a program name.

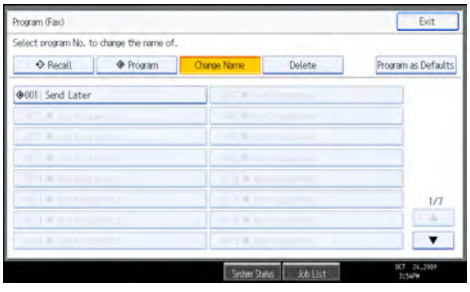
1. **Make sure that the machine is in facsimile mode and the standby display is shown.**
   If the standby display is not shown, press the [Facsimile] key.
2. **Press the [Program] key.**



3. **Press [Change Name].**



4. **Select the program number of the name you want to change.**



5. **Enter a new program name, and then press [OK].**

   The standby display appears.

   Press [Cancel] to cancel the change.

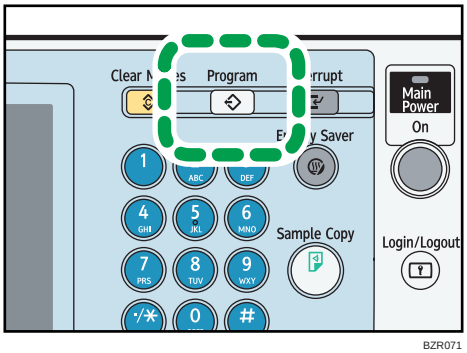
Deleting a Program

This section explains how to delete an unnecessary program.

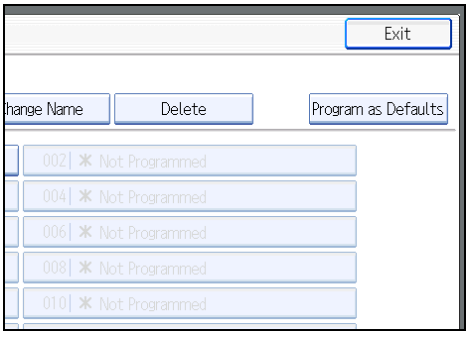
1. **Make sure that the machine is in facsimile mode and the standby display is shown.**

   If the standby display is not shown, press the [Facsimile] key.

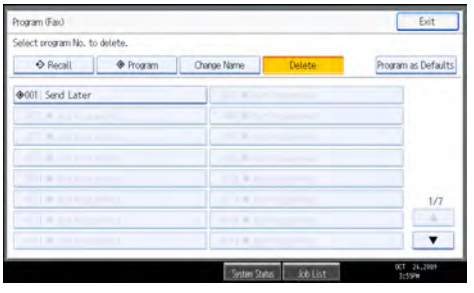
2. **Press the [Program] key.**



3. **Press [Delete].**



4. **Select the program number you want to delete.**



5. **Press [Yes].**

   The standby display appears.

   Press [No] not to delete the program. The display returns to that of step 4.

8

Using a Program

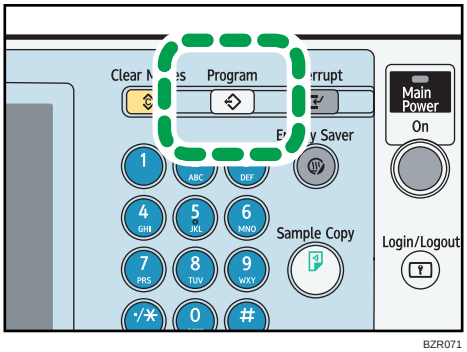
This section explains how to recall and use a registered program.

1. **Make sure that the machine is in facsimile mode and the standby display is shown.**

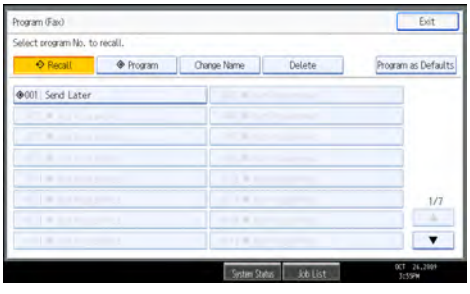
   If the standby display is not shown, press the [Facsimile] key.

2. **Place the original.**

3. **Press the [Program] key.**



4. **Confirm that [Recall] is selected, and press the registered program number.**



The standby display appears.

The programmed fax number appears and the registered settings are recalled.

5. **Press the [Start] key.**

The machine starts to scan the original.

Then, transmission starts with the recalled transmission settings.

Note

- Using the program causes the previous settings to be cleared.
- If you have no programmed destinations or scan settings as programs, select the program number, and then enter the fax number of the destination and select the scan settings you require.

Optional Equipment

This section explains the functions of options.

Expansion Memory

This option provides more memory.

This allows you to send fax documents at high resolution (Super Fine). This also allows you to receive fax documents at high resolution (Fine or Super Fine). If you require this option, consult your service representative.

For details about the memory capacity of machines equipped with the optional expansion memory, see “Maximum Values”.

Reference

- p.427 "Maximum Values"

Handset

You can make or receive calls by installing the optional handset and dialing manually.

Note

- For details about the functions, see “On Hook Dial” and “Manual Dial”.

Reference

- p.144 "On Hook Dial"
- p.146 "Manual Dial"

Extra G3 Interface Unit

This option provides one extra G3 line connection.

A maximum of two G3 interface units can be installed.

Reference

- p.84 "Changing the Line Port"

Specifications

Fax Transmission and Reception

Component	Specifications
Standard	G3
Resolution	G3: 8 × 3.85 lines/mm, 200 × 100 dpi (Standard character), 8 × 7.7 lines/mm, 200 × 200 dpi (Detail character), 8 × 15.4 lines/mm (Fine character: optional), 16 × 15.4 lines/mm, 400 × 400 dpi (Super Fine character: optional)
Transmission time	G3: 3 seconds at 28,800 bps, Standard resolution (JBIG transmission: 2 seconds)
Data compression method	MH, MR, MMR, JBIG
Maximum original size	Standard: A3, 11 × 17 Custom: 297 × 1200 mm, 11 × 47 inches
Maximum scanning size	297 × 1200 mm, 11 × 47 inches
Print process	Printing on standard paper using a laser
Transmission speed	G3: 33,600 / 31,200 / 28,800 / 26,400 / 24,000 / 21,600 / 19,200 / 16,800 / 14,400 / 12,000 / 9,600 / 7,200 / 4,800 / 2,400 bps (auto shift down system)

Power Consumption (Type 1 and 2)

Component	Specifications
Immediate Transmission	approx. 270 W
Memory Transmission	approx. 230 W
Memory Reception	approx. 230 W
Reception	approx. 480 W

Power Consumption (Type 3 and 4)

Component	Specifications
Immediate Transmission	approx. 220 W
Memory Transmission	approx. 160 W
Memory Reception	approx. 160 W
Reception	approx. 650 W

Power Consumption (Type 3 and 4 (models equipped with the one-pass duplex scanning ADF))

Component	Specifications
Immediate Transmission	approx. 230 W
Memory Transmission	approx. 170 W
Memory Reception	approx. 170 W
Reception	approx. 610 W

IP-Fax Transmission and Reception

Component	Specifications
Network	Standard: • Ethernet interface (100 BASE-TX/10 BASE-T) Optional: • Gigabit Ethernet interface (1000BASE-T/100BASE-TX/10BASE-T) • IEEE 802.11a/b/g wireless LAN interface
Scan line density	8 × 3.85 lines/mm, 200 × 100 dpi (Standard character), 8 × 7.7 lines/mm, 200 × 200 dpi (Detail character), 8 × 15.4 lines/mm (Fine character: optional), 16 × 15.4 lines/mm, 400 × 400 dpi (Super Fine character: optional)
Maximum original size	Standard: A3, 11 × 17 Custom: 297 × 1200 mm, 11 × 47 inches

Component	Specifications
Maximum scanning size	297 mm × 1200 mm, 11 × 47 inches
Transmission protocol	Recommendation: T.38, TCP, UDP/IP communication, SIP (RFC 3261 compliant), H.323 v2
Compatible machines	IP-Fax compatible machines
IP-Fax transmission function	Specify an IP address and send faxes to an IP-Fax compatible fax through a network. Also capable of sending faxes to a G3 fax connected to a telephone line via a VoIP gateway.
IP-Fax reception function	Receive faxes sent from an IP-Fax compatible fax through a network. Also capable of receiving faxes from a G3 fax connected to a telephone line via a VoIP gateway.

Internet Fax Transmission and Reception

Component	Specifications
Network	Standard: • Ethernet interface (100 BASE-TX/10 BASE-T) Optional: • Gigabit Ethernet interface (1000BASE-T/100BASE-TX/10BASE-T) • IEEE 802.11a/b/g wireless LAN interface
Transmit function	E-mail
Scan line density	200 × 100 dpi (Standard character), 200 × 200 dpi (Detail character), 200 × 400 dpi (Fine character: optional)*1, 400 × 400 dpi (Super Fine character: optional)*1
Original size : Scanning width	A3*1, B4 JIS*1, A4
Communication Protocols	• Transmission SMTP, TCP/IP • Reception POP3, SMTP, IMAP4, TCP/IP

Component	Specifications
E-mail format	Single/Multi-part, MIME Conversion Attached file forms: TIFF-F (MH, MR*1, MMR*1 compression)
Authentication method	SMTP-AUTH, POP before SMTP, A-POP
Internet communication	Send and receive e-mail with a computer that has an e-mail address.
Encryption method (for forwarding)	S/MIME
Internet Fax send functions	Automatic conversion of sent documents to e-mail format and e-mail transmission. Memory transmission only.
Internet Fax receive functions	Automatic detection and printing of appended TIFF-F (MH) files and ASCII text. Memory reception only.

*1 Full mode

E-mail Transmission and Reception, and Folder Transmission

Component	Specifications
Network	Standard: • Ethernet interface (100 BASE-TX/10 BASE-T) Optional: • Gigabit Ethernet interface (1000BASE-T/100BASE-TX/10BASE-T) • IEEE 802.11a/b/g wireless LAN interface
Scan line density	200 × 100 dpi (Standard character)*1, 200 × 200 dpi (Detail character), 400 × 400 dpi (Super Fine character: optional)
Maximum original size	Standard: A3, 11 × 17 Custom: 297 × 1200 mm, 11 × 47 inches
Maximum scanning size	297 × 1200 mm, 11 × 47 inches
E-mail reception/transmission protocols	• Transmission SMTP, TCP/IP • Reception (Mail to Print) POP3, SMTP, IMAP4, TCP/IP

Component	Specifications
Protocols for sending files to folders	SMB, FTP, NCP, TCP/IP
E-mail formats	Single/Multi-part, MIME Conversion
File formats	• Transmission TIFF (MH, MR, MMR compression), PDF • Reception (Mail to Print) JPEG (JFIF), PDF
Authentication methods	SMTP-AUTH, POP before SMTP, A-POP
Encryption method (for forwarding)	S/MIME
E-mail sending functions	Automatically converts documents to e-mail format and sends them as e-mail.
E-mail receiving functions	Automatically detects and prints JPEG and PDF documents attached to received e-mail.
Sending to folder functions	Sends scanned files over the network to shared folders, FTP server folders, or NetWare folders.

*1 When you send document in TIFF format.

Specifications Required for the Internet Fax Destination Machines

This section explains the specifications required for the Internet Fax destination machine.

When communicating with full mode-compatible machines, you can take advantage of higher specifications for coding, original size, and resolution. For details about the specifications available in full mode, see “Internet Fax Transmission and Reception” in “Specifications”.

Component	Specifications
Communication protocols	• Transmission SMTP • Reception POP3, SMTP, IMAP4

Component	Specifications
E-mail format	• Format MIME, Base64 • Content-Type Image/tiff Multipart/mixed (text/plain, Image/tiff (attached file forms))
Data format	• Profile TIFF Profile S • Coding MH • Original size A4 • Resolution (dpi) 200 × 100/200 × 200, 204 × 98/204 × 196

Reference

• p.421 "Specifications"

Maximum Values

The following list contains the maximum value for each item.

Item	Standard	Expansion memory (Optional)
Memory	4 MB	28 MB
Number of documents you can store in memory for Memory Transmission	400	400
Number of pages you can store in memory (using A4 Standard <ITU-T #1 Chart>)	Approx. 320	Approx. 2,240
Number of destinations you can register in the destination list	2,000	2,000
Number of groups you can register	100	100
Number of destinations you can register in a group	500	500
Number of destinations you can specify per file	500	500
Number of destinations you can specify for all files (including files in memory)	500	500
Number of destinations you can search at a time using [Search Dest.]	100	100
Number of recent destinations the machine can store	10	10
Number of digits that can be included in a destination	128	128
Number of digits for a SEP/SUB/PWD/SID Code	20	20
Number of characters you can enter in the e-mail subject line	128	128
Number of communication results you can check on this machine	200	200
Number of communication results printed in the Journal	50	50
Number of special senders you can register	250	250
Number of LAN-Fax Driver transmission results you can check using Web Image Monitor on a network computer	70	70

Item	Standard	Expansion memory (Optional)
Number of documents sent from a LAN-Fax Driver that the machine can retain as files to be sent	400	400
Number of destinations you can register into a Keystroke Program	500	500
Number of Keystroke Programs you can register	100	100
Number of characters you can enter for a program name	20	20
Number of received documents you can store on the machine's hard disk	400	400
Number of documents you can print at a time in [Print / Delete Stored Reception File]	30	30
Number of documents you can delete at a time in [Print / Delete Stored Reception File]	30	30
Number of stored documents you can specify at a time in [Select Stored File]	30	30
Number of stored pages you can send in one operation in [Select Stored File]	1,000	1,000
Number of stored documents you can print at a time using [Print 1st Page]	30	30
Number of stored documents you can print at a time using [Print File]	30	30
Number of documents you can store in the Document Server using the facsimile function	3,000	3,000
Number of pages per document you can store in the Document Server	1,000	1,000
Number of pages you can store in the Document Server (in total - copy function, facsimile function, printer function, and scanner function) (Using ITU-T #4 Chart)	Approx. 9,000	Approx. 9,000
Number of destinations you can register in the Address Book of the LAN-Fax	2,000	2,000

Item	Standard	Expansion memory (Optional)
Number of destinations you can specify at once using LAN-Fax	500	500

Note

- The maximum number of pages that can be stored or transmitted may decrease depending on the contents of documents.

Trademarks

Adobe, Acrobat, Acrobat Reader, PostScript, and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Microsoft®, Windows®, Windows Server®, and Windows Vista®, Outlook® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

PCL® is a registered trademark of Hewlett-Packard Company.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights to those marks.

The proper names of the Windows operating systems are as follows:

- The product names of Windows 2000 are as follows:

  Microsoft® Windows® 2000 Professional

  Microsoft® Windows® 2000 Server

  Microsoft® Windows® 2000 Advanced Server
- The product names of Windows XP are as follows:

  Microsoft® Windows® XP Professional Edition

  Microsoft® Windows® XP Home Edition

  Microsoft® Windows® XP Media Center Edition

  Microsoft® Windows® XP Tablet PC Edition
- The product names of Windows Vista are as follows:

  Microsoft® Windows Vista® Ultimate

  Microsoft® Windows Vista® Business

  Microsoft® Windows Vista® Home Premium

  Microsoft® Windows Vista® Home Basic

  Microsoft® Windows Vista® Enterprise
- The product names of Windows 7 are as follows:

  Microsoft® Windows® 7 Home Premium

  Microsoft® Windows® 7 Professional

  Microsoft® Windows® 7 Ultimate

  Microsoft® Windows® 7 Enterprise
- The product names of Windows Server 2003 are as follows:

  Microsoft® Windows Server® 2003 Standard Edition

  Microsoft® Windows Server® 2003 Enterprise Edition
- The product names of Windows Server 2003 R2 are as follows:

Microsoft® Windows Server® 2003 R2 Standard Edition

Microsoft® Windows Server® 2003 R2 Enterprise Edition

- The product names of Windows Server 2008 are as follows:

  Microsoft® Windows Server® 2008 Standard

  Microsoft® Windows Server® 2008 Enterprise

- The product names of Windows Server 2008 R2 are as follows:

  Microsoft® Windows Server® 2008 R2 Standard

  Microsoft® Windows Server® 2008 R2 Enterprise

INDEX

180-degree rotation printing.....220
1st Sheet.....56
2 Sided Original.....56
2 Sided Print.....343
2 sided printing.....217, 316
2nd Sheet.....56

A

Acceptable original sizes.....59
Accessing User Tools.....333
Add.....31
Add Destination.....233
Add User.....330
Adding a destination.....233
Address Book.....305, 320
Adjust Sound Volume.....336
Adv.Features.....151
Advanced Features.....151
Advanced Search.....139
All.....256
Area.....76
Area 1.....76
Area 2.....76
Attach a Cover Sheet.....315
Attaching a created cover sheet.....323
Authorized Reception.....387, 391
Auto Density.....79
Auto Detect.....73
Auto e-mail reception.....202
Auto fax reception power-up.....215
Auto Reception.....200
Auto Reduce.....185
Auto Run program.....305
Automatic Redial.....30

B

Backup File TX Setting.....340
Basic transmission.....310
BCC Transmission.....175
Before use.....304
Box Setting.....336
Box Setting Print List.....337
Box Settings.....399
Broadcasting sequence.....31
Bypassing the SMTP server.....98, 104

C

Canceling a Memory Transmission.....159
Canceling a transmission.....159
Canceling a transmission before the original is scanned.....159
Canceling a transmission before the transmission is started.....162
Canceling a transmission of an Internet Fax.....159
Canceling a transmission while the original is being scanned.....159
Canceling a transmission while the original is being transmitted.....160
Canceling an Immediate Transmission.....159
Center Mark.....216, 343
Change / Stop Transmission File.....166
Change File Name.....298
Change Name.....416
Change Password.....298
Change Title.....111
Change TX / Info.....231, 242, 244
Change User Name.....297
Changing a fax destination.....121
Changing a program name.....416
Changing default settings.....333
Changing Fax Information.....373
Changing Keystroke Programs.....414
Changing stored document information.....295
Changing the default functions of the fax's initial display.....169
Changing the line port.....84
Changing the settings of files in memory.....231
Changing the SMTP server setting.....238
Changing the transmission time.....236
Changing the User Parameters.....384
Check / Change Settings.....166, 231, 233, 236, 238
Check / Stop Transmission File.....162, 231
Check Modes.....34
Checkered Mark.....216, 343
Checking a transmission file.....231
Checking files stored in memory.....244

Checking the content of a scanned original.....65
Checking the memory status.....413
Checking the reception result.....254
Checking the result of the communication.....251
Checking the result of the Immediate Transmission. 252
Checking the storage result.....168
Checking the transmission result.....248
Checking transmission using LAN-Fax Driver..... 317
Clear Modes key.....17, 159
Clear/Stop key.....159, 160
Closed Network.....189
Closed Network Code.....189, 198
Combine Two Originals.....221
Combined Auto and Manual Density.....79
Communicating indicator.....160
Communication Failure Report.....252
Communication Page Count.....336
Communication Result Report.....251
Compatible machines.....425
Confidential File indicator.....270
Confidential File Report.....276
Confirming a transmission.....166
Confirming by e-mail.....250
Confirming by report.....249, 255
Confirming by report and e-mail.....251
Confirming on display.....248, 254
Confirming received and stored documents....265, 266
Confirming the reservations for SEP Code Reception 157
Confirming the result of a SEP Code Reception..... 158
Confirming the results of transfer.....210
Confirming transmission results by e-mail.....177, 318
Creating a cover sheet.....322
CSI - Own Fax Number.....198

D

Delete.....268, 281, 417
Delete File.....299
Delete Recent Destinations.....337
Deleting a destination from a Broadcast.....231
Deleting a fax destination.....123
Deleting a program.....417
Deleting a scan size.....369
Deleting a Special Sender.....398
Deleting a stored document.....299
Deleting Fax Information.....374
Deleting fax information using a Web browser..... 329
Deleting Information Box documents.....281
Deleting Information Boxes.....406
Deleting Personal Boxes.....403
Deleting programmed destinations.....321
Deleting received and stored documents.....265, 268
Deleting Transfer Boxes.....411
Delivering files received by fax.....332
Density (contrast).....79
Destination key.....109, 111
Detail.....71
Detecting blank sheet.....67
Display panel.....15
Displaying confirmation of transmission.....34
Document Server.....317
Dual Access.....30

E

E-mail.....24
E-mail encryption.....45, 48
E-mail functions and folder transmission.....40
E-mail Setting.....352
E-mail text.....203
E-mail Transmission.....47
E-mail TX results.....318
E-mail TX Results.....148, 177, 250
Edit Cover Sheet.....323
Edit Dest.....91, 95, 101
Editing Address Book.....320
Editing fax cover sheets.....322
Editing programmed destinations.....321
Enable H.323.....349
Enable SIP.....349
Entering a destination directly.....314
Entering a pause.....89
Entering a tone.....90

Entering an e-mail address.....95, 101
Entering an IP-Fax destination.....91
Entering numbers using the number keys.....88
Expansion memory.....420
External telephone.....146, 200
Extra G3 interface unit.....420

F

Facsimile key.....17, 200
Fax.....24
Fax Destination.....130
Fax Header Print.....193
Fax via computer.....303
File List.....291
File Name.....287
First Name.....193
Folder.....24
Folder Setting.....352
Folder Transfer Result Report.....344
Folder Transmission.....51
Forwarding.....342, 355, 388, 392
Forwarding destination.....210
Forwarding Mark.....358
Forwarding received documents.....210
Full mode.....44, 329
Functions not available by Internet Fax reception.....44
Functions not available by Internet Fax transmission.....43
Functions not available for e-mail transmission.....48
Functions not available for folder transmission.....51
Functions not available for IP-Fax transmission.....39

G

G3.....84
G3 Auto.....84
Gatekeeper (VoIP gatekeeper).....38
Gateway (VoIP gateway).....38
General Settings.....335

H

H.323.....38
H.323 Settings.....349
Hand set.....146, 200
Handset.....420
Having incoming documents printed on paper from the bypass tray.....226
How to read this manual.....13

I

If there is no paper of the correct size.....224
Image Rotation.....221
Immediate Reception.....195
Immediate Transmission.....23, 32
Immediate TX Result Report.....252
Important.....12
Information Box.....277
Initial display.....17
Initial Settings.....347
Installing individual applications.....306
International TX Mode.....112
Internet Fax.....24
Internet Fax Setting.....348
Internet Fax Transmission.....41
IP-Fax functions.....36

J

JBIG reception.....215
JBIG transmission.....71
Journal.....255, 260
Journal by e-mail.....264
JPEG.....205
Just size printing.....225

K

Keystroke Programs.....414

L

Label Insertion.....187
LAN-Fax Cover Sheet Editor.....305, 322
LAN-Fax Driver.....303, 304
LAN-Fax operation messages.....326
LAN-Fax Result Report.....318
Legal prohibition.....15
Louder.....144
Lower.....144

M

Mail to Print.....205
Making settings for option configuration.....309
Manage / Delete File.....295, 299
Managing facsimile functions using SmartDeviceMonitor for Admin.....323
Manual Density.....79
Manual Dial.....146
Manual e-mail reception.....203
Manual E-mail RX.....203
Manual Entry.....91, 95, 101, 286, 291
Manual Reception.....200
Manuals for this machine.....10
Max. E-mail Size.....339
Maximum values.....427
MDN.....173
Memory.....413
Memory File Transfer.....340, 353
Memory Lock.....388, 395
Memory Lock Reception.....345
Memory Reception.....196
Memory Storage Report.....168
Memory Transmission.....23, 26
Memory Transmission sequence.....31
Menu Protect.....351
Mixed Original Sizes.....77
Mixing scan settings for a multiple page original.....81
Multi-copy reception.....220
Multi-port.....84

N

Name.....127
Names.....125
Names of major functions.....14
Notes on using Internet Fax.....42
Notes on using IP-Fax.....38
Notice.....12

O

On Hook.....144
On Hook Dial.....144
On Hook Mode Release Time.....337
Operation switch.....215
Option Setting.....184
Optional equipment.....420
Optional extra G3 line.....208
Original + Stored File.....288
Original Feed Type.....55, 56
Original size.....53, 59
Original sizes detected automatically.....61
Original Type.....69

P

Page reduction.....223
Page separation and length reduction.....222
Paper size and scanned area.....60
Paper Tray.....343, 389
Paper Tray per Sender.....395
Parallel Memory Transmission.....23, 29
Parameter Setting.....347
Parameter Setting Print List.....347
Parameter Settings.....375
Password.....287
Password (PWD).....157
Password (SID).....154, 354
Pause.....89
PDF.....47, 51, 205
Personal Box.....207, 273
Photo.....69
Placing into the ADF.....53
Placing on the exposure glass.....53
Placing originals.....53
Preventing transmission to the wrong destination.....114
Preview.....266, 293, 316
Preview before transmission.....65
Prg. Dest.....124, 125
Print.....242, 267
Print / Delete Stored Reception File.....267, 268
Print 1st Page.....294
Print 2 Sided.....388, 394
Print completion beep.....216
Print Fax Header.....315
Print File.....294
Print Journal.....256
Print List.....244
Print Memory Lock.....270

Print per File No.....257
Print per User.....259
Print Personal Box File.....274
Print Reception Time.....343
Printing a file from memory.....242
Printing a file received with Memory Lock.....270
Printing a list of files in memory.....244
Printing and saving.....319
Printing fax information using a Web browser.....328
Printing Information Box documents.....280
Printing on both sides.....217
Printing options.....216
Printing Personal Box documents.....274
Printing received and stored documents.....265, 267
Printing stored documents.....294
Printing the Box List.....412
Printing the Journal.....256
Program.....414
Program / Change / Delete Gateway.....350
Program / Change / Delete Scan Size.....338, 368
Program / Change / Delete Standard Message...340
Program as Defaults.....169
Program Closed Network Code.....347
Program Dest.....112
Program Fax Information.....349
Program key.....414
Program Memory Lock ID.....348
Program Special Sender.....342
Program Special Sender Print List.....342
Programming a user name.....286
Programming an End Receiver.....356
Programming destination information from Web browser.....329
Programming Initial Set Up of a Special Sender.....395
Programming new destinations.....320
Programming/Changing a scan size.....368
Programming/Changing Information Boxes.....404
Programming/Changing Personal Boxes.....399
Programming/Changing Special Senders.....389
Programming/Changing Transfer Boxes.....407
Properties.....309
PWD Code.....157

Q

Quick Operation Key (1-3).....335
Quitting the forwarding function.....358
Quitting user tools.....334

R

Re-entering a fax number to confirm destination....114
Reading the display.....17
Reading the display panel and using keys.....17
Recall.....418
Receive File indicator.....196
Received images.....203
Receiving documents according to parameter-specified settings.....198
Receiving documents unconditionally.....197
Receiving e-mail.....201
Receiving Internet Fax documents.....202
Recent.....112
Reception File Print Qty.....391
Reception File Print Quantity.....343, 387
Reception File Setting.....342, 360
Reception File Status.....254
Reception functions.....207
Reception modes.....200
Reception Notice.....173
Reception notice message.....173
Reception Report e-mail.....362
Reception SEP Code.....154
Reception Settings.....342
Reception time.....217
Reg. No.....141
Registering a fax destination.....118
Registering destinations in the Address Book.....118
Registering destinations to the Address Book from Prg. Dest.....124
Registering entered destinations to the Address Book.....125
Registering Fax Information.....371, 372
Registering frequently used settings.....414

Registering Keystroke Programs.....414
Regular.....75
Report.....157, 158, 168, 210, 244, 251, 252, 260, 276, 318
Resending a file.....246
Resolution.....71
Returning the machine to the standby mode.....17
Routing e-mail received via SMTP.....213
Routing received documents.....207
Routing received documents with lines when optional extra G3 line is equipped.....208
Routing received documents with SUB Code.....207
RTI - Own Name.....198

S

Saving as files.....316
Scan Settings.....69, 338
Scan Size.....73
Scanning two-sided originals.....56
Search by destination name.....127
Search by e-mail destination.....134
Search by fax number.....130
Search by folder destination.....136
Search by Internet Fax destination.....132
Search by IP-Fax destination.....130
Search by registration number.....141
Search criteria.....139
Search Dest.....127
Search Destination.....336
Search using Advanced Search.....139
Searching for a destination in the Address Book.....127
Searching through an LDAP server.....127
Second Name.....193
Select Dial / Push Phone.....348
Select Line.....84
Select Stored File.....288, 294, 295
Selecting a line port or protocol.....354
Selecting a protocol.....84
Selecting destinations from Recent Destinations.....112
Selecting the file format.....82
Selecting type of transmission.....24
Send & Store.....284
Send Later.....171
Send Settings.....339
Sender Name.....148
Sender settings.....148
Sending a stored file.....283
Sending an e-mail.....101
Sending at a specific time.....171
Sending at specific time.....315
Sending by Internet Fax.....95
Sending by IP-Fax.....91
Sending fax documents from computers.....303
Sending originals using the exposure glass.....29, 33
Sending over a fax line.....88
Sending stored documents.....288
Sending to an e-mail address.....95
Sending to folder destinations.....107
SEP Code.....154, 191
SEP Code Reception.....154, 191
SEP Code RX Reserve Report.....157
SEP Code RX Result Report.....158
Setting a password.....354
Setting a SUB Code.....354
Setting an Internet Fax/e-mail destination as a BCC.....175
Setting LAN-Fax Driver properties.....309
Setting print properties.....309
Setting priority trays.....225
Setting the Original Orientation.....55
SID Code.....154
Simplified Display.....20
Simultaneous Broadcast using multiple line ports.....86
SIP.....38
SIP server.....38
SIP Settings.....349
SMTP.....98, 238
SMTP Reception File Delivery Settings.....365
SMTP reception using Internet Fax.....212
SMTP RX File Delivery Settings.....343
Special Senders to Treat Differently.....386
Specifications.....421
Specify Tray for Lines.....344
Specifying a destination.....88

Specifying a destination using a destination list.....312
Specifying a destination using Address Book.....313
Specifying a host name.....93
Specifying a SIP user name.....93
Specifying an alias telephone number.....93
Specifying an IP address.....91
Specifying auto-generated subjects for e-mail.....181
Specifying automatic deletion of incoming faxes when an error occurs.....361
Specifying documents by File Name.....292
Specifying documents by User Name.....291
Specifying documents from File List.....291
Specifying group destinations.....111
Specifying options.....315
Specifying tray for lines.....228
Stamp.....63
Stamp Sender Name.....148
Standard.....71
Standard Message Stamp.....184
Stop Transmission.....160, 162
Store / Delete / Print Information Box File.....278, 280, 281
Store File.....284
Store Only.....284
Stored file + Original.....288
Stored Reception File User Setting.....343, 363
Storing a document.....283, 284
Storing documents in Information Boxes.....278
SUB Code.....151, 190, 207, 209, 273
SUB Code Transfer Report.....210
SUB Code Transmission.....151, 190
Subject.....179
Substitute Reception.....196
Super Fine.....71
Switch Reception Mode.....342
Switch RX Mode.....200
Switch Title.....336
Switching between Memory and Immediate Transmission.....23
Switching the type of title in the Address Book.....111
Symbols.....13
System Status.....413

T

T.37 full mode.....44, 329
Terminology.....38
Text.....69, 182
Text / Line Art.....69
Text / Photo.....69
TIFF-F format.....41
Title 1.....111
Title 2.....111
Title 3.....111
Title word key.....17
To add new receiver.....330
To edit machine properties already programmed.....330
Tone.....90
Top to Bottom.....56
Top to Top.....56
Trademarks.....430
Transfer Box.....209
Transferring received documents.....209
Transmission.....26, 32
Transmission File Status.....248
Transmission modes.....23
Transmission SUB Code.....151, 354
Transmission with Image Rotation.....63
Transmit Failed File.....246
Transmit Stored File only.....288
Transmitting Journal by e-mail.....263
Tray Shift.....228
TSI - Transmitting Subscriber Identification.....224
TSI Print (Transmitting Subscriber Identification Print).....224
Two-sided printing.....217
TX File List.....244
TX Mode.....171, 173, 175, 177, 179, 182
Types of original whose sizes are difficult to detect.....61
Types of reception.....195

U

User Name.....286
User Parameter List.....375
User Text.....179

Using a program.....418
Using the Address Book to specify destinations.....109
Using the Document Server.....283
Using the machine's Address Book as the LAN-Fax Destination List.....324
Using the SmartDeviceMonitor for Client port.....307
Using the software.....304
Using the Standard TCP/IP Port.....306

V

Viewing fax information using a Web browser.....327
Viewing received fax documents using a Web browser.....327
Vol.....144

W

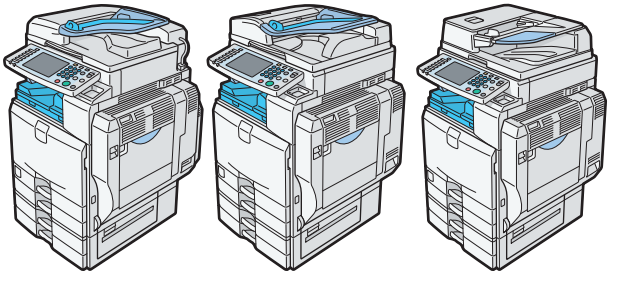
Web Image Monitor.....327
When placing an original into the ADF.....61
When placing an original on the exposure glass.....60
Where incoming documents are delivered - output tray.....228

© 2010

Operating Instructions Facsimile Reference

C9130/C9135/C9145/C9145A/C9155/C9155A
C9130G/C9135G/C9145G/C9145AG/C9155G/C9155AG
LD630C/LD635C/LD645C/LD645CA/LD655C/LD655CA
LD630CG/LD635CG/LD645CG/LD645CAG/LD655CG/LD655CAG
Aficio™ MP C3001/C3501/C4501/C4501A/C5501/C5501A
Aficio™ MP C3001G/C3501G/C4501G/C4501AG/C5501G/C5501AG

Operating Instructions
Printer Reference



1 Preparing the Machine
2 Printing Documents
3 Printing Stored Documents
4 Printing Files from an External Memory Device
5 Saving and Printing Using the Document Server
6 Printer Features
7 Appendix

Read this manual carefully before you use this machine and keep it handy for future reference. For safe and correct use, be sure to read the Safety Information in "About This Machine" before using the machine.

TABLE OF CONTENTS

Manuals for This Machine....6
Notice....8
Important....8
How to Read This Manual....9
Symbols....9
Names of Major Items....9
Notes....9
Laws and Regulations....10
Legal Prohibition....10
Model-Specific Information....11
Display Panel....12
Initial Display....12
Simplified Display....13

1. Preparing the Machine

Confirming the Connection Method....15
Network Connection....15
Local Connection....17
Installing the Printer Driver....19
Quick Install....20
Installing the Printer Driver for the Selected Port....22
Using the Standard TCP/IP Port....22
Using the IPP Port....23
Using the LPR Port....25
Using the WSD Port....26
Using the SmartDeviceMonitor for Client Port....29
Using as a Windows Network Printer....34
Using as a NetWare Print Server/Remote Printer....36
Form Feed....38
Banner Page....38
Printing after Resetting the Printer....38
Installing the Printer Driver Using USB....39
Windows 2000 - USB....39
Windows XP, Windows Server 2003/2003 R2 - USB....40

Windows Vista, Windows Server 2008 - USB....41
Windows 7 - USB....42
Printing with Parallel Connection....44
Making Option Settings for the Printer....46
Conditions for Bidirectional Communication....46
If Bidirectional Communication Is Disabled....47
Installing Font Manager....48
Using Adobe PageMaker Version 6.0, 6.5, or 7.0....49

2. Printing Documents

Displaying the Printer Driver Settings Screen....51
Making Printer Default Settings - the Printer Properties....51
Making Printer Default Settings - Printing Preferences....51
Making Printer Settings from an Application....52
Making Printer Settings - One Click Presets....53
Setting Paper on the Bypass Tray....54
Setting the Paper Size Using the Control Panel....55
Setting Custom Size Paper Using the Control Panel....57
Setting Thick Paper, Thin Paper or OHP Transparencies Using the Control Panel....59
Setting Envelopes Using the Control Panel....61
Printing on Orientation-Fixed or Two-Sided Paper....65
Print Area....67
Frequently Used Print Methods....69
Standard Printing....69
Printing on Both Sides of Sheets....71
Combining Multiple Pages into Single Page....73
Advanced Printing....77
Menu Names and Brief Overview of Each Function....77
Collate....78
Staple....80
Punch....84
Cover Sheet....87
Chapter Page....90
Slip Sheets....91

User Defined Pages....93
Watermarks....93
If Error Occurs with the Specified Paper Size and Type....96
Printing from a Selected Tray....96
Canceling a Print Job....97
Spool Printing....98
Printing a PDF File Directly....100
Using DeskTopBinder Lite....100
PDF Direct Printing Using Function Palette....101
PDF Direct Print Properties....102
Using UNIX Commands....103
Registering Classification Codes....105
Configuring Classification Codes....106
Specifying the Classification Code for a Print Job....106

3. Printing Stored Documents

Using the Print Job Function....109
Selecting the Initial Print Job List....109
Printing from the Print Job Screen....115
Sample Print....115
Locked Print....118
Hold Print....121
Stored Print....124
Printing from the Jobs Per User ID Screen....129
Printing the Selected Print Job....129
Printing All Print Jobs....130
Job List....133
Job List Screen....133
Checking Jobs in the Job List....134
Changing the Order of Jobs....135
Holding Jobs....135
Deleting Jobs....136
Checking the Job History....136
Canceling a Print Job....137

Canceling a Print Job Using the Control Panel....137
Windows - Canceling a Print Job from the Computer....138
Checking the Error Log....139

4. Printing Files from an External Memory Device

Direct Printing from a Removable Memory Device....141
Overview of Direct Printing from Removable Memory Device....141
Screen for Direct Printing....142
Printing from a Removable Memory Device....144
Direct Printing from a Digital Camera (PictBridge)....148
What is PictBridge?....148
PictBridge Printing....148
What Can be Done on This Machine....149
Exiting PictBridge....157
When PictBridge Printing Does Not Work....157
Other Reference Information....158

5. Saving and Printing Using the Document Server

Accessing the Document Server....161

6. Printer Features

Accessing User Tools....163
Changing Default Settings....163
Quitting User Tools....163
List / Test Print....165
Printing the Configuration Page....166
Maintenance....168
System....169
Host Interface....173
PCL Menu....174
PS Menu....176
PDF Menu....178

7. Appendix

Using the Virtual Printer....179
Adding a Virtual Printer....179
Changing a Virtual Printer Configuration....180

Confirming a Virtual Printer Configuration....180
Deleting a Virtual Printer....181
Printing Using a Virtual Printer....181
Specifications....183
Type 1 and 2....183
Type 3 and 4....184
Trademarks....186
INDEX....189

Manuals for This Machine

Read this manual carefully before you use this machine.

Refer to the manuals that are relevant to what you want to do with the machine.

Important

- **Media differ according to manual.**
- **The printed and electronic versions of a manual have the same contents.**
- **Adobe Acrobat Reader/Adobe Reader must be installed in order to view the manuals as PDF files.**
- **A Web browser must be installed in order to view the html manuals.**

About This Machine

Before using the machine, be sure to read the section of this manual entitled Safety Information.

This manual introduces the machine's various functions. It also explains the control panel, preparation procedures for using the machine, how to enter text, how to install the CD-ROMs provided, and how to replace paper, toner, staples, and other consumables.

Troubleshooting

Provides a guide for resolving common usage-related problems.

Copy and Document Server Reference

Explains Copier and Document Server functions and operations. Also refer to this manual for explanations on how to place originals.

Facsimile Reference

Explains Facsimile functions and operations.

Printer Reference

Explains Printer functions and operations.

Scanner Reference

Explains Scanner functions and operations.

Network and System Settings Reference

Explains how to connect the machine to a network, configure and operate the machine in a network environment, and use the software provided. Also explains how to change User Tools settings and how to register information in the Address Book.

Security Reference

This manual is for administrators of the machine. It explains security functions that you can use to prevent unauthorized use of the machine, data tampering, or information leakage. For enhanced security, we recommend that you first make the following settings:

- Install the Device Certificate.
- Enable SSL (Secure Sockets Layer) Encryption.

- Change the user name and password of the administrator using Web Image Monitor.

For details, see "Setting up the Machine", Security Reference.

Be sure to read this manual when setting the enhanced security functions, or user and administrator authentication.

PostScript 3 Supplement

Explains how to set up and use PostScript 3.

VM Card Extended Feature Settings Device Reference

Explains how to set up the extended features settings with the machine.

VM Card Extended Feature Settings Web Reference

Explains how to set up the extended features settings using Web Image Monitor.

Other manuals

- UNIX Supplement
- Quick Reference Copy Guide
- Quick Reference Printer Guide
- Quick Reference Fax Guide
- Quick Reference Scanner Guide
- App2Me Start Guide

Note

- Manuals provided are specific to machine types.
- For "UNIX Supplement", please visit our Web site or consult an authorized dealer. This manual includes descriptions of functions and settings that might not be available on this machine.

Notice

Important

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

For good copy quality, the manufacturer recommends that you use genuine toner from the manufacturer.

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

How to Read This Manual

Symbols

This manual uses the following symbols:

Important

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

Note

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys on the machine's display or control panels.

Names of Major Items

Major items of this machine are referred to as follows in this manual:

- Auto Document Feeder → ADF
- Large capacity tray → LCT

Notes

Contents of this manual are subject to change without prior notice.

Colors on color keys or the color circle may differ slightly from the colors of actual copies.

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Depending on which country you are in, certain units may be optional. For details, please contact your local dealer.

Laws and Regulations

Legal Prohibition

Do not copy or print any item for which reproduction is prohibited by law.

Copying or printing the following items is generally prohibited by local law:

bank notes, revenue stamps, bonds, stock certificates, bank drafts, checks, passports, driver's licenses.

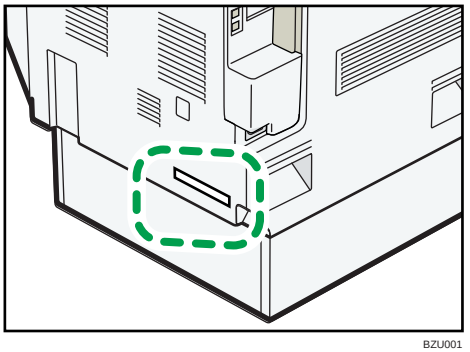
The preceding list is meant as a guide only and is not inclusive. We assume no responsibility for its completeness or accuracy. If you have any questions concerning the legality of copying or printing certain items, consult with your legal advisor.

This machine is equipped with a function that prevents making counterfeit bank bills. Due to this function the original images similar to bank bills may not be copied properly.

Model-Specific Information

This section explains how you can identify the region your machine belongs to.

There is a label on the rear of the machine, located in the position shown below. The label contains details that identify the region your machine belongs to. Read the label.



BZU001

The following information is region-specific. Read the information under the symbol that corresponds to the region of your machine.

Region A (mainly Europe and Asia)

If the label contains the following. your machine is a region A model:

- CODE XXXX -27, -29, -67, -69
- 220-240V

Region B (mainly North America)

If the label contains the following, your machine is a region B model:

- CODE XXXX -17, -51, -52, -57
- 120-127V

Note

- Dimensions in this manual are given in two units of measure: metric and inch. If your machine is a Region A model, refer to the metric units. If your machine is a Region B model, refer to the inch units.

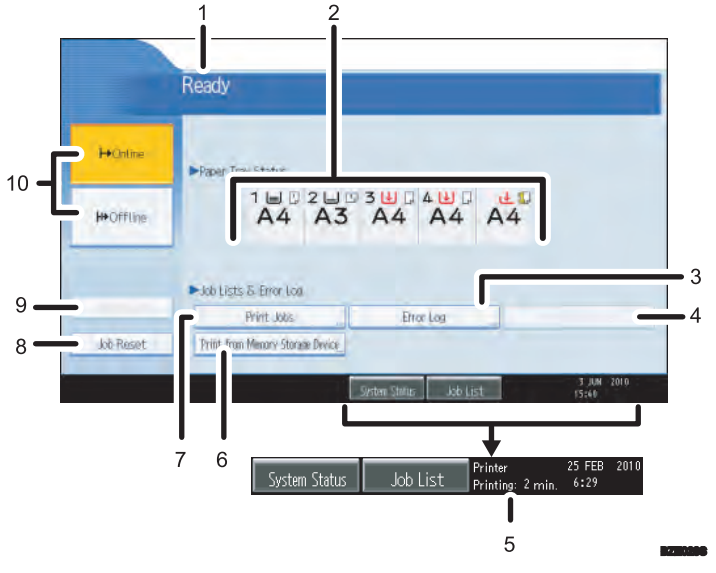
Display Panel

This section describes configuration using the display panel when the printer function is selected.

Initial Display

Important

- The machine switches to offline when you make settings in online mode. After you complete the setting, the machine switches to online automatically.
- If you make a setting when the machine is offline, it will stay offline afterwards.
- The function items displayed serve as selector keys. You can select or specify an item by pressing it lightly.
- When you select or specify an item on the control panel, it becomes highlighted.
- Keys dimmed (for example, OK) cannot be used.



1. **Operational status or messages**

   Displays current machine status, such as "Ready", "Offline", and "Printing...". Information about the print job (user ID and document name) appears in this section.

2. **Paper Tray Status indicators**

   The paper tray settings appear.

3. **Error Log**

   Press to display the error logs of print jobs sent from a computer.

4. **Spooling Job List**

   Press to display spooled jobs.

5. **Estimated time until printing completes**

   Displays estimated time until printing completes after receiving all data from the computer.

6. **Print from Memory Storage Device**

   Press to display the screen for printing files stored on removable memory devices directly.

7. **Print Jobs**

   Press to display print jobs sent from a computer.

8. **Job Reset**

   Press to cancel the current print job.

   If you press it when the machine is offline and Hex Dump is selected, Hex Dump is canceled.

9. **Form Feed**

   Press to print all the data left in the machine's input buffer.

   - When the machine is online, the status appears dimly.

10. **Online / Offline**

    Press to switch the machine between online and offline.

    When the machine is online, it can receive data from the computer.

    When the machine is offline, it cannot receive data from the computer.

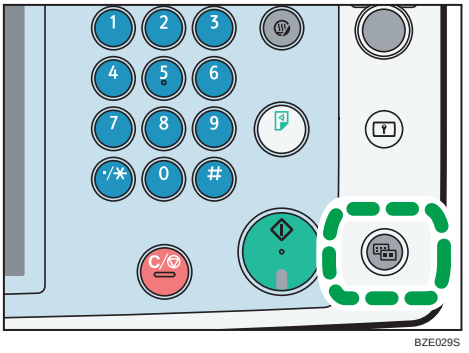
Note

- When the power is turned on, the copier display is shown. This is a factory default. This initial setting can be changed. For details, see "System Settings", Network and System Settings Reference.

Simplified Display

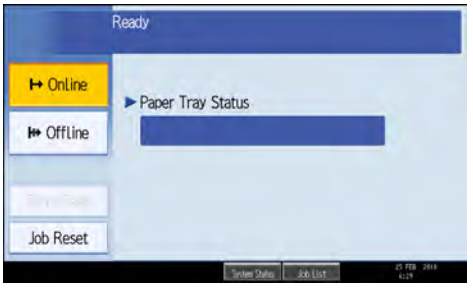
This section explains how to switch to the simplified display.

When you press the [Simplified Display] key, the screen changes from the initial display to the simplified display. Letters and keys are displayed at a larger size, making operations easier.



BZE029S

Example of a simplified display



Note

- To return to the initial display, press the [Simplified Display] key again.
- Certain keys do not appear on the simplified display.
- The [Simplified Display] key is lit when the simplified display is active.

1. Preparing the Machine

This chapter describes how to connect this machine to your computer, and install the printer driver.

Confirming the Connection Method

This machine supports network and local connection.

Before installing the printer driver, check how the machine is connected. Follow the driver installation procedure that is appropriate to the connection method.

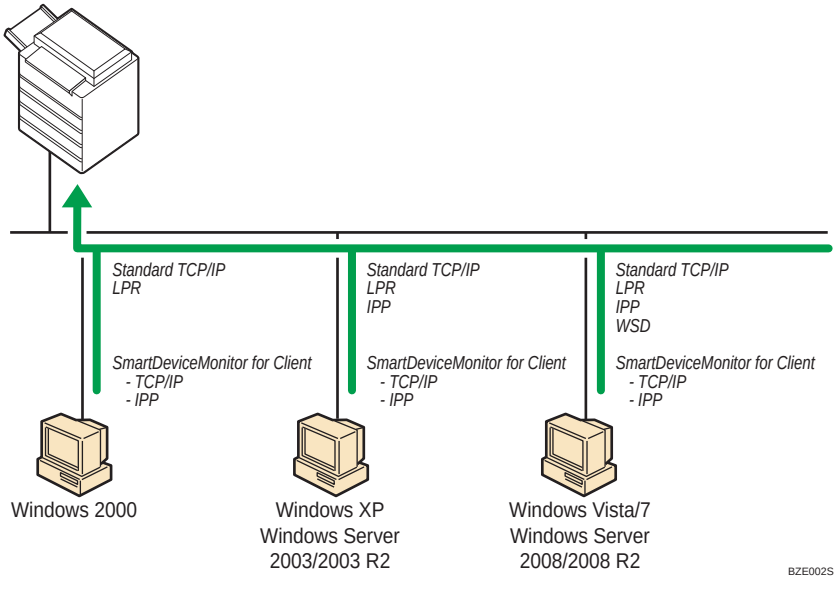
Network Connection

This machine can be used as a Windows printing port or network printer.

Using this machine as the Windows printing port

Network connections can be established through Ethernet, and Wireless LAN.

Available ports are determined based on the combination of Windows operating system version and connection method used.



Windows 2000

Connection Method	Available Ports
• Ethernet • Wireless LAN	• Standard TCP/IP port • LPR port • SmartDeviceMonitor for Client port

Windows XP, Windows Server 2003/2003 R2

Connection Method	Available Ports
• Ethernet • Wireless LAN	• Standard TCP/IP port • IPP port • LPR port • SmartDeviceMonitor for Client port

Windows Vista/7, Windows Server 2008/2008 R2

Connection Method	Available Ports
• Ethernet • Wireless LAN	• Standard TCP/IP port • IPP port • LPR port • WSD port • SmartDeviceMonitor for Client port

Note

- See the explanation about how to install the printer driver for each type of port.
- For details about Standard TCP/IP port, see "Installing the Printer Driver".
- For details about IPP port, see "Installing the Printer Driver".
- For details about LPR port, see "Installing the Printer Driver".
- For details about WSD port, see "Installing the Printer Driver".
- For details about SmartDeviceMonitor for Client port, see "Installing the Printer Driver".
- If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site.

Reference

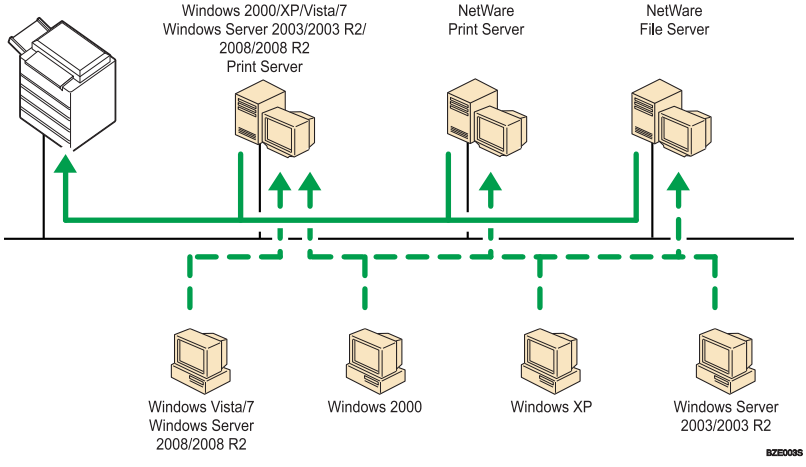
- p.19 "Installing the Printer Driver"

Using as a network printer

This machine can be used as the Windows network printer, the NetWare print server, or the NetWare remote printer.

Important

- **IPX/SPX (NetWare) cannot be used under Windows Vista/7 and Windows Server 2008/2008 R2.**



Note

- In an IPv6 environment, NetWare servers cannot be used.
- See the explanation about how to install the printer driver for each type of network printer.
- For details about Windows network printer, see "Using as a Windows Network Printer".
- For details about NetWare print server and remote printer, see "Using as a NetWare Print Server/ Remote Printer".
- If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site.

Reference

- p.34 "Using as a Windows Network Printer"
- p.36 "Using as a NetWare Print Server/Remote Printer"

Local Connection

Local connections can be established via parallel and USB connections.

Note

- See the explanation about how to install the printer driver for each method of connections.
- For details about USB connections, see "Installing the Printer Driver Using USB".

- For details about parallel connections, see "Printing with Parallel Connection".

Reference

- p.39 "Installing the Printer Driver Using USB"
- p.44 "Printing with Parallel Connection"

Installing the Printer Driver

This section explains how to install the printer driver. There are two ways to install the printer driver: using Quick Install, which installs the printer driver, or installing the appropriate driver according to the port you want to use.

Downloading the Printer Driver

You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.

If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.

Note

- This manual uses procedures based on Windows XP as an example, unless otherwise specified. Procedures and screens might vary depending on the operating system you are using.
- The PostScript 3 printer driver is also available for this machine. For details about installing and configuring the PostScript 3 printer driver, see PostScript 3 Supplement.

Quick Install

You can install the printer drivers easily from the CD-ROM provided with this machine.

Using Quick Install, the PCL 6 printer driver is installed under network environment, and the Standard TCP/IP port will be set.

Important

- **Manage Printers permission is required to install the drivers. Log on as an Administrators group member.**
- **If you connect using USB, see "Installing the Printer Driver Using USB" and install the printer driver.**

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**
4. **Click [Quick Install].**

   The software license agreement appears in the [License Agreement] dialog box.
5. **After reading the agreement, click [I accept the agreement.], and then click [Next >].**
6. **Select the machine model you want to use in the [Select Printer] dialog box.**

   For network connection via TCP/IP, select the machine whose IP address is displayed in [Connect To].

   For parallel connection, select the machine whose printer port is displayed in [Connect To].
7. **Click [Install].**

   If the [Hardware Installation] message appears, click [Continue Anyway].

   The printer driver installation starts.

   The PCL 6 printer driver is installed in the language specified by your operating system.
8. **Click [Finish].**

   A message about restarting the computer appears. Restart the computer to complete installation.
9. **Click [Exit] in the first dialog box of the installer, and then take out the CD-ROM.**

Note

- To stop installation of Quick Install, click [Cancel] before installation is complete.
- Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.
- Quick Install is not available unless bidirectional communication between the machine and computer is enabled via parallel connection. For details about meeting the bidirectional communication conditions, see "Making Option Settings for the Printer".

Reference

- p.39 "Installing the Printer Driver Using USB"
- p.46 "Making Option Settings for the Printer"

Installing the Printer Driver for the Selected Port

You can install the appropriate driver according to the port you want to use.

Using the Standard TCP/IP Port

This describes how to install the PCL printer driver using the Standard TCP/IP port.

Important

- Manage Printers permission is required to install the driver. Log on as an Administrators group member.
- In an IPv6 environment, you cannot use the Standard TCP/IP Port. Use the SmartDeviceMonitor for Client port.
- You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.
- If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.

Installing the PCL printer driver

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**
4. **Click [PCL Printer Driver].**

   The software license agreement appears in the [License Agreement] dialog box.
5. **After reading the agreement, click [I accept the agreement.], and then click [Next >].**
6. **Select a printer driver you want to use in the [Select Program] dialog box.**

   You can select several printer drivers.

   The PCL 6 printer driver is installed in the language specified by your operating system.
7. **Click [Next >].**
8. **Select the machine model you want to use.**

   The machine name can be changed in the [Change settings for 'Printer Name'] box.
9. **Double-click the machine name to display the printer settings.**

   The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, machine model, and port.

10. **Click [Port], and then click [Add].**
11. **Click [Standard TCP/IP Port], and then click [OK].**

    If [Standard TCP/IP Port] does not appear, see Windows Help and then configure the settings.
12. **Click [Next >] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.**
13. **Enter the machine name or IP address in the [Printer Name or IP Address] box.**

    The [Port Name] text box automatically obtains a port name. Change this name if necessary.
14. **Click [Next >].**
15. **Click [Finish] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.**

    The installation start dialog box reappears.
16. **Check that the port of the selected printer is displayed in [Port].**
17. **Configure the default printer as necessary.**
18. **Click [Continue].**

    The printer driver installation starts.
19. **Click [Finish].**
20. **Select one of the options to restart the computer either now or later, and then click [Finish].**

    Restart the computer to complete installation.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.
- A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add Printer]. See "Messages Displayed When Installing the Printer Driver", Troubleshooting.

Using the IPP Port

This describes how to install the PCL printer driver using the IPP port.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**
- **In an IPv6 environment, you cannot use the IPP Port. Use the SmartDeviceMonitor for Client port.**

1

- The IPP port cannot be used under Windows 2000. If you are using Windows 2000, install the PCL printer driver using the SmartDeviceMonitor for Client port. To use the SmartDeviceMonitor for Client port, you must first download SmartDeviceMonitor for Client from the manufacturer's Web site. For details about the SmartDeviceMonitor for Client port, see "Using the SmartDeviceMonitor for Client Port".
- To print via IPP-SSL, use the SmartDeviceMonitor for Client port.
- To print via IPP-SSL under Windows Vista/7 or Windows Server 2008/2008 R2, you must install the device certificate on your computer before you install the printer driver using the IPP port. For details, consult your administrator.

Reference

- p.29 "Using the SmartDeviceMonitor for Client Port"

Installing the PCL printer driver

1. **Quit all applications currently running.**
2. **On the [Start] menu, click [Printers and Faxes].**
3. **Click [Add a printer].**

   The [Add Printer Wizard] dialog box appears.
4. **Click [Next>].**
5. **Click [A network printer, or a printer attached to another computer].**
6. **Click [Next>].**
7. **Click [Connect to a printer on the Internet or on a home or official network:].**
8. **In the [URL:] box, enter "http:// machine's IP address/ printer (or ipp)" as the machine's address, and then click [Next>].**
9. **Click [Have Disk...].**
10. **Insert the provided CD-ROM into the computer's CD-ROM drive.**

    If Auto Run starts, click [Cancel] and then [Exit].
11. **Click [Browse...], and then specify a location for the INF file.**

    If the CD-ROM drive letter is D, the printer driver's source files are stored in "D:\DRIVERS\PCL5C\XP_VISTA\(Language)\DISK1" or "D:\DRIVERS\PCL6\XP_VISTA\MUI\DISK1".

    The PCL 6 printer driver is installed in the language specified by your operating system.
12. **Click [Open].**
13. **Click [OK] to close the Install From Disk window.**
14. **Select the machine you want to use, and then click [OK].**

    If the [Hardware Installation] message appears, click [Continue Anyway].

15. **Configure the default printer as necessary, and then click [Next >].**
16. **Click [Finish].**

    If installation is successful, the icon of the printer connected to the IPP port is added to the [Printers and Faxes] window.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.

Using the LPR Port

This describes how to install the PCL printer driver using the LPR port.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**
- **In an IPv6 environment, you cannot use the LPR Port. Use the SmartDeviceMonitor for Client port.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**

Installing the PCL printer driver

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**
4. **Click [PCL Printer Driver].**

   The software license agreement appears in the [License Agreement] dialog box.
5. **After reading the agreement, click [I accept the agreement.], and then click [Next >].**
6. **Select a printer driver you want to use in the [Select Program] dialog box.**

   You can select several printer drivers.

   The PCL 6 printer driver is installed in the language specified by your operating system.
7. **Click [Next >].**
8. **Select the machine model you want to use.**

   The machine name can be changed in the [Change settings for 'Printer Name'] box.

9. **Double-click the machine name to display the printer settings.**

   The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, machine model, and port.

10. **Click [Port], and then click [Add].**
11. **Click [LPR Port], and then click [OK].**

    If [LPR Port] does not appear, see Windows Help and install it.

12. **Enter the machine's IP address in the [Name or address of server providing lpd:] box.**
13. **Enter "lp" in the [Name of printer or print queue on that server:] box, and then click [OK].**

    The port is added.

14. **Check that the port of the selected printer is displayed in [Port].**
15. **Configure the default printer as necessary.**
16. **Click [Continue].**

    The printer driver installation starts.

17. **Click [Finish].**
18. **Select one of the options to restart the computer either now or later, and then click [Finish].**

    Restart the computer to complete installation.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.
- A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add Printer]. See "Messages Displayed When Installing the Printer Driver", Troubleshooting.

Using the WSD Port

This describes how to install the PCL printer driver using the WSD port.

Important

- **The WSD port can be used under Windows Vista/7, or Windows Server 2008/2008 R2.**
- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**

- You can connect to the printer only if both the printer and computer are on the same network segment, or "Network discovery" is enabled. For details, see Windows Help.

Windows Vista, Windows Server 2008 - WSD port

1. **Quit all applications currently running.**
2. **On the [Start] menu, click [Network].**

   The [Network] window appears, and the device search begins automatically.
3. **Right-click the machine's icon, and then click [Install].**

   If the [User Account Control] dialog box appears, click [Continue].

   The [Found New Hardware] dialog box appears.
4. **Click [Locate and install driver software (recommended)].**

   If the [User Account Control] dialog box appears, click [Continue].
5. **Click [Browse my computer for driver software (advanced)].**
6. **Insert the provided CD-ROM into the computer's CD-ROM drive.**

   If the [AutoPlay] dialog box appears, click the [Close] button.
7. **Click [Browse...], and then specify a location for the printer driver.**

   If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

   - PCL 5c

     D:\DRIVERS\PCL5C\XP_VISTA\(Language)\DISK1
   - PCL 6

     D:\DRIVERS\PCL6\XP_VISTA\MUI\DISK1

   The PCL 6 printer driver is installed in the language specified by your operating system.
8. **Click [Next].**

   If the [Windows can't verify the publisher of this driver software] message appears, click [Install this driver software anyway].
9. **Click [Close].**

   If installation is successful, the icon of the printer connected to the WSD port is added to the [Printers] window.

Note

- The port name that follows "WSD" uses random character strings. It cannot be changed freely.
- To stop installation of the selected driver, click [Cancel] before the installation is complete. When re-installing the WSD Port, right-click the machine's icon in the [Network] window, and then click [Uninstall].

Windows 7 - WSD port

1. **Quit all applications currently running.**
2. **On the [Start] menu, click [Computer].**
3. **Click [Network].**
4. **Right-click the machine's icon, and then click [Install].**

   Driver installation starts automatically.

   If the "Device driver software was not successfully installed" message appears, close the message, and then proceed to step 5.
5. **On the [Start] menu, click [Devices and Printers].**
6. **Click [Add a printer].**
7. **Click [Add a local printer].**
8. **Check the [Use an existing port:] check box, and select WSD port.**
9. **Click [Next].**
10. **Click [Have Disk...].**
11. **Insert the CD-ROM into the CD-ROM drive.**

    If the [AutoPlay] dialog box appears, click the [Close] button.
12. **Click [Browse...], and then specify a location for the printer driver.**

    If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

    - PCL 5c

      D:\DRIVERS\PCL5C\XP_VISTA\(Language)\DISK1
    - PCL 6

      D:\DRIVERS\PCL6\XP_VISTA\MUI\DISK1

    The PCL 6 printer driver is installed in the language specified by your operating system.
13. **Click [OK] to close the [Install From Disk] window.**
14. **Select the manufacturer and model name of the machine you want to use, and then click [Next].**
15. **Follow the instructions on the screens.**

    According to your needs, you may change the machine name, configure the machine as a default printer and/or a shared printer, and print a test page.
16. **Click [Finish].**

    If installation is successful, the icon of the printer connected to the WSD port is added to the [Devices and Printers] window.

Note

- The port name that follows "WSD" uses random character strings. It cannot be changed freely.

- To stop installation of the selected driver, click [Cancel] before the installation is complete. When re-installing the WSD Port, right-click the machine's icon in the [Network] window, and then click [Uninstall].

Using the SmartDeviceMonitor for Client Port

This describes how to install the printer driver using the SmartDeviceMonitor for Client port.

To use this function, you must first download SmartDeviceMonitor for Client from the manufacturer's Web site and install it on your computer. Contact your local dealer for information on downloading SmartDeviceMonitor for Client.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**

Installing the PCL printer driver (TCP/IP)

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**
4. **Click [PCL Printer Driver].**

   The software license agreement appears in the [License Agreement] dialog box.
5. **After reading the agreement, click [I accept the agreement.], and then click [Next >].**
6. **Select the printer driver you want to use in the [Select Program] dialog box.**

   You can select several printer drivers.

   The PCL 6 printer driver is installed in the language specified by your operating system.
7. **Click [Next >].**
8. **Select the machine model you want to use.**

   The machine name can be changed in the [Change settings for 'Printer Name'] box.
9. **Double-click the machine name to display the printer settings.**

   The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, machine model, and port.

10. **Click [Port], and then click [Add].**
11. **Click [SmartDeviceMonitor], and then click [OK].**
12. **Click [TCP/IP], and then click [Search].**

    A list of printers using TCP/IP appears.
13. **Select the machine you want to use, and then click [OK].**

    Only machines that respond to a broadcast from the computer appear. To use a machine not listed here, click [Specify Address], and then enter the IP address or host name of the machine.
14. **Check that the port of the selected printer is displayed in [Port].**
15. **Set a user code, if necessary.**

    Up to 8 numeric characters can be entered. No alphabetic characters or symbols can be entered.
16. **Select the [Default Printer] check box to configure the printer as default.**
17. **Click [Continue].**

    Installation starts.
18. **Click [Finish].**
19. **Select one of the options to restart the computer either now or later, and then click [Finish].**

    Restart the computer to complete installation.

Note

- Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.
- A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add Printer]. See "Messages Displayed When Installing the Printer Driver", Troubleshooting.

Installing the PCL printer driver (IPP)

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**
4. **Click [PCL Printer Driver].**

   The software license agreement appears in the [License Agreement] dialog box.
5. **After reading the agreement, click [I accept the agreement.], and then click [Next >].**
6. **Select a printer driver you want to use in the [Select Program] dialog box.**

   You can select several printer drivers.

   The PCL 6 printer driver is installed in the language specified by your operating system.

7. **Click [Next >].**
8. **Select the machine model you want to use.**

   The machine name can be changed in the [Change settings for 'Printer Name'] box.
9. **Double-click the machine name to display the printer settings.**

   The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, machine model, and port.
10. **Click [Port], and then click [Add].**
11. **Click [SmartDeviceMonitor], and then click [OK].**
12. **Click [IPP].**
13. **In the [Printer URL] box, enter "http://(machine's IP address or host name)/printer" as the machine's address.**

    If the server authentication is issued, to enable SSL (a protocol for encrypted communication), enter "https://(machine's IP address or host name)/printer" (Internet Explorer 5.01, or a higher version must be installed).

    (example IP address: 192.168.15.16)

    `http://192.168.15.16/printer`

    `https://192.168.15.16/printer`

    You can enter "http://machine's IP address or host name/ipp" as the machine's address.

    If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.
14. **Enter a name for identifying the printer in [IPP Port Name]. Use a name different from the one of any existing ports.**

    If a name is not specified here, the address entered in the [Printer URL] box becomes the IPP port name.
15. **Click [Detailed Settings] to make necessary settings, and then click [OK].**

    For details about the settings, see SmartDeviceMonitor for Client Help.
16. **Click [OK].**
17. **Check that the port of the selected printer is displayed in [Port].**
18. **Set a user code, if necessary.**

    Up to 8 numeric characters can be entered. No alphabetic characters or symbols can be entered.
19. **Select the [Default Printer] check box to configure the printer as default.**
20. **Click [Continue].**

    Installation starts.
21. **Click [Finish].**
22. **Select one of the options to restart the computer either now or later, and then click [Finish].**

    Restart the computer to complete installation.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.
- A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add Printer]. See "Messages Displayed When Installing the Printer Driver", Troubleshooting.

Changing the port settings for SmartDeviceMonitor for Client

Follow the procedure below to change the SmartDeviceMonitor for Client settings, such as TCP/IP timeout, recovery/parallel printing, and printer groups.

Windows 2000:

1. **On the [Start] menu, point to [Settings], and then click [Printers].**

   The [Printers] window appears.
2. **Click the icon of the printer you want to use. On the [File] menu, click [Properties].**
3. **On the [Ports] tab, click [Configure Port...].**

   The [Configuration] dialog box appears.

Windows XP, Windows Server 2003/2003 R2:

1. **On the [Start] menu, click [Printers and Faxes].**

   The [Printers and Faxes] window appears.
2. **Click the icon of the printer you want to use. On the [File] menu, click [Properties].**
3. **Click the [Ports] tab, and then click [Configure Port...].**

   The [Port Configuration] dialog box appears.

Windows Vista, Windows Server 2008:

1. **On the [Start] menu, click [Control Panel].**

   The [Control Panel] window appears.
2. **Click [Printer] in "Hardware and Sound".**

   The [Printers] window appears.
3. **Right-click the icon of the printer you want to use, and then click [Properties].**
4. **Click the [Ports] tab, and then click [Configure Port...].**

   The [Port Configuration:] dialog box appears.

Windows 7, Windows Server 2008 R2:

1. **On the [Start] menu, click [Devices and Printers].**

   The [Devices and Printers] window appears.

2. **Right-click the icon of the printer you want to use, and then click [Printer properties].**

   The printer properties appear.

3. **Click the [Ports] tab, and then click [Configure Port...].**

   The [Port Configuration] dialog box appears.

Note

- User, proxy, and timeout settings can be configured for IPP.
- If no settings on the [Recovery/Parallel Printing] tab are available, follow the procedure below.
  1. Click [Cancel] to close the [Port Configuration:] dialog box.
  2. Start SmartDeviceMonitor for Client, and then right-click the SmartDeviceMonitor for Client icon on the task tray.
  3. Point to [Property], and then click [Extended Features Settings].
  4. Select the [Set Recovery/Parallel Printing for each port] check box.
  5. Click [OK] to close the [Extended Features Settings] dialog box.
- For details about these settings, see "Using the SmartDeviceMonitor for Client Port", or SmartDeviceMonitor for Client Help.

Reference

- p.29 "Using the SmartDeviceMonitor for Client Port"

Using as a Windows Network Printer

This describes how to install the PCL printer driver when using the printer as a Windows network printer.

To use the print server, install the printer driver by selecting "Network printer server", and then select the Windows shared printer.

This section assumes that the client computer has already been configured to communicate with a Windows print server. Do not begin the following procedure before the client computer is set up and configured correctly.

Important

- Manage Printers permission is required to install the drivers. Log on as an Administrators group member.
- If you print with a print server connected to the machine using the SmartDeviceMonitor for Client port, Recovery Printing and Parallel Printing cannot be used from the client computer.
- If you print under a print server other than Windows 2000, notification functions of SmartDeviceMonitor for Client may not be used with the client computer.
- You can install the printer driver from the CD-ROM provided with this printer or download it from the manufacturer's Web site.
- If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.

Installing the PCL Printer Driver

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**
4. **Click [PCL Printer Driver].**

   The software license agreement appears in the [License Agreement] dialog box.
5. **After reading the agreement, click [I accept the agreement.], and then click [Next >].**
6. **Select the printer driver you want to use in the [Select Program] dialog box.**

   You can select several printer drivers.

   The PCL 6 printer driver is installed in the language specified by your operating system.
7. **Click [Next >].**
8. **Select the [Printer Name] check box to select the machine models you want to use.**

   The machine name can be changed in the [Change settings for 'Printer Name'] box.

9. **Double-click the machine name to display the machine settings.**

   The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, machine model, and port.

10. **Click [Port], and then click [Add].**
11. **Click [Network Printer], and then click [OK].**
12. **Double-click the computer name you want to use as a print server in the [Browse for Printer] window.**
13. **Select the printer you want to use, and then click [OK].**
14. **Check that the port of the selected printer is displayed in [Port].**
15. **Configure the user code as necessary.**

    For details about user code, see the printer driver Help.

16. **Select the [Default Printer] check box to configure the printer as default.**
17. **Click [Continue].**

    The printer driver installation starts.

18. **Click [Finish].**
19. **Select one of the options to restart the computer either now or later, and then click [Finish].**

    Restart the computer to complete installation.

Note

- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- To stop installation of the selected drivers, click [Cancel] before installation is complete.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.
- A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run.
- If you still want to install the printer driver, use [Add Printer]. See "Messages Displayed When Installing the Printer Driver", Troubleshooting.

Using as a NetWare Print Server/Remote Printer

This describes how to set up the Windows computer used as the NetWare client.

Important

- **Manage Printers permission is required to install the drivers. Log on as an Administrators group member.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**
- **IPX/SPX (NetWare) cannot be used under Windows Vista/7 and Windows Server 2008/2008 R2.**
- **In an IPv6 environment, NetWare servers cannot be used.**

The following explanation assumes NetWare Client is installed on the client computer and the NetWare server environment is correctly set up. Install all necessary client applications before following this procedure.

Set up the printer driver while logging on to the NetWare file server.

The following values are used in the example:

- NetWare version: 4.1
- File server name: CAREE
- Queue name: R-QUEUE

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**
4. **Click [PCL Printer Driver].**

   The software license agreement appears in the [License Agreement] dialog box.
5. **After reading the agreement, click [I accept the agreement.], and then click [Next >].**
6. **Select the printer driver you want to use in the [Select Program] dialog box.**

   You can select several printer drivers.

   The PCL 6 printer driver is installed in the language specified by your operating system.
7. **Click [Next >].**
8. **Select the [Printer Name] check box to select the machine model you want to use.**

   The machine name can be changed in the [Change settings for 'Printer Name'] box.

9. **Double-click the machine name to display the printer settings.**

   The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, machine model, and port.

10. **Click [Port], and then click [Add].**
11. **Click [Network Printer], and then click [OK].**
12. **Double-click the name of the NetWare file server on the network tree.**

    The created queue is displayed.

13. **Select the print queue, and then click [OK].**
14. **Check that the port of the selected printer is displayed in [Port].**
15. **Click [Continue].**

    The printer driver installation starts.

16. **Click [Finish] in the [Select Program] dialog box.**
17. **After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].**

    Restart the computer to complete installation.

18. **After restarting the computer, open the printer properties from the [Printers and Faxes] window.**

    Under Windows 2000 or Windows Server 2003/2003 R2, launch the [Printers] window, and then open the printer properties.

19. **Click the [NetWare setting] tab.**

    Under Windows Server 2003/2003 R2, on the [Printer Settings] tab, clear the [Form Feed] and [Enable Banner] check boxes.

    Do not select these check boxes since they are automatically selected by the printer driver. If you select the check boxes, the printer may not print correctly.

20. **Click [OK] to close the printer properties dialog box.**

Note

- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.
- To stop installation of the selected drivers, click [Cancel] before installation is complete.
- The protocol is set to inactive as default. Enable the protocol on the control panel, using Web Image Monitor or using telnet.

Form Feed

Do not use NetWare to configure form feed. Form feed is controlled by the printer driver on Windows. If NetWare form feed is configured, the printer may not print properly.

Follow the procedure below to disable form feed according to the operating system used:

Clear the [Form feed] check box on the [NetWare Settings] tab in the printer properties dialog box.

Banner Page

Do not use NetWare to configure banner page.

Follow the procedure below to disable banner page according to the operating system used:

Clear the [Enable banner] check box on the [NetWare Settings] tab in the printer properties dialog box.

Printing after Resetting the Printer

Printer to print server connection requires 30 - 40 seconds to resume after the printer is reset. During this period, jobs may be accepted (depending on NetWare specifications) but not printed.

To print after resetting the printer as the remote printer, check on the print server that the remote printer is disconnected, or wait for two minutes before trying to print.

Installing the Printer Driver Using USB

This section explains how to install the PCL printer drivers using USB.

Before installing, check that only the operating system is running on the computer and no print jobs are in progress.

Windows 2000 - USB

Important

- **Manage Printers permission is required to install the drivers. Log on as an Administrators group member.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**

If the printer driver has already been installed, and plug and play is enabled, the icon of the machine connected to the "USB" port is added to the [Printers] window.

If the printer driver is not installed, follow the plug-and-play instructions of the machine to install it from the CD-ROM provided with this machine.

1. **Check that the power of the machine is off.**
2. **Connect the machine and computer using the USB cable.**

   Connect the USB cable firmly.
3. **Turn on the power of the machine.**

   Found New Hardware Wizard starts, and USB Printing Support is installed automatically.
4. **Click [Next >].**
5. **In the Found New Hardware Wizard window, click [Search for a suitable driver for my device [recommended]], and then click [Next >].**
6. **Select the [Specify a location] check box, and then click [Next >].**
7. **Insert the CD-ROM in the CD-ROM drive.**

   If Auto Run starts, click [Cancel] and then [Exit].
8. **Specify the location where the source files of the printer driver is stored.**

   If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

   - PCL 5c

     D:\DRIVERS\PCL5C\XP_VISTA\(Language)\DISK1
   - PCL 6

     D:\DRIVERS\PCL6\XP_VISTA\MUI\DISK1

   The PCL 6 printer driver is installed in the language specified by your operating system.

9. **Check the printer driver location, and then click [OK].**
10. **Click [Next >].**

    If the [Digital Signature Not Found] message appears, click [Yes].
11. **Click [Finish].**

    If the installation is successful, the icon of the machine connected to the "USB001" port is added to the [Printers] window.

Note

- To disable Auto Run, press the left Shift key when inserting the CD-ROM into the drive and keep it pressed until the computer finishes reading from the CD-ROM.
- The number after "USB" varies depending on the number of printers connected.

Windows XP, Windows Server 2003/2003 R2 - USB

Important

- **Manage Printers permission is required to install the drivers. Log on as an Administrators group member.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**

If the printer driver has already been installed, and plug and play is enabled, the icon of the machine connected to the "USB" port is added to the [Printers and Faxes] window.

If the printer driver is not installed, follow the plug-and-play instructions of the machine to install it from the CD-ROM provided with this machine.

1. **Check that the power of the machine is off.**
2. **Connect the machine and computer using the USB cable.**

   Connect the USB cable firmly.
3. **Turn on the power of the machine.**

   Found New Hardware Wizard starts, and USB Printing Support is installed automatically.
4. **Select [No, not this time], and then click [Next>].**
5. **In the Found New Hardware Wizard window, click [Install from a list or specific location [Advanced]], and then click [Next >].**
6. **Insert the CD-ROM in the CD-ROM drive.**

   If Auto Run starts, click [Cancel] and then [Exit].

7. **Select the [Include this location in the search] check box under [Search for the best driver in these locations.], and then click [Browse].**
8. **Specify the location where the source files of the printer driver is stored, and then click [OK].**

   If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

   - PCL 5c

     D:\DRIVERS\PCL5C\XP_VISTA\(Language)\DISK1
   - PCL 6

     D:\DRIVERS\PCL6\XP_VISTA\MUI\DISK1

   The PCL 6 printer driver is installed in the language specified by your operating system.
9. **Click [Next >].**
10. **Select the name of the machine whose driver you want to install, and then click [Next >].**

    If the [Hardware Installation] message appears, click [Continue Anyway].
11. **Click [Finish].**

    If the installation is successful, the icon of the machine connected to the "USB001" port is added to the [Printers and Faxes] window.

Note

- To disable Auto Run, press the left Shift key when inserting the CD-ROM into the drive and keep it pressed until the computer finishes reading from the CD-ROM.
- The number after "USB" varies depending on the number of printers connected.

Windows Vista, Windows Server 2008 - USB

Important

- **Manage Printers permission is required to install the drivers. Log on as an Administrators group member.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**

If the printer driver has already been installed, and plug and play is enabled, the icon of the machine connected to the "USB" port is added to the [Printers] window.

If the printer driver is not installed, follow the plug-and-play instructions of the machine to install it from the CD-ROM provided with this machine.

1. **Check that the power of the machine is off.**

2. **Connect the machine and computer using a USB cable.**

   Connect the USB cable firmly.

3. **Turn on the power of the machine.**

   Found New Hardware Wizard starts, and USB Printing Support is installed automatically.

4. **In the Found New Hardware Wizard window, click [Locate and install driver software (recommended)].**

   Click [Yes] or [Continue] if the [User Account Control] window appears.

5. **When a message prompting insertion of the CD-ROM, insert the CD-ROM into the CD-ROM drive.**

   If the [AutoPlay] dialog box appears, click the [Close] button.

6. **Select the name of the machine whose driver you want to install, and then click [Next].**

   If the [Windows can't verify the publisher of this driver software] message appears, click [Install this driver software anyway].

7. **Click [Close].**

   If the installation is successful, the icon of the machine connected to the "USB001" port is added to the [Printers] window.

Note

- To disable Auto Run, press the left Shift key when inserting the CD-ROM into the drive and keep it pressed until the computer finishes reading from the CD-ROM.
- The number after "USB" varies depending on the number of printers connected.

Windows 7 - USB

Important

- **Manage Printers permission is required to install the drivers. Log on as an Administrators group member.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**

If the printer driver has already been installed, and plug and play is enabled, the icon of the machine connected to the "USB" port is added to the [Devices and Printers] window.

If the printer driver is not installed, follow the plug-and-play instructions of the machine to install it from the CD-ROM provided with this machine.

1. **Check that the power of the machine is off.**

2. **Connect the machine and computer using a USB cable.**

   Connect the USB cable firmly.

3. **Turn on the power of the machine.**
4. **Click [Devices and Printers] from the [Start] menu.**

   [Devices and Printers] window appears.

5. **In [Unspecified], double-click the name of the machine whose driver you want to install.**
6. **Click the [Hardware] tab in the printer properties dialog box.**
7. **Select the name of the machine whose driver you want to install, and then click [Properties].**
8. **Click [Change settings].**
9. **Click the [Driver] tab.**
10. **Insert the CD-ROM into the CD-ROM drive.**

    If the [AutoPlay] dialog box appears, click the [Close] button.

11. **Click [Update Driver...].**
12. **Click [Browse my computer for driver software].**
13. **Click [Browse] to select the printer driver location.**

    If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

    - PCL 5c

      D:\DRIVERS\PCL5C\XP_VISTA\(Language)\DISK1

    - PCL 6

      D:\DRIVERS\PCL6\XP_VISTA\MUI\DISK1

    The PCL 6 printer driver is installed in the language specified by your operating system.

14. **Click [Next].**

    If [Windows can't verify the publisher of this software] display appears in the installation, click [Install this driver software anyway].

15. **Click [Close].**

    If installation is successful, the icon of the machine connected to the "USB001" port is added to the [Devices and Printers] window.

Note

- To disable Auto Run, press the left Shift key when inserting the CD-ROM into the drive and keep it pressed until the computer finishes reading from the CD-ROM.
- The number after "USB" varies depending on the number of printers connected.

Printing with Parallel Connection

This section describes how to install the PCL printer drivers when using the parallel port.

To use a printer connected using a parallel interface, click [LPT1] when installing the printer driver.

Important

- **Manage Printers permission is required to install the drivers. Log on as an Administrators group member.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**

Installing the PCL printer driver:

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**
4. **Click [PCL Printer Driver].**

   The software license agreement appears in the [License Agreement] dialog box.
5. **After reading the agreement, click [I accept the agreement.], and then click [Next >].**
6. **Select the printer driver you want to use in the [Select Program] dialog box.**

   You can select several printer drivers.

   The PCL 6 printer driver is installed in the language specified by your operating system.
7. **Click [Next >].**
8. **Select the [Printer Name] check box to select the machine model you want to use.**

   The machine name can be changed in the [Change settings for 'Printer Name'] box.
9. **Double-click the machine name to display the printer settings.**

   The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, machine model, and port.
10. **Check that [LPT1:] is shown in [Port].**
11. **Select the [Default Printer] check box to configure the printer as default.**
12. **Click [Continue].**

    The printer driver installation starts.
13. **Click [Finish].**

14. **Select to restart the computer either now or later, and then click [Finish].**

    Restart the computer to complete installation.

Note

- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- To stop installation of the selected software, click [Cancel] before installation is complete.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.
- A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add Printer]. See "Messages Displayed When Installing the Printer Driver", Troubleshooting.

Making Option Settings for the Printer

When bidirectional communication works correctly, your computer obtains information about option, paper size and paper feed direction settings from the machine automatically. Bidirectional communication also allows you to monitor machine status.

When bidirectional communication is disabled, you have to set up option, paper size and paper feed direction settings on your computer manually.

Conditions for Bidirectional Communication

To support bidirectional communication, the following conditions must be met:

When connected with parallel cables

- The computer must support bidirectional communication.
- The interface cable must support bidirectional communication.
- The machine must be connected to the computer using the standard parallel cables and parallel connectors.
- [Enable bidirectional support] must be selected, and [Enable printer pooling] must not be selected on the [Ports] tab with the printer driver.

When connected with the network

- The Standard TCP/IP port must be used.
- [Enable bidirectional support] must be selected, and [Enable printer pooling] must not be selected on the [Ports] tab with the printer driver.
- If the Standard TCP/IP port is not used, the following conditions must be met:
  - The TCP/IP protocol or the IPP protocol is used. (When using the IPP protocol, the IPP port name must include the IP address.)
  - [Enable bidirectional support] must be selected, and [Enable printer pooling] must not be selected on the [Ports] tab with the printer driver.

When connected with USB

- The machine must be connected to the computer's USB port using the USB interface cable.
- The computer must support bidirectional communication.

Note

- The PCL 6 printer driver supports bidirectional communication and updates the machine status automatically.
- The PCL 5c printer driver supports bidirectional communication. You can update the machine status manually.

If Bidirectional Communication Is Disabled

This section describes how to set up option, paper size and paper feed direction settings on your computer manually.

Important

- **Manage Printers permission is required to change the printer properties. Log on as an Administrators group member.**

1. **On the [Start] menu, click [Printers and Faxes].**
   - When using Windows 2000, point to [Settings] on the [Start] menu, and then click [Printers].
   - When using Windows Vista or Windows Server 2008, click [Control Panel] on the [Start] menu, and then click [Printer] in "Hardware and Sound".
   - When using Windows 7 or Windows Server 2008 R2, click the [Start] menu, and then click [Devices and Printers].
2. **Click the icon of the printer you want to use.**
3. **On the [File] menu, click [Properties].**
   - When using Windows Vista or Windows Server 2008, right-click the icon of the printer you want to use, and then click [Properties].
   - When using Windows 7 or Windows Server 2008 R2, right-click the icon of the printer you want to use, and then click [Printer properties].
4. **Click the [Accessories] tab.**

   If options in the [Accessories] tab are disabled, bidirectional connection is enabled. In this case, no change is necessary for option settings.
5. **Select options installed from the [Options] area, and then make the necessary settings.**
6. **In [Input Tray:] select which trays to use, and then, in [Paper Size:] select the size of the paper that you want to load in each tray.**

   Click [Update] in the [Input Tray Settings] area to apply the setting for each tray.
7. **Click [OK] to close the printer properties dialog box.**

Installing Font Manager

Important

- Manage Printers permission is required to install Font Manager. Log on as an Administrators group member.

1. Quit all applications currently running.
2. Insert the CD-ROM into the CD-ROM drive.

   The installer starts.
3. Select an interface language, and then click [OK].
4. Click [Font Manager].
5. Follow the instructions on the display.

Using Adobe PageMaker Version 6.0, 6.5, or 7.0

Under Windows operating system environment with Adobe PageMaker, you need to copy PPD files to the PageMaker folder.

PPD files have the .ppd extension in the folder "DRIVERS\PS\XP_VISTA\(Language)\DISK1" on the CD-ROM provided with this machine.

The third folder "(Language)" may be substituted by an appropriate language name.

Copy the .ppd file to the PageMaker folder.

- **For PageMaker 6.0 default installation**

  The directory is "C:\PM6\RSRC\PPD4".

- **For PageMaker 6.5 default installation**

  The directory is "C:\PM65\RSRC\USENGLISH\PPD4".

  The "USENGLISH" may vary depending on your language selection.

- **For PageMaker 7.0 default installation**

  The directory is "C:\PM7\RSRC\USENGLISH\PPD4".

  The "USENGLISH" may vary depending on your language selection.

Note

- If the driver is not set correctly after copying the ".ppd" file, printing may not be performed properly.
- When using PageMaker, the optional features that can be selected by the printer driver will not be active. The following procedure describes how to activate the optional printer features.
  1. On the [File] menu, click [Print].

     The [Print Document] dialog box appears.
  2. Make the necessary settings in the [Features] box.

2. Printing Documents

This chapter explains how to print documents using the printer driver. It also describes advanced printing functions such as staple and punch.

Displaying the Printer Driver Settings Screen

This section explains how to open and configure the printer driver properties.

The following procedure explains how to configure the printer driver under Windows XP. If you are using another operating system, the procedure might vary slightly.

Making Printer Default Settings - the Printer Properties

This section explains how to open the printer driver properties from [Printers and Faxes].

Important

- **Manage Printers permission is required to change the printer settings. Log on as an Administrators group member.**
- **You cannot change the machine default settings for individual users. Settings made in the [Printer Properties] dialog box are applied to all users.**

1. **On the [Start] menu, click [Printers and Faxes].**

   The [Printers and Faxes] window appears.

2. **Click the icon of the printer you want to use.**
3. **On the [File] menu, click [Properties].**

   The [Printer Properties] dialog box appears.

4. **Make the settings you require, and then click [OK].**

Note

- Depending on the applications, the settings you make here may not be used as the default settings.
- For details, see the printer driver Help.

Making Printer Default Settings - Printing Preferences

This section explains how to open the [Printing Preferences] dialog box from [Printers and Faxes].

Important

- **When the printer driver is distributed from the print server, the setting values specified by the server are displayed as the default for [Printing Defaults...].**

1. **On the [Start] menu, click [Printers and Faxes].**

   The [Printers and Faxes] window appears.

2. **Click the icon of the printer you want to use.**
3. **On the [File] menu, click [Printing Preferences...].**

   The [Printing Preferences] dialog box appears.

4. **Make the settings you require, and then click [OK].**

   The setting is temporarily registered as [Unregistered] in the [One Click Preset List:] area.

Note

- Depending on the applications, the settings you make here may not be used as the default settings.
- The [Unregistered] setting is invalid if the other [One Click Presets] icon is selected. If you wish to confirm the [Unregistered] setting, click [Register Current Settings...]. For details about confirming the setting, see "Making Printer Settings - One Click Presets".
- For details, see the printer driver Help.

Reference

- p.53 "Making Printer Settings - One Click Presets"

Making Printer Settings from an Application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the [Printing Preferences] dialog box from that application. The following procedure explains how to make printer settings for a specific application using Windows XP WordPad as an example.

1. **On the [File] menu, click [Print...].**

   The [Print] dialog box appears.

2. **In the [Select Printer] list, select the printer you want to use.**
3. **Click [Preferences].**

   The [Printing Preferences] dialog box appears.

4. **Make the settings you require, and then click [OK].**

Note

- Procedures for opening the [Printing Preferences] dialog box vary depending on the application. For details, see the manuals provided with the application.
- Depending on the applications, the printer default settings may not be applied.
- The printer settings you configure in the current application before printing might not be saved as the default settings.

- General users can change the properties displayed in the [Print] dialog box of an application. Settings made here are used as the defaults when printing from the application.
- For details, see the printer driver Help.

Making Printer Settings - One Click Presets

This section explains how to register and use one click presets.

Each function explained in this chapter is preconfigured and registered under [One Click Preset List:] on the [One Click Presets] tab.

You can apply the relevant setting simply by clicking on the one click preset name. This helps to avoid incorrect settings and misprints.

One click presets can be added, modified, and deleted as required. By using registered one click presets, users without in-depth knowledge of the printer driver can utilize advanced printing functions easily.

Follow the procedure to register one click presets.

1. **In the application, on the [File] menu, click [Print].**

   The [Print] dialog box appears.

2. **Select the machine, and then open the [Printing Preferences] dialog box in the document's native application.**

   The [Printing Preferences] dialog box appears.

3. **Make the settings you require.**

4. **Click [Register Current Settings...]. Enter a name and comment that describe the setting, and then click [OK].**

   The newly registered icon appears with its registered name in the [One Click Preset List:] area.

5. **Click [OK].**

Note

- Under Windows operating systems, this function is available through the PCL 6 and PostScript 3 printer driver. When using this function using the PostScript 3 printer driver, see PostScript 3 Supplement.
- For details about modifying and deleting one click presets, see the printer driver Help.

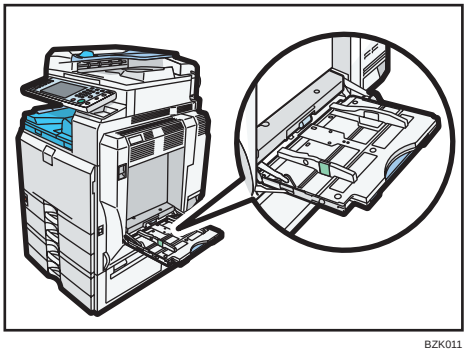
Setting Paper on the Bypass Tray

You can load paper that is not supported in the paper trays. Additionally, you can print on paper such as thick paper, OHP transparency, and label paper by using the bypass tray.

Important

- Paper sizes that can be loaded onto the bypass tray can be 90.0 to 305.0 mm (3.55 to 12.00 in.) vertically, and 148.0 to 600.0 mm (5.83 to 23.62 in.) horizontally.
- When paper larger than 600.0 mm (23.62 in.) in length is used, the paper may become wrinkled, may not be fed into the machine, or may cause paper jams.
- The machine can automatically detect the following sizes as regular size paper:
  - Region A (mainly Europe and Asia)
    A3, A4, A5, A6
  - Region B (mainly North America)
    11 × 17 in, $8^1/_2$ × 11 in, $5^1/_2$ × $8^1/_2$ in
- If you want to use the size of paper other than the above, be sure to specify the size.
- The following functions are disabled when printing from the bypass tray:
  - Auto Tray Select
  - Extended Auto Tray Switching
  - Rotating Collate
  - Staple (when an optional finisher is installed)
  - Punch (when an optional finisher and punch unit are installed)
- Certain types of OHP transparencies for color printing cannot be used.
- For details about types of paper that can be used, contact your sales or service representative.

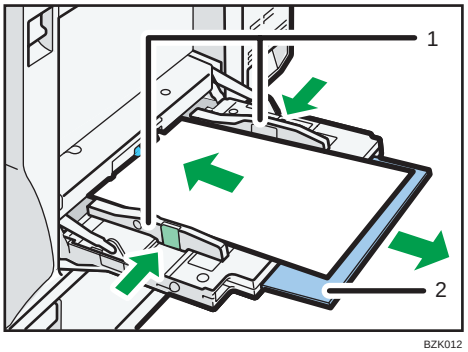
1. Open the bypass tray.



BZK011

2. **Insert the paper face down until you hear the beep, and then align the paper guides to the paper size.**

   If the guides are not flush against the paper, images might be skewed or paper misfeeds might occur.



   1. **Paper Guide**
   2. **Extender**

3. **Set the paper size using the printer driver or the control panel.**

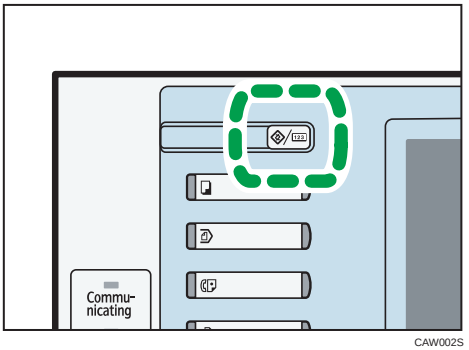
Note

- Certain types of paper might not be detected properly when placed on the bypass tray. If this happens, remove the paper and place it on the bypass tray again.
- Load only as much paper as can be held between the guides on the bypass tray. Overloading the bypass tray can result in misfeeds and skewed images.
- To support A4⬓, $8^{1}/_{2} \times 11$⬓ or larger paper sizes, pull out the extender.
- To prevent multiple sheets from being fed at once, fan paper before placing it on the tray.
- When loading thick paper, thin paper or OHP transparencies, set paper size and paper type.
- The number of sheets that can be loaded in the bypass tray depends on the paper type.
- When loading letterhead paper, see "Loading Paper", About This Machine.
- Depending on the environment where the machine is being used, you might at times hear a rustling noise from paper moving through the machine. This noise does not indicate a malfunction.
- When [Panel Key Sound] is turned off, it will not sound if you insert paper into the bypass tray. For details about [Panel Key Sound], see "System Settings", Network and System Settings Reference.
- For details about setting printer drivers, see the printer driver Help.

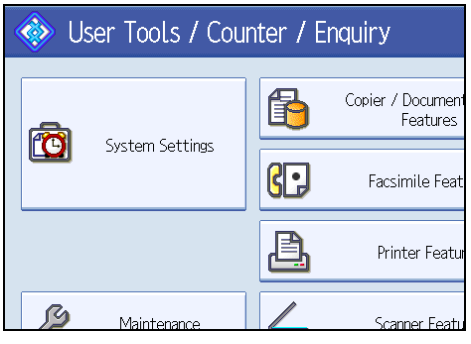
Setting the Paper Size Using the Control Panel

Follow the procedure below to set the machine using the control panel when loading standard size paper onto the bypass tray.

1. Press the [User Tools/Counter] key on the control panel.

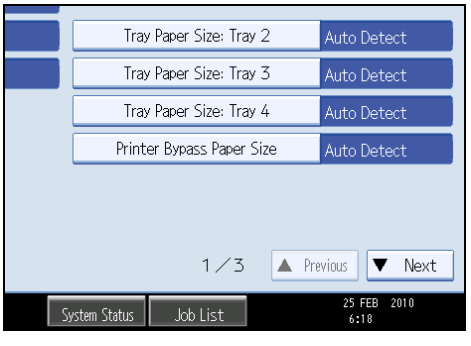


2. Press [System Settings].

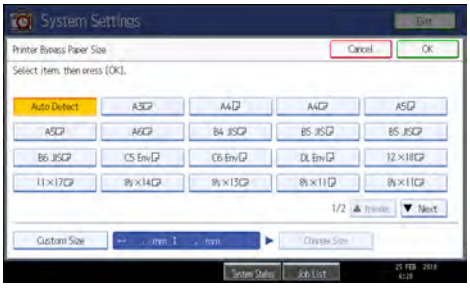


3. Press the [Tray Paper Settings] tab.

4. Press [Printer Bypass Paper Size].



5. **Select the paper size.**



6. **Press [OK].**
7. **Press the [User Tools/Counter] key.**

   The initial screen appears.

Note

- When loading thick paper, thin paper or OHP transparencies, set paper size and paper type.
- [Auto Detect] is the default setting for [Printer Bypass Paper Size].
- For details about setting printer drivers, see the printer driver Help.

Reference

- p.169 "System"

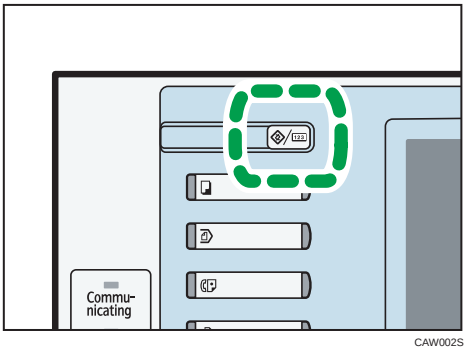
Setting Custom Size Paper Using the Control Panel

Follow the procedure below to set the machine using the control panel when loading custom size paper onto the bypass tray.

Important

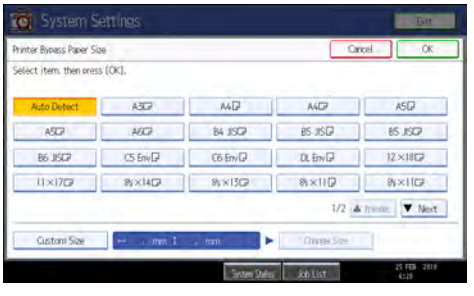
- **If you select [Machine Settings] in [Bypass Tray] under [Tray Setting Priority] in [System] of [Printer Features], the settings made using the control panel have priority over the printer driver settings. For details about [System] settings, see "System".**

1. **Press the [User Tools/Counter] key on the control panel.**



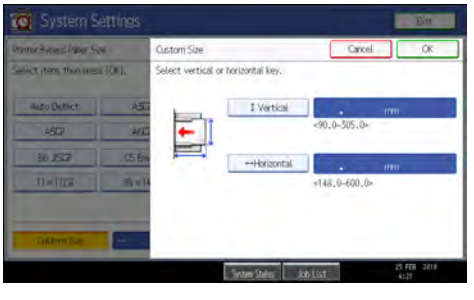
CAW002S

2. **Press [System Settings].**
3. **Press the [Tray Paper Settings] tab.**
4. **Press [Printer Bypass Paper Size].**
5. **Press [Custom Size].**



If a custom size is already set, press [Change Size].

6. **Press [Vertical], enter the vertical size of the paper using the number keys, and then press the [#] key.**



7. **Press [Horizontal], enter the horizontal size of the paper using the number keys, and then press the [#] key.**
8. **Press [OK].**

   The paper sizes entered are displayed.

9. **Press [OK].**

10. **Press the [User Tools/Counter] key.**

    The initial screen appears.

Note

- When loading thick paper, thin paper or OHP transparencies, set paper size and paper type.
- [Auto Detect] is the default setting for [Printer Bypass Paper Size].
- For details about setting printer drivers, see the printer driver Help.

Reference

- p.169 "System"

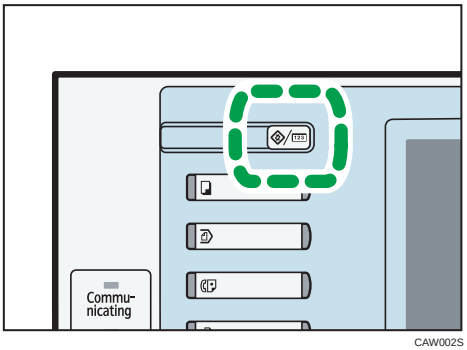
Setting Thick Paper, Thin Paper or OHP Transparencies Using the Control Panel

Follow the procedure below to set the machine using the control panel when loading thick paper, thin paper or OHP transparencies onto the bypass tray.

Important

- **If you select [Machine Settings] in [Bypass Tray] under [Tray Setting Priority] in [System] of [Printer Features], the settings made using the control panel have priority over the printer driver settings. For details about [System] settings, see "System".**
- **We recommend that you use specified OHP transparencies.**
- **Do not use color OHP transparencies that are coated with materials that might melt.**
- **OHP transparencies must be loaded face down in the tray.**
- **When printing onto OHP transparencies, remove printed sheets one by one.**

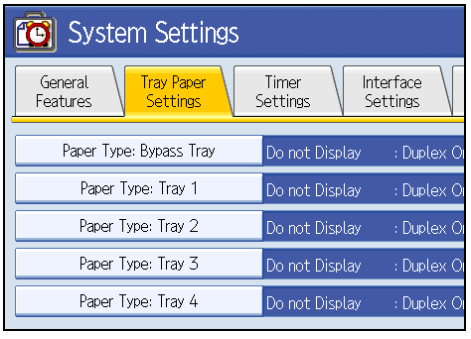
1. **Press the [User Tools/Counter] key on the control panel.**



CAW002S

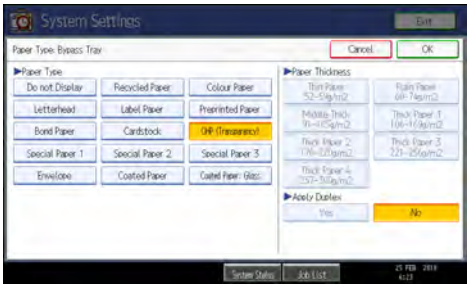
2. **Press [System Settings].**
3. **Press the [Tray Paper Settings] tab.**
4. **Press [▼Next] to scroll through the list.**

5. **Press [Paper Type: Bypass Tray].**

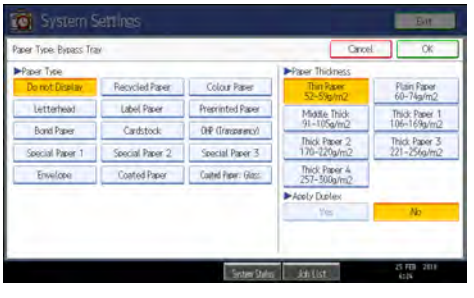


6. **Select the proper items, according to the paper type you want to set.**

   - Press [OHP (Transparency)] on the [Paper Type] area when loading OHP transparencies.



   - Press [Do not Display] on the [Paper Type] area, and then press [Thick Paper 1], [Thick Paper 2], [Thick Paper 3], [Thick Paper 4], or [Thin Paper] on the [Paper Thickness] area when loading thick paper or thin paper.



7. **Press [OK].**

   The paper type selected is displayed.

8. **Press the [User Tools/Counter] key.**

   The initial screen appears.

Note

- Printing on special paper such as thick paper, thin paper or OHP transparencies may be slower than printing on plain paper.

- Load OHP transparencies one by one if they jam when loaded together.
- To prevent multiple sheets from being fed at once, fan paper before placing it on the tray.
- The settings made will remain valid until they are reset again. After printing on OHP transparencies, thick paper or thin paper make sure to clear settings for the next user.
- For details about setting printer drivers, see the printer driver Help.

Reference

- p.169 "System"

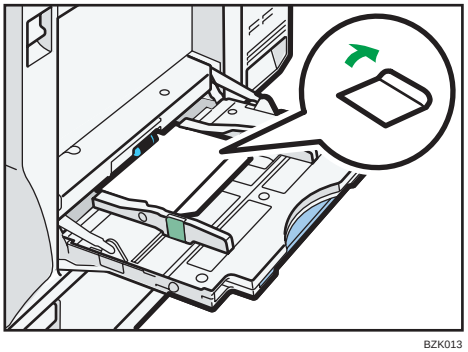
Setting Envelopes Using the Control Panel

Follow the procedure below to set the machine using the control panel when loading envelopes onto the bypass tray.

Important

- **Before loading self-adhesive envelopes, be sure to fan them thoroughly. This will prevent them sticking together. If fanning does not prevent them sticking together, load them one by one. However, depending on the types of envelopes, you cannot use them on this machine.**
- **If you select [Machine Settings] in [Bypass Tray] under [Tray Setting Priority] in [System] of [Printer Features], the settings made using the control panel have priority over the printer driver settings. For details about [System] settings, see "System".**
- **When printing on envelopes, select envelope for the paper type using both the printer driver and the control panel.**

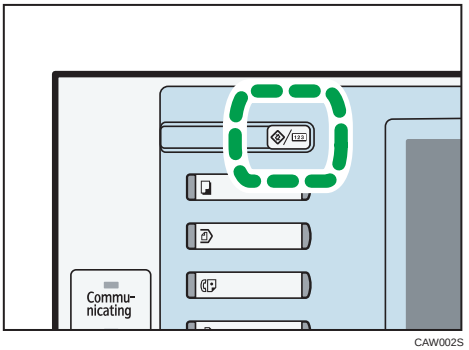
1. **Open the bypass tray and set the envelopes print side down, flaps open and pointing away from the machine. Push the envelopes into the machine until you hear the beep.**



BZK013

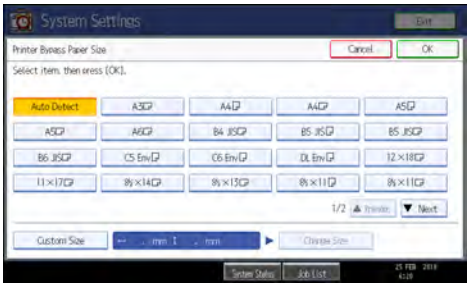
2

2. **Press the [User Tools/Counter] key on the control panel.**

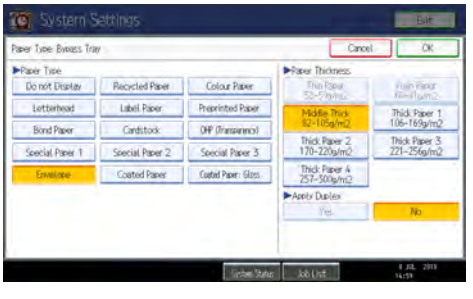


CAW002S

3. **Press [System Settings].**
4. **Press the [Tray Paper Settings] tab.**
5. **Press [Printer Bypass Paper Size].**
6. **Select the envelope size, and then press [OK].**



7. **Press [▼Next] to scroll through the list.**
8. **Press [Paper Type: Bypass Tray].**
9. **Press [Envelope] on the [Paper Type] area, and then press [OK].**



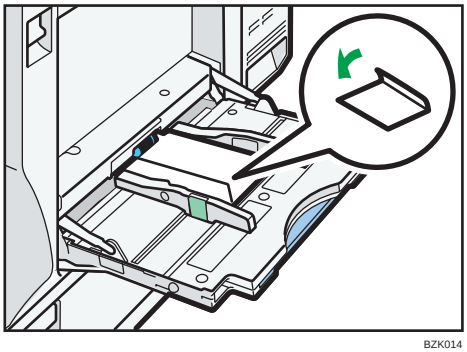
10. **Press the [User Tools/Counter] key.**

    The initial screen appears. Also, select envelope for the paper type using the printer driver.

Note

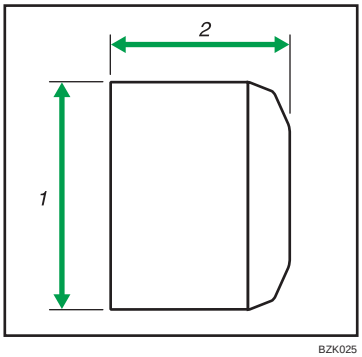
- Load envelopes with flaps fully open. Otherwise, they might not feed into the machine.

- When loading envelopes in the landscape (▭) orientation, set them so that their flaps are closed, facing upward, and pointing toward the front of the machine.



BZK014

- To print onto custom size envelopes, you must specify the envelope's dimensions. Be sure to include the fully open flap in the horizontal dimension.



BZK025

1. Vertical size
2. Horizontal size

- To print on envelopes that are set on the bypass tray with their short edges against the machine body, rotate the print image by 180 degrees using the printer driver.
- Check the envelopes are not damp.
- Load only as much envelopes as can be held between the paper guides on the bypass tray. For the number of envelopes that you can set on the bypass tray, see "Recommended Paper Sizes and Types", About This Machine.
- Check there is no air in the envelopes before loading.
- To get better print quality, it is recommended that you set the right, left, top, and bottom print margin to at least 15 mm (0.6 inch) each.
- You cannot print envelopes with duplex function.
- Load only one size and type of envelope at a time.
- Before loading envelopes, flatten leading edges (the side going into the machine) by pressing a pencil or ruler across them.

- Before loading envelopes, check they are rectangular in shape.
- For details about supported envelope types, see "Envelopes", About This Machine.
- You can also use paper trays (other than the bypass tray) to print on envelopes. For details about supported envelope types, see "Recommended Paper Sizes and Types", About This Machine.

Reference

- p.169 "System"

Printing on Orientation-Fixed or Two-Sided Paper

This section explains how to print on paper whose orientation and printing side are unchangeable (letterhead paper, for example).

Use the settings and paper orientations shown below to ensure the machine prints onto orientation-fixed paper (such as letterhead or continuous stationery) correctly. Specify [Auto Detect] or [On (Always)] for [Letterhead Setting] under [Printer Features], and then place the paper as shown below. For details about the letterhead settings, see "System".

Paper Orientation	Paper Trays 1 to 4		Bypass tray/LCT	
	Letterhead Setting [On (Always)]	Letterhead Setting [Off]	Letterhead Setting [On (Always)]	Letterhead Setting [Off]
1-sided print				
2-sided print				
1-sided print				
2-sided print				

Note

- To print on letterhead paper when [Letterhead Setting] is set to [Auto Detect], you must specify [Letterhead] as the paper type in the printer driver's settings.
- If a print job is changed partway through printing from 1-sided to 2-sided printing, 1-sided output after the first copy may print facing a different direction. To ensure all paper is output facing the same

direction, specify different input trays for 1-sided and 2-sided printing. Note also that 2-sided printing must be disabled for the tray specified for 1-sided printing.

- For details about how to make 2-sided prints, see "Printing on Both Sides of Sheets".

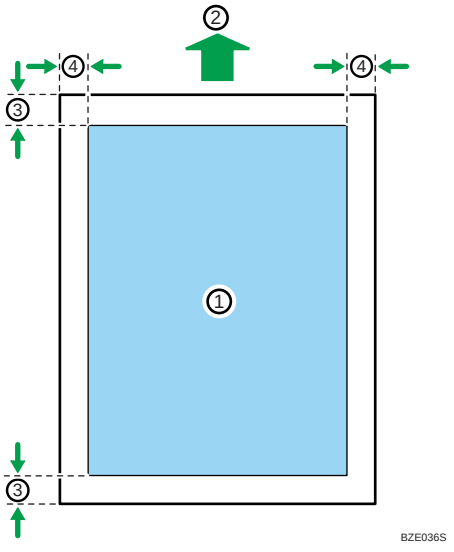
Reference

- p.169 "System"
- p.71 "Printing on Both Sides of Sheets"

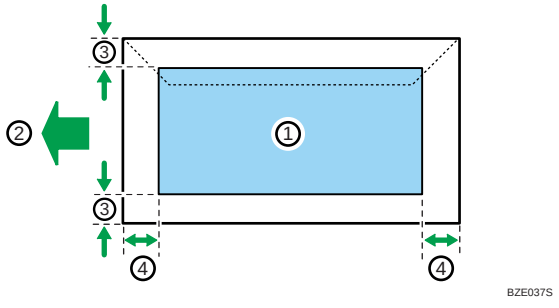
Print Area

The following shows the print area for this machine. Be sure to set the print margins correctly by the application.

Paper



Envelope



1. Print area
2. Feed direction
3. Approx. 4.2 mm (0.17 inches)
4. Approx. 4.2 mm (0.17 inches)

Note

- The print area may vary depending on the paper size, printer language and printer driver settings.
- When [Edge to Edge Print] under [System] in [Printer Features] is enabled, margins on the left, right, and bottom will become 0 mm.

Reference

- p.169 "System"

Frequently Used Print Methods

This chapter explains how to use the various printing functions including normal printing, duplex printing, and combine printing.

Each function described in this chapter is configured and registered in the [One Click Preset List:] area. You can also change the parameters for each function by modifying "One Click Presets ". For details about custom settings, see "Making Printer Settings - One Click Presets".

Important

- **If you send a print job via USB 2.0 while the machine is in Low Power mode or Sleep mode, an error message might appear on your computer even though the job was printed. In this case, check if the document was printed.**

Reference

- p.53 "Making Printer Settings - One Click Presets"

Standard Printing

Use the following procedure to print documents using the normal printing function with the printer driver.

Important

- **Before printing, make sure that the settings for the installed options and loaded paper are correctly configured.**

For the PCL 6 printer driver:

1. **After creating a document, open the [Printing Preferences] dialog box in the document's native application.**

   The [Printing Preferences] dialog box appears.
2. **Click the [One Click Presets] tab, if it is not already selected.**
3. **In the [Job Type:] list, select [Normal Print].**
4. **In the [Document Size:] list, select the size of the original to be printed.**
5. **In the [Orientation:] list, select [Portrait] or [Landscape] as the orientation of the original.**
6. **In the [Input Tray:] list, select the paper tray that contains the paper you want to print onto.**

   If you select [Auto Tray Select] in the [Input Tray:] list, the source tray is automatically selected according to the paper size and type specified.
7. **In the [Paper Type:] list, select the type of paper that is loaded in the paper tray.**
8. **Select [Color] or [Black and White] in the [Color/ Black and White:] list.**

9. **If you want to print multiple copies, specify a number of sets in the [Copies:] box.**
10. **To save current setting in the One Click Preset List, select the [Unregistered] icon in [One Click Preset List:], and then click [Register Current Settings...]. Enter a name and comment that describe the setting, and then click [OK].**

    The newly registered icon appears with its registered name in the [One Click Preset List:] area.
11. **Click [OK] to close the [Printing Preferences] dialog box.**
12. **Print the document using the print function in the document's native application.**

For the PCL 5c printer driver:

1. **After creating a document, open the [Printing Preferences] dialog box in the document's native application.**

   The [Printing Preferences] dialog box appears.
2. **In the [Job Type:] list, select [Normal Print].**
3. **If you want to print multiple copies, specify a number of sets in the [Copies:] box.**
4. **In the [Orientation:] list, select [Portrait] or [Landscape] as the orientation of the original.**
5. **Select [Color] or [Black and White] in the [Color/ Black and White:] list.**
6. **Click the [Paper] tab.**
7. **In the [Document Size:] list, select the size of the original to be printed.**
8. **In the [Input Tray:] list, select the paper tray that contains the paper you want to print onto.**

   If you select [Auto Tray Select] in the [Input Tray:] list, the source tray is automatically selected according to the paper size and type specified.
9. **In the [Type:] list, select the type of paper that is loaded in the paper tray.**
10. **Click [OK] to close the [Printing Preferences] dialog box.**
11. **Print the document using the print function in the document's native application.**

Note

- This function is also available using the PostScript 3 printer driver. For details, see PostScript 3 Supplement.
- The types of paper loaded in the paper trays are indicated on the printer's display. This allows you to see which tray the selected paper type is loaded in. However, the paper type setting available in the [Printing Preferences] dialog box might be different from the type indicated on the printer's display.
- If the paper tray loaded with the specified paper size and type is not available, a warning message appears on the control panel. If this happens, follow the instructions in the message to specify a paper tray and make the machine continue printing manually. Alternatively, press the job reset button to cancel printing. For details, see "If Error Occurs with the Specified Paper Size and Type".

- If [Color] is selected in the [Color/ Black and White:] list, you can print using special color outputs suitable for color vision impaired users. To use this function, click the [Detailed Settings] tab. Click the [Print Quality] menu in the [Menu:] box, and then select [Barrier-free Color Management:]. This function is available with the PCL 6 and PostScript 3 printer drivers only.

Reference

- p.96 "If Error Occurs with the Specified Paper Size and Type"

Printing on Both Sides of Sheets

This section explains how to print on both sides of each page using the printer driver.

Important

- When performing duplex printing, specify paper other than the following:
  - Thick 2, Thick 3, Thick 4, Thin, OHP Transparency, Labels, Glossy, Envelope, Coated

For the PCL 6 printer driver:

1. **After creating a document, open the [Printing Preferences] dialog box in the document's native application.**

   The [Printing Preferences] dialog box appears.

2. **To use an existing One Click Presets, click the [One Click Presets] tab, and then click the [2 sided] icon in the [One Click Preset List:] box.**

   If you do not wish to modify a custom setting that is already registered in the printer driver, change settings such as paper size and source tray as required, and then proceed to step 8.

3. **Click the [Detailed Settings] tab.**
4. **In the [Menu:] box, click the [Edit] icon.**
5. **In the [2 sided:] list, select [Open to Left] or [Open to Top].**
6. **Change any other print settings if necessary.**
7. **To save current setting in the One Click Preset List, select the [Unregistered] icon in [One Click Preset List:], and then click [Register Current Settings...]. Enter a name and comment that describe the setting, and then click [OK].**

   The newly registered icon appears with registered name in the [One Click Preset List:] area.

8. **Click [OK] to close the [Printing Preferences] dialog box.**
9. **Print the document using the print function in the document's native application.**

For the PCL 5c printer driver:

1. **After creating a document, open the [Printing Preferences] dialog box in the document's native application.**

   The [Printing Preferences] dialog box appears.

2. **In the [Duplex:] list, [Open to Left], [Open to Top], or [Booklet].**
3. **Change any other print settings if necessary.**
4. **Click [OK] to close the [Printing Preferences] dialog box.**
5. **Print the document using the print function in the document's native application.**

Note

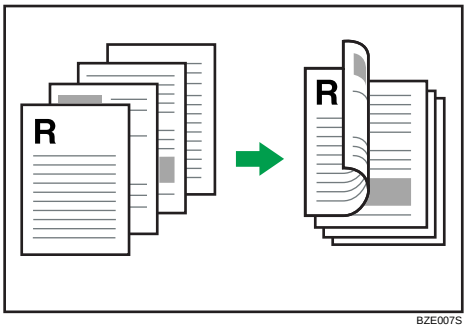
- This function is also available using the PostScript 3 printer driver. For details, see PostScript 3 Supplement.
- If the document contains pages with different original sizes, page breaks may occur.

Types of duplex printing

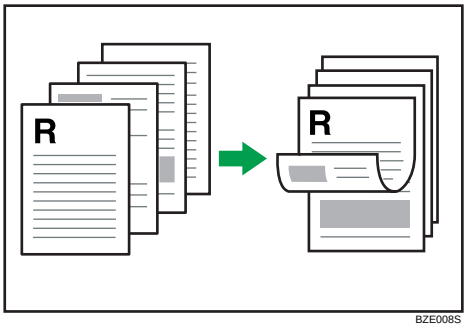
This section explains the binding directions available when using the duplex printing function. When using the duplex printing function, you can select whether to bind copies by edge or in the center.

Edge Binding

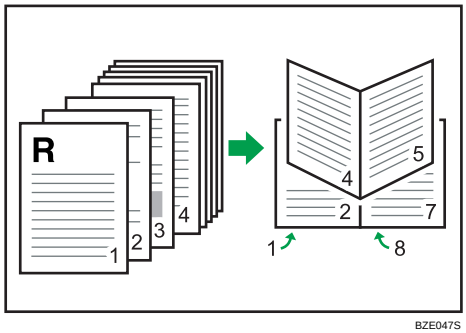
- Open to Left



- Open to Top



Center Binding



Combining Multiple Pages into Single Page

This section explains how to print multiple pages onto a single sheet. The combine printing function allows you to economize on paper by printing multiple sheets at reduced size onto a single sheet.

For the PCL 6 printer driver:

1. **After creating a document, open the [Printing Preferences] dialog box in the document's native application.**

   The [Printing Preferences] dialog box appears.

2. **To use an existing One Click Presets, click the [One Click Presets] tab, and then click the [2 on 1] icon in the [One Click Preset List:] box.**

   If you do not wish to modify a custom setting that is already registered in the printer driver, change settings such as paper size and source tray as required, and then proceed to step 8.

3. **Click the [Detailed Settings] tab.**
4. **In the [Menu:] box, click the [Edit] icon.**
5. **In the [Layout:] list, select the combination pattern from the list.**
6. **Change any other print settings if necessary.**
7. **To save current setting in the One Click Preset List, click [Register Current Settings...]. Enter a name and comment that describe the setting, and then click [OK].**

   The newly registered icon appears in the [One Click Preset List:] area.

8. **Click [OK] to close the [Printing Preferences] dialog box.**
9. **Print the document using the print function in the document's native application.**

For the PCL 5c printer driver:

1. **After creating a document, open the [Printing Preferences] dialog box in the document's native application.**

   The [Printing Preferences] dialog box appears.

2. **In the [Layout:] list, select the combination pattern from the list.**
3. **Change any other print settings if necessary.**
4. **Click [OK] to close the [Printing Preferences] dialog box.**
5. **Print the document using the print function in the document's native application.**

2

Note

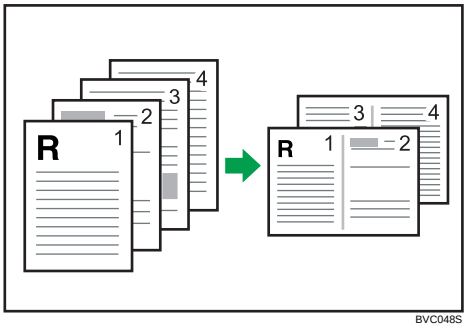
- This function is also available using the PostScript 3 printer driver. For details, see PostScript 3 Supplement.
- If the document contains pages with different original sizes, page breaks may occur.
- If the application you are using also has a combine function, disable it. If the application's combine function is also enabled when the driver's combine function enabled, incorrect printing is likely.
- For details about combining pages with different orientations and other advanced functions, see the printer driver Help.

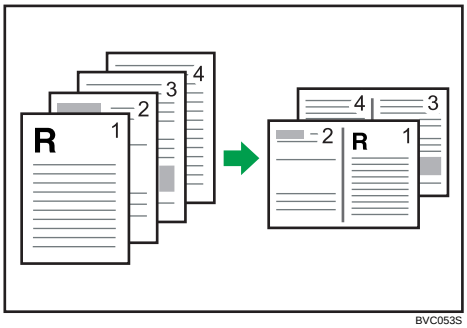
Types of combine printing

This section explains the different methods of combine printing that are available. This function allows you to print 2, 4, 6, 9, or 16 pages at reduced size onto a single sheet and to specify a page ordering pattern for the combination.

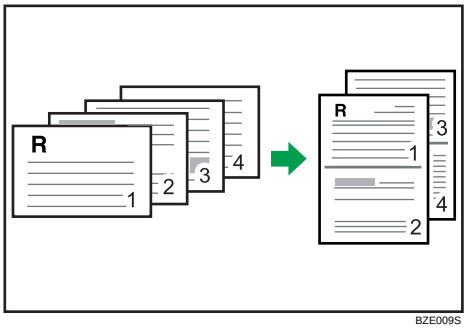
The following illustrations show example page ordering patterns for 2 and 4 page combinations.

2 Pages per Sheet



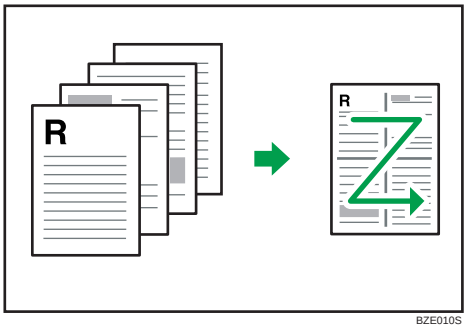


BVC053S

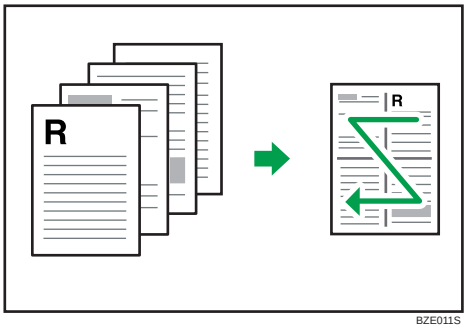


BZE009S

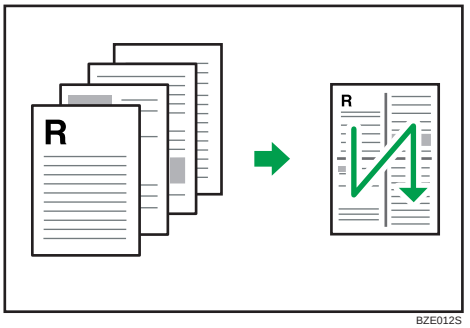
4 Pages per Sheet



BZE010S



BZE011S



BZE012S

BZE013S

Advanced Printing

This chapter explains the machine's advanced printing functions.

Other than the functions that can be configured in the [One Click Presets] tab, various print functions can be set up from the [Menu:] icons in the [Detailed Settings] tab. The settings for each function described in this section can be changed by using the following menus.

Menu Names and Brief Overview of Each Function

The following is an overview of the settings that are available using the [Finishing], [Paper], and [Effects] menus in the [Menu:] area.

The PCL 6 printer driver's menus are shown as examples. For details about the PCL 5c printer driver, see the printer driver Help.

Finishing menu

You can enable/disable collate, staple, and punch functions.

- Collate

  When printing multiple sets of documents such as handouts for meetings, you can have prints delivered in batches of ordered sets.

- Staple

  With an optional finisher installed, sets can be stapled individually when printing multiple sets.

- Punch

  With an optional finisher and punch unit installed, holes can be punched into printed outputs.

Paper menu

You can enable/disable the collate function.

- Front Cover sheet/ Back Cover sheet

  Using this function, you can insert cover sheet/ back cover sheet fed from a different tray to that of the main paper, and print on them.

- Chapter Page

  Using this function, you can have specified pages always printed on the same side as the first page, or have chapter slip sheets inserted before specified pages.

- Slip Sheet

  A slip sheet can be inserted between each page.

Effects menu

- Watermarks

This function increases a document's security and identifiability by embedding a specified text (watermark) on every page.

Collate

When printing multiple documents such as handouts for meetings, you can separate sets into order. This function is known as "Collate". Collate stores data transmitted from a computer to the machine's memory or hard disk drive.

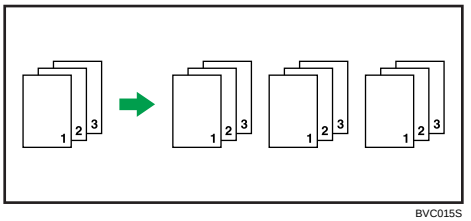
Important

- **You can sort up to 2000 pages, and up to 999 copies.**
- **If [Auto Continue] occurs on the first set, Collate will be canceled. For details about [Auto Continue], see "System".**
- **If you make the machine continue printing manually on the first set, Collate will be canceled. For details about making the machine continue printing manually, see "If Error Occurs with the Specified Paper Size and Type".**
- **If the [Ignore Application Collate] check box is cleared, the collate settings in the application's [Print] dialog box are applied.**

The followings are the three types of Collate.

Collate

Printed output is assembled as sets in sequential order.

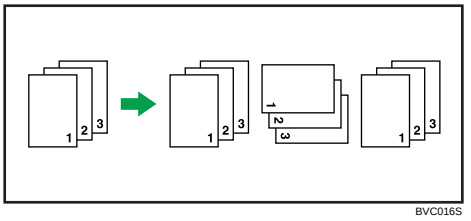


BVC015S

Rotating Collate

Every other print set is rotated by 90 degrees.

When the two paper trays contain the same size paper and same paper type in different orientations, the output result will be always Rotating Collate.



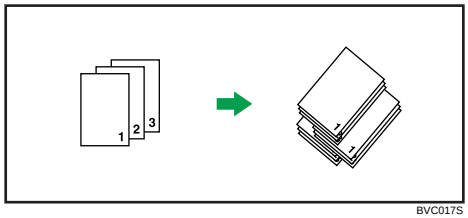
BVC016S

Conditions where Rotate Collate will be canceled

- When combined with the staple function.
- When combined with the punch function.
- When a paper tray is specified.
- When combined with the chaptering function.
- If custom size paper is set.
- When the output tray has the shift function.
- If jobs containing pages of various sizes are set.
- When combined with the cover sheet or back cover sheet functions.
- When combined with the slip sheet function.

Shift Collate

An optional finisher is required for this function.



The finisher shift tray moves backward or forward when a job or set is output, causing the next to shift, so you can separate them.

Note

- This function is also available using the PostScript 3 printer driver. For details, see PostScript 3 Supplement.
- If both the [Extended Auto Tray Switching] setting and the Rotating Collate function are enabled when paper in the selected tray runs out, the [Extended Auto Tray Switching] setting will be disabled. An error message reporting paper empty will then be displayed.
- When Rotating Collate has been selected, printing speed will be slower than with other collate functions.
- If you cannot make Shift Collate even with an optional finisher installed, options may not be set up correctly in the printer driver. To correct the printer driver's option settings, see "Making Option Settings for the Printer".
- For details, see the printer driver Help.

Reference

- p.169 "System"
- p.96 "If Error Occurs with the Specified Paper Size and Type"
- p.46 "Making Option Settings for the Printer"

Staple

With an optional finisher installed, this machine can staple individual sets when printing multiple sets.

Important

- **Make option settings for the machine using the printer driver when bidirectional communication is disabled.**
- **Be sure to set the paper size and paper orientation in the printer driver when using this function.**
- **The staple function cannot be used if the following paper types are used.**
  - **Thick 1, Thick 2, Thick 3, Thick 4, Labels, OHP Transparency, Glossy, Envelope, Coated**

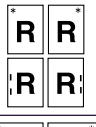
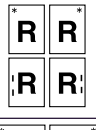
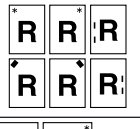
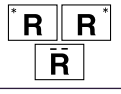
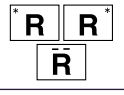
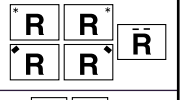
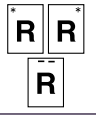
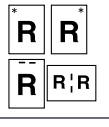
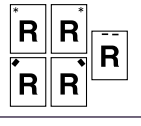
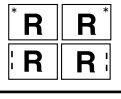
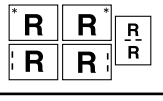
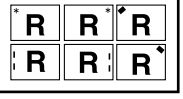
Note

- This function is also available using the PostScript 3 printer driver. For details, see PostScript 3 Supplement.
- Depending on the application, print settings may not be enabled and printed output may not be as expected.

Staple position

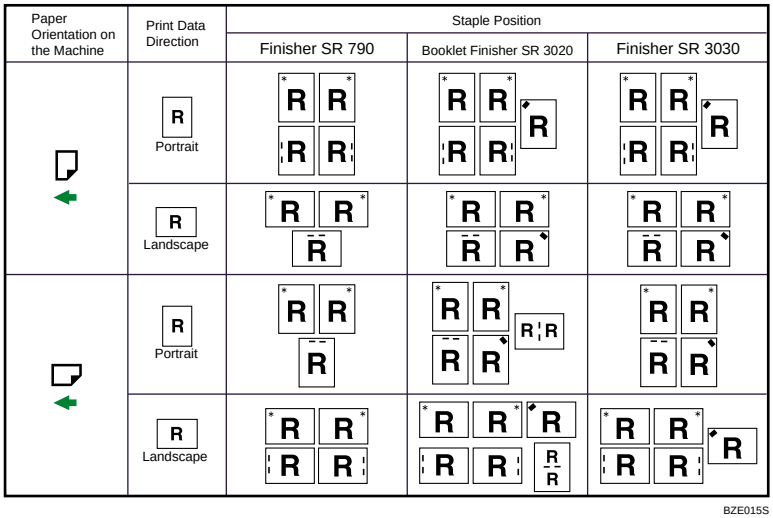
The specified staple position varies depending on paper size, type, quantity and feed orientation. The following table shows staple positions:

Type 1 and 2

Paper Orientation on the Machine	Print Data Direction	Staple Position		
		Finisher SR 790	Booklet Finisher SR 3000	Finisher SR 3050
	R Portrait			
	R Landscape			
	R Portrait			
	R Landscape			

BZE014S

Type 3 and 4



Note

- When center staple is set, the fore edge of prints can be cut using the trimmer. For details about cutting the fore edges of prints, see the printer driver Help.
- Stapling might not be in the specified position if combine (layout) and duplex printing are both selected. After setting the staple position, use the printer driver's preview icon to check the position before printing.
- For printing methods, see the printer driver Help.

Stapling precautions

Paper size and staple capacity

Finisher SR790/Finisher SR3020/Finisher SR3030

Paper Size	Staple Capacity
A3□, B4 JIS□, 11 × 17□, 8 1/2 × 14□, 8 1/4 × 14□, 8 1/4 × 13□, 8 × 13□, 8 1/2 × 13□, 8K□, 11 × 15□, 10 × 14□	30
A4□□, B5 JIS□□, 8 1/2 × 11□□, 8 × 10□, 7 1/4 × 10 1/2□□, 16K□□	50

Finisher SR3000/Finisher SR3050

Paper Size	Staple Capacity
A3, B4 JIS, 11 × 17, 8 1/2 × 14, 8 1/4 × 14, 8 × 13, 8 1/2 × 13, 8 1/4 × 13, 8K, 11 × 15, 10 × 14	30
A4, B5 JIS, 8 ×10, 8 1/2 × 11, 7 1/4 × 10 1/2, 16K	50

Staple capacity for booklet staple

Finisher SR3000

Paper Size	Staple Capacity
A3, A4, B4 JIS, B5 JIS, 11 × 17, 8 1/2 × 14, 8 1/2 × 11	10

Finisher SR3020

Paper Size	Staple Capacity
A3, A4, B4 JIS, B5 JIS, 11 × 17, 8 1/2 × 14, 8 1/2 × 11	15

Staple capacity for mixed size

You can mix two different paper sizes to staple if the width of the paper is the same.

Booklet stapling is unavailable for mixed size paper.

Mixed Paper Size	Finisher SR790	Finisher SR3000	Finisher SR3020/ Finisher SR3030/ Finisher SR3050
A3 and A4	16	20	30
B4 JIS and B5 JIS	16	20	30
11 × 17 and 8 1/2 × 11	16	20	30

Conditions where stapling will be canceled.

Under the following conditions, collate will continue if it was specified along with the staple function.

- If paper sizes which can not mix together are contained in a single job.

- If the number of pages to staple exceeds the maximum.
- If a paper size that cannot be stapled is selected.
- If a paper type that cannot be stapled is selected.
- When the setting does not meet collating requirements.
- When the record area for collate overflows during the job.
- If positions other than those fixed for stapling are specified.
- If there are inconsistencies between the orientation in duplex mode and the staple position.
- If there are inconsistencies between the orientation in letterhead mode and the staple position.
- When paper is loaded using the bypass tray.
- When only 1 page is printed.
- If an event occurs that forces the machine to print an error report.
- If a tray specified as [Driver / Command] under [Tray Setting Priority] is selected.

Note

- When the stapling is canceled, "Staple has been cancelled." appears.
- When staples have run out and [Auto Continue] is off, an error message will be displayed. Cancel the staple function in the error message to continue printing.
- If Staple or Shift Collate is selected with an optional finisher installed, the paper will be output to the finisher shift tray irrespective of the setting.
- When printing on letterhead, stapling may not be at the specified position.
- If you cannot make staple settings even with a finisher installed, options may not be set correctly in the printer driver. To correct the printer driver's option settings, see "Making Option Settings for the Printer".
- When the finisher is being used for another function's job (for example, a copy job), printing will start after that job ends.
- Be sure to set paper size and orientation in the printer driver when stapling.
- When duplex printing is selected, adjust staple positions to the binding orientation.
- Depending on the application you are using, print settings may not be stored and the printed result may not be as expected.
- When you enable the staple function in the printer driver settings, make sure the [Ignore Application Collate] check box is selected on the [Finishing] menu in the printer driver. If this check box is not selected, more sets than intended might be printed.
- When printing restarts after removing jammed paper, the printing position may be different, depending on the location of the jam.
  - If the paper jam occurred in an optional finisher, printing will restart from the top page of the data currently being printed, or from the page where the paper jam occurred.

- If the paper jam occurred in the machine, printing will restart from the page where the paper jam occurred.
- Even if the paper jam occurred in the machine, the error will not be cleared unless the cover of the finisher is opened and closed.

- For details about optional finishers, see "Appendix", About This Machine.
- To remove paper misfeeds, see "Clearing Misfeeds" Troubleshooting.

Reference

- p.46 "Making Option Settings for the Printer"

Punch

With an optional finisher and punch unit attached, holes can be punched into printed outputs.

Important

- **Make option settings for the machine using the printer driver when bidirectional communication is disabled.**
- **Be sure to set the paper size and paper orientation in the printer driver when using this function.**

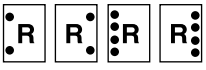
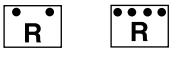
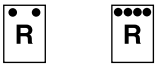
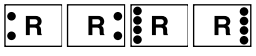
Note

- This function is also available using the PostScript 3 printer driver. For details, see PostScript 3 Supplement.
- For details about printing method, see the printer driver Help.

Punch position

The specified punch position varies depending on paper feed and print data orientation. The following table shows punch positions:

Region A (mainly Europe and Asia)

Paper Orientation on the Machine	Print Data Direction	Punch Position	
		2 and 4 holes	4 holes
	Portrait		
	Landscape		
	Portrait		
	Landscape		

BZE016S

Region B (mainly North America)

Paper Orientation on the Machine	Print Data Direction	Punch Position	
		2 holes	3 holes
	Portrait		
	Landscape		
	Portrait		
	Landscape		

BZE017S

Note

- Punch positions will vary slightly from page to page as holes are punched into each sheet individually.
- The number of holes that can be punched varies according to country.
- For details about paper sizes that can be punched, see "Appendix", About This Machine.
- For details about printing methods, see the printer driver Help.

Punching precautions

Follow these precautions when using the punch function.

Conditions where Punch will be canceled

- When a paper type that cannot be punched is selected.

- When a paper size that cannot be punched is selected.
- When paper is loaded using the bypass tray.
- If there are inconsistencies between the orientation in duplex mode and the punch position.
- If there are inconsistencies between the orientation in letterhead mode and the punch position.
- If there are inconsistencies between the staple position and the punch position, when using with staple function.
- When a tray specified as [Driver / Command] under [Tray Setting Priority] is selected.

Note

- When punching is canceled, "Punch has been cancelled." appears.
- When the punch receptacle has become full and [Auto Continue] is off, an error message will be displayed. Cancel the punch function in the error message to continue printing.
- Punching might not be in the specified position when printing on letterhead paper.
- If you cannot make punch settings even with an optional finisher installed, options may not be set correctly in the printer driver. To correct the printer driver's option settings, see "Making Option Settings for the Printer".
- When duplex print is selected, adjust the punch position to the binding direction.
- Be sure to set the punch position as same as the staple position when using it with the staple function.
- Be sure to set paper size and orientation in the printer driver when punching.
- Depending on the application, print settings may not be enabled and printed output may not be as expected.
- When you enable the punch function in the printer driver settings, make sure the [Ignore Application Collate] check box is selected on the [Finishing] menu in the printer driver. If this check box is not selected, more sets than intended might be printed.
- If a collate option is selected in the application, printing will not be as intended.
- When printing restarts after removing jammed paper, the printing position may be different, depending on the location of the jam.
  - If the paper jam occurred in an optional finisher, printing will restart from the top page of the data currently being printed, or from the page where the paper jam occurred.
  - If the paper jam occurred in the machine, printing will restart from the page where the paper jam occurred.
  - Even if the paper jam occurred in the machine, the error will not be cleared unless the cover of the finisher is opened and closed.
- For details about optional finishers, see "Appendix", About This Machine.
- To remove paper misfeeds, see "Clearing Misfeeds", Troubleshooting.
- For details about printing methods, see the printer driver Help.

Reference

- p.46 "Making Option Settings for the Printer"

Cover Sheet

Using this function, you can insert cover sheet/back cover sheet fed from a different tray to that of the main paper, and print on them.

Important

- **To use this function, Collate must be set. Rotating Collate function is disabled.**

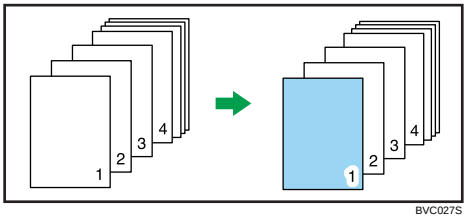
You can print the first page of the document on the sheet for the cover page.

Front Cover sheet

Prints the first page of the document on the sheet for the cover page.

- Print on one side

  Prints on one side of the cover sheet only.

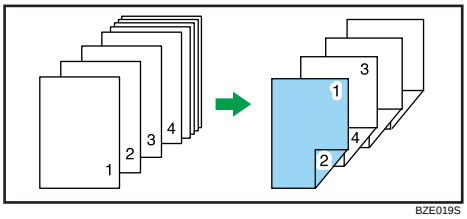


BVC027S

- Print on both sides

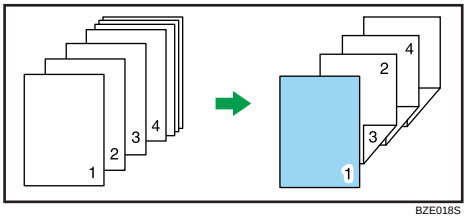
  Prints on both sides of the cover sheet when duplex printing is selected.

  - Cover sheet printed on both sides



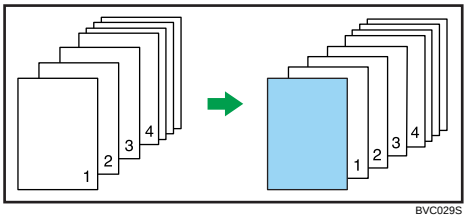
BZE019S

  - Cover sheet printed on one side



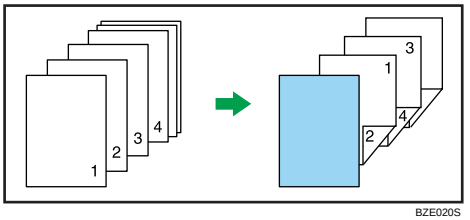
BZE018S

- Blank
  - When printing one side



BVC029S

  - When printing both sides



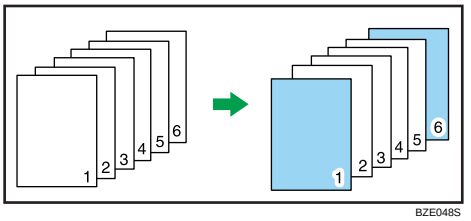
BZE020S

Front and Back Cover

Prints the first and last pages of the document as the cover pages.

- Print on one side

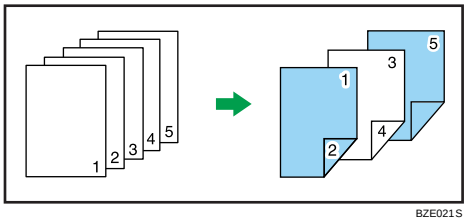
  Prints on one side of the cover sheets only.



BZE048S

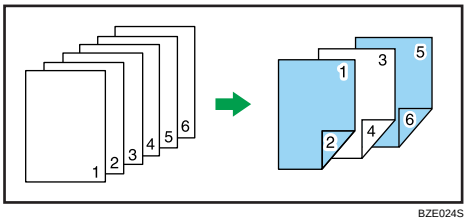
- Print on both sides

  Prints on both sides of the front cover sheet when duplex printing is selected.
  - The number of pages is odd



BZE021S

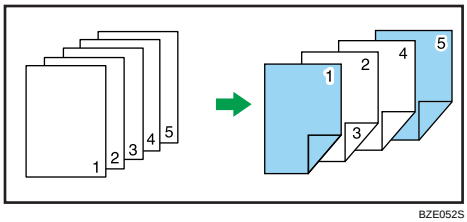
  - The number of pages is even



BZE024S

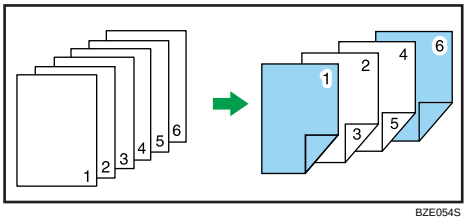
Prints on one side of the front cover sheet when duplex printing is selected.

- The number of pages is odd



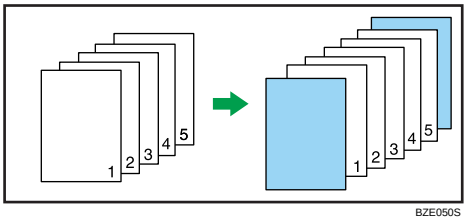
BZE052S

- The number of pages is even



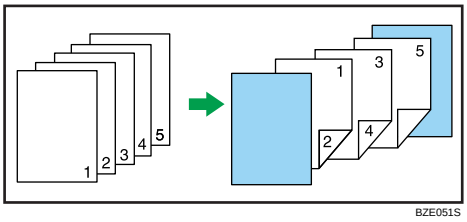
BZE054S

- Blank
  - When printing on one side



BZE050S

  - When printing both sides



BZE051S

Note

- If [Auto Tray Select] is selected in the [Input Tray:] list for the body paper, the paper will be delivered from a tray containing paper in the orientation. Therefore, if the cover paper is set to the orientation, the orientation of the output cover and body will be different.
- The cover sheet/back cover sheet should be the same size and orientation as the body paper.
- The same paper feed tray can be set for the body of the document and the cover sheet/back cover sheet.
- When loading a cover sheet/back cover sheet in the tray, set the relevant paper size.
- The cover sheet/back cover sheet can not be used when slip sheet is specified.
- For printing methods, see the printer driver Help.

Chapter Page

The specified page is printed on the same side as the first page, like a book. Also, you can insert chapter slip sheets before specified pages.

Important

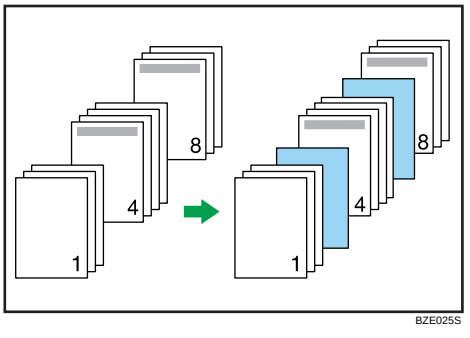
- **The same paper feed tray cannot be set for the body of the document and the slip sheet.**

You can select one of the following chapter page settings:

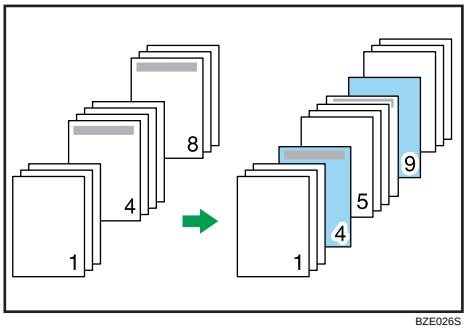
- Leave Blank: Inserts a blank sheet before specified pages.
- One Side: Prints on one side of inserted chapter slip sheets.
- Both Sides: Prints on both sides of inserted chapter slip sheets.
- Lead Chapter Page: Always prints a specified page on the same side as the first page.

The following illustrations show the output patterns for Leave Blank, One Side, and Lead Chapter Page.

- Leave Blank



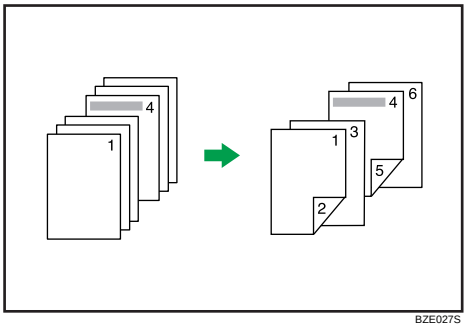
- One Side



BZE026S

If you select Both Sides, both sides of the slip sheets will be printed on.

- Lead Chapter Page



BZE027S

This function is only valid with duplex printing.

If [Auto Tray Select] is selected in the [Input Tray:] list for the body paper, the paper will be delivered from a tray containing paper in the ▯ orientation. Therefore, when the slip sheet has been set to the ▭ orientation, the orientation of the output slip sheet and body will be different.

Note

- You can designate up to 20 locations using the printer driver.
- This function can be used together with combine (layout) printing.
- When the page specified as a chapter slip sheet print is the first page in the first chapter, and a cover sheet is specified on the same page, the chapter slip sheet print will be canceled due to cover sheet priority.
- The slip sheet should be the same size and orientation as the body paper.
- For details about printing methods, see the printer driver Help.

Slip Sheets

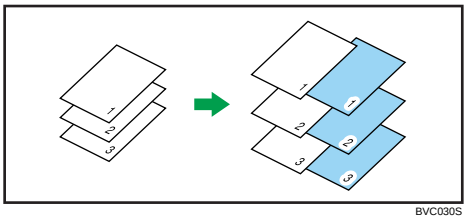
A slip sheet can be inserted between each page.

Important

- The same paper feed tray cannot be set for the body of the document and the slip sheets.

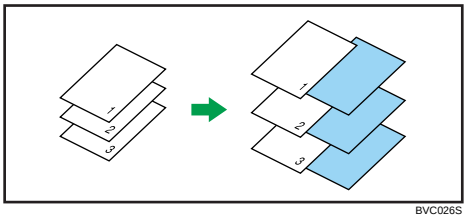
Inserting a slip sheet between each page

- Print



BVC030S

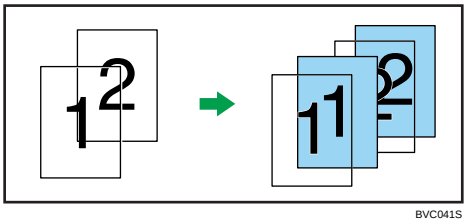
- Blank



BVC026S

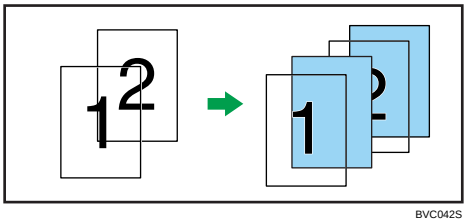
Inserting a slip sheet between OHP transparencies

- Print



BVC041S

- Blank



BVC042S

Note

- When Sample Print is specified with Slip Sheets, only the first copy will be printed. The setting to print the rest of the copies is not stored on the machine.
- Collate, duplex printing, and staple functions will be canceled when using slip sheets.

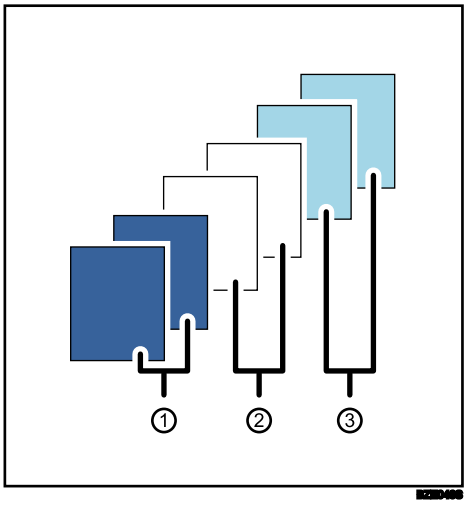
- The slip sheet should be the same size and orientation as the body paper.
- When loading slip sheets in the tray, set the relevant paper size.
- If [Auto Tray Select] is selected in the [Input Tray:] list for the body paper, the paper will be delivered from a tray containing paper in orientation. Therefore, when the slip sheet has been set to orientation, the orientation of the output slip sheet and body paper will be different.

User Defined Pages

Using this function, you can specify different input trays to print certain pages of a document.

Important

- **This function is available with the PCL 5c printer driver only.**
- **If [Document Server] is selected under [Job Type:], User Defined Page cannot be used.**
- **If [User Defined Pages] is selected under [Paper Selection:] on the [Paper] tab, [Layout:] cannot be selected.**



1. Printed using paper from Tray 1
2. Printed using paper from Tray 2
3. Printed using paper from Tray 3

Note

- For details, see the printer driver Help.

Watermarks

Using this function, you can print documents with text watermarks.

This function increases a document's security and identifiability by embedding a specified text (watermark) on every page. You can specify only one type of watermark at a time.

Note

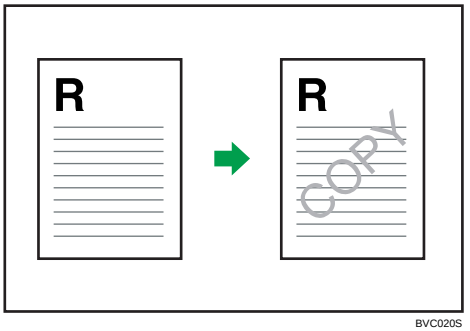
- This function is also available using the PostScript 3 printer driver. For details, see PostScript 3 Supplement.
- You can create and apply custom watermarks. For details about creating original watermarks, see the printer driver Help.

Types of watermarks

This section explains the types of watermarks available.

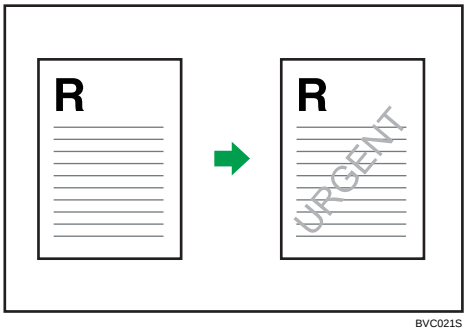
Following are the pre-registered text watermarks that are available:

- COPY



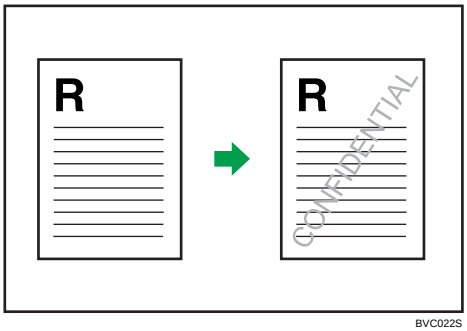
BVC020S

- URGENT



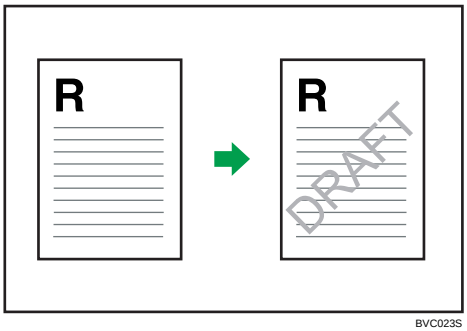
BVC021S

- CONFIDENTIAL



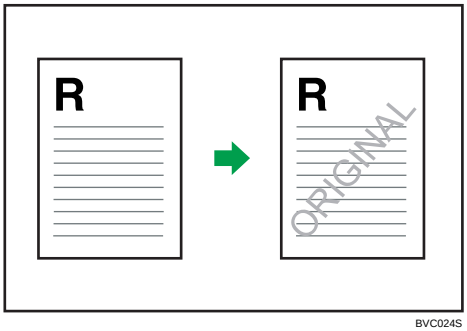
BVC022S

- DRAFT



BVC023S

- ORIGINAL



BVC024S

If Error Occurs with the Specified Paper Size and Type

An error message appears on the control panel when there is no tray for the selected paper size or type, or when paper loaded in the machine has run out. In that case, you can select the tray manually to continue printing, or cancel a print job.

Important

- **The tray cannot be changed if the following functions are set:**
  - **Staple**
  - **Punch**
  - **Front Cover Sheet**
  - **Back Cover Sheet**
  - **Slip Sheet**
  - **Chaptering**
  - **Chapter Slip Sheets**

Note

- If you cancel duplex printing through the error message, printing will continue from the tray that you select manually.
- If any of the following functions are set, you can continue printing by canceling the function:
  - Staple
  - Punch
  - Duplex
- If [Auto Continue] is enabled, printing from the manually selected tray will begin after a specified interval. For details about [Auto Continue], see "System".

Reference

- p.169 "System"

Printing from a Selected Tray

Use the following procedure to manually select the tray from which printing will continue.

1. **Press the [Printer] key.**
2. **Select a tray those that appear on the control panel to continue printing manually.**

   If you want to print after adding paper to the tray, select the tray after loading the correct paper.

3. **Press [Continue].**

   The machine prints using the selected tray.

Note

- If a tray with a smaller paper size is selected, the print job may be cut short, or other problems may occur.

Canceling a Print Job

Use the following procedure to cancel a print job.

1. **Press the [Printer] key.**

   The printer screen appears.

2. **Press [Job Reset] or the [Clear/Stop] key.**

   Delete the stored print jobs, and then cancel printing.

3. **Press [Reset the Job] to cancel the current print job, or [Reset All Jobs] to cancel all jobs.**

   A confirmation message appears.

4. **Press [Yes] to cancel the print job.**

   Press [No] to return to the previous display.

Note

- To resume print jobs, press [Resume Printing].
- If the machine is shared by multiple computers, be careful not to accidentally cancel someone else's print jobs.
- Under Windows, if the machine is connected to the computer using a parallel cable, sent print jobs may be canceled if [Reset All Jobs] is pressed while "Waiting for print data..." is on the control panel. After the interval set in [I/O Timeout] in Printer Features has passed, the next print job can be sent. A print job sent from a different client computer will not be canceled in this case.
- You cannot stop printing data that has already been processed. For this reason, printing may continue for a few pages after you press [Job Reset] or the [Clear/Stop] key.
- A print job containing a large volume of data may take considerable time to stop.
- To stop data printing, see "Canceling a Print Job".

Reference

- p.137 "Canceling a Print Job"

Spool Printing

Spool Printing allows print jobs transferred from a computer to be temporarily stored, and then prints them after they are transferred. This shortens printing time as it maximizes printer efficiency.

Important

- **During Spool Printing, the hard disk is accessed and the Data In indicator blinks. Turning off the computer or machine during Spool Printing can damage the hard disk. Also, if the computer or machine is turned off during Spool Printing, spooled jobs will be deleted. Therefore, do not turn the power of the computer or machine off during Spool Printing.**
- **If data is sent to the machine using other protocols besides "diprint", "lpr", "ipp", "ftp", "sftp", "smb", and "wsd (printer)", Spool Printing cannot be performed.**

Setting Spool Printing

Spool Printing can be set using telnet or Web Image Monitor.

- Using Web Image Monitor

  For details about Web Image Monitor, see "Using Web Image Monitor", Network and System Settings Reference.

- Using telnet

  Type in "spoolsw spool on" to set Spool Printing.

  For details about telnet, see "Remote Maintenance Using telnet", Network and System Settings Reference.

Displaying the spool job list on the control panel

When Spool Printing is set, you can display on the control panel the spooled print jobs stored in the machine.

To display the spooled print jobs, press the [Printer] key, and then press [Spooling Job List]. The spooled print job list appears.

If Spool Printing is not set, you cannot select [Spooling Job List].

To delete a spooled print job stored in the machine, select the job you want to delete, and then press [Delete].

Viewing/Deleting spool jobs in Web Image Monitor

Start Web Image Monitor and enter the machine's IP address in the address bar. This displays the top page.

For details, see Network and System Settings Reference.

Note

- Up to a maximum of 150 jobs at once can be spool printed.
- Printing the first page with Spool Printing will be slow.
- The computer requires less print processing time when large amounts of data are spooled.

- Stored spool jobs can be viewed or deleted using Web Image Monitor.

Printing a PDF File Directly

This section explains how to print PDF files directly without having to open a PDF application by using DeskTopBinder Lite.

2

Using DeskTopBinder Lite

This section explains how to print PDF files directly without having to open a PDF application by using DeskTopBinder Lite. To use this function, you must first download DeskTopBinder Lite from the manufacture's Website and install it on your computer. Contact your local dealer for information on downloading DeskTopBinder Lite.

Important

- This function is possible only when an optional PostScript 3 unit is installed.
- This function is possible for genuine Adobe PDF files only.
- PDF files whose PDF version is 1.7 (Acrobat 8.0 compatible) or earlier can be printed.
- PDF files created using PDF version 1.5 Crypt Filter functions or more than eight DeviceN Color Space components cannot be printed.
- PDF files created using PDF version 1.6 watermark note functions, or extended optional contents cannot be printed.
- PDF files whose PDF version is 1.7 (Acrobat 9.0 compatible) or higher can be printed as long as they do not use any functions that are exclusive to those versions.
- If the document contains transparency function data, it may fail to print. When this happens, use the printer driver to print the document.
- Some types of High Compression PDF files may not be printed.
- If print jobs through PDF direct printing are being canceled, select [Font Priority] for [Memory Usage] in [System] in [Printer Features]. If print jobs are being canceled even though [Font Priority] has been selected, print using the printer driver from a PDF viewer such as Adobe Reader.

Note

- Paper size errors may occur when printing on custom size paper.

Expanding DeskTopBinder Lite Features

This section explains how to extend the features of DeskTopBinder Lite.

To extend a feature, click on its icon in the [Type:] list.

The following procedure explains using the [Extended Features Wizard] to print PDF files directly.

1. **On the [Start] menu, point to [All Programs], [DeskTopBinder], and then click [Extended Features Wizard].**

   The [Extended Features Wizard] dialog box appears.

2. **Select [Easy settings], and then click [Start]. Click [Next>] repeatedly until the [Printing Function2] dialog box appears.**

3. **In the [Printing Function2] dialog box, click [Add...].**

   If you select [All function settings] before clicking [Start], click the [Output] icon on the [Type:] list. Select [PDF Direct Print] in [Selectable function(s):], and then click [Add].

   The [PDF Direct Print Properties] dialog box appears.

4. **Click [Specify...], enter the IP address or host name of the machine, and then click [OK].**

5. **Click [OK].**

   The [PDF Direct Print Properties] dialog box closes.

6. **Click [Next>] repeatedly until [Finish] appears.**

7. **Click [Finish].**

Function Palette

The Function Palette contains buttons for functions that are already configured through expanded DeskTopBinder Lite functions. Using these buttons, you can print Windows files, preview printouts, convert images, and register scanners for documents without having to open DeskTopBinder Lite. You can also use these functions simply by dragging a target file to the button corresponding to the required function and dropping it there.

1. **On the [Start] menu, point to [All Programs], [DeskTopBinder], and then click [Function Palette].**

   An icon for the Function palette is added to the task tray displayed at the bottom right of the screen.

2. **Right-click the new icon that has been added to the task tray, and then click [Properties...].**

   The [Properties] dialog box appears.

3. **Click the [Contents] tab, select the [PDF Direct Print] check box at the center, and then click [OK].**

   The [Properties] screen closes and the [PDF Direct Print] icon is added to the palette.

PDF Direct Printing Using Function Palette

Follow the procedure below to print PDF files directly.

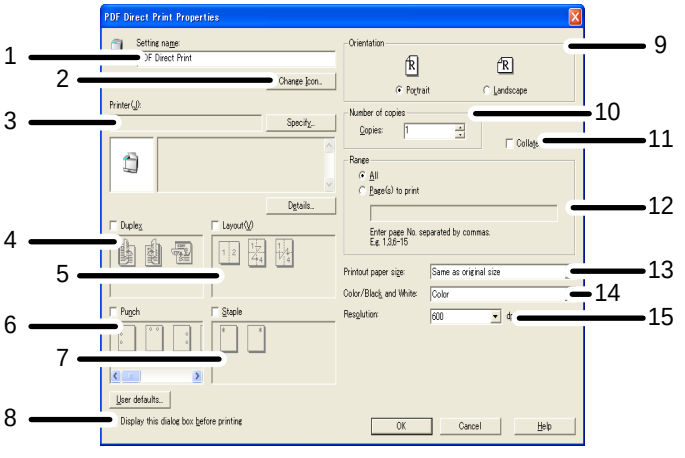
1. **Drag the PDF file you want to print to the PDF Direct Printing icon on the Function Palette and drop it there.**

   The [Output File List - PDF Direct Print] dialog box appears.

2. **Highlight the PDF file you want to print, and then click [OK].**

   The PDF file is printed.

PDF Direct Print Properties



BZE034S

1. **Setting name:**

   Displays the plug-in configuration name (up to 63 single byte characters)

2. **Change Icon...**

   Changes the icon displayed on the tool bar.

3. **Printer:**

   Displays printer's IP address or hostname.

4. **Duplex**

   Prints on both sides of sheets.

5. **Layout**

   Prints multiple pages on a single sheet.

6. **Punch**

   Punches holes in printed sheets.

7. **Staple**

   Staples together printed sheets.

8. **Display this dialog box before printing**

   Appears in PDF direct printing mode if this check box is selected.

9. **Orientation:**

   Specify the original's orientation.

10. **Number of copies**

    Specify the number of copies to print.

11. **Collate**

    Sorts printed sheets.

12. **Range:**

    Specify which paper to print.

13. **Printout paper size:**

    Specify the paper size you want copies to be printed onto.

14. **Color/Black and White:**

    Specify color or black-and-white printing.

15. **Resolution:**

    Specify a print resolution.

Using UNIX Commands

This section explains how to print PDF files directly without having to open a PDF application using printing commands, such as "ftp", "sftp", and "lpr".

Sending a PDF file

Use the following procedure to send a PDF file to this machine using printing commands.

Following is an example when using the "lpr" command to print a PDF file by specifying the machine's IP address.

For details about the printing commands, see UNIX supplement.

```
%lpr -S "printer's IP address" [-Poption] [-o l]\ "path"\"PDF file name"
```

Note

- Replace the strings enclosed in quotations with the appropriate setting's value.
- Entering the text enclosed in brackets [ ] is optional.

Entering the PDF Password

Use the following procedure to print a password protected PDF file directly.

To print a PDF file that is protected by a password, enter the password using the control panel or Web Image Monitor.

Using the Control Panel

To enter a PDF password using the control panel, select [Change PDF Password] on [PDF Menu] under Printer Features.

Using Web Image Monitor

To enter the PDF password using Web Image Monitor, set [PDF Temporary Password] under [Configuration].

Registering Classification Codes

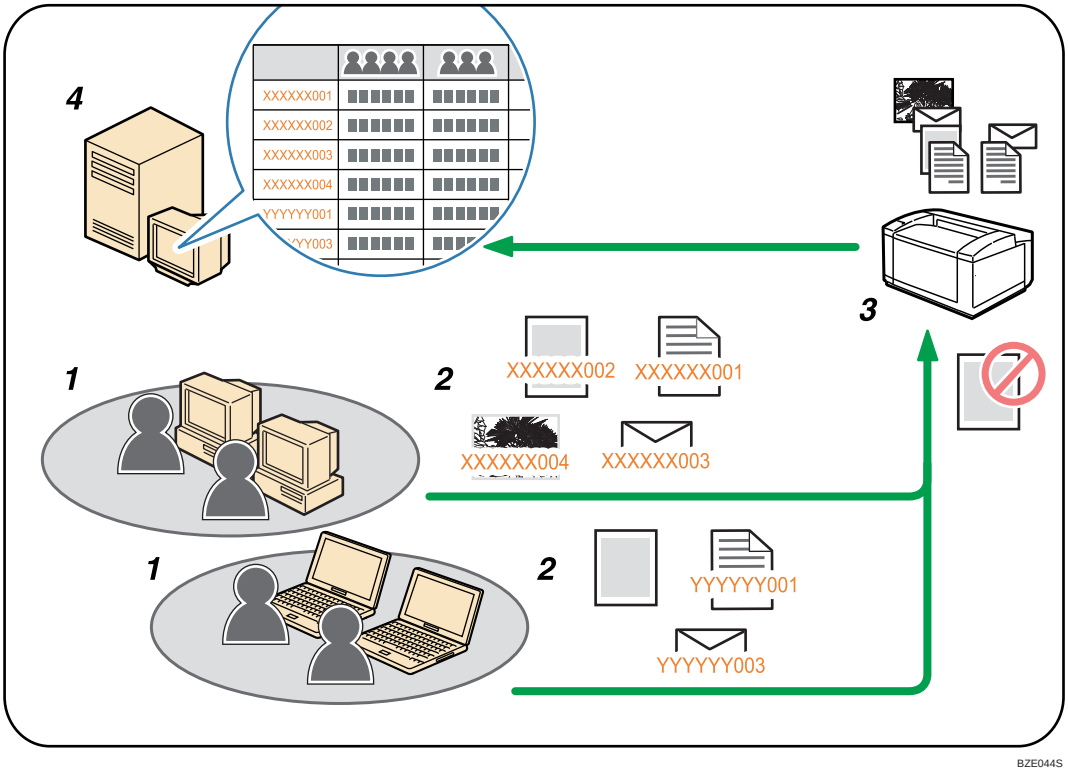
This section explains classification codes.

If you register classification codes, the printer logs the number of prints made under each code.

You can register classification codes to individual users and specified purposes, enabling you to monitor printer usage by each.

For example, you can manage accounts according to individual client computers or account titles.

Classification Code - Based Process (example)



BZE044S

1. **Divisions, sections, departments, project teams, users, etc., to be managed.**
2. **The appropriate classification code for the print job is entered.**

   For details, see "Specifying the Classification Code for a Print Job".
3. **The job is printed.**

   When printing in an environment where classification codes are required, print jobs that do not have a classification code cannot be printed.

   For details, see "Configuring Classification Codes".
4. **Classification codes are collected and managed by an external log management system.**

Reference

- p.106 "Specifying the Classification Code for a Print Job"
- p.106 "Configuring Classification Codes"

Configuring Classification Codes

Use Web Image Monitor to specify whether or not to apply classification code requirement to print jobs.

Important

- The configuration page can be printed at any time.
- The default setting for classification code requirement is "Optional".

1. Start Web Image Monitor.
2. Click [Login].

   A dialog box for entering the login user name and login password appears.
3. Enter the login user name and password, and then click [Login].

   For details about the login user name and password, consult your network administrator.
4. Click [Configuration] in the left area, and then click [Logs].
5. Check that [Required] or [Optional] is selected for [Classification Code] in the [Common Settings for All Logs] column.

   If "Required" is selected for the classification code requirement setting in Web Image Monitor, any print job that without a classification code specified will not be printed.
6. Click [OK].
7. Click [Logout].
8. Quit Web Image Monitor.

Specifying the Classification Code for a Print Job

When printing in an environment where classification codes are required, a classification code must be specified for each print job.

Important

- The PostScript 3 printer driver does not support the classification codes and it cannot be used to print under environment which the classification codes are required.

For the PCL 6 printer driver:

1. Open the [Printing Preferences] dialog box after creating a document in an application.
2. Click the [Detailed Settings] tab.

3. **In the [Menu:] box, click the [Job Setup] icon.**
4. **Enter the classification code in the [Classification code:] box.**

   This code identifies the user. The classification code can contain up to 32 alphanumeric (a-z, A-Z, 0-9, "-") characters.
5. **Make any other necessary print settings, and then click [OK].**
6. **Execute the print command.**
7. **The print job is sent to the printer.**

For the PCL 5c printer driver:

1. **Open the [Printing Preferences] dialog box after creating a document in an application.**
2. **Click the [Valid Access] tab.**
3. **Enter the classification code in the [Classification Code:] box.**

   This code identifies the user. The classification code can contain up to 32 alphanumeric (a-z, A-Z, 0-9, "-") characters.
4. **Make any other necessary print settings, and then click [OK].**
5. **Execute the print command.**
6. **The print job is sent to the printer.**

Note

- The specified classification code is stored in the printer driver.
- To switch between different classification codes, install the printer driver under different names, and specify different classification code for each driver.
- For details about how to view the log collected using Classification Code, see the manual for the external log collection system.

Reference

- p.51 "Displaying the Printer Driver Settings Screen"

3. Printing Stored Documents

This chapter explains how to print documents stored in the machine.

Using the Print Job Function

This describes how to print files stored in the machine.

The following types of printing can be selected using the printer driver: Sample Print, Locked Print, Hold Print, and Stored Print.

You can print or delete the print jobs stored in the machine which is sent from computers.

If you select Sample Print, Locked Print, and Hold Print, the print files stored in the machine are deleted after printing is completed. If you select Stored Print, the files remain in the machine even after printing is finished.

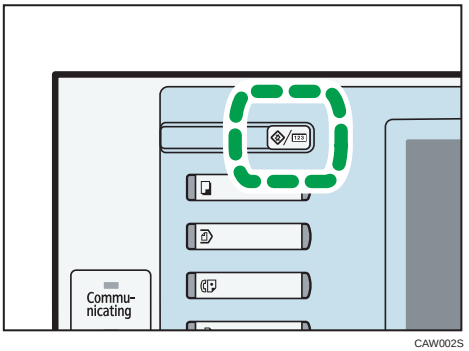
In the [Initial Print Job List] settings on the [System] tab under [Printer Features], the [Complete List] or the [List Per User ID] screen appears depending on which list type you selected.

Selecting the Initial Print Job List

Follow the procedure below to set the initial Print Jobs screen, and to show it.

Selecting the Initial Print Job List

1. **Press the [User Tools/Counter] key.**



CAW002S

2. **Press [Printer Features].**

   The [Printer Features] menu appears.

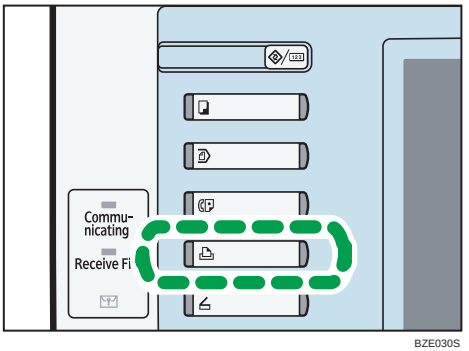
3. **On the [System] tab, press [Initial Print Job List].**

4. **Select either [Complete List] or [List Per User ID].**

   After configuring the settings, the selected type of print job list is displayed.

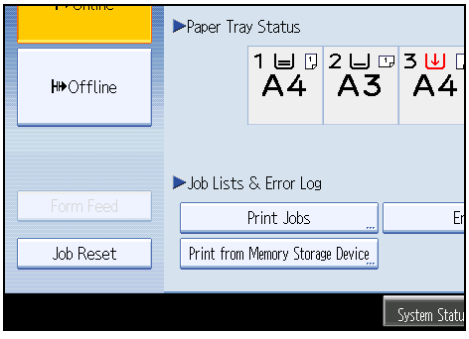
Displaying a Print Job List

1. **Press the [Printer] key.**



BZE030S

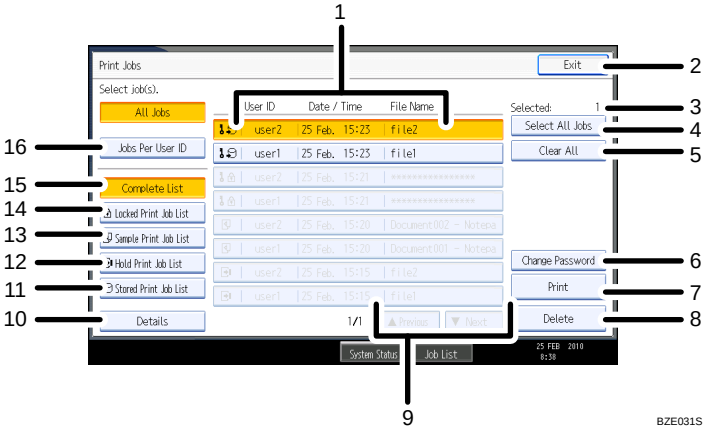
2. **Press [Print Jobs].**



Either the Complete List or List Per User ID screen appears.

Complete List

If you select [Complete List] from [Initial Print Job List], the following screen appears:



1. User ID, Date / Time, and File Name display

   Displays the time when the instruction to print the stored files was entered, the User IDs, and the file names.

2. Exit

   Returns to the printer screen.

3. Selected:

   Displays number of the files selected.

4. Select All Jobs

   Selects all files stored in the machine.

5. Clear All

   Clears all selections.

6. Change Password

Changes or deletes the password of a file if a password is set. To change the password, press [Change Password], enter the current password, and then enter the new password on the confirmation screen. To delete the password, press [Change Password], leave the entering/confirming a new password box blank, and then press [OK].

You can also set passwords to the Stored Print files that do not currently have passwords.

7. Print

   Prints a selected file.

8. Delete

   Deletes a selected file.

9. ▲Previous/▼Next

   If the list of files does not fit on the screen, scroll up or down to view the list.

10. Details

    Displays details about a selected file.

11. Stored Print Job List

    Displays only Stored Print files stored in the machine.

12. Hold Print Job List

    Displays only Hold Print files stored in the machine.

13. Sample Print Job List

    Displays only Sample Print files stored in the machine.

14. Locked Print Job List

    Displays only Locked Print files stored in the machine.

15. Complete List

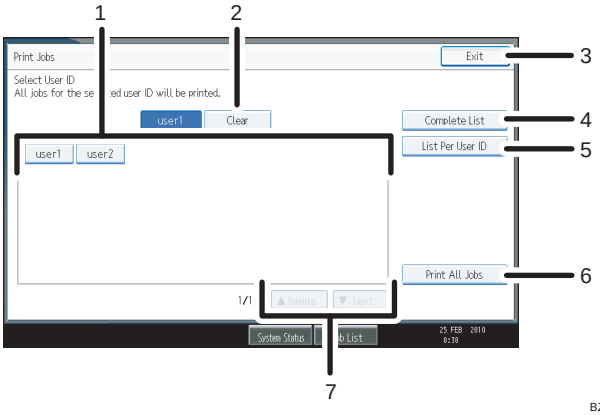
    Displays all files stored in the machine.

16. Jobs Per User ID

    Displays List Per User ID.

List Per User ID

If you select [List Per User ID] from [Initial Print Job List], the following screen appears:



BZE032S

1. User ID

   Displays the User IDs who sent files to the machine.

2. Clear

   Clears a selection.

3. Exit

   Returns to the printer screen.

4. Complete List

   Displays all print jobs.

5. List Per User ID

   Displays the print job list of each ID.

6. Print All Jobs

   Prints all selected type of files sent by the user ID.

7. ▲Previous/▼Next

   If the list of files does not fit on the screen, scroll up or down to view the list.

Note

- Multiple files can be selected on the Print Jobs screen. To clear selection, press the selected print jobs again.
- The display is not updated if a new file is stored while the list of stored files is displayed. To update the display, press [Exit] to return to the printer screen, and then press [Print Jobs] again.
- If a large number of print jobs are stored in the machine, processing may slow down temporarily, depending on which functions are used.
- If you press [List Per User ID] in the Complete List screen, the screen switches to the List Per User ID screen where [Back] appears at the bottom right. Press [Back] to switch to the Complete List screen.
- For details about Sample Print, Locked Print, Hold Print, and Stored Print, see "Printing from the Print Job Screen".

Reference

- p.115 "Printing from the Print Job Screen"

Printing from the Print Job Screen

This section explains how to use the Sample Print function, Locked Print function, Hold Print function, Store and Print function, and Stored Print function.

Sample Print

Use this function to print only the first set of a multiple-set print job. After you have checked the result, remaining sets can be printed or canceled using the control panel. This can reduce misprints due to mistakes in contents or settings.

Important

- **A Sample Print file cannot be stored if:**
  - **the total number of Sample Print, Locked Print, Hold Print, and Stored Print files in the machine is over 100. (The maximum number varies depending on the volume of data in files.)**
  - **the file contains over 2,000 pages.**
  - **the machine's sent or stored files total over 9,000 black-and-white pages. (The total varies depending on the size of the files.)**
  - **the machine's sent or stored files total over 2,000 color pages. (The total varies depending on the size of the files.)**

Note

- The PostScript 3 printer driver is also available for this machine. For details about installing and configuring the PostScript 3 printer driver, see PostScript 3 Supplement.
- If a Sample Print file has not been stored properly, check the error log on the control panel. For details about the error log on the control panel, see "Checking the Error Log".
- Even after you turn off the machine, stored documents in the machine remain. However, the [Auto Delete Temporary Print Jobs] or [Auto Delete Stored Print Jobs] settings are applied first. For details about the auto delete settings, see "System".
- Make sure the [Ignore Application Collate] check box in the printer driver and the [Collate] check box in the application's [Print] dialog box are both cleared. By default, Sample Print jobs are automatically collated by the printer driver. If collate is enabled in the application, more prints than intended may be produced.
- If the first set of the Sample Print file is not as you expected and you do not want to print remaining sets, delete the Sample Print file using the control panel. If you print the remaining sets of the Sample Print file, the job in the machine is deleted automatically. To delete the Sample Print file, see "Deleting Sample Print files".

Reference

- p.139 "Checking the Error Log"

- p.169 "System"
- p.117 "Deleting Sample Print files"

Printing a Sample Print file

The following procedure describes how to print a Sample Print file with the PCL 5c/6 printer driver.

Important

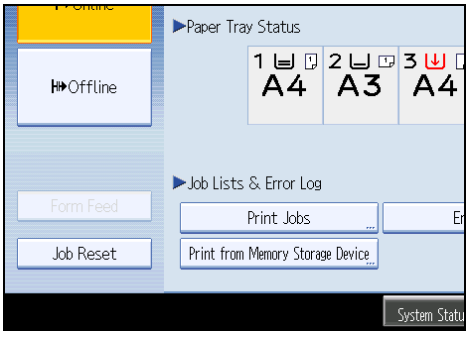
- **Applications with their own drivers, such as PageMaker, do not support this function.**

1. **Configure Sample Print in the printer driver's properties.**

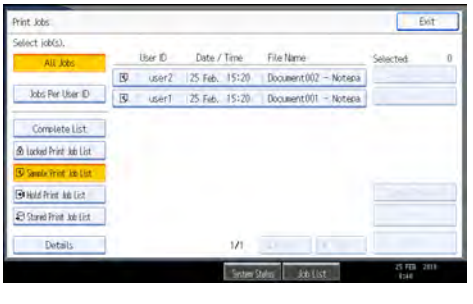
   For details about configuring the printer drivers, see the relevant Help files.
2. **Click [Details...], and then enter a User ID in the [User ID:] box.**
3. **Click [OK] to close [Details...], and then click [OK] to close the printer driver's properties.**
4. **Start printing from the application's [Print] dialog box.**

   Make sure to set more than two copies.

   The Sample Print job is sent to the machine, and the first set is printed.
5. **On the control panel, press the [Printer] key to display the printer screen.**
6. **Press [Print Jobs].**



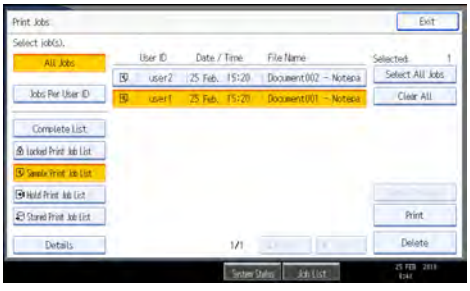
   A list of print files stored in the machine appears.
7. **Press [Sample Print Job List].**



A list of Sample Print files stored in the machine appears.

Depending on the security settings, certain print jobs may not be displayed.

8. **Select the file you want to print, and press [Print].**



9. **Enter the new number of sets using the number keys if necessary, and then press [Yes].**

You can enter up to 999 sets.

Press the [Clear/Stop] key to correct any entry mistakes.

The remaining sets are printed.

Note

- If you want to cancel printing, press [No] in step 9.
- If you select multiple files, the confirmation screen displays the total number of files to be printed.
- If you select multiple documents and do not specify the number of sets on the confirmation screen, one set less than the number specified on the computer is printed for every selected document. If the number of sets specified on the computer is "1", one set each is printed for every document.
- When printing accumulated sample print documents, you cannot change the numbers of sets.
- When printing is completed, the stored file will be deleted.
- To stop printing after printing has started, press [Exit] until the printer screen appears, and then press [Job Reset]. The file will be deleted.

Deleting Sample Print files

If you are not satisfied with the sample printout, you can delete the Sample Print file, revise it and print it again until the settings are suitable.

1. **Press the [Printer] key to display the printer screen.**
2. **Press [Print Jobs].**
3. **Press [Sample Print Job List].**

   A list of Sample Print files stored in the machine appears.

   Depending on the security settings, certain print jobs may not be displayed.
4. **Select the file you want to delete, and then press [Delete].**

   The delete confirmation screen appears.
5. **Press [Yes] to delete the file.**

   The selected file is deleted.

Note

- If you do not want to delete the file, press [No] in step 5.
- If you select multiple files, the confirmation screen displays the total number of files to be deleted.

Locked Print

Use this function to maintain privacy when printing confidential documents on the machine over a shared network. Usually, it is possible to print data using the control panel once it is stored in this machine. When using Locked Print, it is not possible to print unless a password is entered on the control panel. Your confidential documents will be safe from being viewed by other people.

Important

- **A Locked Print file cannot be stored if:**
  - **the total number of Sample Print, Locked Print, Hold Print, and Stored Print files in the machine is over 100. (The maximum number varies depending on the volume of data in files.)**
  - **the file contains over 2,000 pages.**
  - **the machine's sent or stored files total over 9,000 black-and-white pages. (The total varies depending on the size of the files.)**
  - **the machine's sent or stored files total over 2,000 color pages. (The total varies depending on the size of the files.)**

Note

- The PostScript 3 printer driver is also available for this machine. For details about installing and configuring the PostScript 3 printer driver, see PostScript 3 Supplement.
- If a Locked Print file has not been stored properly, check the error log on the control panel. For details about the error log on the control panel, see "Checking the Error Log".

- Even after you turn off the machine, stored documents remain. However, the [Auto Delete Temporary Print Jobs] or [Auto Delete Stored Print Jobs] settings are applied first. For details about the auto delete settings, see "System".
- Make sure the [Ignore Application Collate] check box in the printer driver and the [Collate] check box in the application's [Print] dialog box are both cleared. By default, Locked Print jobs are automatically collated by the printer driver. If collate is enabled in the application, more prints than intended may be produced.

Reference

- p.139 "Checking the Error Log"
- p.169 "System"

Printing a Locked Print file

The following procedure describes how to print a Locked Print file with the PCL 5c/6 printer driver.

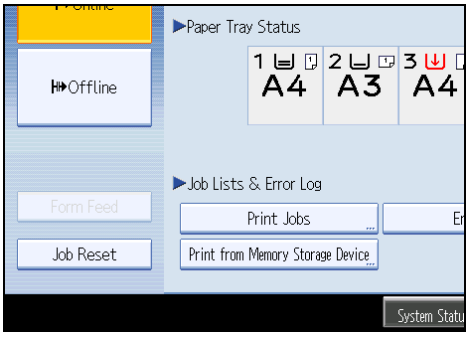
Important

- **Applications with their own drivers, such as PageMaker, do not support this function.**

1. **Configure the Locked Print in the printer driver's properties.**

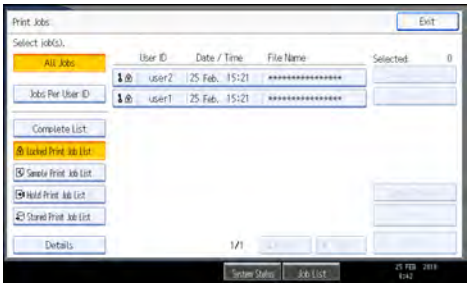
   For details about configuring the printer drivers, see the corresponding Help files.
2. **Click [Details...], and then enter a User ID in the [User ID:] box , and then enter a password in the [Password:] box.**
3. **Click [OK] to close [Details...], and then click [OK] to close the printer driver's properties.**
4. **Start printing from the application's [Print] dialog box.**

   The Locked Print job is sent to the machine.
5. **On the control panel, press the [Printer] key to display the printer screen.**
6. **Press [Print Jobs].**



A list of print files stored in the machine appears.

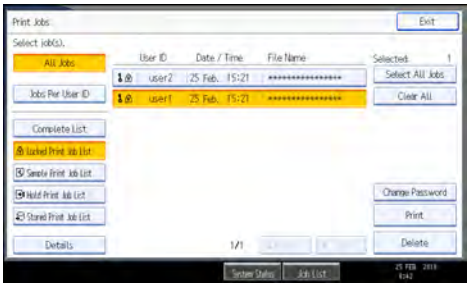
7. **Press [Locked Print Job List].**



A list of Locked Print files stored in the machine appears.

Depending on the security settings, certain print jobs may not be displayed.

8. **Select the file you want to print, and then press [Print].**



The password screen appears.

9. **Enter the password using the number keys, and then press [OK].**

The print confirmation screen appears.

A confirmation screen will appear if the password is not entered correctly. Press [Exit] to enter the password again.

If multiple print files are selected, the machine prints files that correspond to the entered password. The number of files to be printed is displayed on the confirmation screen.

If you forgot your password, ask your file administrator for help.

10. **Press [Yes].**

The locked file is printed.

Note

- If you want to cancel printing, press [No] in step 10.
- When printing is completed, the stored file will be deleted.
- To stop printing after printing has started, press [Exit] until the printer screen appears, and then press [Job Reset]. The file will be deleted.

Deleting Locked Print files

1. **Press the [Printer] key to display the printer screen.**
2. **Press [Print Jobs].**
3. **Press [Locked Print Job List].**

   A list of Locked Print files stored appears.

   Depending on the security settings, certain print jobs may not be displayed.
4. **Select the file you want to delete, and then press [Delete].**

   The password screen is displayed.
5. **Enter the password using the number keys, and then press [OK].**

   The delete confirmation screen appears.

   A confirmation screen will appear if the password is not entered correctly. Press [Exit] to enter the password again.

   If you forgot your password, ask your file administrator for help.
6. **Press [Yes].**

   The selected file is deleted.

Note

- If you do not want to delete the file, press [No] in step 6.
- If multiple print files are selected, the machine deletes files that correspond to the entered password. The number of files to be deleted is displayed on the confirmation screen.

Hold Print

Use this function to temporarily hold a file in the machine, and print it from the computer or the control panel later.

Important

- A Hold Print file cannot be stored if:
  - the total number of Sample Print, Locked Print, Hold Print, and Stored Print files in the machine is over 100. (The maximum number varies depending on the volume of data in files.)

- the file contains over 2,000 pages.
- the machine's sent or stored files total over 9,000 black-and-white pages. (The total varies depending on the size of the files.)
- the machine's sent or stored files total over 2,000 color pages. (The total varies depending on the size of the files.)

Note

- The PostScript 3 printer driver is also available for this machine. For details about installing and configuring the PostScript 3 printer driver, see PostScript 3 Supplement.
- If a Hold Print file has not been stored properly, check the error log on the control panel. For details about the error log on the control panel, see "Checking the Error Log".
- Even after you turn off the machine, stored documents in the machine remain. However, the [Auto Delete Temporary Print Jobs] or [Auto Delete Stored Print Jobs] settings are applied first. For details about the auto delete settings, see "System".
- Make sure the [Ignore Application Collate] check box in the printer driver and the [Collate] check box in the application's [Print] dialog box are both cleared. By default, Hold Print jobs are automatically collated by the printer driver. If collate is enabled in the application, more prints than intended may be produced.

Reference

- p.139 "Checking the Error Log"
- p.169 "System"

Printing a Hold Print file

The following procedure describes how to print a Hold Print file with the PCL 5c/6 printer driver.

Important

- Applications with their own drivers, such as PageMaker, do not support this function.

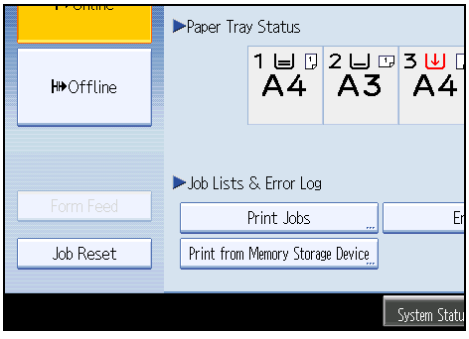
1. **Configure Hold Print in the printer driver's properties.**

   For details about configuring the printer drivers, see the relevant Help files.
2. **Click [Details...], and then enter a User ID in the [User ID:] box.**

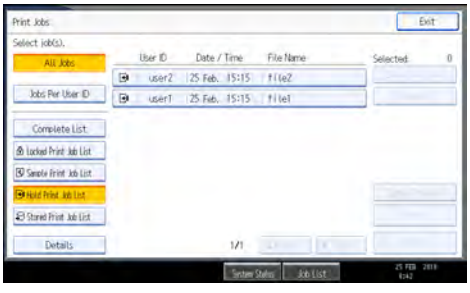
   A file name can also be entered arbitrarily.
3. **Click [OK] to close [Details...], and then click [OK] to close the printer driver's properties.**
4. **Start printing from the application's [Print] dialog box.**

   The Hold Print job is sent to the machine and stored.
5. **On the control panel, press the [Printer] key to display the printer screen.**

6. **Press [Print Jobs].**



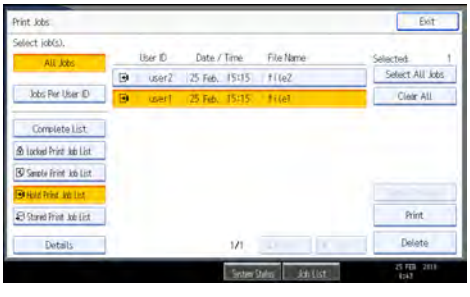
7. **Press [Hold Print Job List].**



A list of Hold print files stored in the machine appears.

Depending on the security settings, certain print jobs may not be displayed.

8. **Select the file you want to print, and press [Print].**



The confirmation screen appears.

9. **Press [Yes].**

The Hold Print file is printed.

Note

- If you want to cancel printing, press [No] in step 9.
- When printing is completed, the stored file is deleted.
- To stop printing after printing has started, press [Exit] until the printer screen appears, and then press [Job Reset]. The file will be deleted.

- If you select multiple files, the confirmation screen displays the total number of files to be printed.
- For details about setting printer drivers, see the printer driver Help.
- You can also print or delete a Hold Print file from Web Image Monitor. For details, see Web Image Monitor Help.

Deleting Hold Print files

1. **Press the [Printer] key to display the printer screen.**
2. **Press [Print Jobs].**
3. **Press [Hold Print Job List].**

   A list of Hold Print files stored in the machine appears.

   Depending on the security settings, certain print jobs may not be displayed.
4. **Select the file you want to delete, and then press [Delete].**

   The delete confirmation screen appears.
5. **Press [Yes] to delete the file.**

   The selected file is deleted.

Note

- If you do not want to delete the file, press [No] in step 5.
- If you select multiple files, the confirmation screen displays the total number of files to be deleted.

Stored Print

Use this function to store a file in the machine, and then print it from the computer or the control panel later.

Jobs are not deleted after they are printed, so the same job needs not to be re-sent in order to print multiple copies.

Important

- **A Stored Print file cannot be stored if:**
  - **the total number of Sample Print, Locked Print, Hold Print, and Stored Print files in the machine is over 100. (The maximum number varies depending on the volume of data in files.)**
  - **the file contains over 2,000 pages.**
  - **the machine's sent or stored files total over 9,000 black-and-white pages. (The total varies depending on the size of the files.)**
  - **the machine's sent or stored files total over 2,000 color pages. (The total varies depending on the size of the files.)**

Note

- The PostScript 3 printer driver is also available for this machine. For details about installing and configuring the PostScript 3 printer driver, see PostScript 3 Supplement.
- If a Stored Print file has not been stored properly, check the error log on the control panel. For details about the error log on the control panel, see "Checking the Error Log".
- Even after you turn off the machine, stored documents remain. However, the [Auto Delete Temporary Print Jobs] or [Auto Delete Stored Print Jobs] settings are applied first. For details about the auto delete settings, see "System".
- Make sure the [Ignore Application Collate] check box in the printer driver and the [Collate] check box in the application's [Print] dialog box are both cleared. By default, Stored Print jobs are automatically collated by the printer driver. If collate is enabled in the application, more prints than intended may be produced.
- You can optionally set a document title and a password of a Stored Print file. For details about a password setting, see the printer driver Help.

Reference

- p.139 "Checking the Error Log"
- p.169 "System"

Printing a Stored Print file

The following procedure describes how to print a Stored Print file with the PCL 5c/6 printer driver.

Important

- **Applications with their own drivers, such as PageMaker, do not support this function.**

1. **Configure Stored Print in the printer driver's properties.**

   You can select four methods of Stored Print:

   To use the Stored Print (Shared) and Store and Print (Shared) functions, authentication must be enabled beforehand. For details, consult your administrator.

   - Stored Print

     Stores the file in the machine and prints it later using the control panel.

   - Store and Print

     Prints the file at once and also stores the file in the machine.

   - Stored Print (Shared)

     Stores the file in the machine and allows any user who has print privileges to print the file later using the control panel.

   - Store and Print (Shared)

Prints the file immediately and also stores the file in the machine. Any user who has print privileges can print any stored file afterward.

2. **Click [Details...], and then enter a User ID in the [User ID:] box.**

   You can also set a file name and a password. The same password must be entered when printing or deleting.

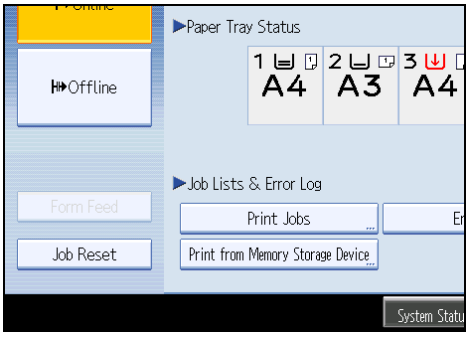
3. **Click [OK] to close [Details...], and then click [OK] to close the printer driver's properties.**

4. **Start printing from the application's [Print] dialog box.**

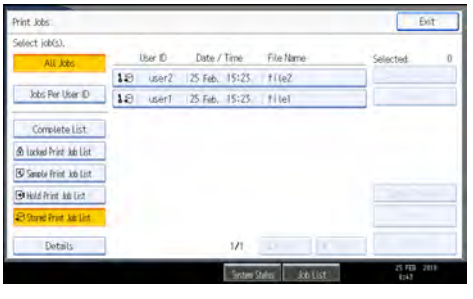
   The Stored Print job is sent to the machine and stored.

5. **On the control panel, press the [Printer] key to display the printer screen.**

6. **Press [Print Jobs].**



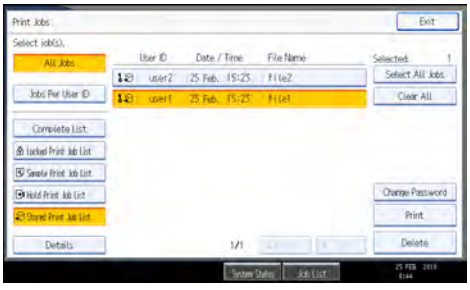
7. **Press [Stored Print Job List].**



A list of Stored Print files stored in the machine appears.

Depending on the security settings, certain print jobs may not be displayed.

8. **Select the file you want to print, and press [Print].**



The confirmation screen appears.

If you set a password in the printer driver, a password confirmation screen appears. Enter the password.

If multiple print files are selected, and some of these require a password, the machine prints files that correspond to the entered password and files that do not require a password. The number of files to be printed is displayed on the confirmation screen.

If you forgot your password, ask your file administrator for help.

9. **Enter the number of sets using the number keys if necessary, and then press [Yes].**

You can enter up to 999 sets.

Press the [Clear/Stop] key to correct any entry mistakes.

The Stored Print file is printed.

Note

- If you want to cancel printing, press [No] in step 9.
- If you select multiple files, the confirmation screen displays the total number of files to be printed. If you select multiple documents, set numbers are determined based on the smallest set number specified for a selected document.
- When printing accumulated stored print documents, you cannot change the numbers of sets.
- To stop printing after printing has started, press [Exit] until the printer screen appears, and then press [Job Reset]. A Stored Print file is not deleted even if [Job Reset] is pressed.

- The Stored Print file that sent to the machine is not deleted unless you delete a file or select [Auto Delete Stored Print Jobs]. For details about the auto delete settings, see "System".
- For details about setting printer drivers, see the printer driver Help.
- You can also print or delete a Stored Print file from Web Image Monitor. For details, see Web Image Monitor Help.

Reference

- p.169 "System"

3

Deleting Stored Print files

1. **Press the [Printer] key to display the printer screen.**
2. **Press [Print Jobs].**
3. **Press [Stored Print Job List].**

   A list of Stored Print files stored in the machine appears.

   Depending on the security settings, certain print jobs may not be displayed.
4. **Select the file you want to delete, and press [Delete].**

   The delete confirmation screen appears.

   If you set the password in the printer driver, enter the password to delete.

   If multiple print files are selected, and some of these require a password, the machine deletes files correspond to the entered password and files that do not require a password. The number of files to be deleted is displayed on the confirmation screen.

   If you forgot your password, ask your file administrator for help.
5. **Press [Yes] to delete the file.**

   The selected file is deleted.

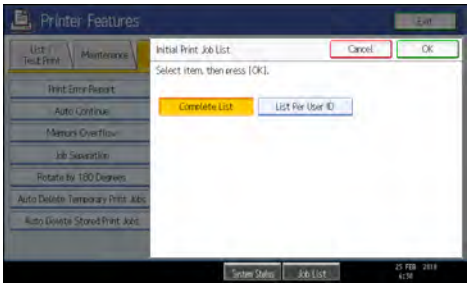
Note

- If you do not want to delete the file, press [No] in step 5.
- If you select multiple files, the confirmation screen displays the total number of files to be deleted.

Printing from the Jobs Per User ID Screen

This describes how to print the files saved in the machine from the user ID screen.

In the [Initial Print Job List] settings on the [System] tab under [Printer Features], the [Complete List] or the [List Per User ID] screen appears depending on which list type you selected.

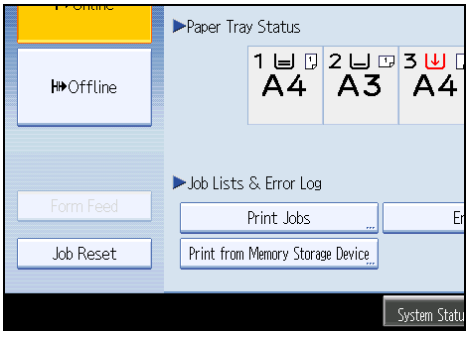


Printing the Selected Print Job

1. **Press the [Printer] key.**

   The printer screen appears.

2. **On the printer screen, press [Print Jobs].**



   A list of user IDs whose files are stored in the machine appears.

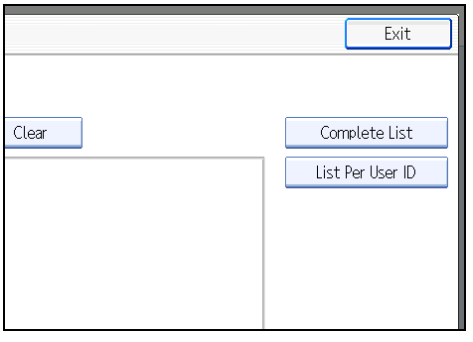
3. **Press the user ID whose file you want to print.**

You cannot select multiple user IDs at the same time.

Press [▲Previous] or [▼Next] to scroll through the list.

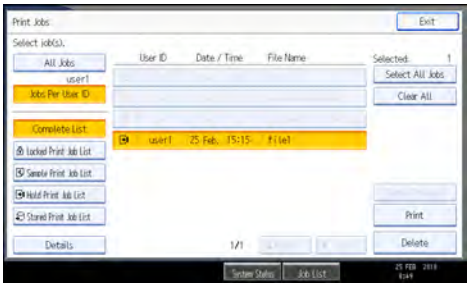
Press [Clear] to cancel a selection.

4. **Press [List Per User ID].**



The print job list of the selected user ID appears.

5. **Select the desired print jobs.**



To cancel a selection, press the highlighted print job again. To clear all selections, press [Clear All].

6. **Press [Print].**

The confirmation screen appears.

7. **Press [Yes].**

The selected files are printed.

Note

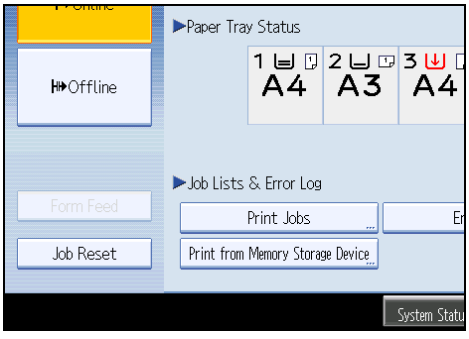
- If you select multiple files, the confirmation screen displays the total number of files to be printed.

Printing All Print Jobs

1. **Press the [Printer] key.**

The printer screen appears.

2. **On the printer screen, press [Print Jobs].**



A list of user IDs whose files are stored in the machine appears.

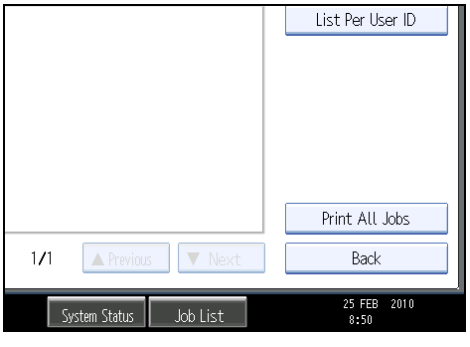
3. **Press the user ID whose file you want to print.**

You cannot select multiple user IDs at the same time.

Press [▲Previous] or [▼Next] to scroll through the list.

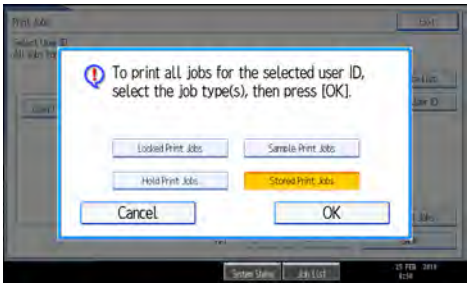
Press [Clear] to cancel a selection.

4. **Press [Print All Jobs].**



If the selected user ID has multiple types of print jobs, the selection screen of the print job type appears.

5. **Select the desired print job type, and then press [OK].**



The confirmation screen appears.

The confirmation screen does not appear if the selected ID has only one type of print job.

6. **Press [Yes].**

The selected files are printed.

Note

- After printing is completed, Sample Print, Locked Print, and Hold Print files are deleted.
- You cannot select a print job that is not stored under the selected user ID.
- If you select multiple Sample Print files and do not specify the number of sets on the confirmation screen, one set less than the number specified on the computer is printed for every selected document. If the number of sets specified on the computer is "1", one set each is printed for every document.
- If you select Stored Print, the number you set on the confirmation screen is applied to all files of the selected print job type. If you do not set a quantity, the minimum number is applied to all files.
- If you select Locked Print, enter the correct password. If there are multiple passwords, the machine prints only files that correspond to the entered password.
- If you select Stored Print files, and some of these require a password, the machine prints files that correspond to the entered password and files that do not require a password.
- The confirmation screen displays the total number of files that have the selected user ID to be printed.

Job List

Jobs printed using Copy, Document Server, or Printer mode are temporarily stored in the machine, and then executed in order. The Job List function allows you to manage these jobs.

For example, you can cancel incorrect job settings or print an urgent document.

Note

- You cannot use the Job List function when the machine is in Interrupt mode.
- Documents printed using the facsimile function and scanner function are not displayed in the Job List.

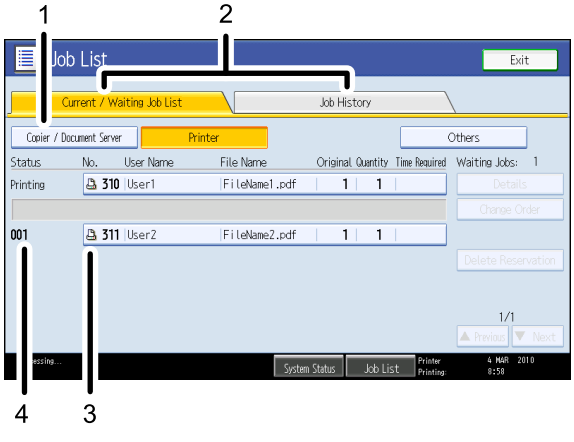
Job List Screen

This section explains displays and icons that appear in the Job List screen.

The Job List screen varies depending on whether [Job Order] is selected with [Print Priority] for [System Settings]. For details about setting procedure, see "System Settings", Network and System Settings Reference.

When [Job Order] is not selected:

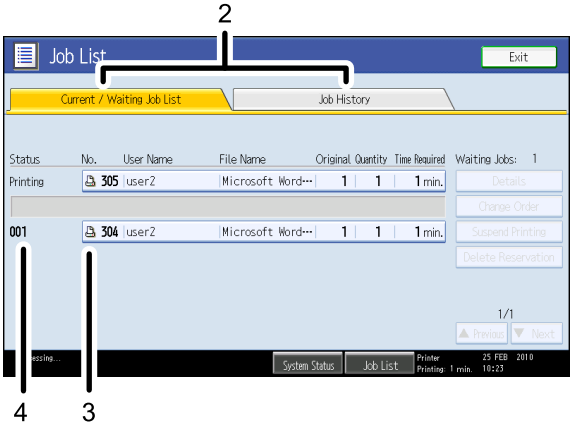
The job list is displayed for each of the functions.



BZE035S

When [Job Order] is selected:

The job list is displayed for all functions in the order of print jobs.



BZE033S

1. Switches between job lists for each function.
2. Switches between Current / Waiting Job List and Job History.
3. Displays the function used to print jobs.

   : Job printed using copier function

   : Job printed using printer function

   : Job printed using Document Server function

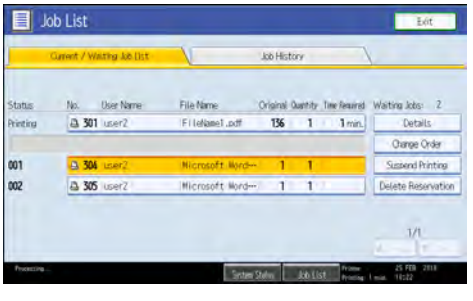
   : Job printed using DeskTopBinder

   : Job printed using Web Image Monitor
4. Displays reserved job numbers.

Checking Jobs in the Job List

You can check the contents of jobs in the job list.

1. **Press [Job List].**
2. **Select a job whose contents you want to check.**

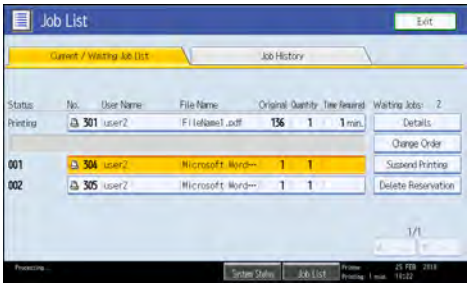


3. **Press [Details], and then check the contents.**
4. **Press [Exit].**

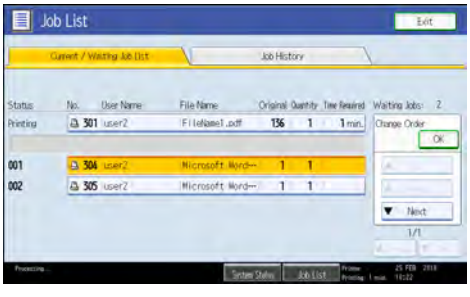
Changing the Order of Jobs

You can change the order of jobs in the job list.

1. **Press [Job List].**
2. **Select a job whose order you want to change.**



3. **Press [Change Order].**
4. **Change the order using [▲Top], [▲Previous], or [▼Next].**

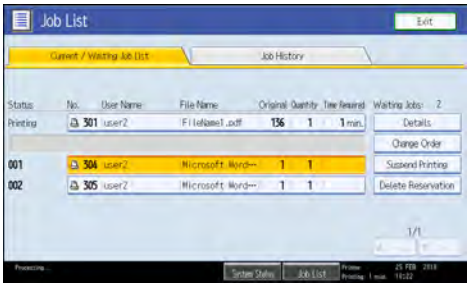


5. **Press [OK].**

Holding Jobs

You can hold jobs that are queued or currently printing.

1. **Press [Job List].**
2. **Select a job you want to hold.**



3. **Press [Suspend Printing].**

   The selected job and the jobs that follow it are suspended. "Suspended" is displayed at the left of the jobs in the job list that are suspended.

Note

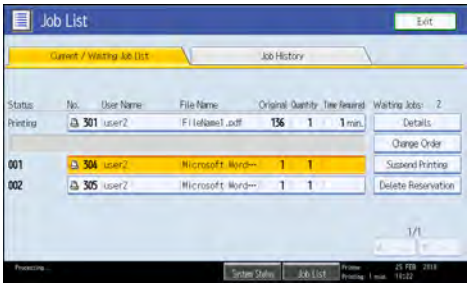
- To resume the suspended jobs, press [Resume Printing].
- This function is available only if [Job Order] is specified.

3

Deleting Jobs

You can delete a job that is queued or currently printing.

1. **Press [Job List].**
2. **Select a job you want to delete.**



   To delete multiple print jobs, select all print jobs you want to delete.

3. **Press [Delete Reservation].**
4. **Press [OK].**

Checking the Job History

You can view the history and contents of completed print jobs.

1. **Press [Job List].**
2. **Press [Job History].**

   A list of completed print jobs appears.

3. **Select a job whose contents you want to check.**
4. **Press [Details], and then check the contents.**
5. **Press [Exit].**

Canceling a Print Job

This section gives instruction to stop printing from the computer or the control panel after confirming to start printing.

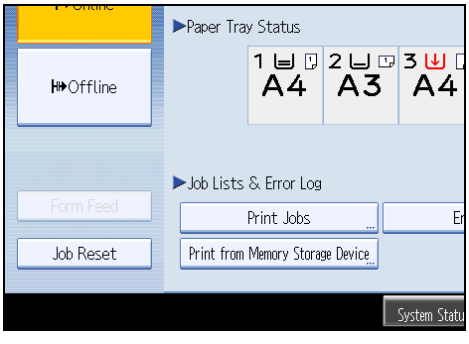
1. **Check the machine to see if relevant data is printing. If the Data In indicator lights up or blinks, the machine is receiving data from a computer.**
2. **Cancel printing.**

   Since canceling procedures vary depending on the print job status, check the job status and cancel printing according to the following procedure.

Canceling a Print Job Using the Control Panel

1. **Press the [Printer] key.**

   The printer screen appears.
2. **Press [Job Reset].**



3. **Press [Reset the Job] or [Reset All Jobs].**

   - [Reset the Job]: cancels the print job currently being processed.
   - [Reset All Jobs]: cancels all jobs in the print queue.
   - [Resume Printing]: resumes printing print jobs.

   A confirmation message appears.

4. **Press [Yes] to cancel the print job.**

   Press [No] to return to the previous display.

Note

- If the machine is connected to the computer using a parallel cable, sent print jobs may be canceled if [Reset All Jobs] is pressed while "Waiting for print data..." is on the control panel. After the interval set in [I/O Timeout] in Printer Features has passed, the next print job can be sent. A print job sent from a different client computer will not be canceled in this case.
- You cannot stop printing data that has already been processed. For this reason, printing may continue for a few pages after you press [Job Reset].

Windows - Canceling a Print Job from the Computer

You can cancel a print job from the computer if transferring print jobs is not completed.

1. **Double-click the printer icon on the Windows task tray.**

   A window appears, showing all print jobs currently queued for printing. Check the current status of the job you want to cancel.

2. **Select the name of the job you want to cancel.**
3. **On the [Document] menu, click [Cancel].**

Note

- If the machine is shared by multiple computers, be careful not to accidentally cancel someone else's print jobs.
- You can also open the print job queue window by double-clicking the machine icon in the printers window.
- A print job containing a large volume of data may take considerable time to stop.

Checking the Error Log

If files could not be stored due to printing errors, identify the cause of the errors by checking the error log on the control panel.

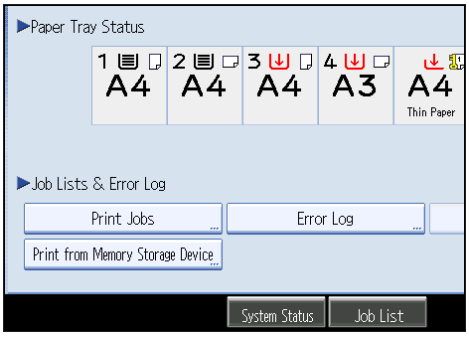
Important

- The most recent 30 errors are stored in the error log. If a new error is added when there are 30 errors already stored, the oldest error is deleted. However, if the oldest error belongs to one of the following print jobs, it is not deleted. The error is stored separately until the number of those errors reaches 30. You can check any of these print jobs for error log information.
  - Sample Print
  - Locked Print
  - Hold Print
  - Stored Print
- If the main power switch is turned off, the error log is deleted.

1. **Press the [Printer] key.**

   The printer screen appears.

2. **Press [Error Log].**



   An error log list appears.

   Depending on the security settings, certain errors may not be displayed.

3. **Press the desired job list.**

   You can select job list from [Complete List], [Locked Print Job List], [Sample Print Job List], [Hold Print Job List], or [Stored Print Job List].

4. **Select the print file you want to check, and then press [Details].**

   A detailed error log appears.

   Press [▲Previous] or [▼Next] to scroll the error files.

Note

- Press [Exit] after checking the log.
- Press [Back to List] to return to the error log list.
- To print files that appear in the error log, resend them after stored files have been printed or deleted.
- [Error Log] is not available in simplified display mode. To view the error log, you must first switch to normal display mode by pressing [Simplified Display] to turn into the normal display mode.

4. Printing Files from an External Memory Device

This chapter explains how to print files directly from a removable memory device or a digital camera connected to the machine.

Direct Printing from a Removable Memory Device

If the optional media slot is installed on your machine, you can connect removable memory devices (USB flash memory and SD cards) to the machine and directly print the files stored on them.

Files in the following formats can be printed: JPEG, TIFF, and PDF.

This function is useful for printing files without using a computer.

Overview of Direct Printing from Removable Memory Device

This section provides an overview of the direct printing function from removable memory devices.

Important

- USB flash memory devices and SD cards are supported for direct printing. However, certain types of USB flash memory devices and SD cards cannot be used. For details, contact your sales or service representative.
- Only removable memory devices that are FAT16 or FAT32 formatted are compatible with this machine.
- This machine does not support the use of external USB hubs or SD card readers.
- USB flash memory devices with password protection or other security features might not be compatible with this machine.
- Do not install the media slot on devices other than this machine (on a computer, for example).
- Connect only USB flash memory to the USB slot; do not connect any other type of USB device.
- Do not turn off the machine while a removable memory device is being accessed. Doing so can damage the memory device and corrupt its data.
- If the machine is accidentally turned off while a removable memory device is being accessed, check that the data on the removable memory device has not been corrupted.
- It is possible that any data stored in the removable memory device will be damaged or lost by user error during operation or software error. Be sure to back up of all data beforehand. The manufacturer shall not be liable to you for damages or loss of any data produced by using this function.

About file formats

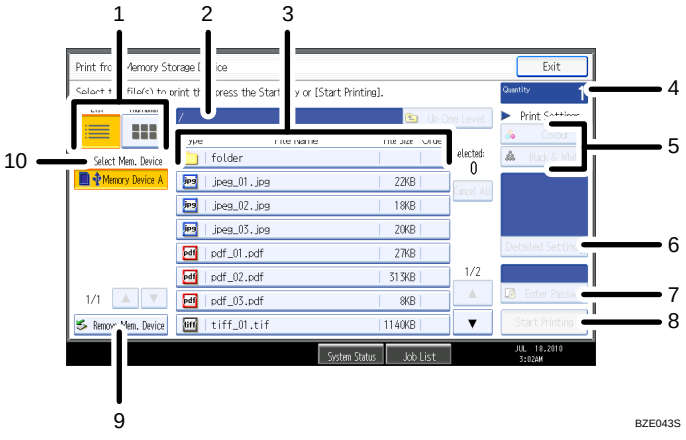
- JPEG files
  - Exif version 1.0 or later JPEG files are compatible with this function.
- TIFF files
  - Following types of TIFF files are compatible with this function: uncompressed TIFF files, or TIFF files compressed using the MH, MR, or MMR method.
- PDF files
  - This function is possible for genuine Adobe PDF files only.
  - PDF files whose PDF version is 1.7 (Acrobat 8.0 compatible) or earlier can be printed.
  - PDF files created using PDF version 1.5 Crypt Filter functions or more than eight DeviceN Color Space components cannot be printed.
  - PDF files created using PDF version 1.6 watermark note functions, or extended optional contents cannot be printed.
  - PDF files whose PDF version is 1.7 (Acrobat 9.0 compatible) or higher can be printed as long as they do not use any functions that are exclusive to those versions.
  - If the document contains transparency function data, it may fail to print. When this happens, use the printer driver to print the document.
  - Some types of High Compression PDF files may not be printed.
  - If print jobs through PDF direct printing are being canceled, select [Font Priority] for [Memory Usage] in [System] in [Printer Features]. If print jobs are being canceled even though [Font Priority] has been selected, print using the printer driver from a PDF viewer such as Adobe Reader.

Screen for Direct Printing

This section explains the elements and icons that appear on the screen for direct printing.

To display this screen, press the [Printer] key, and then press [Print from Memory Storage Device].

You can view files either as a list or as thumbnails.



1. **[List]/[Thumbnail]**

   Press to switch between list view and thumbnail view.

2. **Current folder**

   Displays the name and path of the current folder. To display the contents of the parent folder, press [Up One Level].

3. **File/Folder list**

   Press to select the file you want to print or the folder you want to open. Press [▲] or [▼] to scroll through the list if necessary. Depending on the number of files, up to 999 pages might be shown.

   The formats, names, and sizes of files are displayed. If multiple files are selected, the order in which the files were selected will also be displayed.

4. **[Quantity]**

   Use the number keys to specify the number of copies (1 to 999) that you want to print.

5. **[Colour]/[Black & White]**

   Press to switch the print mode between color and black-and-white.

6. **[Detailed Settings]**

   Press to configure detailed print settings. For details, see "Printing from a Removable Memory Device".

7. **[Enter Passwrd]**

   To print a password-protected PDF file, select the file, press this button, and then enter the password. After you have entered the password, the text above the button will change from "Passwrd Not Entrd" to "Password Entered".

8. **[Start Printing]**

   Press to print the selected file.

9. **[Remove Mem. Device]**

   Before removing a removable memory device, press this and follow the instructions that appear.

10. **[Select Mem. Device]**

    Press to select the removable memory device that contains the files you want to print.

    Only removable memory devices that the machine has recognized correctly can be selected.

Note

- The machine can recognize up to a total of 5990 files and folders in a removable memory device.
- File names must not exceed 255 bytes (including the path name). Also, file names must not contain any character that the machine cannot display correctly.
- Thumbnails can be displayed only for JPEG format files that have thumbnail data. An icon will be shown for any other type of file.
- JPEG format supports color printing only.
- Following sizes of JPEG files can be printed:
  - Standard sizes: 8 × 10 in, Letter ($8\frac{1}{2}$ × 11 in), 11 × 17 in, A3, A4, A5, A6, B4, B5, B6
  - Custom sizes: 2L (5 × 7 in), Postcard, 100 mm × 150 mm, 4 × 6 in
- Custom size PDF files may not be printed using this function.
- Print settings are effective for the format of the currently selected file, and will remain effective as long as the file of that format stays selected. The machine will remember an entered PDF password until you switch out of the printer function.
- If you try to select a removable memory device that the machine has not recognized correctly, an error message will appear.

Reference

- p.144 "Printing from a Removable Memory Device"

Printing from a Removable Memory Device

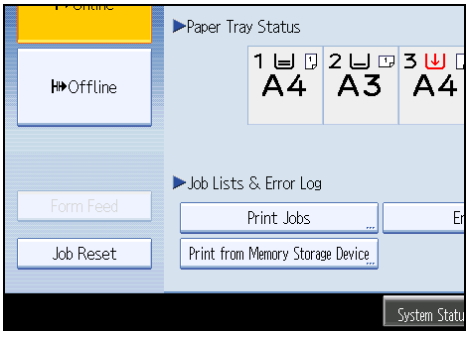
Use the following procedure to print files stored on a removable memory device directly.

Important

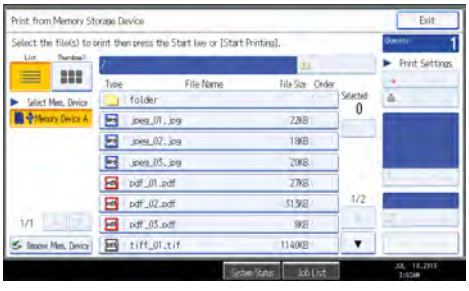
- **Be sure to remove the removable memory device as explained in the following procedure. Failure to do so may damage the removable memory device and corrupt its data.**

1. **Insert a removable memory device into the media slot.**
2. **Press the [Printer] key to display the printer screen.**

3. **Press [Print from Memory Storage Device].**



4. **If necessary, select the removable memory device that contains the file you want to print.**



Only one removable memory device can be selected at a time.

5. **Select the file you want to print.**

You can select multiple JPEG files in the current folder at once.

To print a password-protected PDF file, press [Enter Passwrd], and then enter the password.

6. **If necessary, press [Detailed Settings] to configure detailed print settings.**

Note that certain settings cannot be selected simultaneously (for example, duplex printing cannot be specified depending on the selected paper size).

- [Quantity]: Use the number keys to specify the number of copies (1 to 999) that you want to print.
- Paper Size/Input Tray: Specify the paper size/input tray to use for printing. You can also select to fit the image to the selected paper size (this will be the default selection for JPEG files).
- [Print Quality] (for JPEG files): Select the print quality from [Normal], [Draft], and [Fine].
- [Resolution] (for TIFF files): Select the resolution from [200 dpi], [400 dpi], and [600 dpi].
- [Resolution] (for PDF files): Select the resolution from [600 dpi (Fast)], [600 dpi (Standard)], [600 dpi (High Quality)], and [1200 dpi].
- [2 Sided]: When printing on both sides, specify a binding method.

- [Combine] (for PDF files): When combining multiple pages, specify the number of pages to combine, the page order (orders that start from top-left are available), and whether to print a separation line.
- [Sort]/[Stack] (for TIFF/PDF files): When printing multiple sets, specify whether to print in batches or ordered sets.
- [Staple]/[Punch] (for TIFF/PDF files): If an optional finisher is installed, you can specify the staple and punch settings.
  Note that for stapling, only staple positions can be specified. In addition, if paper is set to be selected automatically, staple or punch positions may not be as expected.

7. **Press [Start Printing] or the [Start] key to begin printing.**

   Printing may take some time depending on the size or number of the files selected.

   To print another file continuously, wait until the machine finishes printing. If you attempt to print a file before the current job is finished, an error message will appear.

8. **When printing is finished, press [Remove Mem. Device].**
9. **Select the removable memory device you want to remove, and then press [Remove].**

   You can select multiple removable memory devices at once.

10. **On the confirmation screen, press [Exit].**

    Remove the removable memory device.

Note

- You cannot select multiple TIFF files, PDF files, or files of different formats at the same time.
- If you move between different folders or select another removable memory device, file selection will be canceled.
- A PDF file can be printed if its size is 500 MB or smaller. A JPEG/TIFF file can be printed if its size is 1 GB or smaller.
- You can select up to 999 JPEG files at once, as long as the total size of the files you select does not exceed 1 GB.
- The availability of paper sizes depends on the format of the selected file. For a JPEG file, you cannot select sizes that are not available for the format of the file.

- The machine might print data that appears to be black-and-white in color printing mode. If you need to make sure that the data is printed in black-and-white, specify black-and-white for the print job.
- If you insert another removable memory device while following the procedure above, a list of files and folders in the root directory on that removable memory device will appear.
- If the removable memory device is partitioned, only the files stored on the first partition can be printed.
- If a USB flash memory device is inserted in the media slot, the LED on the slot will light up and remain lit.
- If an SD card is inserted in the media slot, the LED on the slot will not light up, but will flash when the card is being read.
- Do not remove a removable memory device or disconnect a USB cable while the LED is flashing.
- For details about staple and punch functions, see "Staple" and "Punch".

Reference

- p.80 "Staple"
- p.84 "Punch"

Direct Printing from a Digital Camera (PictBridge)

This section explains how to print directly from a digital camera.

What is PictBridge?

You can connect a PictBridge-compatible digital camera to this machine using a USB cable. This allows you to print photographs taken using the digital camera directly by operating the digital camera.

Important

- **To use this function, the optional Camera Direct Print Card must be installed on the machine.**

Note

- Check your digital camera is PictBridge-compatible.
- Up to 999 images can be sent from the digital camera to the machine during one print transaction. If an attempt is made to send more images, an error message is sent to the camera and printing fails.
- Since printing conditions are specified on the digital camera, specifiable parameters depend on the particular digital camera. For details, see your digital camera's manual.
- This function is compatible with USB 2.0.

PictBridge Printing

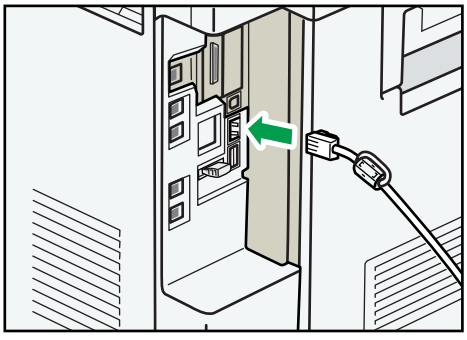
Follow the procedure below to start PictBridge printing on this machine.

Important

- **Do not disconnect the USB cable while data is being sent. If you do, printing will fail.**
- **Use the USB cable bundled to your digital camera.**

1. **Check the machine and the digital camera are both switched on.**

2. **Using a USB cable, connect the digital camera to the machine's USB host interface (on the rear left) or the optional media slot.**



3. **On your digital camera, select the images you want to print, and specify the printing conditions.**

   The machine receives settings from the digital camera and starts printing.

Note

- Since printing conditions are specified on the digital camera, specifiable meters depend on the particular digital camera. For details, see your digital camera's manual.
- Some digital cameras require settings for manual PictBridge operation. For details, see your digital camera's manual.

What Can be Done on This Machine

This machine can perform the following functions using its PictBridge feature.

The settings available for these functions are as follows:

- Single image printing
- Selected image printing
- All image printing
- Index printing
- Trimming
- Date and file name printing
- Paper size
- Image print size
- Multi-Image-Layout
- Duplex printing
- Printing quality

- Color matching
- Paper type specification
- Form printing
- Toner saving
- Camera memo printing

Note

- This machine does not support the following settings:
  - DPOF printing
  - Margin-less printing
- The setting parameters and their names may vary depending on the digital camera. For details, see your digital camera's manual.

Index Printing

A3 (297 × 420 mm)

Horizontal images × vertical images (in)	Paper orientation
12 × 16	
16 × 12	

A4 (210 × 297 mm)

Horizontal images × vertical images (in)	Paper orientation
8 × 12	
12 × 8	

A5 (148 × 210 mm)

Horizontal images × vertical images (in)	Paper orientation
5 × 8	
8 × 5	

Letter ($8^1/_2$ × 11 in)

Horizontal images × vertical images (in)	Paper orientation
8 × 10	
10 × 8	

B4 (257 × 367 mm)

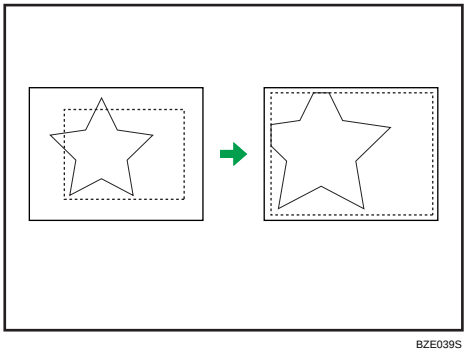
Horizontal images × vertical images (in)	Paper orientation
10 × 14	
14 × 10	

Note

- Index printouts vary depending on the orientation of the paper placed on the specified size tray.
- Depending on the digital camera, a form feed may be inserted after one set of images belonging to one type ends.
- The number of images in each size of paper is fixed.

Trimming

Use this function to print only inside of the trimming area specified on the digital camera.

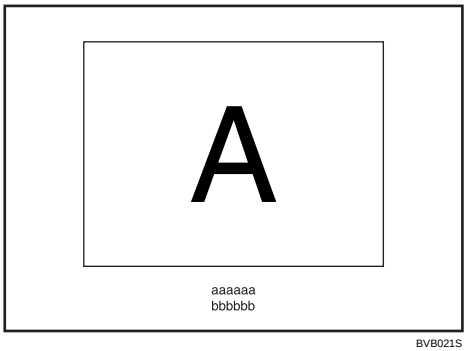


BZE039S

Dotted line indicates the trimming area specified on the camera.

Date and File Name Printing

Use this function to print the date and/or file name under the image.



In the above figure, "aaaaaa" indicates the file name and "bbbbbb" indicates the date.

Paper Size

Use this function to print on paper with the size specified on the digital camera.

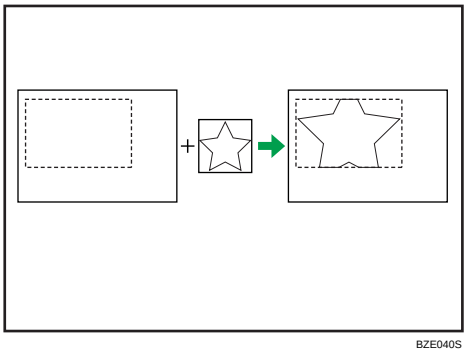
Paper size name	Actual size
2L (5 × 7 in)	178 mm × 127 mm
Postcard	148 mm × 100 mm
100 mm × 150 mm	150 mm × 100 mm
4 × 6 in	152.4 mm × 101.6 mm
8 × 10 in	254 mm × 203.2 mm
Letter ($8\frac{1}{2}$ × 11 in)	279.4 mm × 216 mm
11 × 17 in	431.8 mm × 279.4 mm
A3	420 mm × 297 mm
A4	297 mm × 210 mm
A5	210 mm × 148 mm
A6	148 mm × 105 mm
B4	364 mm × 257 mm
B5	257 mm × 182 mm
B6	182 mm × 128 mm

Note

- Specify custom size for 2L (5 × 7 in), Postcard, 100 mm × 150 mm, and 4 × 6 in.

Image Print Size

Use this function to print images with the size specified on the digital camera.



BZE040S

Dotted line indicates the image size specified on the camera.

You can specify the following image print sizes:

Fixed size

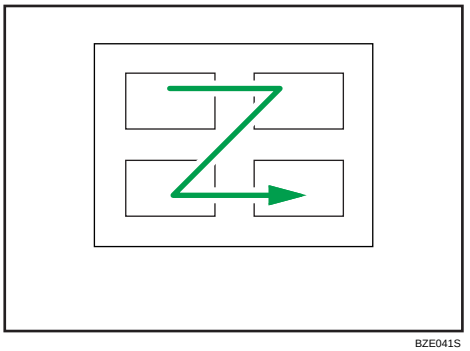
- 3.25 × 2.5 in
- 5 × 3.5 in
- 6 × 4 in
- 7 × 5 in
- 10 × 8 in
- 254 mm × 178 mm
- 110 mm × 74 mm
- 89 mm × 55 mm
- 148 mm × 100 mm
- 8 cm × 6 cm
- 10 cm × 7 cm
- 13 cm × 9 cm
- 15 cm × 10 cm
- 18 cm × 13 cm
- 21 cm × 15 cm
- 24 cm × 18 cm

Note

- An error occurs if the specified size is larger than the actual paper size.

Multi-Image-Layout

Use this function to print multiple images on the specified paper.



BZE041S

The number of images that can be printed on one page are as follows:

Paper size	Number of images that can be specified
2L (5 × 7 in)	2, 4, 8, 9
Postcard	2, 4
100 mm × 150 mm	2, 4
4 × 6 in	2, 4, 8, 9
8 × 10 in	2, 4, 8, 9, 16, 25, 32
Letter ($8\frac{1}{2}$ × 11 in)	2, 4, 8, 9, 16, 25, 32
11 × 17 in	2, 4, 8, 9, 16, 25, 32, 49, 64
A3	2, 4, 8, 9, 16, 25, 32, 49, 64
A4	2, 4, 8, 9, 16, 25, 32
A5	2, 4, 8, 9, 16
A6	2, 4, 8
B4	2, 4, 8, 9, 16, 25, 32, 36, 49
B5	2, 4, 8, 9, 16, 25

Paper size	Number of images that can be specified
B6	2, 4, 8, 9

The number and arrangement of images that can be specified are as follows:

Number of images	Vertical images × horizontal images	Paper orientation
2	2 × 1	
4	2 × 2	
8	4 × 2	
9	3 × 3	
16	4 × 4	
25	5 × 5	
32	8 × 4	
36	6 × 6	
49	7 × 7	
64	8 × 8	

Note

- A form feed may be inserted between images depending on the digital camera in use.
- Printing in the specified way may not be possible depending on the specification for the number of images to be printed.

Duplex Printing

Use this function to enable duplex (double-sided) printing.

Duplex printing is disabled by default. When duplex printing is enabled, the printed pages open to the left. You cannot change the opening direction to the right.

Printing Quality

Use this function to print images at the selected printing quality.

If you select [Default] or [Normal], the machine prints at 600 dpi × 600 dpi (2 bit); if you select [Fine], the machine prints at 600 dpi × 600 dpi (4 bit).

Color Matching

Use this function to optimize colors when printing images.

If you select [Default] or [OFF], the machine prioritizes gradation for color matching, if you select [ON], the machine prioritizes saturation.

Paper Type Specification

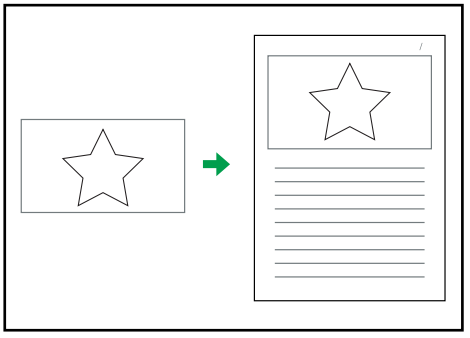
This function sends the machine's paper type information to the digital camera. The names of paper types displayed on the digital camera's screen are different to the names displayed on the machine. Use the table below to match the paper types.

To display a paper type name on the digital camera's screen, use the machine's control panel to set the paper type of the machine correctly.

Paper type detected by the digital camera	Paper type of the machine
Default	All Paper types
Plain Paper	Plain or recycled paper
Photo Paper	HG plain paper or inkjet postcard
Fast Photo Paper	Glazed paper

Form Printing

Use this function to print images in a predetermined layout format.



BZE045S

Toner Saving

By specifying the print density on the digital camera, you can save on toner when printing.

Specification on the digital camera	Print density
Default/OFF	100%
Slightly light	75%
Light	50%

Camera Memo Printing

Use this function to print text data together with an image if it is attached to the image.

Exiting PictBridge

Follow the procedure below to quit the PictBridge mode.

Important

- **Do not disconnect the USB cable while data is being sent to the machine. If you do, printing will fail.**

1. **Check the control panel of this machine is displaying the "Ready" state.**
2. **Disconnect the USB cable from the machine.**

When PictBridge Printing Does Not Work

This section explains likely causes and possible solutions for problems that can occur when PictBridge printing.

Problem	Cause	Solution
PictBridge is not available.	There is a problem with the USB connection or the PictBridge settings.	Use the following procedure to check the connection and settings: 1. Disconnect and then reconnect the USB cable. 2. Check the PictBridge settings are enabled. 3. Disconnect the USB cable, and then turn off the machine. Turn the machine back on. When the machine has fully booted up, reconnect the USB cable.
When two or more digital cameras are connected, the second and subsequent cameras are not recognized.	You have connected multiple digital cameras.	Connect one digital camera only. Do not connect multiple cameras.
Printing is disabled.	The number of originals exceeds the maximum number of pages that can be printed at a time.	The maximum specifiable print quantity at a time is 999. Respecify the quantity to 999 or less, and then retry printing.
Printing is disabled.	There is no paper of the specified size remaining.	There is no paper of the specified size remaining. If you have to use paper that is not of the specified size, perform Form Feed. To cancel printing, perform Job Cancel.
Printing is disabled.	The paper size setting for this tray cannot be printed on the machine.	Select the paper size setting that can be printed on the machine.

Other Reference Information

For further details about paper size, paper type and tray settings, see About This Machine.

Note

- For details about paper size, paper type, or tray settings, see About This Machine.

5. Saving and Printing Using the Document Server

This chapter explains how to use the Document Server function.

Accessing the Document Server

The Document Server enables you to store documents on the machine's hard disk, and allows you to edit and print them as necessary.

Important

- **Applications with their own drivers, such as PageMaker, do not support this function.**

Note

- When you use the Document Server, the following functions can be selected using the control panel:
  - Copies
  - Collate
  - Duplex
  - Staple
  - Paper selection: Paper source tray, paper type, paper output tray.
  - Functions related to paper selection: Cover Sheet, Slip Sheet.
- The above items are dimmed, so you cannot set them from the printer properties dialog box when the Document Server is selected.
- You must enter a user ID, using up to eight alphanumeric characters.
- You should enter a password and file name to distinguish the job from others.
- Up to 3,000 files can be stored in the Document Server. New files cannot be stored when 3,000 files have already been stored. Even if less than 3,000 files are stored, new files cannot be stored when
  - a file to be stored contains more than 2,000 pages.
  - the machine's sent or stored files total over 9,000 black-and-white pages. (The total varies depending on the size of the files.)
  - the hard disk is full.
  - the machine's sent or stored files total over 2,000 color pages. (The total varies depending on the size of the files.)
- The Document Server also stores files scanned using the ADF or exposure glass. You should delete unnecessary stored files once in a while so as not to exceed the capacity of the hard disk. For details about deleting stored files, see "Document Server", Copy and Document Server Reference.

- When using the hard disk for functions other than those of Document Server, you may not be able to store new files in the Document Server, even if there are less than 3,000 files stored.
- For details about Document Server functions, see "Document Server", Copy and Document Server Reference.
- For details about how to access Document Server from a client computer, see the printer driver Help.

6. Printer Features

This chapter describes user tools under Printer Features menu.

Accessing User Tools

This section describes how to access User Tools menu.

User Tools allow you to change or set defaults.

Note

- Operations for system settings differ from normal operations. Always quit User Tools when you have finished.
- Any changes you make with User Tools remain in effect even if the main power switch or operation switch is turned off, or the [Energy Saver] or [Clear Modes] key is pressed.

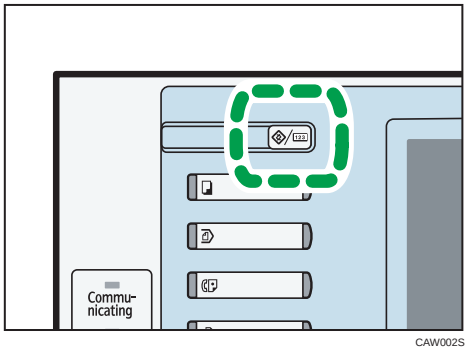
Changing Default Settings

This section describes how to change the settings of User Tools.

Important

- If Administrator Authentication Management is specified, contact your administrator.

1. Press the [User Tools/Counter] key.



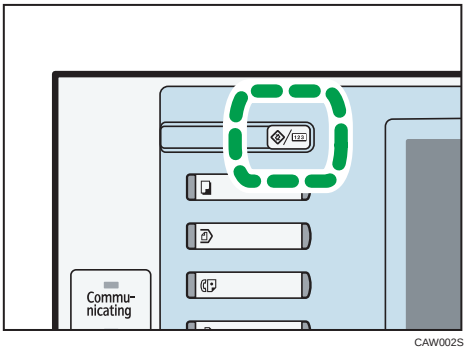
CAW002S

2. Press [Printer Features].
3. Change settings by following instructions on the display, and then press [OK].

Quitting User Tools

This section describes how to quit the settings of User Tools.

1. **Press the [User Tools/Counter] key.**



CAW002S

Note

- You can also quit User Tools by pressing [Exit] on the upper-right of the display.

List / Test Print

This section describes the user tools in the List / Test Print menu under Printer Features.

Multiple Lists

You can print the configuration page and error log.

Configuration Page

You can print the machine's current configuration values.

Error Log

You can print error logs listing all errors that occurred during printing. The most recent 30 errors are stored in the error log. If a new error is added when there are 30 errors already stored, the oldest error is deleted. However, if the oldest error belongs to one of the following types of print jobs, it is not deleted. Instead, it will be stored separately in error logs for each job type, up to a maximum of 30 for each log. You can check any of these print jobs for error log information.

- Sample Print
- Locked Print
- Hold Print
- Stored Print

The records of jobs canceled automatically and manually from the control panel can be printed.

Menu List

You can print a Menu List showing the machine's function menus.

PCL Configuration / Font Page

You can print the current configuration and installed PCL font list.

PS Configuration / Font Page

You can print the current configuration and installed PostScript font list.

This menu can be selected only when an optional PostScript 3 unit is installed.

PDF Configuration / Font Page

You can print the current configuration and installed PDF font list.

This menu can be selected only when an optional PostScript 3 unit is installed.

Hex Dump

You can print in the Hex Dump mode.

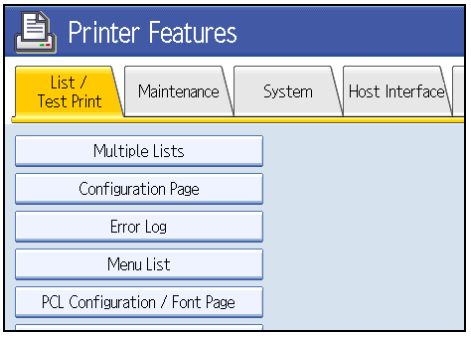
Reference

- p.168 "Maintenance"

Printing the Configuration Page

This section describes how to print the configuration page.

1. **Press the [User Tools/Counter] key.**
2. **Press [Printer Features].**
3. **Press [Configuration Page] on the [List / Test Print].**



The configuration page is printed.

4. **Press the [User Tools/Counter] key.**

Interpreting the configuration page

This section describes the configuration page.

System Reference

- Machine ID

  Displays the serial number assigned to the board by its manufacturer.

- Total Memory

  Displays the total amount of memory (SDRAM) installed on the machine.

- Total Counter

  Displays the total number of pages printed by the machine to date.

- Firmware Version
  - Printer

    Displays the version number of the machine firmware.

  - System

    Displays the version number of the system firmware.

  - Engine

    Displays the version number of the machine engine.

- LCDC

  Displays the version number of the panel display.

- NIB

  Displays the version number of the Network interface.

- Device Connection

  This item(s) appears when the device option(s) is installed.

- HDD: Font/Macro Download

  Displays the capacity of the hard disk drive.

- Printer Language

  Displays the version number of the printer driver language.

- Attached Equipment

  Displays the installed optional equipments.

- Consumption Status

  Displays the supply status.

Paper Input

Displays settings made under Tray Paper Settings menu.

Maintenance

Displays settings made under the Maintenance menu.

System

Displays settings made under the System menu.

PCL Menu

Displays settings made under PCL Menu.

PS Menu

Displays settings made under PS Menu.

PDF Menu

Displays settings made under PDF Menu.

Host Interface

Displays settings made under the Host Interface menu.

When DHCP is active on the network, the actual IPv4 address, subnet mask and gateway address appear in parentheses on the configuration page.

Interface Information

Displays the interface information.

Maintenance

This section describes the user tools in the Maintenance menu under Printer Features.

Menu Protect

You can prevent unauthenticated users from changing the user tools. Menu Protect can be specified for each of the following user tools menus.

For details, consult your administrator.

List / Test Print Lock

You can lock the [List / Test Print] items.

For details, consult your administrator.

Delete All Temporary Print Jobs

You can delete all print jobs temporarily stored in the machine.

Delete All Stored Print Jobs

You can delete all print jobs stored in the machine.

4 Colour Graphic Mode

- Text Priority

  Use the optimum CMYK toner combination for text printing.

- Photo Priority

  Use the optimum CMYK toner combination for photo printing.

Default: [**Photo Priority**]

Note

- To change default settings, see "Accessing User Tools".

Reference

- p.163 "Accessing User Tools"

System

This section describes the user tools in the System menu under Printer Features.

Print Error Report

Select this to have an error report printed when a printer or memory error occurs.

Default: [**Off**]

Auto Continue

Select whether or not the machine automatically continues to print after a system error occurs.

Default: [**Off**]

Memory Overflow

Select this to have a memory overflow error report printed.

Default: [**Do not Print**]

Job Separation

You can enable Job Separation.

This menu can be selected only when an optional finisher is installed.

Default: [**Off**]

Rotate by 180 Degrees

Specify whether to rotate the print image 180 degrees relative to the paper orientation.

Default: [**Off**]

Auto Delete Temporary Print Jobs

You can select to automatically delete print jobs temporarily stored in the machine.

Default: [**Off**]

If you select [On], you can set up to 200 hours for auto file deleting (Default: "**8**").

Auto Delete Stored Print Jobs

You can select to automatically delete print jobs stored in the machine.

Default: [**On**], "3" day(s)

If you select [On], you can set up to 180 days for auto file deleting.

Initial Print Job List

You can set the desired type of print job list that appears on the screen when you press [Print Jobs].

Default: [**Complete List**]

- Complete List

  Displays the list of print jobs stored in the machine.

- List Per User ID

Displays the list of the User ID who stored a file in the machine.

Print Compressed Data

Specify whether to uncompress and extract compressed job data before printing it.

The supported compression format is GZIP.

Default: [**Off**]

Memory Usage

You can select the amount of memory used in Font Priority or Frame Priority, according to paper size or resolution.

Default: [**Frame Priority**]

Duplex

You can select to have print on both sides of each page.

Default: [**Off**]

Copies

You can specify the number of print sets. This setting is disabled if the number of pages to print has been specified with the printer driver or another command.

The number of copies can be specified from 1 to 999 by increments of one.

Default: "**1**" copies

Blank Page Print

You can select whether or not to print blank pages.

Default: [**On**]

Pages that match one of the following conditions are identified as blank.

- There are no images.
- There are images but they are outside the printable area.
- There are only blank characters.

Reserved Job Waiting Time

You can specify how long the machine waits to receive a print job before allowing other functions such as the copier and scanner functions to interrupt it.

Default: [**Short Wait**]

Printer Language

Specify the printer language.

This menu can be selected only when an optional PostScript 3 unit is installed.

Default: [**Auto**]

Sub Paper Size

You can specify whether A4 or Letter ($8^1/_2 \times 11$) size paper is automatically selected as the default size when the job-specified size is unavailable.

Default: [**Auto**]

Page Size

You can select the default paper size.

The paper size you can select is as follows:

- A3, A4, A5, A6, B4JIS, B5JIS, B6JIS, C5 Env, C6 Env, DL Env, 12×18, 11×17, 11×15, 10×14, $8^1/_2 \times 14$, $8^1/_2 \times 13$, $8^1/_2 \times 11$, $8^1/_4 \times 14$, $8^1/_4 \times 13$, 8×13, 8×10, $7^1/_4 \times 10^1/_2$, $5^1/_2 \times 8^1/_2$, $4^1/_8 \times 9^1/_2$, $3^7/_8 \times 7^1/_2$, 8K, 16K, Custom Size

Default:

- Region A (mainly Europe and Asia)

  A4

- Region B (mainly North America)

  $8^1/_2 \times 11$

Letterhead Setting

You can rotate original images when printing.

When printing, original images are always rotated by 180 degrees. Therefore, output might not be as expected when printing onto letterhead or preprinted paper requiring orientation. Using this function, you can specify image rotation.

Default: [**Auto Detect**]

- Off

  When set to [Off], original images are always rotated by 180 degrees.

- Auto Detect

  When set to [Auto Detect], the machine detects a letterhead or preprinted paper automatically, and does not rotate the image.

- On (Always)

  When set to [On (Always)], the machine does not rotate.

This function reduces printing speed.

Tray Setting Priority

You can specify which of the two options, [Driver / Command] or [Machine Settings], has priority for determining the paper size for each tray.

[LCT] appears only when LCT is installed.

Default: [**Driver / Command**] (bypass tray), [**Machine Settings**] (the other trays)

Edge to Edge Print

You can select whether or not to expand the print area.

When set to [Off], margins on all sides are 4.2 mm (0.17 inches).

When set to [On], margins on the left, right, and bottom will become 0 mm.

Default: [**Off**]

Default Printer Language

You can set the default printer language if the machine cannot find the printer language automatically.

This menu can be selected only when an optional PostScript 3 unit is installed.

Default: [**PCL**]

Tray Switching

You can specify whether or not the machine automatically switches paper trays if paper of the specified size and type is not loaded in the driver-designated tray.

Default: [**Off**]

Extended Auto Tray Switching

You can select whether or not to automatically switch to a suitable tray when the current tray runs out of paper.

When [On] is set, the extended auto tray switching is priority, regardless of the printer driver settings.

Default: [**Off**]

Note

- To change default settings, see "Accessing User Tools".

Reference

- p.163 "Accessing User Tools"

Host Interface

This section describes the user tools in the Host Interface menu under Printer Features.

I/O Buffer

You can set the size of the I/O Buffer. Normally it is not necessary to change this setting.

Default: [**128 KB**]

I/O Timeout

You can set how many seconds the machine should wait before ending a print job. If data from another port usually arrives in the middle of a print job, you should increase this timeout period.

Default: [**15 seconds**]

Note

- To change default settings, see "Accessing User Tools".

Reference

- p.163 "Accessing User Tools"

PCL Menu

This section describes the user tools in the PCL Menu under Printer Features.

Orientation

You can set the page orientation.

Default: [**Portrait**]

Form Lines

You can set the number of lines per page.

The number of lines can be specified from 5 to 128 by increments of one.

Default:

- Region A (mainly Europe and Asia)

  "64" lines

- Region B (mainly North America)

  "60" lines

Font Source

You can set the storage location of the default font.

Default: [**Resident**]

[RAM], [HDD] and [SD] can be selected only when fonts have been downloaded to the machine.

Font Number

You can set the ID of the default font you want to use.

- When [Resident] is selected under [Font Source]:

  The font number can be specified from 0 to 63 by increments of one.

  Default: "0"

- When [RAM], [HDD], or [SD] is selected under [Font Source]:

  The font number can be specified from 1 up to number of fonts stored on the machine.

  Default: "1"

Point Size

You can set the point size you want to use for the selected font.

The number of point sizes can be specified from 4.00 to 999.75 by increments of 0.25.

This setting is effective only with variable-space fonts.

Default: "12.00" points

Font Pitch

You can set the number of characters per inch for the selected font.

The number of characters per inch can be specified from 0.44 to 99.99 by increments of 0.01.

This setting is effective only with fixed-space fonts.

Default: "10.00" pitches

Symbol Set

You can specify the character set of the selected font. The available options are as follows:

- Roman-8, Roman-9, ISO L1, ISO L2, ISO L5, ISO L6, ISO L9, PC-775, PC-8, PC-8 D/N, PC-850, PC-852, PC-858, PC8-TK, PC-1004, Win L1, Win L2, Win L5, Win Baltic, Desktop, PS Text, MS Publ, Math-8, PS Math, Pifont, Legal, ISO 4, ISO 6, ISO 11, ISO 15, ISO 17, ISO 21, ISO 60, ISO 69, Win 3.0, MC Text, UCS-2, PC-864, Arabic-8, WIN-Arabic, PC-866, PC-866U, ISO-Cyrillic, WIN-Cyrillic, PC-851, Greek-8, ISO-Greek, PC8-Greek, WIN-Greek, PC-862, Hebrew 7, Hebrew 8, ISO-Hebrew

Default: [PC-8]

Courier Font

You can select a courier font type.

Default: [Regular]

Extend A4 Width

You can extend the printing area width (when printing on A4 sheet with PCL).

Default: [Off]

When the setting is [On], the width will be $8^{1}/_{2}$ inches.

Append CR to LF

When set to [On], a carriage return will follow each line feed: CR=CR, LF=CR-LF, FF=CR-FF.

Default: [Off]

Resolution

You can set the print resolution in dots per inch.

Default: [600 dpi (Fast)]

Note

- To change default settings, see "Accessing User Tools".

Reference

- p.163 "Accessing User Tools"

PS Menu

This section describes the user tools in the PS Menu under Printer Features.

This menu appears only when an optional PostScript 3 unit is installed.

Job Timeout

You can specify how long the printer waits (in seconds) before canceling the current job when the job is interrupted while being processed.

Default: [**Use Driver / Command**]

If you select [Use Machine Settings], enter a value between 0 and 999.

Default: "**0**"

When set to "0", the current job will not be canceled when interrupted.

Wait Timeout

You can specify how long the printer waits (in seconds) before it cancels receiving the job when the printer cannot detect the end of the job.

Default: [**Use Driver / Command**]

If you select [Use Machine Settings], enter a value between 0 and 999.

Default: "**300**"

When set to "0", the print job will not be canceled when the end of the job cannot be detected.

Data Format

You can select a data format.

Default: [**TBCP**]

This setting is not effective when operating the machine with a parallel connection.

When operating the machine with a parallel connection, and also if the binary data is sent from the printer driver, the print job is canceled.

Resolution

You can set the print resolution in dots per inch.

Default: [**600 dpi (Fast)**]

Colour Setting

You can make an RGB setting.

Default: [**Super Fine**]

Colour Profile

You can set the color profile.

Default: [**Auto**]

Process Colour Model

Specify the color model.

Default: [**Colour**]

Note

- To change default settings, see "Accessing User Tools".

Reference

- p.163 "Accessing User Tools"

PDF Menu

This section describes the user tools in the PDF Menu under Printer Features.
This menu appears only when an optional PostScript 3 unit is installed.

Change PDF Password

You can set the password for the PDF file printed using PDF Direct Print.

- Current Password
  - New Password
  - Confirm New Password

[New Password] and [Confirm New Password] appear only when [Current Password] is set.

A password can be also set using Web Image Monitor, but in this case the password information is sent through the network. If security is a priority, set the password using this menu from the control panel.

PDF Group Password

This setting is not available on this machine.

Reverse Order Printing

You can specify whether the machine automatically prints in reverse order.

Default: [**Off**]

Resolution

You can set the print resolution in dots per inch.

Default: [**600 dpi (Fast)**]

Colour Setting

You can make an RGB setting.

Default: [**Super Fine**]

Colour Profile

You can set the color profile.

Default: [**Auto**]

Process Colour Model

Specify the color model.

Default: [**Colour**]

Note

- To change default settings, see "Accessing User Tools".

Reference

- p.163 "Accessing User Tools"

7. Appendix

Using the Virtual Printer

This section explains the virtual printer function.

The virtual printer is a pseudo printer that can only be recognized on a network. The virtual printer has various print options, such as feeding tray selection and duplex printing, which you can set in advance. You can also use the interrupt printing function. This function suspends the ongoing job and gives priority to a new job. If you use the virtual printer under UNIX, Solaris, and other operating systems, various print functions are possible without you having to manually enter the usual print commands.

Adding a Virtual Printer

Use this procedure to add a virtual printer.

Important

- **Adding a virtual printer requires Administrators privilege. Log in using an account that has Administrators privilege.**
- **The following Virtual Printer protocols are available: "TCP/IP (Unspecified, Normal)", "TCP/IP (Unspecified, Priority)", "TCP/IP (DIPRINT)", "TCP/IP (RHPP)", and "NetWare".**

1. **Log in to Web Image Monitor as an administrator.**

   For details about login user names and passwords, see "Using Web Image Monitor", Network and System Settings Reference.

2. **In the menu area, click [Configuration], and then click [Virtual Printer Settings] in the "Printer" category.**

   A list of the available virtual printers appears.

3. **Click [Add].**

   The screen for adding virtual printers appears.

4. **In [Virtual Printer Name], enter a name for the new printer, and then select the protocol in the [Protocol] list.**

5. **Click [OK].**

   The virtual printer is added.

Note

- If you select [NetWare] in the [Protocol] list, you cannot specify a virtual printer name.
- You can specify a virtual printer name using up to 47 characters.

- You can add up to 50 virtual printers. After 51 virtual printers have been added, [Add] will no longer be displayed.

Changing a Virtual Printer Configuration

Use this procedure to change a virtual printer configuration.

Important

- **You must have Administrators privilege to change the configuration of a virtual printer. Log in using an account that has Administrators privilege.**

1. **Log in to Web Image Monitor as an administrator.**

   For details about login user names and passwords, see "Using Web Image Monitor", Network and System Settings Reference.

2. **In the menu area, click [Configuration], and then click [Virtual Printer Settings] in the "Printer" category.**

   A list of the available virtual printers appears.

3. **Select the virtual printer whose configuration you want to change, and then click [Change].**

   If you want to configure this virtual printer for an interrupt printer, select [TCP/IP (Unspecified, Priority)] in the protocol list.

4. **Change the configuration as required.**

5. **Click [OK].**

Note

- For details about virtual printer configuration, see Web Image Monitor Help.

Confirming a Virtual Printer Configuration

Use this procedure to confirm a virtual printer configuration.

1. **Start Web Image Monitor.**

2. **In the menu area, click [Configuration], and then click [Virtual Printer Settings] in the "Printer" category.**

   A list of available virtual printers appears.

3. **Select the virtual printer whose configuration details you want to confirm, and then click [Details].**

   A configuration list for the selected virtual printer appears.

Note

- [Details] is not displayed if you log in to Web Image Monitor as an administrator. To confirm the current virtual printer configuration, click [Change].
- If the virtual printers function is set to [Inactive] in [Virtual Printer], the list of available virtual printers is not displayed. Set the virtual printers function to [Active]. To set the virtual printers function to [Active], you must logon as an administrator. For details, see "Printing Using a Virtual Printer".

Reference

- p.181 "Printing Using a Virtual Printer"

Deleting a Virtual Printer

Use this procedure to delete a virtual printer.

1. **Log in to Web Image Monitor as an administrator.**

   For details about login user names and passwords, see "Using Web Image Monitor", Network and System Settings Reference.

2. **In the menu area, click [Configuration], and then click [Virtual Printer Settings] in the "Printer" category.**

   The list of available virtual printers appears.

3. **Select the virtual printer that you want to delete, and then click [Delete].**

   The delete confirmation screen appears.

4. **Click [OK].**

Note

- You cannot delete the default virtual printer.
- [Delete] appears only if you have already added a virtual printer.

Printing Using a Virtual Printer

To print directly from a specified virtual printer, assign the virtual printer in the print command. If you use the interrupt printing function, enter the name of the virtual printer that you configured for interrupt printing. Before printing for the first time, specify the virtual printer you want to use.

1. **Log in to Web Image Monitor in administrator mode.**

   For details about login user name and password, see "Using Web Image Monitor", Network and System Settings Reference.

2. **In the menu area, click [Configuration], and then click [Basic Settings] in the "Printer" category.**

3. **Select [Active] in [Virtual Printer], and then click [OK].**
4. **Send a command from your computer.**

lpr

```
C:\>lpr -S "printer's IP address" [-P "Virtual Printer Name"] [-ol] \path\file
name
```

ftp

```
ftp> put \path\ file name [Virtual Printer Name],
```

Specifications

Type 1 and 2

Component	Specifications
Resolution	200dpi/300dpi/400dpi/600dpi/1200dpi
Printing speed	Type 1: • Color: 30 ppm • B&W: 30 ppm Type 2: • Color: 35 ppm • B&W: 35 ppm (A4□, 8 1/2 × 11 in □, plain paper, 600 dpi × 600 dpi) Printing speeds depend on the machine. Check which type of machine you have. See About This Machine.
Interface	Standard: • Ethernet interface (100BASE-TX/10BASE-T) • USB 2.0 Option: • Giga Ethernet interface (1000BASE-T/100BASE-TX/10BASE-T) • IEEE 1284 parallel interface • IEEE 802.11a/b/g wireless LAN interface
Network protocol	TCP/IP(IPv4, IPv6), IPX/SPX
Printer language	Standard: PCL 5c/6 Option: PostScript 3, PDF, PictBridge
Fonts	PCL 5c/6: • 45, 13 International fonts. PostScript 3: • 136 fonts
Memory	1.5 GB

Component	Specifications
Hard disk	160 GB
USB Interface (Standard)	Supported Operating System: • Windows 2000/XP/Vista/7, Windows Server 2003/2003 R2/2008/2008 R2, Mac OS 10.3.3 or later Transmission spec: • USB 2.0 Standard Connectable Device: • Devices corresponding to USB 2.0 Standard

Note

- When resolution is 1200 dpi, printing speed may be slower.
- When using the Mac OS X operating system, use only the standard USB Interface. An optional USB interface board is not supported.
- When using the USB Interface (Standard) with Mac OS X 10.3.3 or later, USB 2.0 is supported.

7

Type 3 and 4

Component	Specifications
Resolution	200dpi/300dpi/400dpi/600dpi/1200dpi
Printing speed	Type 3: • Color: 45 ppm • B&W: 45 ppm Type 4: • Color: 55 ppm • B&W: 55 ppm (A4□, $8\frac{1}{2}$ × 11 in □, plain paper, 600 dpi × 600 dpi) Printing speeds depend on the machine. Check which type of machine you have. See About This Machine.

Component	Specifications
Interface	Standard: • Ethernet interface (100BASE-TX/10BASE-T) • USB 2.0 Option: • Giga Ethernet interface (1000BASE-T/100BASE-TX/10BASE-T) • IEEE 1284 parallel interface • IEEE 802.11a/b/g wireless LAN interface
Network protocol	TCP/IP(IPv4, IPv6), IPX/SPX
Printer language	Standard: PCL 5c/6 Option: PostScript 3, PDF, PictBridge
Fonts	PCL 5c/6: • 45, 13 International fonts. PostScript 3: • 136 fonts
Memory	2 GB
Hard disk	160 GB
USB Interface (Standard)	Supported Operating System: • Windows 2000/XP/Vista/7, Windows Server 2003/2003 R2/2008/2008 R2, Mac OS 10.3.3 or later Transmission spec: • USB 2.0 Standard Connectable Device: • Devices corresponding to USB 2.0 Standard

Note

- When resolution is 1200 dpi, printing speed may be slower.
- When using the Mac OS X operating system, use only the standard USB Interface. An optional USB interface board is not supported.
- When using the USB Interface (Standard) with Mac OS X 10.3.3 or later, USB 2.0 is supported.

Trademarks

Adobe, Acrobat, Acrobat Reader, PageMaker, PostScript, and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or countries.

Macintosh, and Mac OS are registered trademarks of Apple Inc, registered in the U.S. and other countries.

IPS is a trademark or registered trademark of Zoran Corporation and/or its subsidiaries in the United States or other countries.

Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries.

Microsoft®, Windows®, Windows Server®, and Windows Vista® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Monotype is a registered trademark of Monotype Imaging, Inc.

NetWare, IPX, IPX/SPX are either registered trademarks or trademarks of Novell, Inc.

PCL® is a registered trademark of Hewlett-Packard Company.

UNIX is a registered trademark of The Open Group.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all right to those marks.

The proper names of the Windows operating systems are as follows:

- The product names of Windows 2000 are as follows:

  Microsoft® Windows® 2000 Professional

  Microsoft® Windows® 2000 Server

  Microsoft® Windows® 2000 Advanced Server
- The product names of Windows XP are as follows:

  Microsoft® Windows® XP Professional Edition

  Microsoft® Windows® XP Home Edition

  Microsoft® Windows® XP Media Center Edition

  Microsoft® Windows® XP Tablet PC Edition
- The product names of Windows Vista are as follows:

  Microsoft® Windows Vista® Ultimate

  Microsoft® Windows Vista® Business

  Microsoft® Windows Vista® Home Premium

  Microsoft® Windows Vista® Home Basic

  Microsoft® Windows Vista® Enterprise
- The product names of Windows 7 are as follows:

  Microsoft® Windows® 7 Home Premium

Microsoft® Windows® 7 Professional

Microsoft® Windows® 7 Ultimate

Microsoft® Windows® 7 Enterprise

- The product names of Windows Server 2003 are as follows:

  Microsoft® Windows Server® 2003 Standard Edition

  Microsoft® Windows Server® 2003 Enterprise Edition

- The product names of Windows Server 2003 R2 are as follows:

  Microsoft® Windows Server® 2003 R2 Standard Edition

  Microsoft® Windows Server® 2003 R2 Enterprise Edition

- The product names of Windows Server 2008 are as follows:

  Microsoft® Windows Server® 2008 Standard

  Microsoft® Windows Server® 2008 Enterprise

- The product names of Windows Server 2008 R2 are as follows:

  Microsoft® Windows Server® 2008 R2 Standard

  Microsoft® Windows Server® 2008 R2 Enterprise

INDEX

4 Colour Graphic Mode....168

A

About This Machine....6
Accessing User Tools....163
Advanced printing....77
Append CR to LF....174
Auto Continue....169
Auto Delete Stored Print Jobs....169
Auto Delete Temporary Print Jobs....169

B

Banner page....38
Bidirectional communication....46
Blank Page Print....169
Bypass tray....54
- OHP transparencies....59
- thick paper....59

C

Canceling a job....137
Canceling print jobs....97, 137, 138
Change PDF Password....178
Changing the port setting....32
Chapter page....90
Checking the machine's status....166
Classification code....105
Collate....78
Colour Profile....176, 178
Colour Setting....176, 178
Combining multiple pages into single page....73
Configuration Page....165
Continuing printing manually....96
Copies....169
Copy and Document Server Reference....6
Courier Font....174
Cover sheet....87
Custom Size Paper....54

D

Data Format....176
Default Printer Language....169
Default settings....51, 53, 163
Delete All Stored Print Jobs....168
Delete All Temporary Print Jobs....168
DeskTopBinder Lite....100, 101
- Function Palette....101

Direct Printing from a Removable Memory Device
- Direct printing screen....142
- Printing directly from a removable memory device....144
- Removable memory device....141

Display panel....12
Document Server....161
Downloading the printer driver....19
Duplex....169
Duplex printing....71

E

Edge to Edge Print....169
Envelopes....54
Error Log....139, 165
Extend A4 Width....174
Extend Auto Tray Switching....169

F

Font Manager....48
Font Number....174
Font Pitch....174
Font Source....174
Form feed....38, 96
Form Lines....174
Frequently used print methods....69

H

Hex Dump....165
Hold Print....121
How to read this manual....9

I

I/O Buffer....173
I/O Timeout....173
Initial display....12
Initial Print Job List....109, 169
Installing the printer driver....19
Installing the printer driver using USB....39
Interrupt printing....179
IPP....30

IPP port....23

J

Job list....133
change order....135
checking jobs....134
deleting jobs....136
job history....136
Job Separation....169
Job timeout....176

L

Laws and regulations....10
Legal prohibition....10
Letterhead....65
Letterhead Setting....169
List / Test Print....165
List / Test Print Lock....168
List Per User ID....129
printing all print jobs....130
Local connection....15
Locked Print....118
LPR port....25

M

Making option settings....46
Making paper settings....46
Maximum numbers of sheets for stapling....81
Memory Overflow....169
Memory Usage....169
Menu List....165
Menu Protect....168
Models....11
Multiple Lists....165

N

Names of major items....9
NetWare....36
Network and System Settings Reference....6
Network connection....15
Network printer....17, 34
Note....9
Notice....8

O

OHP Transparencies....54
One click presets....53
Orientation....174
Other manuals....6

P

Page Size....169
PageMaker....49
Paper sizes for stapling....81
Parallel connection....44
PCL 5c printer driver....93
PCL Configuration / Font Page....165
PCL printer driver....19, 20
PDF Configuration / Font Page....165
PDF Direct Print....100, 102
Function Palette....101
using commands....103
PDF Group Password....178
PDF password....103
PictBridge
Camera Memo Printing....157
Color Matching....156
Date and File Name Printing....151
Exiting PictBridge....157
Form Printing....156
Image Print Size....153
Index Printing....150
MultiImageLayout....154
Other Reference Information....158
Paper Size....152
Paper type specification....156
PictBridge Printing....148
Printing from a Digital Camera....148
Printing Quality....155
Trimming....151
What Can Be Done on This Machine....149
What is PictBridge?....148
Point Size....174
PostScript 3 printer driver....19
PostScript 3 Supplement....6
Print area....67
Print Compressed Data....169
Print Error Report....169
Print Job Function....109

Printer driver.....19, 34, 36
Printer driver setting screen.....51
Printer Language.....169
Printer Reference.....6
Printing on both sides of sheets.....71
Printing on two sides of sheets.....71
Printing print jobs.....129
Printing using the bypass tray.....54
Process Colour Model.....176, 178
PS Configuration / Font Page.....165
Punch.....84
Punch position.....84
Punching precautions.....85

Q

Quick Install.....20

R

Remote printer.....36
Reserved Job Waiting Time.....169
Resetting the printer.....38
Resolution.....174, 176, 178
Reverse Order Printing.....178
Rotate by 180 Degrees.....169

S

Sample Print.....115
Scanner Reference.....6
Security Reference.....6
Sending a PDF file.....103
Simplified display.....13
Slip sheets.....91
SmartDeviceMonitor for Client.....32
SmartDeviceMonitor for Client port.....29
Specifications.....183
Spool printing.....98
Standard printing.....69
Standard TCP/IP port.....22
Staple position.....80
Staple printing.....80
Store and Print.....124
Store and Print (Shared).....124
Stored Print.....124
Stored Print (Shared).....124
Sub Paper Size.....169
Symbol Set.....174
Symbols.....9

T

TCP/IP.....29
Thick Paper.....54
Thin Paper.....54
Trademarks.....186
Tray Setting Priority.....169
Tray Switching.....169
Troubleshooting.....6, 96
Troubleshooting, PictBridge.....157

U

USB connection.....39
User defined pages.....93

V

Virtual printer.....179

W

Watermarks.....93
Web Image Monitor.....105, 179
WSD port.....26

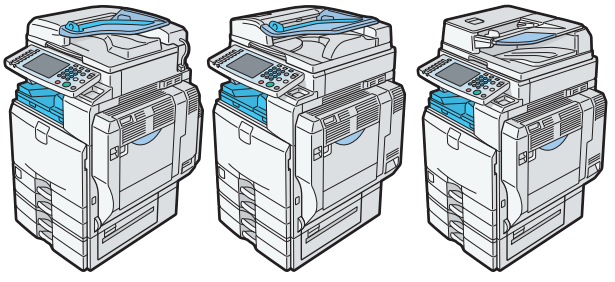
MEMO

© 2010

Operating Instructions Printer Reference

C9130/C9135/C9145/C9145A/C9155/C9155A
C9130G/C9135G/C9145G/C9145AG/C9155G/C9155AG
LD630C/LD635C/LD645C/LD645CA/LD655C/LD655CA
LD630CG/LD635CG/LD645CG/LD645CAG/LD655CG/LD655CAG
Aficio™ MP C3001/C3501/C4501/C4501A/C5501/C5501A
Aficio™ MP C3001G/C3501G/C4501G/C4501AG/C5501G/C5501AG

Operating Instructions
Scanner Reference



1 Sending Scan Files by E-mail
2 Sending Scan Files to Folders
3 Sending Scan Files Using WSD
4 Storing Files Using the Scanner Function
5 Saving Scan Files on a Removable Memory Device
6 Delivering Scan Files
7 Scanning Originals with the Network TWAIN Scanner
8 Various Scan Settings
9 Scanner Features
10 Appendix

Read this manual carefully before you use this machine and keep it handy for future reference. For safe and correct use, be sure to read the Safety Information in "About This Machine" before using the machine.

TABLE OF CONTENTS

Manuals for This Machine....7
Notice....9
Important....9
How to Read This Manual....10
Symbols....10
Names of Major Items....10
Notes....10
Laws and Regulations....11
Legal Prohibition....11
About the Scanner Functions....12
Display Panel....14
Simplified Display....14
Confirmation Displays....15

1. Sending Scan Files by E-mail

Before Sending Scan Files by E-mail....21
Overview of Sending Scan Files by E-mail....21
Preparation for Sending by E-mail....22
Registering E-mail Addresses in the Address Book....24
E-mail Screen....25
Basic Procedure for Sending Scan Files by E-mail....27
Switching to the E-mail Screen....30
Specifying E-mail Destinations....31
Selecting the Destination from the Machine's Address Book....31
Entering an E-mail Address Manually....34
Selecting the Destination from Recent Destinations....35
Selecting Destinations by Searching an LDAP Server....36
Registering a Directly-Entered Destination in the Address Book....39
Registering a Recent Destination in the Address Book....40
Specifying the E-mail Sender....41
Selecting a Sender from the List....41
Using a Registration Number to Specify a Sender Name....42
Selecting the Sender by Searching the Machine's Address Book....42
Entering the E-mail Subject....45

Entering the E-mail Message....46
Selecting a Message from the List....46
Manual Entry of a Message....47
Simultaneous Storage and Sending by E-mail....48
Security Settings to E-mails....49
Sending Encrypted E-mail....49
Sending E-mail with a Signature....50
Sending the URL by E-mail....51

2. Sending Scan Files to Folders

Before Sending Files by Scan to Folder....53
Overview of Sending Scan Files by Scan to Folder....53
Preparation for Sending by Scan to Folder....55
Registering Destination Folders in the Address Book....60
Scan to Folder Screen....61
Basic Procedure When Using Scan to Folder....63
Switching to the Scan to Folder Screen....66
Specifying Scan to Folder Destinations....67
Selecting the Destination from the Machine's Address Book....67
Sending Files to a Shared Network Folder....70
Sending Files to an FTP Server....74
Sending Files to NetWare Server....75
Selecting the Destination from Recent Destinations....79
Registering the Path to the Selected Destination in the Address Book....80
Registering the Path to a Recent Destination in the Address Book....81
Simultaneous Storage and Sending by Scan to Folder....83

3. Sending Scan Files Using WSD

Before Sending Scan Files Using WSD....85
Overview of Sending Scan Files Using WSD....86
Preparation for Sending Files Using WSD....87
Using the WSD Scanner (Push Type)....91
WSD Scanner (Push Type) Screen....91
Basic Procedure for Sending Scan Files Using WSD....92
Switching to the WSD Scanner Screen....94

Specifying the Destination Client Computer....95
Using the WSD Scanner (Pull Type)....98
Basic Procedure for Sending Scan Files Using WSD (Pull Type)....98
Configuring the Scan Settings on a Client Computer....100
Changing a Scan Profile....100
Creating a New Scan Profile....101
Scan Profile Items and Settings....102

4. Storing Files Using the Scanner Function

Before Storing Files....105
Overview of File Storage under the Scanner Function....105
Basic Procedure for Storing Scan Files....107
Specifying File Information for a Stored File....109
Specifying a User Name....109
Specifying a File Name....109
Specifying a Password....110
Displaying the List of Stored Files....112
List of Stored Files....112
Searching the List of Stored Files....113
Checking Stored Files....116
Checking a Stored File Selected from the List....116
Checking Stored Files from a Client Computer....117
Sending a Stored File....119
Sending Stored Files....119
Managing Stored Files....121
Deleting a Stored File....121
Changing Information for a Stored File....122

5. Saving Scan Files on a Removable Memory Device

Before Saving Files on a Removable Memory Device....127
Overview of Saving Files on a Removable Memory Device....127
Basic Procedure for Saving Scan Files on a Removable Memory Device....129

6. Delivering Scan Files

Before Delivering Files....131
Overview of Scan File Delivery....131

Preparing to Deliver Files....132
Network Delivery Scanner Screen....135
Basic Procedure for Delivering Files....137
Switching to the Network Delivery Scanner Screen....140
Specifying Delivery Destinations....141
Selecting Destinations Registered in the Delivery Server's Address Book....141
Specifying the Sender....145
Selecting a Sender from the Sender List....145
Selecting the Sender by Entering the Registration Number....145
Selecting a Sender by Searching the Delivery Server's Destination List....146
Entering the Subject of the E-mail to Be Transmitted via the Delivery Server....149
Simultaneous Storage and Delivery....150

7. Scanning Originals with the Network TWAIN Scanner

Before Using the Network TWAIN Scanner....151
Overview of the Network TWAIN Scanner....151
Preparing to Use the Network TWAIN Scanner....152
Installing the TWAIN Driver from the Supplied CD-ROM....154
Basic Network TWAIN Scanner Procedure....156
Scan Settings When Using TWAIN Scanner....158
Setting Original Orientation on the TWAIN Scanner....158
When Scanning Originals of Mixed Sizes Using TWAIN Scanner....160

8. Various Scan Settings

Specifying Scan Settings....161
Scan Settings....162
Original Type....162
Resolution....163
Scan Size....163
Edit....169
Adjusting Image Density....170
Setting of Original Feed Type....171
Original Orientation....171
Original Settings....173
Stamp....175

Batch, SADF....176
Divide....177
Scanning Multiple Pages of Originals as One File....179
Specifying the File Type and File Name....181
Specifying the File Type....181
Notes About and Limitations of File Types....182
Specifying the File Name....183
Security Settings for PDF Files....185
Programs....190
Registering Frequently Used Settings....190
Recalling a Registered Content....191
Changing a Registered Program....191
Deleting a Program....192
Changing the Registered Program Name....192
Changing the Default Functions of the Scanner's Initial Display....194

9. Scanner Features

Accessing User Tools....197
Changing User Tools....197
Closing User Tools....198
General Settings....199
Scan Settings....201
Send Settings....203
Initial Settings....206

10. Appendix

Relationship between Resolution and Scan Size....207
When Using the E-mail, Folder Sending, WSD Scanner, Storing, or Network Delivery Functions....207
When Using the TWAIN Driver or the WIA Driver....207
Software Supplied on CD-ROM....209
Auto-Run Program....209
TWAIN Driver....209
Values of Various Set Items for Transmission/Storage/Delivery Function....210
Transmission Function....210

Storage Function....212
Network Delivery Function....213
About WIA Scanning....215
Specifications....218
Trademarks....222
INDEX....225

Manuals for This Machine

Read this manual carefully before you use this machine.

Refer to the manuals that are relevant to what you want to do with the machine.

Important

- **Media differ according to manual.**
- **The printed and electronic versions of a manual have the same contents.**
- **Adobe Acrobat Reader/Adobe Reader must be installed in order to view the manuals as PDF files.**
- **A Web browser must be installed in order to view the html manuals.**

About This Machine

Before using the machine, be sure to read the section of this manual entitled Safety Information.

This manual introduces the machine's various functions. It also explains the control panel, preparation procedures for using the machine, how to enter text, how to install the CD-ROMs provided, and how to replace paper, toner, staples, and other consumables.

Troubleshooting

Provides a guide for resolving common usage-related problems.

Copy and Document Server Reference

Explains Copier and Document Server functions and operations. Also refer to this manual for explanations on how to place originals.

Facsimile Reference

Explains Facsimile functions and operations.

Printer Reference

Explains Printer functions and operations.

Scanner Reference

Explains Scanner functions and operations.

Network and System Settings Reference

Explains how to connect to the machine to a network, configure and operate the machine in a network environment, and use the software provided. Also explains how to change User Tools settings and how to register information in the Address Book.

Security Reference

This manual is for administrators of the machine. It explains security functions that you can use to prevent unauthorized use of the machine, data tampering, or information leakage. For enhanced security, we recommend that you first make the following settings:

- Install the Device Certificate.
- Enable SSL (Secure Sockets Layer) Encryption.

- Change the user name and password of the administrator using Web Image Monitor.

For details, see "Setting Up the Machine", Security Reference.

Be sure to read this manual when setting the enhanced security functions, or user and administrator authentication.

PostScript 3 Supplement

Explains how to set up and use PostScript 3.

VM Card Extended Feature Settings Device Reference

Explains how to set up the extended features settings with the machine.

VM Card Extended Feature Settings Web Reference

Explains how to set up the extended features settings using Web Image Monitor.

Other manuals

- UNIX Supplement
- Quick Reference Copy Guide
- Quick Reference Printer Guide
- Quick Reference Fax Guide
- Quick Reference Scanner Guide
- App2Me Start Guide

Note

- Manuals provided are specific to machine types.
- For "UNIX Supplement", please visit our Web site or consult an authorized dealer. This manual includes descriptions of functions and settings that might not be available on this machine.
- The following software products are referred to using general names:

Product name	General name
DeskTopBinder Lite and DeskTopBinder Professional *1	DeskTopBinder
ScanRouter EX Professional *1 and ScanRouter EX Enterprise *1	The ScanRouter delivery software

*1 Optional

Notice

Important

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

For good copy quality, the manufacturer recommends that you use genuine toner from the manufacturer.

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

How to Read This Manual

Symbols

This manual uses the following symbols:

Important

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

Note

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys on the machine's display or control panels.

Names of Major Items

Major items of this machine are referred to as follows in this manual:

- Auto Reverse Document Feeder → ARDF
- Auto Document Feeder → ADF (in this manual, "ADF" refers to the ARDF and the one-pass duplex scanning ADF)

Notes

Contents of this manual are subject to change without prior notice.

Colors on color keys or the color circle may differ slightly from the colors of actual copies.

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Depending on which country you are in, certain units may be optional. For details, please contact your local dealer.

This machine comes in several models which vary in copy/print speed.

Laws and Regulations

Legal Prohibition

Do not copy or print any item for which reproduction is prohibited by law.

Copying or printing the following items is generally prohibited by local law:

bank notes, revenue stamps, bonds, stock certificates, bank drafts, checks, passports, driver's licenses.

The preceding list is meant as a guide only and is not inclusive. We assume no responsibility for its completeness or accuracy. If you have any questions concerning the legality of copying or printing certain items, consult with your legal advisor.

This machine is equipped with a function that prevents making counterfeit bank bills. Due to this function the original images similar to bank bills may not be copied properly.

About the Scanner Functions

This section describes functions you can use in the scanner mode.

You can use the scanner functions to send scan files to computers, scan originals from a computer using the TWAIN driver, or store scan files on the machine's hard disk.

For details about each function, see respective chapters.

Sending scanned files (Network Scanner)

Scan files can be sent to or stored on a computer, and you can specify the format of a scan file according to how the file will be used.

- Sending by e-mail

  You can send scan files to specified e-mail addresses.

  For details, see chapter 1 "Sending Scan Files by E-mail".

- Sending to folders

  Scan files can be stored in shared network folders, or on FTP or Netware servers.

  For details, see chapter 2 "Sending Scan Files to Folders".

- Sending using WSD

  You can use Web Services on Devices (WSD) to send scan files to a client computer.

  For details, see chapter 3 "Sending Scan Files Using WSD".

- Delivering

  You can deliver scan files using a delivery server.

  For details, see chapter 6 "Delivering Scan Files".

Scanning originals from a client computer (TWAIN Scanner)

You can use the TWAIN driver to scan originals from networked client computers.

For details, see chapter 7 "Scanning Originals with the Network TWAIN Scanner".

Storing files

Scan files can be stored on the machine's hard disk or saved on a removable memory device.

- Storing files on the machine's hard disk

  You can do various things with files that are stored on the hard disk, such as save them in shared folders or send them by e-mail.

  For details, see chapter 4 "Storing Files Using the Scanner Function".

- Saving files on a removable memory device

  You can save scan files on a removable memory device such as a USB flash memory or an SD card.

  For details, see chapter 5 "Saving Scan Files on a Removable Memory Device".

Note

- This machine's scanner functions are only available as network functions. They are not available through direct USB connection.

Reference

- p.21 "Sending Scan Files by E-mail"
- p.53 "Sending Scan Files to Folders"
- p.85 "Sending Scan Files Using WSD"
- p.131 "Delivering Scan Files"
- p.151 "Scanning Originals with the Network TWAIN Scanner"
- p.105 "Storing Files Using the Scanner Function"
- p.127 "Saving Scan Files on a Removable Memory Device"

Display Panel

This section explains the simplified display and three confirmation screens: Check Modes, Preview, and Scanned Files Status.

In this manual you can find explanations about the E-mail screen, Scan to Folder screen, WSD scanner screen, list of stored files screen, and the network delivery scanner screen. For details about each of these screens, see "E-mail Screen", "Scan to Folder Screen", "WSD Scanner (Push Type) Screen", "List of Stored Files", and "Network Delivery Scanner Screen" respectively.

Reference

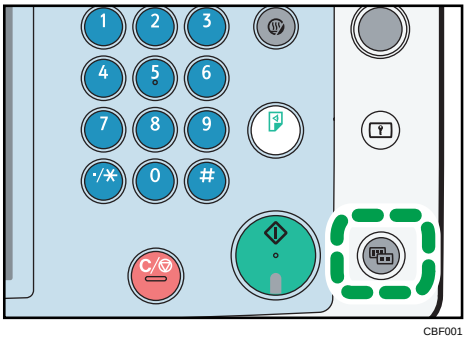
- p.25 "E-mail Screen"
- p.61 "Scan to Folder Screen"
- p.91 "WSD Scanner (Push Type) Screen"
- p.112 "List of Stored Files"
- p.135 "Network Delivery Scanner Screen"

Simplified Display

This section explains how to switch to the simplified display.

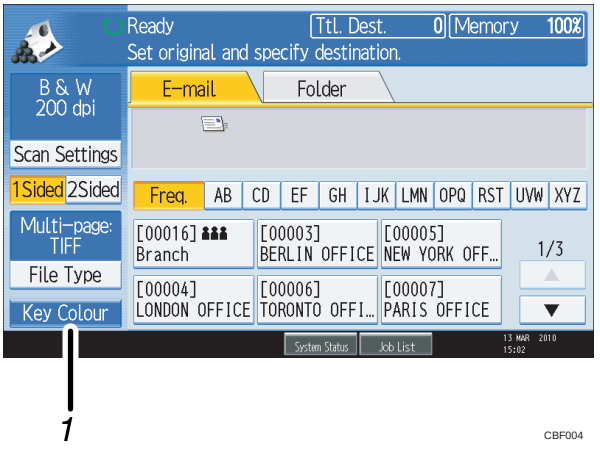
When you press the [Simplified Display] key, the screen changes from the initial display to the simplified display.

Letters and keys are displayed at a larger size, making operations easier.



CBF001

Example of Simplified Display



1. **[Key Colour]**

   Press to increase screen contrast by changing the color of the keys.

   This is available only for the simplified display.

Note

- To return to the initial screen, press the [Simplified Display] key again.
- Certain keys do not appear on the simplified display.

Confirmation Displays

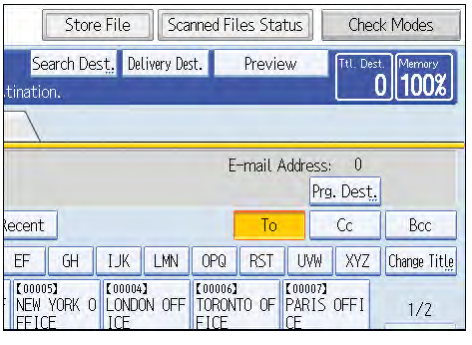
This section explains three confirmation displays: Check Modes, Preview, and Scanned Files Status.

Check Modes

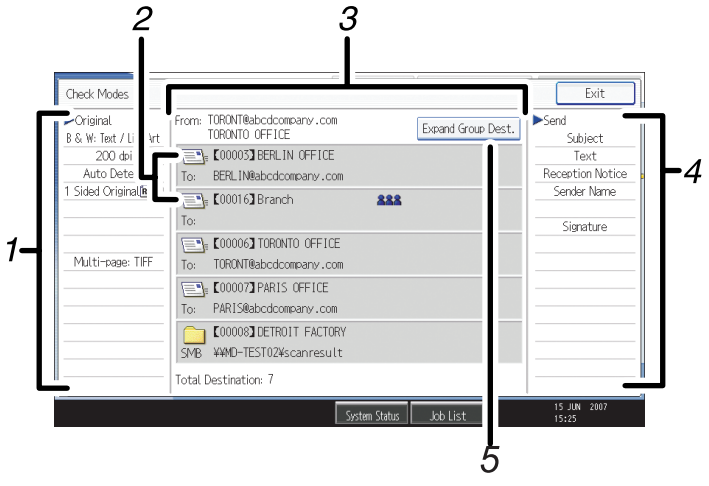
This section explains items that are displayed and how to display the Check Modes screen.

Use the Check Modes screen to check scanning and transmission settings.

Pressing [Check Modes] switches the screen from the initial scanner screen to the Check Modes screen.



Check Modes



1. **Original**

   Displays Scan Settings, Original Feed Type, and other scanning settings.

2. **Transmission function icon**

   Displays the icon of the transmission function in use.

3. **Sender and Destination**

   Displays the sender and transmission or delivery destinations.

   The ( ) symbol indicates a group destination.

   The ( ) symbol indicates a destination that can receive encrypted e-mail.

4. **Send**

   Displays transmission settings such as Sender and Subject.

5. **[Expand Group Dest.]**

   Press to display the members of the group, when a group is specified as the destination.

Note

- While this machine is being used as a WSD scanner, only the settings specified directly on the machine can be displayed.

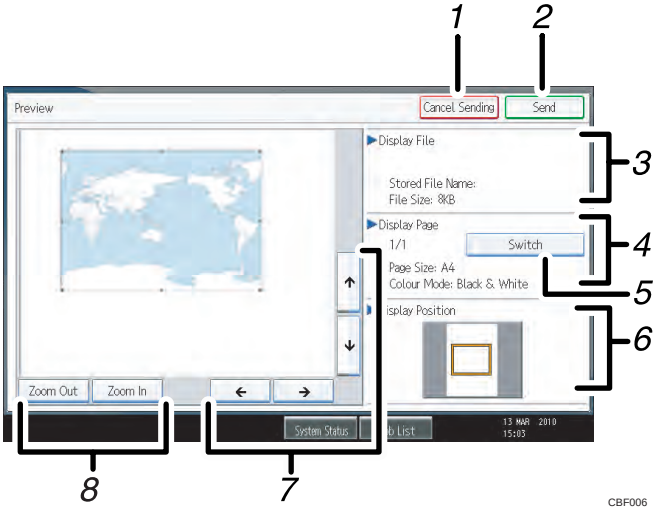
Preview

Use the Preview screen to check that originals have been scanned correctly.

This section explains about the Preview screen that can be used before sending files by e-mail or Scan to Folder, or delivering files.

Before you start scanning, press [Preview]. If you scan originals while [Preview] is selected, the Preview screen appears. You can start or cancel sending the files after checking the preview and the scan settings used for scanning.

Preview



1. **[Cancel Sending]**

   Press to close a preview and interrupt a transmission.

2. **[Send]**

   Press to close a preview and continue a transmission.

3. **Display File**

   Displays a file's name and size.

4. **Display Page**

   Displays the number of the currently displayed page, total number of pages, page size, and color mode.

5. **[Switch]**

   Press to change the page of the selected file that is displayed.

6. **Display Position**

   Displays the position of an image when enlarged.

7. **[←][→][↑][↓]**

   Press to shift the displayed area.

8. **[Zoom Out] and [Zoom In]**

   Press to reduce or enlarge the displayed preview.

Note

- Preview is not available if you are scanning by WSD. View the scanned images on the destination computer instead.
- Preview is not available if a file is scanned using [Store to HDD].
- You can view a stored file using the Preview screen displayed from the list of stored files. For details about viewing a stored file, see "Checking a Stored File Selected from the List".

- Preview is not available if you select High Compression PDF as the file type.
- Preview might not be displayed if scanning failed or the image file is corrupted. If this is the case, scan the original again.

Reference

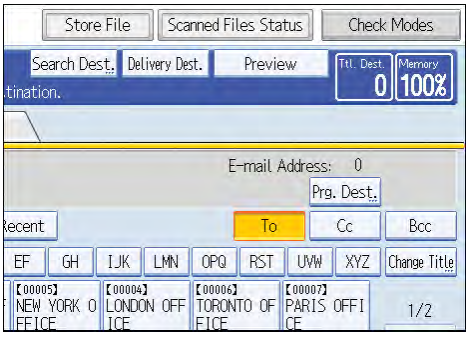
- p.116 "Checking a Stored File Selected from the List"

Scanned Files Status

This section explains items that are displayed and how to display the Scanned Files Status screen.

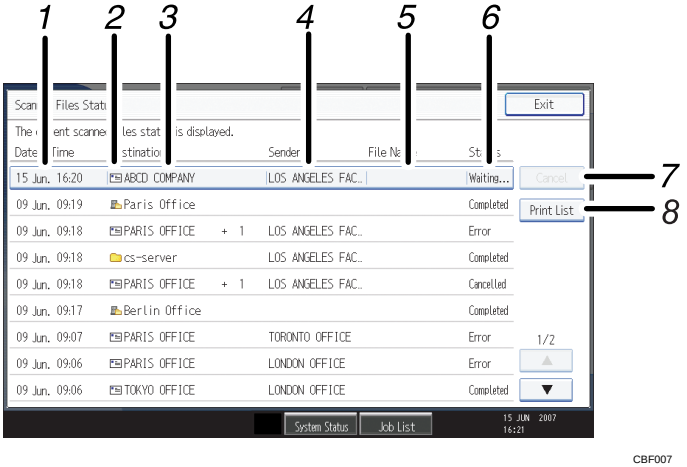
Use the Scanned Files Status screen to check e-mail transmission, Scan to Folder, and delivery results.

Press [Scanned Files Status] to display the Scanned Files Status screen.



Up to 9 transmission or delivery results are displayed at the same time. Press [▲] or [▼] to switch between results.

Scanned Files Status



CBF007

1. **Date / Time**

   Displays the time and date transmission was specified by this machine or the time and date when Completed, Error, or Cancelled was confirmed.

2. **Transmission function icon**

   Displays the icon of the transmission function used.

   The ( ) symbol indicates a destination that can receive encrypted e-mail.

3. **Destination**

   Displays the transmission destination.

   If you have selected multiple destinations, the first selected destination is displayed.

   Other destinations appear as "+ X" (X indicates the number of destinations.) when sending files by e-mail or delivering them.

4. **Sender**

   Displays the sender name.

5. **File Name**

   Displays the stored file name of files that are simultaneously sent and stored, or of stored files that are sent.

6. **Status**

   Displays one of the following transmission statuses: Completed, Trnsmtg., Waiting..., Error, or Cancelled.

7. **[Cancel]**

   To cancel transmission, select a file whose status is "Waiting...", and then press [Cancel].

8. **[Print List]**

   Press to print transmission results.

Note

- You cannot check scanner function transmission results by pressing [Job List] at the bottom of the screen. To check transmission results, press [Scanned Files Status], and then display the Scanned Files Status screen.
- Depending on security settings, some transmission results might not be displayed.

1. Sending Scan Files by E-mail

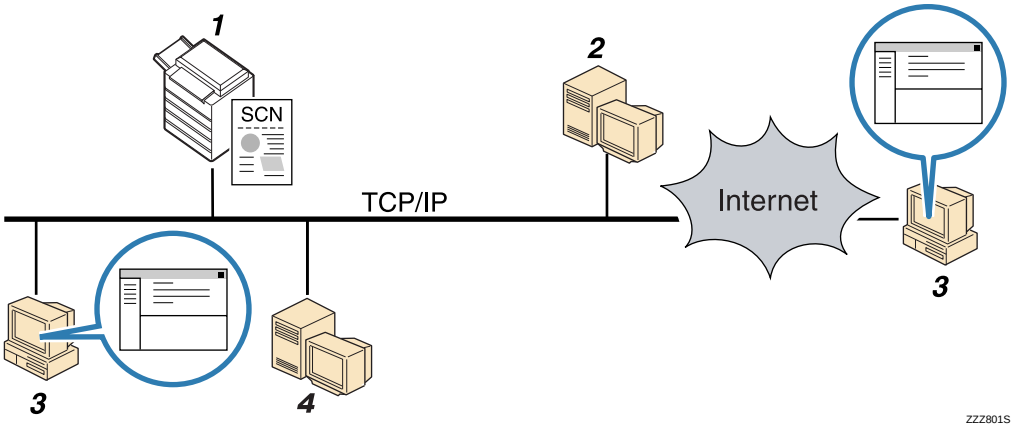
You can attach scan files to e-mails and send them via connections such as LAN and the Internet.

Before Sending Scan Files by E-mail

This section explains the necessary preparations and the procedure for sending scan files by e-mail.

Overview of Sending Scan Files by E-mail

This section describes the process for sending scan files by e-mail.



1. **This machine**

   You can attach scan files to e-mail and send them to a mail server. You can also encrypt and/or attach a signature to the scan files you send by e-mail.

2. **SMTP server**

   You need to have an access to an e-mail server that supports SMTP (Simple Mail Transfer Protocol), to send scan files by e-mail. However, it is not essential to have an e-mail server inside the LAN where this machine belongs. It transfers a received e-mail to a specified destination through a LAN or the Internet.

3. **Client computer**

   Use e-mail client software to receive e-mail messages and scan file attachments that are generated by this machine.

4. **LDAP Server**

   Use this server for administering e-mail accounts, searching the network, and authenticating the computers that access the machine. Using the LDAP server, you can search for destinations from the machine.

Note

- This machine supports SMTPS (SMTP over SSL).
- This machine supports Web mail sending.

1

Preparation for Sending by E-mail

To send scanned files by e-mail, you must first perform the following:

- Check the machine is properly connected to the network
- Configure the network settings in [System Settings]
- Configure the necessary settings in [Scanner Features]

Checking the machine is properly connected to the network

Check that this machine is properly connected to the network.

For details about how to connect this machine to a network, see "Connecting to the Interface", Network and System Settings Reference.

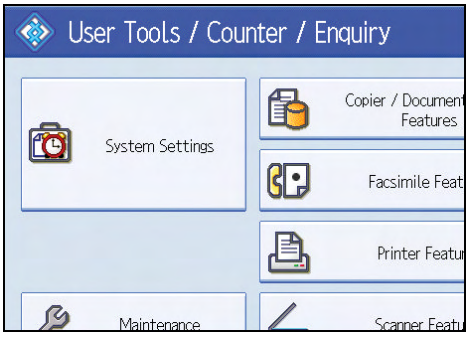
Configuring the network settings in [System Settings]

Configure the network settings in [System Settings] according to your environment and how you will be using the machine.

The following procedure explains connecting this machine to an IPv4 network using Ethernet cable.

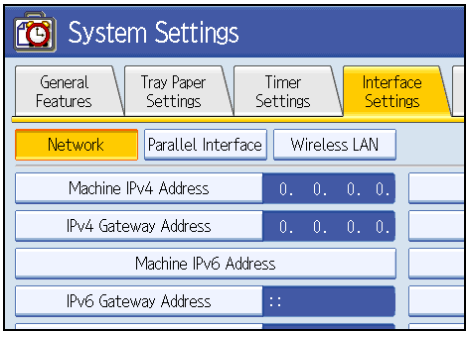
Note that the settings you must configure will vary depending on your operating environment. For details about network settings and configuration procedures, see "Network Settings Required to Use E-mail Function", Network and System Settings Reference.

1. **Press the [User Tools/Counter] key, and then press [System Settings].**



The System Settings screen appears.

2. **Press the [Interface Settings] tab.**



3. **Press [Machine IPv4 Address] to specify the machine's IPv4 address.**

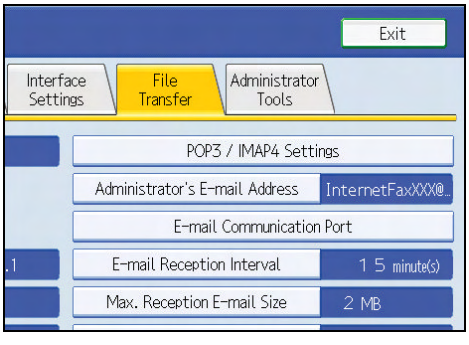
   To specify a static IPv4 address for this machine, press [Specify], and then enter the IPv4 address and subnet mask.

   To obtain an IPv4 address from a DHCP server automatically, press [Auto-Obtain (DHCP)].

4. **Press [IPv4 Gateway Address], and then enter the IPv4 gateway address.**

5. **Press [Effective Protocol], and then make [IPv4] active.**

6. **Press the [File Transfer] tab, and then press [SMTP Server].**



7. **Press [Change], which is to the right of [Server Name], then enter the SMTP server host name or IPv4 address, and then press [OK].**

   If necessary, you can change the port number by pressing [Change], which is to the right of the port number.

8. **Press [Exit] twice.**

Note

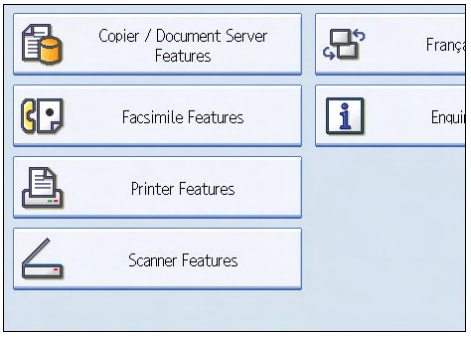
- If an extended wireless LAN board (optional) is installed, press [LAN Type] on the [Interface Settings] tab, then press [Ethernet], and then configure the network settings.

Configuring the necessary settings in [Scanner Features]

Using [Scanner Features], you can make or change various settings related to the scanner function, such as compressing scan data or printing the scanner journal. Configure the scanner settings according to your environment and how you will be using the machine.

This section explains how to display the Scanner Features screen. For details about the settings on this screen, see "Scanner Features".

1. **Press the [User Tools/Counter] key, and then press [Scanner Features].**



   The Scanner Features screen appears.

2. **Press the [General Settings], [Scan Settings], [Send Settings], or [Initial Settings] tabs and configure the relevant settings on those tabs.**

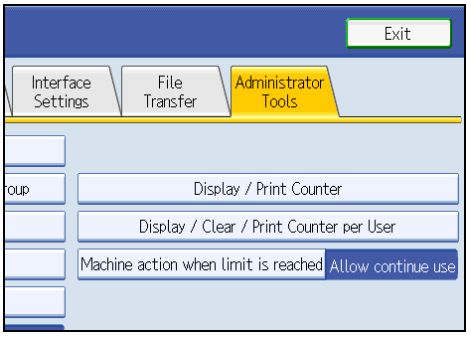
Reference

- p.197 "Scanner Features"

Registering E-mail Addresses in the Address Book

You can register frequently used e-mail addresses in the address book. This section explains how to register e-mail addresses in the address book.

1. **Press the [User Tools/Counter] key, and then press [System Settings].**
2. **Press the [Administrator Tools] tab.**



3. **Press [Address Book Management].**
4. **Press [New Program], and then enter necessary information.**

   You can register the e-mail address in groups.
5. **Press [OK].**
6. **Press [Exit] twice.**

Note

- For details about registering e-mail addresses in the address book, see "Registering Addresses and Users for Facsimile/Scanner Functions", Network and System Settings Reference.
- You can also register e-mail addresses in the address book using Web Image Monitor. For details about how to display Web Image Monitor, see "Monitoring and Configuring the Machine", Network and System Settings Reference. For details about registering addresses in the address book, see Web Image Monitor Help.
- Encrypted files can be sent by e-mail only to destinations for which decryption is set. For details about sending encrypted files by e-mail, see "Security Settings to E-mails".

Reference

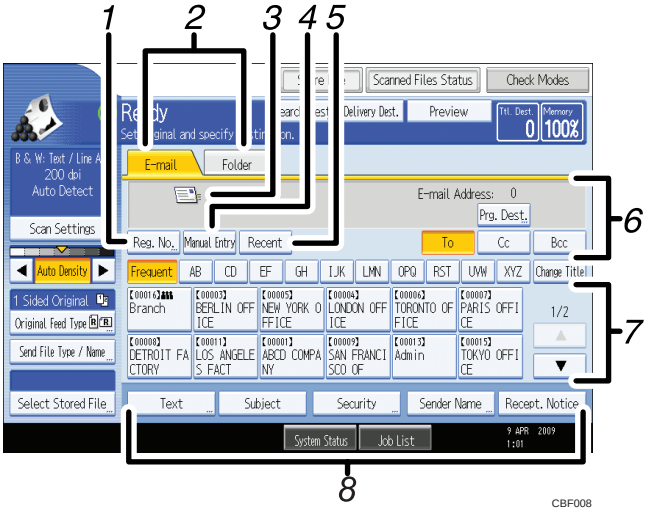
- p.49 "Security Settings to E-mails"

E-mail Screen

This section explains the screen layout when sending scan files by e-mail.

The function items displayed serve as selector keys. You can select or specify an item by pressing it.

When you select or specify an item on the display panel, it is highlighted like Set. Keys that cannot be selected appear like OK.



1. **[Reg. No.]**

   Press this key to specify the destination using a five-digit registration number.

2. **E-mail / Folder**

   Press these tabs to switch between the E-mail screen and Scan to Folder screen.

   Switch the screen also when sending the same files by both e-mail and Scan to Folder.

3. **E-mail icon**

   Indicates that the E-mail screen is displayed.

4. **[Manual Entry]**

   To specify destinations not registered in the address book, press this key, and then enter the e-mail addresses using the soft keyboard that appears.

5. **[Recent]**

   Press this key to select destinations that have been recently specified using [Manual Entry]. If there are multiple recent destinations, press [▲] or [▼] to scroll through them.

6. **Destination field**

   The specified destination appears. If more than one destination has been specified, press [▲] or [▼] to scroll through the destinations.

7. **Destination List**

   The list of destinations registered in the machine appears. If all of the destinations cannot be displayed, press [▲] or [▼] to switch the screen.

   The ( ) symbol indicates a group destination.

   The (or) symbol indicates a destination that can receive encrypted e-mail.

8. **[Text] [Subject] [Security] [Sender Name] [Recept. Notice]**

   Enter the message and specify the subject, security (encryption and a signature), sender, and whether or not to use Message Disposition Notification.

Basic Procedure for Sending Scan Files by E-mail

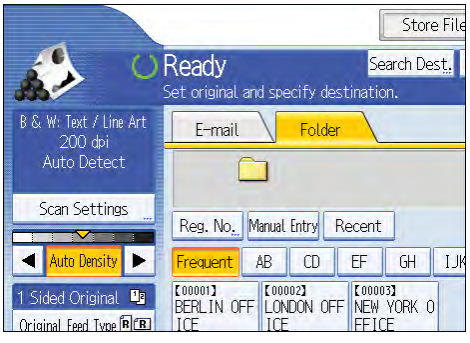
This section explains the basic procedure for sending scan files by e-mail.

1. **Make sure that no previous settings remain.**

   If a previous setting remains, press the [Clear Modes] key.

2. **If the network delivery scanner screen or Scan to Folder screen appears, switch to the E-mail screen.**

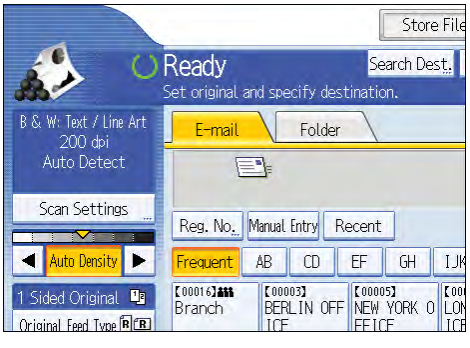
   For details, see "Switching to the E-mail Screen".



3. **Place originals.**

4. **If necessary, press [Scan Settings] to specify scanner settings such as resolution and scan size.**

   For details, see "Various Scan Settings".



5. **If necessary, specify the scanning density.**

   For details, see "Adjusting Image Density".

6. **If necessary, press [Original Feed Type] to specify settings such as original orientation.**

   For details, see "Setting of Original Feed Type".

7. **If necessary, press [Send File Type / Name] to specify settings such as file format and file name.**

   For details, see "Specifying the File Type and File Name".

8. **Specify the destination.**

   You can specify multiple destinations.

   For details, see "Specifying E-mail Destinations".

9. **If necessary, press [Text] to enter the e-mail message.**

   For details, see "Entering the E-mail Message".

10. **If necessary, press [Subject] to specify the e-mail subject.**

    For details, see "Entering the E-mail Subject".

11. **To specify the e-mail sender, press [Sender Name].**

    For details, see "Specifying the E-mail Sender".

12. **If necessary, press [Security] to specify [Encryption] or [Signature].**

    For details, see "Security Settings to E-mails".

13. **To use Message Disposition Notification, press [Recept. Notice].**

    If you select [Recept. Notice], the selected e-mail sender will receive e-mail notification when the e-mail recipient has opened the e-mail.

14. **Press the [Start] key.**

Note

- If you have selected two or more destinations, the destinations can be made to appear one by one by pressing [▲] or [▼] next to the destination field.
- To cancel a selected destination, press [▲] or [▼] to display the destination in the destination field, and then press the [Clear/Stop] key. You can cancel a destination selected from the destination list by pressing the selected destination again.
- In [System Settings], you can specify the administrator's e-mail address as the default sender name. This lets you send e-mail without entering anything for [Sender Name]. For details, see "File Transfer", Network and System Settings Reference.
- Depending on the security setting, the logged-in user may be specified as [Sender Name].
- To use Message Disposition Notification, log in to the machine as a user and specify the sender. Note, however, that the [Recept. Notice] notification e-mail may not be transmitted if the e-mail software of the recipient does not support Message Disposition Notification.
- If you press [Check Modes] before pressing the [Start] key, the initial scanner screen switches to the Check Modes screen. You can use the Check Modes screen to check the settings such as destinations. For details, see "Check Modes".
- If you press [Preview] and then start scanning while [Preview] is selected, the Preview screen appears. You can use this screen to check how the originals are scanned and the scan setting used for scanning. After checking the preview, you can specify whether to send the file or not. For details, see "Preview".
- To cancel scanning, press the [Clear/Stop] key.

- You can also store a scan file and simultaneously send it by e-mail. For details, see "Simultaneous Storage and Sending by E-mail".
- When [Security] is set to [Encryption], if you select multiple destinations and encryption is not configured for some of the destinations, a confirmation message appears before the file is sent.
- After an e-mail is sent, the destination, sender, subject, text, and file name fields will be automatically cleared. If you want to preserve the information in these fields, contact your local dealer.

Reference

- p.30 "Switching to the E-mail Screen"
- p.161 "Various Scan Settings"
- p.170 "Adjusting Image Density"
- p.171 "Setting of Original Feed Type"
- p.181 "Specifying the File Type and File Name"
- p.31 "Specifying E-mail Destinations"
- p.46 "Entering the E-mail Message"
- p.45 "Entering the E-mail Subject"
- p.41 "Specifying the E-mail Sender"
- p.49 "Security Settings to E-mails"
- p.15 "Check Modes"
- p.16 "Preview"
- p.48 "Simultaneous Storage and Sending by E-mail"

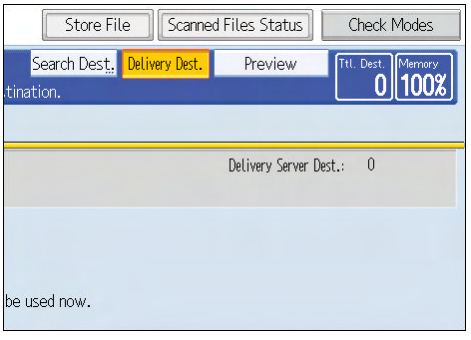
Switching to the E-mail Screen

This section explains how to switch the screen to the E-mail screen.

If the Scan to Folder screen is being displayed, press [E-mail] to switch to the E-mail screen.

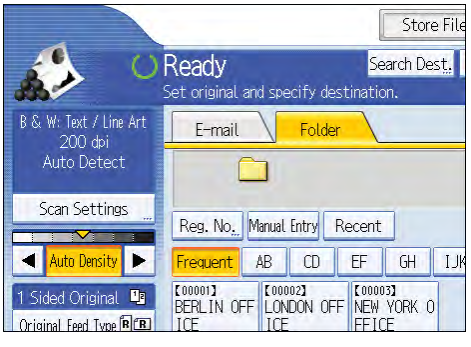
If the network delivery scanner screen is being displayed, switch to the E-mail screen as follows:

1. **Press [Delivery Dest.].**



The E-mail screen or Scan to Folder screen appears.

2. **If the Scan to Folder screen appears, press [E-mail].**



The E-mail screen appears.

Note

- You cannot switch from the network delivery scanner screen or other screens while destinations are being specified. To clear the specified destination, display the destination in the destination field, and then press the [Clear/Stop] key.
- If you are scanning files using WSD, [Swtch Dest.List] or [WSD Dest.] appears instead of [Delivery Dest.]. To switch to the E-mail screen, press [Swtch Dest.List], and then, on the screen that appears, press [E-mail / Folder], or press [WSD Dest.].

Specifying E-mail Destinations

This section explains how to specify e-mail destinations.

You can specify e-mail destinations by any of the following methods:

- Select the destination from the machine's address book
- Enter the e-mail address directly
- Select the destination from recent destinations
- Search the LDAP server for the destination and select it

Before you select destinations, make sure you have selected [To]. If necessary, press [Cc] or [Bcc], and then select destinations.

Note

- You can specify multiple destinations.

Selecting the Destination from the Machine's Address Book

This section explains how to select the destination from the machine's address book.

Important

- **To use this function, you must register the destinations in [System Settings] in advance. For details, see "Registering Addresses and Users for Facsimile/Scanner Functions", Network and System Settings Reference.**

You can use the following methods to select destinations registered in the machine's address book:

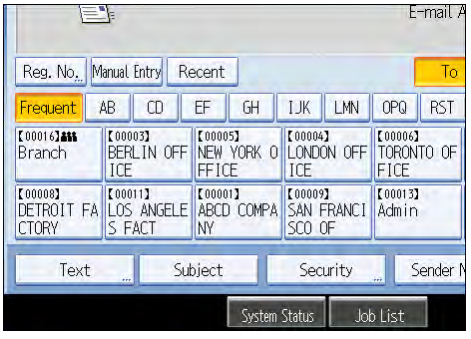
- Select a destination from the list
- Select a destination by entering the registration number
- Select a destination by searching the machine's address book

Selecting a destination from the list

Select the destination from the destination list.

1

1. **In the destination list, press the key including the destination name.**



The key of the selected destination is highlighted, and the destination appears in the destination field at the top of the screen.

If the target destination does not appear, take one of the following steps:

- Display the destination by selecting its initial letter from the title
- Display the destination by pressing [▲] or [▼]

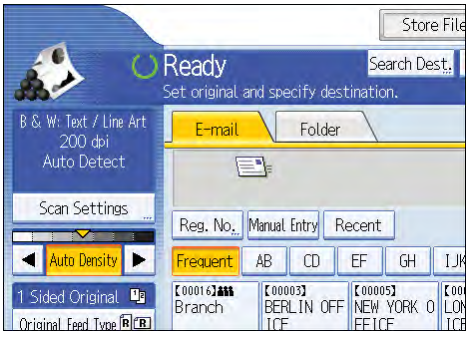
Note

- Depending on the security setting, some destinations may not appear in the destination list.

Selecting destinations by entering the registration numbers

Select the destination from the machine's address book using its registration number.

1. **Press [Reg. No.].**



2. **Using the number keys, enter the five-digit registration number assigned to the required destination.**

If the entered number is less than five digits, press the [#] key after the last number.

Example: To enter 00003

Press the [3] key, and then press the [#] key.

By pressing [Change], you can change the selected destination.

3. **Press [OK].**

Searching the machine's address book for the destination and selecting it

This section explains how to search the machine's address book for the destination and select it.

1. **Press [Search Dest.].**

2. **To search by destination name, press [Name].**

   To search by e-mail address, press [E-mail Address].

   The soft keyboard appears.

   You can also search by combining [Name] and [E-mail Address].

3. **Enter the beginning of the destination name.**

   To search by e-mail address, enter the beginning of the address.

4. **Press [OK].**

5. **If necessary, press [Advanced Search] to specify the detailed search criteria, and then press [OK].**

   By pressing [Advanced Search], you can search using criteria such as [Name], [Fax Destination], [E-mail Address], and [Folder Name]. You can specify search criteria such as [Beginning Word] or [End Word]. You can refine your search using multiple criteria.

   The illustrated screen is an example. The items that actually appear on the screen may differ.

6. **Press [Start Search].**

   Destinations that match the search criteria are displayed.

7. **Select a destination.**
8. **Select [To], [Cc], or [Bcc].**
9. **Press [OK].**

Note

- If [LDAP Search] is set to [On] in [System Settings], check that [Address Book] has been selected before executing the search.
- Search criteria that appear in [Advanced Search], such as [Name], [Fax Destination], [E-mail Address], and [Folder Name], are registered in the machine's address book. For details, see "Registering Addresses and Users for Facsimile/Scanner Functions", Network and System Settings Reference.
- By pressing [Details], you can view details about the selected destinations.
- Up to 100 destinations can be displayed as search results.
- By pressing [Advanced Search], the following criteria appear:
  - [Beginning Word]: The names which start with the entered character or characters are targeted.

    For example, to search for "ABC", enter "A".
  - [End Word]: The names which end with the entered character or characters are targeted.

    For example, to search for "ABC", enter "C".
  - [Exact Match]: The names which correspond to an entered character or characters are targeted.

    For example, to search for "ABC", enter "ABC".
  - [Include one Word]: The names which contain an entered character or characters are targeted.

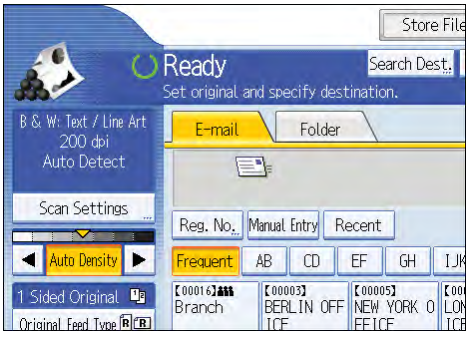
    For example, to search for "ABC", enter "A", "B", or "C".
  - [Exclude Words]: The names which do not contain an entered character or characters are targeted.

    For example, to search for "ABC", enter "D".

Entering an E-mail Address Manually

This section explains how to enter an e-mail address manually.

1. **Press [Manual Entry].**



The soft keyboard appears.

2. **Enter the e-mail address.**
3. **Press [OK].**

Note

- Depending on the security settings, [Manual Entry] may not be displayed.
- To change a registered destination e-mail address, press [Edit] to the left of the destination field to display the soft keyboard, use the soft keyboard to enter the new address, and then click [OK].
- The e-mail address that is entered directly can be registered in the machine's address book. For details, see "Registering a Directly-Entered Destination in the Address Book".

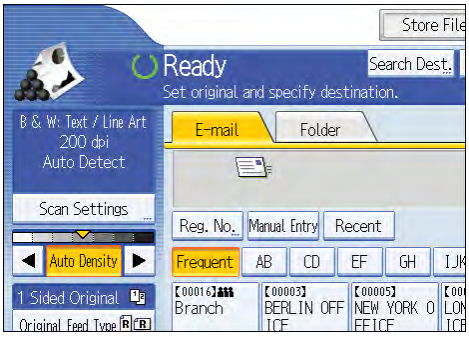
Reference

- p.39 "Registering a Directly-Entered Destination in the Address Book"

Selecting the Destination from Recent Destinations

This section explains how to display destinations that have been recently entered directly, and how to select one of those destinations.

1. **Press [Recent].**



The most recent, directly entered destinations appear.

2. **Select a destination.**

3. **Press [OK].**

Note

- Depending on the security settings, [Recent] may not be displayed.
- If there are multiple recent destinations, press [▲] or [▼] to scroll through them.
- The 10 most recent destinations are displayed. Destinations are deleted in chronological order, oldest first.
- You can add recent destinations to the machine's address book. For details, see "Registering a Recent Destination in the Address Book".

Reference

- p.40 "Registering a Recent Destination in the Address Book"

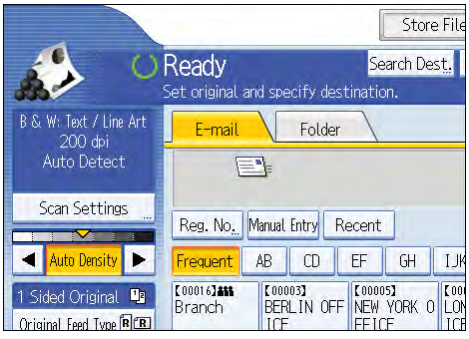
Selecting Destinations by Searching an LDAP Server

This section explains how to search for an address registered in an LDAP server and specify it as an e-mail destination.

Important

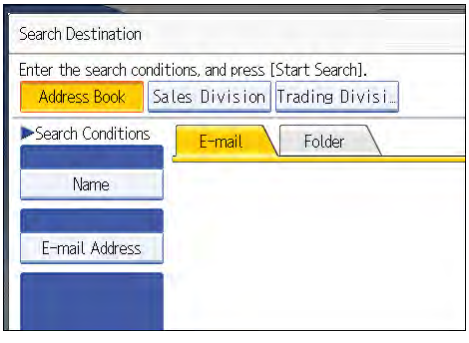
- **To use this function, an LDAP server must be connected to the network.**
- **Under [System Settings], the LDAP server must be registered and [LDAP Search] must be set to [On]. For details, see "System Settings", Network and System Settings Reference.**

1. **Press [Search Dest.].**



2. **Select the LDAP server that appears next to [Address Book].**

   Register the LDAP server in advance in [System Settings].



   If authentication is required to access the selected server, the authentication screen appears. To authenticate, enter the user name and password.

3. **To search by destination name, press [Name].**

   To search by e-mail address, press [E-mail Address].

   The soft keyboard appears.

   You can also search by combining [Name] and [E-mail Address]. If you search by [Name], LDAP server's settings determine whether the search is based on surname or first name. Consult your administrator.

4. **Enter the beginning of the destination name.**

   To search by e-mail address, enter the beginning of the destination address.

5. **Press [OK].**

6. **If necessary, press [Advanced Search] to specify the detailed search criteria, and then press [OK].**

   By pressing [Advanced Search], you can search using criteria such as [Name], [Fax Destination], [E-mail Address], [Company Name], and [Department Name]. You can specify search criteria such as [Beginning Word] or [End Word]. You can refine your search using multiple criteria.

The illustrated screen is an example. The items that actually appear on the screen may differ.

7. **Press [Start Search].**

   Destinations that match the search criteria are displayed.

8. **Select the destination.**

9. **Select [To], [Cc], or [Bcc].**

10. **Press [OK].**

Note

- Search criteria that appear in [Advanced Search], such as [Name], [Fax Destination], [E-mail Address], [Company Name], and [Department Name], are registered in the LDAP server.
- If you specified [Search Options] on [Program / Change / Delete LDAP Server] under [System Settings], you can add a search condition for LDAP search on the [Advanced Search] screen. For details, see "System Settings", Network and System Settings Reference.
- By pressing [Details], you can view details about the selected destinations.
- Up to 100 destinations can be displayed as search results.
- If an e-mail address returned by the LDAP server is too long, it will be impossible to specify it as the destination. For details about the number of characters that can be specified, see "Sending e-mail".
- You can register multiple e-mail addresses in individual LDAP server accounts. However, only one e-mail address will be displayed as the search result. Usually, the address that was registered first on the LDAP server is the address that is displayed.
- By pressing [Advanced Search], the following criteria appear:
  - [Beginning Word]: The names which start with the entered character or characters are targeted.

    For example, to search for "ABC", enter "A".
  - [End Word]: The names which end with the entered character or characters are targeted.

    For example, to search for "ABC", enter "C".
  - [Exact Match]: The names which correspond to an entered character or characters are targeted.

    For example, to search for "ABC", enter "ABC".
  - [Include one Word]: The names which contain an entered character or characters are targeted.

    For example, to search for "ABC", enter "A", "B", or "C".

- [Exclude Words]: The names which do not contain an entered character or characters are targeted.

  For example, to search for "ABC", enter "D".
- [Fuzzy Search]: a vague search (The function of this vague search depends on the system supported by the LDAP server.)

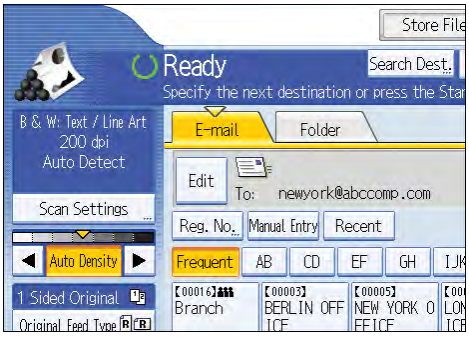
Reference

- p.210 "Sending e-mail"

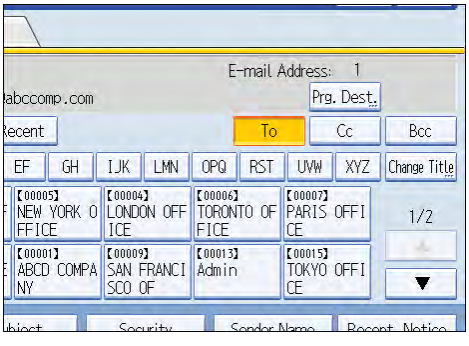
Registering a Directly-Entered Destination in the Address Book

This section explains how to register a directly-entered destination in the machine's address book. You can also register a destination selected from the LDAP server.

1. **In the destination field, display the destination you want to register.**



2. **Press [Prg. Dest.].**



3. **Press [Names], and then specify the name and other information to be registered.**

   For details about specifying the information to be registered, see "Registering Addresses and Users for Facsimile/Scanner Functions", Network and System Settings Reference.

4. **Press [OK].**

1

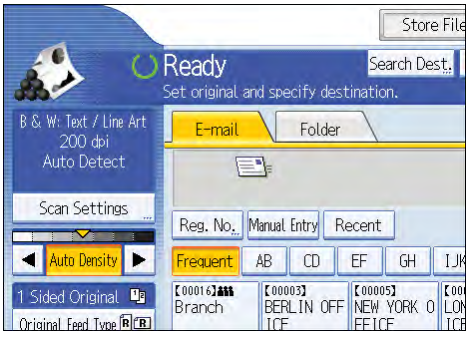
Note

- Depending on the security setting, [Prg. Dest.] may not appear. In such case, you cannot complete the registration.
- To register in the machine's address book a destination searched for and selected from the LDAP server, display the destination, and then press [Prg. Dest.].

Registering a Recent Destination in the Address Book

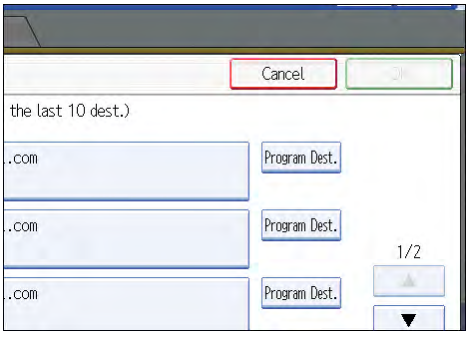
This section explains how to register recent destinations in the machine's address book.

1. **Press [Recent].**



The most recent, directly entered destinations appear.

2. **Press [Program Dest.].**



3. **Press [Names], and then enter the name and other necessary information.**

For details about entering the other information, see "Registering Addresses and Users for Facsimile/ Scanner Functions", Network and System Settings Reference.

4. **Press [OK].**

Note

- Depending on the security settings, [Recent] may not be displayed.
- If there are multiple recent destinations, press [▲] or [▼] to scroll through them.

Specifying the E-mail Sender

This section explains how to specify the e-mail sender.

To send e-mail, you must specify the name of the sender.

You can specify the e-mail sender by any of the following methods:

- Select the sender from the sender list
- Select the sender by entering the registration number
- Select the sender by searching the machine's address book

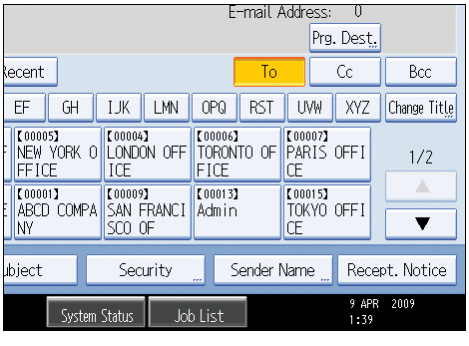
Note

- Senders must be registered in advance under [System Settings]. For details, see "Registering Addresses and Users for Facsimile/Scanner Functions", Network and System Settings Reference.
- In [System Settings], you can specify the administrator's e-mail address as the default sender name. This lets you send e-mail without entering anything for [Sender Name]. For detail, see "File Transfer", Network and System Settings Reference.
- Depending on the security setting, the logged-in user may be specified as [Sender Name].
- When a protection code has been set, a screen for entering the protection code appears after selecting the sender. Enter the protection code, and then press [OK]. If the protection code you entered is correct, the sender name is displayed.

Selecting a Sender from the List

This section explains how to select the sender from the machine's sender list.

1. **Press [Sender Name].**

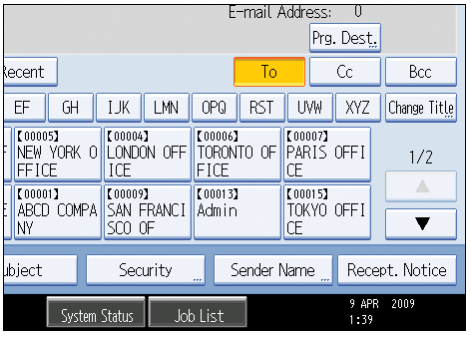


2. **Select the sender.**
3. **Press [OK].**

Using a Registration Number to Specify a Sender Name

Select the sender using the registration numbers specified by users in the machine's address book.

1. **Press [Sender Name].**



2. **Press [Registration No.].**
3. **Using the number keys, enter the five-digit registration number assigned to the sender.**

   If the entered number is less than five digits, press the [#] key after the last number.

   Example: To enter 00006

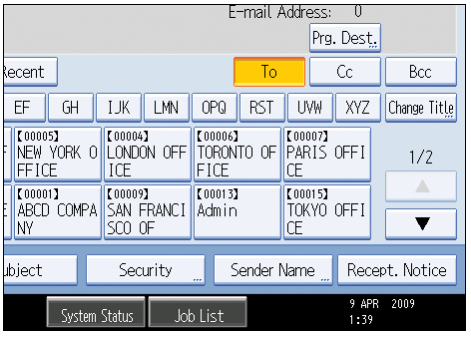
   Press the [6] key, and then press the [#] key.

   By pressing [Change], you can change the selected destination.
4. **Press [OK] twice.**

Selecting the Sender by Searching the Machine's Address Book

This section explains how to select the sender by searching the machine's address book.

1. **Press [Sender Name].**



2. **Press [Search].**

3. **To search by user name, press [Name].**

   To search by e-mail address, press [E-mail Address].

   The soft keyboard appears.

   You can also search by combining [Name] and [E-mail Address].

4. **Enter the beginning of the sender's name you want to search for.**

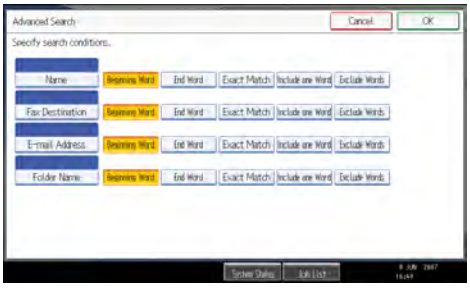
   To search by e-mail address, enter the beginning of the address.

5. **Press [OK].**

6. **If necessary, press [Advanced Search] to specify the detailed search criteria, and then press [OK].**

   By pressing [Advanced Search], you can search using criteria such as [Name], [Fax Destination], [E-mail Address], and [Folder Name].

   You can specify search criteria such as [Beginning Word] or [End Word]. You can refine your search using multiple criteria.



   The illustrated screen is an example. The items that actually appear on the screen may differ.

7. **Press [Start Search].**

   Destinations that match the search criteria are displayed.

8. **Select the sender.**

9. **Press [OK] twice.**

Note

- Search criteria that appear in [Advanced Search], such as [Name], [Fax Destination], [E-mail Address], and [Folder Name], are registered in the machine's address book. For details, see "Registering Addresses and Users for Facsimile/Scanner Functions", Network and System Settings Reference.
- By pressing [Details], you can view details about the selected sender.
- By pressing [Advanced Search], the following criteria appear:
  - [Beginning Word]: The names which start with the entered character or characters are targeted.

    For example, to search for "ABC", enter "A".
  - [End Word]: The names which end with the entered character or characters are targeted.

For example, to search for "ABC", enter "C".

- [Exact Match]: The names which correspond to an entered character or characters are targeted.

  For example, to search for "ABC", enter "ABC".

- [Include one Word]: The names which contain an entered character or characters are targeted.

  For example, to search for "ABC", enter "A", "B", or "C".

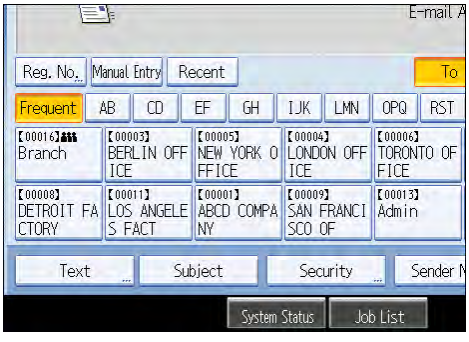
- [Exclude Words]: The names which do not contain an entered character or characters are targeted.

  For example, to search for "ABC", enter "D".

Entering the E-mail Subject

When sending a scan file by e-mail, you can enter a subject line for the e-mail.

1. **Press [Subject].**



2. **Enter the subject.**

   To enter characters, press [Text Entry].

   To enter symbols, press [Symbol Entry].

   To add predefined User Text registered on this machine, press [User Text].

   For details about entering the text, see "Entering Text", About This Machine.

3. **Press [OK].**

Note

- If you do not specify the e-mail subject, the settings specified in [Default E-mail Subject] on the [Send Settings] tab under [Scanner Features] will be applied. For details, see "Send Settings".

Reference

- p.203 "Send Settings"

Entering the E-mail Message

1

This section explains how to enter the e-mail message.

The message can be created in the following ways:

- Select the registered e-mail message from the list
- Enter the message directly

Important

- **The messages that can be selected from the list must be registered in [System Settings] in advance. For details, see "File Transfer", Network and System Settings Reference.**

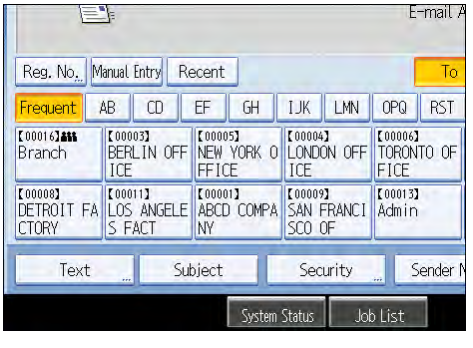
Note

- Through Web Image Monitor settings, you can attach a signature that includes sender information, such as company information, to all e-mail messages. For details about the settings, see Web Image Monitor Help.

Selecting a Message from the List

You can select a message from the list.

1. **Press [Text].**



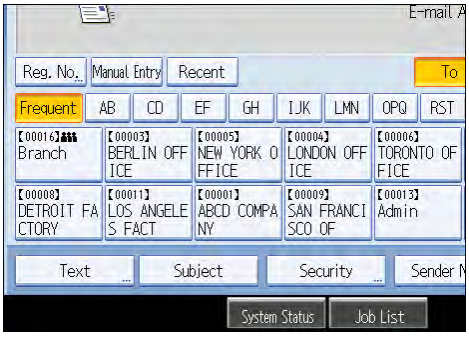
2. **Select a message.**

3. **Press [OK].**

Manual Entry of a Message

You can enter the message manually.

1. **Press [Text].**



2. **Press [Manual Entry].**

   The soft keyboard appears.

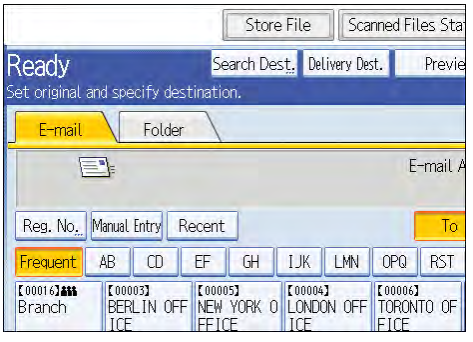
3. **Enter the message.**

4. **Press [OK] twice.**

Simultaneous Storage and Sending by E-mail

This section explains how to store a file and simultaneously send it by e-mail.

1. **Press [Store File].**



2. **Select [Store to HDD + Send].**
3. **If necessary, specify the stored file's information, such as [User Name], [File Name], and [Password].**

   For details, see "Specifying File Information for a Stored File".
4. **Press [OK].**
5. **Specify the destination, make any other necessary settings, and then send the e-mail.**

   For details about sending a file by e-mail, see "Basic Procedure for Sending Scan Files by E-mail".
6. **Press the [Start] key.**

Note

- Depending on the security setting, [Access Privileges] may appear instead of [User Name]. For details about specifying [Access Privileges], consult the administrator.
- You can resend stored files by e-mail. To resend stored files, select the files on the Select Stored File screen, and then send them. For details, see "Sending a Stored File".
- If a file is sent and stored simultaneously with [Security] set, the e-mail will be encrypted and the signature applied, but the stored file will be neither encrypted nor signed. For details about encrypting stored files, see "Encrypting Data on the Hard Disk", Security Reference.

Reference

- p.109 "Specifying File Information for a Stored File"
- p.27 "Basic Procedure for Sending Scan Files by E-mail"
- p.119 "Sending a Stored File"

Security Settings to E-mails

This section explains the procedure for applying security (encryption and a signature) to e-mail.

Applying security (encryption and a signature) to e-mail helps prevent spoofing and information leakage.

Note

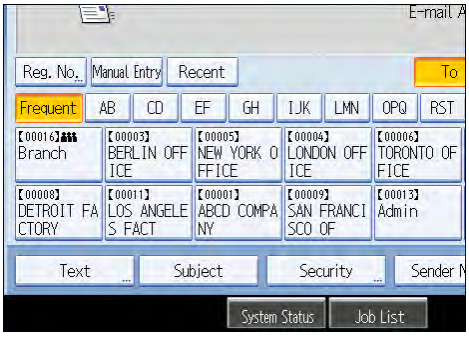
- The S/MIME is used to set security. For details about security settings, consult your network administrator.
- Applying security to e-mail can reduce transmission speed.

Sending Encrypted E-mail

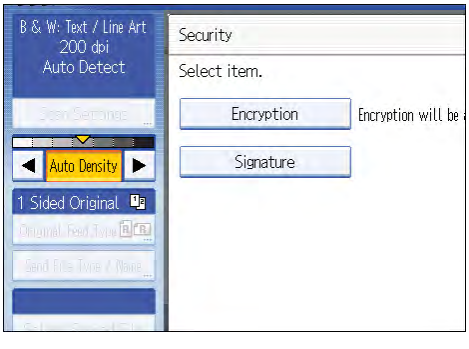
Use the following procedure to specify a destination for which encryption is configured, and encrypt and send an e-mail.

Destinations for which encryption can be configured for each transmission are indicated by this symbol .

1. **Press [Security].**



2. **Select [Encryption].**



3. **Press [OK].**

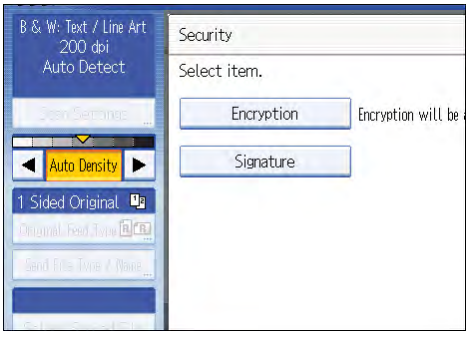
Note

- Encrypting e-mail will increase its size.
- When you specify a destination denoted by the symbol (which indicates that e-mail sent to this destination is always encrypted) encrypted e-mail will be sent regardless of the setting specified in [Security].
- If you have selected multiple destinations including destinations for which encryption has not been configured, e-mail sent to such destinations will not be encrypted even if you specify encryption.
- If you selected [Store to HDD + Send], the e-mail will be encrypted, but the stored file will not be encrypted.For details about encrypting stored files, see "Encrypting Data on the Hard Disk", Security Reference.

Sending E-mail with a Signature

Use the following procedure to apply a signature to an e-mail that has scan file attachments.

1. **Press [Security].**
2. **Select [Signature].**



3. **Press [OK].**

Note

- The certificate (device certificate) installed on this machine is used to attach signatures.
- Note that the following can result if certain signature settings are specified by the administrator:
  - [Signature] does not appear. This is because you cannot apply signatures to scan files that are sent by e-mail.
  - You cannot change the [Signature] settings. This is because a signature is always applied to scan files that are sent by e-mail.

Sending the URL by E-mail

This section explains how to send the URL of a scanned file by e-mail.

Use this function if network restrictions prevent you sending attachments by email.

Important

- **Depending on your e-mail application, a phishing warning might appear after you receive an e-mail message. To prevent phishing warnings appearing after you receive e-mail from a specified sender, you must add the sender to your e-mail application's exclusion list. For details about how to do this, see your e-mail application's Help.**

1. **In [Scanner Features], on the [Send Settings] tab, press [Stored File E-mail Method], and then select [Send URL Link].**

   For details about specifying the setting, see "Send Settings".

2. **Return to the initial scanner screen, and then press [Store File] to select [Store to HDD + Send].**

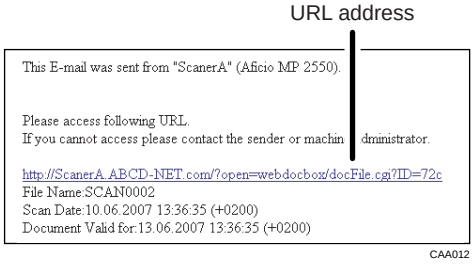
   To send the URL by e-mail, you must select [Store to HDD + Send]. For details, see "Simultaneous Storage end Sending by E-mail".

3. **Press [OK].**

4. **Specify the e-mail destination, make any other necessary settings, and then send the e-mail.**

   For details about sending e-mail, see "Basic Procedure for Sending Scan Files by E-mail".

   An e-mail similar to the following will be sent to the destination:



5. **In the e-mail destination, click the URL.**

   Web Image Monitor starts.

6. **View, delete, send, or download the file over the network using Web Image Monitor.**

Note

- For details about Web Image Monitor functions and their settings, see "Monitoring and Configuring the Machine", Network and System Settings Reference.
- It is recommended that you use Web Image Monitor on the same network environment.

- Depending on the environment, even if you click the URL in the file sent by e-mail, the browser may not start and you may not be able to view the file. If this happens, click the same URL again, or manually enter the URL in the browser's address bar.
- To display details about the functions for managing stored files using Web Image Monitor, click [Help] on the upper right of each Web browser's window.
- You can send the URL by e-mail and simultaneously send it by Scan to Folder. In this case, the file is sent to the Scan to Folder destination, not the URL.
- To send a stored file, see "Sending a Stored File".

Reference

- p.203 "Send Settings"
- p.48 "Simultaneous Storage and Sending by E-mail"
- p.27 "Basic Procedure for Sending Scan Files by E-mail"
- p.119 "Sending a Stored File"

2. Sending Scan Files to Folders

Using the Scan to Folder function, you can send scan files over the network to shared folders, FTP server folders, or NetWare folders. You can send scan files to a shared folder on a computer simply by placing the original and using the control panel to specify the recipient.

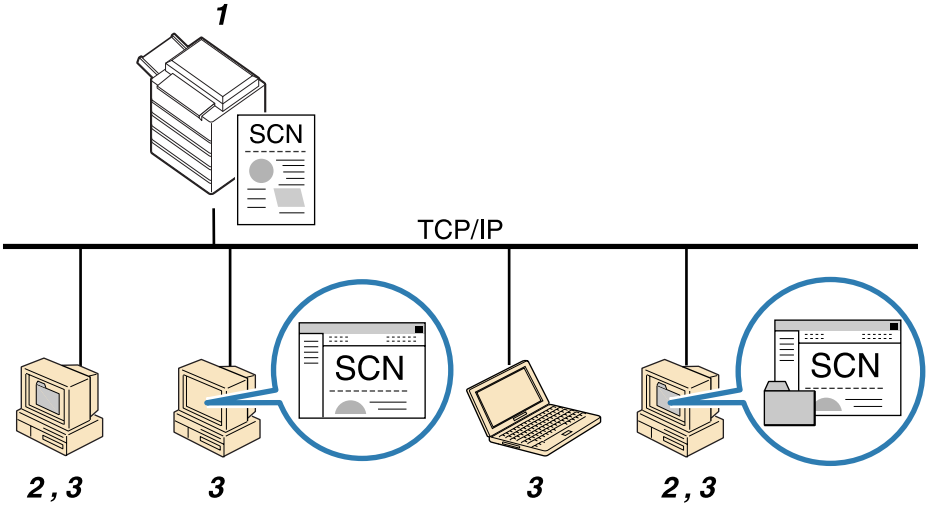
Before Sending Files by Scan to Folder

This section describes the preparations and procedure for sending files by Scan to Folder.

Overview of Sending Scan Files by Scan to Folder

This section describes the process for sending scan files by Scan to Folder.

Sending files to shared folders



1. **This machine**

   After you place the original and specify a destination computer on the control panel, the scanned document is sent to a shared folder on the destination computer. To send scan files to shared network folders, use the SMB protocol.

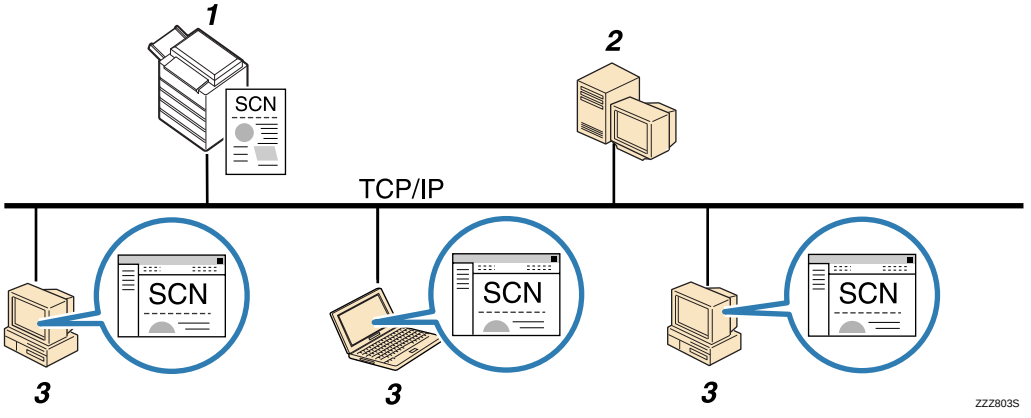
2. **Destination Computer**

   The scanned document is sent to the specified shared folder.

3. **Client computer**

   The scanned document is sent to the specified shared folder. From a client computer, you can also browse scanned files sent to shared folders on different computers.

Sending files to an FTP server



1. **This machine**

   You can send scan files to FTP server folders. To send scan files to FTP server folders, use the FTP protocol.

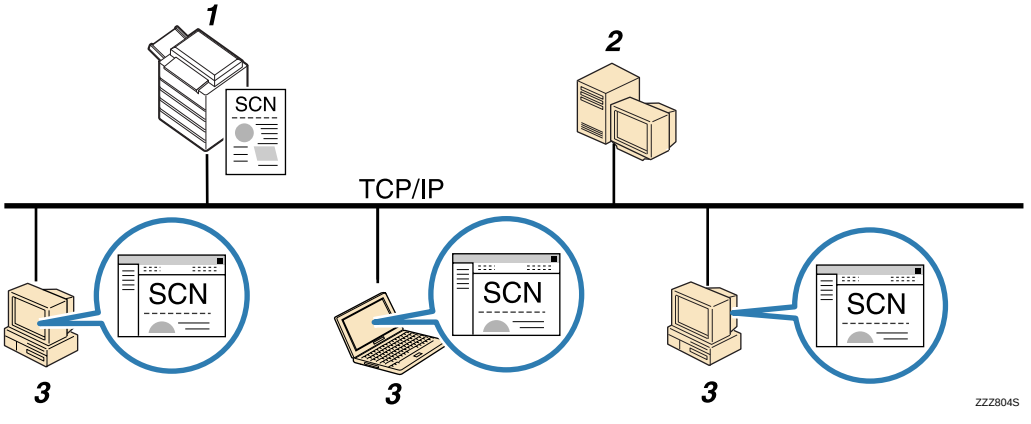
2. **FTP server**

   The FTP server is a server that provides file transfer services among computers on the same network. Transferred files are stored on this server. It is essential to have the FTP server inside the LAN/WAN where this machine belongs. It is not possible to access an FTP server via a proxy server.

3. **Client computer**

   You can browse scanned files saved to an FTP server from a client computer. You need to have an FTP client program on the computer to connect to an FTP server.

Sending files to a NetWare server



1. **This machine**

   You can send scan files to NetWare folders. To send scan files to NetWare folders, use the NCP protocol.

2. **NetWare server**

   You can use this server to share files over the network via NetWare. By sending image data to the server, files can be stored on the server.

3. **Client computer**

   To download files, a computer must be running the NetWare client application and be logged in to the server.

Preparation for Sending by Scan to Folder

To send scanned files by Scan to Folder, you must first perform the following:

- Check the machine is properly connected to the network
- Configure the network settings in [System Settings]
- Configure the necessary settings in [Scanner Features]
- Creating a shared folder on a computer running Windows/Confirming a computer's information
- Creating a shared folder on a computer running Mac OS X/Confirming a computer's information

Note

- You can create the shared folder under Windows 2000/XP/Vista/7, Windows Server 2003/2003 R2/2008/2008 R2, and Mac OS X 10.2 or later.
- Files can be sent by SMB in NetBIOS over TCP/IP environments only. Files cannot be sent by SMB in NetBEUI environments.

Checking the machine is properly connected to the network

Check that this machine is properly connected to the network.

For details about how to connect this machine to a network, see "Connecting to the Interface", Network and System Settings Reference.

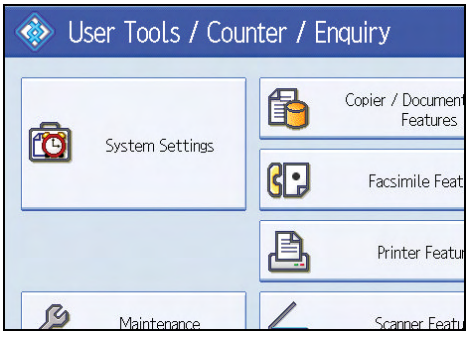
Configuring the network settings in [System Settings]

Configure the network settings in [System Settings] according to your environment and how you will be using the machine.

The following procedure explains connecting this machine to an IPv4 network using Ethernet cable.

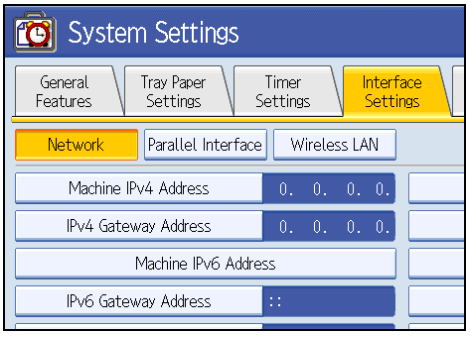
Note that the settings you must configure will vary depending on your operating environment. For details about network settings and configuration procedures, see "Network Settings Required to Use Scan to Folder Function", Network and System Settings Reference.

1. **Press the [User Tools/Counter] key, and then press [System Settings].**



   The System Settings screen appears.

2. **Press the [Interface Settings] tab.**



3. **Press [Machine IPv4 Address] to specify the machine's IPv4 address.**

   To specify a static IPv4 address for this machine, press [Specify], and then enter the IPv4 address and subnet mask.

   To obtain an IPv4 address from a DHCP server automatically, press [Auto-Obtain (DHCP)].

4. **Press [IPv4 Gateway Address], and then enter the IPv4 gateway address.**
5. **Press [Effective Protocol], and then make [IPv4] active.**
6. **Press [Exit] twice.**

Note

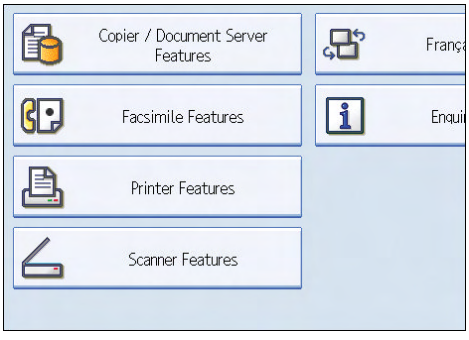
- If an extended wireless LAN board (optional) is installed, press [LAN Type] on the [Interface Settings] tab, then press [Ethernet], and then configure the network settings.

Configure the necessary settings in [Scanner Features]

Using [Scanner Features], you can make or change various settings related to the scanner function, such as compressing scan data or printing the scanner journal. Configure the scanner settings according to your environment and how you will be using the machine.

This section explains how to display the Scanner Features screen. For details about the settings on this screen, see "Scanner Features".

1. **Press the [User Tools/Counter] key, and then press [Scanner Features].**



The Scanner Features screen appears.

2. **Press the [General Settings], [Scan Settings], [Send Settings], or [Initial Settings] tabs and configure the relevant settings on those tabs.**

Reference

- p.197 "Scanner Features"

Creating a shared folder on a computer running Windows/Confirming a computer's information

The following procedures explain how to create a shared folder on a computer running Windows, and how to confirm the computer's information. In these examples, Windows XP Professional is the operating system, and the computer is a member in a network domain.

Step 1: Creating a shared folder on a computer running Microsoft Windows

Create a shared destination folder in Windows and enable sharing.

Important

- **You must log in as an Administrators group member to create a shared folder.**
- **If "Everyone" is left selected in step 5, the created shared folder will be accessible by all users. This is a security risk, so we recommend that you give access rights only to specific users. Use the following procedure to remove "Everyone" and specify user access rights.**

1. **Create a folder, just as you would create a normal folder, in a location of your choice on the computer.**
2. **Right-click the folder, and then click [Sharing and Security].**
3. **On the [Sharing] tab, select [Share this folder].**
4. **Click [Permissions].**

5. **In the [Group or user names:] list, select "Everyone", and then click [Remove].**
6. **Click [Add].**
7. **In the [Select Users or Groups] window, click [Advanced].**
8. **Specify one or more object types, select a location, and then click [Find Now].**
9. **From the list of results, select the groups and users you want to grant access to, and then click [OK].**
10. **In the [Select Users or Groups] window, click [OK].**
11. **In the [Groups or user names:] list, select a group or user, and then, in the [Allow] column of the permissions list, select either the [Full Control] or [Change] check box.**

    Configure the access permissions for each group and user.
12. **Click [OK].**
13. **Select the [Security] tab, and then configure the access permissions.**

    Add to the list the groups and users whom you want to grant access to, and then configure the access permissions for each. The procedure is the same as the procedure explained in steps 6 through 11.
14. **Click [OK].**

Note

- If you are creating a shared folder for the first time on this computer, you must enable the file sharing function. For details, see Windows Help.
- To register a shared folder in the machine's address book, you need the computer's IP address or computer name, and the user name and password of a user who has access permissions for the shared folder.

Reference

- For details about registering shared folders, see "Registering Folders", Network and System Setting Reference.

Step 2: Confirming the user name and computer name

Confirm the user name and the name of the computer you will send scanned documents to.

1. **On the [Start] menu, point to [All Programs], then [Accessories], and then click on [Command Prompt].**

   The command prompt window opens.
2. **Enter the command "ipconfig/all", and then press [Enter].**
3. **Confirm the name of the computer.**

   The computer's name is displayed under [Host Name].

   You can also confirm the IPv4 address. The address displayed under [IP Address] is the IPv4 address of the computer.

4. **Next, enter the command "set user", and then press [Enter]. (Be sure to put a space between "set" and "user".)**
5. **Confirm the user name.**

   The user name is displayed under [USERNAME].

Note

- Depending on the operating system or security settings, it might be possible to specify a user name that does not have a password assigned. However, we recommend that for greater security you select a user name that has a password.

Creating a shared folder on a computer running Mac OS X/Confirming a computer's information

The following procedures explain how to create a shared folder on a computer running Mac OS X, and how to confirm the computer's information. Max OS X 10.5 is used in these examples.

Step 1: Creating a shared folder on a computer running Mac OS X

Important

- **You must log in as an administrator to create a shared folder.**

1. **Create the folder that you want to send scan files to.**
2. **On the Apple menu, click [System Preferences].**
3. **Click [Sharing].**
4. **Select the [File Sharing] check box.**
5. **Click [Options].**
6. **Select the [Share files and folders using SMB.] check box.**
7. **Select the account that will be used to access the shared folder.**
8. **If the [Authenticate] screen appears, enter the password for the account, click [OK], and then click [Done].**
9. **Under the [Shared Folders:] list, click [+] (new).**
10. **Select the folder you have created, and then click [Add].**
11. **Make sure that the permissions for the user who will access this folder are set to [Read&Write].**

Note

- To register a shared folder in the machine's address book, you need the computer's IP address, and the user name and password of a user who has access permissions for the shared folder.

Step 2: Confirming the computer's name and the user name

Confirm the computer name and the user name for the computer you will send scanned documents to.

1. **On the Apple menu, click [About This Mac].**

   The [About This Mac] window appears.

2. **Click [More Info...].**

   The computer's information screen appears.

3. **In the [Contents] pane, select [Software], and then confirm the computer name and user name under "System Software Overview".**

   The computer name is displayed under [Computer Name].

   The user name is displayed under [User Name].

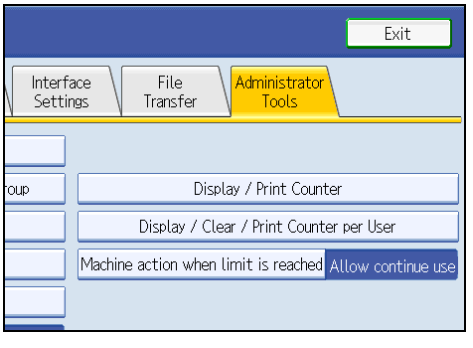
Note

- Depending on the operating system or security settings, you might be able to specify a user name that does not have a password assigned. However, we recommend that you select a user name that has a password.
- To confirm the IP address: on the Apple menu, click [System Preferences], and then click [Network] on the System Preferences window. Then click [Ethernet]. The address displayed in the IP address field is the IP address of the computer.

Registering Destination Folders in the Address Book

You can register the addresses of frequently-used destination folders in the address book. This section explains how to register destination folders in the address book.

1. **Press the [User Tools/Counter] key, and then press [System Settings].**
2. **Press the [Administrator Tools] tab.**



3. **Press [Address Book Management].**

4. **Press [New Program], and then enter necessary information.**

   You can register the e-mail address in groups.

5. **Press [Exit] twice.**

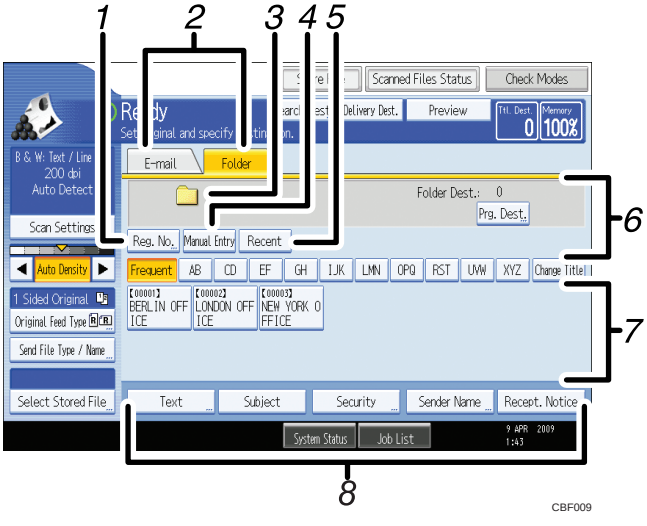
Note

- For details about registering the address of a destination folder in the address book, see "Registering Folders", Network and System Settings Reference.
- You can register entries in the address book using Web Image Monitor. For details about how to display Web Image Monitor, see "Monitoring and Configuring the Machine", Network and System Settings Reference. For details about registering addresses in the address book, see Web Image Monitor Help.

Scan to Folder Screen

This section describes the screen layout when sending scan files by Scan to Folder.

The function items displayed serve as selector keys. You can select or specify an item by pressing it. When you select or specify an item on the display panel, it is highlighted like Set. Keys that cannot be selected appear like OK.



1. **[Reg. No.]**

   Press to specify a destination using a five-digit registration number.

2. **E-mail / Folder**

   Press to switch between the Scan to Folder screen and E-mail screen.

   Also switch the screen when sending a file simultaneously by both Scan to Folder and e-mail.

3. **Scan to Folder icon**

   Shows that the Scan to Folder screen is displayed.

4. **[Manual Entry]**

   To specify destinations not registered in the address book, press this key to display the soft keyboard, and then enter the address of the destination folder.

5. **[Recent]**

   Press this key to select destinations that have been recently specified using [Manual Entry]. If there is more than one recent destination, press [▲] or [▼] to scroll through them.

6. **Destination field**

   The specified destination appears. If more than one destination has been specified, press [▲] or [▼] to scroll through the destinations.

7. **Destination List**

   The list of destinations registered in the machine appears.

   If all of the destinations cannot be displayed, press [▲] or [▼] to switch the screen.

   The (👥) symbol indicates a group destination.

8. **[Text] [Subject] [Security] [Sender Name] [Recept. Notice]**

   Enter the message and specify the subject, e-mail security (encryption and a signature), sender, and whether or not to use Message Disposition Notification. The entries will be used for e-mail transmission when sending files simultaneously by Scan to Folder and e-mail. For details, see "Sending Scan Files by E-mail".

Reference

- p.21 "Sending Scan Files by E-mail"

Basic Procedure When Using Scan to Folder

This section describes the basic procedure involved in using Scan to Folder.

Reference

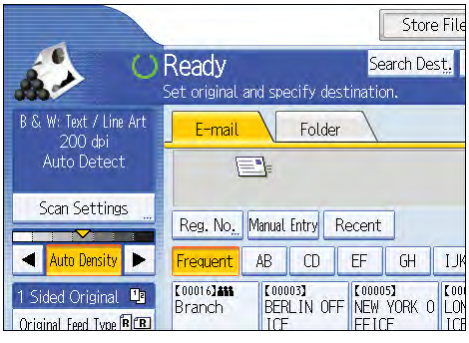
- Before performing this procedure, refer to “Preparation for Sending by Scan to Folder” and confirm the details of the destination computer. Also refer to “Registering Folders”, Network and System Settings Reference, and register the address of the destination computer to the address book.

1. **Make sure that no previous settings remain.**

   If a previous setting remains, press the [Clear Modes] key.

2. **If the network delivery scanner screen or E-mail screen appears, switch to the Scan to Folder screen.**

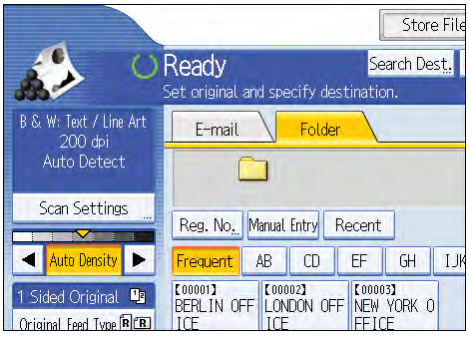
   For details, see "Switching to the Scan to Folder Screen".



3. **Place originals.**

4. **If necessary, press [Scan Settings] to specify scanner settings such as resolution and scan size.**

   For details, see "Various Scan Settings".



5. **If necessary, specify the scanning density.**

   For details, see "Adjusting Image Density".

6. **If necessary, press [Original Feed Type] to specify settings such as original orientation.**

   For details, see "Setting of Original Feed Type".

7. **If necessary, press [Send File Type / Name] to specify settings such as file format and file name.**

   For details, see "Specifying the File Type and File Name".

8. **Specify the destination.**

   You can specify multiple destinations.

   For details, see "Specifying Scan to Folder Destinations".

9. **Press the [Start] key.**

Note

- If you have selected more than one destination, you can press [▲] or [▼] next to the destination field to scroll through the destinations.
- To cancel a selected destination, press [▲] or [▼] to display the destination in the destination field, and then press the [Clear/Stop] key. You can cancel a destination selected from the destination list by pressing the selected destination again.
- If you press [Check Modes] before pressing the [Start] key, the initial scanner screen switches to the Check Modes screen. You can use the Check Modes screen to check the settings such as destinations. For details, see "Check Modes".
- If you press [Preview], and then start scanning while [Preview] is highlighted, the Preview screen appears. You can use this screen to check how the originals are scanned and the scan settings used for scanning. After checking the preview, you can specify whether to send the file or not. For details, see "Preview".
- To cancel scanning, press the [Clear/Stop] key.
- You can also store a file and simultaneously send it by Scan to Folder. For details, see "Simultaneous Storage and Sending by Scan to Folder".
- After scan files are sent, the destination and file name fields will be automatically cleared. If you want to preserve the information in these fields, contact your local dealer.

Reference

- p.55 "Preparation for Sending by Scan to Folder"
- p.66 "Switching to the Scan to Folder Screen"
- p.161 "Various Scan Settings"
- p.170 "Adjusting Image Density"
- p.171 "Setting of Original Feed Type"
- p.181 "Specifying the File Type and File Name"
- p.67 "Specifying Scan to Folder Destinations"
- p.15 "Check Modes"

- p.16 "Preview"
- p.83 "Simultaneous Storage and Sending by Scan to Folder"

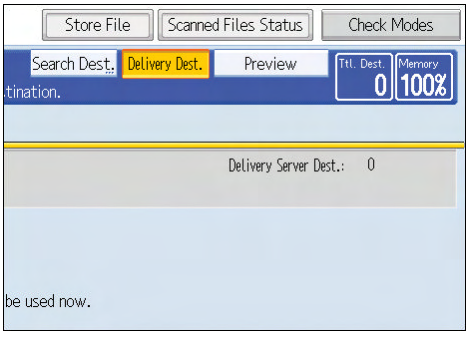
Switching to the Scan to Folder Screen

This section explains how to switch to the Scan to Folder screen.

If the E-mail screen is being displayed, press the [Folder] tab to switch to the Scan to Folder screen.

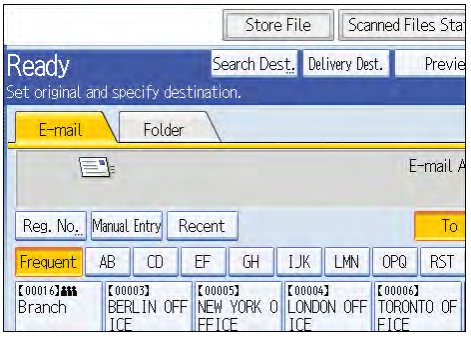
If the network delivery scanner screen is being displayed, switch to the Scan to Folder screen as follows:

1. **Press [Delivery Dest.].**



The E-mail screen or Scan to Folder screen appears.

2. **If the E-mail screen appears, press the [Folder] tab.**



The Scan to Folder screen appears.

Note

- You cannot switch from the network delivery scanner screen or other screens while destinations are being specified. To clear the specified destination, display the destination in the destination field, and then press the [Clear/Stop] key.
- If you are scanning files using WSD, [Swtch Dest.List] or [WSD Dest.] appears instead of [Delivery Dest.]. To switch to the Scan to Folder screen, press [Swtch Dest.List], and then, on the screen that appears, press [E-mail / Folder], or press [WSD Dest.].

Specifying Scan to Folder Destinations

This section explains how to specify Scan to Folder destinations.

You can send a file by Scan to Folder by any of the following methods:

- Select a destination registered in the machine's address book
- Send a file to a shared network folder
- Send a file to an FTP server
- Send a file to a NetWare server
- Select a destination from recent destinations

Note

- You can specify multiple destinations.

Selecting the Destination from the Machine's Address Book

This section explains how to select the destination from the machine's address book.

Important

- **To use this function, you must register the destinations in [System Settings] in advance.**

You can select a destination registered in the machine's address book by any of the following methods:

- Select the destination from the destination list
- Select the destination by entering its registration number
- Select the destination by searching the machine's address book

Note

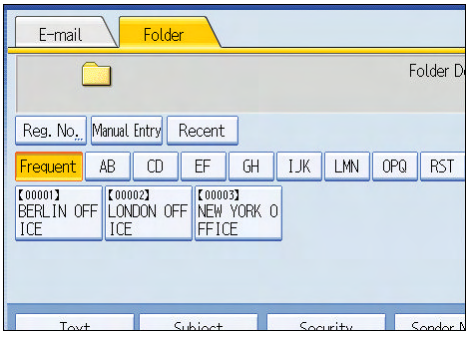
- If you have specified the address protection code for accessing the address book, the screen for entering the address protection code appears. Enter the protection code, and then press [OK]. If the protection code you entered is correct, you can specify Scan to Folder destinations from the address book.
- Depending on the security setting, some destinations may not appear in the destination list.

Selecting a destination registered in the destination list

Select the destination from the destination list.

1. **In the destination list, press the key including the destination name.**

   The key of the selected destination is highlighted, and the destination appears in the destination field at the top of the screen.



If the target destination does not appear, take one of the following steps:

- Display the destination by selecting its initial letter from the title
- Display the destination by pressing [▲] or [▼]

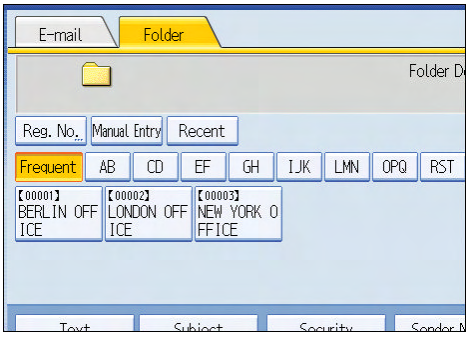
Note

- Depending on the security setting, some destinations may not appear in the destination list.

Selecting destinations by entering the registration numbers

Select the destination from the machine's address book using its registration number.

1. **Press [Reg. No.].**



2. **Enter the five-digit registration number that has been assigned to a destination folder using the number keys.**

   If the entered number is less than five digits, press the [#] key after the last number.

   Example: To enter 00004

   Press the [4] key, and then press the [#] key.

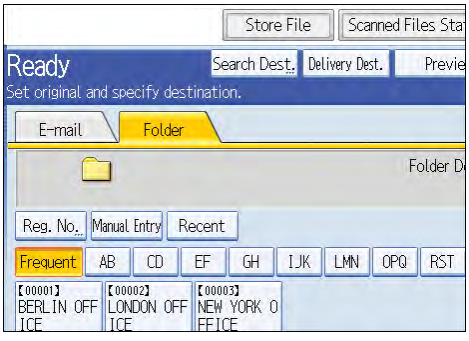
   By pressing [Change], you can change the selected destination.

3. **Press [OK].**

Searching the machine's address book for the destination and selecting it

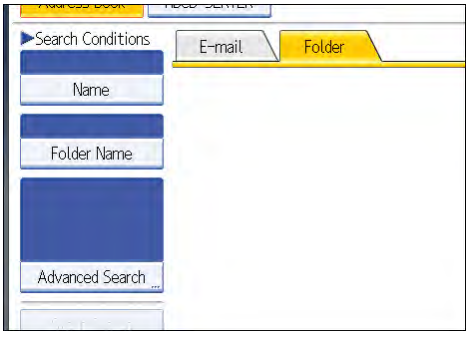
This section explains how to search the machine's address book for the destination and select it.

1. **Press [Search Dest.].**



2. **To search by destination name, press [Name].**

   To search by path, press [Folder Name].



   The soft keyboard appears.

   You can also search by combining [Name] and [Folder Name].

3. **Enter the beginning of the destination name.**

   To search by path, enter the beginning of the path.

4. **Press [OK].**

5. **If necessary, press [Advanced Search] to specify the detailed search criteria, and then press [OK].**

   By pressing [Advanced Search], you can search using criteria such as [Name], [Fax Destination], [E-mail Address], and [Folder Name].

   You can specify search criteria such as [Beginning Word] or [End Word]. You can refine your search using multiple criteria.

The illustrated screen is an example. The items that actually appear on the screen may differ.

6. **Press [Start Search].**

   Destinations that match the search criterion are displayed.

7. **Select the destination folder.**

8. **Press [OK].**

Note

- Search criteria that appear in [Advanced Search], such as [Name], [Fax Destination], [E-mail Address], and [Folder Name], are registered in the machine's address book. For details, see "Registering Addresses and Users for Facsimile/Scanner Functions", Network and System Settings Reference.
- By pressing [Details], you can view details about the selected destinations.
- Up to 100 destinations can be displayed as search results.
- By pressing [Advanced Search], the following criteria appear:
  - [Beginning Word]: The names which start with the entered character or characters are targeted.

    For example, to search for "ABC", enter "A".
  - [End Word]: The names which end with the entered character or characters are targeted.

    For example, to search for "ABC", enter "C".
  - [Exact Match]: The names which correspond to an entered character or characters are targeted.

    For example, to search for "ABC", enter "ABC".
  - [Include one Word]: The names which contain an entered character or characters are targeted.

    For example, to search for "ABC", enter "A", "B", or "C".
  - [Exclude Words]: The names which do not contain an entered character or characters are targeted.

    For example, to search for "ABC", enter "D".

Sending Files to a Shared Network Folder

This section explains how to specify the destination when sending files to a shared network folder.

Important

- **When sending to a shared folder on a network, refer to "Preparation for Sending by Scan to Folder" and confirm the following items for the destination computer:**
  - **Destination computer name**
  - **Destination computer's user name and password**
  - **Destination shared folder name**
- **Depending on the operating system of the client computer, access to the shared folder may require authentication.**

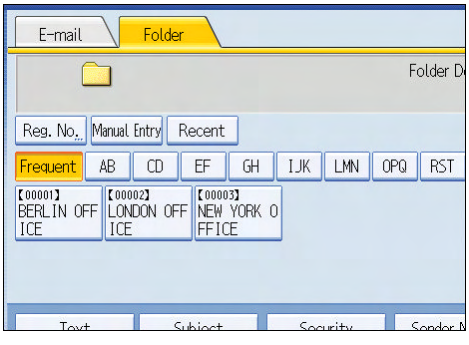
You can send a file to a shared folder over the network by any of the following methods:

- Enter the path to the destination directly
- Specify the path by browsing the network for the destination

Entering the path to the destination manually

You can enter the path to the destination folder manually.

1. **Press [Manual Entry].**



2. **Press [SMB].**
3. **Press [Manual Entry] on the right side of the path field.**

   The soft keyboard appears.
4. **Enter the path for the folder.**

   In the following example path, the shared folder name is "user" and the computer name is "desk01":

   `\\desk01\user`
5. **Press [OK].**
6. **Depending on the destination setting, enter the user name for logging in to the computer.**

   Press [Manual Entry] to the right of the user name field to display the soft keyboard.
7. **Depending on the destination setting, enter the password for logging in to the computer.**

   Press [Manual Entry] for the password to display the soft keyboard.

8. **Press [Connection Test].**

   A connection test is performed to check whether the specified shared folder exists.

   If the message "Connection with PC has failed. Check the settings." appears, see "Troubleshooting When Using the Scanner Function", Troubleshooting.

9. **Check the connection test result, and then press [Exit].**
10. **Press [OK].**

Note

- If authentication is required to access the folder, the login screen appears. Enter the user name and password.
- If you change the protocol after entering the path name, user name, or password, a confirmation message appears.
- To change the path for the folder that has been entered, press [Edit] on the left side of the destination field. Enter the correct path for the folder, and then press [OK].
- The connection test may take time.
- You may not be able to press [Connection Test] right after pressing [Cancel] during a connection test.
- Even if the connection test was successful, the machine may fail to transfer the file if you do not have write privileges for the file or there is not enough free hard disk space.
- You can register the path to the destination in the machine's address book. For details, see "Registering the Path to the Selected Destination in the Address Book".
- If the client computer has a fixed IP address assigned to it, you can specify the IP address manually by including it in the path name of the destination folder. For example, if the IP address is "192.168.1.191" and the shared folder name is "user", enter "\\192.168.1.191\user" as the path.

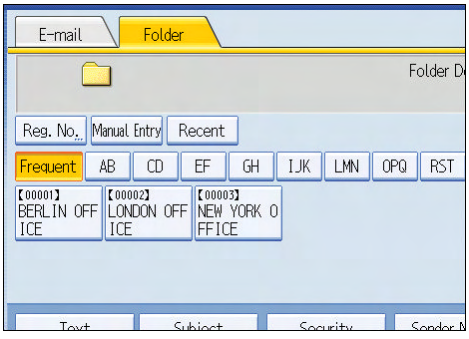
Reference

- p.55 "Preparation for Sending by Scan to Folder"
- p.80 "Registering the Path to the Selected Destination in the Address Book"

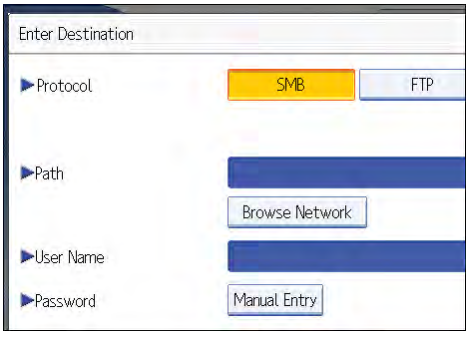
Specifying the path by browsing the network for destinations

You can browse computers on the network for the destination folder, and then specify the path.

1. **Press [Manual Entry].**



2. **Press [SMB].**
3. **Press [Browse Network] under the path name field.**



Domains or workgroups on the network appear.

If the message "Cannot find the specified path. Please check the settings." appears, see "Troubleshooting When Using the Scanner Function", Troubleshooting.

4. **Select the domain or workgroup in which the destination folder is located.**
5. **Select the client computer that has the destination folder.**

If you cannot find the computer you are looking for, press [Up One Level] and browse that level.

If authentication is required to access the selected computer, the authentication screen appears. To authenticate, enter the user name and password.

6. **Select the destination folder.**

When the selected folder has sub-folders, the sub-folders list appears.

If you cannot find the destination folder, press [Up One Level], and then search for the folder at that level.

7. **Press [OK] twice.**

Note

- If authentication is required to access the folder, the login screen appears. Enter the user name and password.

- If you change the protocol after entering the path name, user name, or password, a confirmation message appears.
- Up to 100 computers or shared folders can be displayed.
- The machine may fail to transfer the file if you do not have the write privileges for the shared folder or there is not enough free hard disk space.
- You can register the path to the destination in the machine' address book. For details, see "Registering the Path to the Selected Destination in the Address Book".

Reference

- p.80 "Registering the Path to the Selected Destination in the Address Book"

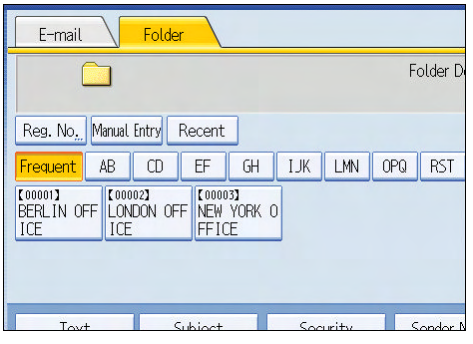
Sending Files to an FTP Server

This section explains how to specify destinations when sending files to an FTP server.

Entering the path to an FTP server manually

You can enter the path to an FTP server manually.

1. **Press [Manual Entry].**



2. **Press [FTP].**
3. **Press [Manual Entry] on the right side of the server name field.**

   The soft keyboard appears.
4. **Enter a server name.**

   Instead of the server name, you can also use its IPv4 address.
5. **Press [OK].**
6. **Press [Manual Entry] on the right side of the path field.**

7. **Enter the path for the folder.**

   The following is an example of a path where the folder name is "user" and the subfolder name is "lib": user\lib.

8. **Press [OK].**
9. **Enter the user name according to the setting at the destination.**

   Press [Manual Entry] to the right of the user name field to display the soft keyboard.

10. **Enter the password according to the setting at the destination.**

    Press [Manual Entry] next to the password field to make the soft keyboard appear.

11. **To change the port number which is set in [System Settings], press [Change] on the right side of the port number field. Enter a port number using the number keys, and then press the [#] key.**
12. **Press [Connection Test].**

    A connection test is performed to check whether the specified folder exists.

    If the message "Connection with PC has failed. Check the settings." appears, see "Troubleshooting When Using the Scanner Function", Troubleshooting.

13. **Check the connection test result, and then press [Exit].**
14. **Press [OK].**

Note

- If you change the protocol after entering the path name, user name, or password, a confirmation message appears.
- The connection test may take time.
- You may not be able to press [Connection Test] right after pressing [Cancel] during a connection test.
- To change the registered path to a destination folder, press [Edit] to the left of the destination field to display the soft keyboard, enter the new path, and then click [OK].
- You can register the path to the destination in the machine's address book. For details, see "Registering the Path to the Selected Destination in the Address Book".
- The machine may fail to transfer the file if you do not have write privileges for the folder or there is not enough free hard disk space.

Reference

- p.80 "Registering the Path to the Selected Destination in the Address Book"

Sending Files to NetWare Server

This section explains how to specify destinations when sending files to a NetWare server.

The NetWare folder of the destination can be specified in an NDS tree or on a NetWare Bindery server, depending on the NetWare environment. Consult your administrator.

You can send a file to NetWare server by any of the following methods:

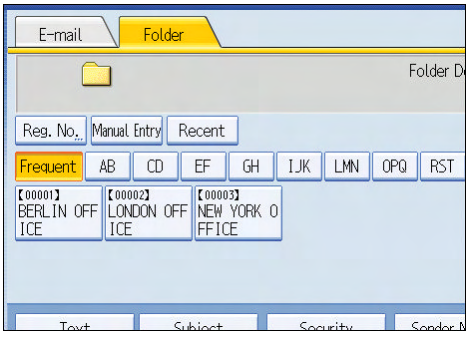
- Enter the destination path of the Netware server directly
- Specify the path by browsing to the destination on the Netware server

2

Entering the path of the NetWare server directly

You can enter the path of the NetWare server.

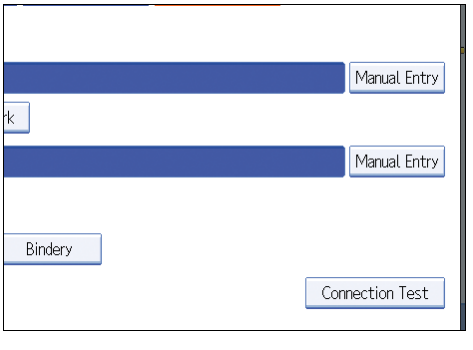
1. **Press [Manual Entry].**



2. **Press [NCP].**
3. **Select the connection type.**

   Press [NDS] to specify the folder in the NDS tree.

   Press [Bindery] to specify the folder on the NetWare Bindery server.
4. **Press [Manual Entry] on the right side of the path field.**



   The soft keyboard appears.

5. **Enter the path for the folder.**

   If you set the connection type to [NDS], and when the NDS tree name is "tree", the name of the context including the volume is "context", the volume name is "volume", and the folder name is "folder", the path will be "\\tree\volume.context\folder".

   If you set the connection type to [Bindery], and when the NetWare server name is "server", the volume name is "volume", and the folder name is "folder", the path will be "\\server\volume\folder".

6. **Press [OK].**
7. **Enter the user name for logging in to the NDS tree or NetWare Bindery server.**

   Press [Manual Entry] to the right of the user name field. The soft keyboard appears.

   If you press [NDS] for [Connection Type], enter the user name, and then enter the name of the context containing the user object. If the user name is "user" and the name of the Context is "context", the user name will be "user.context".

8. **If a password is specified for the log in user, enter it.**

   Press [Manual Entry] to the right of the password field. The soft keyboard appears.

9. **Press [Connection Test].**

   A connection test is performed to check whether the specified folder exists.

   If the message "Connection with PC has failed. Check the settings." appears, see "Troubleshooting When Using the Scanner Function", Troubleshooting.

10. **Check the connection test result, and then press [Exit].**
11. **Press [OK].**

Note

- If you change the protocol after entering the path name, user name, or password, a confirmation message appears.
- To change a registered path to a destination folder, press [Edit] to the left to the destination field to display the soft keyboard, enter the correct path to the folder, and then press [OK].
- You can connect only to folders that you have the read privileges for.
- The connection test may take time.
- You may not be able to press [Connection Test] right after pressing [Cancel] during a connection test.
- Even if the connection test was successful, the machine may fail to transfer the file if you do not have write privileges for the file or there is not enough free hard disk space.
- You can register the path to the destination in the machine's address book. For details, see "Registering the Path to the Selected Destination in the Address Book".

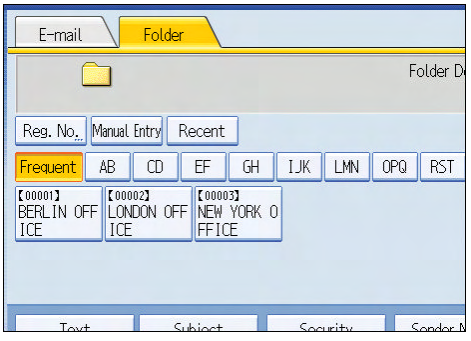
Reference

- p.80 "Registering the Path to the Selected Destination in the Address Book"

Specify the path by browsing to the destination on the Netware server

Specify the path by browsing to the destination folder in an NDS tree or on a NetWare Bindery server.

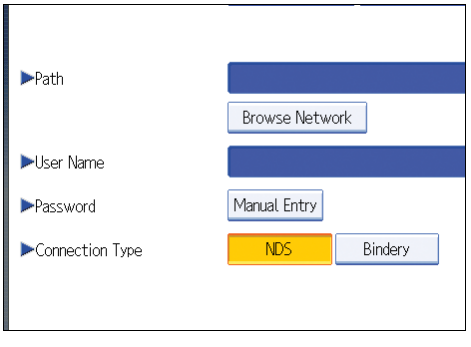
1. **Press [Manual Entry].**



2. **Press [NCP].**
3. **Select the connection type.**

   Press [NDS] to specify a folder in the NDS tree.

   Press [Bindery] to specify a folder on the NetWare Bindery server.
4. **Press [Browse Network] under the path name field.**



   If you selected [NDS] under [Connection Type], the NDS tree list appears.

   If you selected [Bindery] under [Connection Type], the NetWare Bindery server list appears.
5. **Search for the destination folder in the NDS tree or NetWare Bindery server.**

   If you cannot find the destination folder, press [Up One Level], and then search for the folder at that level.
6. **Select the destination folder.**
7. **Press [OK] twice.**

Note

- If you change the protocol after entering the path name, user name, or password, a confirmation message appears.

- Only folders that you have the read privileges for are displayed.
- If the language used for the NDS tree or by the NetWare Bindery server differs from that used by the machine, file names in the NDS tree or on the NetWare Bindery server might appear garbled.
- Up to 100 items can be displayed.
- If the selected NDS tree or NetWare Bindery server requires authentication, a login screen appears. Enter a user name and password for logging in to the NDS tree or NetWare Bindery server. If you log in to the NDS tree, enter a user name, and then enter the name of the context containing the user object. If the user name is "user" and the name of the Context is "context", the user name will be "user.context".
- The machine may fail to transfer the file if you do not have write privileges for the folder or there is not enough free hard disk space.
- You can register the path to the destination in the machine's address book. For details, see "Registering the Path to the Selected Destination in the Address Book".

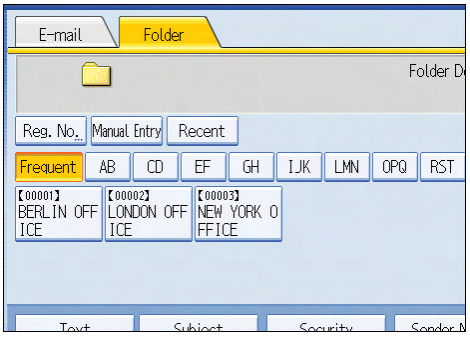
Reference

- p.80 "Registering the Path to the Selected Destination in the Address Book"

Selecting the Destination from Recent Destinations

This section explains how to display destinations that have been recently entered directly, and how to select one of those destinations.

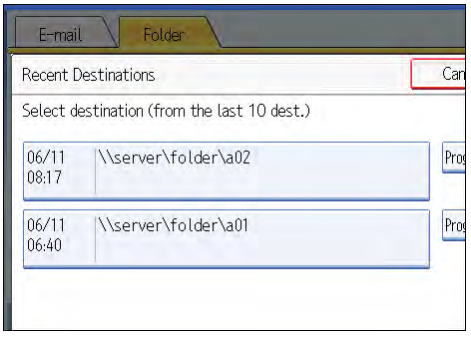
1. **Press [Recent].**



The most recent, directly entered destinations appear.

2

2. **Select a destination.**



3. **Press [OK].**

Note

- Depending on the security settings, [Recent] may not be displayed.
- If there are multiple recent destinations, press [▲] or [▼] to scroll through them.
- The 10 most recent destinations are displayed. Destinations are deleted in chronological order, oldest first.
- You can register the folder paths of recent destinations to the machine's address book. For details, see "Registering the Path to a Recent Destination in the Address Book".

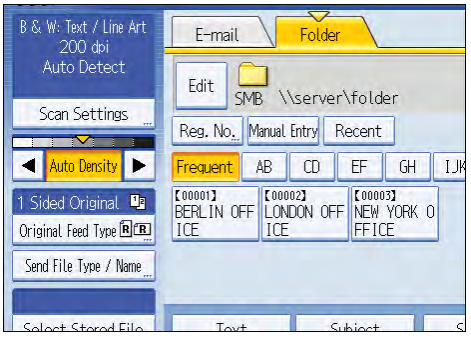
Reference

- p.81 "Registering the Path to a Recent Destination in the Address Book"

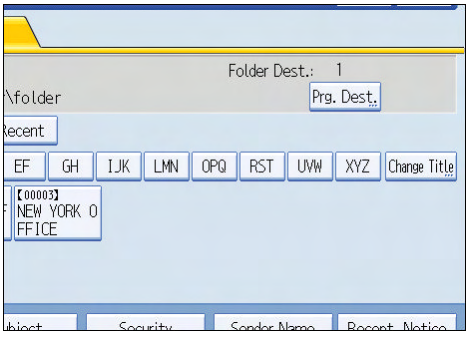
Registering the Path to the Selected Destination in the Address Book

This section explains how to register folder paths you have entered manually or specified by browsing the network to the machine's address book.

1. **In the destination field, display the destination you want to register.**



2. **Press [Prg. Dest.].**



3. **Press [Names], and then specify the name and other information to be registered.**

   For details about specifying the information to be registered, see "Registering Addresses and Users for Facsimile/Scanner Functions", Network and System Settings Reference.

4. **Press [OK].**

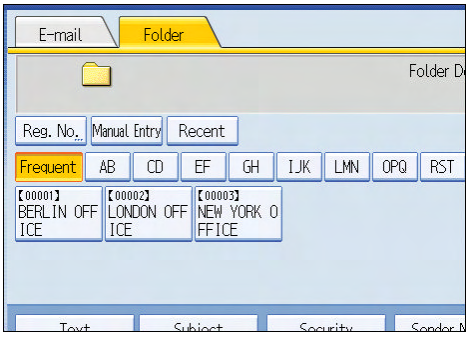
Note

- Depending on the security setting, [Prg. Dest.] may not appear.

Registering the Path to a Recent Destination in the Address Book

This section explains how to register the folder paths of recent destinations to the machine's address book.

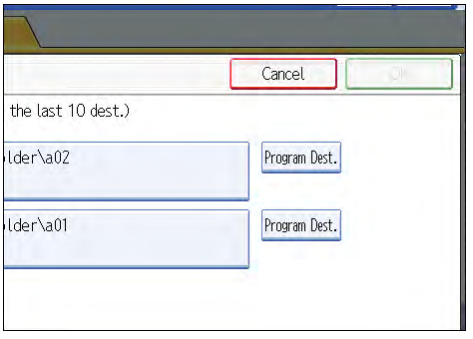
1. **Press [Recent].**



   The most recent, directly entered destinations appear.

2

2. **Press [Program Dest.].**



3. **Press [Names], and then enter the name and other necessary information.**

   For details about entering the information, see "Registering Addresses and Users for Facsimile/ Scanner Functions", Network and System Settings Reference.

4. **Press [OK].**

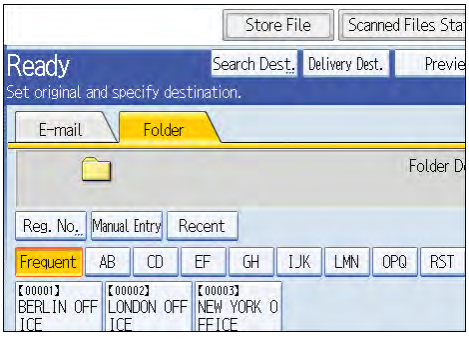
Note

- Depending on the security settings, [Recent] may not be displayed.
- If there are multiple recent destinations, press [▲] or [▼] to scroll through them.

Simultaneous Storage and Sending by Scan to Folder

This section explains how to store a file and simultaneously send it by Scan to Folder.

1. **Press [Store File].**



2. **Make sure that [Store to HDD + Send] is selected.**
3. **If necessary, specify the stored file's information, such as [User Name], [File Name], and [Password].**

   For details, see "Specifying File Information for a Stored File".
4. **Press [OK].**
5. **Specify the setting for sending the file by Scan to Folder, and then send the file.**

   For details about sending a file by Scan to Folder, see "Basic Procedure When Using Scan to Folder".
6. **Press the [Start] key.**

Note

- Depending on the security setting, [Access Privileges] may appear instead of [User Name]. For details about specifying [Access Privileges], consult the administrator.
- You can resend stored files by Scan to Folder. To resend stored files, select the files on the Select Stored File screen, and then send them. For details, see "Sending a Stored File".

Reference

- p.109 "Specifying File Information for a Stored File"
- p.63 "Basic Procedure When Using Scan to Folder"
- p.119 "Sending a Stored File"

3. Sending Scan Files Using WSD

Web Services on Devices (WSD) is a function that can be used with Windows Vista, Windows 7, and other compatible operating systems. Using WSD, you can send files scanned by this machine to a designated computer on your network.

Before Sending Scan Files Using WSD

This section explains the preparations and procedures for using WSD.

This machine provides the following two forms of WSD scanning:

- WSD (Push Type)

  This allows you to send scan files to a client computer through the network.

  To begin a scan job, press the [Start] key on the machine. Note that you cannot scan originals from client computers.

- WSD (Pull Type)

  This allows you to send scanning requests to this machine from a client computer through the network.

  To begin a scan job, send a scanning request from a client computer.

Important

- **Compatible Operating Systems**
  - **Operating systems compatible with WSD include Windows Vista, Windows 7, and Windows Server 2008/2008 R2. Check your operating system's Help files or online support for compatibility information.**
  - **Some operating systems do not support WSD features.**
- **When personal authentication or user code authentication is set:**
  - **WSD (Push Type)**

    The [Display WSD Destination List] setting in Web Image Monitor will be reset to [Do not Display]. To use WSD (Push Type) after configuring authentication, you must specify this setting in Web Image Monitor again. For details, see "Enabling WSD using Web Image Monitor".
  - **WSD (Pull Type)**

    Users restricted by personal authentication or user code authentication cannot use WSD (Pull Type).

Note

- The example explanations in this manual are based on Windows Vista Ultimate. Procedures for other operating systems may differ slightly.

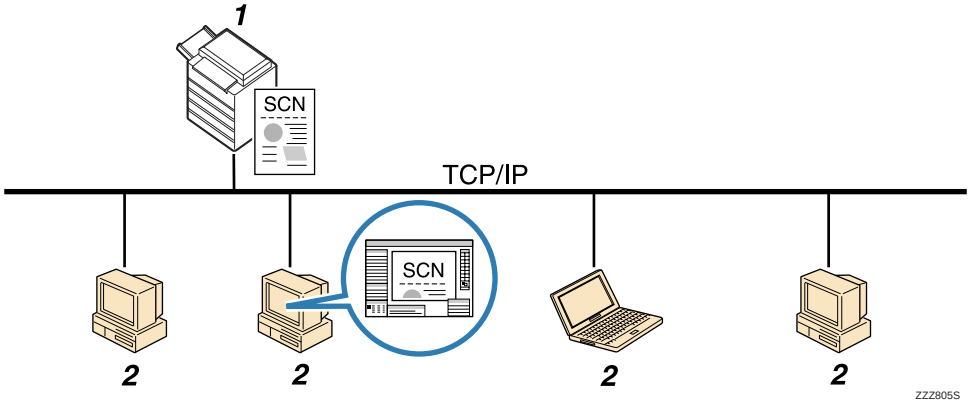
Reference

- p.88 "Enabling WSD using Web Image Monitor"

Overview of Sending Scan Files Using WSD

This section describes the process of sending scan files using WSD.

Sending files using WSD (Push Type)



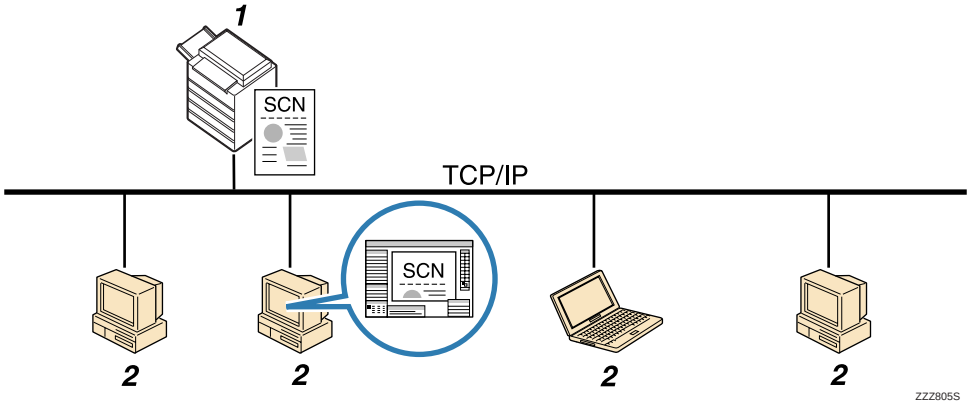
1. **This machine**

   From this machine you can specify destinations, and then send scan files to WSD-compliant client computers.

2. **Client computers (WSD-compliant)**

   WSD-compliant computers receive the sent scan files via the network.

Sending files using WSD (Pull Type)



1. **This machine**

   Scans originals after receiving a scanning request from a client computer, and then sends the scan files over the network to the client computer.

2. **Client computers (WSD-compliant)**

   You can specify scan settings and send scanning requests from client computers using Windows Fax and Scan or a similar application. Client computers can receive files scanned by this machine.

Preparation for Sending Files Using WSD

To send scanned files using WSD, you must first perform the following:

- Check the machine is properly connected to the network
- Configure the network settings in [System Settings]
- Enable WSD using Web Image Monitor
- Register the machine to a client computer

Checking the machine is properly connected to the network

Check that this machine is properly connected to the network.

For details about how to connect this machine to a network, see "Connecting to the Interface", Network and System Settings Reference.

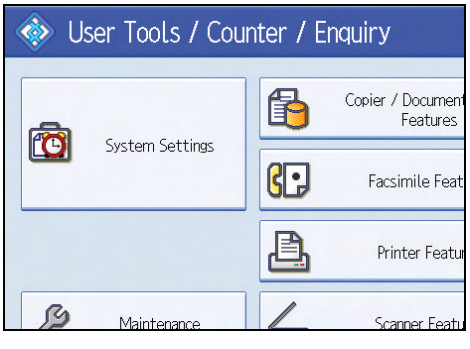
Configuring the network settings in [System Settings]

Configure the network settings in [System Settings] according to your environment and how you will be using the machine.

The following procedure explains connecting this machine to an IPv4 network using Ethernet cable.

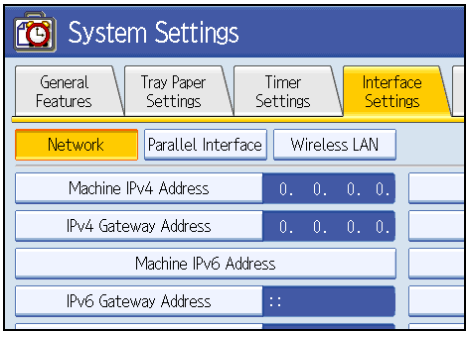
Note that the settings you must configure will vary depending on your operating environment. For details about network settings and configuration procedures, see "Network Settings Required to Use WSD Scanner", Network and System Settings Reference.

1. **Press the [User Tools/Counter] key, and then press [System Settings].**



   The System Settings screen appears.

2. **Press the [Interface Settings] tab.**



3. **Press [Machine IPv4 Address] to specify the machine's IPv4 address.**

   To specify a static IPv4 address for this machine, press [Specify], and then enter the IPv4 address and subnet mask.

   To obtain an IPv4 address from a DHCP server automatically, press [Auto-Obtain (DHCP)].

4. **Press [IPv4 Gateway Address], and then enter the IPv4 gateway address.**
5. **Press [Effective Protocol], and then make [IPv4] active.**
6. **Press [Exit] twice.**

Note

- If an extended wireless LAN board (optional) is installed, press [LAN Type] on the [Interface Settings] tab, then press [Ethernet], and then configure the network settings.

Enabling WSD using Web Image Monitor

To use this machine as a WSD scanner, you must first configure the following settings using Web Image Monitor on a client computer:

- Settings to enable WSD (Push Type)
  - WSD protocol (default setting: [Active])

    Click [Configuration], click [IPv4] under [Network], and then enable [WSD (Scanner)].
  - [Display WSD Destination List] (default setting: [Do not Display])

    Click [Configuration], click [Initial Settings] under [Scanner], and then set [Display WSD Destination List] to [Display].
- Settings to enable WSD (Pull Type)
  - WSD protocol (default setting: [Active])

    Click [Configuration], click [IPv4] under [Network], and then enable [WSD (Scanner)].
  - [Prohibit WSD Scan Command] (default setting: [Prohibit])

Click [Configuration], click [Initial Settings] under [Scanner], and then set [Prohibit WSD Scan Command] to [Do not Prohibit].

Use the following procedure to enable both WSD (Push Type) and WSD (Pull Type).

1. **On the [Start] menu, click [Network].**
2. **Double-click the icon for this machine.**
3. **Click [Login].**

   The Web Image Monitor login page appears.
4. **Enter your login user name and password in the [Login User Name] and [Login Password] boxes respectively, and then click [Login].**

   Consult your administrator if you require a login user name and password.
5. **On the menu in the left frame, click [Configuration].**
6. **Under [Scanner], click [Initial Settings].**

   The [Initial Settings] page appears.
7. **Set [Display WSD Destination List] to [Display].**
8. **Set [Prohibit WSD Scan Command] to [Do not Prohibit].**
9. **Click [OK].**

Note

- For details about displaying Web Image Monitor, see "Monitoring and Configuring the Machine", Network and System Settings Reference. For details about using Web Image Monitor, see Web Image Monitor Help.

Registering the machine to a client computer

Use the following procedure to register this machine to a client computer.

Important

- **You must log in as an Administrators group member to register the machine.**
- **The client computer cannot detect the machine if they are on different network segments or if Windows Vista's Network Search setting is disabled. For details, see Windows Help.**

1. **On the [Start] menu, click [Network].**

   The [Network] window appears and the device search starts automatically.
2. **Right-click the icon for this machine, and then click [Install].**

   The [User Account Control] dialog box appears.
3. **Click [Continue].**

Note

- If the message "Found New Hardware" appears, install the printer driver using the procedure shown under "Installing the Printer Driver", Printer Reference.
- When registration is complete, the scan profile is created automatically. To change the scan profile, see "Changing a Scan Profile".

Reference

- p.100 "Changing a Scan Profile"

Using the WSD Scanner (Push Type)

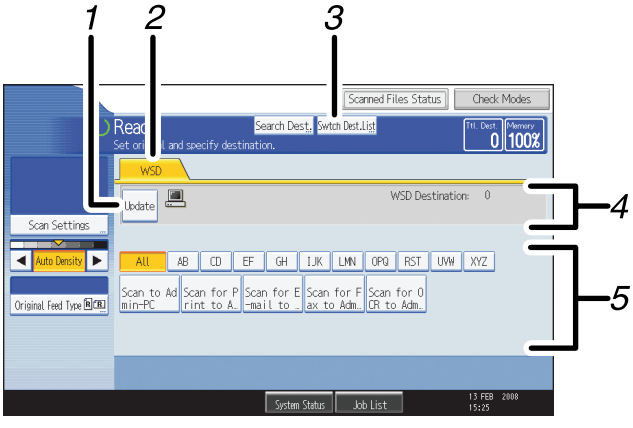
This section explains the WSD Scanner (Push Type) functions.

WSD Scanner (Push Type) Screen

This section explains the layout of the screen that allows you to send scan files using WSD (Push Type).

The function items displayed serve as selector keys. You can select or specify an item by pressing it.

When you select or specify an item on the display panel, it is highlighted like Set. Keys that cannot be selected appear like OK.



CBF010

1. **[Update]**

   Press this key to update the destination list.

2. **WSD**

   This tab is highlighted whenever the machine is used as a WSD scanner.

3. **[Swtch Dest.List]**

   Press this key to switch from the screen that is currently displayed to the WSD scanner screen.

   If you are not using the network delivery function, [WSD Dest.] appears instead of [Swtch Dest.List].

4. **Destination field**

   The specified destination is displayed here. You can specify only one destination.

5. **Destination List**

   The list of available destinations is displayed here.

   If all of the destinations cannot be displayed, press [▲] or [▼] to move through the list.

Basic Procedure for Sending Scan Files Using WSD

This section explains the basic procedure for sending scan files using WSD (Push Type).

Important

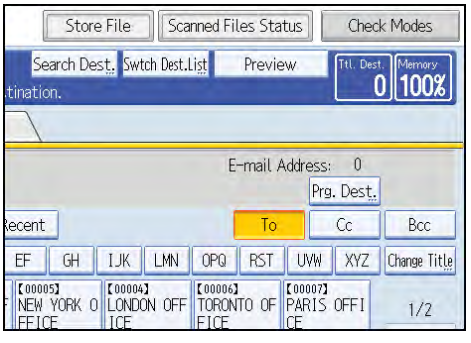
- **If the message "Updating the destination list has failed. Try again?" appears, press [OK]. The destination list will then be updated.**

1. **Make sure that no previous settings remain.**

   If a previous setting remains, press the [Clear Modes] key.

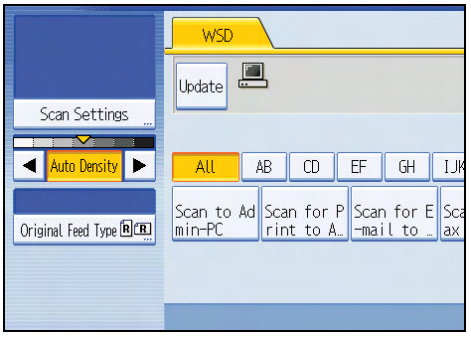
2. **If the E-mail screen, Scan to Folder screen, or network delivery scanner screen is displayed, switch to the WSD scanner screen.**

   For details, see "Switching to the WSD Scanner Screen".



3. **Place originals.**

4. **If necessary, press [Scan Settings] to configure the scan settings.**



   Note that only [Erase Border] can be specified directly from this machine. Use the client computer to configure the other scan settings. For details, see "Changing a Scan Profile".

5. **If necessary, specify the scanning density.**

   For details, see "Adjusting Image Density".

6. **If necessary, press [Original Feed Type] to configure the original orientation settings.**

   For details, see "Setting of Original Feed Type".

7. **Specify the destination.**

   For details, see "Specifying the Destination Client Computer".

8. **Press the [Start] key.**

   When scanning batches, place subsequent originals after the scan files have been sent.

Note

- If you are using this machine as a WSD scanner, you can specify only one destination per scan job.
- You cannot preview scanned images. After pressing the [Start] key, you can view the scanned images on your computer.
- After you press the [Start] key, the client computer might time out and display the error message "Automatic Scanning could not be completed". The cause of this message is likely to be one of the following:
  - Scan processing is taking a long time.

    The machine will send the scan files again; please wait. Depending on the client computer's settings, you might have to perform a procedure on the client computer directly.
  - The operating system might not support WSD (Push Type) features.

    If the message appears every time you scan an original, it is possible that WSD (Push Type) features cannot be used. Use WSD (Pull Type) for scanning.
- To check the files have been sent successfully, use the machine's Scanned Files Status screen or a client computer. For details, see "Scanned Files Status".
- To cancel a specified destination, press the destination again, or press the [Clear/Stop] key.
- To cancel scanning, press the [Clear/Stop] key. You cannot cancel scanning from a client computer.
- You cannot store files scanned using WSD on the machine.
- You cannot use WSD to send files stored on the machine.
- You cannot scan originals while other originals are being scanned.
- Two-sided originals are scanned for sideways opening (top-to-top orientation).
- If scanning does not begin after you press the [Start] key, the machine might not be registered to the computer or the profile might be incorrectly configured. For details, see "Registering the machine to a client computer" or "Creating a New Scan Profile".
- After scan files are sent, their destination settings are automatically cleared. If you want to preserve this information, contact your local dealer for details.

Reference

- p.94 "Switching to the WSD Scanner Screen"
- p.100 "Changing a Scan Profile"
- p.170 "Adjusting Image Density"
- p.171 "Setting of Original Feed Type"

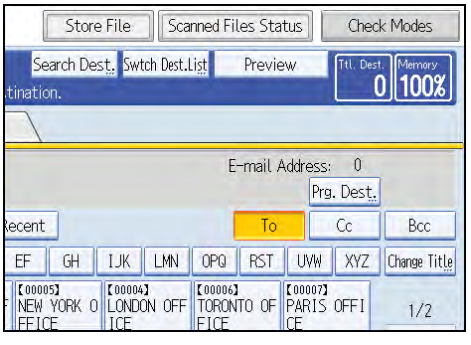
- p.96 "Searching for a Destination Client Computer"
- p.18 "Scanned Files Status"
- p.89 "Registering the machine to a client computer"
- p.101 "Creating a New Scan Profile"

Switching to the WSD Scanner Screen

This section explains how to switch from the screen that is currently displayed to the WSD scanner screen.

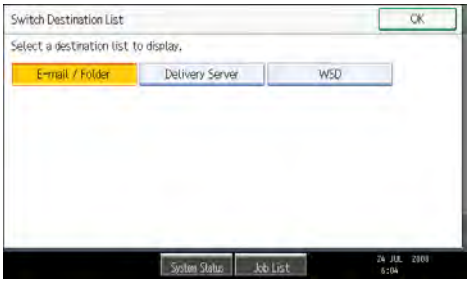
When the E-mail screen, Scan to Folder screen, or network delivery screen is displayed, you can use the following procedure to switch to the WSD scanner screen.

1. **Press [Swtch Dest.List].**



The [Switch Destination List] screen appears.

2. **Press [WSD], and then press [OK].**



The WSD scanner screen appears.

Note

- You cannot switch the screen while e-mail or other destinations are being specified. To clear a specified destination, display the destination in the destination field of each screen, and then press the [Clear/Stop] key.
- If you are not using the network delivery function, [WSD Dest.] is displayed instead of [Swtch Dest.List]. Press [WSD Dest.] to switch to the WSD scanner screen.

Reference

- p.87 "Preparation for Sending Files Using WSD"

Specifying the Destination Client Computer

This section explains how to specify a destination client computer for the scan files you are sending by WSD.

You can specify the destination computer using either of the following methods:

- Selecting a destination computer from the destination list
- Searching for a destination computer and then selecting it

Important

- **If you are using this machine as a WSD scanner, you can specify only one destination per scan job.**

Selecting a Destination Client Computer from the Destination List

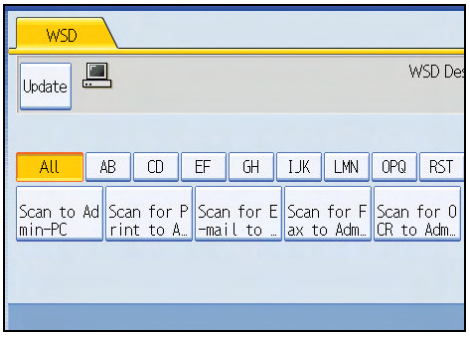
Use the following procedure to select a destination client computer from the destination list.

Destinations appear in the destination list after you log in to your computer.

Important

- **If the destination computer does not appear but the machine is already registered to the destination computer, press [Update]. This will update the destination list with the latest information.**

1. **In the destination list, press the destination computer that you want to send to.**



The key of the selected destination client computer is highlighted, and the destination appears in the destination field at the top of the screen.

Note

- In the destination list, each destination client computer is displayed using up to 20 characters. If the number of characters exceeds 21, "..." is displayed at and after the 20th character position.
- We recommend you register easily recognizable computer names.

- If a WSD-compatible computer is connected to the network, the following five destinations appear on the display panel automatically. For details about the saving location of files in each destination, see the relevant computer's settings.
  - Scan to "Computer Name"
  - Scan for Print to "Computer Name"
  - Scan for E-mail to "Computer Name"
  - Scan for Fax to "Computer Name"
  - Scan for OCR to "Computer Name" (Scan for OCR to "Computer Name" might not be available depending on the destination client computer.)
- If the target destination does not appear, take one of the following steps:
  - Display the destination by selecting the initial letter of its title
  - Display the destination by pressing [▲] or [▼]
- You can also search for the destination by pressing [Search Dest.]. For details, see "Searching for a Destination Client Computer".
- The destination list can display up to 250 client computer destinations.

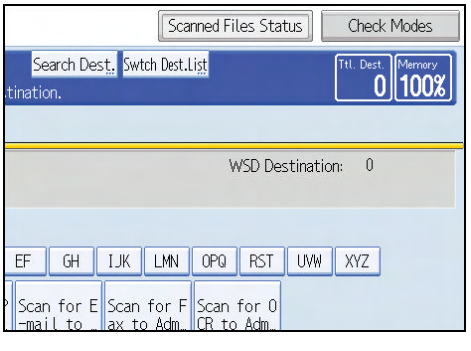
Reference

- p.96 "Searching for a Destination Client Computer"

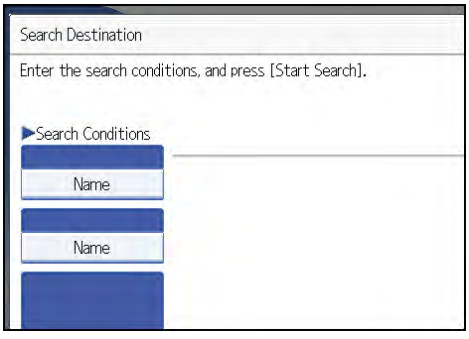
Searching for a Destination Client Computer

Use the following procedure to search for a destination client computer and select it.

1. **Press [Search Dest.].**



2. **Press [Name].**



The soft keyboard appears.

3. **Enter the search characters, and then press [OK].**
4. **If necessary, press [Advanced Search] to specify the detailed search criteria.**

You can specify up to three search criteria. You can specify [Beginning Word] or [End Word] as the matching criterion. You can refine your search using multiple criteria.

5. **Press [OK].**
6. **Press [Start Search].**

Destinations that match the search criteria are displayed.

7. **Select a destination, and then press [OK].**

Note

- Search targets are computer names.
- By pressing [Details], you can view details about the selected destinations.
- Up to 100 destinations can be displayed as search results.
- By pressing [Advanced Search], the following criteria appear:
  - [Beginning Word]: The names which start with the entered character or characters are targeted.

    For example, to search for "ABC", enter "A".
  - [End Word]: The names which end with the entered character or characters are targeted.

    For example, to search for "ABC", enter "C".
  - [Exact Match]: The names which correspond to an entered character or characters are targeted.

    For example, to search for "ABC", enter "ABC".
  - [Include one Word]: The names which contain an entered character or characters are targeted.

    For example, to search for "ABC", enter "A", "B", or "C".
  - [Exclude Words]: The names which do not contain an entered character or characters are targeted.

    For example, to search for "ABC", enter "D".

Using the WSD Scanner (Pull Type)

This section explains the WSD Scanner (Pull Type) functions.

Basic Procedure for Sending Scan Files Using WSD (Pull Type)

This section explains the basic procedure for sending scan files using WSD (Pull Type).

1. **On the client computer, click the [Start] menu, point to [All Programs], and then click [Windows Fax and Scan].**
2. **Place an original on this machine.**
3. **In the [Windows Fax and Scan] window, click the [File] menu, point to [New], and then click [Scan...].**
4. **If a dialog box for selecting the device you want to use appears, select the name of the device in the list, and then click [OK].**

   The [New Scan] dialog box appears.
5. **Make settings for the type of original, type of scanning, and orientation of the original, etc.**

   For details, see "Scan Profile Items and Settings".
6. **In the [New Scan] dialog box, click [Scan].**

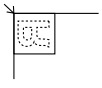
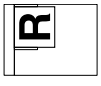
   The original is scanned.

   Send the scan data by e-mail as an attachment or save it as a file.

Note

- If scanning takes too long, the computer might time out and display the error message "Automatic Scanning could not be completed" on the computer screen. If this happens, change the scan settings or scan the originals one side at a time.
- In the profile settings, if you select [Feeder (Scan one side)] for [Source], only one side will be scanned per operation. If you select [Feeder (Scan both sides)] for [Source], two sides will be scanned per operation.
- When scanning from the ADF, you must click [Scan] in the [New Scan] dialog box each time you scan an original.
- You cannot scan originals while other originals are being scanned.
- Two-sided originals are scanned for sideways opening (top-to-top orientation).
- Transmission results of WSD scanning (Pull Type) jobs do not appear in File Status.
- The Blank Page Detect function is not available when you are using the WSD scanner (Pull Type).

- If a scanning method other than [Auto Detect] is set, the original may not be able to be scanned at the set size. In such cases, delete the scan profile, and then scan the original again. For details about deleting a scan profile, see "Changing a Scan Profile".
- To scan an original correctly, place it as shown in the following table:
  Placing an original

Scanning method (Exposure glass/ADF)	Original orientation
Exposure glass	top corner touching top left corner of exposure glass 
Auto Document Feeder (ADF)	top edge leading 

Reference

- p.102 "Scan Profile Items and Settings"
- p.100 "Changing a Scan Profile"
- p.88 "Enabling WSD using Web Image Monitor"

Configuring the Scan Settings on a Client Computer

This section explains how to configure a scan profile. A scan profile contains scan settings specified on a client computer.

Changing a Scan Profile

Use the following procedure to change a scan profile.

Whenever the machine is first registered to a computer, a profile is created automatically. Using the following procedure, you can change this profile on the computer.

1. **On the [Start] menu, click [Control Panel].**

   Control Panel opens.

2. **Click [Hardware and Sound].**

   You do not have to perform this step depending on the Control Panel settings.

3. **Click [Scanners and Cameras].**

   The [Scanners and Cameras] dialog box appears.

4. **Select this machine, and then click [Scan Profiles].**

   The [Scan Profiles] dialog box appears.

5. **Select a profile, and then click [Edit].**

   The [Edit Profile] dialog box appears.

6. **Configure the necessary settings.**

   For details, see “Scan Profile Items and Settings”.

7. **Click [Save Profile].**

   The changed scan settings are saved as a profile.

   To delete a profile, click [Delete] in the Scan Profiles dialog box displayed in step 4.

Note

- If a profile does not appear in the [Scanners and Cameras] dialog box, the associated machine might be turned off, or the required WSD scanner settings might not have been specified. For details about WSD scanner settings, see "Preparation for Sending Files Using WSD".
- If a profile does not appear in the [Scan Profiles] dialog box, recreate it as a new profile. For details, see "Creating a New Scan Profile".
- You can create multiple profiles.

Reference

- p.102 "Scan Profile Items and Settings"
- p.87 "Preparation for Sending Files Using WSD"
- p.101 "Creating a New Scan Profile"

Creating a New Scan Profile

Use the following procedure to create a new profile.

1. **On the [Start] menu, click [Control Panel].**

   Control Panel opens.

2. **Click [Hardware and Sound].**

   You do not have to perform this step depending on the Control Panel settings.

3. **Click [Scanners and Cameras].**

   The [Scanners and Cameras] dialog box appears.

4. **Select this machine, and then click [Scan Profiles].**

   The [Scan Profiles] dialog box appears.

5. **Click [Add].**

   The [Add New Profile] dialog box appears.

6. **Configure the necessary settings for the profile.**

   For details, see “Scan Profile Items and Settings”.

7. **Click [Save Profile].**

   The scan settings are saved as a new profile.

Note

- You can register multiple profiles. If multiple profiles are registered, the profile specified as default in the [Scan Profiles] dialog box is applied.
- To specify a scan profile as the default profile, perform one of the following procedures:
  - In the [Scan Profiles] dialog box, click the scan profile, and then click [Set as Default].
  - After you create a new scan profile, in the [Add New Profile] dialog box, select the [Set this profile as default] check box.

Reference

- p.102 "Scan Profile Items and Settings"

Scan Profile Items and Settings

The following table tells you the scan profile settings that you can configure.

Scan Profile Items and Settings

Item	Scan settings
Scanner:	Select this machine.
Profile name:	Enter the profile name.
Source:	Select one of the following: Flatbed Feeder (Scan one side) Feeder (Scan both sides) **Note** • If the original is set on the exposure glass, select [Flatbed]. If the original is set in the ADF, select [Feeder (Scan one side)] or [Feeder (Scan both sides)].
Paper size:	If you select [Feeder (Scan one side)] or [Feeder (Scan both sides)] in [Source], you must specify the paper size.
Color format:	Select one of the following: Color Grayscale Black and white
File type:	Select one of the following: BMP (Bitmap Image) JPG (JPEG Image) PNG (PNG Image) TIF (TIFF Image)
Resolution (DPI):	Specify the resolution.
Brightness:	The setting you specify here will not be applied for scanning.

Item	Scan settings
Contrast:	The setting you specify here will not be applied for scanning.

4. Storing Files Using the Scanner Function

Using the scanner function, you can store scan files in the machine and then send the stored files by e-mail or Scan to Folder.

Before Storing Files

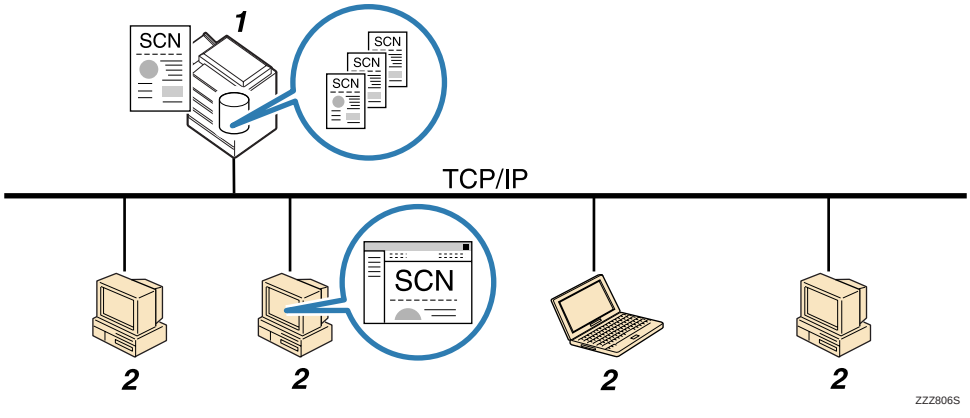
This section outlines file storage under the scanner function and provides related cautions.

Overview of File Storage under the Scanner Function

This section describes the process of storing files under the scanner function.

Important

- **You can specify a password for each stored file. Files that are not password-protected can be accessed by other users on the same local area network using DeskTopBinder. We recommend that you protect stored files from unauthorized access by specifying passwords.**
- **Scan file stored in the machine may be lost if some kind of failure occurs. We advise against using the hard disk to store important files. The supplier shall not be responsible for any damage that may result from the loss of files. For long-term storage of files, we recommend the use of DeskTopBinder. For details, contact your local dealer, or see the documentation for DeskTopBinder.**



1. **This Machine**

   You can store scan files on the machine's hard disk. The stored files can be sent by e-mail, Scan to Folder, or the network delivery scanner.

2. **Client Computer**

   Using DeskTopBinder, you can, over the network, view, copy, or delete files stored in the machine. Using Web Image Monitor, you can, over the network, view, download, send, or delete files stored in the machine. For

details about DeskTopBinder Lite, see DeskTopBinder Lite-related manuals. For details about Web Image Monitor, Web Image Monitor Help.

Note

- You can download DeskTopBinder Lite from the Web site and then install it on the client computer.
- Stored files will be deleted after a set period. For details about specifying the period, see "Administrator Tools", Network and System Settings Reference.
- Files stored under the scanner function cannot be printed from the machine's control panel. Print the files from a client computer after receiving them on the computer.
- You can also store a file and simultaneously send it. For details, see "Simultaneous Storage and Sending by E-mail", "Simultaneous Storage and Sending by Scan to Folder", and "Simultaneous Storage and Delivery".
- If a media slot (optional) is installed on the machine, you can save scan files on a removable memory device. For details, see "Basic Procedure for Saving Scan Files on a Removable Memory Device".

Reference

- p.48 "Simultaneous Storage and Sending by E-mail"
- p.83 "Simultaneous Storage and Sending by Scan to Folder"
- p.150 "Simultaneous Storage and Delivery"
- p.129 "Basic Procedure for Saving Scan Files on a Removable Memory Device"

Basic Procedure for Storing Scan Files

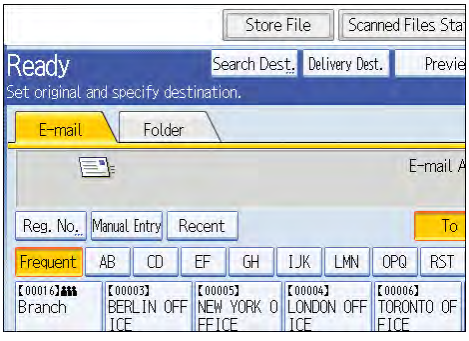
This section explains the basic procedure for storing scan files.

1. **Make sure that no previous settings remain.**

   If a previous setting remains, press the [Clear Modes] key.

2. **Place originals.**

3. **Press [Store File].**



4. **Press [Store to HDD].**

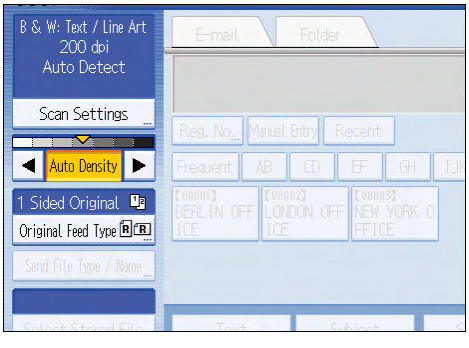
5. **If necessary, specify file information, such as [User Name], [File Name], and [Password].**

   For details, see "Specifying File Information for a Stored File".

6. **Press [OK].**

7. **If necessary, press [Scan Settings] to specify scanner settings such as resolution and scan size.**

   For details, see "Various Scan Settings".



8. **If necessary, specify the scanning density.**

   For details, see "Adjusting Image Density".

9. **If necessary, press [Original Feed Type] to specify settings such as original orientation.**

   For details, see "Setting of Original Feed Type".

10. Press the [Start] key.

Note

- Depending on the security setting, [Access Privileges] may appear instead of [User Name]. For details about specifying [Access Privileges], consult the administrator.
- By pressing [Store to HDD + Send], you can simultaneously store scan files and send them. For details, see "Simultaneous Storage and Sending by E-mail", "Simultaneous Storage and Sending by Scan to Folder", and "Simultaneous Storage and Delivery".
- You cannot press [Store File] if:
  - "PDF" is selected as the file type and security is applied
  - High Compression PDF is selected as the file type
- You cannot specify [Store to HDD] if:
  - a destination is specified
  - [Preview] is selected
- To cancel scanning, press the [Clear/Stop] key.
- After scan files are stored, the file information fields will be automatically cleared. If you want to preserve the information in these fields, contact your local dealer.

Reference

- p.109 "Specifying File Information for a Stored File"
- p.161 "Various Scan Settings"
- p.170 "Adjusting Image Density"
- p.171 "Setting of Original Feed Type"
- p.48 "Simultaneous Storage and Sending by E-mail"
- p.83 "Simultaneous Storage and Sending by Scan to Folder"
- p.150 "Simultaneous Storage and Delivery"

Specifying File Information for a Stored File

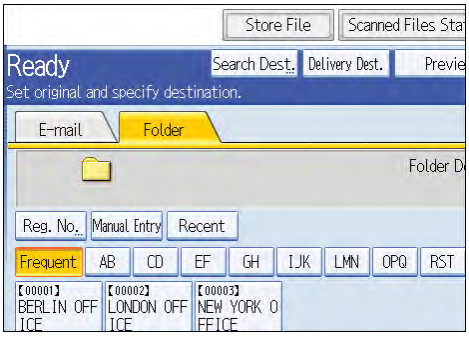
You can specify information for a stored file, such as user name, file name, and password.

By specifying information for a stored file, you can search for the file by user name or file name, or protect the file with a password to prevent other people from accessing the file.

Specifying a User Name

You can specify a user name for the stored file.

1. **Press [Store File].**



   The Store File screen appears.

2. **Press [User Name].**

   A list of user names appears.

3. **Press the user name you want to specify.**

   The user names shown here are names that were registered on the [Administrator Tools] tab in [System Settings]. To specify a name not shown here, press [Manual Entry], and then enter the user name.

4. **Press [OK] twice.**

Note

- Depending on the security setting, [Access Privileges] may appear instead of [User Name]. For details about specifying [Access Privileges], consult the administrator.

Specifying a File Name

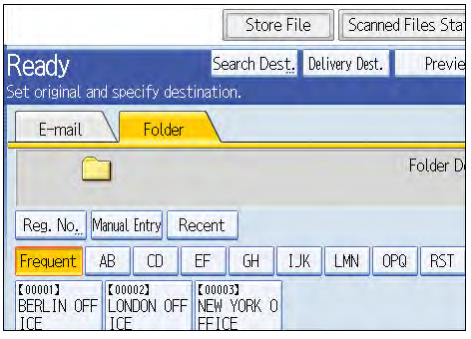
This section explains how to change the name of a stored file.

A stored file is allocated a name starting with "SCAN" followed by a 4-digit number.

- Example: SCAN0001

You can change this file name.

1. **Press [Store File].**



   The Store File screen appears.

2. **Press [File Name].**

   The soft keyboard appears.

3. **Change the file name.**

4. **Press [OK] twice.**

Note

- For details about entering the text, see "Entering Text", About This Machine.

Specifying a Password

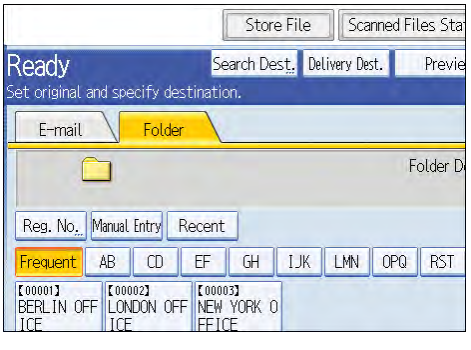
You can specify a password for the stored file.

Important

- **Do not forget the password. If you forget it, consult the system administrator of the machine.**

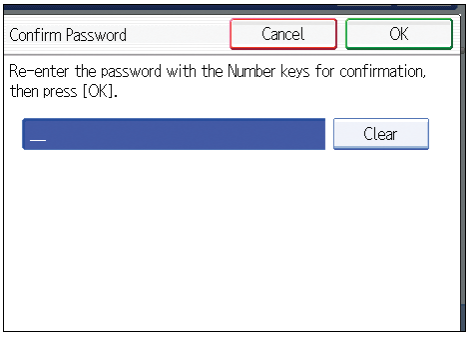
By specifying a password, you can ensure that only the people who know the password can view the file.

1. **Press [Store File].**



The Store File screen appears.

2. **Press [Password].**
3. **Using the number keys, enter a four to eight-digit number.**
4. **Press [OK].**
5. **Enter the same number again using the number keys.**



6. **Press [OK] twice.**

Displaying the List of Stored Files

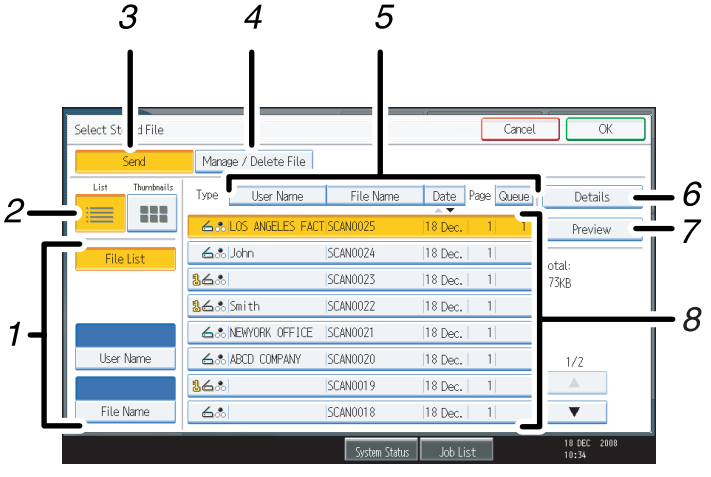
This section describes the list of stored files. Using the list of stored files, you can delete stored files or change the file's information.

List of Stored Files

This section describes how the list of stored files is displayed.

To display the list of stored files, press [Select Stored File] on the initial scanner screen.

The function items displayed serve as selector keys. You can select or specify an item by pressing it. When you select or specify an item on the display panel, it is highlighted like Set. Keys that cannot be selected appear like OK.



CBF011

1. **Keys for searching for files**

   Press to switch to the screens for searching for a file by user name or file name, or to the screen for displaying all files.

2. **List / Thumbnails**

   You can select whether to display stored files as a list or as thumbnails.

3. **[Send]**

   Press this to deliver or send a stored file by e-mail or Scan to Folder.

4. **[Manage / Delete File]**

   Press this to delete stored files or change the file data.

5. **Keys for sorting files**

   Press to sort the files using the selected item. Select the same item once more for a reverse sort. However, the files cannot be sorted in reverse delivery.

6. **[Details]**

   Press this to display details about the selected file.

7. **[Preview]**

   Press this to display a preview of the selected file. For details, see "Checking a Stored File Selected from the List".

8. **List of stored files**

   Displays the list of stored files.

   If the file you want to select is not displayed in the list, press [▲] or [▼] to scroll the screen. If a password has been specified for a file, a key icon appears to the left of the user name for the file.

Note

- Depending on the security setting, some files may not appear in the list.
- Files stored under functions other than the scanner function do not appear on this screen.

Reference

- p.116 "Checking a Stored File Selected from the List"

Searching the List of Stored Files

You can search for files from the stored files using the user name or file name.

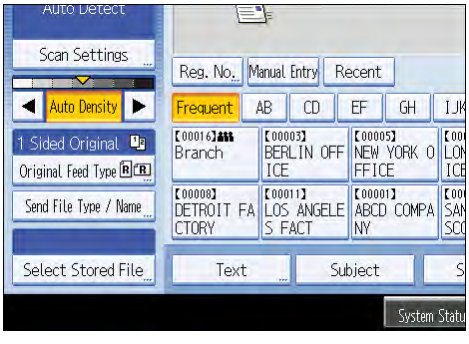
You can search the list of stored files by either of the following methods:

- Search by user name
- Search by file name

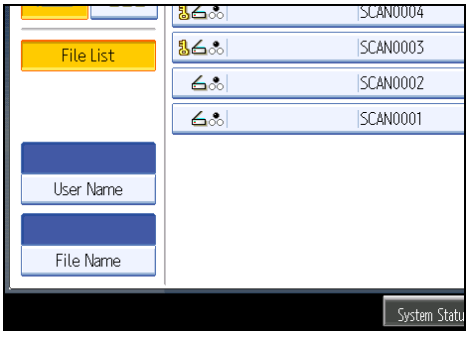
Searching by user name

You can search for a stored file by its user name.

1. **Press [Select Stored File].**



2. **Press [User Name].**



3. **Select the user name to be used for the search.**

   The user names shown here are names that were registered on the [Administrator Tools] tab in [System Settings]. To change a user name not shown here, press [Manual Entry], and then enter the user name.

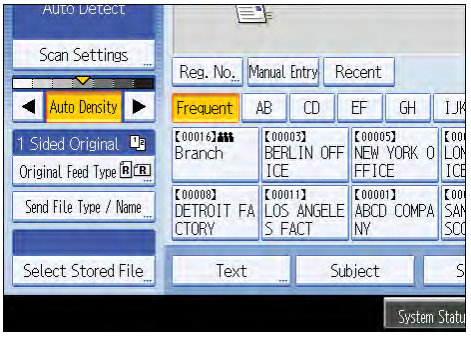
4. **Press [OK].**

   The search begins, and then files belonging to the specified user appear.

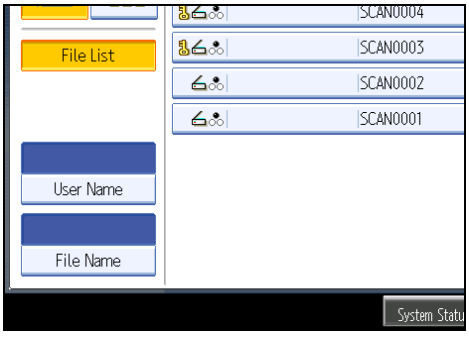
Searching by file name

You can search for a stored file by its file name.

1. **Press [Select Stored File].**



2. **Press [File Name].**



The soft keyboard appears.

3. **Enter the file name.**

For information about how to enter characters, see "Entering Text", About This Machine.

4. **Press [OK].**

The search starts, and files whose name starts with the entered string appear.

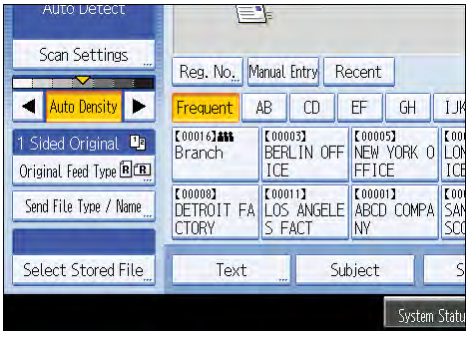
Checking Stored Files

You can display the Preview screen and check a stored file on the machine or from the client computer.

Checking a Stored File Selected from the List

This section explains how to preview a file selected from the list of stored files.

1. **Press [Select Stored File].**



   The list of stored files appears.

   For details about the list of stored files, see "List of Stored Files".

2. **From the list of stored files, select the file you want to check.**

   You can select more than one file.

3. **Press [Preview].**

   A preview of the selected stored file appears.

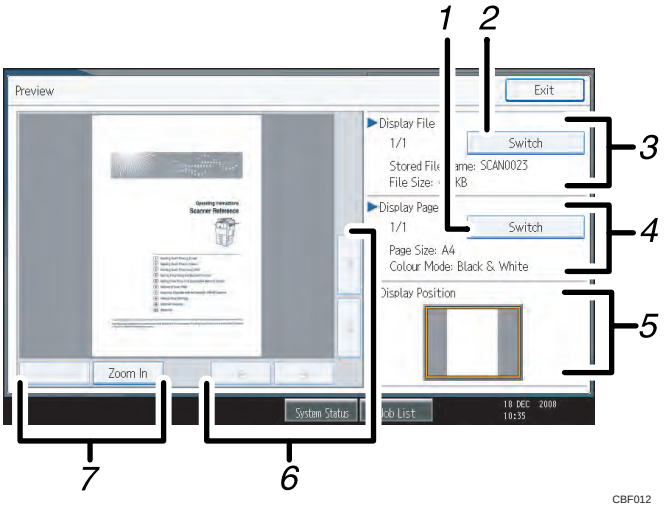
Note

- If you select a password-protected stored file, a screen for entering the password appears. To select the file, enter the correct password, and then press [OK].

Reference

- p.112 "List of Stored Files"

Stored File Preview Screen



1. **[Switch]**

   You can switch to a preview of another page.

2. **[Switch]**

   You can switch to a preview of another file.

3. **Display File**

   The name and size of the selected file appear.

4. **Display Page**

   The page number of the previewed page, total number of pages, page size, and color mode appear.

5. **Display Position**

   When the preview is enlarged, the location of the part of the page displayed on the preview screen is indicated.

6. **[←] [→] [↑] [↓]**

   Press to shift the displayed area.

7. **[Zoom Out], [Zoom In]**

   In previewing, you can reduce or enlarge the file image.

Checking Stored Files from a Client Computer

Using DeskTopBinder Lite or Web Image Monitor, you can also display the files stored in the machine on a client computer.

Important

- **To view stored files from a client computer, you must first make the required IPv4 address settings using DeskTopBinder or Web Image Monitor.**

You can also check files stored under the copier, Document Server, and printer functions.

Using DeskTopBinder Lite to display stored files

The stored files are displayed and can be checked on a client computer using DeskTopBinder Lite.

Note

- You can also transfer the stored files to the client computer.
- You can download DeskTopBinder Lite from the Web site and then install it on the client computer.
- For details about DeskTopBinder, see the DeskTopBinder-related manuals.

Using Web Image Monitor to display stored files

The stored files are displayed and can be checked also on a client computer using Web Image Monitor.

If you enter "http:// (machine IPv4 address, or host name)/" in the address bar of the client computer's Web browser, the top page of Web Image Monitor appears.

Important

- **Do not begin IPv4 segments with zeros. For example: if the address is "192.168.001.010", enter it as "192.168.1.10".**

Note

- You can also download the stored files.
- It is recommended that you use Web Image Monitor only within your local area network.
- For details about displaying or downloading stored files using Web Image Monitor, see "Displaying Stored Documents with Web Image Monitor", "Downloading Stored Documents with Web Image Monitor", Copy and Document Server Reference.
- For details about making settings for using Web Image Monitor, see "Monitoring and Configuring the Machine", Network and System Settings Reference.
- For details about functions for managing stored files using Web Image Monitor, click [Help] on the upper-right corner of the displayed screen.

Sending a Stored File

This section explains how to send a stored file.

Stored files can be sent by e-mail, Scan to Folder, or the network delivery scanner.

There are two methods of sending stored files by e-mail. Settings made under [Scanner Features] determine which method is used. For details, see "Send Settings".

- To send the URL by e-mail:

  Under [Scanner Features], [Stored File E-mail Method], select [Send URL Link]. This method is useful when network restrictions prevent you sending attachments.

- To send an attached file by e-mail:

  Under [Scanner Features], [Stored File E-mail Method], select [Send File].

Important

- **Depending on your e-mail application, a phishing warning might appear after you receive an e-mail message. To prevent phishing warnings appearing after you receive e-mail from a specified sender, you must add the sender to your e-mail application's exclusion list. For details about how to do this, see your e-mail application's Help.**

Reference

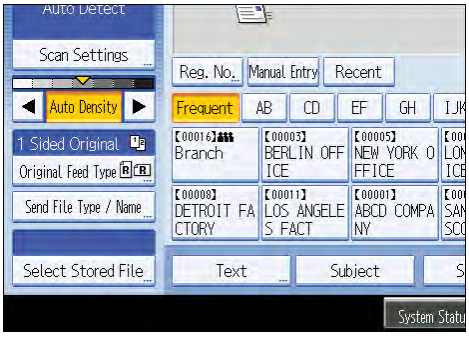
- p.203 "Send Settings"

Sending Stored Files

This section mainly explains how to select the files you want to send.

For details about how to select stored files and make settings for sending those files, see respective pages.

1. **Press [Select Stored File].**



   The list of stored files appears.

2. **Select the file you want to send.**

   You can select multiple files.

The selected files are sent in the order they were selected.

If you press [Queue], only the files you have selected are displayed in the order they will be sent.

For details about selecting the stored files, see "Displaying the List of Stored Files".

3. **Press [OK].**
4. **If necessary, switch to the E-mail, Scan to Folder, or network delivery scanner screen.**

   For details about switching the screen, see "Switching to the E-mail Screen", "Switching to the Scan to Folder Screen", or "Switching to the Network Delivery Scanner Screen".
5. **Specify the destination, make any other necessary settings.**

   For details about how to send a file by e-mail or Scan to Folder, or how to deliver a file, see "Basic Procedure for Sending Scan Files by E-mail", "Basic Procedure When Using Scan to Folder", or "Basic Procedure for Delivering Files".
6. **Press the [Start] key.**

   The stored file will be sent.

Note

- If you select a password-protected stored file, a screen for entering the password appears. To select the file, enter the correct password, and then press [OK].
- When the URL has been sent by e-mail, the recipient can check the stored file by clicking that URL. For details, see "Sending the URL by E-mail".
- You can encrypt e-mail or attach a signature to it. For details, see "Security Settings to E-mails".

Reference

- p.30 "Switching to the E-mail Screen"
- p.66 "Switching to the Scan to Folder Screen"
- p.140 "Switching to the Network Delivery Scanner Screen"
- p.27 "Basic Procedure for Sending Scan Files by E-mail"
- p.63 "Basic Procedure When Using Scan to Folder"
- p.137 "Basic Procedure for Delivering Files"
- p.51 "Sending the URL by E-mail"
- p.49 "Security Settings to E-mails"

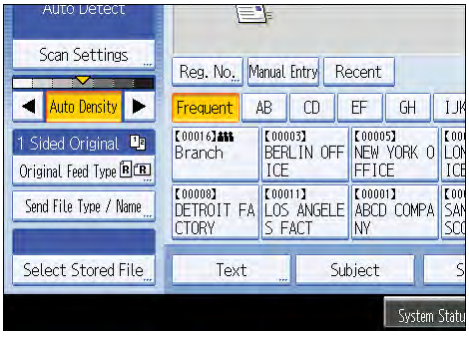
Managing Stored Files

This section explains how to delete stored files and how to change the data for stored files.

Deleting a Stored File

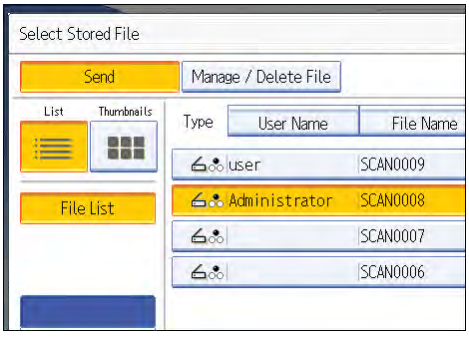
This section explains how to delete a stored file.

1. **Press [Select Stored File].**



   The list of stored files appears.

2. **Press [Manage / Delete File].**



3. **Select the file you want to delete.**

   If you select a password-protected stored file, a screen for entering the password appears. To select the file, enter the correct password, and then press [OK].

4. **Press [Delete File].**

   A confirmation message about deleting the file appears.

5. **Press [Yes].**

Note

- Files waiting for sending cannot be deleted.

- You can also delete files stored in the machine by accessing the machine from a client computer using Web Image Monitor or DeskTopBinder. For detail about Web Image Monitor, see Web Image Monitor Help. For details about DeskTopBinder, see the manuals supplied with DeskTopBinder.

Changing Information for a Stored File

You can change information for a stored file, such as [User Name], [File Name], and [Password].

Note

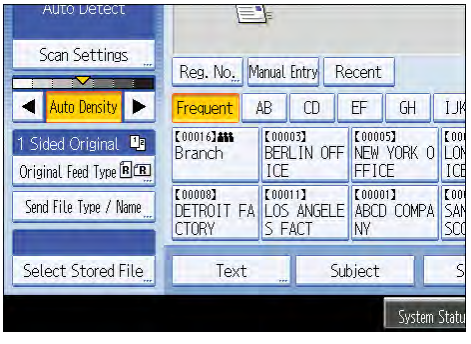
- Information for files waiting for being sent cannot be changed.

4

Changing a user name

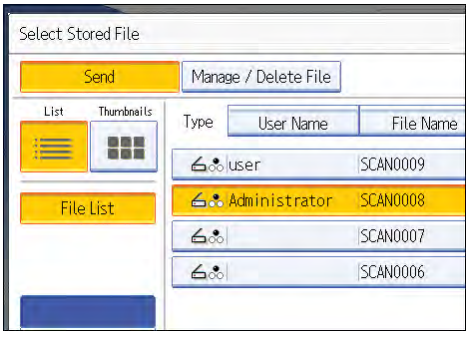
You can change the user name for a stored file.

1. **Press [Select Stored File].**



The list of stored files appears.

2. **Press [Manage / Delete File].**



3. **Select the file containing the information you want to change.**

If you select a password-protected stored file, a screen for entering the password appears. Enter the password, and then press [OK].

4. **Press [Change User Name].**
5. **Enter a new user name.**

   The user names shown here are names that were registered on the [Administrator Tools] tab in [System Settings]. To change a user name not shown here, press [Manual Entry], and then enter the user name.
6. **Press [OK].**
7. **Make sure that the user name was changed as necessary, and press [Exit].**

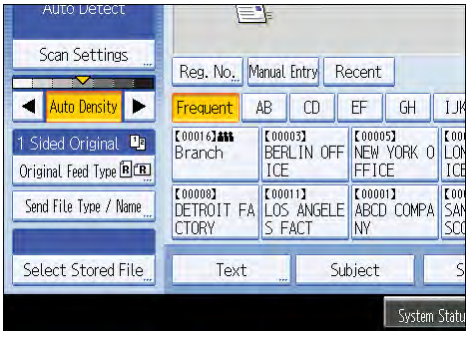
Note

- Using Web Image Monitor or DeskTopBinder you can also change the user name of a file stored in the machine from the client computer. For details about Web Image Monitor, see Web Image Monitor Help. For details about DeskTopBinder, see the manuals supplied with DeskTopBinder.
- Depending on the security setting, [Change Access Priv.] may appear instead of [Change User Name]. For details about specifying [Change Access Priv.] consult the administrator.

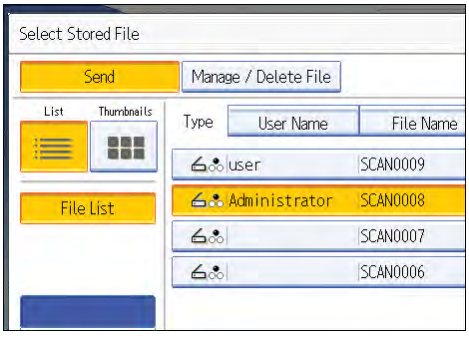
Changing a file name

You can change the file name of a stored file.

1. **Press [Select Stored File].**



   The list of stored files appears.
2. **Press [Manage / Delete File].**



3. **Select the file containing the file information you want to change.**

   If you select a password-protected stored file, a screen for entering the password appears. Enter the password, and then press [OK].

4. **Press [Change File Name].**
5. **Change the file name.**
6. **Press [OK].**
7. **Make sure that the file information was changed as necessary, and press [Exit].**

Note

- For information about how to enter characters, see "Entering Text", About This Machine.
- Using Web Image Monitor or DeskTopBinder, you can also change the file name of a file stored in the machine from the client computer. For details about Web Image Monitor, see Web Image Monitor Help. For details about DeskTopBinder, see the manuals supplied with DeskTopBinder.

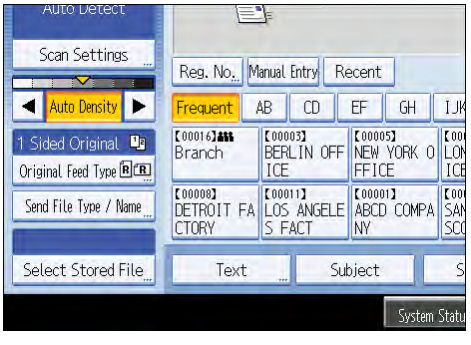
Changing a password

Enter the password for accessing the stored file.

Important

- **Be sure not to forget the password. If you forget it, consult the system administrator of the machine.**

1. **Press [Select Stored File].**



   The list of stored files appears.

2. **Press [Manage / Delete File].**
3. **Select the file containing the file information you want to change.**

   If you select a password-protected stored file, a screen for entering the password appears. Enter the password, and then press [OK].

4. **Press [Change Password].**
5. **Using the number keys, enter a new four to eight-digit password.**
6. **Press [OK].**

7. **Enter the same number again using the number keys.**
8. **Press [OK].**
9. **Press [Exit].**

Note

- Using Web Image Monitor or DeskTopBinder, you can also change the password of a file stored in the machine from the client computer. For details about Web Image Monitor, see Web Image Monitor Help. For details about DeskTopBinder, see the manuals supplied with DeskTopBinder.

5. Saving Scan Files on a Removable Memory Device

If the optional media slot is installed on your machine, you can use the scanner function to save scan files on a removable memory device. You can digitize and save documents easily, without using a computer.

Before Saving Files on a Removable Memory Device

This section explains saving scan files on a removable memory device and provides related cautions.

Overview of Saving Files on a Removable Memory Device

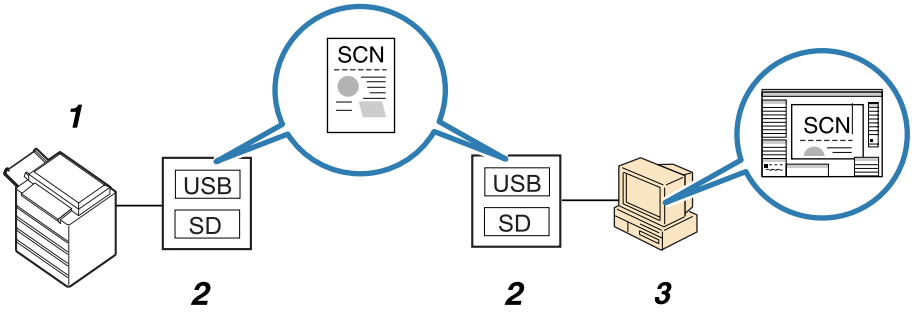
The following diagram explains saving scan files on a removable memory device.

Important

- This machine supports FAT16 or FAT32 format USB flash memory and SD cards. Other forms of removable memory device are not compatible.
- Make sure that the format of the removable memory device is FAT16 or FAT32.
- Saving might fail if the USB flash memory features password protection or other security features.
- Do not connect the optional media slot to other machines.
- Connect only USB flash memory to the USB slot, not any other form of USB device.
- Do not remove the media while data is being written. Doing so will result in corrupted data.
- Do not turn the machine's main power switch to off while data is being written. Doing so will result in corrupted data.
- If the machine's main power is accidentally switched off while data is being written, you must check the data on your media for corruption when you switch the machine back on.
- USB flash memory devices and SD cards are supported for direct printing.However, certain types of USB flash memory devices and SD cards cannot be used. For details, contact your sales or service representative.

Note

- The amount of time required to save files to a USB flash memory device or SD card will vary according to the device's specifications.



1. **This Machine**

   If the optional media slot is installed, the machine can save scan files on a removable memory device.

2. **Removable Memory Device**

   Scan files are saved on a removable memory device.

3. **Client Computer**

   Using applications on a client computer, scan files saved on a removable memory device can be printed or viewed.

Note

- Files saved on a removable memory device will not appear in the list of stored files.
- Files saved on a removable memory device cannot be printed or sent using the machine's control panel. To perform operations on files saved on a removable memory device, you must use an application on a client computer.

Basic Procedure for Saving Scan Files on a Removable Memory Device

Use the following procedure to save scan files on a removable memory device.

1. **Insert a removable memory device in the media slot.**

   You can connect only one removable memory device at a time. The media slot cannot be used if both an SD card and a USB flash memory are inserted into it at the same time.

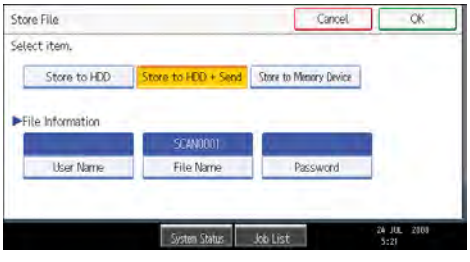
2. **Make sure that no previous settings remain.**

   If a previous setting remains, press the [Clear Modes] key.

3. **Place originals.**

4. **Press [Store File].**

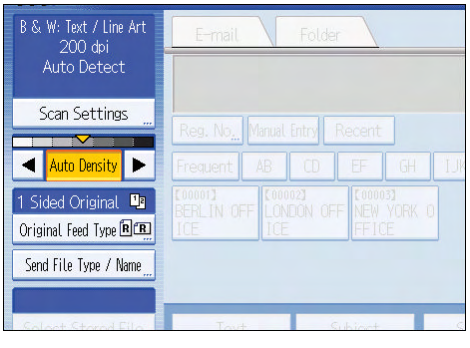
5. **Press [Store to Memory Device].**



6. **Press [OK].**

7. **If necessary, press [Scan Settings] to specify scanner settings such as resolution and scan size.**

   For details, see "Various Scan Settings".



8. **If necessary, specify the scanning density.**

   For details, see "Adjusting Image Density".

9. **If necessary, press [Original Feed Type] to specify settings such as original orientation.**

   For details, see "Setting of Original Feed Type".

10. **If necessary, press [Send File Type / Name] to specify settings such as file format and file name.**

    For details, see "Specifying the File Type and File Name".

11. **Press the [Start] key.**

    When scanning batches, place subsequent originals after the scan files have been sent.

    When writing is complete, a confirmation message appears.

12. **Press [Exit].**

13. **Remove the memory device from the media slot.**

    Remove the media from the media slot only after data has been written completely. Removing the media while data is being written will result in corrupted data.

Note

- You cannot specify where the data is saved. Files are saved in the root directory of the removable memory device.
- If the removable memory device is partitioned, files are saved on the first partition.
- You cannot configure file information such as [User Name], [File Name], and [Password].
- The amount of free space on the memory device is displayed. Note that if the amount of free space exceeds 10 GB, "9999.99 MB" will be displayed.
- To cancel writing, press the [Clear/Stop] key. If files are being written when writing is cancelled, any partially written files are deleted. Only complete files are stored on the removable memory device.
- The following table explains the activity of the media slot lamp.

Media Type	Lamp Activity
USB Memory	Lights up and remains lit as long as a USB flash memory is inserted.
SD Card	Lights up only when the SD card is being accessed.

Reference

- p.161 "Various Scan Settings"
- p.170 "Adjusting Image Density"
- p.171 "Setting of Original Feed Type"
- p.181 "Specifying the File Type and File Name"

6. Delivering Scan Files

Using the ScanRouter delivery software, you can deliver by various methods scan files produced by the machine.

Before Delivering Files

This section describes the necessary preparations and the procedure for using the network delivery scanner.

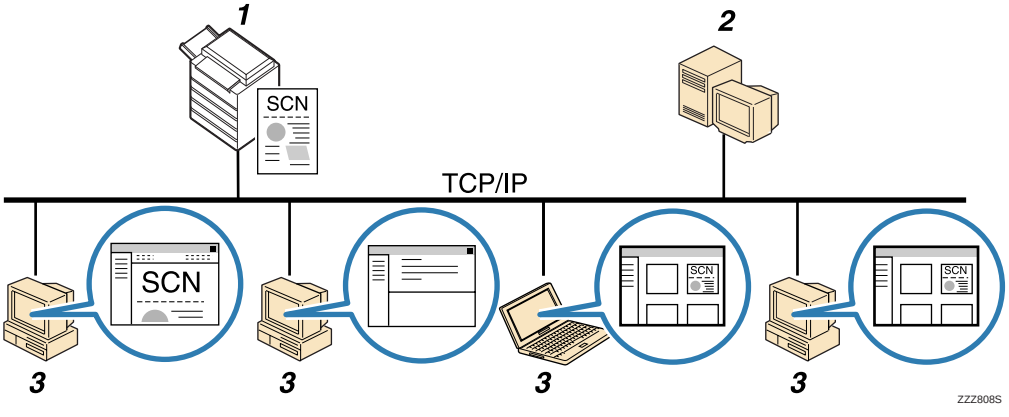
Important

- **To use the network delivery scanner function, your network must have a delivery server on which the ScanRouter delivery software *1 is installed. You must also register destination and sender information on the delivery server. For details about the ScanRouter delivery software, see the manuals that are supplied with it.**

*1 For details to purchase ScanRouter delivery software, contact your local dealer. With the GlobalScan NX (optional), you can also use network delivery scanner functions.

Overview of Scan File Delivery

This section describes the process for delivering files using the network delivery scanner.



1. **This machine**

   You can send scan files to the delivery server.

2. **Delivery server**

   Install the ScanRouter delivery software on this computer to use it as the delivery server.

   After receiving a scan file, the delivery server delivers the file according to the setting specified for the destination. The delivery settings are as follows:

   - Storing the file in an in-tray
   - Delivering the file by e-mail

- Storing the file in a selected folder

For details about the ScanRouter delivery software, see the manuals supplied with ScanRouter delivery software.

3. **Client Computer**

   How to check a file from the client computer depends on the delivery method.

   For example, you can check a file by one of the following methods:

   - Use DeskTopBinder to view a file delivered to the in-tray.
   - Use e-mail software to receive e-mail with an attached file.
   - Browse a folder for a stored file.

Preparing to Deliver Files

To deliver scanned files, you must first perform the following:

- Check the machine is properly connected to the network
- Configure the network settings in [System Settings]
- Configure the necessary settings in [Scanner Features]
- Configure the settings in ScanRouter delivery software

Checking the machine is properly connected to the network

Check that this machine is properly connected to the network.

For details about how to connect this machine to a network, see "Connecting to the Interface", Network and System Settings Reference.

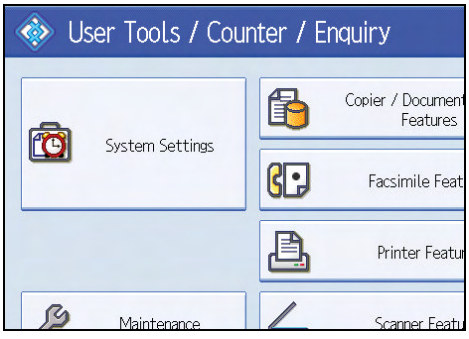
Configuring the network settings in [System Settings]

Configure the network settings in [System Settings] according to your environment and how you will be using the machine.

The following procedure explains connecting this machine to an IPv4 network using Ethernet cable.

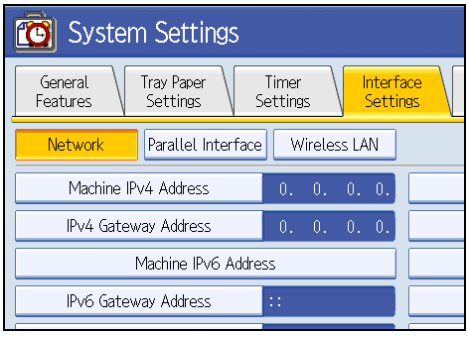
Note that the settings you must configure will vary depending on your operating environment. For details about network settings and configuration procedures, see "Network Settings Required to Use the Network Delivery Scanner", Network and System Settings Reference.

1. **Press the [User Tools/Counter] key, and then press [System Settings].**



The System Settings screen appears.

2. **Press the [Interface Settings] tab.**

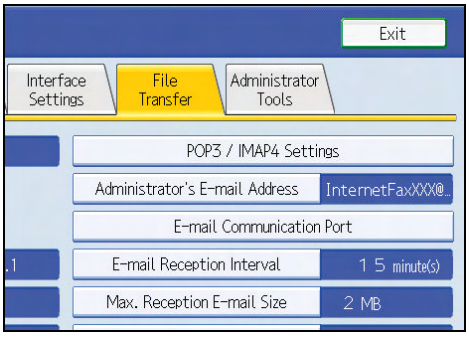


3. **Press [Machine IPv4 Address] to specify the machine's IPv4 address.**

To specify a static IPv4 address for this machine, press [Specify], and then enter the IPv4 address and subnet mask.

To obtain an IPv4 address from a DHCP server automatically, press [Auto-Obtain (DHCP)].

4. **Press [IPv4 Gateway Address], and then enter the IPv4 gateway address.**
5. **Press [Effective Protocol], and then make [IPv4] active.**
6. **Press the [File Transfer] tab.**



7. **Press [Delivery Option], and then press [On].**

8. **Press [Exit] twice.**

Note

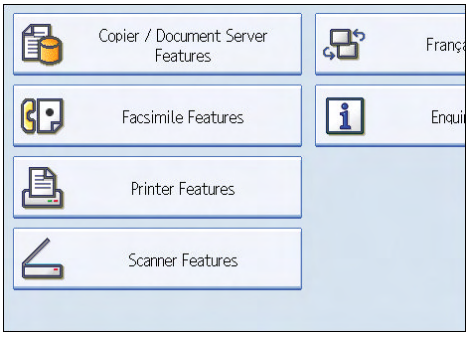
- If an extended wireless LAN board (optional) is installed, press [LAN Type]on the [Interface Settings] tab, then press [Ethernet], and then configure the network settings.

Configure the necessary settings in [Scanner Features]

Using [Scanner Features], you can make or change various settings related to the scanner function, such as compressing scan data or viewing the scanner journal. Configure the scanner settings according to your environment and how you will be using the machine.

This section explains how to display the Scanner Features screen. For details about the settings on this screen, see "Scanner Features".

1. **Press the [User Tools/Counter] key, and then press [Scanner Features].**



The Scanner Features screen appears.

2. **Press the [General Settings], [Scan Settings], [Send Settings], or [Initial Settings] tabs and configure the relevant settings on those tabs.**

Reference

- p.197 "Scanner Features"

Configure the settings in ScanRouter delivery software

Using SR Manager (a tool for the ScanRouter delivery software), register this machine as an I/O device. In addition, register destinations and specify such settings as the delivery type and sender.

For details about settings, see the manuals supplied with the ScanRouter delivery software.

Note

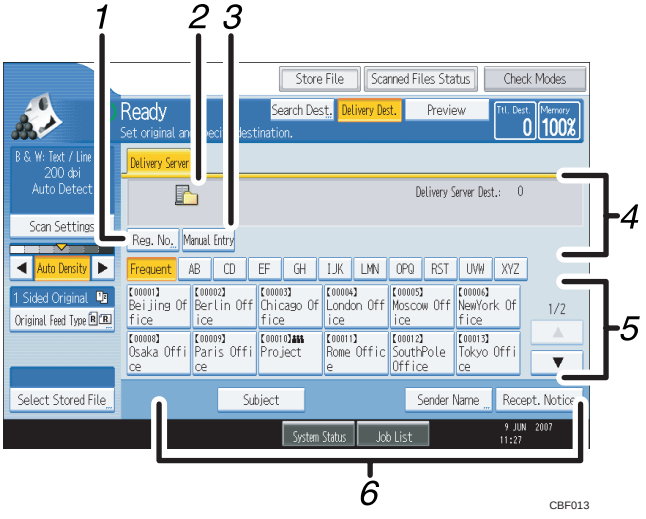
- To view files delivered to an in-tray, DeskTopBinder Lite must be installed on the client computer. You can download DeskTopBinder Lite from the Web site and then install it on the client computer.

- The settings you must configure in [System Settings] vary depending on your network environment. For details about network settings, see "Connecting the Machine", Network and System Settings Reference.

Network Delivery Scanner Screen

This section describes the screen layout when using the network delivery scanner.

The function items displayed serve as selector keys. You can select or specify an item by pressing it. When you select or specify an item on the display panel, it is highlighted like Set. Keys that cannot be selected appear like OK.



1. **[Reg. No.]**

   Press this key to specify the destination using a 5-digit registration number.

2. **Network delivery scanner icon**

   Indicates that the network delivery scanner screen is displayed.

3. **[Manual Entry]**

   To send a file by e-mail via the delivery server to a destination not registered in the delivery server's Destination List, press this key to display the soft keyboard. Then use the soft keyboard to enter the e-mail address. For details about how to send a file by e-mail via the delivery server, see ScanRouter delivery software manual.

4. **Destination Field**

   The specified destination appears. If more than one destination has been specified, press [▲] or [▼] to scroll through the destinations.

5. **Destination List**

   The list of destinations registered in the delivery server appears. If all of the destinations cannot be displayed, press [▲] or [▼] to switch the screen.

   The (👥) symbol indicates a group destination.

6. **[Subject] [Sender Name] [Recept. Notice]**

   Specify the subject, sender, and whether or not to enable Message Disposition Notification for the file to be transmitted.

Basic Procedure for Delivering Files

This section explains the basic procedure for delivering scan files using the network delivery scanner.

Important

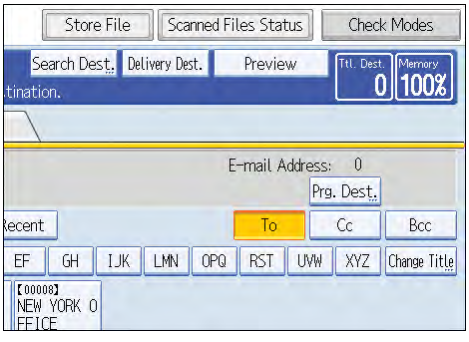
- **You must register destinations and senders in advance using the ScanRouter delivery software installed on the delivery server.**

1. **Make sure that no previous settings remain.**

   If a previous setting remains, press the [Clear Modes] key.

2. **If the E-mail screen or Scan to Folder screen appears, switch to the network delivery scanner screen.**

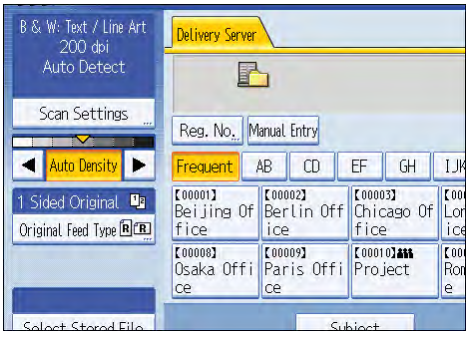
   For details, see "Switching to the Network Delivery Scanner Screen".



3. **Place originals.**

4. **If necessary, press [Scan Settings] to specify scanner settings such as resolution and scan size.**

   For details, see "Various Scan Settings".



5. **If necessary, specify the scanning density.**

   For details, see "Adjusting Image Density".

6. **If necessary, press [Original Feed Type] to specify settings such as original orientation.**

   For details, see "Setting of Original Feed Type".

7. **Specify the destination.**

   You can specify multiple destinations.

   For details, see "Specifying Delivery Destinations".

8. **If necessary, press [Subject] to specify the e-mail subject.**

   For details, see "Entering the Subject of the E-mail to Be Transmitted via the Delivery Server".

9. **If necessary, press [Sender Name] to specify the sender.**

   For details, see "Specifying the Sender".

10. **Press the [Start] key.**

Note

- By pressing [Manual Entry] on the network delivery scanner screen, you can send a file by e-mail via the delivery server's network. For details about entering the e-mail address directly, see "Entering an E-mail Address Manually".
- If you have selected more than one destination, press [▲] or [▼] next to the destination field to scroll through the destinations.
- To cancel a selected destination, display the destination in the destination field, and then press the [Clear/Stop] key. You can cancel a destination selected from the address book by pressing the selected destination again.
- You can use the Message Disposition Notification function when sending e-mail via delivery server. An e-mail is sent to the sender selected in step 9, notifying him/her that the recipient has read his/her e-mail. To specify this setting, press [Recept. Notice].
- To enable the Return Receipt function, you must specify the SMTP e-mail transmission settings using ScanRouter delivery software. For details about specifying this setting, see the ScanRouter delivery software manual. Note, however, that if the e-mail software used at the destination does not support Message Disposition Notification (MDN), e-mail notification that the e-mail has been opened may not be sent.
- Register the sender's e-mail address using the ScanRouter delivery software in advance.
- If you press [Check Modes] before pressing the [Start] key, the initial scanner screen switches to the Check Modes screen. You can use the Check Modes screen to check the settings such as destinations. For details, see "Check Modes".
- If you press [Preview] and start scanning while [Preview] is highlighted, the Preview screen appears. For details, see "Preview".
- To cancel scanning, press the [Clear/Stop] key.
- You can also store a scan file and simultaneously deliver it. For details, see "Simultaneous Storage and Delivery".

- After scan files are delivered, the destination, sender, and subject fields will be automatically cleared. If you want to preserve the information in these fields, contact your local dealer.

Reference

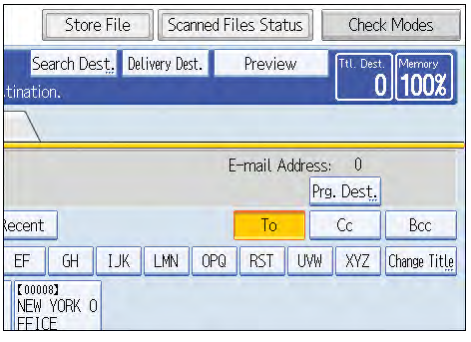
- p.140 "Switching to the Network Delivery Scanner Screen"
- p.161 "Various Scan Settings"
- p.170 "Adjusting Image Density"
- p.171 "Setting of Original Feed Type"
- p.141 "Specifying Delivery Destinations"
- p.149 "Entering the Subject of the E-mail to Be Transmitted via the Delivery Server"
- p.145 "Specifying the Sender"
- p.34 "Entering an E-mail Address Manually"
- p.15 "Check Modes"
- p.16 "Preview"
- p.150 "Simultaneous Storage and Delivery"

Switching to the Network Delivery Scanner Screen

This section explains how to switch the screen to the network delivery scanner screen.

If the E-mail screen or Scan to Folder screen is being displayed, switch to the network delivery scanner screen.

1. **Press [Delivery Dest.].**



The network delivery scanner screen appears.

Note

- You cannot switch the screen while e-mail or other destinations are being specified. To clear the specified destination, display the destination in the destination field of each screen, and then press the [Clear/Stop] key.
- When WSD is enabled, [Swtch Dest.List] appears instead of [Delivery Dest.]. To switch to the network delivery screen, press [Swtch Dest.List], and then press [Delivery Server].

Specifying Delivery Destinations

This section explains how to specify delivery destinations.

Note

- You can specify multiple destinations.

Selecting Destinations Registered in the Delivery Server's Address Book

This section explains how to select destinations registered in the delivery server's address book

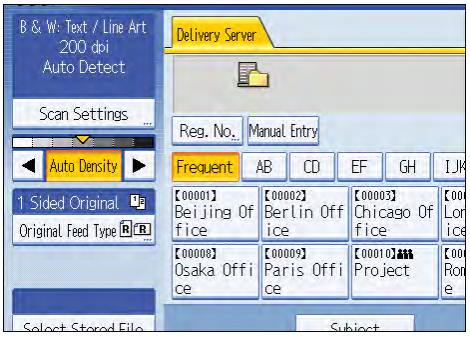
You can select a delivery destination registered in Destination List of the delivery server by any of the following methods:

- Select the destination from the delivery destination list
- Select the destination by entering the registration numbers
- Select the destination by searching in the delivery server

Selecting a destination from the Destination List

From the destination list, select a destination.

1. **In the destination list, press the key including the destination name.**



The selected destination is highlighted and also is displayed in the destination field at the top of the screen.

Destinations are registered in the delivery server under captions. The destination list is updated automatically.

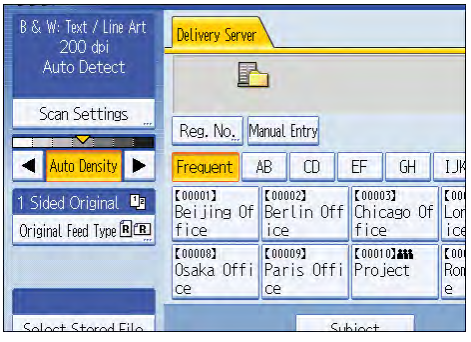
Note

- If the target destination does not appear, press [▲] or [▼] to scroll through the destinations until it does.
- Depending on the security setting, some destinations may not appear in the destination list.

Selecting destinations by entering their registration numbers

Select a destination by entering its Short ID number (registered using the ScanRouter delivery software). For details about how to set Short IDs, see the manuals supplied with the ScanRouter delivery software.

1. **Press [Reg. No.].**



2. **Using the number keys, enter the five-digit registration number, and then press the [#] key.**

   You can also enter a registration number of fewer than five digits.

   Example: To enter 00009

   Press the [9] key, and then press the [#] key.

   By pressing [Change], you can change the selected destination.

3. **Press [OK].**

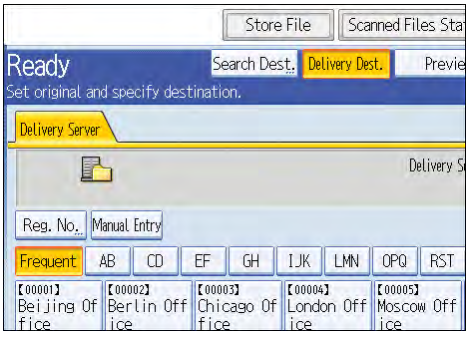
Note

- To cancel a selected destination, press [▲] or [▼] next to the destination field to scroll through the destinations until the one you want to cancel appears, and then press the [Clear/Stop] key.

Selecting destinations by searching the delivery server's Destination List

In the delivery server's Destination List, you can search for destinations and select them.

1. **Press [Search Dest.].**



2. **To search by destination name, press [Name].**

   To search by comment, press [Comment].

   The soft keyboard appears.

   You can also search by combining [Name] and [Comment].

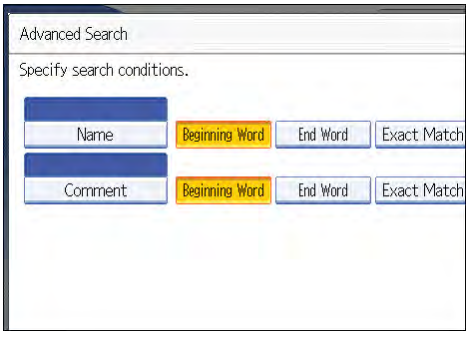
3. **Enter the beginning of the destination name.**

   To search by comment, enter the beginning of the comment.

4. **Press [OK].**

5. **If necessary, press [Advanced Search] to specify the detailed search criteria, and then press [OK].**

   By pressing [Advanced Search], you can search by [Name] and [Comment]. You can specify search criteria such as [Beginning Word] or [End Word]. You can refine your search using multiple criteria.



6. **Press [Start Search].**

   Destinations that match the search criteria are displayed.

7. **Select the destination.**

8. **Press [OK].**

Note

- The Comment search function searches for destinations by comment information, which is a registration item required by the ScanRouter delivery software.
- By pressing [Details], you can view details about the selected destinations.
- Up to 100 destinations can be displayed as search results.
- By pressing [Advanced Search], the following criteria appear:
  - [Beginning Word]: The names which start with the entered character or characters are targeted.

    For example, to search for "ABC", enter "A".
  - [End Word]: The names which end with the entered character or characters are targeted.

    For example, to search for "ABC", enter "C".
  - [Exact Match]: The names which correspond to an entered character or characters are targeted.

For example, to search for "ABC", enter "ABC".

- [Include one Word]: The names which contain an entered character or characters are targeted.

  For example, to search for "ABC", enter "A", "B", or "C".

- [Exclude Words]: The names which do not contain an entered character or characters are targeted.

  For example, to search for "ABC", enter "D".

Specifying the Sender

This section explains how to specify the e-mail sender when sending a file by e-mail via the delivery server.

You can specify the sender by any of the following methods:

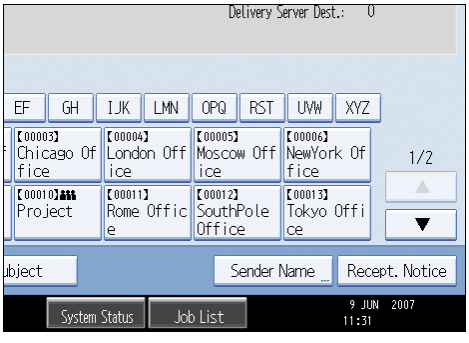
- Select the sender from the sender list
- Select the sender by entering the registration number
- Select the sender by searching the delivery server's Destination List

Selecting a Sender from the Sender List

This section explains how to select a sender from the sender list.

The sender list displays destinations that are registered on the delivery server.

1. **Press [Sender Name].**



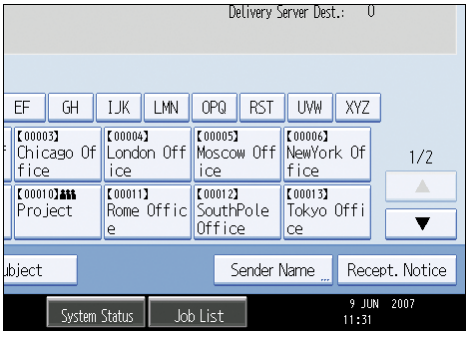
2. **Select the sender.**
3. **Press [OK].**

Selecting the Sender by Entering the Registration Number

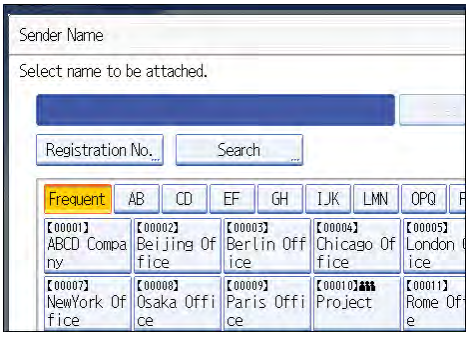
Select a sender by entering its Short ID number (registered using the ScanRouter delivery software).

For details about how to set Short IDs, see the manuals supplied with the ScanRouter delivery software.

1. **Press [Sender Name].**



2. **Press [Registration No.].**



3. **Using the number keys, enter the five-digit registration number assigned to the sender.**

   If the entered number is less than five digits, press the [#] key after the last number.

   Example: To enter 00006

   Press the [6] key, and then press the [#] key.

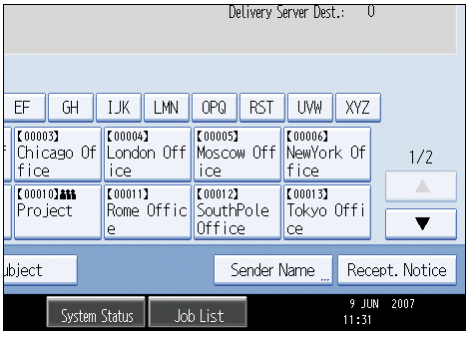
   By pressing [Change], you can change the selected destination.

4. **Press [OK] twice.**

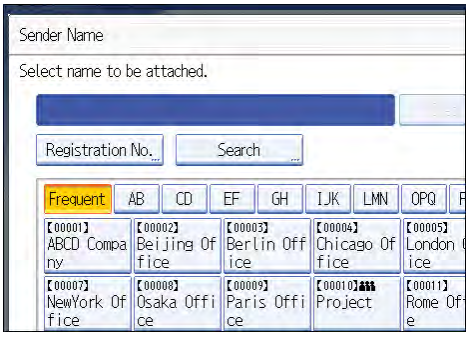
Selecting a Sender by Searching the Delivery Server's Destination List

This section explains how to select a sender by searching the delivery server's Destination List.

1. **Press [Sender Name].**



2. **Press [Search].**



3. **To search by destination name, press [Name].**

   To search by comment, press [Comment].

   The soft keyboard appears.

   You can also search by combining [Name] and [Comment].

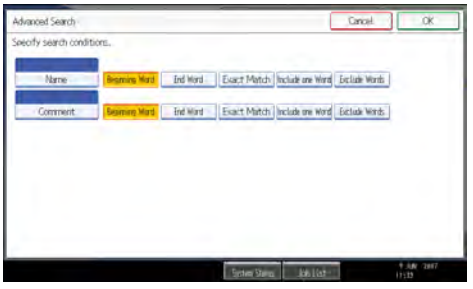
4. **Enter the beginning of the sender's name.**

   To search by comment, enter beginning of the comment.

5. **Press [OK].**

6. **If necessary, press [Advanced Search] to specify the detailed search criteria, and then press [OK].**

   By pressing [Advanced Search], you can search by [Name] and [Comment]. You can specify search criteria such as [Beginning Word] or [End Word]. You can refine your search using multiple criteria.



7. **Press [Start Search].**

   Destinations that match the search criteria are displayed.

8. **Select the sender.**

9. **Press [OK].**

Note

- The Comment search function searches for destinations by comment information, which is a registration item required by the ScanRouter delivery software.
- By pressing [Details], you can view details about the selected sender.
- Up to 100 items can be displayed as the search results.
- By pressing [Advanced Search], the following criteria appear:
  - [Beginning Word]: The names which start with the entered character or characters are targeted.

    For example, to search for "ABC", enter "A".
  - [End Word]: The names which end with the entered character or characters are targeted.

    For example, to search for "ABC", enter "C".
  - [Exact Match]: The names which correspond to an entered character or characters are targeted.

    For example, to search for "ABC", enter "ABC".
  - [Include one Word]: The names which contain an entered character or characters are targeted.

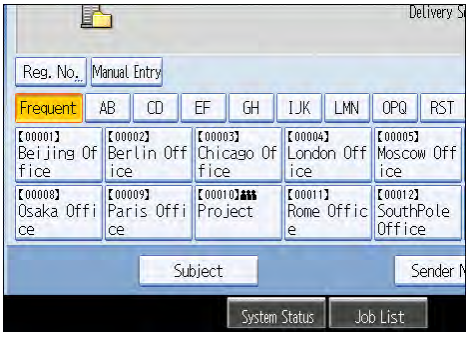
    For example, to search for "ABC", enter "A", "B", or "C".
  - [Exclude Words]: The names which do not contain an entered character or characters are targeted.

    For example, to search for "ABC", enter "D".

Entering the Subject of the E-mail to Be Transmitted via the Delivery Server

This section explains how to enter the e-mail subject when sending a file by e-mail via the delivery server.

1. **Press [Subject].**



2. **Enter the subject.**

   To enter characters, press [Text Entry].

   To enter symbols, press [Symbol Entry].

   To add predefined User Text registered on this machine, press [User Text].

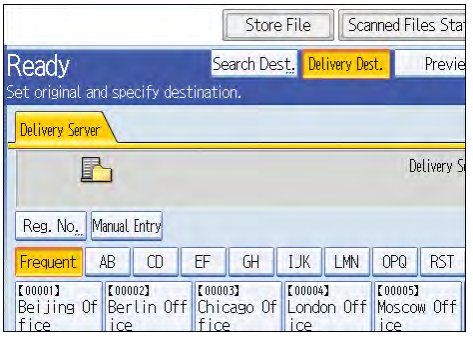
   For details about entering the text, see "Entering Text", About This Machine.

3. **Press [OK].**

Simultaneous Storage and Delivery

This section explains how to store a file and simultaneously deliver it.

1. **Press [Store File].**



2. **Make sure that [Store to HDD + Send] is selected.**
3. **If necessary, specify the stored file's information, such as [User Name], [File Name], and [Password].**

   For details, see "Specifying File Information for a Stored File".
4. **Press [OK].**
5. **Specify the setting for delivering the file, and then send the file.**

   For details about delivering a file, see "Basic Procedure for Delivering Files".

Note

- Depending on the security setting, [Access Privileges] may appear instead of [User Name]. For details about specifying [Access Privileges], consult the administrator.
- You can resend stored files. To resend stored files, select the files on the Select Stored File screen, and then send them. For details, see "Sending a Stored File".

Reference

- p.109 "Specifying File Information for a Stored File"
- p.137 "Basic Procedure for Delivering Files"
- p.119 "Sending a Stored File"

7. Scanning Originals with the Network TWAIN Scanner

The TWAIN driver allows you to scan originals on the machine from a client computer via the network.

Before Using the Network TWAIN Scanner

This section describes the preparations and procedure for using the network TWAIN scanner.

Important

- **To use the network TWAIN scanner, you must install the TWAIN driver, which is on the supplied CD-ROM. For details about installing the TWAIN driver, see "Installing the TWAIN Driver from the Supplied CD-ROM".**
- **To use the network TWAIN scanner, a TWAIN-compliant application, such as DeskTopBinder, must be installed on the client computer. You can download DeskTopBinder Lite from the Web site and then install it on the client computer.**

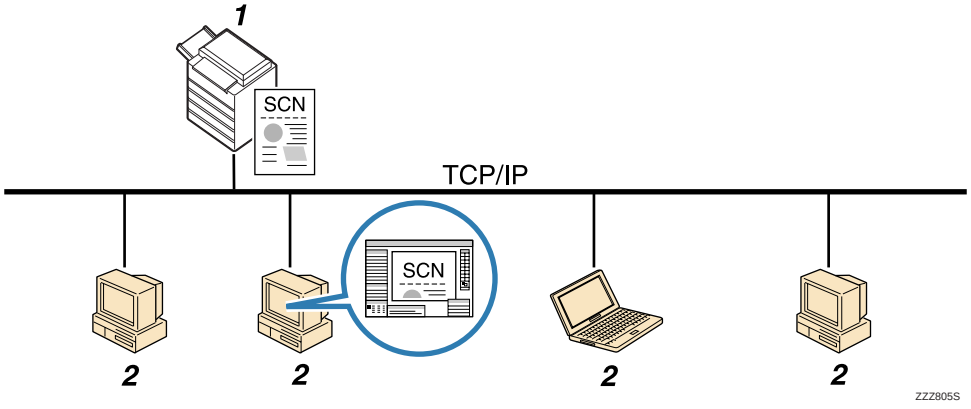
Reference

- p.154 "Installing the TWAIN Driver from the Supplied CD-ROM"

Overview of the Network TWAIN Scanner

This section describes the network TWAIN scanner function.

In the TWAIN scanner mode, you can share this machine among multiple computers. Therefore, you don't have to prepare a special computer for scanner or reconnect the scanner and each computer every time you need to use it.



1. **This Machine**

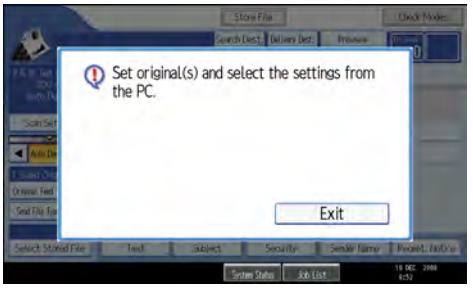
   Scans an original after receiving a scan instruction from a client computer, and then sends the scan file over the network to the client computer.

2. **Client Computer**

   Specifies the scanner settings and controls the scanner using an application, such as DeskTopBinder Lite, that supports the network TWAIN scanner. Receives the files scanned by the machine and displays them using an application that supports the network TWAIN scanner.

Note

- When using the machine as a network TWAIN scanner, you do not need to press the [Scanner] key on the machine's control panel. The screen switches automatically when you scan an original from a client computer using the TWAIN driver. To use functions other than the network TWAIN scanner, press [Exit].



Preparing to Use the Network TWAIN Scanner

To use this machine as a network TWAIN scanner, you must first perform the following:

- Check the machine is properly connected to the network
- Configure the network settings in [System Settings]
- Install the TWAIN driver on a client computer
- Install a TWAIN-compliant application on the same client computer

Checking the machine is properly connected to the network

Check that this machine is properly connected to the network.

For details about how to connect this machine to a network, see "Connecting to the Interface", Network and System Settings Reference.

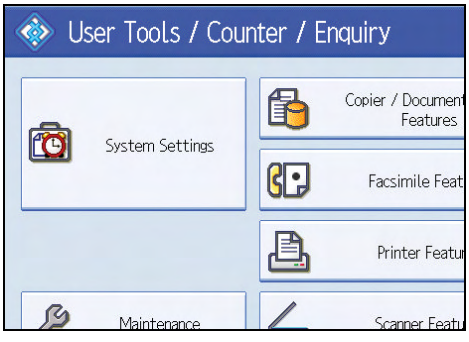
Configuring the network settings in [System Settings]

Configure the network settings in [System Settings] according to your environment and how you will be using the machine.

The following procedure explains connecting this machine to an IPv4 network using Ethernet cable.

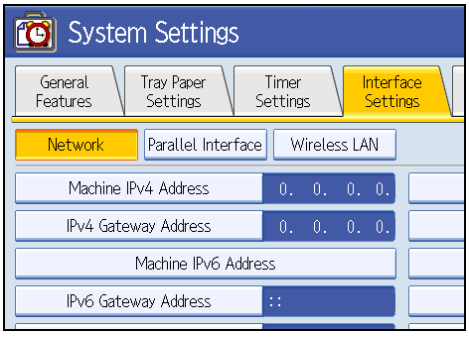
Note that the settings you must configure will vary depending on your operating environment. For details about network settings and configuration procedures, see "Network Settings Required to Use Network TWAIN Scanner", Network and System Settings Reference.

1. **Press the [User Tools/Counter] key, and then press [System Settings].**



   The System Settings screen appears.

2. **Press the [Interface Settings] tab.**



3. **Press [Machine IPv4 Address] to specify the machine's IPv4 address.**

   To specify a static IPv4 address for this machine, press [Specify], and then enter the IPv4 address and subnet mask.

   To obtain an IPv4 address from a DHCP server automatically, press [Auto-Obtain (DHCP)].

4. **Press [IPv4 Gateway Address], and then enter the IPv4 gateway address.**
5. **Press [Effective Protocol], and then make [IPv4] active.**
6. **Press [Exit] twice.**

Note

- If an extended wireless LAN board (optional) is installed, press [LAN Type] on the [Interface Settings] tab, then press [Ethernet], and then configure the network settings.

Installing the TWAIN driver on a client computer

Install the TWAIN driver on your computer.

For details about installing the TWAIN driver, see "Installing the TWAIN Driver from the Supplied CD-ROM".

Reference

- p.154 "Installing the TWAIN Driver from the Supplied CD-ROM"

Installing a TWAIN-compliant application on the same client computer

To use this machine as a network TWAIN scanner, a TWAIN-compliant application, such as DeskTopBinder, must be installed on the client computer.

You can download DeskTopBinder Lite from the Web site and then install it on the client computer.

Installing the TWAIN Driver from the Supplied CD-ROM

This section explains how to install the TWAIN driver on a client computer from the supplied CD-ROM.

To use the network TWAIN scanner, you must install the TWAIN driver on a client computer.

1. **Start Windows, and then insert the CD-ROM into the CD-ROM drive of the client computer.**

   The installer starts.
2. **Click [TWAIN Driver].**
3. **The installer of the TWAIN driver starts. Follow the instructions.**

Note

- Before you start the installation, check the system requirements for the TWAIN driver. For details about the system requirements, see "Software Supplied on CD-ROM".
- You can install the software using the auto-run program. For details about the auto-run program, see "Auto-Run Program".
- If the installer does not start automatically, see "Auto-Run Program".
- When the installation is complete, a message about restarting the client computer may appear. In this case, restart the client computer.
- After the installation is complete, a folder with the name of the machine in use is added in [Programs] or [All Programs] on the [Start] menu. Help can be displayed from here.
- Notes on using the network TWAIN scanner are provided in "Readme.txt". Be sure to read them before use.

Reference

- p.209 "Software Supplied on CD-ROM"

- p.209 "Auto-Run Program"

Basic Network TWAIN Scanner Procedure

This section explains the basic procedure for scanning with the network TWAIN scanner.

Important

- **To use the network TWAIN scanner, a TWAIN-compliant application, such as DeskTopBinder and the TWAIN driver must be installed on the client computer.**
- **You can download DeskTopBinder Lite from the Web site and then install it on the client computer.**
- **Under the Windows XP SP2/Vista/7 or Windows Server 2003/2003 R2/2008 operating system, when the Windows firewall or an antivirus program is enabled, "Cannot find the scanner." or "No response from the scanner." may appear and scanning with the TWAIN scanner may fail. In this case, change the settings of the Windows firewall or antivirus program. For details, see Windows Help.**

The following procedure uses Windows XP and DeskTopBinder Lite by way of example.

1. **On the [Start] menu, point to [All Programs], point to DeskTopBinder, and then click DeskTopBinder.**
2. **On the [Tools] menu, click [Scanner Settings...].**
3. **Click [Select Scanner Driver...].**
4. **Select the name of the machine you want to use in the list, and then click [Select].**
5. **Click [OK].**
6. **Place originals.**
7. **On the [File] menu, point to [Add Document], and then click [Scan...] to display the Scanner Control dialog box.**

   The Scanner Control dialog box and DeskTopBinder Viewer will appear.

   A dialog box that is used to control a scanner using the TWAIN driver is referred to as the Scanner Control dialog box.
8. **Make settings according to such factors as the type of original, type of scanning, and orientation of the original.**

   For details, see the TWAIN driver Help.
9. **In the Scanner Control dialog box, click [Scan].**

   Depending on the security setting, if you press [Scan], a dialog box for entering the user name and password may appear.

   If there are more originals to be scanned, place the next original, and then click [Continue].

   If there are no more originals to be scanned, click [Complete].
10. **On the [File] menu of the DeskTopBinder Viewer, click [Exit].**
11. **Enter the document name, and then click [OK].**

    The DeskTopBinder Viewer closes and the image is stored in DeskTopBinder Lite.

Note

- If you have already selected a scanner, you do not need to select the scanner unless you want to change it.
- Using DeskTopBinder, you can edit and print scan files. For more information about DeskTopBinder, see DeskTopBinder manuals.
- The model name of the connected scanner appears in the title bar of the Scanner Control dialog box. If there is more than one scanner of the same model on the network, make sure you have selected the correct scanner. If you have not, click [Select Scanner Driver...], and then select the scanner again. If the correct scanner does not appear in the list, check that the scanner is correctly connected to the network and that its IPv4 address has been specified. If the correct scanner still does not appear; in the Network Connection Tool that is installed with the TWAIN driver, select the [Use a specific scanner.] check box, and then specify the IP address or host name of the scanner you want to use. For details, see the Help for the Network Connection Tool.
- If you are scanning originals from DeskTopBinder using the network TWAIN scanner, you cannot cancel scanning without first saving the documents. If you are no longer using the documents, save them first, and then delete them using DeskTopBinder.
- The Blank Page Detect function is not available when you are using the TWAIN scanner.

Scan Settings When Using TWAIN Scanner

This section explains how to specify original orientation and scan setting for a bundle of mixed size originals when using the TWAIN scanner.

Setting Original Orientation on the TWAIN Scanner

To correctly display the top/bottom orientation of the scanned original on a client computer, the placement of the original and the settings made in the Scanner Control dialog box must match.

1. **Open the Scanner Control dialog box.**

   For details about how to open the Scanner Control dialog box, see "Basic Network TWAIN Scanner Procedure".

2. **In the [Original Scan Method:] list, select the place where the original is placed.**
3. **In the [Orig.Orientn.:] list, select [Long Edge] or [Short Edge].**
4. **In the [Orientation:] list, select [Right 90 deg. / Right 90 deg.], [Left 90 deg. / Left 90 deg.], [Standard 0 deg. / Standard 0 deg.], or [180 deg. / 180 deg.].**
5. **If an original is placed in the ADF, from the drop down menu of [Scan Settings:], select [1 Sided], [2 Sided(Top to Top)], or [2 Sided(Top to Bottom)].**

7

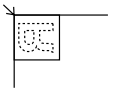
Reference

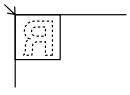
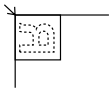
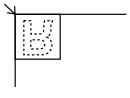
- p.156 "Basic Network TWAIN Scanner Procedure"

Placing Originals

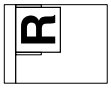
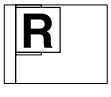
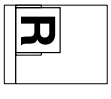
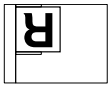
The following table shows the relationship between the original orientation and the Scanner Properties dialog box settings:

Exposure Glass

Original Orientation	TWAIN Scanner Control Dialog Box Key
top edge touches top left of exposure glass  This orientation is the TWAIN driver's standard setting. Place originals in this orientation normally.	Left 90 deg.

Original Orientation	TWAIN Scanner Control Dialog Box Key
top edge touches rear of exposure glass 	Standard 0 deg.
bottom edge touches left side of exposure glass 	Right 90 deg.
bottom edge touches top of exposure glass 	180 deg.

ADF

Original Orientation	TWAIN Scanner Control Dialog Box Key
top edge of original placed first 	Left 90 deg.
top edge touches rear of ADF 	Standard 0 deg.
bottom edge touches left side of ADF 	Right 90 deg.
bottom edge touches top of ADF 	180 deg.

Note

- Originals are normally rectangular (R) or horizontally long (R). However, the table above uses squares to make original orientation easier to understand. Even if the actual shape of the original is different, the combination of original orientation and the orientation specified on the scanner driver does not change.
- For details about the Scanner Control dialog box, see the TWAIN driver Help.
- Depending on the settings, originals of different sizes are scanned differently.

When Scanning Originals of Mixed Sizes Using TWAIN Scanner

This section explains the differences between scanning mixed-size originals using the TWAIN scanner and normal scanning.

- If [Auto detect(Mixed-size)] is selected in the [Original Size:] list, the machine detects the length of each original and then scans them.
- If [Auto detect(Uni-size)] is selected in the [Original Size:] list, the machine detects the size of the first original of the batch and scans all subsequent originals at that size.

Note

- The paper guides cannot be adjusted to small size originals, which may cause slightly tilted scanning.

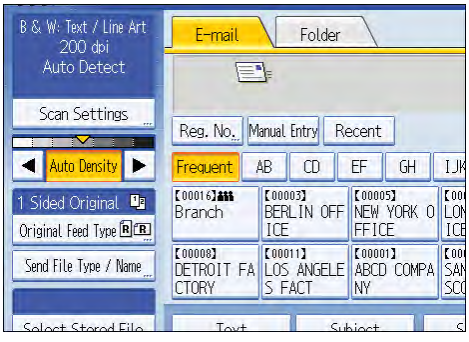
8. Various Scan Settings

This chapter describes various scan settings.

Specifying Scan Settings

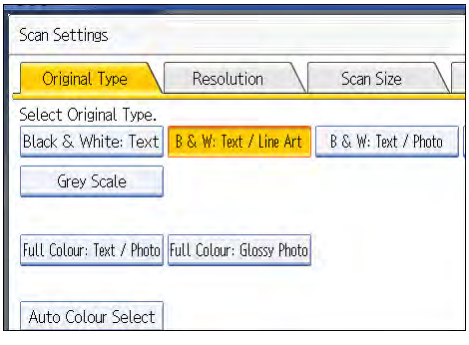
This section explains how to make scan settings.

1. **Press [Scan Settings].**



2. **Specify resolution, scan size, and other settings, as required.**

   For details about individual scan setting items, see "Scan Settings".



3. **Press [OK].**

Reference

- p.162 "Scan Settings"

Scan Settings

This section describes the items for Scan Settings.

Original Type

Select a Original type that is appropriate for your original.

[Black & White: Text]

Appropriate to increase OCR readability using an OCR-compliant application.

- [Dropout Colour]

  You can select not to scan the following colors: [Chromatic Colour], [Red], [Green], and [Blue]. When you select a color to leave out of the scan, specify its level of coverage. There are five levels. Press [Narrow] to leave out colors that are closest to the specified color. Press [Wide] to broaden the coverage of the specified color and not scan those colors.

[B & W: Text / Line Art]

Standard black and white originals containing mainly characters. Creates scanned images suitable for printing.

[B & W: Text / Photo]

Originals containing a mixture of photographs, pictures and characters (two-value). Creates scanned images suitable for printing.

[Black & White: Photo]

Originals containing photographs and other pictures (two-value). Creates scanned images suitable for printing.

[Grey Scale]

Originals containing photographs and other pictures (multi-value). Creates scanned images suitable for displaying on a computer screen.

[Full Colour: Text / Photo]

Originals for color printing mainly consisting of characters.

[Full Colour: Glossy Photo]

Originals of silver salt photographs and other color pictures.

[Auto Colour Select]

Scans originals by automatically judging the colors of the originals.

Note

- [Dropout Colour] can be set when [Black & White: Text] is selected for [Original Type].

- If [Auto Colour Select] is selected, the machine may fail to correctly judge colors depending on the scanning condition or the contents of originals.
- If you select [High Compression PDF] as the file type, you must then select one of the following for Original Type: [Grey Scale], [Full Colour: Text / Photo], or [Full Colour: Glossy Photo].

Resolution

Select resolution for scanning originals.

Select [100 dpi], [200 dpi], [300 dpi], [400 dpi], or [600 dpi] as the scanning resolution.

Note

- If [High Compression PDF] is selected as the file type, you cannot select [100 dpi]. For details about file types, see "Specifying the File Type and File Name".

Reference

- p.181 "Specifying the File Type and File Name"

Scan Size

Select the size of the original to be scanned.

[Auto Detect]

Scans original sizes using the automatic size detect function.

[Mixed Original Sizes]

Select [Mixed Original Sizes] to scan a batch of originals that have different lengths.

Originals are scanned by the ADF and the length of each is automatically detected.

[Custom Size]

Select [Custom Size] to scan originals whose sizes do not match a standard template or to scan only a part of an original.

You can specify the length and width of your originals in mm or inches.

Template size

Select a template size to scan originals at a specified size regardless of the actual size of the originals you have placed.

You can specify the following template sizes:

A3, A4, A4, A5, A5, B4 JIS, B5 JIS, B5 JIS, 11 × 17, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_2$ × 11, $5^1/_2$ × $8^1/_2$, $5^1/_2$ × $8^1/_2$

Note

- Selecting both [Mixed Original Sizes] and [Erase Border] reduces the scanning speed.

- You can enter 140 mm (5.5 inches) or higher in Original Size (X1 and Y1) under [Custom Size].
- If the size of an original placed in the ADF cannot be detected automatically, the original might be scanned at a different size. For details about paper sizes that can be automatically detected when placed in the ADF, see "Specifications".

Reference

- p.218 "Specifications"

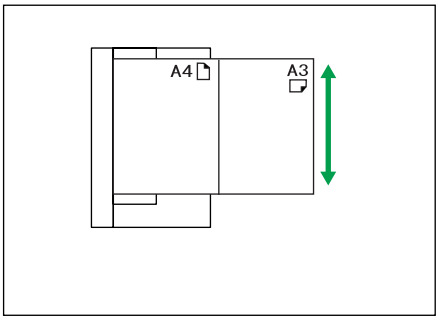
Relationship of original of mixed sizes and scan size

Scanning methods for originals mixed with different sizes (such as A3 & A4 or B4 & B5) differ depending on the settings you make for the scan size and whether you use the exposure glass or the ADF.

- If you select [Mixed Original Sizes], the machine detects the length of each original and scans them.
- If a template size is selected, the machine scans originals at the selected size regardless of the actual size of originals. If an original is smaller than the selected size, the machine applies margins to the scan area.
- If [Auto Detect] is selected for scanning originals from the exposure glass, the machine detects the size of individual originals and scans accordingly.
- If only [Auto Detect] is selected for scanning originals from the ADF, the machine detects the size of the first original and scans all the other originals based on that size.

Note

- When scanning originals of different length at the same time, place them correctly by referring to the chart below. The paper guides cannot be adjusted to small size originals, which may cause slightly tilted scanning.



BPT021S

- If you do not select [Mixed Original Sizes] and place originals of different sizes in the ADF, paper jams might occur or parts of the originals might not be scanned.

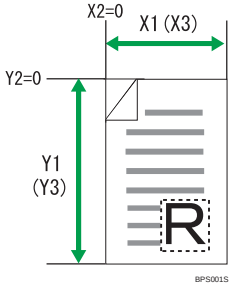
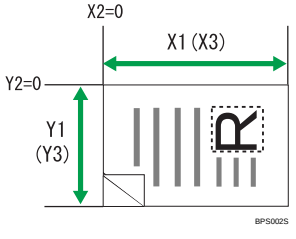
Scanning the entire area of a custom size original

This section explains how to specify a custom size for scanning the entire area of an original. If you want to scan the entire area of a custom size original, select [Custom Size] as the scan size.

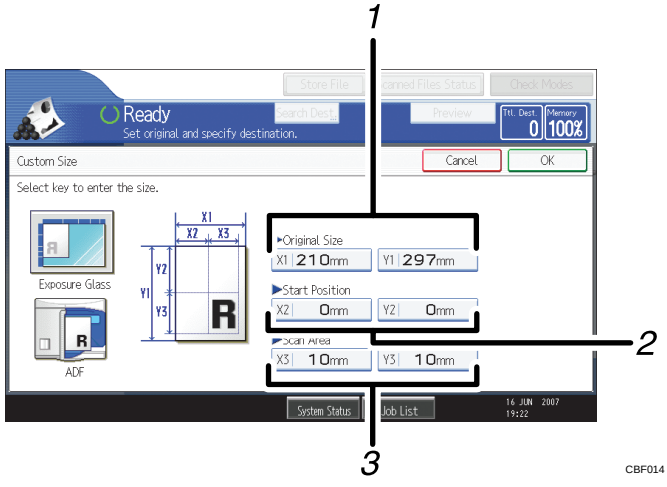
To display the custom size setting screen, on the initial scanner screen, press [Scan Settings] > [Scan Size] > [Custom Size].

The following tables explain how to measure custom size originals and how to specify the scan settings on the custom size settings screen.

How to measure sizes

Orientation and placement of original	Measuring method for scanning the entire area of a custom size original
In the orientation on the exposure glass or in the ADF	
In the orientation on the exposure glass or in the ADF	

Scan settings on the custom size setting screen



1. **Original Size (X1 and Y1)**

   Specify the length and width of the original.

   Enter the actual width and length in [X1] and [Y1], respectively, and then press the [#] key.

2. **Start Position (X2 and Y2)**

   Set Start Position to 0 mm (0 inch).

   Enter "0" in both [X2] and [Y2], and then press the [#] key.

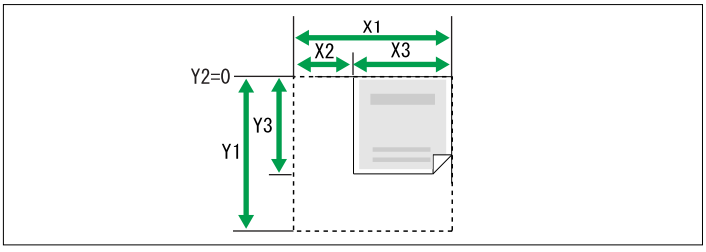
3. **Scan Area (X3 and Y3)**

   Specify the same values as Original Size (X1, Y1).

   Enter the same values in [X3] and [Y3] as Original Size (X1 and Y1 respectively), and then press the [#] key.

Note

- For X1 and Y1, you can specify 140 mm (5.5 inches) or larger.
- When scanning originals using [Custom Size], you cannot enter specific values in [Original Size] and [Start Position]. To configure the scan area, specify [Scan Area] and [Start Position] first, and then [Original Size].
- To scan an original that is smaller than 140 mm (5.5 inches), configure the settings as though you were scanning part of an original that is larger than 140 mm (5.5 inches). For example: to scan a CD label on the exposure glass, specify X1 - X3 and Y1 - Y3 based on the chart below. For details about scanning procedures, see "Scanning part of a custom size original".



- For details about how to place originals, see "Setting of Original Feed Type".

Reference

- p.167 "Scanning part of a custom size original"
- p.171 "Setting of Original Feed Type"

Scanning part of a custom size original

If you want to scan only a part of a custom size original, select [Custom Size] as the scan size.

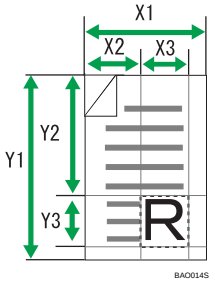
To display the custom size setting screen, on the initial scanner screen, press [Scan Settings] > [Scan Size] > [Custom Size].

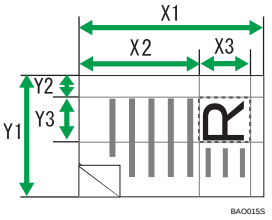
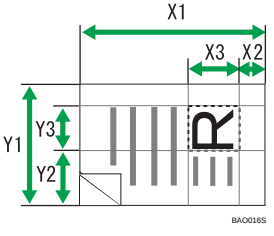
To scan part of an original, measure Original Size (X1 and Y1), Start Position (X2 and Y2), and Scan Area (X3 and Y3) on the surface of the original, and then enter those values in the same order on the custom size setting screen.

Measuring methods differ depending on where the original is placed and the orientation it is placed in. For details about how to measure Original Size (X1 and Y1), Start Position (X2 and Y2), and Scan Area (X3 and Y3) correctly, see "How to measure sizes".

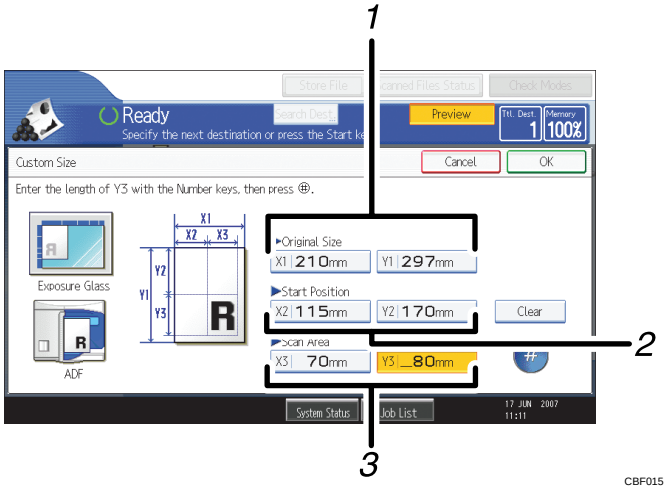
Enter the sizes while referring to "Scan settings on the custom size setting screen".

How to measure sizes

Orientation and placement of original	Measuring method for scanning the "R" section
In the R orientation on the exposure glass or in the ADF.	

Orientation and placement of original	Measuring method for scanning the "R" section
In the orientation in the ADF.	
In the orientation on the exposure glass.	

Scan settings on the custom size setting screen



1. **Original Size (X1 and Y1)**

   Specify the original's entire size.

   Enter the actual values in [X1] and [Y1] while referring to "How to measure sizes", and then press the [#] key.

2. **Start Position (X2 and Y2)**

   Specify the scanning start position.

   Enter the actual values in [X2] and [Y2] while referring to "How to measure sizes", and then press the [#] key.

3. **Scan Area (X3 and Y3)**

   Specify sizes of the area you want to scan.

   Enter the actual values in [X3] and [Y3] while referring to "How to measure sizes", and then press the [#] key.

Note

- When scanning originals using [Custom Size], you cannot enter specific values in [Original Size] and [Start Position]. To configure the scan area, specify [Scan Area] and [Start Position] first, and then [Original Size].
- For details about how to place originals, see "Setting of Original Feed Type".

Reference

- p.171 "Setting of Original Feed Type"

Edit

Make editing settings.

[Erase Border]

Deletes the borders of the scanned original according to the specified width.

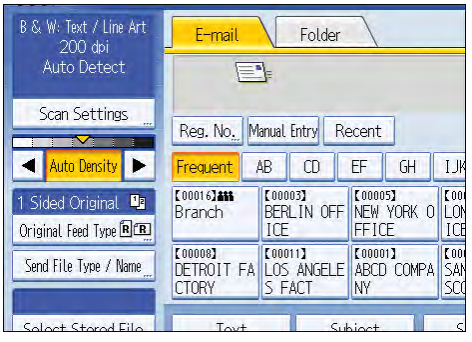
If you select [Same Width], you can specify a uniform width for deletion all around the original (top, bottom, left, and right sides). If you select [Different Width], you can specify a different width for deletion for each side.

Adjusting Image Density

This section explains how to adjust image density.

To adjust image density, press [◀] or [▶], at the left and right of [Auto Density]. These keys increase or decrease the image density in single increments up to 7.

Selecting [Auto Density] corrects scanning density to improve resolution of paper types such as non-white paper like newspaper or transparent originals.



Note

- When scanning originals in full color, you can specify the [Auto Density] level in [Background Density of ADS (Full Colour)] under [Scanner Features]. For details, see "Scan Settings".

Reference

- p.201 "Scan Settings"

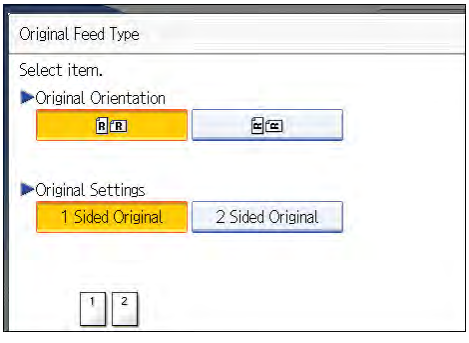
Setting of Original Feed Type

This section explains Original Feed Type settings such as orientation and scan sides of originals.

Original Orientation

This section explains how to correctly display the top/bottom orientation of scanned originals on a client computer screen.

1. **Press [Original Feed Type].**
2. **Press [ ] or [ ] to select the same orientation as that of original.**



3. **Press [OK].**

Placing Originals

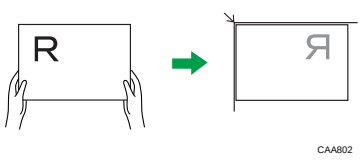
To correctly display the top/bottom orientation of the scanned original on a client computer, the placement of the original and the settings made on the control panel must match.

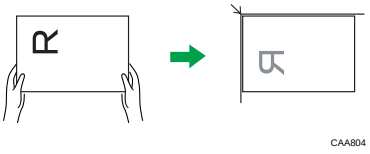
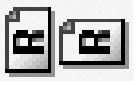
Place originals correctly by referring to the following tables:

Exposure Glass

Place the original face down on the exposure glass in either the left-right (landscape) or up-down (portrait) orientation.

Original orientation and control panel key selection

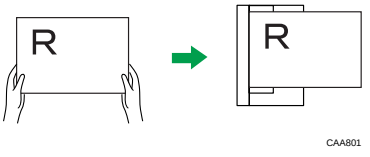
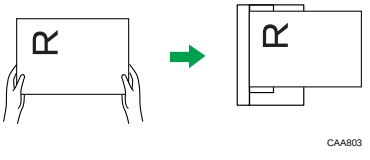
Original orientation	Control panel key
top edge touches rear of exposure glass 	

Original orientation	Control panel key
top edge touches top left corner of exposure glass  CAA804	

ADF

Hold the original so that its text is in the natural readable orientation, and then place it face up in the ADF.

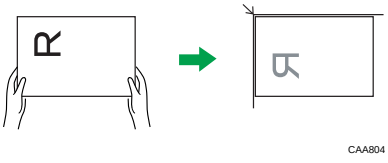
Original orientation and control panel key selection

Original orientation	Control panel key
top edge touches rear of ADF  CAA801	
top edge placed first  CAA803	

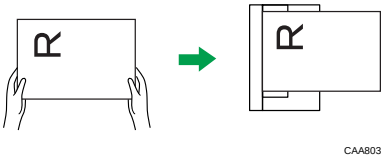
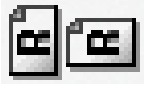
Note

- When you specify full color, gray scale, or [Auto Colour Select] for Original Type, and single page TIFF/JPEG or multi-page TIFF is selected as the file type, refer to the tables below for how to place originals. Originals placed in orientations that are not recommended in the table might appear incorrectly top/bottom oriented on client computer displays. Whether you are scanning one-sided or two-sided originals, set the originals in the orientations specified in the tables below.

Exposure glass

Original orientation	Control panel key
top edge touches top left corner of exposure glass 	

ADF

Original orientation	Control panel key
top edge placed first 	

Original Settings

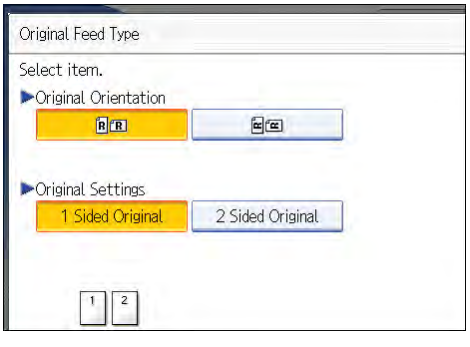
This section explains the settings for the scanning the sides of originals.

8

One-sided original

This section explains the settings for scanning only one side of originals.

1. **Press [Original Feed Type].**
2. **In [Original Settings], select [1 Sided Original].**

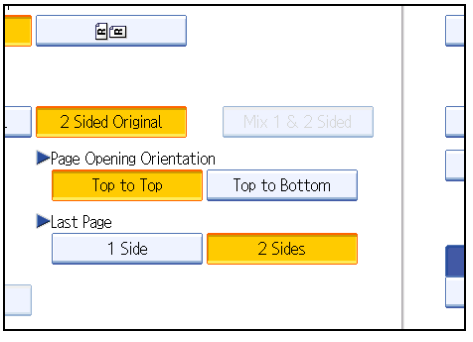


3. **Press [OK].**

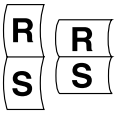
Two-sided original

This section explains the settings for scanning both sides of originals.

1. **Press [Original Feed Type].**
2. **In [Original Settings], select [2 Sided Original].**
3. **In [Page Opening Orientation], select [Top to Top] or [Top to Bottom] according to the binding orientation of the originals.**



Binding orientation and required page opening orientation

Binding orientation	Page opening orientation
	Top to Top
	Top to Bottom

4. **If the last page of the last original is blank, in [Last Page], select [1 Side] or [2 Sides].**

   To skip the last page, select [1 Side].

   To scan the last page as blank page, select [2 Sides].

5. **Press [OK].**

Note

- If you selected [Divide], the setting made here is applied to the last page of each batch of divided originals.

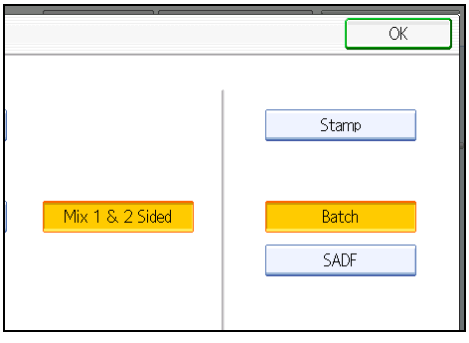
Multiple originals containing one-sided and two-sided pages

This section explains the settings for switching between [1 Sided Original] and [2 Sided Original] when scanning multiple originals containing one-sided and two-sided pages.

Select [Mix 1 & 2 Sided]. Then, before placing additional originals, switch between [1 Sided Original] and [2 Sided Original], and then start scanning.

1. **Press [Original Feed Type].**
2. **Select either [Batch] or [SADF].**

   If you will be scanning multiple originals multiple times, you must specify this setting beforehand. For details, see "Batch, SADF".
3. **In [Original Settings], select [Mix 1 & 2 Sided].**



4. **Press [OK].**

Note

- You can select [Mix 1 & 2 Sided] and [Divide] at the same time. However, the function selected last has priority.
- To switch the scan setting for additional originals to [1 Sided Original] after scanning one side of the last page of a batch of two-sided originals, press [Change Setting], and then press [1 Sided Original].
- One-sided and two-sided originals are usually output to different trays. However, if you select [Mix 1 & 2 Sided], all originals are output back side up (reversed) to the same tray. This allows you to check the scanning order, regardless of whether they are one-sided or two-sided originals.

Reference

- p.176 "Batch, SADF"
- p.179 "Scanning Multiple Pages of Originals as One File"

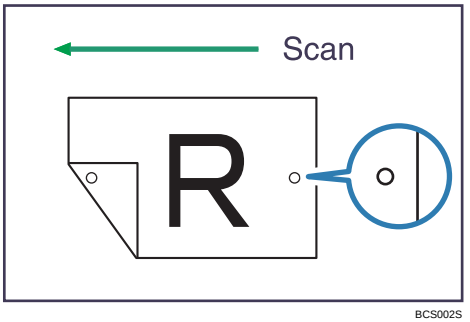
Stamp

This section explains the procedure for stamping originals that are scanned from the ARDF. The stamp indicates the originals have been scanned.

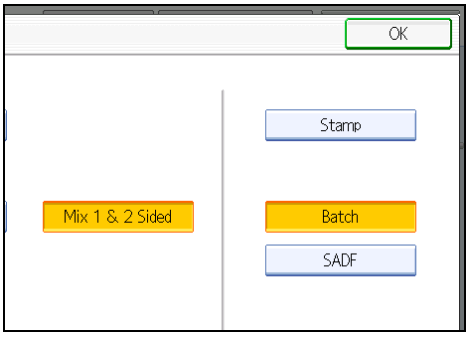
When scanning a document using ARDF, the machine can stamp a circle mark at the bottom of the original. When scanning a two-sided document, the document is marked at the bottom of the front page and top of the rear page.

This function is useful when you want to distinguish scanned originals.

One-pass duplex scanning ADF does not support the Stamp function.



1. **Press [Original Feed Type].**
2. **Press [Stamp].**



3. **Press [OK].**

Note

- The stamp position varies depending on the machine type.
- Last pages are stamped even if you selected not to scan the last page.
- Stamping may continue if scanning is interrupted, depending on the cause of interruption.
- Replace the stamp cartridge when stamp begins to fade. For details, see "Replacing the Stamp Cartridge", About This Machine.

Batch, SADF

This section explains the settings you need to configure if you want to scan a large number of originals in several batches and send them together as a single job.

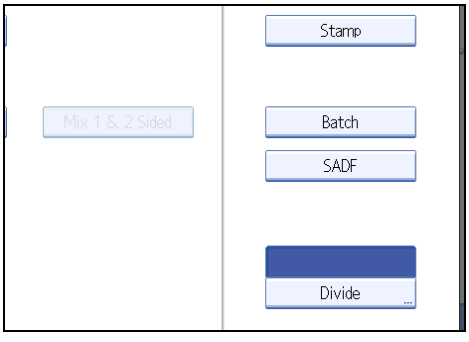
Batch

If you select [Batch], scanning starts when you place the additional originals and press the [Start] key. When all the originals have been scanned, press the [#] key. If you select [Batch], regardless of the default settings, the machine waits until additional originals are placed.

SADF

If [SADF] is selected, scanning starts as soon as you place additional originals in the ADF. Select which operation the machine performs while waiting for additional originals in [Wait Time for Next Original(s): SADF] under [Scanner Features]. For details about [Wait Time for Next Original(s): SADF], see "Scan Settings".

1. **Press [Original Feed Type].**
2. **Select [Batch] or [SADF].**



3. **Press [OK].**

Note

- If [SADF] is selected, scanning starts as soon as you place additional originals in the ADF. However, in the following cases you must press the [Start] key to start scanning additional originals.
  - After scanning additional originals using the exposure glass
  - After changing settings while waiting for additional originals
  - After opening/closing the ADF
- For more details about procedures, see "Scanning Multiple Pages of Originals as One File".

Reference

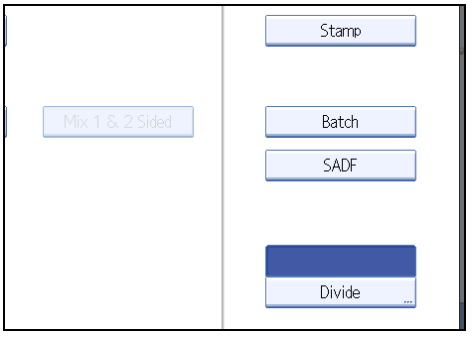
- p.201 "Scan Settings"
- p.179 "Scanning Multiple Pages of Originals as One File"

Divide

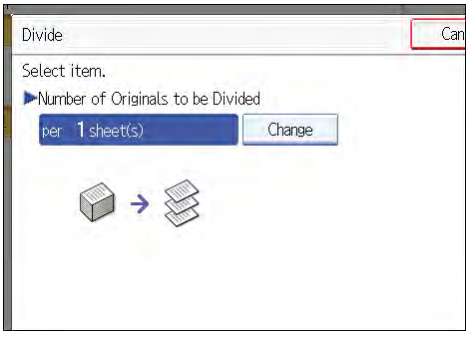
This section explains settings for dividing multiple originals by a specified number of pages and then sending them.

1. **Press [Original Feed Type].**

2. **Press [Divide].**



3. **Press [Change], and then use the number keys to enter the number of pages you want to divide the job into sets of.**



4. **Press the [#] key.**
5. **If necessary, press [Division Check].**

   When you select [Division Check], if the originals were not scanned in order due to a paper jam or multi-sheet feed, a screen for stopping or continuing scanning appears at the end of the scan.

6. **Press [OK] twice.**

   The current settings are displayed.

Note

- You can select [Divide] and [Mix 1 & 2 Sided] at the same time. However, the function selected last has priority.
- If the last page of a batch of divided two-sided originals is blank, you can skip that page. To skip scanning, in [Last Page] under [2 Sided Original], select [1 Side]. To scan the last page as a blank page, select [2 Sides]. For details, see "Two-sided original".

Reference

- p.174 "Two-sided original"

Scanning Multiple Pages of Originals as One File

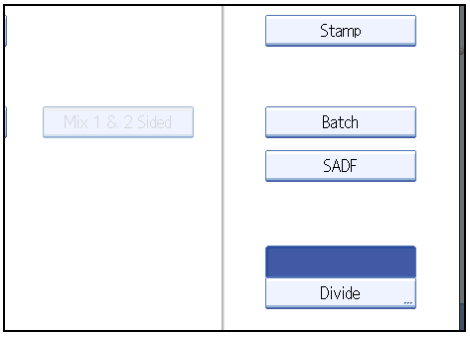
This section explains the procedure for sending multiple originals as a multi-page file or storing them as a single stored file.

Important

- **To send multiple originals as a multi-page file, in [Send File Type / Name], select a multi-page file type. For details about file types, see "Specifying the File Type".**

1. **Press [Original Feed Type].**
2. **Select [Batch] or [SADF].**

   To scan originals using the exposure glass, select [Batch]. To scan originals using the ADF, select [SADF]. For detail about [Batch] and [SADF], see "Batch, SADF".



3. **Press [OK].**
4. **Place originals.**
5. **Make settings for sending or storing.**
6. **Press the [Start] key to scan originals.**

   If [Batch] is selected, place additional originals, and then press the [Start] key.

   If [SADF] is selected, scanning starts automatically when you place additional originals. Place subsequent originals after the originals have been scanned.

   Repeat this step until all originals are scanned.

7. **After all originals are scanned, press the [#] key.**

   Storing or transmission starts.

Note

- If [Batch] is selected, originals can be scanned using the ADF.
- When scanning originals using the exposure glass, depending on the settings for [Wait Time for Next Orig.: Exposure Glass] under [Scanner Features], the machine can wait for additional originals even if [Batch] is not selected in [Original Feed Type]. For details about [Wait Time for Next Orig.: Exposure Glass], see "Scan Settings".

- If, under [Scanner Features], [Set Wait Time] is set for [Wait Time for Next Orig.: Exposure Glass] or [Wait Time for Next Original(s): SADF], place additional originals within the specified time. When the countdown ends, transmission or storage starts automatically. To start transmission or storage before the countdown is completed, press the [#] key. Countdown is canceled if Scan Settings or other settings are changed in the meantime. Place additional originals, and then press the [Start] key. The machine scans the originals and the countdown is resumed. For details about [Wait Time for Next Orig.: Exposure Glass] and [Wait Time for Next Original(s): SADF], see "Scan Settings".
- If [SADF] is selected, scanning from the exposure glass is enabled after scanning from the ADF. If this happens, you must press the [Start] key to start scanning.

Reference

- p.176 "Batch, SADF"
- p.181 "Specifying the File Type"
- p.201 "Scan Settings"

Specifying the File Type and File Name

This section explains the procedure for specifying the file type, file name, and security for PDF files.

Specifying the File Type

This section explains the procedure for specifying the file type of a file you want to send.

File types can be specified when sending files by e-mail or Scan to Folder, sending stored files by e-mail or Scan to Folder, and saving files on a removable memory device.

You can select one of the following file types:

- Single Page: [TIFF / JPEG], [PDF], [High Compression PDF]

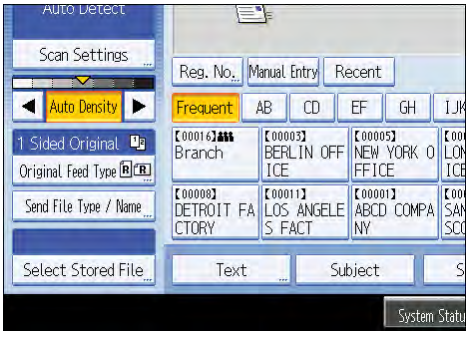
  If you select a single-page file type when scanning multiple originals, one file is created for each single page and the number of files sent is the same as the number of pages scanned.

- Multi-page: [TIFF], [PDF], [High Compression PDF]

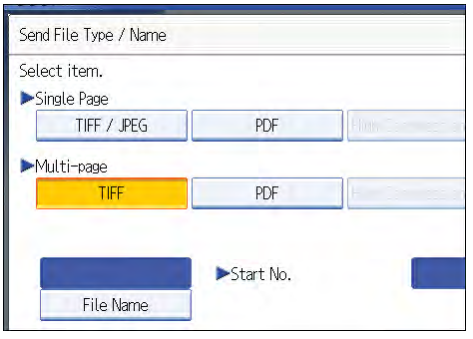
  If you select a multi-page file type when scan multiple originals, scanned pages are combined and sent as a single file.

  Selectable file types differ depending on the scan settings and other conditions. For details about file types, see "Notes About and Limitations of File Types".

1. **Press [Send File Type / Name].**



2. **Select a file type.**



3. **Press [OK].**

Note

- To deliver files, specify the file type using the delivery server computer. For details, see the manuals provided with the ScanRouter delivery software.
- If you select [Store to HDD] under [Store File], you cannot specify the file type.
- If you select [Store to HDD + Send] under [Store File], files are sent in the specified file type by e-mail or Scan to Folder. However, files cannot be stored in the specified format–instead, they are automatically stored in one of the following file types, depending on the compression and Original Type settings:
  - JPEG

    Under [Scanner Features], [Compression (Grey Scale / Full Colour)] is set to [On], and originals are scanned in full color or gray scale.
  - TIFF

    All other scanning methods
- The version of the created PDF files is 1.4.
- High Compression PDF files retain the character legibility of uncompressed PDF files but have much lower data volume. For details about the limitations of High Compression PDF files, see "Notes About and Limitations of File Types".

Reference

- p.182 "Notes About and Limitations of File Types"

Notes About and Limitations of File Types

Depending on the file format you select, the following limitations will apply:

Single Page [TIFF / JPEG]

- Originals scanned in black and white are sent as TIFF files.

- According to the settings specified for [Compression (Grey Scale / Full Colour)] under [Scanner Features], originals scanned in full color or gray scale are sent in one of the following file types:
  - [On] : JPEG file
  - [Off] : TIFF file

Multi-page [TIFF]

- When full color, gray scale, or [Auto Colour Select] is specified under [Original Type] and [Compression (Grey Scale / Full Colour)] is set to [On] under [Scanner Features], you cannot select [TIFF] under [Multi-page].
- Even if you select [TIFF] under [Multi-page], files stored in JPEG format are automatically changed to multi-page PDF files and then sent.

High Compression PDF

- You cannot select [High Compression PDF] if:
  - [Store to HDD + Send] is selected under [Store File].
  - [Black & White: Text], [B & W: Text / Line Art], [B & W: Text / Photo], [Black & White: Photo], or [Auto Colour Select] is selected under [Original Type].
  - [100 dpi] is selected as the resolution.
  - [Preview] is selected.
  - The machine is working with the ScanRouter delivery software and the Capture function is in use. For details about the capture function, see the manuals provided with the ScanRouter delivery software.
- Adobe Acrobat Reader 5.0 / Adobe Reader 6.0 and later versions support High Compression PDF.
- High Compression PDF files cannot be displayed correctly using DeskTopBinder Easy Viewer. For details about the capture function, see the manuals supplied with the ScanRouter delivery software.

Specifying the File Name

This section explains the procedure for specifying a file name.

Scanned file will be given a file name consisting of the time and date of scanning, 4-digit page number, etc.

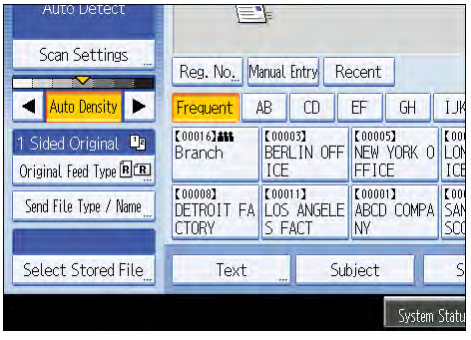
- Single-page and divided multi-page files are assigned file names that contain the date and time of scanning and a four-digit page number. An underscore is inserted between the date and time and the four-digit page number.

  (Example: For a file scanned in single-page TIFF at 10 ms, 15 sec., 15:30 hours on Dec. 31, 2020, the file name will be 20201231153015010_0001.tif)
- Multi-page files are given file names that contain the time and date of scanning.

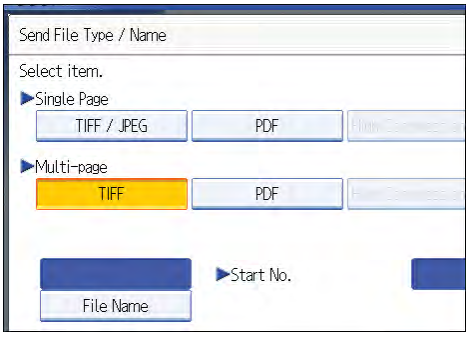
(Example: For a file scanned in multi-page TIFF at 10 ms, 15 sec., 15:30 hours on Dec. 31, 2020, the file name will be 20201231153015010.tif)

If necessary, you can change the file name.

1. **Press [Send File Type / Name].**



2. **Press [File Name].**



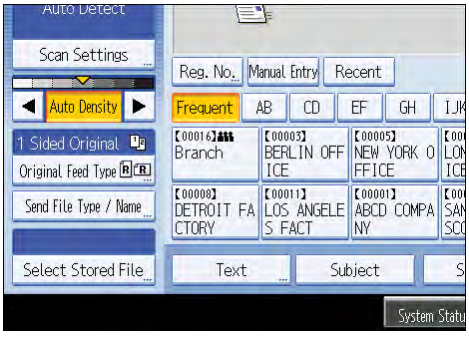
The soft keyboard appears.

3. **Enter a file name.**
4. **Press [OK] twice.**

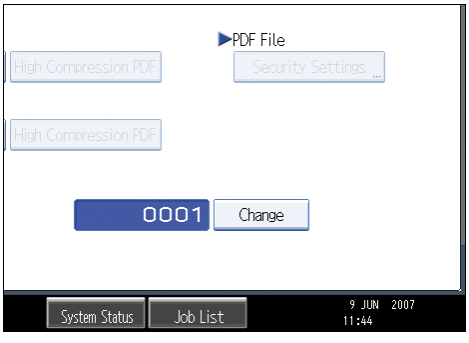
Changing the starting digit of file name serial numbers

A single-page file is assigned a serial number after the file name. The starting number of this serial number can be changed as follows:

1. **Press [Send File Type / Name].**



2. **Press [Change] to the right of the entry box.**



3. **Using the number keys, enter the starting digit of the serial number.**
4. **Press the [#] key.**
5. **Press [OK].**

Note

- You can change the starting digit only if a single-page file type is selected.
- You can change the number of digits in the serial number. Change the number under [Scanner Features], [No. of Digits for Single Page Files]. You can select 4 or 8.

Security Settings for PDF Files

This section explains security settings for PDF files.

Use security settings to prevent unauthorized access to PDF files.

Important

- **Security settings can be made for PDF and High Compression PDF files only.**

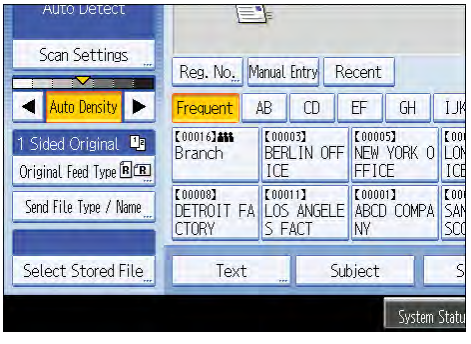
Encrypting PDF files

Set a document password to protect and encrypt a PDF file. Only users who have the password can open and decrypt the PDF file.

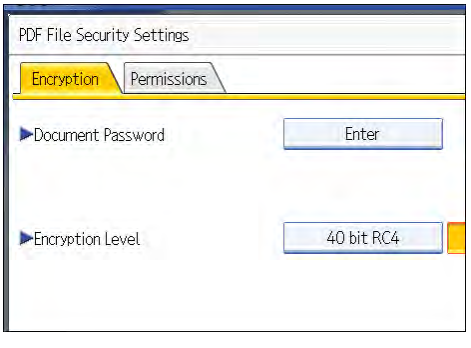
Important

- **Encryption is possible only for scan files that are sent by e-mail or Scan to Folder and saved on a removable memory device.**
- **You cannot open an encrypted file without a document password. Make sure you do not forget the file's password.**

1. **Press [Send File Type / Name].**



2. **Check that [PDF] or [High Compression PDF] is selected.**
3. **Press [Security Settings].**
4. **Select [Encryption].**
5. **In [Document Password], press [Enter].**



6. **Enter a password, and then press [OK].**

   The password entered here will be required to open the PDF file.

7. **Enter the password again to confirm it, and then press [OK].**
8. **In [Encryption Level], select [40 bit RC4], [128 bit RC4] or [128 bit AES].**
9. **Press [OK] twice.**

Note

- A document password cannot be the same as the master password.
- Document passwords can contain up to 32 alphanumeric characters.
- You cannot use Adobe Acrobat Reader 3.0 or 4.0 to view PDF files that were created using [128 bit RC4] encryption.
- PDF files created using [128 bit AES] encryption can be viewed only with Adobe Reader 7.0 or later.
- If [Low Resolution Only] is selected as the print permission, you cannot select [40 bit RC4] as the PDF encryption level.

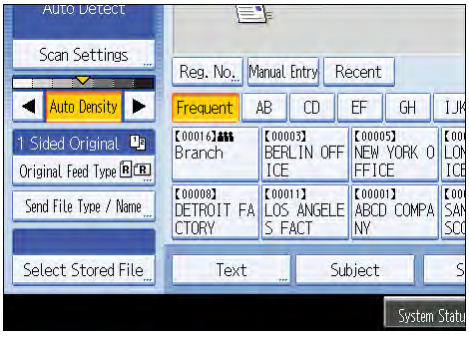
Changing security permissions for PDF files

Set a master password to restrict unauthorized printing, changing, copying, or extracting of a PDF file's content. Only users who have the master password can reset or change these restrictions.

Important

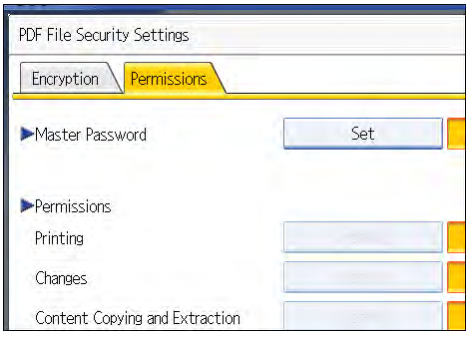
- **Encryption is possible only for scan files that are sent by e-mail or Scan to Folder and saved on a removable memory device.**
- **You cannot reset or change a file's restriction settings without the master password. Write down the master password and keep it secure.**

1. **Press [Send File Type / Name].**

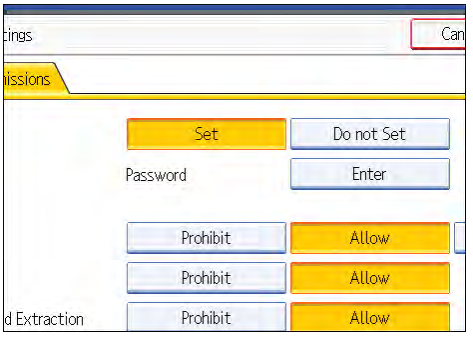


2. **Check that [PDF] or [High Compression PDF] is selected.**
3. **Press [Security Settings].**
4. **Select the [Permissions] tab.**

5. **In [Master Password], select [Set].**



6. **In [Password], press [Enter].**



7. **Enter a password, and then press [OK].**

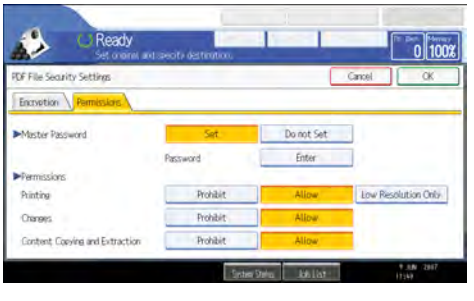
   The password entered here will be required to change the security settings of the PDF file.

8. **Enter the password again to confirm it, and then press [OK].**

9. **Select the security permission setting.**

   You can specify the following security settings:

   - Print permission: [Prohibit], [Allow], or [Low Resolution Only]
   - Editing permission: [Prohibit] or [Allow]
   - Copying or extracting content permission: [Prohibit] or [Allow]



10. **Press [OK] twice.**

Note

- The master password cannot be the same as a document password.
- Master passwords can contain up to 32 alphanumeric characters.
- If [40 bit RC4] is selected as the PDF encryption level, you cannot select [Low Resolution Only] as the print permission.

Programs

You can register frequently used settings in the machine memory and recall them for future use.

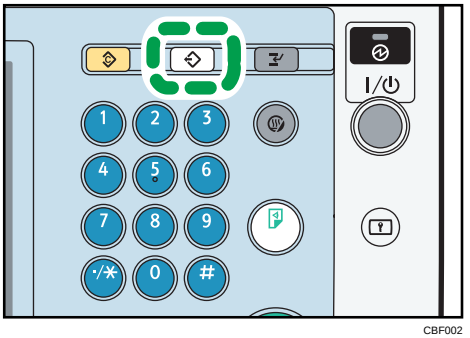
Note

- You can register up to 10 programs for the scanner mode.
- Programs are not deleted by turning the power off or by pressing the [Clear Modes] key unless the content is deleted or newly registered.
- The following settings can be registered to programs: Scan Settings, 1 Sided/2 Sided Original, Mix 1 & 2 Sided, Top to Top/Top to Bottom, 1 Side/2 Sides for the Last Page, Divide, Original Orientation, File Type, Stamp, Batch/SADF, Store File, Preview, Reception Notice, and Security (E-mail Encryption and Signature).
- Setting made on the simplified display cannot be registered to a program.

Registering Frequently Used Settings

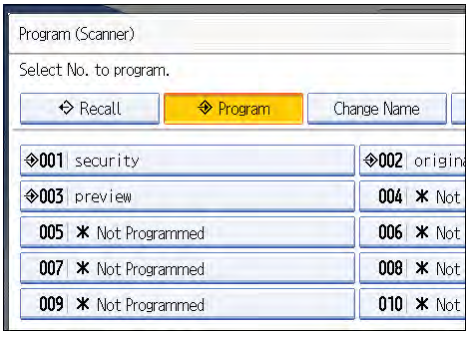
To register frequently used settings in a program:

1. **On the initial scanner screen, make the settings you want to register in a program.**
2. **Press the [Program] key.**



CBF002

3. **Press [Program].**



4. **Select the number of the program in which you want to register the settings.**

   Program numbers with ⇨ already have settings in them.

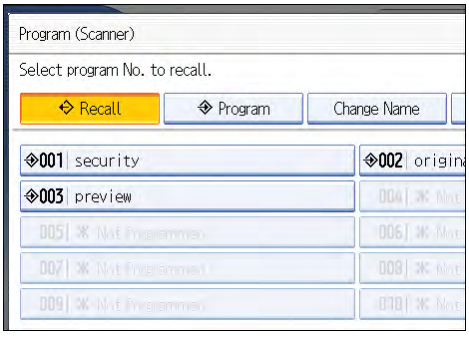
5. **Enter the program name.**
6. **Press [OK].**

   The Program screen reappears. When the settings are successfully registered, ⇨appears on the left side of the registered program number and the program name appears on the right side. The initial screen reappears after a moment.

Recalling a Registered Content

To recall settings registered in a program and use them for scanning:

1. **Press the [Program] key.**
2. **Press [Recall].**



3. **Press the number of the program you want to recall.**

   Settings registered in the program are recalled and the initial scanner screen reappears.

   Settings are not registered in numbers that appear without⇨.

4. **Place originals, and then press the [Start] key.**

Changing a Registered Program

To change the settings registered to a program:

1. **Press the [Program] key.**
2. **Press [Recall].**
3. **Press the number of the program you want to change.**

   Settings registered in the program are recalled and the initial scanner screen reappears.

4. **Change settings of the program.**

5. **Press the [Program] key.**
6. **Press [Program].**
7. **Press the number of the program whose settings you changed or the number of a different program in which you want to register the changed settings.**
8. **If you select a program that is already registered, a confirmation message appears. To overwrite the program, press [Yes].**

   If you select a new program number, you can omit this step. Proceed to the next step.
9. **Enter a program name.**
10. **Press [OK].**

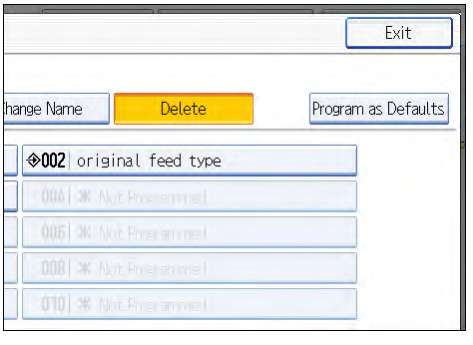
    If overwritten, the registered program is deleted.

    The new program name appears briefly, and then the initial screen reappears after a moment.

Deleting a Program

To delete a registered program:

1. **Press the [Program] key.**
2. **Press [Delete].**



3. **Press the number of the program you want to delete.**

   A confirmation screen appears.
4. **Press [Yes].**

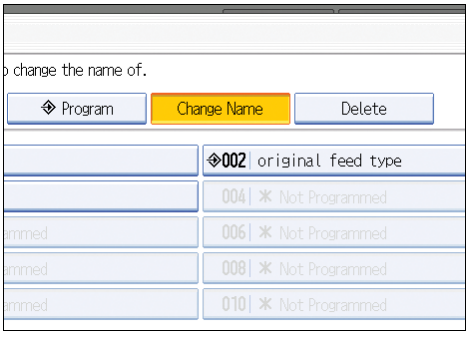
   The program is deleted, and the initial screen reappears after a moment.

Changing the Registered Program Name

To change the name of a registered program:

1. **Press the [Program] key.**

2. **Press [Change Name].**



3. **Press the number of the program whose name you want to change.**

   The soft keyboard appears.

4. **Enter a new program name.**

5. **Press [OK].**

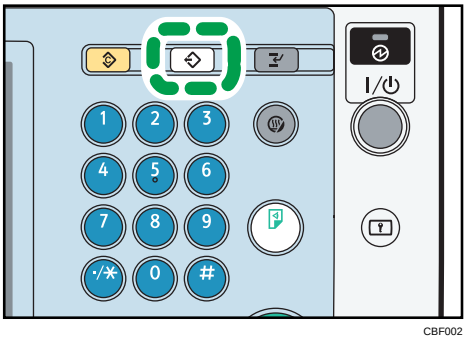
   The new program name appears briefly, and then the initial screen reappears.

Changing the Default Functions of the Scanner's Initial Display

This section explains how to set defaults for the initial screen, which appears when the machine is turned on or when settings are cleared or reset.

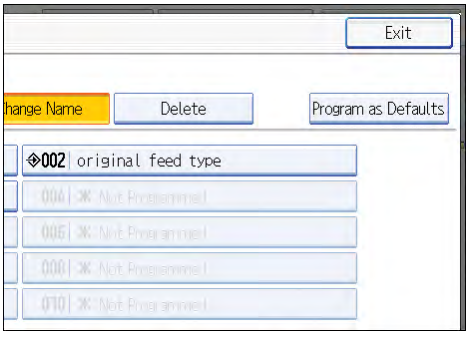
The following settings can be registered as defaults: Scan Settings, 1 Sided/2 Sided Original, Mix 1 & 2 Sided, Top to Top/Top to Bottom, 1 Side/2 Sides for the Last Page, Divide, Original Orientation, File Type, Stamp, Batch/SADF, Store File, Preview, Reception Notice, and Security (E-mail Encryption and Signature).

1. **Make the necessary scan settings on the initial screen.**
2. **Press the [Program] key.**



CBF002

3. **Press [Program as Defaults].**



4. **Press [Program].**

   A confirmation screen appears.

5. **Press [Yes].**

   The current settings are registered as defaults, and then the initial screen reappears.

Note

- To restore the initial screen's original default settings, press [Restore Factory Defaults].

- Default settings for the initial screen can be registered for normal screens and simplified displays respectively.

9. Scanner Features

This chapter describes the user tools in the Scanner Features menu.

Accessing User Tools

This section describes how to access User Tools.

User Tools allows you to change the settings of [Scanner Features].

Note

- Procedures for configuring system settings differ from procedures for configuring other settings. You must return to the initial screen when you finish configuring the system settings. For details about returning to the initial screen, see "Closing User Tools".
- Any changes you make in [Scanner Features] remain in effect even if the main power switch or operation switch is turned off, or the [Energy Saver] or [Clear Modes] key is pressed.
- Depending on the sending method, some settings cannot be applied.

Reference

- p.198 "Closing User Tools"

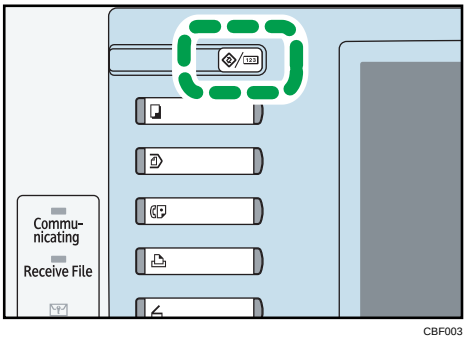
Changing User Tools

This section describes how to change the settings of [Scanner Features].

Important

- If Administrator Authentication Management is specified, contact your administrator.

1. Press the [User Tools/Counter] key.



CBF003

2. Press [Scanner Features].
3. Select the item you want to change.
4. Change settings by following instructions on the display, and then press [OK].

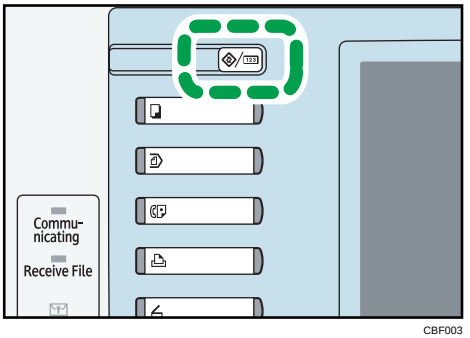
Note

- To cancel changes made to the settings and return to the initial display, press the [User Tools/Counter] key.

Closing User Tools

This section describes how to quit User Tools.

1. **Press the [User Tools/Counter] key.**



CBF003

Note

- You can also quit User Tools by pressing [Exit].

General Settings

This section describes the user tools on the [General Settings] tab in [Scanner Features].

Switch Title

Select the title to be shown on the destination list.

Default: [**Title 1**]

Update Delivery Server Destination List

Press [Update Delivery Server Destination List] to update the receivers from the delivery server. To use this function, it is necessary to set [Delivery Option] to [On].

For details about "Delivery Option", see "File Transfer", Network and System Settings Reference.

Search Destination

Select a destination list to be used in "Search Destination". To search from LDAP server, it is necessary to register the LDAP server in [System Settings] and set [LDAP Search] to [On].

Default: [**Address Book**]

For details about "LDAP Search", see "Administrator Tools", Network and System Settings Reference.

PC Scan Command Standby Time

If the machine receives a TWAIN or WSD (Pull Type) scanning request while it is writing data to memory or performing e-mail, Scan to Folder, network delivery, or WSD scanning jobs, it switches to the network TWAIN or WSD (Pull Type) scanner function either immediately or after a specified standby time elapses following the last key operation.

Use this setting to select whether the machine switches to TWAIN or WSD (Pull Type) immediately or waits until the standby time elapses when it receives a TWAIN or WSD (Pull Type) scanning request.

Default: [**On**], **10 second(s)**

If you select [Off], the machine will switch to the network TWAIN or WSD (Pull Type) scanner function immediately.

If you select [On], enter a standby time using the number keys (3-30 seconds). The machine will switch to the network TWAIN or WSD (Pull Type) scanner function when the time set here elapses following the last key operation.

Destination List Display Priority 1

Select a destination list to be displayed when the machine is in the initial state.

You can select [E-mail / Folder], [Delivery Server], or [WSD].

Default: [**Delivery Server**]

Destination List Display Priority 2

In the machine's address book, select which address book appears by default.

You can select either [E-mail Address] or [Folder].

Default: [**E-mail Address**]

Print & Delete Scanner Journal

Up to 250 transmission/delivery results can be checked on this machine. If the stored transmission/delivery results reach 250, select whether to print the delivery journal.

Default: [**On**]

- On

  The transmission/delivery journal is printed automatically. The printed journal is deleted.

- Off

  Transmission/delivery results are deleted one by one as new results are stored.

- Do not Print: Disable Send

  Transmission/delivery cannot be performed when the journal is full.

  When printed, all records are deleted after printing. When not printed, records over the limit are automatically deleted in succession from the oldest record.

  While the journal is being printed, files with the status waiting cannot be sent.

Print Scanner Journal

The scanner journal is printed and deleted.

Delete Scanner Journal

The scanner journal is deleted without being printed.

Delete Recent Destinations

The recent destinations are deleted.

Scan Settings

This section describes the user tools in the [Scan Settings] tab under [Scanner Features].

A.C.S. Sensitivity Level

Sets the sensitivity level for judging color/black and white for scanning originals when [Original Type] is set to [Auto Colour Select].

Default: The default setting is the middle of 5 adjustment levels.

Wait Time for Next Orig.: Exposure Glass

If you want to divide your originals and scan them separately using the exposure glass and then send them together as a single job, select [Continuous Wait], [Off], or [Set Wait Time] as the waiting status.

Default: [**Set Wait Time**], **60 second(s)**

If you specify [SADF] or [Batch] for the [Original Feed Type] setting, the [Wait Time for Next Orig.: Exposure Glass] setting becomes invalid.

If [Off] is selected, the machine forwards the scan data as soon as it finishes scanning each original.

If [Set Wait Time] is selected, enter the wait time in seconds (3-999) for placing additional originals with the number keys. Scanning will start if additional originals are placed and the [Start] key is pressed within this time. You can end scanning and begin transmission by pressing the [#] key within this time. Once the specified time has elapsed, transmission starts automatically.

If [Continuous Wait] is selected, the machine will wait for additional originals until the [#] key is pressed. Scanning will start when additional originals are placed and the [Start] key is pressed. You can end scanning and begin sending by pressing the [#] key.

If originals are placed in the ADF (auto document feeder), transmission will start without waiting for additional originals after all originals in the ADF have been scanned, regardless of the specified settings.

If a paper misfeed occurs or any of the following operations are performed while the machine is waiting for additional originals, the countdown stops and does not start again until the [#] key is pressed.

- Changing the settings such as the scan settings
- Opening the upper cover of the ADF
- Pressing the [Interrupt] key to activate the copy mode

Wait Time for Next Original(s): SADF

If you want to divide your originals and scan them separately using the ADF and then send them together as a single job, select [Set Wait Time] or [Continuous Wait] as the waiting status.

Default: [**Set Wait Time**], **60 second(s)**

This setting is valid if [SADF] is specified for [Original Feed Type] when scanning.

If [Set Wait Time] is selected, enter the wait time in seconds (3-999) for placing additional originals with the number keys. Scanning will start automatically if additional originals are placed within this time. You can end scanning and begin transmission by pressing the [#] key within this time. Once the specified time has elapsed, transmission starts automatically.

If [Continuous Wait] is selected, the machine will wait for the additional originals until the [#] key is pressed. Scanning will start automatically when additional originals are placed. You can end scanning and begin sending by pressing the [#] key.

Even if originals are placed on the exposure glass, the machine will operate according to the specified settings. However, every time originals are placed on the exposure glass, you must press the [Start] key to start scanning.

If a paper misfeed occurs or any of the following operations are performed while the machine is waiting for additional originals, the countdown stops and does not start again until the [#] key is pressed.

- Changing the settings such as the scan settings
- Opening the upper cover of the ADF
- Pressing the [Interrupt] key to activate the copy mode

Background Density of ADS (Full Colour)

Characteristics due to the type of paper such as nonwhiteness like newspaper or transparent originals can be reduced by correcting the scanning density.

Default: The default setting is the middle of 5 adjustment levels.

Blank Page Detect

Use the Blank Page Detect function to prevent blank pages being scanned.

If the first page of the originals is blank, the machine beeps to warn you that you might have placed blank originals.

Default: [**On**]

- On
- Off

When the Blank Page Detect function is set to [On], the outermost 1mm of an original's edge border cannot be scanned.

Blank pages of custom size originals may not be detected.

This function is available only for scanning from the ADF.

The machine cannot perform blank page detection on the second or subsequent pages of an original.

Send Settings

This section describes the user tools in the [Send Settings] tab under [Scanner Features].

Compression (Black & White)

Select whether or not to compress black and white scan files.

Default: [**On**]

Compression reduces the time required for transferring the scan file.

The actual time required for file transfer will vary depending on the file size and network load.

Compression (Grey Scale / Full Colour)

Specify whether or not to compress multi-level (grayscale / full color) scan files.

Default: [**On**]

If you select [On], you can specify the compression level between one and five.

The image quality is better for lower compression, but the time required for file transfer increases accordingly.

The actual time required for file transfer will vary depending on the file size and network load.

Compression Method for High Compression PDF

Select the compression method for compressing image data when creating high compression PDF files.

Default: [**JPEG**]

- JPEG
- JPEG 2000

High Compression PDF Level

Select compression level when creating high compression PDF files.

Default: [**Standard**]

Max. E-mail Size

Select whether or not to limit the size of an e-mail to which an image is attached.

Default: [**On**], **2048KB**

When [On] is selected, enter the size limit (128-102400 KB) with the number keys.

When the SMTP limits the size, match that setting.

Divide & Send E-mail

This function is effective only when [On] is selected for [Max. E-mail Size].

Select whether or not an image exceeding the size specified in [Max. E-mail Size] should be divided and sent using more than one e-mail.

Default: [**Yes (per max. size)**], *5*

When [Yes (per Max. Size)] is selected, enter the Max. Number of Divisions (2- 500) with the number keys.

When the file type selected for [Multi-page] is [TIFF] or [PDF], the image will not be divided even if [Yes (per Page)] is selected.

When [Yes (per Max. Size)] is selected, some received files may not be able to be restored, depending on the type of e-mail software.

When [No] is selected, the e-mail is not sent if its size exceeds the limit, and an error message appears. The scan file is discarded.

Set the maximum e-mail size within the capacity of the SMTP server.

Insert Additional E-mail Info

Select the language in which e-mail information such as title, document name, and sender's name is sent.

If you select [On], select one of the following 22 languages:

British English, American English, German, French, Italian, Spanish, Dutch, Portuguese, Polish, Czech, Swedish, Finnish, Hungarian, Norwegian, Danish, Japanese, Simplified Chinese, Traditional Chinese, Russian, Hangul, Catalan, and Turkish.

Default: [**On**], [**British English**]

The e-mail text which is a template cannot be changed.

No. of Digits for Single Page Files

Sets digit number for serial number to attach to Single Page file name.

Default: [**4 Digits**]

Stored File E-mail Method

Specify the e-mail setting for sending stored files. You can select [Send File] or [Send URL Link]. This setting can be used for the following:

Default: [**Send File**]

- Send File

  Sending Stored Files by E-mail

- Send URL Link

  Simultaneous Storage and Sending by E-mail

If you select [Send File], actual files are attached to e-mails.

If you select [Send URL Link], URL links to file locations are attached to e-mails.

If [Send URL Link] is selected in [Stored File E-mail Method], a phishing warning may appear after you receive a stored file e-mail, depending on your e-mail application. To prevent phishing warnings appearing after you receive a stored file e-mail, you must add the sender to your e-mail application's exclusion list. For details about how to do this, see your e-mail application's Help.

Default E-mail Subject

If an e-mail subject is not entered on the machine's control panel, the default e-mail subject is applied when scan files are sent by e-mail.

Select whether to use the host name or a specified text as the default e-mail subject.

Default: [**Host Name**]

If you select [Host Name], the host name configured on the [Interface Settings] tab under [System Settings] is applied.

Initial Settings

This section describes the user tools in the [Initial Settings] tab under [Scanner Features].

Menu Protect

You can specify user access levels for functions whose settings can be changed by users other than the administrator. Using Menu Protect, you can prevent unauthenticated users from changing the user tools.

Menu Protect is a Scanner Features setting item. You can also specify user access levels for each function's default setting.

For details, consult your administrator.

10. Appendix

Relationship between Resolution and Scan Size

This section explains the relationship between resolution and scan size.

Resolution and scan size are inversely related. The higher the resolution (dpi) is set, the smaller the area that can be scanned. Similarly, the larger the scan area, the lower the resolution that can be set.

The relationship between the scanning resolution and scan size is shown below. If the combination is unreadable, "Exceeded max. data capacity. Check the scanning resolution, then press the Start key again." appears on the machine's control panel display. Change the condition until scanning is enabled.

Note

- Image compression level can limit Maximum image size.

When Using the E-mail, Folder Sending, WSD Scanner, Storing, or Network Delivery Functions

This section explains the relationship between resolution and scan size when using the e-mail, Scan to Folder, WSD Scanner, storing, or network delivery functions.

If [Black & White: Text], [B & W: Text / Line Art], [B & W: Text / Photo], [Black & White: Photo], [Grey Scale] ,[Full Colour: Text / Photo] or [Full Colour: Glossy Photo] is selected for Original Type:

All combinations up to A3 and 600 dpi can be scanned.

Note

- Enter B6, A6, and A7 sizes directly.
  - B6 (128 mm/5.0 inches × 182 mm/7.1 inches)
  - A6 (105 mm/4.1 inches × 148 mm/5.8 inches)
  - A7 (74 mm/2.9 inches × 105 mm/4.1 inches)

When Using the TWAIN Driver or the WIA Driver

This section explains the relationship between resolution and scan size when using the TWAIN driver or the WIA driver with the machine.

To specify the scan area or resolution on the machine you are using as a network TWAIN scanner directly, see the TWAIN driver Help.

Note

- Certain original types and resolution settings can reduce scanning quality.

The scan size determines the maximum possible resolution.

Refer to the table below for the maximum resolution available for each scan size.

Scan size and maximum resolution

Scan size	Maximum resolution (dpi)
A3, 11×17	600
B4	693
Legal ($8^1/_2$×14)	728
$8^1/_2$×13	785
Letter ($8^1/_2$×11)	825
A4	848
B5	979
A5, B6, A6, $5^1/_2$×$8^1/_2$	1200

Software Supplied on CD-ROM

This section explains the applications on the supplied CD-ROM.

Auto-Run Program

This section explains the auto-run program.

When the CD-ROM is inserted into a client computer running Windows 2000/XP/Vista/7 or Windows Server 2003/2003 R2/2008/2008 R2, the installer starts up automatically (auto run) to install various software.

Note

- For installation, log in as an Administrators group member.
- Auto-run program may not automatically work with certain operating system settings. If this happens, start "Setup.exe" on the CD-ROM root directory.
- To disable auto-run, set CD-ROM while pressing the Shift key. Keep the Shift key pressed until the computer finishes reading from the CD-ROM.
- If [Cancel] is clicked during installation, the installation of all the software thereafter will be stopped. If cancelled, reinstall the remaining software after restarting the client computer.

TWAIN Driver

This section tells you the file path to the TWAIN driver and the TWAIN driver's system requirements.

You must install this driver if you want to scan originals or use the machine as a network TWAIN scanner.

File path

The TWAIN driver is stored in the following folder on the CD-ROM:

\DRIVERS\TWAIN

System requirements

- Computer hardware

  PC/AT-compatible machines that support the operating system properly
- Operating system

  Microsoft Windows 2000/XP/Vista/7

  Microsoft Windows Server 2003/2003 R2/2008
- Display resolution

  800 × 600 pixels, 256 colors or higher

Values of Various Set Items for Transmission/Storage/Delivery Function

This section explains the values of various transmission/storage/delivery function settings.

Note

- Depending on the type or settings of the file or original, you may not be able to specify the destination or enter the maximum number of characters stated below.

Transmission Function

This section explains the values of transmission function settings.

Sending e-mail

The following table tells you the maximum values of the e-mail sending function settings.

Values of Set Items for Sending by E-mail

Item	Maximum value	Comments
Number of subject line characters	128 alphanumeric characters	-
Number of e-mail message characters	• Selecting from the list: 400 alphanumeric characters (80 alphanumeric characters × 5 lines) • Entering manually: 80 alphanumeric characters	You cannot enter messages from the list and manually at the same time.
Number of e-mail address characters	128 alphanumeric characters	E-mail addresses found via LDAP server search cannot be selected if they contain more than 128 characters.
Number of addresses you can specify at the same time	500 addresses	You can specify 100 destinations by direct entry, including LDAP search. Select the remaining 400 destinations from registered addresses.

Item	Maximum value	Comments
Sendable file size	725.3 MB per file	-
Sendable number of pages	2,000 pages per file	-

Folder transmission

The following table tells you the maximum values of the Scan to Folder function settings.

Values of Set Items for Scan to Folder

Item	Maximum value	Comments
Number of path name characters on SMB	256 alphanumeric characters	-
Number of user name characters on SMB	128 alphanumeric characters	-
Number of password characters on SMB	128 alphanumeric characters	-
Number of server name characters on FTP	64 alphanumeric characters	-
Number of path name characters on FTP	256 alphanumeric characters	-
Number of user name characters on FTP	64 alphanumeric characters	-
Number of password characters on FTP	64 alphanumeric characters	-
Number of path name characters on NCP	256 alphanumeric characters	-
Number of user name characters on NCP	128 alphanumeric characters	-
Number of password characters on NCP	64 alphanumeric characters	-
Number of addresses you can specify at the same time	50 addresses	You can specify a maximum of 50 directly entered destinations.

Item	Maximum value	Comments
Sendable file size	2,000 MB per file	-

Simultaneous transmission

The following table tells you the maximum values of settings for using the E-mail and Scan to Folder functions simultaneously.

Values of Set Items for Simultaneous transmission

Item	Maximum value	Comments
Number of destinations you can select for E-mail and Scan to Folder	550 addresses	-
Number of destinations you can select for sending by e-mail	500 addresses	You can specify a maximum of 100 directly entered destinations, including LDAP search-retrieved destinations.
Number of destinations you can set for sending by Scan to Folder	50 addresses	-

WSD scanner transmission

The following table tells you the maximum values available for the WSD scanner function settings.

Values of Set Items for WSD Scanner Transmission

Item	Maximum value	Comments
Number of destinations you can specify at the same time	1 destination	-
Sendable file size	2,000 MB per file	-
Sendable number of pages	2,000 pages per file	-

Storage Function

The following table tells you the maximum values of the storage function settings.

Values of Set Items for File Storage

Item	Maximum value	Comments
Number of file name characters	64 alphanumeric characters	On the control panel, the first 16 characters are displayed. When viewing the stored files from a client computer using DeskTopBinder, all the entered characters can be viewed.
Number of user name characters	20 alphanumeric characters	On the control panel, the first 16 characters are displayed. When viewing the stored files from a client computer using DeskTopBinder, all the entered characters can be viewed.
Number of password characters	4-8 digit number	-
Number of stored files you can select at the same time	30 files	-
Storable number of files	3,000 files	This is the total number of files stored under the scanner, copier, document server, facsimile, and printer functions.
Storable number of pages	9,000 pages	This is the total number of files stored under the scanner, copier, document server, facsimile, and printer functions.
Storable number of pages per file	2,000 pages	-
Storable size	2,000 MB per file	-

Network Delivery Function

The following table tells you the values of setting items for the network delivery scanner function.

Values of Set Items for Network Delivery

Item	Maximum value	Comments
Number of subject line characters	128 alphanumeric characters	This is the total number of characters selected from the list and the number of characters entered directly from text.
Number of e-mail address characters	128 alphanumeric characters	-
Number of addresses you can specify at the same time	500 addresses	You can specify 65 destinations by direct entry, including LDAP search. Select the remaining 435 destinations from registered addresses. The maximum number of destinations you can specify differs depending on which ScanRouter delivery software you are using. For details, see the manuals supplied with the ScanRouter delivery software.
Sendable file size	2,000 MB per file	-

About WIA Scanning

WIA allows computers running Windows Vista (SP1 or later)/7, or Windows Server 2008/2008 R2 to perform scanning over a network.

Important

- **To use this machine as a WIA scanner, you must first download the WIA driver from the supplier's Web site and install it on your computer.**

Network TWAIN also allows you to perform scanning through a network; however, TWAIN and WIA do not provide the same scan functions.

The following table tells you the functions available or not available with TWAIN and WIA. For details about TWAIN, see "Scanning Originals with the Network TWAIN Scanner".

Reference

- p.151 "Scanning Originals with the Network TWAIN Scanner"

Functions of the TWAIN and WIA scanners

Functions	TWAIN	WIA
1. Scan		
Scan from the exposure glass	Yes	Yes
Continuous scanning from the ADF	Yes	Yes
ADF Read-ahead (Type 1 and 2)	No	No
ADF Read-ahead (Type 3 and 4)	Yes	Yes *1
Specify the number of originals to be scanned from the ADF	Yes *2	Yes *2
Preview	Yes	Yes *3
Auto detect		
• When scanning from the exposure glass	Yes	No
• When scanning from the ADF (Mixed-size)	Yes	Yes
• When scanning from the ADF (Uni-size)	Yes	No
Scan using an application that do not have user interface	Yes	Yes
2. Setting		

Functions	TWAIN	WIA
Driver selection	Yes	Yes
Initial Settings		
• Unit of Measure: (mm, inch, pixel)	Yes	No
• Compression	Yes	No
Deskew	Yes	No
Start from Scanner	Yes	No
Orient.auto detect	Yes	No
Save/Delete Mode	Yes	No
Specify original size		
• When scanning from the exposure glass	Yes	Yes *2
• When scanning from the ADF	Yes	Yes
Orig.Orientn.:	Yes	Yes *2
Orientation:	Yes	Yes *2
Scan Settings:		
• 1 Sided	Yes	Yes
• 2 Sided	Yes	Yes
• 2 Sided (Top to Top, Top to Bottom)	Yes	No
Resolution	Yes	Yes
Brightness:	Yes	Yes
Contrast:	Yes	Yes
Threshold:	Yes	Yes *2
Col./Grad.:		
• Binary	Yes	Yes
• Grey Scale	Yes	Yes
• 8 Colors	Yes	No

Functions	TWAIN	WIA
• 16770K colors (Full color)	Yes	Yes
Gam-Curve:	Yes	No
Eras.Bgrnd:	Yes	No
Advanced		
• Filter (Filter, Dropout Col.)	Yes	No
• Color Matching (ICM:, Inversion)	Yes	No
Save/Delete Scanning Area	Yes	No
Specify original size (specify scan area manually)	Yes	No
Comb./Series	Yes	No
Endorser	Yes	No
3. Properties		
General		
• Diagnosis (Scan test)	No	Yes
Authenticate		
• User Code:	Yes	Yes
• General User Authentication	Yes	Yes
Network Connection		
• Settings for using a specific scanner	Yes	Yes
• SNMP V3 Auth.information	Yes	Yes
Driver version display	Yes	Yes

*1 You cannot disable this function.

*2 You might not be able to specify settings for this function from some applications.

*3 The preview does not reflect changes made for settings while it is displayed. To display the preview image with the changed settings applied, first close the preview, and then open it again.

Specifications

Component	Specifications
Type	Full-color scanner
Scan method	Flatbed scanning
Image sensor type	CCD Image Sensor
Scan type	Sheet, book, three-dimensional object
Original sizes that can be scanned	• Length 140 - 297 mm ($5^1/_2$ - 11 inches) • Width 140 - 432 mm ($5^1/_2$ - 17 inches)
Scan sizes automatically detectable from the exposure glass	• Metric version A3, B4 JIS, A4, A4, B5 JIS, B5 JIS, A5, $8^1/_2 \times 13$ • Inch version 11×17, $8^1/_2 \times 14$, $8^1/_2 \times 11$, $8^1/_2 \times 11$, $8^1/_2 \times 5^1/_2$
Scan sizes automatically detectable from the ADF	• Metric version (Type 1 and 2) A3, B4 JIS, A4, A4, B5 JIS, B5 JIS, A5, A5, 11×17, $8^1/_2 \times 11$, $8^1/_2 \times 11$, $8^1/_2 \times 13$ • Metric version (Type 3 and 4) A3, B4 JIS, A4, A4, B5 JIS, B5 JIS, A5, A5, B6, B6, 11×17, $8^1/_2 \times 11$, $8^1/_2 \times 11$, $8^1/_2 \times 13$ • Inch version A3, A4, A4, 11×17, $8^1/_2 \times 14$, $8^1/_2 \times 11$, $8^1/_2 \times 11$, $5^1/_2 \times 8^1/_2$, $5^1/_2 \times 8^1/_2$, 10×14, $7^1/_4 \times 10^1/_2$

Component	Specifications
Scan speed (Type 1 and 2)	When using the E-mail/Scan to Folder/WSD(Push Type)/Scan to Removable device/network delivery scanner function (Original size: A4, Resolution: 200 dpi, 1-side scanning): Black and white: 51 pages/min (Original Type: B & W: Text / Line Art, Compression (Black & White): MH, ITU-T No1 Chart) Full Color: 51 pages/min (Original Type: Full Colour: Text / Photo, Compression (Grey Scale / Full Colour): Default, Original Chart) Scanning speed differs depending on the following; operating environment of the machine and computer, scan settings, and the content of originals (denser images require more time).
Scan speed (Type 3 and 4)	When using the E-mail/Scan to Folder/WSD(Push Type)/Scan to Removable device/network delivery scanner function (Original size: A4, Resolution: 200 dpi/300 dpi, 1-side scanning): Black and white: 67 pages/min (Original Type: B & W: Text / Line Art, Compression (Black & White): MH, ITU-T No1 Chart) Full Color: 67 pages/min (Original Type: Full Colour: Text / Photo, Compression (Grey Scale / Full Colour): Default, Original Chart) Scanning speed differs depending on the following; operating environment of the machine and computer, scan settings, and the content of originals (denser images require more time).

Component	Specifications
Scan speed (Type 3 and 4; models equipped with a one-pass duplex scanning ADF)	When using the E-mail/Scan to Folder/WSD(Push Type)/Scan to Removable device/network delivery scanner function (Original size: A4, Resolution: 200 dpi/300 dpi, 1-side scanning): Black and white: 85 pages/min (Original Type: B & W: Text / Line Art, Compression (Black & White): MH, ITU-T No1 Chart) Full Color: 85 pages/min (Original Type: Full Colour: Text / Photo, Compression (Grey Scale / Full Colour): Default, Original Chart) Scanning speed differs depending on the following; operating environment of the machine and computer, scan settings, and the content of originals (denser images require more time).
Tone	Black and white: 2 tones Full color / Gray scale: 256 tones
Basic scanning resolution	600 dpi
Image compression type for black and white (two-value)	TIFF (MH, MR, MMR)
Image compression type for gray scale/full color	JPEG
Interface	Standard: • Ethernet interface (100BASE-TX/10BASE-T) • USB 2.0 Option: • Gigabit Ethernet interface (1000BASE-T/ 100BASE-TX/10BASE-T) • IEEE 802.11a/b/g wireless LAN interface
Network protocol	TCP/IP

Component	Specifications
Selectable scanning resolutions when using the E-mail function (main scanning × sub scanning)	100 dpi, 200 dpi, 300 dpi, 400 dpi, 600 dpi
Protocol for sending e-mail	SMTP, SMTPS, POP3
Sendable file formats when using the E-mail function	TIFF, JPEG, PDF, High Compression PDF
Selectable scanning resolutions when using the Scan to Folder function (main scanning × sub scanning)	100 dpi, 200 dpi, 300 dpi, 400 dpi, 600 dpi
Protocol for Scan to Folder	SMB, FTP, NCP
Sendable file formats when using the Scan to Folder function	TIFF, JPEG, PDF, High Compression PDF
Protocol for sending using WSD	Web Services on Devices for scanning
Selectable scanning resolution when using TWAIN scanner (main scanning × sub scanning)	100 dpi to 1200 dpi
Protocol for TWAIN scanner	TCP/IP
Operating system for TWAIN scanner	Windows 2000/XP/Vista/7, Windows Server 2003/2003 R2/2008
Selectable scanning resolutions when using the network delivery scanner function (main scanning × sub scanning)	100 dpi, 200 dpi, 300 dpi, 400 dpi, 600 dpi
Selectable scanning resolutions when using WIA scanner (main scanning × sub scanning)	100 dpi to 1200 dpi
Protocol for WIA scanner	TCP/IP
Operating system for WIA scanner	Windows Vista (SP1 or later)/7, Windows Server 2008/2008 R2 (WIA scanner can function under both 32- and 64-bit operating systems.)

Note

- Specifications are subject to change without notice.

Trademarks

Adobe, Acrobat, Acrobat Reader, PostScript, and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Pentium® is a registered trademark of Intel Corporation.

NetWare® is a registered trademark of Novell, Inc.

Microsoft®, Windows®, Windows Server®, and Windows Vista® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Mac OS is a trademark of Apple Inc., registered in the U.S. and other countries.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights to those marks.

The proper names of the Windows operating systems are as follows:

- The product names of Windows 2000 are as follows:

  Microsoft® Windows® 2000 Professional

  Microsoft® Windows® 2000 Server

  Microsoft® Windows® 2000 Advanced Server
- The product names of Windows XP are as follows:

  Microsoft® Windows® XP Professional

  Microsoft® Windows® XP Home Edition

  Microsoft® Windows® XP Media Center Edition

  Microsoft® Windows® XP Tablet PC Edition
- The product names of Windows Vista are as follows:

  Microsoft® Windows Vista® Ultimate

  Microsoft® Windows Vista® Business

  Microsoft® Windows Vista® Home Premium

  Microsoft® Windows Vista® Home Basic

  Microsoft® Windows Vista® Enterprise
- The product names of Windows 7 are as follows:

  Microsoft® Windows® 7 Home Premium

  Microsoft® Windows® 7 Professional

  Microsoft® Windows® 7 Ultimate

  Microsoft® Windows® 7 Enterprise
- The product names of Windows Server 2003 are as follows:

  Microsoft® Windows Server® 2003 Standard Edition

Microsoft® Windows Server® 2003 Enterprise Edition

- The product names of Windows Server 2003 R2 are as follows:

  Microsoft® Windows Server® 2003 R2 Standard Edition

  Microsoft® Windows Server® 2003 R2 Enterprise Edition

- The product names of Windows Server 2008 are as follows:

  Microsoft® Windows Server® 2008 Standard

  Microsoft® Windows Server® 2008 Enterprise

- The product names of Windows Server 2008 R2 are as follows:

  Microsoft® Windows Server® 2008 R2 Standard

  Microsoft® Windows Server® 2008 R2 Enterprise

INDEX

A

A.C.S. Sensitivity Level....201
Access Privileges....48, 83, 108, 109, 150
Accessing User Tools....197
Address book
registering destination folders....60
registering e-mail addresses....24
ADF....159, 172
Adjusting image density....170
Advanced Search....33, 37, 43, 69
Auto Colour Select....162
Auto Density....170
Auto Detect....163
Auto-run program....209

B

B & W Text / Line Art....162
B & W Text / Photo....162
Background Density of ADS (Full Colour)....202
Basic operation
delivering scan files....137
network TWAIN scanner....156
saving on a memory device....129
sending scan files by e-mail....27
sending scan files by Scan to Folder....63
storing scan files....107
WSD scanner (Pull Type)....98
WSD scanner (Push Type)....92
Batch....176, 179
Black & White Photo....162
Black & White Text....162
Blank Page Detect....202

C

CD-ROM....209
Certificate....50
Change Access Priv....123
Change File Name....123
Change Name....192
Change Password....124
Change User Name....122
Check Modes....15
Compression (Black & White)....203
Compression (Grey Scale / Full Colour)....203
Compression Method for High Compression PDF....203
Configuring scan settings on a client computer....100
Confirmation displays....15
Check Modes....15
Preview....16
Scanned Files Status....18
Connecting to the network....22, 23, 55, 87, 132, 152
Custom Size....163
scanning part of an original....167
scanning the entire area....165

D

Delete....192
Delete File....121
Delete Recent Destinations....200
Delete Scanner Journal....200
Delivering scan files....131, 137
Delivery....131
Delivery Dest....140
Delivery destination....141
Delivery server....131
DeskTopBinder Lite....117, 118, 134, 154
Destination (delivery)
searching the delivery server's destination list....142
selecting by entering the registration numbers....142
selecting from the delivery server's address book....141
selecting from the list....141
Destination (e-mail)
entering an e-mail address manually....34
registering a directly-entered destination in the address book....39
registering a recent destination in the address book....40
searching an LDAP server....36
searching the machine's address book....33
selecting by entering the registration numbers....32
selecting from the list....31
selecting from the machine's address book....31
selecting the destination from recent destinations....35
Destination (folder)
entering the path of the NetWare server directly....76
entering the path to a shared network folder manually....71
entering the path to an FTP server manually....74

registering the path to a recent destination in the address book....81
registering the path to the selected destination in the address book....80
searching the machine's address book....69
selecting by entering the registration numbers....68
selecting from the list....67
selecting from the machine's address book....67
selecting the destination from recent destinations....79
specifying the path by browsing the NetWare server....78
specifying the path by browsing the shared network folder....72
Destination (WSD scanner)
searching the destination....96
selecting the destination....95
Destination list....26, 31, 62, 67, 91, 135, 141
Destination List Display Priority 1....199
Destination List Display Priority 2....199
Display
confirmation displays....15
simplified display....14
Display panel....14
Divide....177
Divide & Send E-mail....203
Dropout Colour....162

E

E-mail destination....31
E-mail message....46
entering manually....47
selecting from the list....46
E-mail screen....25, 30
E-mail sender....41
Edit....169
Enabling WSD....88
Encryption
e-mail....49
PDF....186
Erase Border....169
Expand Group Dest....16
Exposure glass....158, 171

F

File Name....183
sending files....181
stored files....109
File type....181
FTP....54, 74
FTP server....54
Full Colour Glossy Photo....162
Full Colour Text / Photo....162
Functions....12

G

General Settings....199
Grey Scale....162

H

High Compression PDF....181, 182
High Compression PDF Level....203
How to read this manual....10

I

Initial Settings....206
Insert Additional E-mail Info....204
Install
TWAIN driver....154

K

Key Colour....15

L

Laws and regulations....11
LDAP server....21, 36
Legal prohibition....11
Limitations of file types....182

M

Manage / Delete File....121
Manual Entry....26, 34, 62, 135
Manuals for this machine....7
Max. E-mail Size....203
Memory device....127, 129
Menu Protect....206
Mix 1 & 2 Sided....174
Mixed Original Sizes....163, 164
Mixed size originals....160, 164
Multi-page....181
Multiple pages scanned as one file....179

N

Names of Major Items....10
NCP....54, 75
NetWare server....55, 75
Network delivery function....213
Network delivery scanner screen....135, 140
Network TWAIN scanner....151
No. of Digits for Single Page Files....204
Notes....10
Notes about file types....182
Notice....9

O

One sided original....173
one-sided and two-sided pages....174
Original Feed Type....171
Original orientation....171
  TWAIN scanner....158
Original Settings....173
Original Type....162
Outline
  delivering scan files....131
  network TWAIN scanner....151
  saving on a memory device....127
  sending scan files by e-mail....21
  sending scan files by Scan to Folder....53
  storing scan files....105
  WSD scanner....86

P

Password....110
PC Scan Command Standby Time....199
PDF....181
  changing security permissions....187
  encryption....186
  security....185
Permissions....187
Placing originals
  Original feed type....171
Preparation
  network TWAIN scanner....152
  sending scan files by e-mail....22
  sending scan files by Scan to Folder....55
  WSD scanner....87
Preview
  viewing a file before sending....16
Prg. Dest....39, 80
Print & Delete Scanner Journal....200
Print List....19
Print Scanner Journal....200
Program as Defaults....194
Program Dest....40, 81
Programs....190
  changing....191, 192
  defaults....194
  deleting....192
  recalling....191
  registering....190

R

Recall....191
Recent....35, 40, 79, 81
Recent Destinations....26, 62
Recept. Notice....28, 138
Reg. No....26, 61, 135
Registering of WSD scanner....89
Registration number....32, 42, 68, 142, 145
Resolution....163
Resolution and scan size....207
  e-mail....207
  network delivery....207
  Scan to Folder....207
  storing....207
  TWAIN scanner....207
Restore Factory Defaults....194
Result of sending....18

S

S/MIME....49
SADF....176, 179
Saving on a memory device....127, 129
Scan profile
  changing....100
  creating....101
Scan settings....161, 201
Scan Settings....162
Scan Size....163
Scan to e-mail....21
Scan to Folder....53
Scan to Folder destination....67

Scan to Folder screen.....61, 66
Scanner Features.....24, 56, 134
accessing.....197
changing.....197
quitting.....198
Scanner functions.....12
ScanRouter delivery software.....131, 134
Screen layout
delivering scan files.....135
list of stored files.....112
sending scan files by e-mail.....25
sending scan files by Scan to Folder.....61
WSD scanner.....91
Search Dest.....33, 36, 69, 96, 142
Search Destination.....199
Security
e-mail.....49
encryption (e-mail).....49
PDF.....185
signature.....50
Security Settings.....185
Select Stored File.....112
Send Settings.....203
Sender (delivery).....145
searching the delivery server's destination list.....146
selecting by entering a registration number.....145
selecting from the list.....145
Sender (e-mail).....41
searching the machine's address book.....42
selecting by entering a registration number.....42
selecting from the list.....41
Sender Name.....41, 42, 145, 146
Sending a stored file.....119
Sending files
WSD scanner (Pull Type).....86
WSD scanner (Push Type).....86
Sending scan files by e-mail.....21, 27
Sending scan files by Scan to Folder.....63
Sending scan files to folders.....53
Sending scan files with WSD.....85
Sending scan files with WSD (Pull Type).....98
Sending scan files with WSD (Push Type).....92
Sending the URL by e-mail.....51
Serial number.....184
Shared folder
creating on Mac OS X.....59
creating on Windows.....57
Signature.....50
Simplified Display.....14
Single Page.....181
SMB.....53, 70
SMTP server.....21
Specifications.....218
Stamp.....175
Storage function.....212
Store File.....107
Store to HDD.....107
Store to HDD + Send.....48, 83, 150
Stored file
changing a file name.....123
changing a password.....124
changing a user name.....122
changing information.....122
checking.....116
checking from a client computer.....117
checking from the list.....116
deleting.....121
displaying the list.....112
displaying with DeskTopBinder Lite.....118
displaying with Web Image Monitor.....118
managing.....121
preview screen.....117
searching by file name.....114
searching by user name.....113
searching the list.....113
sending.....119
Stored File E-mail Method.....204
Storing scan files.....105
specifying a file name.....109
specifying a password.....110
specifying a user name.....109
specifying file information.....109
Subject.....45, 149
Switch Title.....199
Switching screen
E-mail.....30
network delivery scanner.....140
Scan to Folder.....66
WSD scanner.....94
Symbols.....10
System Settings.....22, 55, 87, 132, 152

T

Template size....163
Text....46, 47
TIFF....181
TIFF / JPEG....181
Trademarks....222
Transmission function....210
TWAIN driver....154, 156, 209
TWAIN scanner....151, 156, 158, 160
  Scan settings....158
Two sided original....174

U

Update....91
Update Delivery Server Destination List....199
URL....51
User Name....109
User Tools
  accessing....197
  changing....197
  quitting....198

V

Values of set items....210
  e-mail....210
  network delivery....213
  Scan to Folder....211
  simultaneous transmission....212
  storage....212
  WSD scanner....212

W

Wait Time for Next Orig. Exposure Glass....201
Wait Time for Next Original(s) SADF....201
Web Image Monitor....25, 117, 118
WIA scanning....215
WSD scanner....85
WSD scanner (Pull Type)....98
WSD scanner (Push Type)....91
WSD scanner destination....95
WSD scanner screen....91, 94

MEMO

MEMO

MEMO

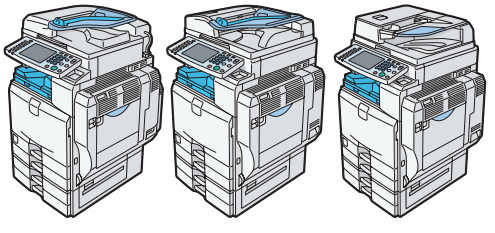
© 2010

Operating Instructions Scanner Reference

C9130/C9135/C9145/C9145A/C9155/C9155A
C9130G/C9135G/C9145G/C9145AG/C9155G/C9155AG
LD630C/LD635C/LD645C/LD645CA/LD655C/LD655CA
LD630CG/LD635CG/LD645CG/LD645CAG/LD655CG/LD655CAG
Aficio™ MP C3001/C3501/C4501/C4501A/C5501/C5501A
Aficio™ MP C3001G/C3501G/C4501G/C4501AG/C5501G/C5501AG

Operating Instructions

Network and System Settings Reference



1 System Settings
2 Connecting the Machine
3 Using a Printer Server
4 Monitoring and Configuring the Machine
5 Registering Addresses and Users for Facsimile/Scanner Functions
6 Special Operations under Windows
7 Appendix

Read this manual carefully before you use this machine and keep it handy for future reference. For safe and correct use, be sure to read the Safety Information in "About This Machine" before using the machine.

TABLE OF CONTENTS

Manuals for This Machine....10
Notice....12
Important....12
How to Read This Manual....13
Symbols....13
Machine Types....13
Names of Major Items....14
Notes....14
About IP Address....15
Laws and Regulations....16
Legal Prohibition....16
Model-Specific Information....17
Display Panel....18
Accessing User Tools....19
Changing Default Settings....19
Quitting User Tools....20

1. System Settings

General Features....21
Output Tray Settings (Type 1 and 2)....23
Output Tray Settings (Type 3 and 4)....24
Tray Paper Settings....27
Timer Settings....36
Interface Settings....39
Network....39
Parallel Interface....43
Wireless LAN....44
Print List....46
File Transfer....48
Administrator Tools....55
Programming the LDAP server....66
Programming the LDAP server....66
Changing the LDAP server....70
Deleting the LDAP server....70

Programming the Realm....72
Programming the Realm....72
Changing the Realm....73
Deleting the Realm....74

2. Connecting the Machine

Connecting to the Interface....75
Connecting to the Ethernet Interface....76
Connecting to the Gigabit Ethernet Interface....77
Connecting to the USB (Type B) Interface....80
Connecting a Device to the Machine's USB Host Interface....80
Connecting to the IEEE 1284 Interface....81
Connecting to the Wireless LAN Interface....82
Network Settings Required to Use the Printer/LAN-Fax....85
Ethernet....85
Wireless LAN....86
Network Settings Required to Use Internet Fax....88
Ethernet....88
Wireless LAN....90
Network Settings Required to Use E-mail Function....92
Ethernet....92
Wireless LAN....93
Network Settings Required to Use Scan to Folder Function....96
Ethernet....96
Wireless LAN....97
Network Settings Required to Use the Network Delivery Scanner....99
Ethernet....99
Wireless LAN....100
Network Settings Required to Use WSD Scanner....102
Ethernet....102
Wireless LAN....103
Network Settings Required to Use Network TWAIN Scanner....105
Ethernet....105
Wireless LAN....106

Network Settings Required to Use Document Server....108
Ethernet....108
Wireless LAN....109
Using Utilities to Make Network Settings....111
Interface Settings....111
File Transfer....116
Connecting the Machine to a Telephone Line and Telephone....119
Connecting the Telephone Line (Type 1 and 2)....119
Connecting the Telephone Line (Type 3 and 4)....119
Selecting the Line Type....120

3. Using a Printer Server

Preparing Printer Server....121
Using NetWare....122
Setting Up as a Print Server (NetWare 3.x)....122
Setting Up as a Print Server (NetWare 4.x, 5/5.1, 6/6.5)....124
Using Pure IP in the NetWare 5/5.1 or 6/6.5 Environment....125
Setting Up as a Remote Printer (NetWare 3.x)....127
Setting Up as a Remote Printer (NetWare 4.x, 5/5.1, 6/6.5)....129

4. Monitoring and Configuring the Machine

Using Web Image Monitor....133
Displaying Top Page....134
When User Authentication is Set....136
About Menu and Mode....136
Access in the Administrator Mode....138
List of Setting Items....139
Displaying Web Image Monitor Help....146
When Using IPP with SmartDeviceMonitor for Client....148
Machine Status Notification by E-Mail....149
Setting the Account for E-mail Notification....151
Mail Authentication....151
Auto E-mail Notification....153
On-demand E-mail Notification....153
Format of On-demand E-mail Messages....154

Remote Maintenance Using telnet....155
Using telnet....155
access....156
authfree....157
autonet....158
bonjour....158
devicename....160
dhcp....160
dhcp6....161
diprint....162
dns....163
domainname....165
etherauth....165
etherconfig....165
help....166
hostname....166
ifconfig....167
info....168
ipp....168
ipsec....169
ipv6....169
logout....170
lpr....170
netware....171
passwd....172
pathmtu....172
prnlog....173
rhpp....173
route....174
set....175
show....178
slp....178
smb....179

snmp....180
sntp....183
spoolsw....184
ssdp....185
ssh....185
status....186
syslog....186
upnp....186
web....187
wiconfig....187
wins....192
wsmfp....193
8021x....194
SNMP....197
Getting Machine Information over the Network....198
Current Machine Status....198
Printer configuration....207
Understanding the Displayed Information....209
Print Job Information....209
Print Log Information....209
Configuring the Network Interface Board....210
Message List....216
System Log Information....216

5. Registering Addresses and Users for Facsimile/Scanner Functions

Address Book....229
Managing names in the Address Book....232
Sending fax by Quick Dial....232
Sending e-mail by Quick Dial....233
Sending received fax documents or scanned files to a shared folder directly....233
Preventing unauthorized user access to shared folders from the machine....233
Managing users and machine usage....233
Registering Names....235
Registering Names....235

Changing a Registered Name....236
Deleting a Registered Name....237
Carrying Over Registered Data for Use by Address Book Auto Register....239
Authentication Information....240
Registering a User Code....240
Changing a User Code....242
Deleting a User Code....244
Displaying the Counter for Each User....245
Printing the Counter for Each User....246
Printing the Counter for All Users....247
Clearing the Number of Prints....248
Fax Destination....250
Registering a Fax Destination....252
Changing a Fax Destination....253
Deleting a Fax Destination....256
Registering an IP-Fax Destination....257
Changing a Registered IP-Fax Destination....258
Deleting a Registered IP-Fax Destination....261
E-mail Destination....263
Registering an E-mail Destination....263
Changing an E-mail Destination....265
Deleting an E-mail Destination....266
Registering Folders....268
Registering an SMB Folder....268
Changing an SMB Folder....272
Deleting an SMB Registered Folder....273
Registering an FTP Folder....274
Changing an FTP Folder....277
Deleting an FTP Folder....278
Registering an NCP Folder....279
Changing an NCP Registered Folder....283
Deleting an NCP Folder....284
Registering Names to a Group....286

Registering a Group....286
Registering Names to a Group....287
Adding a Group to Another Group....289
Displaying Names Registered in a Group....290
Removing a Name from a Group....291
Deleting a Group Within Another Group....292
Changing a Group Name....293
Deleting a Group....294
Registering a Protection Code....296
Registering a Protection Code to a Single User....296
Registering a Protection Code to a Group User....297
Registering SMTP and LDAP Authentication....299
SMTP Authentication....299
LDAP Authentication....300

6. Special Operations under Windows

Printing Files Directly from Windows....303
Setup....303
Using a Host Name Instead of an IPv4 Address....303
Printing Commands....304

7. Appendix

When Using Windows Terminal Service/Citrix Presentation Server/Citrix XenApp....307
Operating Environment....307
Supported Printer Drivers....307
Limitations....307
Using DHCP....309
Using AutoNet....309
Configuring the WINS Server....310
Using Web Image Monitor....310
Using telnet....311
Using the Dynamic DNS Function....312
Updating....312
DNS servers targeted for operation....313
DHCPv4 servers targeted for operation....313

Setting the dynamic DNS function....313
Precautions....315
Connecting a Dial-Up Router to a Network....315
NetWare Printing....316
When the IEEE 802.11 Interface Unit is Installed....318
Configuring IEEE 802.1X....319
Installing a Site Certificate....319
Installing Device Certificate....319
Setting Items of IEEE 802.1X for Ethernet....320
Setting Items of IEEE 802.1X for Wireless LAN....322
Specifications....325
Copyrights....327
Boost....327
expat....327
FreeBSD 4.6.2/netipx....327
Heimdal....328
ILU....328
IPS™ print language emulations....329
JPEG LIBRARY....329
libusb....329
libxml2....329
Lua....329
The m17n library....330
MD4....330
MD5....330
nana....331
Net-SNMP....331
NetBSD....335
Open LDAP....345
Open SSH....345
Open SSL....349
racoon....351
RSA BSAFE®....351

Sablotron (Version 0.82)....352
Samba....352
SASL....358
SPX/IPX....359
TinyScheme....359
TrouSerS....359
WPA Supplicant....363
Zilb....364
Trademarks....365
INDEX....367

Manuals for This Machine

Read this manual carefully before you use this machine.

Refer to the manuals that are relevant to what you want to do with the machine.

Important

- **Media differ according to manual.**
- **The printed and electronic versions of a manual have the same contents.**
- **Adobe Acrobat Reader/Adobe Reader must be installed in order to view the manuals as PDF files.**
- **A Web browser must be installed in order to view the html manuals.**

About This Machine

Before using the machine, be sure to read the section of this manual entitled Safety Information.

This manual introduces the machine's various functions. It also explains the control panel, preparation procedures for using the machine, how to enter text, how to install the CD-ROMs provided, and how to replace paper, toner, staples, and other consumables.

Troubleshooting

Provides a guide for resolving common usage-related problems.

Copy and Document Server Reference

Explains Copier and Document Server functions and operations. Also refer to this manual for explanations on how to place originals.

Facsimile Reference

Explains Facsimile functions and operations.

Printer Reference

Explains Printer functions and operations.

Scanner Reference

Explains Scanner functions and operations.

Network and System Settings Reference

Explains how to connect the machine to a network, configure and operate the machine in a network environment, and use the software provided. Also explains how to change User Tools settings and how to register information in the Address Book.

Security Reference

This manual is for administrators of the machine. It explains security functions that you can use to prevent unauthorized use of the machine, data tampering, or information leakage. For enhanced security, we recommend that you first make the following settings:

- Install the Device Certificate.
- Enable SSL (Secure Sockets Layer) Encryption.

- Change the user name and password of the administrator using Web Image Monitor.

For details, see "Setting Up the Machine", Security Reference.

Be sure to read this manual when setting the enhanced security functions, or user and administrator authentication.

PostScript 3 Supplement

Explains how to set up and use PostScript 3.

VM Card Extended Feature Settings Device Reference

Explains how to set up the extended features settings with the machine.

VM Card Extended Feature Settings Web Reference

Explains how to set up the extended features settings using Web Image Monitor.

Other manuals

- UNIX Supplement
- Quick Reference Copy Guide
- Quick Reference Printer Guide
- Quick Reference Fax Guide
- Quick Reference Scanner Guide
- App2Me Start Guide

Note

- Manuals provided are specific to machine types.
- For "UNIX Supplement", please visit our Web site or consult an authorized dealer. This manual includes descriptions of functions and settings that might not be available on this machine.
- The following software products are referred to using general names:

Product Name	General name
DeskTopBinder Lite and DeskTopBinder Professional*1	DeskTopBinder
ScanRouter EX Professional*1 and ScanRouter EX Enterprise*1	the ScanRouter delivery software

*1 Optional

Notice

Important

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

For good copy quality, the manufacturer recommends that you use genuine toner from the manufacturer.

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

How to Read This Manual

Symbols

This manual uses the following symbols:

Important

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

Note

Indicates supplementary explanations of the machine's functions , and instructions on resolving user errors.

Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys on the machine's display or control panels.

Region A (mainly Europe and Asia)

Region B (mainly North America)

Differences in the functions of Region A and Region B models are indicated by two symbols. Read the information indicated by the symbol that corresponds to the region of the model you are using. For details about which symbol corresponds to the model you are using, see "Model-Specific Information".

Machine Types

This machine comes in several models which vary in copy/print speed.

Machine types for users of type 1 and 2

	Type 1	Type 2
Copy/print speed (Full Color)	30 sheets/minute (A4, $8\frac{1}{2} \times 11$)	35 sheets/minute (A4, $8\frac{1}{2} \times 11$)
Copy/print speed (B&W)	30 sheets/minute (A4, $8\frac{1}{2} \times 11$)	35 sheets/minute (A4, $8\frac{1}{2} \times 11$)

Machine types for users of type 3 and 4

	Type 3	Type 4
Copy/print speed (Full Color)	45 sheets/minute (A4, $8^1/_2 \times 11$)	55 sheets/minute (A4, $8^1/_2 \times 11$)
Copy/print speed (B&W)	45 sheets/minute (A4, $8^1/_2 \times 11$)	55 sheets/minute (A4, $8^1/_2 \times 11$)

Names of Major Items

Major items of this machine are referred to as follows in this manual:

Region A (mainly Europe and Asia)

- Auto Reverse Document Feeder(optional) → ARDF
- Auto Document Feeder(optional) → ADF (in this manual, "ADF" refers to the ARDF and the one-pass duplex scanning ADF)
- Large capacity tray (optional) → LCT
- Envelope Feeder EF3000 (optional) → Small size paper tray

Region B (mainly North America)

- Auto Reverse Document Feeder → ARDF
- Auto Document Feeder → ADF (in this manual, "ADF" refers to the ARDF and the one-pass duplex scanning ADF)
- Large capacity tray (optional) → LCT
- Envelope Feeder EF3000 (optional) → Small size paper tray

Notes

Contents of this manual are subject to change without prior notice.

Colors on color keys or the color circle may differ slightly from the colors of actual copies.

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Depending on which country you are in, certain units may be optional. For details, please contact your local dealer.

About IP Address

In this manual, "IP address" covers both IPv4 and IPv6 environments. Read the instructions that are relevant to the environment you are using.

Laws and Regulations

Legal Prohibition

Do not copy or print any item for which reproduction is prohibited by law.

Copying or printing the following items is generally prohibited by local law:

bank notes, revenue stamps, bonds, stock certificates, bank drafts, checks, passports, driver's licenses.

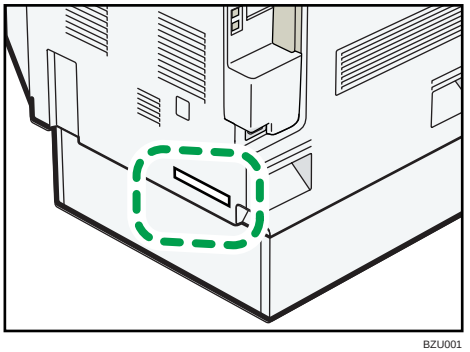
The preceding list is meant as a guide only and is not inclusive. We assume no responsibility for its completeness or accuracy. If you have any questions concerning the legality of copying or printing certain items, consult with your legal advisor.

This machine is equipped with a function that prevents making counterfeit bank bills. Due to this function the original images similar to bank bills may not be copied properly.

Model-Specific Information

This section explains how you can identify the region your machine belongs to.

There is a label on the rear of the machine, located in the position shown below. The label contains details that identify the region your machine belongs to. Read the label.



BZU001

The following information is region-specific. Read the information under the symbol that corresponds to the region of your machine.

Region A (mainly Europe and Asia)

If the label contains the following, your machine is a region A model:

- CODE XXXX -27, -29, -67, -69
- 220-240V

Region B (mainly North America)

If the label contains the following, your machine is a region B model:

- CODE XXXX -17, -51, -52, -57
- 120-127V

Note

- Dimensions in this manual are given in two units of measure: metric and inch. If your machine is a Region A model, refer to the metric units. If your machine is a Region B model, refer to the inch units.

Display Panel

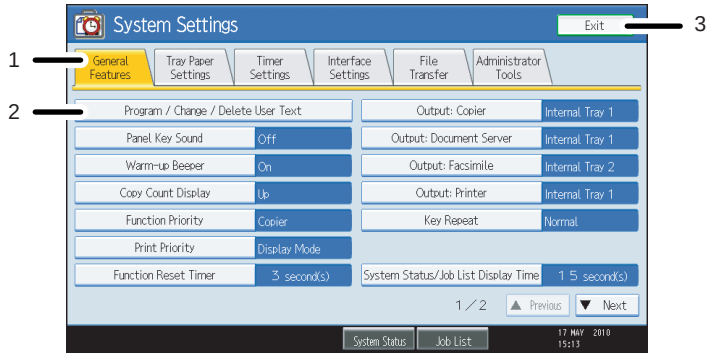
The display panel shows machine status, error messages, and function menus.

The function items displayed serve as selector keys. You can select or specify an item by lightly pressing it.

When you select or specify an item on the display panel, it is highlighted like Program / Change. Keys appearing as OK cannot be used.

To display the following screen, press the [User Tools/Counter] key to display the User Tools menu, and then press [System Settings].

Using the System Settings menu screen as an example, this section explains how to use the machine's display panel.



BZU005

1. **The menu tabs for various settings appear. To display the setting you want to specify or change, press the appropriate menu tab.**
2. **A list of settings appears. To specify or change a setting, press the appropriate key in the list.**
3. **Press this to quit the User Tools menu.**

Accessing User Tools

This section describes how to access User Tools menu.

User Tools allow you to change or set defaults.

Note

- Operations for system settings differ from normal operations. Always quit User Tools when you have finished.
- Any changes you make with User Tools remain in effect even if the main power switch or operation switch is turned off, or the [Energy Saver] or [Clear Modes] key is pressed.

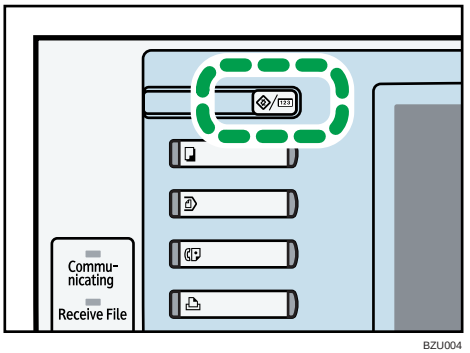
Changing Default Settings

This section describes how to change the settings of User Tools.

Important

- **If Administrator Authentication Management is specified, contact your administrator.**

1. **Press the [User Tools/Counter] key.**



BZU004

2. **Press [System Settings].**
3. **Select the user tool you want to change.**
4. **Change settings by following instructions on the display, and then press [OK].**

Note

- To cancel changes made to settings and return to the initial display, press the [User Tools/Counter] key.
- For details about specifying System Settings, see "System Settings".
- For details about changing the language, see "Changing the Display Language", About This Machine.
- For details about checking inquiry and counter, see "Remarks", About This Machine.

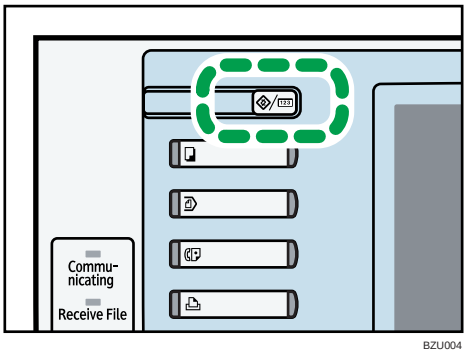
Reference

- p.21 "System Settings"

Quitting User Tools

This section describes how to quit the settings of User Tools.

1. **Press the [User Tools/Counter] key.**



Note

- You can also quit User Tools by pressing [Exit].

1. System Settings

This chapter describes user tools in the System Settings menu.

General Features

This section describes the user tools in the General Features menu under System Settings.

Program / Change / Delete User Text

You can register text phrases you often use when specifying settings, such as ".com" and "Regards".

You can register up to 40 entries.

- Program / Change
  1. Press the [User Tools/Counter] key.
  2. Press [System Settings].
  3. Check that [General Features] is selected.
  4. Press [Program / Change / Delete User Text].
  5. Check that [Program / Change] is selected.
  6. Select the user text you want to change.

     To program new user text, press [*Not Programmed].
  7. Enter the user text, and then press [OK].

     Enter the user text using up to 80 characters.
  8. Press [Exit].
  9. Press the [User Tools/Counter] key.
- Delete
  1. Press the [User Tools/Counter] key.
  2. Press [System Settings].
  3. Check that [General Features] is selected.
  4. Press [Program / Change / Delete User Text].
  5. Press [Delete].
  6. Select the user text you want to delete.
  7. Press [Yes].
  8. Press [Exit].
  9. Press the [User Tools/Counter] key.

Panel Key Sound

The beeper (key tone) sounds when a key is pressed.

Default: [Medium]

Warm-up Beeper (copier/Document Server)

You can have the beeper sound when the machine becomes ready to copy after leaving Energy Saver mode, or when the power is turned on.

Default: [On]

If the Panel Key Sound setting is [Off], the beeper does not sound, whatever the Warm-up Beeper setting.

Copy Count Display (copier/Document Server)

The copy counter can be set to show the number of copies made (count up) or the number of copies yet to be made (count down).

Default: [Up]

Function Priority

Specify the mode to be displayed immediately after the operation switch is turned on, or when System Reset mode is turned on.

Default: [Copier]

Print Priority

Print Priority is given to the mode selected.

Default: [Display Mode]

Function Reset Timer

You can set the length of time the machine waits before changing modes when using the multi-access function.

This is useful if you are making many copies and have to change settings for each copy. If you set a longer reset period, you can prevent interruption from other functions.

Default: [Set Time], [3 second(s)]

When you select [Set Time], enter the time (3-30 seconds, in 1 second increments) using the number keys.

The Function Reset Timer setting is ignored if [Interleave] or [Job Order] is set for Print Priority.

Output: Copier (copier)

Specify a tray to which documents are delivered.

Default: [Internal Tray 1]

Output: Document Server (Document Server)

Specify a tray to which documents are delivered.

Default: [Internal Tray 1]

Output: Facsimile (facsimile)

Specify a tray to which documents are delivered.

Default: [Internal Tray 1]

Output: Printer (printer)

Specify a tray to which documents are delivered.

Default: [Internal Tray 1]

Key Repeat

You can enable or disable repetition of an operation if a key on the screen or control panel is pressed continuously.

Default: [Normal]

ADF Original Table Elevation (Type 3 and 4 (models equipped with the one-pass duplex scanning ADF))

Set when to raise the ADF plate after placing originals on the Auto Document Feeder (ADF).

Default: [When Original is Set]

System Status/Job List Display Time

Specify how long to display the System Status and Job List display for.

Default: [On], [15 second(s)]

By selecting [On], you can specify a display time between 10 and 999 seconds.

Small Size Paper Tray

When printing on small paper sizes, specify this setting for each tray.

Default: [Off], [Tray 2]

Note

- For details on how to access System Settings, see "Accessing User Tools".

Reference

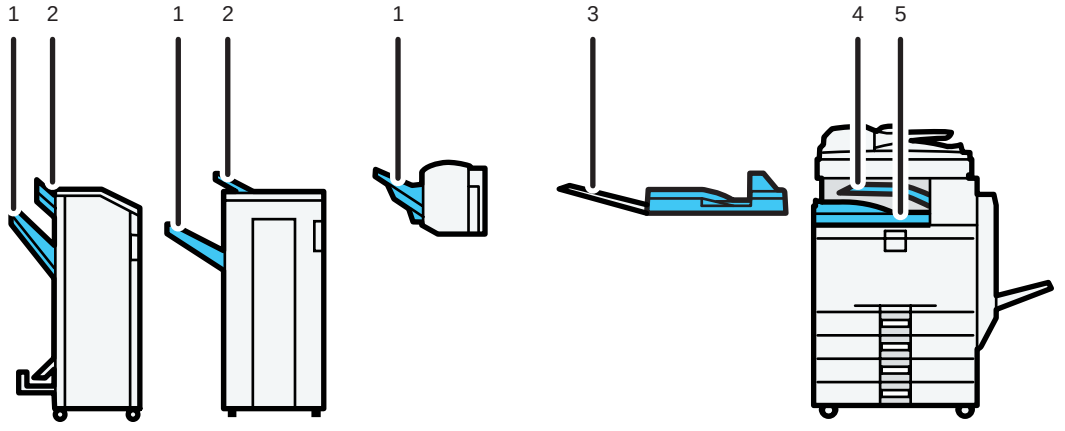
- p.19 "Accessing User Tools"

Output Tray Settings (Type 1 and 2)

This section describes the output tray settings.

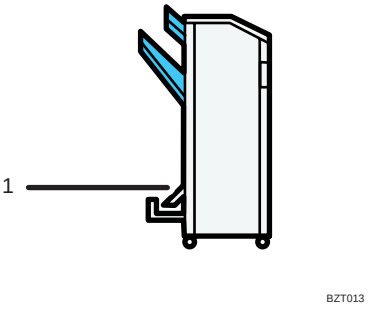
- Depending on the options installed on the machine, some trays might not be displayed.
  - When the internal tray 2 is installed, [Internal Tray 2] is displayed.
  - When the external tray is installed, [External Tray] is displayed.
  - When Booklet Finisher SR3000 or Finisher SR790 is installed, [Finisher Upper Tray] is displayed.
  - When a finisher is installed, [Finisher Shift Tray] is displayed.
- If you select a setting that uses the finisher, the job might not be delivered to the specified output tray.

- If you select stapling or punching, the job will be delivered to the finisher upper tray or the finisher shift tray.
- If you select shift-sorting, the job will be delivered to the finisher shift tray.



1. **Finisher Shift Tray**
2. **Finisher Upper Tray**
3. **External Tray**
4. **Internal Tray 2**
5. **Internal Tray 1**

- If you select center stapling, the job will be delivered to the finisher booklet tray.

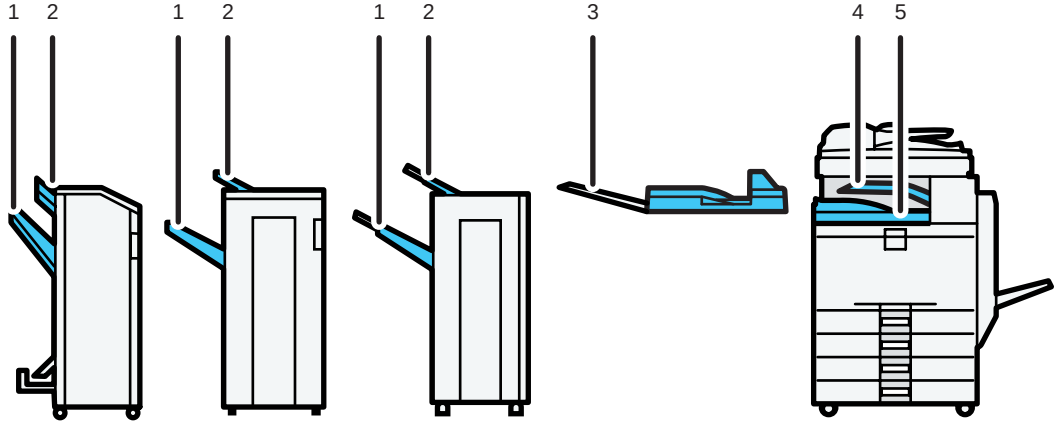


1. **Finisher Booklet Tray**

Output Tray Settings (Type 3 and 4)

This section describes the output tray settings.

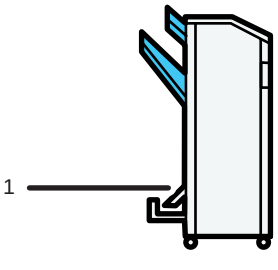
- Depending on the options installed on the machine, some trays might not be displayed.
  - When the internal tray 2 is installed, [Internal Tray 2] is displayed.
  - When the external tray is installed, [External Tray] is displayed.
  - When a finisher is installed, [Finisher Shift Tray] and [Finisher Upper Tray] are displayed.
- If you select a setting that uses the finisher, the job might not be delivered to the specified output tray.
  - If you select stapling or punching, the job will be delivered to the finisher upper tray or the finisher shift tray.
  - If you select shift-sorting, the job will be delivered to the finisher shift tray.



BZU003

1. **Finisher Shift Tray**
2. **Finisher Upper Tray**
3. **External Tray**
4. **Internal Tray 2**
5. **Internal Tray 1**

- If you select center stapling, the job will be delivered to the finisher booklet tray.



BZT013

1. **Finisher Booklet Tray**

Tray Paper Settings

This section describes the user tools in the Tray Paper Settings menu under System Settings.

Important

- **If the specified paper size differs from the actual size of the paper loaded in the paper tray, a misfeed might occur because the correct paper size was not detected.**

Paper Tray Priority: Copier (copier/Document Server)

Specify the tray to supply paper for output.

Default: [**Tray 1**]

Paper Tray Priority: Facsimile (facsimile)

Specify the tray to supply paper for output.

Default: [**Tray 1**]

Paper Tray Priority: Printer (printer)

Specify the tray to supply paper for output.

Default: [**Tray 1**]

Tray Paper Size: Tray 2

Select the size of the paper loaded in the paper tray.

The paper sizes you can set for tray 2 are as follows:

- [Auto Detect]
- Region A (mainly Europe and Asia)
  A3, A4, A4, A5, B4 JIS, B5 JIS, B5 JIS, C5 Env,
  11 × 17, 11 × 15, 10 × 14, $8^1/_2$ × 14, $8^1/_2$ × 13,
  $8^1/_2$ × 11, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13,
  8 × 13, 8 × 10, $7^1/_4$ × $10^1/_2$, $7^1/_4$ × $10^1/_2$, $4^1/_8$ × $9^1/_2$,
  8K, 16K, 16K
- Region B (mainly North America)
  11 × 17, 11 × 15, 10 × 14, $8^1/_2$ × 14, $8^1/_2$ × 13,
  $8^1/_2$ × 11, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13,
  8 × 13, 8 × 10, $7^1/_4$ × $10^1/_2$, $7^1/_4$ × $10^1/_2$, $4^1/_8$ × $9^1/_2$,
  A3, A4, A4, A5, B4 JIS, B5 JIS, B5 JIS, C5 Env,
  8K, 16K, 16K
- [Custom Size]

Default: [**Auto Detect**]

You can specify a custom size of between 182.0 - 297.0 mm (7.17 - 11.69 inch) vertically, and between 148.0 - 432.0 mm (5.83 - 17.00 inch) horizontally.

For details about auto detect paper size, see About This Machine.

Tray Paper Size: Tray 3-4 (when the lower paper trays are installed.)

Select the size of the paper loaded in the paper tray.

The paper sizes you can set for tray 3 - 4 are as follows:

- [Auto Detect]
- Region A (mainly Europe and Asia)
  A3, A4, A4, A5, B4 JIS, B5 JIS, B5 JIS, C5 Env,
  11 × 17, 11 × 15, 10 × 14, 8 1/2 × 14, 8 1/2 × 13,
  8 1/2 × 11, 8 1/2 × 11, 8 1/4 × 14, 8 1/4 × 13,
  8 × 13, 8 × 10, 7 1/4 × 10 1/2, 7 1/4 × 10 1/2, 4 1/8 × 9 1/2,
  8K, 16K, 16K
- Region B (mainly North America)
  11 × 17, 11 × 15, 10 × 14, 8 1/2 × 14, 8 1/2 × 13,
  8 1/2 × 11, 8 1/2 × 11, 8 1/4 × 14, 8 1/4 × 13,
  8 × 13, 8 × 10, 7 1/4 × 10 1/2, 7 1/4 × 10 1/2, 4 1/8 × 9 1/2,
  A3, A4, A4, A5, B4 JIS, B5 JIS, B5 JIS, C5 Env,
  8K, 16K, 16K
- [Custom Size]

Default: [**Auto Detect**]

You can specify a custom size of between 182.0 - 297.0 mm (7.17 - 11.69 inch) vertically, and between 148.0 - 432.0 mm (5.83 - 17.00 inch) horizontally.

For details about auto detect paper size, see About This Machine.

Tray Paper Size: Tray 3 (when the lower paper tray is installed.) (Type 1 and 2)

Select the size of the paper loaded in the paper tray.

The paper sizes you can set for tray 3 are as follows:

- [Auto Detect]
- Region A (mainly Europe and Asia)
  A3, A4, A4, A5, B4 JIS, B5 JIS, B5 JIS, C5 Env,
  11 × 17, 11 × 15, 10 × 14, 8 1/2 × 14, 8 1/2 × 13,
  8 1/2 × 11, 8 1/2 × 11, 8 1/4 × 14, 8 1/4 × 13,
  8 × 13, 8 × 10, 7 1/4 × 10 1/2, 7 1/4 × 10 1/2, 4 1/8 × 9 1/2,
  8K, 16K, 16K

- Region B (mainly North America)

  11 × 17, 11 × 15, 10 × 14, 8 1/2 × 14, 8 1/2 × 13,
  8 1/2 × 11, 8 1/2 × 11, 8 1/4 × 14, 8 1/4 × 13,
  8 × 13, 8 × 10, 7 1/4 × 10 1/2, 7 1/4 × 10 1/2, 4 1/8 × 9 1/2,
  A3, A4, A4, A5, B4 JIS, B5 JIS, B5 JIS, C5 Env,
  8K, 16K, 16K

- [Custom Size]

Default: [**Auto Detect**]

You can specify a custom size of between 182.0 - 297.0 mm (7.17 - 11.69 inch) vertically, and between 148.0 - 432.0 mm (5.83 - 17.00 inch) horizontally.

For details about auto detect paper size, see About This Machine.

Tray Paper Size: Tray 2-4 (when the small size paper tray is installed.)

Select the size of the paper loaded in the paper tray.

The paper sizes you can set for tray 2-4 are as follows:

- A4, A5, A5, A6, B5 JIS, B6 JIS,
  C5 Env, C6 Env, C6 Env, DL Env, DL Env,
  8 1/2 × 11, 7 1/4 × 10 1/2, 5 1/2 × 8 1/2,
  4 1/8 × 9 1/2, 3 7/8 × 7 1/2, 3 7/8 × 7 1/2,
- [Custom Size]

Default:

Region A (mainly Europe and Asia)

[**A4**]

Region B (mainly North America)

[**8 1/2 × 11**]

You can specify a custom size of between 100.0 - 220.0 mm (3.94 - 8.66 inch) vertically, and between 148.0 - 432.0 mm (5.83 - 17.00 inch) horizontally.

You cannot replace the lower paper tray with the small size paper tray.

Printer Bypass Paper Size

Specify the size of the paper in the bypass tray when printing data from the computer.

The paper sizes you can set for bypass tray are as follows:

- [Auto Detect]
- A3, A4, A4, A5, A5, A6, B4 JIS, B5 JIS, B5 JIS, B6 JIS,
  C5 Env, C5 Env, C6 Env, C6 Env, DL Env, DL Env, 12 × 18,
  11 × 17, 11 × 15, 10 × 14, 8 1/2 × 14, 8 1/2 × 13,

1

$8^1/_2 \times 11$, $8^1/_2 \times 11$, $8^1/_4 \times 14$, $8^1/_4 \times 13$,
8×13, 8×10, $7^1/_4 \times 10^1/_2$, $7^1/_4 \times 10^1/_2$,
$5^1/_2 \times 8^1/_2$, $4^1/_8 \times 9^1/_2$, $4^1/_8 \times 9^1/_2$, $3^7/_8 \times 7^1/_2$, $3^7/_8 \times 7^1/_2$,
8K, 16K, 16K

- [Custom Size]

Default: [**Auto Detect**]

For details about auto detect paper size, see About This Machine.

You can specify a custom size of between 90.0 - 305.0 mm (3.55 -12.00 inch) vertically, and between 148.0 - 600.0 mm (5.83 - 23.62 inch) horizontally

To allow users to specify a horizontal dimension of 600-1260 mm in "Custom Size", other settings must first be specified. For details about specifying custom paper sizes, contact your sales or service representative.

Paper Type: Bypass Tray

Sets the display so you can see what type of paper is loaded in the bypass tray.

The paper types you can set for the bypass tray are as follows:

- [Do not Display], [Recycled Paper], [Colour Paper], [Letterhead], [Label Paper], [Preprinted Paper], [Bond Paper], [Cardstock], [OHP (Transparency)], [Special Paper 1], [Special Paper 2], [Special Paper 3], [Envelope], [Coated Paper], [Coated Paper: Gloss]

The paper thicknesses you can set for the bypass tray are as follows:

- [Thin Paper] (52 - 59 g/m^2, 14 - 16 lb.Bond)
- [Plain Paper] (60 - 81 g/m^2, 16 - 20 lb.Bond)
- [Middle Thick] (82 - 105 g/m^2, 20 - 28 lb.Bond)
- [Thick Paper 1] (106 - 169 g/m^2, 28 lb. Bond - 90 lb. Index)
- [Thick Paper 2] (170 - 220 g/m^2, 65 - 80 lb. cover)
- [Thick Paper 3] (221 - 256 g/m^2, 80 lb. cover - 140 lb. Index)
- [Thick Paper 4] (257 - 300 g/m^2, 140 lb. Index - 110 lb. Cover)

Default for "Paper Type": [**Do not Display**]

Default for "Paper Thickness": [**Plain Paper**]

Default for "Apply Duplex": [**Yes**]

For details about the relations between possible paper sizes and thickness, see "Recommended Paper Sizes and Types", About This Machine.

For details about the recommended conditions for using thick paper, see "Thick Paper", About This Machine.

Paper Type: Tray 1

Sets the display so you can see what type of paper is loaded in the paper tray 1.

The print function uses this information to automatically select the paper tray.

The paper types you can set for the paper tray 1 are as follows:

- [Do not Display], [Recycled Paper], [Colour Paper], [Letterhead], [Preprinted Paper], [Bond Paper], [Cardstock], [Special Paper 1], [Special Paper 2], [Special Paper 3], [Coated Paper: Gloss]

The paper thicknesses you can set for the paper tray 1 are as follows:

- [Plain Paper] (60 - 81 g/m^2, 16 - 20 lb.Bond)
- [Middle Thick] (82 - 105 g/m^2, 20 - 28 lb.Bond)
- [Thick Paper 1] (106 - 169 g/m^2, 28 lb. Bond - 90 lb. Index)
- [Thick Paper 2] (170 - 220 g/m^2, 65 - 80 lb. cover)
- [Thick Paper 3] (221 - 256 g/m^2, 80 lb. cover - 140 lb. Index)

Default for "Paper Type": [**Do not Display**]

Default for "Paper Thickness": [**Plain Paper**]

Default for "Apply Duplex": [**Yes**]

Default for "Apply Auto Paper Select": [**Yes**]

The key mark is displayed next to the paper tray if [No] is selected in "Apply Auto Paper Select".

Apply Auto Paper Select can only be selected for the copier function if [Do not Display] and [Recycled Paper] are selected. If [No] is selected, Auto Paper Select is not valid.

For details about the relations between possible paper sizes and thickness, see "Recommended Paper Sizes and Types", About This Machine.

For details about the recommended conditions for using thick paper, see "Thick Paper", About This Machine.

Paper Type: Tray 2

Sets the display so you can see what type of paper is loaded in the paper tray 2.

The print function uses this information to automatically select the paper tray.

The paper types you can set for the paper tray 2 are as follows:

- [Do not Display], [Recycled Paper], [Colour Paper], [Letterhead], [Preprinted Paper], [Bond Paper], [Cardstock], [Special Paper 1], [Special Paper 2], [Special Paper 3], [Envelope], [Coated Paper], [Coated Paper: Gloss]

The paper thicknesses you can set for the paper tray 2 are as follows:

- [Plain Paper] (60 - 81 g/m^2, 16 - 20 lb.Bond)
- [Middle Thick] (82 - 105 g/m^2, 20 - 28 lb.Bond)
- [Thick Paper 1] (106 - 169 g/m^2, 28 lb. Bond - 90 lb. Index)
- [Thick Paper 2] (170 - 220 g/m^2, 65 - 80 lb. cover)
- [Thick Paper 3] (221 - 256 g/m^2, 80 lb. cover - 140 lb. Index)

Default for "Paper Type": [**Do not Display**]

Default for "Paper Thickness": [**Plain Paper**]

Default for "Apply Duplex": [**Yes**]

Default for "Apply Auto Paper Select": [**Yes**]

The key mark is displayed next to the paper tray if [No] is selected in "Apply Auto Paper Select".

Apply Auto Paper Select can only be selected for the copier function if [Do not Display] and [Recycled Paper] are selected. If [No] is selected, Auto Paper Select is not valid.

For details about the relations between possible paper sizes and thickness, see "Recommended Paper Sizes and Types", About This Machine.

For details about the recommended conditions for using thick paper, see "Thick Paper", About This Machine.

Paper Type: Tray 3 - 4 (when the lower paper trays are installed.)

Sets the display so you can see what type of paper is loaded in the paper tray 3 - 4.

The print function uses this information to automatically select the paper tray.

The paper types you can set for the paper tray 3 - 4 are as follows:

- [Do not Display], [Recycled Paper], [Colour Paper], [Letterhead], [Preprinted Paper], [Bond Paper], [Cardstock], [Special Paper 1], [Special Paper 2], [Special Paper 3], [Envelope], [Coated Paper], [Coated Paper: Gloss]

The paper thicknesses you can set for the paper tray 3 - 4 are as follows:

- [Plain Paper] (60 - 81 g/m^2, 16 - 20 lb.Bond)
- [Middle Thick] (82 - 105 g/m^2, 20 - 28 lb.Bond)
- [Thick Paper 1] (106 - 169 g/m^2, 28 lb. Bond - 90 lb. Index)
- [Thick Paper 2] (170 - 220 g/m^2, 65 - 80 lb. cover)
- [Thick Paper 3] (221 - 256 g/m^2, 80 lb. cover - 140 lb. Index)

Default for "Paper Type": [**Do not Display**]

Default for "Paper Thickness": [**Plain Paper**]

Default for "Apply Duplex": [**Yes**]

Default for "Apply Auto Paper Select": [**Yes**]

The key mark is displayed next to the paper tray if [No] is selected in "Apply Auto Paper Select".

Apply Auto Paper Select can only be selected for the copier function if [Do not Display] and [Recycled Paper] are selected. If [No] is selected, Auto Paper Select is not valid.

For details about the relations between possible paper sizes and thickness, see "Recommended Paper Sizes and Types", About This Machine.

For details about the recommended conditions for using thick paper, see "Thick Paper", About This Machine.

Paper Type: Tray 3 (When the paper tray 3 (LCT) is installed.)

Sets the display so you can see what type of paper is loaded in the paper tray 3 (LCT).

The print function uses this information to automatically select the paper tray.

The paper types you can set for the paper tray 3 (LCT) are as follows:

- [Do not Display], [Recycled Paper], [Colour Paper], [Letterhead], [Preprinted Paper], [Bond Paper], [Cardstock], [Special Paper 1], [Special Paper 2], [Special Paper 3], [Coated Paper], [Coated Paper: Gloss]

The paper thicknesses you can set for the paper tray 3 are as follows:

- [Plain Paper] (60 - 81 g/m^2, 16 - 20 lb.Bond)
- [Middle Thick] (82 - 105 g/m^2, 20 - 28 lb.Bond)
- [Thick Paper 1] (106 - 169 g/m^2, 28 lb. Bond - 90 lb. Index)
- [Thick Paper 2] (170 - 220 g/m^2, 65 - 80 lb. cover)
- [Thick Paper 3] (221 - 256 g/m^2, 80 lb. cover - 140 lb. Index)

Default for "Paper Type": [**Do not Display**]

Default for "Paper Thickness": [**Plain Paper**]

Default for "Apply Duplex": [**Yes**]

Default for "Apply Auto Paper Select": [**No**]

The key mark is displayed next to the paper tray if [No] is selected in "Apply Auto Paper Select".

Apply Auto Paper Select can only be selected for the copier function if [Do not Display] and [Recycled Paper] are selected. If [No] is selected, Auto Paper Select is not valid.

For details about the relations between possible paper sizes and thickness, see "Recommended Paper Sizes and Types", About This Machine.

For details about the recommended conditions for using thick paper, see "Thick Paper", About This Machine.

Paper Type: Tray 3 (when the lower paper tray is installed.) (Type 1 and 2)

Sets the display so you can see what type of paper is loaded in the paper tray 3.

The print function uses this information to automatically select the paper tray.

The paper types you can set for the paper tray 3 are as follows:

- [Do not Display], [Recycled Paper], [Colour Paper], [Letterhead], [Preprinted Paper], [Bond Paper], [Cardstock], [Special Paper 1], [Special Paper 2], [Special Paper 3], [Envelope], [Coated Paper], [Coated Paper: Gloss]

The paper thicknesses you can set for the paper tray 3 are as follows:

- [Plain Paper] (60 - 81 g/m^2, 16 - 20 lb.Bond)
- [Middle Thick] (82 - 105 g/m^2, 20 - 28 lb.Bond)
- [Thick Paper 1] (106 - 169 g/m^2, 28 lb. Bond - 90 lb. Index)

- [Thick Paper 2] (170 - 220 g/m^2, 65 - 80 lb. cover)
- [Thick Paper 3] (221 - 256 g/m^2, 80 lb. cover - 140 lb. Index)

Default for "Paper Type": [**Do not Display**]

Default for "Paper Thickness": [**Plain Paper**]

Default for "Apply Duplex": [**Yes**]

Default for "Apply Auto Paper Select": [**Yes**]

The key mark is displayed next to the paper tray if [No] is selected in "Apply Auto Paper Select".

Apply Auto Paper Select can only be selected for the copier function if [Do not Display] and [Recycled Paper] are selected. If [No] is selected, Auto Paper Select is not valid.

For details about the relations between possible paper sizes and thickness, see "Recommended Paper Sizes and Types", About This Machine.

For details about the recommended conditions for using thick paper, see "Thick Paper", About This Machine.

Paper Type: LCT (When the LCT is installed.)

Sets the display so you can see what type of paper is loaded in the LCT.

The print function uses this information to automatically select the paper tray.

The paper types you can set for the LCT are as follows:

- [Do not Display], [Recycled Paper], [Colour Paper], [Letterhead], [Preprinted Paper], [Bond Paper], [Cardstock], [Special Paper 1], [Special Paper 2], [Special Paper 3], [Coated Paper], [Coated Paper: Gloss]

The paper thicknesses you can set for the LCT are as follows:

- [Plain Paper] (60 - 81 g/m^2, 16 - 20 lb.Bond)
- [Middle Thick] (82 - 105 g/m^2, 20 - 28 lb.Bond)
- [Thick Paper 1] (106 - 169 g/m^2, 28 lb. Bond - 90 lb. Index)
- [Thick Paper 2] (170 - 220 g/m^2, 65 - 80 lb. cover)
- [Thick Paper 3] (221 - 256 g/m^2, 80 lb. cover - 140 lb. Index)

Default for "Paper Type": [**Do not Display**]

Default for "Paper Thickness": [**Plain Paper**]

Default for "Apply Duplex": [**Yes**]

Default for "Apply Auto Paper Select": [**Yes**]

The key mark is displayed next to the paper tray if [No] is selected in "Apply Auto Paper Select".

Apply Auto Paper Select can only be selected for the copier function if [Do not Display] and [Recycled Paper] are selected. If [No] is selected, Auto Paper Select is not valid.

For details about the relations between possible paper sizes and thickness, see "Recommended Paper Sizes and Types", About This Machine.

For details about the recommended conditions for using thick paper, see "Thick Paper", About This Machine.

Cover Sheet Tray

You can specify and display the paper tray that is used to set front cover sheets.

After selecting the paper tray, you can also specify the display timing and copy method for two-sided copying.

Default: [**Off**]

When [At Mode Selected] is selected, front cover sheet tray settings only appear when the cover function or slip sheet function is selected.

When [Full Time] is selected, the front cover sheet tray is always displayed.

Slip Sheet Tray

You can specify and display the paper tray that is used for setting slip sheets.

You can also specify the display timing and copy method for two-sided copying.

Default: [**Off**]

When [At Mode Selected] is selected, slip sheet tray settings only appear when the cover function or slip sheet function is selected.

When [Full Time] is selected, the slip sheet tray is always displayed.

Note

- The paper types you can set for this machine are [Plain Paper 1] and [Plain Paper 2]. The default setting is [Plain Paper 2]. For details about setting the paper type, see "Changing Paper Thickness Settings", About This machine.
- For details on how to access System Settings, see "Accessing User Tools".

Reference

- p.19 "Accessing User Tools"

Timer Settings

This section describes the user tools in the Timer Settings menu under System Settings.

1

Auto Off Timer (Type 1 and 2)

After a specified period has passed, following job completion, the machine automatically turns off, in order to conserve energy. This function is called "Auto Off".

The machine status after the Auto Off operation is referred to as "Off mode", or "Sleep mode".

For the Auto Off Timer, specify the time to elapse before Auto Off.

You can specify this setting only if [Auto Off Setting] is set to [Enable] in [Administrator Tools] in [System Settings].

Default:

Region A (mainly Europe and Asia)

[15 minute(s)]

The time can be set from 1 to 240 minutes, using the number keys.

Region B (mainly North America)

[1 minute(s)]

The time can be set from 1 to 60 minutes, using the number keys.

Auto Off Timer may not work when error messages appear.

Depending on which Embedded Software Architecture application is installed on it, the machine might take longer than indicated to enter Sleep Mode.

Auto Off Timer (Type 3 and 4)

After a specified period has passed, following job completion, the machine automatically turns off, in order to conserve energy. This function is called "Auto Off".

The machine status after the Auto Off operation is referred to as "Off mode", or "Sleep mode".

For the Auto Off Timer, specify the time to elapse before Auto Off.

You can specify this setting only if [Auto Off Setting] is set to [Enable] in [Administrator Tools] in [System Settings].

Default:

Region A (mainly Europe and Asia)

[16 minute(s)]

The time can be set from 1 to 240 minutes, using the number keys.

Region B (mainly North America)

[1 minute(s)]

The time can be set from 1 to 60 minutes, using the number keys.

Auto Off Timer may not work when error messages appear.

Depending on which Embedded Software Architecture application is installed on it, the machine might take longer than indicated to enter Sleep Mode.

Energy Saver Timer

Set the amount of time the machine waits before switching to lower-power mode after copying has finished or the last operation is performed.

Default:

Region A (mainly Europe and Asia)

[On], [10 minute(s)]

The time can be set from 1 to 240 minutes, using the number keys.

Region B (mainly North America)

[Off]

The time can be set from 1 to 30 minutes, using the number keys.

Energy Saver Timer may not work when error messages appear.

Panel Off Timer

Set the amount of time the machine waits before switching the panel off after copying has finished or the last operation is performed.

Region A (mainly Europe and Asia)

Enter a time interval between 10 seconds and 240 minutes, using the number keys.

Region B (mainly North America)

Enter a time interval between 10 seconds and 30 minutes, using the number keys.

Default: [On], [1 minute(s)]

Panel Off Timer may not work when error messages appear.

System Auto Reset Timer

The System Reset setting automatically switches the screen to that of the function set in Function Priority when no operations are in progress, or when an interrupted job is cleared. This setting determines the system reset interval.

The time can be set from 10 to 999 seconds, using the number keys.

Default: [On], [60 second(s)]

Copier / Document Server Auto Reset Timer (copier/Document Server)

Specifies the time to elapse before copier and Document Server modes reset.

If [Off] is selected, the machine does not automatically switch to the user code entry screen.

The time can be set from 10 to 999 seconds, using the number keys.

Default: [On], [60 second(s)]

Facsimile Auto Reset Timer (facsimile)

Specify the time to elapse before the facsimile mode resets.

The time can be set from 30 to 999 seconds, using the number keys.

Default: [**30 second(s)**]

Printer Auto Reset Timer (printer)

Specify the time to elapse before the printer function resets.

The time can be set from 10 to 999 seconds, using the number keys.

Default: [**On**], [**60 second(s)**]

Scanner Auto Reset Timer (scanner)

Specify the time to elapse before the scanner function resets.

If [Off] is selected, the machine will not automatically switch to the user code entry screen.

The time can be set from 10 to 999 seconds, using the number keys.

Default: [**On**], [**60 second(s)**]

Set Date

Set the date for the copier's internal clock using the number keys.

To change between year, month, and day, press [←] and [→].

Set Time

Set the time for the copier's internal clock using the number keys.

To change between hours, minutes and seconds, press [←] and [→].

Region A (mainly Europe and Asia)

Enter the time using the 24-hour format (in 1 second increments).

Region B (mainly North America)

Enter the time using the 12-hour format (in 1 second increments).

Auto Logout Timer

Specify whether or not to automatically log out a user when the user does not operate the machine for a specified period of time after logging in.

The time can be set from 60 to 999 seconds, in one second increments, using the number keys.

Default: [**On**], [**180 second(s)**]

Note

- For details on how to access System Settings, see "Accessing User Tools".

Reference

- p.19 "Accessing User Tools"

Interface Settings

This section describes the user tools in the Interface Settings menu under System Settings.

Network

This section describes the user tools in the Network menu under Interface Settings.

Machine IPv4 Address

Specify the machine's IPv4 network address.

Default: [Auto-Obtain (DHCP)]

When you select [Specify], enter the IPv4 address and subnet mask as "xxx.xxx.xxx.xxx" ("x" indicates a number).

When you select [Specify], make sure that IPv4 address is different from that of other machines on the network.

The physical address (MAC address) also appears.

IPv4 Gateway Address

A gateway is a connection or interchange point between two networks.

Specify the gateway address for the router or host computer used as a gateway.

Default: [0.0.0.0]

Machine IPv6 Address

Displays the machine's IPv6 network address.

- Link-local Address

  The machine's specified link-local address appears.

- Manual Configuration Address

  The machine's manually configured address appears.

- Stateless Address: 1-5

  The specified stateless address appears.

IPv6 Gateway Address

Displays the machine's IPv6 gateway address.

IPv6 Stateless Address Autoconfiguration

Specify IPv6 Stateless Address Autoconfiguration.

Default: [Active]

DNS Configuration

Make settings for the DNS server.

Default: [Auto-Obtain (DHCP)]

When you select [Specify], enter the DNS Server IPv4 address as "xxx.xxx.xxx.xxx" ("x" indicates a number).

DDNS Configuration

Specify the DDNS settings.

Default: [Active]

IPsec

Specify the machine's IPsec function Active/Inactive.

Default: [Inactive]

For details about this function, consult your administrator.

Domain Name

Specify the domain name.

Default: [Auto-Obtain (DHCP)]

When you select [Specify], enter the domain name using up to 63 characters.

WINS Configuration

Specify the WINS server settings.

Default: [On]

If [On] is selected, enter the WINS Server IPv4 address as "xxx.xxx.xxx.xxx" ("x" indicates a number).

If DHCP is in use, specify the Scope ID. Enter a Scope ID using up to 31 characters.

Do not enter "255.255.255.255" as the primary or secondary WINS server address.

Effective Protocol

Select the Protocol to use in the network.

Default for "IPv4": [Active]

Default for "IPv6": [Inactive]

Default for "NetWare": [Inactive]

"NetWare" is displayed only when Netware is installed.

Default for "SMB": [Active]

NCP Delivery Protocol

Select the protocol NCP delivery.

Default: [TCP / IP Priority]

If you select [IPX Only] or [TCP / IP Only], you cannot switch the protocol even if you cannot connect with it. If "NetWare" in "Effective Protocol" is set to [Inactive], you can only use TCP/IP.

NW Frame Type

Select the frame type when you use NetWare.

Default: [**Auto Select**]

SMB Computer Name

Specify the SMB computer name.

Enter the computer name using up to 15 characters.

"*+,/:;<>=?[\]|. and spaces cannot be entered.

Do not set a computer name starting with RNP and rnp.

Use uppercase letters for alphabets.

SMB Work Group

Specify the SMB work group.

Enter the computer name using up to 15 characters.

"*+,/:;<>=?[\]|. and spaces cannot be entered.

Use uppercase letters for alphabet.

Ethernet Speed

Set the access speed for networks.

Default: [**Auto Select**]

Select a speed that matches your network environment. [Auto Select] should usually be selected.

		Machine Setting				
		10Mbps Half Duplex	10Mbps Full Duplex	100Mbps Half Duplex	100Mbps Full Duplex	Auto Select
Connection	10Mbps Half Duplex	○	–	–	–	○
	10Mbps Full Duplex	–	○	–	–	–
	100Mbps Half Duplex	–	–	○	–	○
	100Mbps Full Duplex	–	–	–	○	–
	Auto Select*	○	–	○	–	○

*Terms will vary depending on the network.

○ Connectable

– Not Connectable

BZU022

IEEE 802.1X Authentication for Ethernet

Specify the IEEE 802.1X authentication for Ethernet.

Default: [**Inactive**]

For details about IEEE 802.1X authentication, see "Configuring IEEE 802.1X".

Restore IEEE 802.1X Authentication to Defaults

You can return the IEEE 802.1X authentication settings to their defaults.

For details about IEEE 802.1X authentication, see "Configuring IEEE 802.1X".

LAN Type

When you have installed the Wireless LAN interface unit, select the method of connection.

Default: [**Ethernet**]

[LAN Type] is displayed when wireless LAN board is installed. If Ethernet and Wireless LAN are both connected, the selected interface has priority.

Ping Command

Check the network connection with ping command using given IPv4 address.

If you fail to connect to the network, check the following, and then retry the ping command.

- Make sure that "IPv4" in [Effective Protocol] is set to [Active].
- Check that the machine with assigned IPv4 address is connected to the network.
- There is a possibility that the same IPv4 address is used for the specified equipment.

Permit SNMPv3 Communication

Set the encrypted communication of SNMPv3.

Default: [**Encryption / Cleartext**]

If you select to [Encryption Only], you need to set an encryption password for the machine.

Permit SSL / TLS Communication

Set the encrypted communication of SSL/TLS.

Default: [**Ciphertext Priority**]

If you set to [Ciphertext Only], you need to install the SSL certificate for the machine.

Host Name

Specify the host name.

Enter the host name using up to 63 characters.

You cannot enter a host name starting or ending with a hyphen.

You cannot enter a host name starting with "RNP" or "rnp".

Machine Name

Specify the machine name.

Enter the machine name using up to 31 characters.

Note

- For details on how to access System Settings, see "Accessing User Tools".

Reference

- p.19 "Accessing User Tools"
- p.319 "Configuring IEEE 802.1X"

Parallel Interface

This section describes the user tools in the Parallel Interface menu under Interface Settings.

[Parallel Interface] is displayed when this machine is installed with the IEEE 1284 interface board.

Parallel Timing

Sets the timing for the control signal of the parallel interface.

Normally, you do not need to change this setting.

Default: [ACK Outside]

Parallel Communication Speed

Sets the communication speed for the parallel interface. If the speed is too high, data may not be transferred smoothly. If this happens, change the setting to [Standard].

Default: [High Speed]

Selection Signal Status

Sets the level for the select signal of the parallel interface.

Default: [High]

Input Prime

Sets whether to validate or invalidate the input prime signal upon reception.

Normally, you do not need to change this setting.

Default: [Inactive]

Bidirectional Communication

Sets the printer's response mode to a status acquisition request when using a parallel interface. If you experience problems using another manufacturer's machine, set this to [Off].

Default: [On]

When set to [Off], the bidirectional communication function will be disabled, and the printer driver will not be installed under Windows Auto Detect function.

Signal Control

Specifies how error during printing or sending facsimile from the computer is to be dealt with.

Normally, you do not need to change this setting.

Default: [Job Acceptance Priority]

Note

- For details on how to access System Settings, see "Accessing User Tools".

Reference

- p.19 "Accessing User Tools"

Wireless LAN

This section describes the user tools in the Wireless LAN menu under Interface Settings.

[Wireless LAN] is displayed when this machine is installed with the wireless LAN interface board.

Be sure to make all settings simultaneously.

Communication Mode

Specifies the communication mode of the wireless LAN.

Default: [**Infrastructure Mode**]

SSID Setting

Specifies SSID to distinguish the access point in [Infrastructure Mode] or [802.11 Ad-hoc Mode].

The characters that can be used are ASCII 0x20-0x7e (32 bytes).

If blank is specified in [802.11 Ad-hoc Mode], "ASSID" appears.

Ad-hoc Channel

Specify the channel to use when [802.11 Ad-hoc Mode] has been selected. Set the channel that matches the type of wireless LAN being used. The channel in use might differ depending on the country.

The following channels are available:

Region A (mainly Europe and Asia)

- IEEE 802.11 a/b/g Wireless LAN

  Frequency range:

  2412 - 2472 MHz (1 - 13 channels)

  5180 - 5240 MHz (36, 40, 44 and 48 channels)

In some countries, only the following channels are available:

- IEEE 802.11 b/g Wireless LAN

  Frequency range:

  2412 - 2462 MHz (1 - 11 channels)

Default: [**11**]

Region B (mainly North America)

- IEEE 802.11 a/b/g Wireless LAN

  Frequency range:

2412 - 2462 MHz (1 - 11 channels)

5180 - 5240 MHz (36, 40, 44 and 48 channels)

Default: [**11**]

Security Method

Specifies the encryption of the Wireless LAN.

Default: [**Off**]

If you select [WEP], always enter WEP key. If you select [WPA], specify the encryption and authentication methods.

Specify "WPA", when [Communication Mode] is set to [Infrastructure Mode].

- WEP

  If you select [WEP], enter WEP key.

  When using 64 bit WEP, up to 10 characters can be used for hexadecimal and up to 5 characters for ASCII. When using 128 bit WEP, up to 26 characters can be used for hexadecimal and up to 13 characters for ASCII.

  The number of characters that can be entered is limited to 10 or 26 for hexadecimal and 5 or 13 for ASCII.

- WPA

  - WPA Encryption Method

    Select either [TKIP] or [CCMP (AES)].

  - WPA Authent. Method

    Select either [WPA-PSK], [WPA], [WPA2-PSK], or [WPA2].

    If you select [WPA-PSK] or [WPA2-PSK], enter the pre-shared key (PSK) of 8- 63 characters in ASCII code.

    When [WPA] or [WPA2] are selected, authentication settings and certificate installation settings are required. For details about setting methods, see "Configuring IEEE 802.1X".

Wireless LAN Signal

When using in infrastructure mode, you can check the machine's radio wave status using the control panel.

Radio wave status is displayed when you press [Wireless LAN Signal].

Restore Factory Defaults

You can return the wireless LAN settings to their defaults.

Note

- For details on how to access System Settings, see "Accessing User Tools".

Reference

- p.19 "Accessing User Tools"

- p.319 "Configuring IEEE 802.1X"

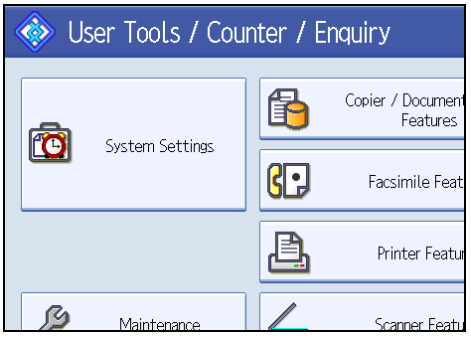
Print List

This section describes how to print the configuration page.

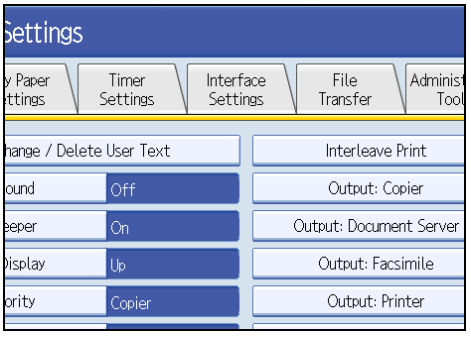
You can check items related to the network environment.

The configuration page shows the current network settings and network information.

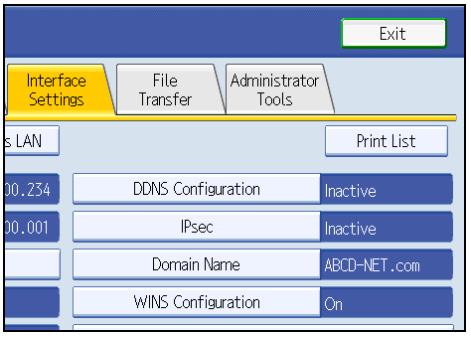
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Interface Settings].**



4. **Press [Print List].**



5. **Press the [Start] key.**

   The configuration page is printed.

6. **Press [Exit].**

7. **Press the [User Tools/Counter] key.**

Note

- You can also exit by pressing [Exit] on the User Tools main menu.
- For details on how to access System Settings, see "Accessing User Tools".

Reference

- p.19 "Accessing User Tools"

File Transfer

This section describes the user tools in the File Transfer menu under System Settings.

Delivery Option

Enables or disables sending stored or scanned documents to the ScanRouter delivery server.

Default: [**Off**]

Specify this option when selecting whether or not to use the ScanRouter delivery software. If you do, you will have to preregister I/O devices in the ScanRouter delivery software.

Capture Server IPv4 Address

Specify the capture server IPv4 address.

This setting appears when the File Format Converter is installed, and when the capture function is being used by the ScanRouter delivery software.

Fax RX File Transmission

Specify how to deliver fax files received via the different lines.

- Setting per Line

  Specifies whether or not received fax documents are sent to the ScanRouter delivery software for each fax line.

  - G3 Port 1
  - G3 Port 2
  - G3 Port 3
  - E-mail
  - IP-Fax

  Default: [**Do not Deliver**]

  The lines appear according to the operating environment.

- RX File Delivery

  Specifies whether or not received fax documents are sent to the ScanRouter delivery software for each fax line.

  Default: [**Do not Deliver**]

- Print at Delivery

  Specify whether or not received fax documents sent to the ScanRouter delivery software should also be printed at the same time.

  Default: [**Do not Print**]

- File to Deliver

  Specify whether all received fax documents or only received fax documents that include delivery codes (documents with an ID or SUB/SEP codes) are sent to the ScanRouter delivery software.

Default: [**All Files**]

- Delivery Failure File

  If a fax is received but cannot be sent via the ScanRouter delivery software, it is stored in the machine's memory. If received document deletion is set to "1 (On)", documents that cannot be stored due to insufficient memory or an internal hard disk error will automatically be deleted, and a Reception File Erased Report will be printed.

  For details about the Reception File Erased Report, see "Reception File Setting", Facsimile Reference. To print a stored file, select [Print File], and to delete stored files, select [Delete File].

  - Print File
  - Delete File

This setting appears when the delivery function is being used by the ScanRouter delivery software.

SMTP Server

Specify the SMTP server name.

If DNS is in use, enter the host name.

If DNS is not in use, enter the SMTP server IPv4 address.

Default for "Port No.": [**25**]

Default for "SSL": [**Off**]

Enter the server name using up to 127 characters. Spaces cannot be entered.

Enter port number between 1 and 65535 using the number keys, and then press the [#] key.

The SMTP server shares the same port number with the Direct SMTP server.

If you set SSL to [On], the port number automatically changes to "465".

SMTP Authentication

Specify SMTP authentication (PLAIN, LOGIN, CRAMMD5, DIGEST-MD5). When sending e-mail to an SMTP server, you can enhance the SMTP server security level using authentication that requires entering the user name and password.

If the SMTP server requires authentication, set [SMTP Authentication] to [On], and then specify the user name, password and encryption.

Enter the user name and password to be set for the Administrator's e-mail address when using Internet Fax.

Default: [**Off**]

- User Name

  Enter the user name using up to 191 characters.

  Spaces cannot be entered. Depending on the SMTP server type, "realm" must be specified. Add "@" after the user name, as in "user name@realm".

- E-mail Address

Enter the E-mail address using up to 128 characters.

- Password

  Enter the password using up to 128 characters.

  Spaces cannot be entered.

- Encryption

  Select Encryption as follows:

  [Auto]

  Use if the authentication method is PLAIN, LOGIN, CRAM-MD5, or DIGEST-MD5.

  [On]

  Use if the authentication method is CRAMMD5 or DIGEST-MD5.

  [Off]

  Use if the authentication method is PLAIN, or LOGIN.

POP before SMTP

Specify POP authentication (POP before SMTP).

When sending e-mail to an SMTP server, you can enhance the SMTP server security level by connecting to the POP server for authentication.

Default: [**Off**]

If you set POP before SMTP to [On], specify the waiting time after authentication, user name, e-mail address, and password.

- Wait Time after Authent.

  Default: [**300 msec.**]

  Specify [Wait Time after Authent.] from zero to 10,000 milliseconds, in increments of one millisecond.

- User Name

  Enter the user name using up to 191 characters. Spaces cannot be entered.

- E-mail Address

  Enter the E-mail Address using up to 128 characters. Spaces cannot be entered.

- Password

  Enter the password using up to 128 characters. Spaces cannot be entered.

To enable POP server authentication before sending e-mail via the SMTP server, set [POP before SMTP] to [On]. E-mail is sent to the SMTP server after the time specified for [Wait Time after Authent.] has elapsed.

If you select [On], enter server name in POP3/IMAP4 Settings. Also, check POP3 port number in E-mail Communication Port.

Reception Protocol

Specify the Reception Protocol for receiving Internet Fax.

Default: [POP3]

POP3 / IMAP4 Settings

Specify the POP3/IMAP4 server name for receiving Internet faxes.

The specified POP3/IMAP4 server name is used for [POP before SMTP].

Default: [Auto]

- Server Name

  If DNS is in use, enter the host name.

  If DNS is not in use, enter the POP3/IMAP4 or server IPv4 address.

  Enter POP3/IMAP4 server name using up to 127 characters. Spaces cannot be entered.

- Encryption

  Select Encryption as follows:

  [Auto]

  Password encryption is automatically set according to the POP/IMAP server settings.

  [On]

  Encrypt password.

  [Off]

  Do not encrypt password.

Administrator's E-mail Address

Specify the Administrator's E-mail Address.

On e-mailed scanned documents, if the sender is not specified this appears as the sender's address.

When sending e-mail under the Internet fax function, administrator's e-mail address will appear as the sender's address under the following conditions:

- The sender has not been specified and the machine's e-mail address has not been registered.
- The specified sender is not registered in the machine's Address Book and the machine's e-mail address has not been registered.

When conducting SMTP authentication for the transmitted files under the Internet fax function, the Administrator's E-mail Address will appear in the "From:" box. If you have specified the user name and e-mail address in [SMTP Authentication], make sure to specify this setting.

Enter up to 128 characters.

On e-mailed scanned documents, if [Auto Specify Sender Name] is [Off], specify the sender.

E-mail Communication Port

Specify the port numbers for receiving Internet faxes. The specified POP3 port number is used for [POP before SMTP].

Default for "POP3": [110]

Default for "IMAP4": [143]

Enter a port number between 1 and 65535 using the number keys, and then press the [#] key.

E-mail Reception Interval

Specify, in minutes, the time interval for receiving Internet faxes via POP3 or IMAP4 server.

Default: [On], [15 minute(s)]

If [On] is selected, the time can be set from 2 to 1440 minutes in increments of one minute.

Max. Reception E-mail Size

Specify the maximum reception e-mail size for receiving Internet faxes.

Default: [2 MB]

Enter a size from 1 - 50 MB in increments of one megabyte.

E-mail Storage in Server

Specify whether or not to store received Internet fax e-mails on the POP3 or IMAP4 server.

Default: [Off]

Default User Name / Password (Send)

Specify the user name and password required when sending scan files directly to a shared folder on a computer running Windows, to an FTP server, or to a NetWare server.

Enter in up to 64 characters.

Program / Change / Delete E-mail Message

You can program, change, or delete the e-mail message used when sending an Internet fax or scan file as an attachment.

- Program/Change:
  1. Press the [User Tools/Counter] key.
  2. Press [System Settings].
  3. Press [File Transfer].
  4. Press [▼Next].
  5. Press [Program / Change / Delete E-mail Message].
  6. Check that [Program / Change] is selected.
  7. Press [*Not Programmed].

     To change the registered e-mail message, select the e-mail message to change.
  8. Press [Change] under the "Name".

9. Enter a name, and then press [OK].

   Enter the name using up to 20 characters.

10. Press [Edit].

    To start a new line, press [OK] to return to the e-mail message screen, and then press [▼] in "Select Line to Edit:".

11. Enter the text, and then press [OK].

    Enter up to five lines of text. Each line can consist of up to 80 characters.

12. Press [OK].
13. Press [Exit].
14. Press the [User Tools/Counter] key.

- Delete:
  1. Press the [User Tools/Counter] key.
  2. Press [System Settings].
  3. Press [File Transfer].
  4. Press [▼Next].
  5. Press [Program / Change / Delete E-mail Message].
  6. Press [Delete].
  7. Select the e-mail message to delete.

     The confirmation message about deleting appears.

  8. Press [Yes].
  9. Press [Exit].
  10. Press the [User Tools/Counter] key.

Auto Specify Sender Name

Set whether or not to specify the name of the sender when sending e-mail.

Default: [**Off**]

- On

  If you select [On], the specified e-mail address will appear in the "From:" box. If you do not specify the sender's address, the administrator's e-mail address will appear in the "From:" box.

  If you do not specify the sender when sending a file by e-mail under the fax function, or if the specified e-mail address is not registered in the machine's Address Book, the machine's e-mail address will appear in the "From:" box. If the machine does not have an e-mail address, the administrator's e-mail address will appear in the "From:" box.

- Off

  If you select [Off], the specified e-mail address will appear in the "From:" box, but you cannot send e-mail without specifying the sender's e-mail address. Under the fax function, you cannot

send e-mail if the specified sender's e-mail address is not registered in the machine's Address Book.

Fax E-mail Account

Specify e-mail address, user name and password for receiving Internet faxes.

Default: [**Do not Receive**]

- E-mail Address

  Enter an e-mail address using up to 128 characters.

- User Name

  Enter a user name using up to 191 characters.

- Password

  Enter a password using up to 128 characters.

Scanner Resend Interval Time

Specifies the interval the machine waits before resending a scan file, if it cannot be sent to the delivery server or mail server.

Default: [**300 second(s)**]

The interval time can be set from 60 to 900 seconds in one second increments, using the number keys.

This setting is for the scanner function.

This setting is not valid for the WSD scanner function.

Number of Scanner Resends

Sets a maximum number of times a scan file is resent to the delivery server or mail server.

Default: [**On**], [**3 time(s)**]

If [On] is selected, the number of times can be set from 1 to 99.

This setting is for the scanner function.

This setting is not valid for the WSD scanner function.

Note

- For details on how to access System Settings, see "Accessing User Tools".

Reference

- p.19 "Accessing User Tools"

Administrator Tools

This section describes the user tools in the Administrator Tools menu under System Settings.

Administrator Tools are used by the administrator. To change these settings, contact the administrator.

We recommend specifying Administrator Authentication before making Administrator Tools settings.

Address Book Management

You can add, change or delete information registered in the Address Book.

For details, see "Address Book".

- Program / Change

  You can register and change names as well as user codes.

  - Names

    You can register a name, key display, registration number, and title selection.

  - Auth. Info

    You can register a user code, and specify the functions available to each user code. You can also register user names and passwords to be used when sending e-mail, sending files to folders, or accessing an LDAP server.

  - Protection

    You can register a protection code.

  - Fax Dest.

    You can register a fax number, international TX mode, fax header, label insertion, IP-Fax destination, and protocol.

  - E-mail

    You can register an e-mail address.

  - Folder

    You can register the protocol, path, port number, and server name.

  - Add to Group

    You can put names registered in the Address Book into a group.

- Delete

  You can delete a name from the Address Book.

You can register up to 2,000 names.

You can register up to 500 user codes.

You can also register and manage names in the Address Book using Web Image Monitor.

Address Book: Program / Change / Delete Group

Names registered in the Address Book can be added into a group. You can then easily manage the names registered in each group.

- Program/Change

  You can register and change groups.

  - Names

    You can register a name, key display, registration number, and title selection.

  - Programmed User/Group

    You can check the names or groups registered in each group.

  - Protection

    You can register a protection code.

  - Add to Group

    You can put groups registered in the Address Book into a group.

- Delete

  You can delete a group from the Address Book.

You can register up to 100 groups.

You can also register and manage groups in the Address Book using Web Image Monitor.

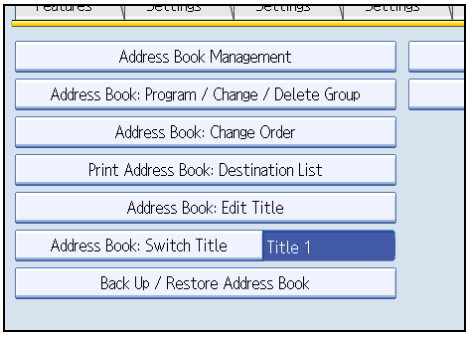
Address Book: Change Order

Changes the order of registered names.

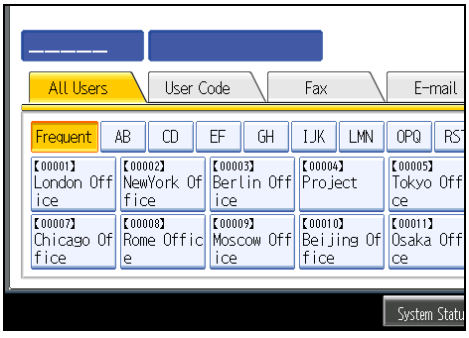
You can rearrange the order of items on the same page, but you cannot move items to another page.

For example, you cannot move an item from "PLANNING" ([OPQ]) to "DAILY" ([CD]).

1. Press the [User Tools/Counter] key.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [Address Book: Change Order].

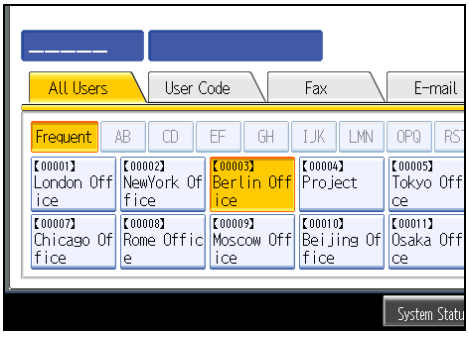


5. Press the name key to be moved.



You can select a name using the number keys.

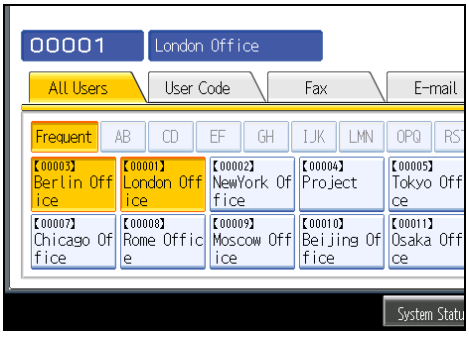
6. Press the name key in place you want to move it to.



The user key is moved to the selected position, and the user key currently at the selected position is moved forward or backward.

If you move the selected user key forward, the user key currently at the selected position is moved backward.

If you move the selected user key backward, the user key currently at the selected position is moved forward.



You can also select a name using the number keys.

Print Address Book: Destination List

You can print the destination list registered in the Address Book.

- Print in Title 1 Order

  Prints the Address Book in Title 1 order.

- Print in Title 2 Order

  Prints the Address Book in Title 2 order.

- Print in Title 3 Order

  Prints the Address Book in Title 3 order.

- Print Group Dial List

  Prints the group Address Book.

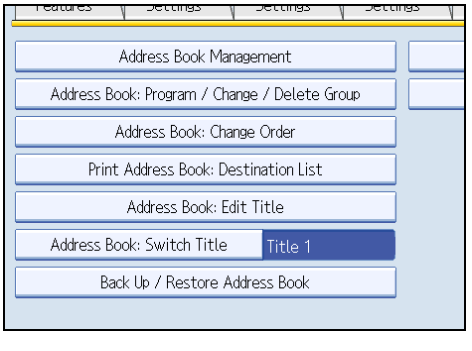
1. Press the [User Tools/Counter] key.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [Print Address Book: Destination List].
5. Select the print format.
6. To print the list on two-sided pages, select [Print on 2 Sides].
7. Press the [Start] key.

   The list prints out.

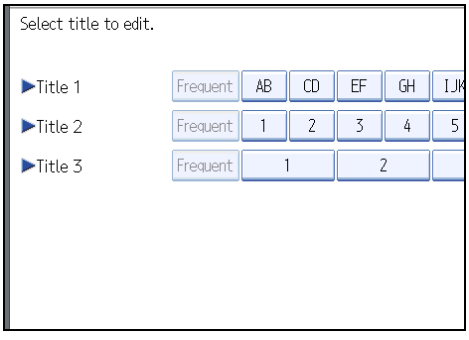
Address Book: Edit Title

You can edit the title to easily find a user.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [Address Book: Edit Title].



5. Press the title key you want to change.



6. Enter the new name, and then press [OK].
7. Press [OK].
8. Press the [User Tools/Counter] key.

Address Book: Switch Title

Specifies the title to select a name.

Default: [**Title 1**]

Back Up / Restore Address Book

You can back up the machine's Address Book to external storage or restore the backup copy from the external storage.

Backup requires a removable SD card to be installed in this machine.

For details about installing and removing the SD card, contact your sales or service representative.

Restore data overwrites Address Book data stored on the machine, and clears the counter of each registered user of the machine.

You can also back up and restore the machine's Address Book using Web Image Monitor. For details, see the Help files of Web Image Monitor.

- Back Up

  You can back up the machine's Address Book to external storage.

- Restore

  You can restore the backup copy of the Address Book from external storage.

- Format

  You can format the external storage.

- Obtain Memory Device Info

  The free space and occupied space of the external storage are displayed.

Data Carry-over Setting for Address Book Auto-program

By using Data Carry-over Setting for Address Book Auto-program, you can carry over user authentication information that has already been registered to the Address Book of the Windows authentication, LDAP authentication, or integration server authentication.

Default: [Do not Carry-over]

If you select [Carry-over Data], use the number keys to enter the registration number of the data you wish to carry over from an Address Book.

For details about the Windows authentication, LDAP authentication, or Integration server authentication, consult your administrator.

Display / Print Counter

Allows you to view and print the number of prints.

- Display / Print Counter

  Displays the number of prints for each function (Total, Copier, Printer, A3/DLT, Duplex, Fax Prints, Send / TX Total, Fax Transmission, Scanner Send).

- Print Counter List

  Prints out a list of the number of prints made under each function.

Display / Clear / Print Counter per User

Allows you to view and print the numbers of prints accessed with user codes, and to set those values to 0.

Press [▲Previous] and [▼Next] to show all the numbers of prints.

The number of prints may differ from the counter values shown in Display/Print Counter.

- Print Counter List for All Users

  Prints the counter value for all the users.

- Clear Counter List for All Users

  Resets the counter value for all the users.

- Print Counter List Per User

  Prints the counter value for each user.

- Clear Counter List Per User

  Resets the counter value for each user.

- Select All on the Page

  Select all the users on the page.

For details about printing the counter, see "Printing the Counter for Each User" and "Printing the Counter for All Users".

Machine Action When Limit is Reached

For details about this function, consult your administrator.

Print Volume Use Limitation: Unit Count Setting

For details about this function, consult your administrator.

User Authentication Management

- User Code Auth.

  Using User Code Authentication, you can limit the available functions and supervise their use.

  When using User Code Authentication, register the user code.

  Using the Printer PC Control function, you can obtain a log of prints corresponding to the codes entered using the printer driver.

  For details about Basic Authentication, Windows Authentication, LDAP Authentication, and Integration Server Authentication, consult your administrator.

  Function to Restrict

  - Copier:

    [Restrict All (B & W / Single Colour / Two-colour / Full Colour)], [Single Colour / Two-colour / Full Colour], [Two-colour / Full Colour], [Full Colour], [Do not Restrict]

  - Printer:

    [Black & White / Colour], [Colour], [PC Control], [Do not Restrict]

  - Other Functions:

    [Document Server], [Facsimile], [Scanner]

  - Printer Job Authentication:

    [Entire], [Simple (Limitation)], [Simple (All)]

  - Limitation Range:

    [Change]

- Basic Auth.
- Windows Auth.
- LDAP Auth.
- Integration Svr. Auth.
- Off

Default: [**Off**]

Administrator Authentication Management

For details about this function, consult your administrator.

Program / Change Administrator

For details about this function, consult your administrator.

Key Counter Management

Specify the functions you want to manage with the key counter.

- Copier:

  [Full Colour], [Black & White], [Single Colour], [Two-colour]

- Printer:

  [Colour], [Black & White]

- Other Functions:

  [Document Server], [Facsimile], [Scanner]

External Charge Unit Management

You can use the key card to specify an upper limit on machine use.

- Copier
- Document Server
- Facsimile
- Printer
- Scanner

For details about this function, consult your administrator.

Enhanced External Charge Unit Management

Specify whether or not to make available enhanced features for enhanced external charge unit management.

For details about this function, consult your administrator.

Extended Security

Specify whether or not to use the extended security functions. For details about the extended security functions, consult your administrator.

Auto Delete File in Document Server

Specify whether documents stored in the Document Server will or will not be deleted after a specified period of time.

Default: [On], [3 day(s)]

If you select [On], documents stored subsequently are deleted after the specified period.

If you select [Off], documents are not automatically deleted.

If you select [On], enter a number of days from 1 to 180 (in 1 day increments).

The default is 3 days, this means documents are deleted 3 days (72 hours) after they are stored.

Delete All Files in Document Server

You can delete files stored in the Document Server, including files stored for Sample Print, Locked Print, Hold Print, and Stored Print under the printer function.

Even if a password is always set, all documents are deleted.

A confirmation message appears. To delete all documents, select [Yes].

Capture Priority

This setting appears when the File Format Converter is installed, and when the capture function is being used by the ScanRouter delivery software.

For details about this function, consult your administrator.

Capture: Delete All Unsent Files

This setting appears when the File Format Converter is installed, and when the capture function is being used by the ScanRouter delivery software.

For details about this function, consult your administrator.

Capture: Ownership

This setting appears when the File Format Converter is installed, and when the capture function is being used by the ScanRouter delivery software.

For details about this function, consult your administrator.

Capture: Public Priority

This setting appears when the File Format Converter is installed, and when the capture function is being used by the ScanRouter delivery software.

For details about this function, consult your administrator.

Capture: Owner Defaults

This setting appears when the File Format Converter is installed, and when the capture function is being used by the ScanRouter delivery software.

For details about this function, consult your administrator.

Program / Change / Delete LDAP Server

Program the LDAP server to find up e-mail destinations in the LDAP server Address Book directly. This function is possible when sending scan files by e-mail using the scanner or fax function.

- Name
- Server Name
- Search Base
- Port Number
- Use Secure Connection (SSL)
- Authentication
- User Name
- Password
- Realm Name
- Search Conditions
- Search Options

This function supports LDAP Version 2.0 and 3.0. Digest authentication can only be used under LDAP Ver.3.0.

To use the LDAP server, select [On] under LDAP Search.

For details about how to program the LDAP Server, see "Programming the LDAP server".

LDAP Search

Specify whether or not to use the LDAP server for searching.

Default: [**Off**]

If you select [Off], LDAP server list will not appear on the searching display.

Auto Off Setting

Specify whether or not to use Auto Off.

Default: [**Enable**]

Energy Saver Level

Specify the level for Energy Saver mode.

Default: [**Level 2**]

If you specify [Level 1], the machine switches from Energy Saver mode to Normal mode and is ready to begin copying in about three seconds.

If you specify [Level 2], the machine switches from Energy Saver mode to Normal mode and is ready to begin copying about ten seconds. When set to [Level 2], the machine consumes less power than when set to [Level 1].

Service Test Call

You can make a test call to the @Remote center.

This function is available only if the @Remote service is enabled and active.

Notify Machine Status

You can send notification of the machine's status to the @Remote center.

This function is available only if the @Remote service is enabled and active.

Service Mode Lock

For details about this function, consult your administrator.

Firmware Version

You can check the version of the software installed in this machine.

Network Security Level

For details about this function, consult your administrator.

Auto Erase Memory Setting

For details about this function, consult your administrator.

Erase All Memory

For details about this function, consult your administrator.

Delete All Logs

For details about this function, consult your administrator.

Transfer Log Setting

For details about this function, consult your administrator.

Fixed USB Port

Specify whether or not to fix the USB port.

Default: [Off]

If set to [Level 1]

It is not necessary to install a new driver when the printer driver of this machine has already been installed on the PC.

If set to [Level 2]

Please contact your service representative for details.

Program / Change / Delete Realm

Program the realm to be used for Kerberos authentication.

- Realm Name
- KDC Server Name
- Domain Name

Be sure to set both the realm name and KDC server name when programming a realm.

For details about Program/Change/Delete Realm, see "Programming the Realm".

Machine Data Encryption Settings

For details about this function, consult your administrator.

Note

- For details on how to access System Settings, see "Accessing User Tools".

Reference

- p.19 "Accessing User Tools"
- p.66 "Programming the LDAP server"
- p.72 "Programming the Realm"
- p.246 "Printing the Counter for Each User"
- p.247 "Printing the Counter for All Users"

Programming the LDAP server

This section describes how to specify the LDAP server settings.

This function supports LDAP version 2.0 and 3.0.

Program the LDAP server to find e-mail destinations in the LDAP server Address Book directly.

This function is possible when sending scan files by e-mail using the scanner or fax function.

To start an LDAP search, make sure that the items listed below are set. For other items, check your environment and make any necessary changes.

- Server Name
- Search Base
- Port Number
- Authentication
- Search Conditions

If [Kerberos Authentication] is selected be sure to set the "User Name", "Password", and the "Realm Name".

If [Digest Authentication] or [Cleartext Authentication] is selected be sure to set the "User Name" and "Password".

To use the LDAP server in Administrator Tools, select [On] under "LDAP Search".

The LDAP version 2.0 does not support Digest Authentication.

To select Kerberos Authentication, a realm must be registered in advance.

Programming the LDAP server

This section describes how to program the LDAP server.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [▼Next] twice.**
5. **Press [Program / Change / Delete LDAP Server].**
6. **Check that [Program / Change] is selected.**
7. **Select the LDAP server you want to program or change.**

   When programming the server, select [*Not Programmed].
8. **Press [Change] under "Name".**
9. **Enter the name, and then press [OK].**
10. **Press [Change] under "Server Name".**

11. **Enter the server name, and then press [OK].**
12. **Press [Change] under "Search Base".**

    Select a root folder to start the search from e-mail addresses registered in the selected folder are search targets.
13. **Enter the search base, and then press [OK].**

    For example, if the search target is the sales department of ABC company, enter "dc=sales department, o=ABC". (In this example, the description is for an active directory. "dc" is for the organization unit, and "o" is for the company.)

    Search base registration may be required depending on your server environment. When registration is required, unspecified searches will result in error.

    Check your server environment and enter any required specifications.
14. **Press [Change] under "Port Number".**

    Specify the port number for communicating with the LDAP server. Specify a port that is compliant with your environment.
15. **Enter the port number using the number keys, and then press the [#] key.**
16. **Under "Use Secure Connection (SSL)", press [On].**

    Use SSL to communicate with the LDAP server.

    For SSL to function, the LDAP server must support SSL.

    If you set SSL to [On], the port number automatically changes to "636".

    If you do not enable SSL, security problems may occur. To enable SSL, you must use the machine's settings. For details, consult your network administrator.
17. **Press [▼Next].**
18. **Select the authentication method.**

    To make a search request to the LDAP server, use the administrator account for authentication.

    Authentication settings must comply with your server's authentication settings. Check your server settings before setting this machine.

    [Digest Authentication] is available only with LDAP Version 3.0.

    If you select [Cleartext Authentication], a password is sent to the LDAP server as is, without any encryption processing.

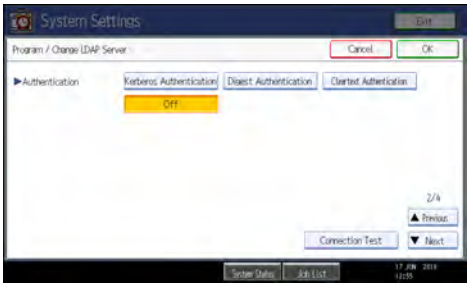
    If you select [Digest Authentication], a password is sent using an encryption process that prevents passwords from being revealed during transmission to the LDAP server.

    If you select [Kerberos Authentication], a password is sent using an encryption process that prevents passwords from being revealed during transmission to the KDC server where authentication occurs.

    If you select [Off], proceed to step 24.

    If you select [Digest Authentication] or [Cleartext Authentication], proceed to step 19 to 22, and then proceed to step 24.

If you select [Kerberos Authentication], proceed to step 19 to 23, and then proceed to step 24.



19. **Press [Change] under "User Name".**

    When [Kerberos Authentication], [Digest Authentication], or [Cleartext Authentication] is selected for the authentication setting, use the administrator account name and password. Do not enter the administrator account name and password when using authentication for each individual or each search.

20. **Enter the user name, and then press [OK].**

    Procedures for the user name setting differ depending on server environment. Check your server environment before making the setting.

    Example: Domain Name\User Name, User Name@Domain Name, CN=Name, OU=Department Name, DC=Server Name

21. **Press [Change] under "Password".**

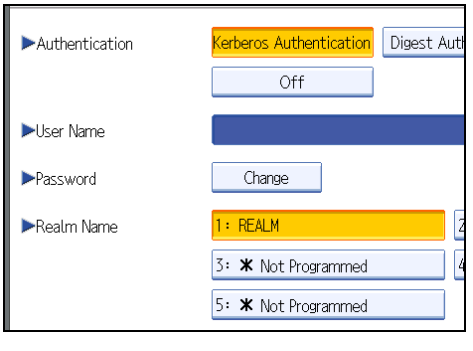
22. **Enter the password, and then press [OK].**

    The user name and password are required for administrator authentication to access the LDAP server.

    You can connect to the LDAP server using a user name and password stored in the Address Book. For details, see "Registering SMTP and LDAP Authentication".

    If you select [Digest Authentication] or [Cleartext Authentication], proceed to step 24.

23. **Select the Realm.**



24. **Press [Connection Test].**

    Access the LDAP server to check that the proper connection is established. Check authentication works according to the authentication settings.

25. **Press [Exit].**

    If the connection test fails, check your settings and try again.

    This function does not check search conditions or the search base.

26. **Press [▼Next].**

27. **Press [Change] for items you want to use as search conditions from the following: "Name", "E-mail Address", "Fax Number", "Company Name", and "Department Name".**

    You can enter an attribute as a typical search keyword. Using the entered attribute, the function searches the LDAP server's Address Book.

28. **Enter the attribute you want to use when searching for e-mail addresses, and then press [OK].**

    The attribute value may change depending on the server environment. Check that the attribute value complies with your server environment before setting it.

    You can leave items blank, but you cannot leave attributes blank when searching for e-mail addresses from the LDAP server Address Book.

29. **Press [▼Next].**

30. **Press [Change] under "Attribute".**

31. **Enter the attribute you want to use when searching for e-mail addresses, and then press [OK].**

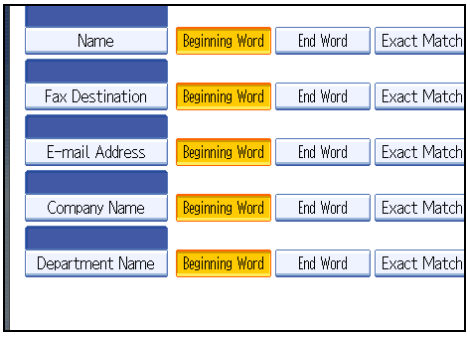
    The attribute value may change depending on the server environment. Check that the attribute complies with your server environment before setting it.

32. **Press [Change] under "Key Display".**

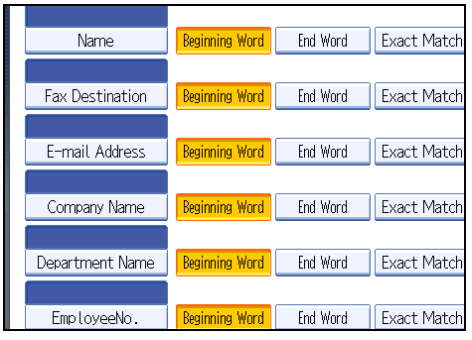
33. **Enter the key display, and then press [OK].**

    The registered "Key Display" appears as a keyword for searching LDAP.

    - Without key display registration



    - With key display registration



The key does not appear on the search screen unless both "Attribute" and "Key Display" are registered. Make sure you register both to use the optional search.

34. **Press [OK].**
35. **Press [Exit].**
36. **Press the [User Tools/Counter] key.**

Reference

- p.299 "Registering SMTP and LDAP Authentication"

Changing the LDAP server

This section describes how to change the programmed LDAP server.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [▼Next] twice.**
5. **Press [Program / Change / Delete LDAP Server].**
6. **Check that [Program / Change] is selected.**
7. **Select the LDAP server you want to change.**
8. **Change the settings as necessary.**
9. **Press [OK] after changing each item.**
10. **Press [Exit].**
11. **Press the [User Tools/Counter] key.**

Deleting the LDAP server

This section describes how to delete the programmed LDAP server.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] twice.
5. Press [Program / Change / Delete LDAP Server].
6. Press [Delete].
7. Select the LDAP server you want to delete.
8. Press [Yes].
9. Press [Exit].
10. Press the [User Tools/Counter] key.

Programming the Realm

This section describes how to specify the Realm settings.

Program the realm to be used for Kerberos authentication.

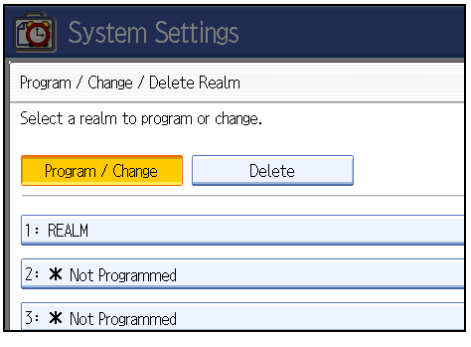
A realm is the network area in which Kerberos authentication is used. After confirming the network environment, specify the necessary items.

You can register up to 5 realms.

Programming the Realm

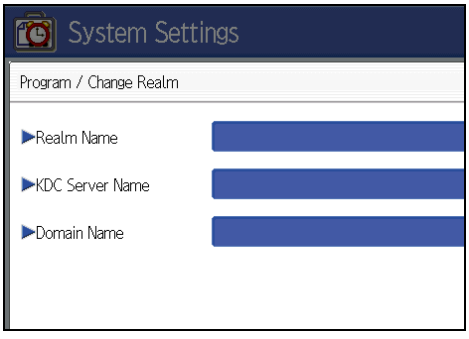
This section describes how to program the Realm.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [▼Next] three times.**
5. **Press [Program / Change / Delete Realm].**
6. **Check that [Program / Change] is selected.**



7. **Press [*Not Programmed].**

8. **Press [Change] under "Realm Name".**



9. **Enter the realm name, and then press [OK].**

   Enter the realm name, or host name.

   You can enter a realm name using up to 64 characters.

10. **Press [Change] under "KDC Server Name".**
11. **Enter the KDC server name, and then press [OK].**

    Enter the KDC server name, host name, or IPv4 address.

    You can enter a KDC server name using up to 64 characters.

12. **Press [Change] under "Domain Name".**
13. **Enter the domain name, and then press [OK].**

    Enter the domain name, or host name.

    You can enter a domain name using up to 64 characters.

14. **Press [OK].**
15. **Press [Exit].**
16. **Press the [User Tools/Counter] key.**

Changing the Realm

This section describes how to change the programmed Realm.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [▼Next] three times.**
5. **Press [Program / Change / Delete Realm].**
6. **Check that [Program / Change] is selected.**
7. **Select the Realm you want to change.**

8. **To change the realm name, press [Change] under "Realm Name".**
9. **Enter the realm name, and then press [OK].**

   You can enter a realm name using up to 64 characters.
10. **To change the KDC server name, press [Change] under "KDC Server Name".**
11. **Enter the KDC server name, and then press [OK].**

    You can enter a KDC server name using up to 64 characters.
12. **To change the domain name, press [Change] under "Domain Name".**
13. **Enter the domain name, and then press [OK].**

    You can enter a domain name using up to 64 characters.
14. **Press [OK].**
15. **Press [Exit].**
16. **Press the [User Tools/Counter] key.**

Deleting the Realm

This section describes how to delete the programmed Realm.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [▼Next] three times.**
5. **Press [Program / Change / Delete Realm].**
6. **Press [Delete].**
7. **Select the realm you want to delete.**
8. **Press [Yes].**
9. **Press [Exit].**
10. **Press the [User Tools/Counter] key.**

2. Connecting the Machine

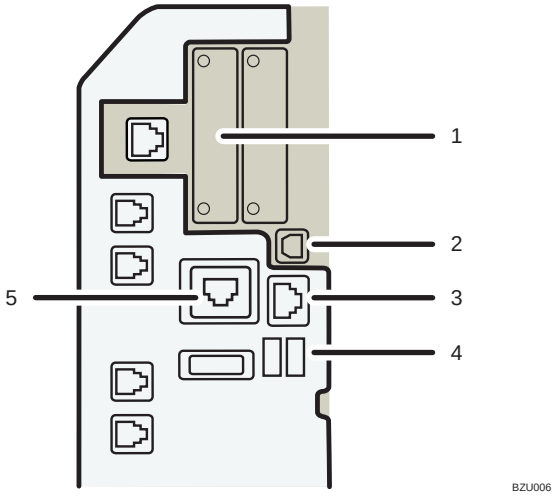
This chapter describes how to connect the machine to the network and specify the network settings.

Connecting to the Interface

This section explains how to identify the machine's interface and connect the machine according to the network environment.

⚠CAUTION

- A network interface cable with a ferrite core must be used for RF interference suppression.



1. **Slot A**

   Install an optional interface board in this slot.

   The slot can accommodate one of the following interface boards:

   - IEEE1284 interface board: Required if you want to connect an IEEE 1284 cable to this machine. When installed in Slot A, this board allows you to connect the machine to a computer through an IEEE 1284 cable.
   - Wireless LAN interface unit: Required if you want to connect this machine to a wireless LAN. When installed in Slot A, this unit allows you to connect the machine to an IEEE 802.11 a or IEEE 802.11 b/g wireless LAN.

2. **USB 2.0 [Type B] port**

   Port for connecting the USB2.0 [Type B] interface cable

3. **10BASE-T/100BASE-TX port**

   Port for connecting the 10BASE-T or 100BASE-TX cable

4. **USB Host Interface**

   Port for connecting the USB interface cable

Use this interface to connect the machine to a card authentication device or memory card reader.

5. **Gigabit Ethernet port (optional)**

   Port for using the 1000BASE-T, 100BASE-TX, or 10BASE-T cable

Note

- Slot A can contain one module only: You can install only one IEEE 1284 interface board or one Wireless LAN interface unit at a time in this slot.
- The Ethernet and Gigabit Ethernet port cannot be used simultaneously. If the optional Gigabit Ethernet board is installed, connect the Ethernet cable to the port on the Gigabit Ethernet board Communication with the machine will fail if cables are connected to both ports simultaneously.

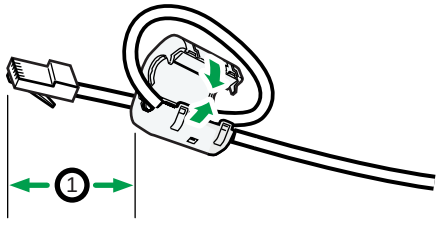
Connecting to the Ethernet Interface

This section describes how to connect an Ethernet cable to the Ethernet interface.

Important

- If the main power switch is on, turn it off.
- Use the following Ethernet cables.
  - Unshielded Twisted Pair Cable (UTP) or Shielded Twisted Pair Cable (STP) and Category type 5 or more

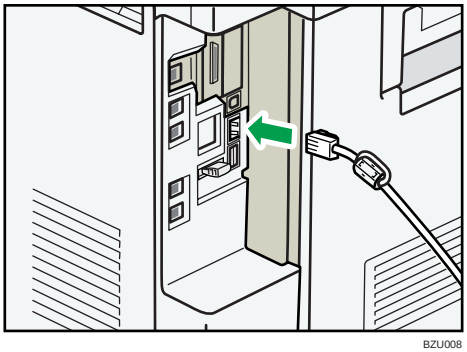
1. Make a loop 5 cm (2.1 inch) (1) from the end of the Ethernet cable and attach the included ferrite core to the loops as shown.



BZU007

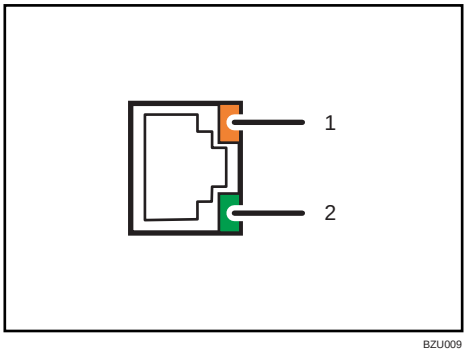
2. Make sure the main power is switched off.

3. **Connect the Ethernet interface cable to the 10BASE-T/100BASE-TX port.**



BZU008

4. **Connect the other end of the Ethernet interface cable to a network connection device such as a hub.**
5. **Turn on the main power switch of the machine.**



BZU009

1. **Indicator (orange)**

   When 100BASE-TX is operating, the LED is lit orange. When 10BASE-T is operating or the machine is not connected to the network, it is turned off.

2. **Indicator (green)**

   When 10BASE-T is operating, the LED is lit green. When 100BASE-TX is operating or the machine is not connected to the network, it is turned off.

Note

- For details about how to turn on the main power switch, see "Turning On the Power", About This Machine.
- For details about installing the printer driver, see "Preparing the Machine", Printer Reference.

Connecting to the Gigabit Ethernet Interface

This section describes how to connect the Ethernet interface cable to the Gigabit Ethernet port.

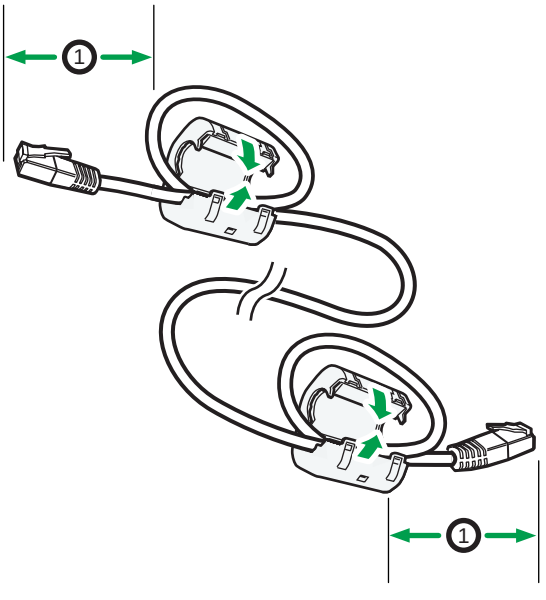
Important

- If the main power switch is on, turn it off.
- Use the following Ethernet cables.
  - When using 100BASE-TX/10BASE-T:

    Unshielded Twisted Pair Cable (UTP) or Shielded Twisted Pair Cable (STP) and Category type 5 or more
  - When using 1000BASE-T:

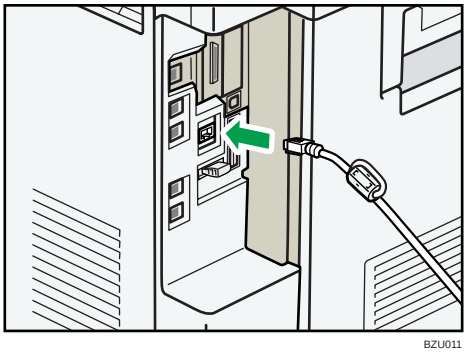
    Unshielded Twisted Pair Cable (UTP) or Shielded Twisted Pair Cable (STP) and Category type 5e or more

1. Make loops 5 cm (2.1 inch) (1) from the end of each Ethernet cable and attach included ferrite cores to each loop as shown.



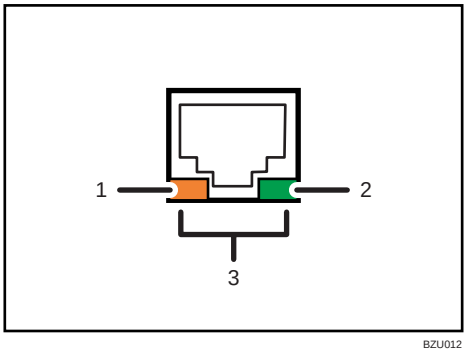
2. Make sure the main power is switched off.

3. **Connect the Ethernet interface cable to the Gigabit Ethernet port.**



BZU011

4. **Connect the other end of the Ethernet interface cable to a network connection device such as a hub.**
5. **Turn on the main power switch of the machine.**



BZU012

1. **Indicator (orange)**

   When 100BASE-T is operating, the LED is lit orange. When 10BASE-TX is operating or the machine is not connected to the network, it is turned off.

2. **Indicator (green)**

   When 10BASE-TX is operating, the LED is lit green. When 100BASE-T is operating or the machine is not connected to the network, it is turned off.

3. **Indicators (both orange and green)**

   When 1000BASE-T is operating, both LED are lit.

Note

- For details about how to turn on the main power switch, see "Turning On the Power", About This Machine.
- For details about installing the printer driver, see "Preparing the Machine", Printer Reference.

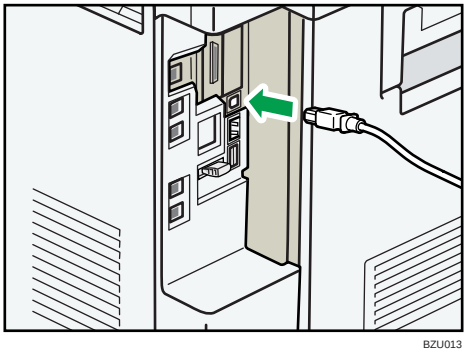
Connecting to the USB (Type B) Interface

This section describes how to connect the USB2.0 (Type B) interface cable to the USB2.0 port.

⚠CAUTION

- Properly shielded and grounded cables and connectors must be used for connections to a host computer (and/or peripheral) in order to meet emission limits.

1. **Connect the USB2.0 (Type B) interface cable to the USB2.0 port.**



BZU013

2. **Connect the other end to the USB2.0 port on the host computer.**

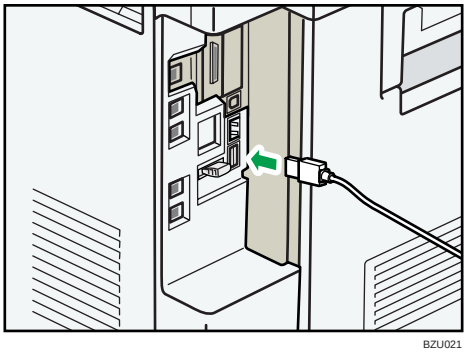
Note

- This machine does not come with a USB interface cable. Make sure you purchase the appropriate cable for the machine and your computer.
- The USB2.0 interface board is supported by Windows 2000/XP/Vista/7, Windows Server 2003/2003 R2/2008/2008 R2, Mac OS X 10.3.3 or higher.
  - To use Macintosh, the machine must be equipped with the optional PostScript 3 unit. When used with Mac OS X 10.3.3 or higher, a transfer speed of USB2.0 is supported.
- For details about installing the printer driver, see "Preparing the Machine", Printer Reference.

Connecting a Device to the Machine's USB Host Interface

This section explains how to connect a device to the machine's USB host interface.

1. **Connect one end of the USB interface cable to the machine's USB host interface.**



BZU021

2. **Connect the other end of the USB interface cable to a card authentication device or media slot.**

Note

- This machine does not come with a USB interface cable. Make sure you purchase the appropriate cable.

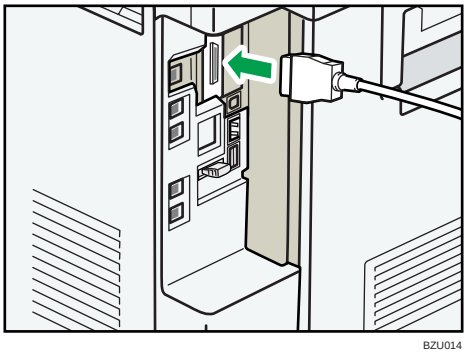
Connecting to the IEEE 1284 Interface

This section describes how to connect the IEEE 1284 interface cable to the IEEE 1284 interface board.

⚠CAUTION

- Properly shielded and grounded cables and connectors must be used for connections to a host computer (and/or peripheral) in order to meet emission limits.

1. **Make sure the main power switch on the machine is off.**
2. **Turn off the main power switch of the host computer.**
3. **Connect the IEEE 1284 interface cable to the IEEE 1284 port.**



BZU014

You might have to use a conversion adapter to connect the cable to the interface. For details about acquiring a conversion adapter, consult your sales or service representative.

4. **Connect the other end of the cable into the interface connector on the host computer.**

   Check the shape of the connector to the computer. Connect the cable firmly.

5. **Turn on the main power switch of the machine.**

6. **Turn on the host computer.**

   When using Windows 2000/XP/Vista/7, and Windows Server 2003/2003 R2/2008/2008 R2, a printer driver installation screen might appear when the computer is turned on. If this happens, click [Cancel] on the screen.

Note

- For details about how to turn on the main power switch, see "Turning On the Power", About This Machine.
- For details about installing the printer driver, see "Preparing the Machine", Printer Reference.

Connecting to the Wireless LAN Interface

This section describes how to connect to the wireless LAN interface.

Note

- Check the machine's IPv4 address and subnet mask, or the IPv6 address settings.
- For details about how to set the IPv4 address and subnet mask from the control panel of the machine, see "Interface Settings".
- Before using this machine with a wireless LAN interface, you must select [Wireless LAN] in [LAN Type].

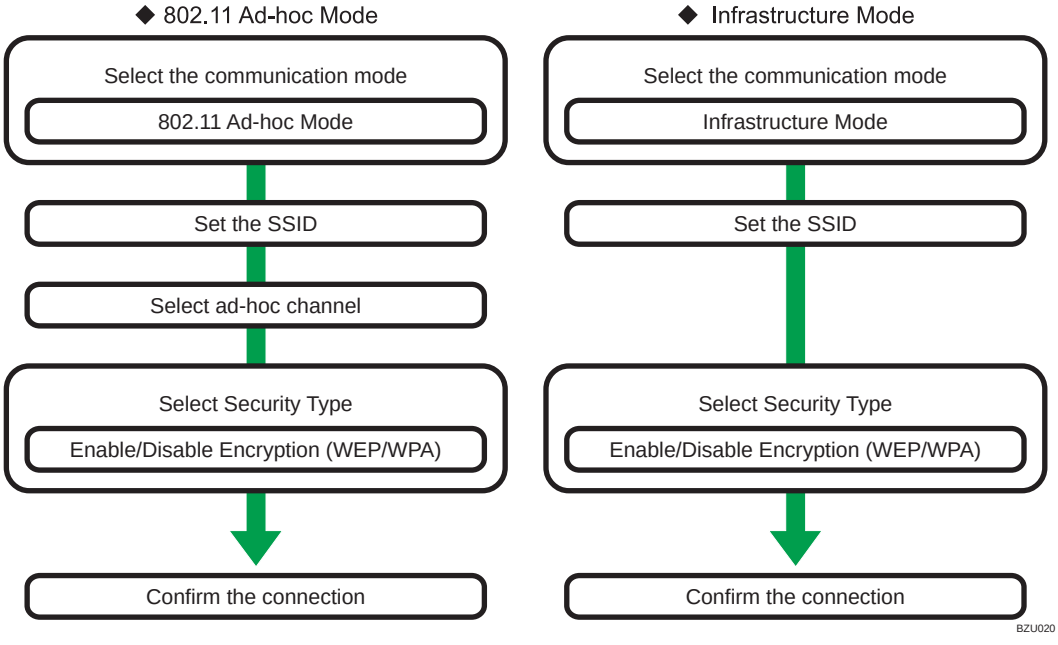
Reference

- p.39 "Interface Settings"

Setup Procedure

This section describes how to setup wireless LAN interface.

To configure the wireless LAN settings: open [System Settings], [Interface Settings], select [Wireless LAN], and then use the following procedure.



Note

- Select [802.11 Ad-hoc Mode] when connecting Windows XP as a wireless LAN client using Windows XP standard driver or utilities, or when not using the infrastructure mode.
- When [802.11 Ad-hoc Mode] is selected in Communication Mode, select the channel for [Ad-hoc Channel]. Set a channel that matches the type of wireless LAN being used. For details about setting the Ad-hoc Channel, see "Interface Settings ".
- You can specify either "WEP" or "WPA" to the Security Method.
- Specify "WPA", when [Communication Mode] is set to [Infrastructure Mode].
- If you select the [WPA] option for Security Method, select one of the following: [WPA-PSK], [WPA], [WPA2-PSK], or [WPA2]. If you select [WPA-PSK] or [WPA2-PSK], enter your PSK. If you select [WPA] or [WPA2], authentication settings and certificate installation settings are required. For details about setting methods, see "Configuring IEEE 802.1X".
- For details about how to specify wireless LAN settings from the control panel on the machine, see "Interface Settings".

Reference

- p.39 "Interface Settings"
- p.319 "Configuring IEEE 802.1X"

Checking the Signal

This section describes how to check the machine's radio wave status.

When using in infrastructure mode, you can check the machine's radio wave status using the control panel.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Interface Settings].**
4. **Press [Wireless LAN].**
5. **Press [Wireless LAN Signal].**

   The machine's radio wave status appears.
6. **After checking radio wave status, press [Exit].**
7. **Press the [User Tools/Counter] key.**

Network Settings Required to Use the Printer/ LAN-Fax

This section lists the network settings required for using the printer or LAN-Fax function.

Important

- **These settings should be made by the administrator, or with the advice of the administrator.**

Ethernet

This section lists the settings required for using the printer or LAN-Fax function with an Ethernet connection.

For details about how to specify the settings, see "Interface Settings".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	NCP Delivery Protocol	As required
Interface Settings/Network	NW Frame Type	As required
Interface Settings/Network	SMB Computer Name	As required
Interface Settings/Network	SMB Work Group	As required

Menu	User Tool	Setting Requirements
Interface Settings/Network	Ethernet Speed	As required
Interface Settings/Network	IEEE 802.1X Authentication for Ethernet	As required
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Network	Machine Name	As required

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [LAN Type] is displayed when the wireless LAN board is installed. If Ethernet and wireless LAN are both connected, the selected interface has priority.

Reference

- p.39 "Interface Settings"

Wireless LAN

This section lists the settings required for using the printer or LAN-Fax function with a wireless LAN connection.

For details about how to specify the settings, see "Interface Settings".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required

Menu	User Tool	Setting Requirements
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	NCP Delivery Protocol	As required
Interface Settings/Network	NW Frame Type	As required
Interface Settings/Network	SMB Computer Name	As required
Interface Settings/Network	SMB Work Group	As required
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Network	Machine Name	As required
Interface Settings/Wireless LAN	Communication Mode	Necessary
Interface Settings/Wireless LAN	SSID Setting	As required
Interface Settings/Wireless LAN	Ad-hoc Channel	As required
Interface Settings/Wireless LAN	Security Method	As required

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [Wireless LAN] and [LAN Type] are displayed when the wireless LAN interface board is installed. If both Ethernet and wireless LAN are connected, the selected interface takes precedence.

Reference

- p.39 "Interface Settings"

Network Settings Required to Use Internet Fax

This section lists the network settings required for using Internet Fax.

Important

- **These settings should be made by the administrator, or with the advice of the administrator.**

Ethernet

This section lists the settings required for using Internet Fax with an Ethernet connection.

For details about how to specify the settings, see "Interface Settings" and "File Transfer".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	Necessary
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	Ethernet Speed	As required
Interface Settings/Network	IEEE 802.1X Authentication for Ethernet	As required
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required

Menu	User Tool	Setting Requirements
Interface Settings/Network	Host Name	As required
File Transfer	SMTP Server	Necessary
File Transfer	SMTP Authentication	As required
File Transfer	POP before SMTP	As required
File Transfer	Reception Protocol	As required
File Transfer	POP3 / IMAP4 Settings	As required
File Transfer	Administrator's E-mail Address	As required
File Transfer	E-mail Communication Port	Necessary
File Transfer	E-mail Reception Interval	As required
File Transfer	Max. Reception E-mail Size	As required
File Transfer	E-mail Storage in Server	As required
File Transfer	Program / Change / Delete E-mail Message	As required
File Transfer	Fax E-mail Account	Necessary

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [LAN Type] is displayed when the wireless LAN interface board is installed. If both Ethernet and wireless LAN are connected, the selected interface takes precedence.
- SMTP Server and Fax E-mail Account must be specified in order to send Internet Fax.
- When POP before SMTP is set to [On], also make settings for Reception Protocol and POP3 / IMAP4 Settings.
- When SMTP Authentication is set to [On], also make setting for Administrator's E-mail Address.
- POP3 / IMAP4 Settings, E-mail Communication Port, and Fax E-mail Account must be specified in order to receive Internet Fax.
- When setting POP before SMTP to [On], check POP3 port number in E-mail Communication Port.

Reference

- p.39 "Interface Settings"
- p.48 "File Transfer"

Wireless LAN

This section lists the settings required for using Internet Fax with a wireless LAN connection.

For details about how to specify the settings, see "Interface Settings" and "File Transfer".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	Necessary
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Wireless LAN	Communication Mode	Necessary
Interface Settings/Wireless LAN	SSID Setting	As required
Interface Settings/Wireless LAN	Ad-hoc Channel	As required
Interface Settings/Wireless LAN	Security Method	As required
File Transfer	SMTP Server	Necessary
File Transfer	SMTP Authentication	As required

Menu	User Tool	Setting Requirements
File Transfer	POP before SMTP	As required
File Transfer	Reception Protocol	As required
File Transfer	POP3 / IMAP4 Settings	As required
File Transfer	Administrator's E-mail Address	As required
File Transfer	E-mail Communication Port	Necessary
File Transfer	E-mail Reception Interval	As required
File Transfer	Max. Reception E-mail Size	As required
File Transfer	E-mail Storage in Server	As required
File Transfer	Program / Change / Delete E-mail Message	As required
File Transfer	Fax E-mail Account	Necessary

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [Wireless LAN] and [LAN Type] are displayed when the wireless LAN interface board is installed. If both Ethernet and wireless LAN are connected, the selected interface takes precedence.
- SMTP Server and Fax E-mail Account must be specified in order to send Internet Fax.
- When POP before SMTP is set to [On], you must also make settings for Reception Protocol and POP3 / IMAP4 Settings.
- When SMTP Authentication is set to [On], you must also make settings for Administrator's E-mail Address.
- POP3 / IMAP4 Settings, E-mail Communication Port, and Fax E-mail Account must be specified in order to receive Internet Fax.
- When setting POP before SMTP to [On], check POP3 port number in E-mail Communication Port.

Reference

- p.39 "Interface Settings"
- p.48 "File Transfer"

Network Settings Required to Use E-mail Function

This section lists the network settings required for sending e-mail.

Important

- **These settings should be made by the administrator, or with the advice of the administrator.**

Ethernet

This section lists the settings required for sending e-mail with an Ethernet connection.

For details about how to specify the settings, see "Interface Settings" and "File Transfer".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	Necessary
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	Ethernet Speed	As required
Interface Settings/Network	IEEE 802.1X Authentication for Ethernet	As required
Interface Settings/Network	LAN Type	Necessary

Menu	User Tool	Setting Requirements
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
File Transfer	SMTP Server	Necessary
File Transfer	SMTP Authentication	As required
File Transfer	POP before SMTP	As required
File Transfer	Reception Protocol	As required
File Transfer	POP3 / IMAP4 Settings	As required
File Transfer	Administrator's E-mail Address	As required
File Transfer	E-mail Communication Port	As required
File Transfer	Program / Change / Delete E-mail Message	As required
File Transfer	Scanner Resend Interval Time	As required
File Transfer	Number of Scanner Resends	As required

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [LAN Type] is displayed when the wireless LAN interface board is installed. If both Ethernet and wireless LAN are connected, the selected interface takes precedence.
- When POP before SMTP is set to [On], also make settings for Reception Protocol and POP3 / IMAP4 Settings.
- When setting POP before SMTP to [On], check POP3 port number in E-mail Communication Port.

Reference

- p.39 "Interface Settings"
- p.48 "File Transfer"

Wireless LAN

This section lists the settings required for sending e-mail with a Wireless LAN connection.

For details about how to specify the settings, see "Interface Settings" and "File Transfer".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	Necessary
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Wireless LAN	Communication Mode	Necessary
Interface Settings/Wireless LAN	SSID Setting	As required
Interface Settings/Wireless LAN	Ad-hoc Channel	As required
Interface Settings/Wireless LAN	Security Method	As required
File Transfer	SMTP Server	Necessary
File Transfer	SMTP Authentication	As required
File Transfer	POP before SMTP	As required
File Transfer	Reception Protocol	As required

Menu	User Tool	Setting Requirements
File Transfer	POP3 / IMAP4 Settings	As required
File Transfer	Administrator's E-mail Address	As required
File Transfer	E-mail Communication Port	As required
File Transfer	Program / Change / Delete E-mail Message	As required
File Transfer	Scanner Resend Interval Time	As required
File Transfer	Number of Scanner Resends	As required

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [Wireless LAN] and [LAN Type] are displayed when the wireless LAN interface board is installed. If both Ethernet and wireless LAN are connected, the selected interface takes precedence.
- When POP before SMTP is set to [On], you must also make settings for Reception Protocol and POP3 / IMAP4 Settings.
- When setting POP before SMTP to [On], check POP3 port number in E-mail Communication Port.

Reference

- p.39 "Interface Settings"
- p.48 "File Transfer"

Network Settings Required to Use Scan to Folder Function

This section lists the network settings required for sending files.

Important

- **These settings should be made by the administrator, or with the advice of the administrator.**

Ethernet

This section lists the settings required for sending files with an Ethernet connection.

For details about how to specify the settings, see "Interface Settings" and "File Transfer".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	Necessary
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	Ethernet Speed	As required
Interface Settings/Network	IEEE 802.1X Authentication for Ethernet	As required
Interface Settings/Network	LAN Type	Necessary

Menu	User Tool	Setting Requirements
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
File Transfer	Default User Name / Password (Send)	As required
File Transfer	Scanner Resend Interval Time	As required
File Transfer	Number of Scanner Resends	As required

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [LAN Type] is displayed when the wireless LAN interface board is installed. If both Ethernet and wireless LAN are connected, the selected interface takes precedence.

Reference

- p.39 "Interface Settings"
- p.48 "File Transfer"

Wireless LAN

This section lists the settings required for sending files with a Wireless LAN connection.

For details about how to specify the settings, see "Interface Settings" and "File Transfer".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	Necessary
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required

Menu	User Tool	Setting Requirements
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Wireless LAN	Communication Mode	Necessary
Interface Settings/Wireless LAN	SSID Setting	As required
Interface Settings/Wireless LAN	Ad-hoc Channel	As required
Interface Settings/Wireless LAN	Security Method	As required
File Transfer	Default User Name / Password (Send)	As required
File Transfer	Scanner Resend Interval Time	As required
File Transfer	Number of Scanner Resends	As required

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [Wireless LAN] and [LAN Type] are displayed when the wireless LAN interface board is installed. If both Ethernet and wireless LAN are connected, the selected interface takes precedence.

Reference

- p.39 "Interface Settings"
- p.48 "File Transfer"

Network Settings Required to Use the Network Delivery Scanner

This section lists the network settings required for delivering data to the network.

Important

- **These settings should be made by the administrator, or with the advice of the administrator.**

Ethernet

This section lists the settings required for delivering data to the network with an Ethernet connection.

For details about how to specify the settings, see "Interface Settings" and "File Transfer".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	Ethernet Speed	As required
Interface Settings/Network	IEEE 802.1X Authentication for Ethernet	As required
Interface Settings/Network	LAN Type	Necessary

Menu	User Tool	Setting Requirements
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
File Transfer	Delivery Option	Necessary
File Transfer	Fax RX File Transmission	As required
File Transfer	Scanner Resend Interval Time	As required
File Transfer	Number of Scanner Resends	As required

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [LAN Type] is displayed when the wireless LAN interface board is installed. If both Ethernet and wireless LAN are connected, the selected interface takes precedence.
- If Delivery Option is set to [On], check that IPv4 Address is specified.

Reference

- p.39 "Interface Settings"
- p.48 "File Transfer"

Wireless LAN

This section lists the settings required for delivering data to the network with a wireless LAN connection.

For details about how to specify the settings, see "Interface Settings" and "File Transfer".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required

Menu	User Tool	Setting Requirements
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Wireless LAN	Communication Mode	Necessary
Interface Settings/Wireless LAN	SSID Setting	As required
Interface Settings/Wireless LAN	Ad-hoc Channel	As required
Interface Settings/Wireless LAN	Security Method	As required
File Transfer	Delivery Option	Necessary
File Transfer	Fax RX File Transmission	As required
File Transfer	Scanner Resend Interval Time	As required
File Transfer	Number of Scanner Resends	As required

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [Wireless LAN] and [LAN Type] are displayed when the wireless LAN interface board is installed. When both Ethernet and wireless LAN are connected, the selected interface takes precedence.
- If Delivery Option is set to [On], check that IPv4 Address is specified.

Reference

- p.39 "Interface Settings"
- p.48 "File Transfer"

Network Settings Required to Use WSD Scanner

This section lists the network settings required for using WSD Scanner function.

Important

- **These settings should be made by the administrator, or with the advice of the administrator.**

Ethernet

This section lists the settings required for using WSD Scanner function with an Ethernet connection.

For details about how to specify the settings, see "Interface Settings".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	NCP Delivery Protocol	As required
Interface Settings/Network	NW Frame Type	As required
Interface Settings/Network	SMB Computer Name	As required
Interface Settings/Network	SMB Work Group	As required
Interface Settings/Network	Ethernet Speed	As required

Menu	User Tool	Setting Requirements
Interface Settings/Network	IEEE 802.1X Authentication for Ethernet	As required
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Network	Machine Name	As required

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [LAN Type] is displayed when the wireless LAN board is installed. If Ethernet and wireless LAN are both connected, the selected interface has priority.

Reference

- p.39 "Interface Settings"

Wireless LAN

This section lists the settings required for using WSD Scanner function with a wireless LAN connection.

For details about how to specify the settings, see "Interface Settings".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required

Menu	User Tool	Setting Requirements
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	NCP Delivery Protocol	As required
Interface Settings/Network	NW Frame Type	As required
Interface Settings/Network	SMB Computer Name	As required
Interface Settings/Network	SMB Work Group	As required
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Network	Machine Name	As required
Interface Settings/Wireless LAN	Communication Mode	Necessary
Interface Settings/Wireless LAN	SSID Setting	As required
Interface Settings/Wireless LAN	Ad-hoc Channel	As required
Interface Settings/Wireless LAN	Security Method	As required

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [Wireless LAN] and [LAN Type] are displayed when the wireless LAN interface board is installed. If both Ethernet and wireless LAN are connected, the selected interface takes precedence.

Reference

- p.39 "Interface Settings"

Network Settings Required to Use Network TWAIN Scanner

This section lists the network settings required for using the TWAIN Scanner under the network environment.

Important

- **These settings should be made by the administrator, or with the advice of the administrator.**

Ethernet

This section lists the settings required for using the network TWAIN Scanner with an Ethernet connection.

For details about how to specify the settings, see "Interface Settings".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	Ethernet Speed	As required
Interface Settings/Network	IEEE 802.1X Authentication for Ethernet	As required
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [LAN Type] is displayed when the wireless LAN interface board is installed.
- When both Ethernet and wireless LAN are connected, the selected interface takes precedence.

Reference

- p.39 "Interface Settings"

Wireless LAN

This section lists the settings required for using the network TWAIN Scanner with a wireless LAN connection.

For details about how to specify the settings, see "Interface Settings".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Wireless LAN	Communication Mode	Necessary
Interface Settings/Wireless LAN	SSID Setting	As required
Interface Settings/Wireless LAN	Ad-hoc Channel	As required
Interface Settings/Wireless LAN	Security Method	As required

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [Wireless LAN] and [LAN Type] are displayed when the wireless LAN interface board is installed. When both Ethernet and wireless LAN are connected, the selected interface takes precedence.

Reference

- p.39 "Interface Settings"

Network Settings Required to Use Document Server

This section lists the settings required for using the Document Server function under the network environment.

Important

- **These settings should be made by the administrator, or with the advice of the administrator.**

Ethernet

This section lists the settings required for using the Document Server function with an Ethernet connection.

For details about how to specify the settings, see "Interface Settings".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	Ethernet Speed	As required
Interface Settings/Network	IEEE 802.1X Authentication for Ethernet	As required
Interface Settings/Network	LAN Type	Necessary

Menu	User Tool	Setting Requirements
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [LAN Type] is displayed when the wireless LAN interface board is installed.
- When both Ethernet and wireless LAN are connected, the selected interface takes precedence.

Reference

- p.39 "Interface Settings"

Wireless LAN

This section lists the settings required for using the Document Server function with a wireless LAN connection.

For details about how to specify the settings, see "Interface Settings".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary

Menu	User Tool	Setting Requirements
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Wireless LAN	Communication Mode	Necessary
Interface Settings/Wireless LAN	SSID Setting	As required
Interface Settings/Wireless LAN	Ad-hoc Channel	As required
Interface Settings/Wireless LAN	Security Method	As required

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [Wireless LAN] and [LAN Type] are displayed when the wireless LAN interface board is installed. When both Ethernet and wireless LAN are connected, the selected interface takes precedence.

Reference

- p.39 "Interface Settings"

Using Utilities to Make Network Settings

This section describes how to make network settings using utilities.

You can also specify network settings using utilities such as Web Image Monitor and telnet.

Note

- These settings should be made by the administrator, or with the advice of the administrator.
- For details about using Web Image Monitor, see "Using Web Image Monitor".
- For details about using telnet, see "Remote Maintenance Using telnet".

Reference

- p.133 "Using Web Image Monitor"
- p.155 "Remote Maintenance Using telnet"

Interface Settings

This section describes how to make Interface settings using utilities.

Change settings by using Web Image Monitor and telnet.

[Network] → [Machine IPv4 Address] → [Auto-Obtain (DHCP)]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Machine IPv4 Address] → [Specify] → "Machine IPv4 Address"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Machine IPv4 Address] → [Specify] → "Subnet Mask"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [IPv4 Gateway Address]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Machine IPv6 Address] → "Manual Configuration Address"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [IPv6 Gateway Address]

- Web Image Monitor: Can be used for specifying the setting.

- telnet: Can be used for specifying the setting.

[Network] → [IPv6 Stateless Address Autoconfiguration]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [DNS Configuration] → [Auto-Obtain (DHCP)]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [DNS Configuration] → [Specify] → "DNS Server 1-3"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [DDNS Configuration]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [IPsec]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Domain Name] → [Auto-Obtain (DHCP)]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Domain Name] → [Specify] → "Domain Name"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [WINS Configuration] → [On] → "Primary WINS Server"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [WINS Configuration] → [On] → "Secondary WINS Server"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [WINS Configuration] → [On] → "Scope ID"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [WINS Configuration] → [Off]

- Web Image Monitor: Can be used for specifying the setting.

- telnet: Can be used for specifying the setting.

[Network] → [Effective Protocol] → "IPv4"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Effective Protocol] → "IPv6"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Effective Protocol] → "NetWare"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Effective Protocol] → "SMB"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [NCP Delivery Protocol] → [IPX Priority]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[Network] → [NCP Delivery Protocol] → [TCP / IP Priority]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[Network] → [NCP Delivery Protocol] → [IPX Only]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[Network] → [NCP Delivery Protocol] → [TCP / IP Only]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[Network] → [NW Frame Type] → [Auto Select]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [NW Frame Type] → [Ethernet II]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [NW Frame Type] → [Ethernet 802.2]

- Web Image Monitor: Can be used for specifying the setting.

- telnet: Can be used for specifying the setting.

[Network] → [NW Frame Type] → [Ethernet 802.3]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [NW Frame Type] → [Ethernet SNAP]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [SMB Computer Name]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [SMB Work Group]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Ethernet Speed]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [IEEE 802.1X Authentication for Ethernet]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [LAN Type] → [Ethernet]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [LAN Type] → [Wireless LAN]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Ping Command]

- Web Image Monitor: Cannot be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[Network] → [Permit SNMPv3 Communication] → [Encryption Only]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Permit SNMPv3 Communication] → [Encryption / Cleartext]

- Web Image Monitor: Can be used for specifying the setting.

- telnet: Can be used for specifying the setting.

[Network] → [Permit SSL / TLS Communication] → [Ciphertext Only]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[Network] → [Permit SSL / TLS Communication] → [Ciphertext Priority]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[Network] → [Permit SSL / TLS Communication] → [Ciphertext / Cleartext]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[Network] → [Host Name]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Machine Name]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Wireless LAN] → [Communication Mode] → [802.11 Ad-hoc Mode]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Wireless LAN] → [Communication Mode] → [Infrastructure Mode]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Wireless LAN] → [SSID Setting]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Wireless LAN] → [Ad-hoc Channel]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Wireless LAN] → [Security Method]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

File Transfer

This section describes how to make File Transfer settings using utilities.

Change settings by using Web Image Monitor and telnet.

[File Transfer] → [Delivery Option]

- Web Image Monitor: Cannot be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Capture Server IPv4 Address]

- Web Image Monitor: Cannot be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Fax RX File Transmission]

- Web Image Monitor: Cannot be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [SMTP Server]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [SMTP Authentication]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [POP before SMTP]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Reception Protocol] → [POP3]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Reception Protocol] → [IMAP4]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Reception Protocol] → [SMTP]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [POP3 / IMAP4 Settings]

- Web Image Monitor: Can be used for specifying the setting.

- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Administrator's E-mail Address]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [E-mail Communication Port]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [E-mail Reception Interval]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Max. Reception E-mail Size]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [E-mail Storage in Server]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Default User Name / Password (Send)]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Program / Change / Delete E-mail Message]

- Web Image Monitor: Cannot be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Auto Specify Sender Name]

- Web Image Monitor: Cannot be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Fax E-mail Account]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Scanner Resend Interval Time]

- Web Image Monitor: Cannot be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Number of Scanner Resends]

- Web Image Monitor: Cannot be used for specifying the setting.

- telnet: Cannot be used for specifying the setting.

Connecting the Machine to a Telephone Line and Telephone

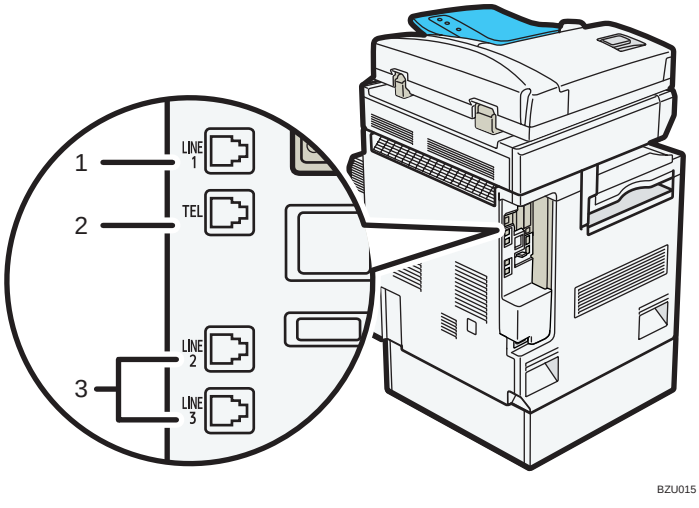
This section describes how to connect the machine to the telephone lines and select the line type.

Connecting the Telephone Line (Type 1 and 2)

To connect the machine to a telephone line, use a snap-in modular type connector.

Important

- **Make sure the connector is the correct type before you start.**



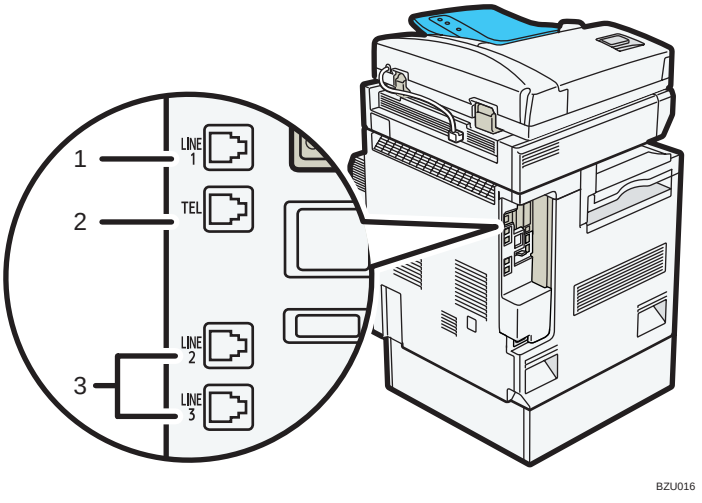
1. **G3 interface unit connector**
2. **External telephone connector**
3. **Extra G3 interface unit connector**

Connecting the Telephone Line (Type 3 and 4)

To connect the machine to a telephone line, use a snap-in modular type connector.

Important

- **Make sure the connector is the correct type before you start.**



1. **G3 interface unit connector**
2. **External telephone connector**
3. **Extra G3 interface unit connector**

Selecting the Line Type

Select the line type to which the machine is connected. There are two types: tone and pulse dial.

Select the line type using Administrator Tools.

Note

- This function is not available in some regions.

3. Using a Printer Server

This chapter describes how to configure the machine as a network printer.

Preparing Printer Server

This section explains how to configure the machine as a Windows network printer. The machine is configured to enable network clients to use it.

Important

- **Under Windows XP Professional or Windows Server 2003/2003 R2/2008/2008 R2, to change printer properties in the [Printer] or [Printers and Faxes] window, you need Printer Management access authentication; under Windows Vista/7, Full Control access authentication. Log in to the file server as an Administrator or member of the PowerUsers group.**

1. **Open the [Printers and Faxes] window from the [Start] menu.**

   The [Printers and Faxes] window appears.

2. **Click the icon of the machine you want to use. On the [File] menu, click [Properties]. The printer properties appear.**
3. **On the [Sharing] tab, click [Share this printer].**
4. **To share the machine with users using a different version of Windows, click [Additional Drivers...].**

   If you have installed an alternative driver by selecting [Share As:] during the printer driver installation, this step can be ignored.

5. **On the [Advanced] tab, click the [Printing Default...] button. Specify the default values for the printer driver that will be distributed to the client computers, and then click [OK].**
6. **Click [OK], and then close the printer properties.**

Using NetWare

This section describes the setting procedure for network printers in the NetWare environment. In the NetWare environment, you can connect the machine as a "print server" or "remote printer".

Important

- **IPv6 cannot be used on this function.**

Note

- This procedure assumes an environment is already prepared for normal NetWare running the printing service setting.
- The procedure is explained with the following example settings:
  - File server's name ...CAREE
  - Print server's name ...PSERV
  - Printer's name ...R-PRN
  - Queue name ...R-QUEUE

Setting Up as a Print Server (NetWare 3.x)

Follow the procedure below to connect the machine as a print server using NetWare 3.x.

1. **Start Web Image Monitor.**
2. **Click [Login].**

   A dialog box for entering the login user name and password appears.
3. **Enter the login user name and password, and then click [Login].**

   For details about the login user name and password, consult your network administrator.

   The Web browser might be configured to auto complete login dialog boxes by retaining user names and passwords. This function reduces security. To prevent the browser retaining user names and passwords, disable the browser's auto complete function.
4. **In the menu area, click [Configuration].**
5. **Under "Network", click [NetWare].**
   - Print Server Name: Enter the NetWare print server name. To use the interface board as a print server, enter the name of a print server that is not active on the file server. Use up to 47 characters.
   - Logon Mode: Specify whether to designate a file server or NDS tree when logging in to NetWare.
   - File Server Name: When a file server name is entered here, only the specified file server is searched for. This item is mandatory. Use up to 47 characters.

- NDS Tree: To enable NDS mode, enter the name of the NDS tree you want to log in to. Use up to 32 alphanumeric characters.
- NDS Context Name: To enable NDS mode, enter the print server context. Use up to 127 characters.
- Operation Mode: Specify whether to use the interface board as a print server or a remote printer.
- Remote Printer No.: This item is effective when the interface board is specified as a remote printer. Enter the same number as the number of the printer to be created on the print server (0 to 254 characters).
- Job Timeout: When the interface board is used as a NetWare remote printer, the printer cannot detect when a print job ends. Therefore, the printer terminates printing when a certain period of time has elapsed since it last received print data (i.e., when it has not received print data for a certain period of time). Specify here this period of time (3 to 255 seconds). The initial value is 15 (seconds).
- Frame Type: Select the frame type from the drop-down menu.
- Print Server Protocol: Select the protocol for NetWare from the drop-down menu.
- NCP Delivery Protocol: Select the protocol for NCP delivery.

6. **Confirm the settings, and then click [OK].**

   Configuration is now complete. Wait several before restarting Web Image Monitor.

7. **Click [Logout].**

Note

- To check the configuration is correct, enter the following from the command prompt:

  ```
  F:> USERLIST
  ```

- If the printer works as configured, the name of the print server appears as a connected user.
- If you cannot identify the printer you want to configure, check the printer name against the configuration page printed from the printer.
- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about login user names and passwords, see Security Reference, which is the administrator's manual.

Reference

- p.133 "Using Web Image Monitor"

Setting Up as a Print Server (NetWare 4.x, 5/5.1, 6/6.5)

Follow the procedure below to connect the machine as a print server using NetWare 4.x, NetWare 5/5.1, or NetWare 6 / 6.5.

Important

- **When using the printer as a print server in NetWare 4.x, NetWare 5/5.1, or NetWare 6/6.5, set it to the NDS mode.**
- **When using NetWare 5/5.1 or NetWare 6/6.5, set the printer as a print server.**

1. **Start Web Image Monitor.**
2. **Click [Login].**

   A dialog box for entering the login user name and password appears.
3. **Enter the login user name and password, and then click [Login].**

   For details about the login user name and password, consult your network administrator.

   Depending on the configuration of your Web browser, the login user name and password might be saved. If you do not want to save them, configure your Web browser's settings so that this information is not saved.
4. **In the menu area, click [Configuration].**
5. **Under "Network", click [NetWare].**
6. **Confirm the settings, and then click [OK].**

   Configuration is now complete. Wait several minutes before restarting Web Image Monitor.
7. **Click [Logout].**
8. **Quit Web Image Monitor.**

Note

- To check the configuration is correct, enter the following from the command prompt:

  `F:> USERLIST`
- If the printer works as configured, the name of the print server appears as a connected user.
- If you cannot identify the printer you want to configure, check the printer name against the configuration page printed from the printer. If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about login user names and passwords, see Security Reference, which is the administrator's manual.

Reference

- p.133 "Using Web Image Monitor"

Using Pure IP in the NetWare 5/5.1 or 6/6.5 Environment

Follow the procedure below to connect the machine as a print server in a pure IP environment of NetWare 5/5.1 or NetWare 6/6.5.

Important

- When creating a queued print server in a pure IP environment of NetWare 5/5.1 or NetWare 6/6.5, create a print queue on the file server using NetWare Administrator.
- This printer is not available as a remote printer for use in a pure IP environment.
- To use the printer in a pure IP environment, set it to IPv4.

Setting up using NWadmin

1. From Windows, start NWadmin.

   For details about NWadmin, see the NetWare manuals.
2. Select the object in which the print queue is located in the directory tree, and then click [Create] on the [Object] menu.
3. In the [Class of new object] box, click [Print Queue], and then click [OK].
4. In the [Print Queue Name] box, enter the name of the print queue.
5. In the [Print Queue Volume] box, click [Browse].
6. In the [Available objects] box, click the volume in which the print queue is created, and then click [OK].
7. Check the settings, and then click [Create].
8. Select the object in which the printer is located, and then click [Create] on the [Object] menu.
9. In the [Class of new object] box, click [Printer], and then click [OK]. For NetWare 5, click [Printer (Non NDPS)].
10. In the [Printer name] box, enter the printer name.
11. Select the [Define additional properties] check box, and then click [Create].
12. Click [Assignments], and then click [Add] in the [Assignments] area.
13. In the [Available objects] box, click the queue you created, and then click [OK].
14. Click [Configuration], click [Parallel] in the [Printer type] list, and then click [Communication].
15. Click [Manual load] in the [Communication type] area, and then click [OK].
16. Check the settings, and then click [OK].
17. Select a context specified, and then click [Create] on the [Object] menu.
18. In the [Class of new object] box, click [Print Server], and then click [OK]. For NetWare 5, click [Print Server (Non NDPS)].

19. **In the [Print Server Name] box, enter the print server name.**

    Use the same print server name specified using Web Image Monitor.

20. **Select the [Define additional properties] check box, and then click [Create].**
21. **Click [Assignments], and then click [Add] in the [Assignments] area.**
22. **In the [Available objects] box, click the queue you created, and then click [OK].**
23. **Check the settings, and then click [OK].**
24. **Start the print server by entering the following from the console of the NetWare server.**

    If the print server is in operation, quit and restart it.

    To quit

    ```
    CAREE: unload pserver
    ```

    To start

    ```
    CAREE: load pserver [print server name]
    ```

Setting up using Web Image Monitor

1. **Start Web Image Monitor.**
2. **Click [Login].**

   A dialog box for entering the login user name and login password appears.

3. **Enter the login user name and password, and then click [Login].**

   For details about the login user name and password, consult your network administrator.

   Depending on the configuration of your Web browser, the login user name and password might be saved. If you do not want to save them, configure your Web browser's settings so that this information is not saved.

4. **In the menu area, click [Configuration].**
5. **Under "Network", click [NetWare].**
6. **Confirm the settings, and then click [OK].**

   Configuration is now complete. Wait several minutes before restarting Web Image Monitor.

7. **Click [Logout].**
8. **Quit Web Image Monitor.**

Note

- If you cannot identify the printer you want to configure, check the printer name against the configuration page printed from the printer.
- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".

- For details about login user names and passwords, see Security Reference, which is the administrator's manual.

Reference

- p.133 "Using Web Image Monitor"

Setting Up as a Remote Printer (NetWare 3.x)

Follow the procedure below to use the machine as a remote printer under NetWare 3.x.

Setting up using PCONSOLE

1. **Enter "PCONSOLE" from the command prompt.**

   ```
   F:> PCONSOLE
   ```

2. **Create a print queue.**

   When using the existing print queue, go to the procedure for creating a printer.

3. **From the [Available Options] menu, select [Print Queue Information], and then press the [Enter] key.**
4. **Press [Insert] key, and then enter a print queue name.**
5. **Press [Esc] key to return to the [Available Options] menu.**
6. **Set up the network connection to a printer.**
7. **On the [Available Options] menu, click [Print Server Information], and then press the [Enter] key.**
8. **To create a new print server, press the [Insert] key, and then enter a print server name.**

   For a currently defined print server, select a print server in the [Print Server] list.

   Use the same printer name specified using Web Image Monitor.

9. **From the [Print Server Information] menu, select [Print Server Configuration].**
10. **From the [Print Server Configuration] menu, select [Printer Configuration].**
11. **Select the printer indicated as [Not Installed].**

    Use the same printer number specified as the remote printer number using Web Image Monitor.

12. **To change the printer name, enter a new name.**

    A name "printer x" is assigned to the printer. The "x" stands for the number of the selected printer.

13. **As type, select [Remote Parallel, LPT1].**

    The IRQ, Buffer size, Starting form, and Queue service mode are automatically configured.

14. **Press the [Esc] key, and then click [Yes] on the confirmation message.**
15. **Press the [Esc] key to return to [Print Server Configuration Menu].**
16. **Assign print queues to the created printer.**

17. **From [Print Server Configuration Menu], select [Queues Serviced By Printer].**
18. **Select the printer created.**
19. **Press the [Insert] key to select a queue serviced by the printer.**

    You can select several queues.
20. **Follow the instructions on the screen to make other necessary settings.**

    Following these steps, check that the queues are assigned.
21. **Press the [Esc] key until "Exit?" appears, and then select [Yes] to exit PCONSOLE.**
22. **Start the print server by entering the following from the console of the NetWare server.**

    If the print server is in operation, quit and restart it.

    To quit

    ```
    CAREE: unload pserver
    ```

    To start

    ```
    CAREE: load pserver [print server name]
    ```

    If the printer works as configured, the message "Waiting for job" appears.

Setting up using Web Image Monitor

1. **Start Web Image Monitor.**
2. **Click [Login].**

   A dialog box for entering the login user name and login password appears.
3. **Enter the login user name and password, and then click [Login].**

   For details about the login user name and password, consult your network administrator.

   Depending on the configuration of your Web browser, the login user name and password might be saved. If you do not want to save them, configure your Web browser's settings so that this information is not saved.
4. **In the menu area, click [Configuration].**
5. **Under "Network", click [NetWare].**
6. **Confirm the settings, and then click [OK].**

   Configuration is now complete. Wait several minutes before restarting Web Image Monitor.
7. **Click [Logout].**
8. **Quit Web Image Monitor.**

Note

- If you cannot identify the printer you want to configure, check the printer name against the configuration page printed from the printer.

- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about login user names and passwords, see Security Reference, which is the administrator's manual.

Reference

- p.133 "Using Web Image Monitor"

Setting Up as a Remote Printer (NetWare 4.x, 5/5.1, 6/6.5)

Follow the procedure below to use the printer as a remote printer under NetWare 4.x, 5/ 5.1 and 6/6.5.

Important

- **To use the printer as a remote printer under NetWare 4.x, 5/5.1, 6/6.5, set it to NDS mode.**
- **Do not use the printer as a remote printer when Pure IP is used.**

Setting up using NWadmin

1. **From Windows, start NWadmin.**

   For details about NWadmin, see the NetWare manuals.
2. **Set up the network connection to a print queue. Select the object in which the print queue is located in the directory tree, and then click [Create] on the [Object] menu.**
3. **In the [Class of new object] box, click [Print Queue], and then click [OK].**
4. **In the [Print Queue Name] box, enter the name of the print queue.**
5. **In the [Print Queue Volume] box, click [Browse].**
6. **In the [Available objects] box, click the volume in which the print queue is created, and then click [OK].**
7. **Check the settings, and then click [Create].**
8. **Set up the network connection to a printer. Select the object in which the printer is located, and then click [Create] on the [Object] menu.**
9. **In the [Class of new object] box, click [Printer], and then click [OK]. For NetWare 5, click [Printer (Non NDPS)].**
10. **In the [Printer name] box, enter the printer name.**
11. **Select the [Define additional properties] check box, and then click [Create].**
12. **Assign print queues to the created printer. Click [Assignments], and then click [Add] in the [Assignments] area.**
13. **In the [Available objects] box, click the queue you created, and then click [OK].**

14. **Click [Configuration], click [Parallel] in the [Printer type] list, and then click [Communication].**
15. **Click [Manual load] in the [Communication type] area, and then click [OK]. Check the settings, and then click [OK].**
16. **Set up the network connection to a print server. Select a context specified, and then click [Create] on the [Object] menu.**
17. **In the [Class of new object] box, click [Print Server], and then click [OK]. For NetWare 5, click [Print Server (Non NDPS)].**
18. **In the [Print Server Name:] box, enter the print server name.**

    Use the same print server name specified using Web Image Monitor.
19. **Select the [Define additional properties] check box, and then click [Create].**
20. **Assign the printer to the created print server. Click [Assignments], and then click [Add] in the [Assignments] area.**
21. **In the [Available objects] box, click the queue you created, and then click [OK].**
22. **In the [Printers] area, click the printer you assigned, and then click [Printer Number].**
23. **Enter the printer number, and then click [OK]. Check the settings, and then click [OK].**

    Use the same printer number specified as the remote printer number using Web Image Monitor.
24. **Start the print server by entering the following from the console of the NetWare server.**

    If the print server is in operation, quit and restart it.

    To exit

    ```
    CAREE: unload pserver
    ```

    To start

    ```
    CAREE: load pserver [print server name]
    ```
25. **Enter the printer server name as the context name, and then press the [Enter] key.**
26. **Select the printer name on the context menu, and then press the [Enter] key.**

Setting up using Web Image Monitor

1. **Start Web Image Monitor.**
2. **Click [Login].**

   A dialog box for entering the login user name and login password appears.
3. **Enter the login user name and password, and then click [Login].**

   For details about the login user name and password, consult your network administrator.

   Depending on the configuration of your Web browser, the login user name and password might be saved. If you do not want to save them, configure your Web browser's settings so that this information is not saved.

4. **In the menu area, click [Configuration].**
5. **Under "Network", click [NetWare].**
6. **Confirm the settings, and then click [OK].**

   Configuration is now complete. Wait several minutes before restarting Web Image Monitor.
7. **Click [Logout].**
8. **Quit Web Image Monitor.**

Note

- If you cannot identify the printer you want to configure, check the printer name against the configuration page printed from the printer.
- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about login user names and passwords, see Security Reference, which is the administrator's manual.

Reference

- p.133 "Using Web Image Monitor"

4. Monitoring and Configuring the Machine

This chapter describes how to monitor and configure the machine.

Using Web Image Monitor

Using Web Image Monitor, you can check the machine status and change settings.

Available operations

The following operations can be remotely performed using Web Image Monitor from a client computer.

- Displaying machine status or settings
- Checking the print job status or history
- Checking, modifying, printing, or deleting print jobs stored in the Document Server
- Interrupting currently printing jobs
- Resetting the machine
- Managing the Address Book
- Making machine settings
- Making network protocol settings
- Making security settings

Configuring the machine

To perform the operations from Web Image Monitor, TCP/IP is required. After the machine is configured to use TCP/IP, operations from Web Image Monitor become available.

Recommended Web browser

- Windows:

  Internet Explorer 5.5 SP2 or higher

  Firefox 1.0 or higher

- Mac OS:

  Firefox 1.0 or higher

  Safari 1.0, 1.2, 2.0 (412.2) or higher

Web Image Monitor supports screen reader software. We recommend JAWS 7.0 or a later version.

Note

- Safari cannot be used on Mac OS X 10.4.1.

- Display and operation problems can occur if you do not enable JavaScript and cookies, or if you are using a non-recommended Web Browser.
- If you are using a proxy server, change the Web browser settings. Contact your administrator for information about the settings.
- If you click your browser's back button but the previous page does not appear, click the browser's refresh button and try again.
- Machine information is not automatically updated. To perform an update, click [Refresh] in the display area.
- We recommend using Web Image Monitor in the same network.
- If the machine is firewall-protected, it cannot be accessed from computers outside the firewall.
- When using the machine under DHCP, the IP address may be automatically changed by the DHCP server settings. Enable DDNS setting on the machine, and then connect using the machine's host name. Alternatively, set a static IP address to the DHCP server.
- If the HTTP port is disabled, connection to the machine using the machine's URL cannot be established. SSL setting must be enabled on this machine. For details, consult your network administrator.
- When using the SSL encryption protocol, enter "https://(machine's IP address or host name)/".
- Internet Explorer must be installed on your computer. Use the most recent available version. We recommend Internet Explorer 6.0 or later.
- When you are using Firefox, fonts and colors may be different, or tables may be out of shape.
- When using a host name under Windows Server 2003/2003 R2/2008/2008 R2 with IPv6 protocol, perform host name resolution using an external DNS server. The host file cannot be used.
- To use JAWS 7.0 under Web Image Monitor, you must be running Windows OS and Microsoft Internet Explorer 5.5 SP2, or a later version.
- If you are using Internet Explorer 8, downloading will be slower than with other browsers. To download faster with Internet Explorer 8, open the browser's [Internet Options] menu and register the machine's URL as a trusted site. Then disable SmartScreen filter for trusted sites. For details about these settings, see the Internet Explorer 8 Help files.
- You can access Web Image Monitor more quickly by registering the machine's URL as a bookmark. Note that the URL you register must be the URL of the top page, which is the page that appears before login. If you register the URL of a page that appears after login, Web Image Monitor will not open properly from the bookmark.

Displaying Top Page

This section explains the Top Page and how to display Web Image Monitor.

Important

- **When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10".**

1. **Start your Web browser.**
2. **Enter "http://(machine's IP address or host name)/" in your Web browser's URL bar.**

   Top Page of Web Image Monitor appears.

   If the machine's host name has been registered on the DNS or WINS server, you can enter it.

   When setting SSL, a protocol for encrypted communication, under environment which server authentication is issued, enter "https://(machine's IP address or host name)/".

   Every Web Image Monitor page is divided into the following areas:

BZU017

1. **Menu area**

   If you select menu, it's content will be shown on the work area.

2. **Tab area**

   Details about each menu appear.

3. **Header area**

   The dialog box for switching to the user mode and administrator mode appears, and each mode's menu will be displayed.

   The link to help and dialog box for keyword search appears.

4. **Help**

   Use Help to view or download Help file contents.

5. **Work area**

   Displays the contents of the item selected in the menu area.

Machine information in the work area is not automatically updated. Click [Refresh] at the upper right in the work area to update the machine information. Click the Web browser's [Refresh] button to refresh the entire browser screen.

Note

- When using a host name under Windows Server 2003/2003 R2/2008/2008 R2 with IPv6 protocol, perform host name resolution using an external DNS server. The host file cannot be used.

When User Authentication is Set

Login (using Web Image Monitor)

Follow the procedure below to log in when user authentication is set.

1. **Click [Login].**
2. **Enter a login user name and password, and then click [Login].**

   For details about the login user name and password, consult your network administrator.

   Depending on the configuration of your Web browser, the login user name and password might be saved. If you do not want to save them, configure your Web browser's settings so that this information is not saved.

Note

- For user code authentication, enter a user code in [Login User Name], and then click [Login].
- The procedure may differ depending on the Web browser used.

Log out (using Web Image Monitor)

Click [Logout] to log out.

Note

- When you log in and make the setting, always click [Logout].

About Menu and Mode

There are two modes available with Web Image Monitor: guest mode and administrator mode.

Displayed Items may differ depending on the machine type.

Guest Mode

In the guest mode, machine status, settings, and print job status can be viewed, but the machine settings cannot be changed.

BZU018

1. **Home**

   The [Status], [Device Info], [Counter], and [Inquiry] tab are displayed. Details of the tab menu are displayed on the work area.

2. **Document Server**

   Display files stored in the Document Server.

3. **Fax Received File**

   Display received fax files.

4. **Printer: Print Jobs**

   Allows you to display list of Sample Print, Locked Print, Hold Print, and Stored Print jobs.

5. **Job**

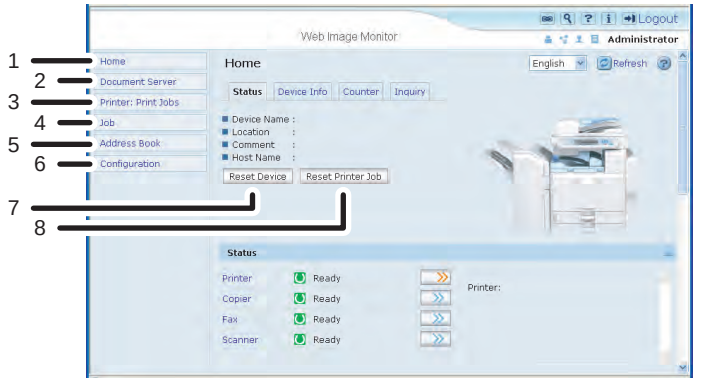
   Display all print files.

6. **Configuration**

   Display current machine and network settings.

Administrator Mode

In the administrator mode, you can configure various machine settings.



BZU019

1. **Home**

   The [Status], [Device Info], [Counter], and [Inquiry] tab are displayed. Details of the tab menu are displayed on the work area.

2. **Document Server**

   Display files stored in the Document Server.

3. **Printer: Print Jobs**

   Allows you to display list of Locked Print, Sample Print, Hold Print, and Stored Print jobs.

4. **Job**

   Display all print files.

5. **Address Book**

   User information can be registered, displayed, changed, and deleted.

6. **Configuration**

   Make system settings for the machine, interface settings, and security.

7. **Reset Device**

   Click to reset the printer. If a print job is being processed, the printer will be reset after the print job is completed. This button is located on Top Page.

8. **Reset Printer Job**

   Click to reset current print jobs and print jobs in queue. This button is located on Top Page.

Access in the Administrator Mode

Follow the procedure below to access Web Image Monitor in the administrator mode.

1. **On Top Page, click [Login].**

   The window for entering the login user name and password appears.

2. **Enter your login user name and password, and then click [Login].**

   For details about the login user name and password, consult your network administrator.

   Depending on the configuration of your Web browser, the login user name and password might be saved. If you do not want to save them, configure your Web browser's settings so that this information is not saved.

List of Setting Items

The following tables show Web Image Monitor items that can be viewed or modified depending on the selected mode on the Web browser. Select one of the following modes to log in Web Image Monitor:

- Guest mode: logged in as a user
- Administrator mode: logged in as an administrator

Home

Status

Menu	Guest mode	Administrator mode
Reset Device	None	Modify
Reset Printer Job	None	Modify
Status	Read	Read
Toner	Read	Read
Input Tray	Read	Read
Output Tray	Read	Read

Device Info

Menu	Guest mode	Administrator mode
Functions	Read	Read
System	Read	Read
Version	Read	Read
Printer Language	Read	Read

Counter

Menu	Guest mode	Administrator mode
Total	Read	Read
Copier	Read	Read
Printer	Read	Read
Fax	Read	Read
Send/TX Total	Read	Read
Fax Transmission	Read	Read
Scanner Send	Read	Read
Coverage	Read	Read
Other Function(s)	Read	Read

Inquiry

Menu	Guest mode	Administrator mode
Machine Maintenance/Repair	Read	Read
Sales Representative	Read	Read
Consumables	Read	Read

Document Server

Document Server

Guest mode	Administrator mode
Read/Modify	Read/Modify

Fax Received File

Fax Received File

Guest mode	Administrator mode
Read/Modify	None

Printer: Print Jobs

Print Job List

Guest mode	Administrator mode
Read/Modify	Read/Modify

Job

Job List

Menu	Guest mode	Administrator mode
Current/Waiting Jobs	Read	Read/Modify
Job History	Read	Read

Printer

Menu	Guest mode	Administrator mode
Spool Printing*1	Read	Read/Modify
Job History	Read	Read
Error Log	Read	Read

*1 "Spool Printing" appears only if the Spool function is enabled. You can enable and disable the Spool setting using the "spoolsw" telnet command.

Fax History

Menu	Guest mode	Administrator mode
Transmission	Read	Read
Reception	Read	Read
LAN-Fax	Read	Read

Document Server

Menu	Guest mode	Administrator mode
Print Job History	Read/Modify	Read/Modify
Fax Remote Send History	Read/Modify	Read/Modify
Scanner Remote Send History	Read/Modify	Read/Modify

Address Book

Menu	Guest mode	Administrator mode
Address Book	None	Read/Modify

Configuration

Device Settings

Menu	Guest mode	Administrator mode
System	Read	Read/Modify
Paper	Read	Read/Modify
Date/Time	Read	Read/Modify
Timer	Read	Read/Modify
Logs	None	Read/Modify
Download Logs	None	Read/Modify
E-mail	Read	Read/Modify
Auto E-mail Notification	None	Read/Modify
On-demand E-mail Notification	None	Read/Modify
File Transfer	None	Read/Modify
User Authentication Management	None	Read/Modify
Administrator Authentication Management	None	Read/Modify
Print Volume Use Limitation	None	Read/Modify
Program/Change Administrator	None	Read/Modify
LDAP Server	None	Read/Modify
Firmware Update	None	Read/Modify
Program/Change Realm	None	Read/Modify

Printer

Menu	Guest mode	Administrator mode
Basic Settings	Read	Read/Modify
Tray Parameters (PCL)	None	Read/Modify
Tray Parameters (PS)	None	Read/Modify
Virtual Printer Settings	Read	Read/Modify
PDF Temporary Password	Modify	None
PDF Group Password *1	None	Modify
PDF Fixed Password	None	Modify

*1 This setting is not available on this machine.

Fax

Menu	Guest mode	Administrator mode
Initial Settings	None	Read/Modify
Send / Reception Settings	None	Read/Modify
IP-Fax Settings	None	Read/Modify
IP-Fax Gateway Settings	None	Read/Modify
Parameter Settings	None	Read/Modify

Scanner

Menu	Guest mode	Administrator mode
General Settings	Read	Read/Modify
Scan Settings	Read	Read/Modify
Send Settings	Read	Read/Modify
Initial Settings	Read	Read/Modify
Default Settings for Normal Screens on Device	Read	Read/Modify

Menu	Guest mode	Administrator mode
Default Settings for Simplified Screens on Device	Read	Read/Modify

Interface

Menu	Guest mode	Administrator mode
Interface Settings	Read	Read/Modify
Wireless LAN Settings	Read	Read/Modify

Network

Menu	Guest mode	Administrator mode
IPv4	Read	Read/Modify
IPv6	Read	Read/Modify
NetWare	Read	Read/Modify
SMB	Read	Read/Modify
SNMP	None	Read/Modify
SNMPv3	None	Read/Modify
SSDP	None	Read/Modify
Bonjour	Read	Read/Modify
System Log	Read	Read

Security

Menu	Guest mode	Administrator mode
Network Security	None	Read/Modify
Access Control	None	Read/Modify
IPP Authentication	None	Read/Modify
SSL/TLS	None	Read/Modify
ssh	None	Read/Modify

Menu	Guest mode	Administrator mode
Site Certificate	None	Read/Modify
Device Certificate	None	Read/Modify
IPsec	None	Read/Modify
User Lockout Policy	None	Read/Modify
IEEE 802.1X	None	Read/Modify
S/MIME	None	Read/Modify

RC Gate

Menu	Guest mode	Administrator mode
Setup RC Gate	None	Read/Modify
Update RC Gate Firmware	None	Read
RC Gate Proxy Server	None	Read/Modify

Webpage

Menu	Guest mode	Administrator mode
Webpage	Read	Read/Modify

Extended Feature Settings

Menu	Guest mode	Administrator mode
Startup Setting	None	Read/Modify
Extended Feature Info	None	Read
Install	None	Read/Modify
Uninstall	None	Read/Modify
Change Allocation	None	Read/Modify
Administrator Tools	None	Read/Modify
Additional Program Startup Setting	None	Read/Modify

Menu	Guest mode	Administrator mode
Install Additional Program	None	Read/Modify
Uninstall Additional Program	None	Read/Modify
Copy Extended Features	None	Read/Modify
Copy Card Save Data	None	Read/Modify

Note

- Some items are not displayed depending on the security settings.

Displaying Web Image Monitor Help

When using Help for the first time, clicking the Help button ( ) makes the following screen appear, in which you can view Help in two different ways, as shown below:

Viewing Help on our Web site

You can view the latest Help information.

Downloading and Checking Help

You can download Help to your computer. As the Help URL, you can specify the path to the local file to view the Help without connecting to the Internet.

Note

- By clicking the Help button ( ) in the header area, the contents of Help appear.
- By clicking the Help button ( ) in the work area, Help for the setting items in the work area appears.

Downloading Help

1. **In the [OS] list, select the operating system.**
2. **In the [Language] list, select the language.**
3. **Click [Download].**
4. **Download Help by following the instructions on the screen.**
5. **Store the downloaded compressed file in a given location, and then decompress the file.**

   To create a link for the Help button ( ), save the downloaded Help files on a Web server.

Linking the URL of the downloaded Help

You can link the URL of the Help file on a computer or Web server to the Help button ( ).

1. **Log in to Web Image Monitor in the administrator mode.**
2. **In the menu area, click [Configuration].**
3. **Under "Webpage", click [Webpage].**
4. **In the [Set Help URL Target] box, enter the URL of the help file.**

   If you saved the help file to "\\Server_A\HELP\EN", enter "file://Server_A/HELP/". For example, if you saved the file to a Web server, and the URL of the index file is "http:// a.b.c.d/HELP/EN/index.html", enter "http://a.b.c.d/HELP/".
5. **Click [OK].**
6. **"Updating..." appears. Wait for about one or two minutes, and then click [OK].**

Note

- If you save the Help files on your hard disk, you must access them directly - you cannot link to them using the Help button ( ).

When Using IPP with SmartDeviceMonitor for Client

When using IPP with SmartDeviceMonitor for Client, note the following:

To use this function, you must first download SmartDeviceMonitor for Client from the manufacturer's Web site and install it on your computer. Contact your local dealer for information on downloading SmartDeviceMonitor for Client.

- The network printer can only receive one print job from SmartDeviceMonitor for Client at a time. While the network printer is printing, another user cannot access it until the job is finished. In this case, SmartDeviceMonitor for Client tries to access the network printer until the retry interval expires.
- If SmartDeviceMonitor for Client cannot access the network printer and times out, it will stop sending the print job. In this case, you should cancel the paused status from the print queue window. SmartDeviceMonitor for Client will resume access to the network printer. You can delete the print job from the print queue window, but canceling a print job printed by the network printer might cause the next job sent from another user to be incorrectly printed.
- If a print job sent from SmartDeviceMonitor for Client is interrupted and the network printer cancels the job because something went wrong, send the print job again.
- Print jobs sent from another computer do not appear in the print queue window, regardless of protocol.
- If various users send print jobs using SmartDeviceMonitor for Client to network printers, the printing order might not be the same as that in which the jobs were sent.
- An IP address cannot be used for the IPP port name because the IP address is used for the SmartDeviceMonitor for Client port name.
- When setting SSL, a protocol for encrypted communication, under the environment where the device certificate is installed, enter "https://(machine's IP address or host name)/ ". Internet Explorer must be installed on your computer. Use the highest version. Internet Explorer 6.0 or higher is recommended.
- If the [Security Alert] dialog box appears when accessing the machine using IPP to create or configure an IPP port, or when printing, install the certificate. To select the certificate store location when using Certificate Import Wizard, click [Place all certificates in the following store], and then click [Local Computer] under [Trusted Root Certification Authorities].

Note

- For details about SSL settings, consult your network administrator.

Machine Status Notification by E-Mail

Whenever a paper tray becomes empty or paper is jammed, an e-mail alert is issued to the registered addresses to notify the machine status.

For this notification, you can make the e-mail notification settings.

Notification timing and e-mail content can be set.

Important

- **Depending on your e-mail application, a phishing warning might appear after you receive an e-mail message. To prevent phishing warnings appearing after you receive e-mail from a specified sender, you must add the sender to your e-mail application's exclusion list. For details about how to do this, see your e-mail application's Help.**

The e-mail notification functions you can set are as follows:

- Auto e-mail notification

  Information including the machine status is automatically sent by e-mail. Before you use this function, register the e-mail address to be used.

- On-demand e-mail notification

  Information including the machine status is sent by e-mail when a request e-mail from the administrator is received.

The information that can be notified by auto e-mail notification is as follows:

- Call Service
- Out of Toner
- Toner Almost Empty
- Paper Misfeed
- Cover Open
- Out of Paper
- Almost Out of Paper
- Paper Tray Error
- Output Tray Full
- Unit Connection Error
- Duplex Unit Error
- Waste Toner Bottle is Full
- Waste Toner Bottle is Almost Full
- Add Staples
- Hole Punch Receptacle is Full

- File Storage Memory Full Soon
- Device Access Violation
- Replacement Required: Unit
- Replacement Required Soon: Unit

1. **Log in to Web Image Monitor in administrator mode.**
2. **In the menu area, click [Configuration].**
3. **Under "Device Settings", click [E-mail].**
4. **Make the following settings:**
   - Administrator E-mail Address: Specify the administrator's e-mail address. On e-mailed scanned documents, if the sender is not specified this appears as the sender's address.
   - Create Email Signature: Specify the signature appended to e-mails sent from the machine.
   - Items in the Reception column: Make the necessary settings for sending and receiving e-mail.
   - Items in the SMTP column: Configure the SMTP server. Check your mailing environment, and then specify the necessary items. You can also perform mail authentication for the SMTP server.
   - Items in the POP before SMTP column: Configure the POP server. Check your mailing environment, and then specify the necessary items. You can also perform mail authentication for the POP server.
   - Items in the POP3/IMAP4 column: Configure the POP3 or IMAP4 server. Check your mailing environment, and then specify the necessary items.
   - Items in the E-mail Communication Port column: Configure the port to be used for access to the mail server.
   - Items in the Fax E-mail Account column: Specify these items if you want to use on-demand e-mail notification.
   - Items in the E-mail Notification Account column: Specify these items If you want to use e-mail notification.
5. **Click [OK].**
6. **Click [Logout].**
7. **Quit Web Image Monitor.**

Note

- For details about login user name and password, see Security Reference, which is the administrator's manual.
- Depending on the configuration of your Web browser, the login user name and password might be saved. If you do not want to save them, configure your Web browser's settings so that this information is not saved.
- For details about the settings, see Web Image Monitor Help.

- For details about Web Image Monitor, see "Using Web Image Monitor".

Reference

- p.133 "Using Web Image Monitor"

Setting the Account for E-mail Notification

Before you use Auto E-mail Notification or On-demand E-mail notification, setup an e-mail account to be used for the function. Perform the following configuration task in Web Image Monitor.

1. **Log in to Web Image Monitor in administrator mode.**
2. **In the menu area, click [Configuration].**
3. **Under "Device Settings", click [E-mail].**
4. **Make the following settings in E-mail Notification Account:**
    - E-mail Notification E-mail Address: Enter the address using alphanumeric characters. This will appear as the sender (From:) of the e-mail notification. Send requests for e-mail notification to this address.
    - Receive E-mail Notification: Specify whether to use on-demand e-mail notification.
    - E-mail Notification User Name: Enter the specified user name for the e-mail account in "E-mail Notification E-mail Address".
    - E-mail Notification Password: Enter the specified password for the e-mail account in "E-mail Notification E-mail Address".
5. **Click [OK].**
6. **Click [Logout].**
7. **Quit Web Image Monitor.**

Note

- The user name and e-mail address that is already registered as e-mail destination cannot be specified as the recipient of e-mail notification.

Mail Authentication

You can configure mail authentication to prevent illegal use of the mail server.

SMTP Authentication

Specify SMTP authentication.

When mail is sent to the SMTP server, authentication is performed using the SMTP AUTH protocol by prompting the mail originator to enter the user name and password. This prevents illegal use of the SMTP server.

1. Log in to Web Image Monitor in administrator mode.
2. In the menu area, click [Configuration].
3. Under "Device Settings", click [E-mail].
4. Make the following settings in SMTP column:
   - SMTP Server Name: Enter the IP address or host name of the SMTP server.
   - SMTP Port No.: Enter the port number used when sending e-mail to the SMTP server.
   - SMTP Authentication: Enable or disable SMTP authentication.
   - SMTP Auth. E-mail Address: Enter the e-mail address.
   - SMTP Auth. User Name: Enter the SMTP account name.
   - SMTP Auth. Password: To set or change the password for SMTP AUTH.
   - SMTP Auth. Encryption: Select whether to encrypt the password or not.

     [Auto Select]: If the authentication method is PLAIN, LOGIN, CRAM-MD5, or DIGEST-MD5.

     [Active]: If the authentication method is CRAM-MD5 or DIGEST-MD5.

     [Inactive]: If the authentication method is PLAIN or LOGIN.
5. Click [OK].
6. Click [Logout].
7. Quit Web Image Monitor.

POP before SMTP Authentication

Select whether to log in to the POP3 server before sending e-mail.

1. Log in to Web Image Monitor in administrator mode.
2. In the menu area, click [Configuration].
3. Under "Device Settings", click [E-mail].
4. Make the following settings in POP before SMTP column:
   - POP before SMTP: Enable or disable POP before SMTP.
   - POP E-mail Address: Enter the e-mail address.
   - POP User Name: Enter the POP account name.
   - POP Password: To set or change the POP password.
   - Timeout setting after POP Auth.: Enter the time available before connecting to the SMTP server after logging in to the POP server.
5. Click [OK].
6. Click [Logout].
7. Quit Web Image Monitor.

Auto E-mail Notification

1. **Log in to Web Image Monitor in administrator mode.**
2. **In the menu area, click [Configuration].**
3. **Under "Device Settings", click [Auto E-mail Notification].**

   The dialog box for making notification settings appears.
4. **Make the following settings:**
   - Notification Message: You can set this according to your needs, for example, the machine's location, service representative contact information.
   - Items in the Groups to Notify column: E-mail notification addresses can be grouped as required.
   - Items in the Select Groups/Items to Notify column: Select groups for each notification type, such as machine status and error.

     To make detailed settings for these items, click [Edit] next to "Detailed Settings of Each Item".
5. **Click [OK].**
6. **Click [Logout].**
7. **Quit Web Image Monitor.**

Note

- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about the settings, see Web Image Monitor Help.

Reference

- p.133 "Using Web Image Monitor"

On-demand E-mail Notification

1. **Log in to Web Image Monitor in administrator mode.**
2. **In the menu area, click [Configuration].**
3. **Under "Device Settings", click [On-demand E-mail Notification].**

   The dialog box for making notification settings appears.
4. **Make the following settings:**
   - Notification Subject: Enter a text string to be added to the subject line of return e-mails.
   - Notification Message: You can set this according to your needs, for example, the machine's location, service representative contact information.
   - Restriction to Device Status Info.: Select whether or not to allow access to the information such as the machine settings and status.

- Items in the Receivable E-mail Address/Domain Name Settings column: Enter an e-mail address or domain name to use for requesting information by e-mail and to receive its return e-mail.

5. **Click [OK].**
6. **Click [Logout].**
7. **Quit Web Image Monitor.**

Note

- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about the settings, see Web Image Monitor Help.

Reference

- p.133 "Using Web Image Monitor"

Format of On-demand E-mail Messages

To use "on-demand e-mail notification", you need to send a request e-mail with a particular format to the machine.

Using your mail software, enter the following:

Format of the request e-mail

Item	Description
To	Enter the specified e-mail address in "E-mail Notification E-mail Address".
Subject	Enter "requeststatus".
From	Specify a valid mail address. The device information will be sent to the address specified here.

Note

- A mail message must be within 1 MB in size.
- E-mail may be incomplete if sent immediately after power on.
- The subject is not case sensitive.
- The body of a request e-mail has no meaning. Any text written in the e-mail body is ignored.

Remote Maintenance Using telnet

Important

- Remote Maintenance should be protected so that access is allowed to administrators only.
- The password is the same as the one of Web Image Monitor administrator. When the password is changed using "telnet", other's change also.

Using telnet

Follow the procedure below to use telnet.

Important

- Only one user at a time can log in to perform remote maintenance.
- If you are using Windows Vista/7, you must enable the telnet server and telnet client beforehand.

1. **Use the IP address or the host name of the machine to start telnet.**

   ```
   % telnet "IP address"
   ```

   For example, if the machine's IP address is "192.168.15.16", enter the address as follows:

   ```
   % telnet 192.168.15.16
   ```

2. **Enter your user name and password.**

   For details about the user name and password, consult your network administrator.

3. **Enter a command.**

4. **Quit telnet.**

   ```
   msh> logout
   ```

   A message asking you to confirm saving the changes appears.

5. **Enter "yes" to save the changes, and then press the [Enter] key.**

   If you do not want to save the changes, enter "no", and then press the [Enter] key. To make further changes, enter "return" at the command line, and then press the [Enter] key.

Note

- If the message "Can not write NVRAM information" appears, the changes are not saved. Repeat the procedure above.
- When the changes are saved, the network interface board is reset automatically with that changes.
- When the network interface board resets, the print job in print process will be printed. However, print jobs in queue will be canceled.

access

Use the "access" command to view and configure access control. You can also specify two or more access ranges.

View settings

```
msh> access
```

IPv4 configuration display

```
msh> access "ID" range
```

IPv6 configuration display

```
msh> access "ID" range6
```

IPv6 access mask configuration display

```
msh> access "ID" mask6
```

IPv4 configuration

```
msh> access "ID" range "start-address end-address"
```

Example: to specify accessible IPv4 addresses between 192.168.0.10 and 192.168.0.20:

```
msh> access 1 range 192.168.0.10 192.168.0.20
```

IPv6 configuration

```
msh> access "ID" range6 "start-address end-address"
```

Example: to specify accessible IPv6 addresses between 2001:DB8::100 and 2001:DB8::200.

```
msh> access 1 range6 2001:DB8::100 2001:DB8::200
```

IPv6 access mask configuration

```
msh> access "ID" mask6 "base-address prefixlen"
```

Example: to specify accessible IPv6 addresses to 2001:DB8::/32

```
msh> access 1 mask6 2001:DB8:: 32
```

Access control initialization

```
msh> access flush
```

- Use the "flush" command to restore the default settings so that all access ranges become "0.0.0.0" for IPv4, and "::" for IPv6.

Note

- You can specify each IPv6 entry by either range or mask. For the range parameter, you can select "start-address end-address". For the mask parameter, you can select "baseaddress prefixlen".
- The access range restricts computers from use of the machine by IP address. If you do not need to restrict printing, make the setting "0.0.0.0" for IPv4, and "::" for IPv6.
- Valid ranges must be from lower (start address) to higher (end address).

- For IPv4 and IPv6, you can select an ID number between 1 and 5.
- IPv6 can register and select the range and the mask for each access ranges.
- IPv6 mask ranges between 1 - 128 can be selected.
- Up to five access ranges can be specified. The entry is invalid if the target number is omitted.
- You cannot send print jobs, or access Web Image Monitor and diprint from a restricted IP address.

authfree

Use the "authfree" command to view and configure authfree parameters.

View settings

The following command displays the current authfree settings:

```
msh> authfree
```

IPv4/IPv6 configuration display

```
msh> authfree "ID"
```

IPv4 address configuration display

```
msh> authfree "ID" range
```

IPv6 address configuration display

```
msh> authfree "ID" range6
```

IPv6 address mask configuration display

```
msh> authfree "ID" mask6
```

IPv4 address configuration

```
msh> authfree "ID" range_addr1 range_addr2
```

IPv6 address configuration

```
msh> authfree "ID" range6_addr1 range6_addr2
```

IPv6 address mask configuration

```
msh> authfree "ID" mask6_addr1 masklen
```

Parallel/USB configuration

```
msh> authfree [parallel | usb] [on|off]
```

- To enable authfree, set to on. To disable authfree, set to off. Always specify the interface.

Authentication exclusion control initialization

```
msh> authfree flush
```

Note

- If print job authentication exclusion is not set, authentication exclusion control cannot be displayed.

autonet

Use the "autonet" command to configure AutoNet parameters.

View settings

The following command displays the current AutoNet settings:

```
msh> autonet
```

Configuration

You can configure AutoNet settings.

```
msh> autonet {on|off}
```

- {on} means "active" and {off} means "inactive".

Current interface priority configuration display

```
msh> autonet priority
```

Interface priority configuration

```
msh> autonet priority "interface_name"
```

- You can give interface's AutoNet parameter priority.
- Priority settings are available when multiple interfaces are installed.
- wlan can be specified only when the IEEE 802.11 interface is installed.

Interface	Interface configured
ether	Ethernet interface
wlan	IEEE 802.11 interface

Note

- If an interface is not selected, the current interface connection settings remain in effect.

bonjour

Use the "bonjour" command to display bonjour-related settings.

View settings

Bonjour settings are displayed.

```
msh> bonjour
```

Bonjour service name setting

You can specify the bonjour service name.

```
msh> bonjour cname "computer name"
```

- The computer name can be entered using up to 63 alphanumeric characters.
- If you do not specify a character string, the current setting is displayed.

Bonjour Installation location information setting

You can enter information about the location where the printer is installed.

```
msh> bonjour location "location"
```

- Information about the location can be entered using up to 32 alphanumeric characters.
- If you do not specify a character string, current setting is displayed.

Setting order of priority for each protocol

- msh> bonjour diprint [0-99]
- msh> bonjour lpr [0-99]
- msh> bonjour ipp [0-99]

You can specify the order of priority for "diprint", "lpr", and "ipp". Smaller numbers indicate higher priority.

IP TTL setting

```
msh> bonjour ipttl [1-255]
```

You can specify the IP TTL (the number of routers a packet can pass through).

- The default is 255.

Resetting the computer name and location information

You can reset the computer name and location information.

```
msh> bonjour clear {cname|location}
```

- cname: Reset the computer name. The default computer name will be displayed when the computer is restarted.
- location: Reset the location information. The previous location information will be deleted.

Interface configuration

```
msh> bonjour linklocal "interface_name"
```

- If you do not specify an interface, the Ethernet interface is selected automatically.
- If many types of interface are installed, configure the interface that communicates with linklocal address.
- If you do not specify an interface, the Ethernet interface is automatically selected.
- wlan can be specified only when the IEEE 802.11 interface is installed.

Interface	Interface configured
ether	Ethernet interface
wlan	IEEE 802.11 interface

Setting IPP-SSL printing

```
msh> bonjour ippport {ipp|ssl}
```

- If IPP-SSL Printing is set to ssl, the IPP port number will appear as 443, and IPP-SSL printing can be performed with higher security.
- If IPP-SSL Printing is set to ipp, the IPP port number will appear as 631. Port 631 is the port for normal IPP printing.

devicename

Use the "devicename" command to display and change the printer name.

View settings

```
msh> devicename
```

Printer name configuration

```
msh> devicename name "string"
```

- Enter a printer name using up to 31 alphanumeric characters.
- Set single names for each printer.

Printer name initialization

```
msh> devicename clear name
```

- Reset the printer name to its default.

dhcp

Use the "dhcp" command to configure DHCP settings.

View settings

The following command displays the current DHCP settings.

```
msh> dhcp
```

Configuration

You can configure DHCP.

```
msh> dhcp "interface_name" {on|off}
```

- Specify "on" to enable dhcp. Specify "off" to disable DHCP.
- If the DNS server address and domain name are obtained from DHCP, be sure to specify {on}.
- wlan can be specified only when the IEEE 802.11 interface is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	IEEE 802.11 interface

Current interface priority configuration display

```
msh> dhcp priority
```

Interface priority configuration

```
msh> dhcp priority "interface_name"
```

- You can select which interface has DHCP parameter priority.
- Priority settings are available when multiple interfaces are installed.

DNS server address selection

```
msh> dhcp dnsaddr {dhcp|static}
```

- Specify whether to obtain the DNS server address from the DHCP server or use the address set by a user.
- To obtain the DNS server address from the DHCP server, specify "dhcp". To use the address set by a user, specify "static".

Domain name selection

```
msh> dhcp "interface_name" domainname {dhcp|static}
```

- Specify whether to obtain the domain name from the DNS server or use the domain name set by a user.
- To obtain the domain name from the DHCP server, specify "dhcp". To use the domain name set by a user, specify "static".

Reference

- p.309 "Using DHCP"

dhcp6

Use the "dhcp6"command to display or configure DHCPv6 settings.

View settings

The following command displays the current DHCPv6 settings.

```
msh> dhcp6
```

DHCPv6-lite configuration and display

```
msh> dhcp6 "interface_name" lite {on|off}
```

Viewing and specifying DNS server address selection (obtained from the dhcpv6 server/user specified value)

```
msh> dhcp6 dnsaddr {dhcp|static}
```

DUID(DHCP unique ID) deletion and display

```
msh> dhcp6 duid clear
```

Viewing and specifying the time required to re-obtain the parameter obtained from dhcpv6

```
msh> dhcp6 option lifetime [0-65535]
```

- It can be entered between 0 and 65535 minutes.
- The default is 60 minutes.
- If you specify "0", you cannot re-obtain the value.

diprint

The direct printing port enables direct printing from a network-connected computer.

Use the "diprint" command to change direct printing port settings.

View settings

The following command displays the current direct printing port settings:

```
msh> diprint
```

Example output:

```
port 9100
timeout=300(sec)
bidirect on
conn multi
apl async
```

- The "port" specifies the port number of the direct printing port.
- The "bidirect" setting indicates whether the direct printing port is bidirectional or not.

Bidirectional communication settings

```
msh> diprint bidirect {on|off}
```

- The default is "on".

Setting timeout

```
msh> diprint timeout [30-65535]
```

- You can specify the timeout interval to use when the printer is expecting data from the network.
- The default is 300 seconds.
- This command functions in conjunction with the "lpr" command.

Specifying the number of concurrent connections

```
msh> diprint conn {multi|single}
```

- The above command specifies the number of concurrent diprint connections. Specify "multi" for multiple connections or "single" for a single connection.
- The default is "multi".

dns

Use the "dns" command to configure or display DNS (Domain Name System) settings.

View settings

The following command displays the current DNS settings:

```
msh> dns
```

IPv4 DNS server configuration

The following command enables or disables the IPv4 DNS server address:

```
msh> dns "ID" server "server address"
```

The following command displays a configuration using the IP address 192.168.15.16 on a DNS 1 server:

```
msh> dns 1 server 192.168.15.16
```

- You can register IPv4 DNS Server address.
- You can select an ID number between 1 and 3. You can select up to three ID numbers.
- You cannot use "255.255.255.255" as the DNS server address.

IPv6 DNS server configuration

The following command enables or disables the IPv4 DNS server address:

```
msh> dns "ID" server6 "server address"
```

- You can register IPv6 DNS Server address.
- The selectable ID number is between 1 and 3. You can select up to 3 ID.

Dynamic DNS function setting

```
msh> dns "interface_name" ddns {on|off}
```

- You can set the dynamic DNS function "active" or "inactive".
- {on} means "active" and {off} means "inactive".
- wlan can be specified only when the IEEE 802.11 interface is installed.

Interface name	Interface configured
ether	Ethernet interface

Interface name	Interface configured
wlan	IEEE 802.11 interface

Specifying the record overlap operation

```
msh> dns overlap {update|add}
```

- You can specify operations performed when records overlap.
- update: To delete old records and register new records.
- add: To add new records and store the old records.
- When CNAME overlaps, it is always changed, irrespective of the settings.

CNAME registration

```
msh> dns cname {on|off}
```

- You can specify whether to register CNAME.
- {on} means "active" and {off} means "inactive".
- The CNAME registered is the default name beginning with rnp. CNAME cannot be changed.

A records registration

```
msh> dns arecord {dhcp|own}
```

- dhcp: You can specify the method of registering an A record when the dynamic DNS function is enabled and DHCP is used.
- own: To register an A record using the printer as the DNS client.

  The DNS server address and the domain name already designated are used for the registration.

Record updating interval settings

```
msh> dns interval [1-255]
```

- You can specify the interval after which records are updated when using the dynamic DNS function.
- The updating interval is specified hourly. It can be entered between 1 and 255 hours.
- The default is 24 hours.

resolv.conf display

```
msh> dns resolv
```

Specifying the protocol when asking names during dual stacking

```
msh> dns resolv protocol {ipv4|ipv6}
```

- Appears during dual stacking only.

domainname

Use the "domainname" command to display or configure the domain name settings.

You can configure the Ethernet interface or IEEE 802.11 interface.

View settings

The following command displays the current domain name:

```
msh> domainname
```

Interface domain configuration

```
msh> domainname "interface_name"
```

Setting the Domain Name

```
msh> domainname "interface_name" name "domain name"
```

- A domain name can be entered using up to 63 alphanumeric characters.
- The Ethernet interface and IEEE 802.11 interface will have the same domain name.
- wlan can be specified only when the IEEE 802.11 interface is installed.

Interface	Interface set
ether	Ethernet interface
wlan	IEEE 802.11 interface

Deleting the Domain Name

```
msh> domainname "interface_name" clear name
```

etherauth

Use the "etherauth" command to display or modify the authentication related parameters for Ethernet.

View settings

```
msh> etherauth
```

802.1x configuration

```
msh> etherauth 8021x {on|off}
```

- {on} means "active" and {off} means "inactive".

etherconfig

Use the "etherconfig" command to view and configure the Ethernet parameters.

View settings

```
msh> etherconfig
```

Specify Ethernet Speed

```
msh> etherconfig speed {auto|10f|10h|100f|100h}
```

- auto=Auto Select
- 10f=10 Mbps Full Duplex
- 10h=10 Mbps Half Duplex
- 100f=100 Mbps Full Duplex
- 100h=100 Mbps Half Duplex

The default is "auto".

help

Use the "help" command to display the available command list and the procedures for using those commands.

Command list display

```
msh> help
```

Display of procedure for using commands

```
msh> help "command_name"
```

hostname

Use the "hostname" command to change the printer name.

View settings

```
msh> hostname
```

IPv4 Configuration

```
msh> hostname "interface_name" "printer_name"
```

- Enter the printer name using up to 63 alphanumeric characters.
- You cannot use a printer name beginning "RNP" (in either upper or lower case).
- The Ethernet interface and IEEE 802.11 interface will have the same printer name.
- wlan can be specified only when the IEEE 802.11 interface is installed.
- If you do not specify an interface, the Ethernet interface is selected automatically.

Interface name	Interface configured
ether	Ethernet interface
wlan	IEEE 802.11 interface

Initializing the printer name for each interface

```
msh>hostname "interface_name" clear name
```

ifconfig

Use the "ifconfig" command to view and configure TCP/IP (IP address, subnet mask, broadcast address, default gateway address) for the printer.

View settings

```
msh> ifconfig
```

IPv4 configuration

```
msh> ifconfig "interface_name" "address"
```

- If you did not enter an interface name, it is automatically set to the Ethernet interface.
- wlan can be specified only when the IEEE 802.11 interface is installed.

Interface name	Interface configured
ether	Ethernet Interface
wlan	IEEE 802.11 Interface

The following explains how to configure an IPv4 address 192.168.15.16 on the Ethernet interface.

```
msh> ifconfig ether 192.168.15.16
```

IPv6 configuration

```
msh> ifconfig "interface_name" inet6 "address" "prefixlen[1-128]"
```

The following explains how to configure an IPv6 address to 2001:DB8::100 with prefix length 64 on the Ethernet interface.

```
msh> ifconfig ether inet6 2001:DB8::100 64
```

Netmask configuration

```
msh> ifconfig "interface_name" netmask "address"
```

The following explains how to configure a subnet mask 255.255.255.0 on the Ethernet interface.

```
msh> ifconfig ether netmask 255.255.255.0
```

Broadcast address configuration

```
msh> ifconfig "interface_name" broadcast "address"
```

Changing the interface

```
msh> ifconfig "interface" up
```

- When using the optional IEEE 802.11 interface unit, you can specify either Ethernet or IEEE 802.11 interface.

Note

- To get the above addresses, contact your network administrator.
- Use the default configuration if you cannot obtain setting addresses.
- The IP address, subnet mask and broadcast address are the same as that for the Ethernet interface and IEEE 802.11 interface.
- TCP/IP configuration is the same for both the Ethernet and IEEE 802.11 interface. If interfaces are changed, the new interface inherits the configuration.
- Use "0x" as the initial two letters of a hexadecimal address.

info

Use the "info" command to display the printer information such as paper tray, output tray, and printer language.

Printer information display

```
msh> info
```

Reference

- p.198 "Getting Machine Information over the Network"

ipp

Use the "ipp" command to view and configure the IPP settings.

View settings

The following command displays the current IPP settings:

```
msh> ipp
```

IPP timeout configuration

Specify how many seconds the computer waits before canceling an interrupted print job. The time can be entered between 30 to 65535 seconds.

```
msh> ipp timeout [30-65535]
```

IPP user authorization configuration

Use IPP user authorization to restrict users to print with IPP. The default is "off".

```
msh> ipp auth {off|digest|basic}
```

- User authorization settings are "basic" and "digest".
- If user authorization is specified, register a user name. You can register up to 10 users.

IPP user name configuration

Configure IPP users according to the following messages:

```
msh> ipp user
```

The following message appears:

```
Input user number (1 to 10):
```

Enter the number, user name, and password.

```
IPP user name:user1
IPP password :*******
```

After configuring the settings, the following message appears:

```
IPP configuration changed.
```

ipsec

Use the "ipsec" command to view and configure the IPsec settings.

View settings

The following command displays the current IPsec settings:

```
msh> ipsec
```

Note

- For details about displayed contents, consult your administrator.

ipv6

Use the "ipv6" command to display and configure the IPv6 settings.

View Setting

```
msh> ipv6
```

IPv6 stateless address

```
msh> ipv6 stateless {on|off}
```

If "on" is selected, IPv6 requests information required for maintaining stateful connection to the router for as long as the printer power is turned on. This setting allows information from the router to be obtained constantly, and periodically refreshes the effective period of the stateless address.

logout

Use "logout" command to quit telnet.

Quit telnet

```
msh> logout
```

A confirmation message appears.

```
{yes|no|return}
```

Enter [yes], [no] or [return] by typing the word, and then press the [Enter] key.

To save the changes and quit telnet, enter [yes].

To discard the changes and quit telnet, enter [no].

To continue making changes, enter [return]

lpr

Use the "lpr" command to view and configure the LPR settings.

View Setting

```
msh> lpr
```

Checking host name when deleting the job

```
msh> lpr chkhost {on|off}
```

- The default is "on".

If "on" is selected, you can delete print jobs only from the IP address of the host that sent the print job. If LPR is disabled, you can also delete print jobs sent from IP addresses other than that of the host.

Printer Error Detection Function

```
msh> lpr prnerrchk {on|off}
```

- The default is "off".

If you set this to "on", the printer stops receiving data and will wait until the error is resolved before continuing processing a job.

netware

Use the "netware" command to view and configure the NetWare settings such as the print server name or file server name. The following commands are available only when the NetWare is installed.

NetWare Printer Server Names

```
msh> netware pname "character string"
```

- Enter the NetWare print server name using up to 47 characters.

NetWare File Server Names

```
msh> netware fname "character string"
```

- Enter the NetWare file server name using up to 47 characters.

Encap type

```
msh> netware encap {802.3|802.2|snap|ethernet2|auto}
```

Remote Printer Number

```
msh> netware rnum [0-254]
```

- The default is 0.

Timeout

```
msh> netware timeout [3-255]
```

- The default is 15.

Printer server mode

```
msh> netware mode pserver
msh> netware mode ps
```

Remote printer mode

```
msh> netware mode rprinter
msh> netware mode rp
```

NDS context name

```
msh> netware context "character string"
```

SAP interval

```
msh> netware sap_interval [0-3600]
```

It can be entered between 0 and 3600 seconds.

Setting login mode for file server

```
msh> netware login server
```

Setting login mode for NDS tree

```
msh> netware login tree
```

Setting login mode for NDS tree name

```
msh> netware tree "NDS tree name"
```

File transfer protocol

```
msh> netware trans {ipv4pri|ipxpri|ipv4|ipx}
```

- If you do not specify the protocol, the current setting is displayed.

Protocol	Set Protocol
ipv4pri	IPv4+IPX(IPv4)
ipxpri	IPv4+IPX(IPX)
ipv4	IPv4
ipx	IPX

passwd

Use the "passwd" command to change the remote maintenance password.

Changing the password

```
msh> passwd
```

- Enter the current password.
- Enter the new password.
- Renter the new password to confirm it.

Changing the password of the administrators using the Supervisor

```
msh> passwd {Administrator ID}
```

- Enter the new password.
- Renter the new password to confirm it.

Note

- Be sure not to forget or lose the password.
- The password can be entered using up to 32 alphanumeric characters. Passwords are case-sensitive. For example, "R" is not the same as "r".

pathmtu

Use the "pathmtu" command to display and configure the PathMTU Discovery service function.

View settings

```
msh> pathmtu
```

Configuration

```
msh> pathmtu {on|off}
```

- The default is "on".
- If the MTU size of the sent data is larger than the router's MTU, the router will declare it impassable, and communication will fail. If this happens, setting "pathmtu" to "on" optimizes the MTU size and prevents data output failure.
- Depending on the environment, information might not be obtained from the router, and communication will fail. If this happens, set "pathmtu" to "off".

prnlog

Use the "prnlog" command to obtain printer log information.

Print logs display

```
msh> prnlog
```

- Display previous print jobs.

```
msh> prnlog "ID Number"
```

- Specify the ID number of the displayed print log information to display additional details about a print job.

Reference

- p.209 "Understanding the Displayed Information"

rhpp

Use the "rhpp" command to view and configure RHPP settings.

View settings

```
msh> rhpp
```

Changing rhpp port number

```
msh> rhpp port [1024-65535]
```

- The default is 59100.

Setting timeout

```
msh> rhpp timeout [30-65535]
```

- The default is 300 seconds.

Note

- "RHPP" is an abbreviation of "Reliable Host Printing Protocol", which is a manufacturer-original printing protocol.

route

Use the "route" command to view and control the routing table.

Specified route information display

```
msh> route get "destination"
```

- Specify the IPv4 address to destination.

  "0.0.0.0" cannot be specified as the destination address.

Enabling/disabling specified IPv4 destination

```
msh> route active {host|net} "destination" {on|off}
```

- If you do not specify {host|net}, the host setting is automatically selected.

Adding IPv4 routing table

```
msh> route add {host|net} "destination" "gateway"
```

- Adds a host or network route to "destination", and a gateway address to "gateway" in the table.
- Specify the IPv4 address to destination and gateway.
- If you do not specify {host|net}, the host setting is selected automatically.
- You cannot specify "0.0.0.0" as the destination address.

Setting the Default IPv4 gateway

```
msh> route add default {gateway}
```

Deleting specified IPv4 destination from routing table

```
msh> route delete {host|net} "destination"
```

- If you do not specify {host|net}, the host setting is automatically selected.
- IPv4 address of destination can be specified.

Setting IPv6 default gateway

```
msh> route add6 default "gateway"
```

Adding a specified IPv6 destination to routing table

```
msh> route add6 "destination" "prefixlen[1-128]" "gateway"
```

- Specify the IPv6 address to destination and gateway.
- If the prefix of the address is between 1 and 127, the network is selected. If the prefix of the address is 128, the host is selected.
- You cannot register a record that has the same destination and prefix as a registered record.

- You cannot register a record that uses "0000:0000:0000:0000:0000:0000:0000:0000" as its destination.

Deleting a specified IPv6 destination from routing table

```
msh> route delete6 "destination" "prefixlen"
```

- Specify the IPv6 address to destination and gateway.

Display information about a specified IPv6 route information

```
msh> route get6 "destination"
```

- Specify the IPv6 address to destination and gateway.

Enabling/disabling a specified IPv6 destination

```
msh> route active6 "destination" "prefixlen[1-128]" {on|off}
```

Route initialization

```
msh> route flush
```

Note

- The maximum number of IPv4 routing tables is 16.
- The maximum number of IPv6 routing tables is 2.
- Set a gateway address when communicating with devices on an external network.
- The same gateway address is shared by all interfaces.
- "Prefixlen" is a number between 1 and 128.

set

Use the "set" command to set the protocol information display "up" or "down".

View settings

The following command displays the protocol information (up/down).

```
msh> set ipv4
msh> set ipv6
msh> set ipsec
msh> set netware
```

- This command is available only when the NetWare is installed.

```
msh> set smb
msh> set protocol
```

- When protocol is specified, information about TCP/IP, NetWare and SMB appears.

```
msh> set lpr
msh> set lpr6
```

```
msh> set ftp
msh> set ftp6
msh> set rsh
msh> set rsh6
msh> set diprint
msh> set diprint6
msh> set web
msh> set snmp
msh> set ssl
msh> set ssl6
msh> set nrs
msh> set rfu
msh> set rfu6
msh> set ipp
msh> set ipp6
msh> set http
msh> set http6
msh> set bonjour
msh> set bonjour6
msh> set nbt
msh> set ssdp
msh> set ssh
msh> set sftp
msh> set sftp6
msh> set wsdev
msh> set wsdev6
msh> set wsprn
msh> set wsscn
msh> set rhpp
msh> set rhpp6
msh> set lltd
msh> set pictbridge
```

Configuration

- Enter "up" to enable the protocol, and enter "down" to disable the protocol.

You can set the protocol to "active" or "inactive".

```
msh> set ipv4 {up|down}
```

- If you disable IPv4, you cannot use remote access after logging out. If you did this by mistake, you can use the control panel to enable remote access via IPv4.
- Disabling IPv4 also disables lpr, ftp, rsh, diprint, web, snmp, ssl, ipp, http, bonjour, wsdev, and sftp.

```
msh> set ipv6 {up|down}
```

- If you disable IPv6, you cannot use remote access after logging out. If you did this by mistake, you can use the control panel to enable remote access via IPv6.
- Disabling IPv6 also disables lpr6, ftp6, rsh6, diprint6, ssl6, ipp6, http6, bonjour6, wsdev6, and sftp6.

```
msh> set ipsec {up|down}
msh> set netware {up|down}
```

- This command is available only when the NetWare is installed.

```
msh> set smb {up|down}
msh> set lpr {up|down}
msh> set lpr6 {up|down}
msh> set ftp {up|down}
msh> set ftp6 {up|down}
msh> set rsh {up|down}
msh> set rsh6 {up|down}
msh> set diprint {up|down}
msh> set diprint6 {up|down}
msh> set web {up|down}
msh> set snmp {up|down}
msh> set ssl {up|down}
msh> set ssl6 {up|down}
```

- If Secured Sockets Layer (SSL, an encryption protocol) function is not available for the printer, you cannot use the function by enabling it.

```
msh> set nrs {up|down}
msh> set rfu {up|down}
msh> set rfu6 {up|down}
```

```
msh> set ipp {up|down}
msh> set ipp6 {up|down}
msh> set http {up|down}
msh> set http6 {up|down}
msh> set bonjour {up|down}
msh> set bonjour6 {up|down}
msh> set ssh {up|down}
msh> set ssdp {up|down}
msh> set nbt {up|down}
msh> set sftp {up|down}
msh> set sftp6 {up|down}
msh> set wsdev {up|down}
msh> set wsdev6 {up|down}
```

- If "wsdev" and "wsdev6" are enabled simultaneously, both appear as "up" on the protocol information display, but both use IPv4 for WSD (Device), WSD (Printer) and WSD (Scanner).

```
msh> set wsprn {up|down}
msh> set wsscn {up|down}
msh> set rhpp {up|down}
msh> set rhpp6 {up|down}
msh> set lltd {up|down}
msh> set pictbridge {up|down}
```

show

Use the "show" command to display the network interface board configuration settings.

View settings

```
msh> show
```

- If "-p" is added, you can view settings one by one.

Reference

- p.209 "Understanding the Displayed Information"

slp

Use "slp" command to view and configure the SLP settings.

```
msh> slp ttl "ttl_val[1-255]"
```

- You can search the NetWare server using SLP in the PureIP environment of NetWare 5/5.1. Using the "slp" command, you can configure the value of TTL which can be used by SLP multicast packet.
- The default value of TTL is 1. A search is executed only within a local segment. If the router does not support multicast, the settings are not available even if the TTL value is increased.
- The acceptable TTL value is between 1 and 255.
- This command is available only when the NetWare is installed.

smb

Use the "smb" command to configure or delete a computer or workgroup name for SMB.

View settings

```
msh> smb
```

Computer name settings

```
msh> smb comp "computer name"
```

- Set computer name using up to 15 characters.
- Names beginning with "RNP" or "rnp" cannot be entered.

Working group name settings

```
msh> smb group "work group name"
```

- Set workgroup name using up to 15 characters.

Comment settings

```
msh> smb comment "comment"
```

- Set comment using up to 31 characters.

Notify print job completion

```
msh> smb notif {on|off}
```

- To notify print job completion, specify "on". Otherwise, specify "off".

Deleting computer name

```
msh> smb clear comp
```

Deleting group name

```
msh> smb clear group
```

Deleting comment

```
msh> smb clear comment
```

View protocol

```
msh> smb protocol
```

snmp

Use the "snmp" command to display and edit the SNMP configuration settings such as the community name.

View settings

"IPX" is shown only when the NetWare is installed.

```
msh> snmp
```

- Default access settings 1 is as follows:

  Community name:public

  IPv4 address:0.0.0.0

  IPv6 address:::

  IPX address:00000000:000000000000

  Access type:read-only

  Effective Protocol:IPv4/IPv6/IPX
- Default access settings 2 is as follows:

  Community name:admin

  IPv4 address:0.0.0.0

  IPv6 address:::

  IPX address:00000000:000000000000

  Access type:read-write

  Effective Protocol:IPv4/IPv6/IPX
- If "-p" is added, you can view settings one by one.
- To display the current community, specify its registration number.

Display

```
msh> snmp ?
```

Community name configuration

```
msh> snmp "number" name "community_name"
```

- You can configure ten SNMP access settings numbered 1-10.
- The printer cannot be accessed from SmartDeviceMonitor for Admin or SmartDeviceMonitor for Client if “public” is not registered in numbers 1-10. When changing the community name, use SmartDeviceMonitor for Admin and SNMP Setup Tool to correspond with printer settings.
- The community name can be entered using up to 15 characters.

Deleting community name

```
msh> snmp "number" clear name
```

Access type configuration

```
msh> snmp "number" type "access_type"
```

Access type	Type of access permission
no	not accessible
read	read only
write	read and write
trap	user is notified of trapmessages

Protocol configuration

Use the following command to set protocols "active" or "inactive". If you set a protocol "inactive", all access settings for that protocol are disabled.

"IPX" is shown only when the NetWare is installed.

```
msh> snmp {ipv4|ipv6|ipx} {on|off}
```

- Specify "ipv4" for IPv4, "ipv6" for IPv6, or "ipx" for IPX/SPX.
- {on} means "active" and {off} means "inactive".
- All protocols cannot be turned off concurrently.

Configuration of protocol for each registration number

"IPX" is shown only when the NetWare is installed.

```
msh> snmp "number" active {ipv4|ipv6|ipx} {on|off}
```

- To change the protocol of access settings, use the following command. However, if you have disabled a protocol with the above command, activating it here has no effect.

Access configuration

"IPX" is shown only when the NetWare is installed.

```
msh> snmp "number" {ipv4|ipv6|ipx} "address"
```

- You can configure a host address according to the protocol used.
- The network interface board accepts requests only from hosts that have IPv4, IPv6, and IPX addresses with access types of "read-only" or "read-write". Enter "0" to have the network interface board accept requests from any host without requiring a specific type of access.
- Enter a host address to deliver "trap" access type information to.
- To specify IPv4 or IPv6, enter "ipv4" or "ipv6" followed by a space, and then the IPv4 or IPv6 address.
- To specify IPX/SPX, enter "ipx" followed by a space, the IPX address followed by a decimal, and then the MAC address of the network interface board.

sysLocation configuration

```
msh> snmp location "character string"
```

Deleting sysLocation

```
msh> snmp clear location
```

sysContact setting

```
msh> snmp contact "character string"
```

Deleting sysContact

```
msh> snmp clear contact
```

SNMP v1v2 function configuration

```
msh> snmp v1v2 {on|off}
```

- Specify "on" to enable, and "off" to disable.

SNMP v3 function configuration

```
msh> snmp v3 {on|off}
```

- Specify "on" to enable, and "off" to disable.

SNMP TRAP configuration

```
msh> snmp trap {v1|v2|v3} {on|off}
```

- Specify "on" to enable, and "off" to disable.

Remote configuration authorization configuration

```
msh> snmp remote {on|off}
```

- Specify "on" to enable, and "off" to disable the SNMP v1v2 setting.

SNMP v3 TRAP configuration display

```
msh> snmp v3trap
msh> snmp v3trap [1-5]
```

- If a number from 1 to 5 is entered, settings are displayed for that number only.

Configuring a sending address for SNMP v3 TRAP

"IPX" is shown only when the NetWare is installed.

```
msh> snmp v3trap [1-5] {ipv4|ipv6|ipx} "address"
```

Configuring a sending protocol for SNMP v3 TRAP

"IPX" is shown only when the NetWare is installed.

```
msh> snmp v3trap [1-5] active {ipv4|ipv6|ipx} {on|off}
```

Configuring a user account for SNMP v3 TRAP

```
msh> snmp v3trap [1-5] account "account_name"
```

- Enter an account name using up to 32 alphanumeric characters.

Deleting an SNMP v3 TRAP user account

```
msh> snmp v3trap [1-5] clear account
```

Configuring an SNMP v3 encryption algorithm

```
msh> snmp v3auth {md5|sha1}
```

Configuring SNMP v3 encryption

```
msh> snmp v3priv {auto|on}
```

- Set "auto" for automatic encryption configuration.
- If you select "on", plain-text communication becomes impossible - only encrypted communication is possible.

Note

- "Encrypted communication" means an encrypted password is set on the machine.
- To use SNMP Setup Tool, you must first download SmartDeviceMonitor for Admin from the manufacturer's Web site and install it on your computer. Contact your local dealer for information on downloading SmartDeviceMonitor for Admin.

sntp

The printer clock can be synchronized with a NTP server clock using Simple Network Time Protocol (SNTP). Use the "sntp" command to change the SNTP settings.

View settings

```
msh> sntp
```

NTP IPv4 server address configuration

You can specify the IPv4 address of the NTP server.

```
msh> sntp server "IPv4_address"
```

NTP hostname configuration

You can specify the hostname of the NTP server.

```
msh> sntp server "hostname"
```

Deleting NTP server configuration

```
msh> sntp server clear
```

Interval configuration

```
msh> sntp interval "polling_time"
```

- You can specify the interval at which the printer synchronizes with the operator-specified NTP server. The default is 60 minutes.
- The interval can be entered from 0, or between 15 and 10,080 minutes.

- If you set 0, the printer synchronizes with the NTP server only when you turn the printer on. After that, the printer does not synchronize with the NTP server.

Time-zone configuration

```
msh> sntp timezone "±hour_time"
```

- You can specify the time difference between the printer clock and NTP server clock. The values are between -12:00 and +13:00.

Note

- You can only select either the address or host name for the ntp server.

spoolsw

Use the "spoolsw" command to view and configure the Job Spool settings.

You can only specify diprint, trap, lpr, ipp, ftp, sftp, wsprn, and smb (TCP/IP) protocol.

- The "spoolsw" command for configuring Job Spool settings is available only when the optional hard disk is installed.

View settings

The Job Spool setting appears.

```
msh> spoolsw
```

Job Spool setting

```
msh> spoolsw spool {on|off}
```

- Specify "on" to enable Job Spool, or "off" to disable it.

Resetting Job spool setting

```
msh> spoolsw clear job {on|off}
```

- When the printer power is cut during job spooling, this determines whether to reprint the spooled job.

Protocol configuration

```
msh> spoolsw diprint {on|off}
msh> spoolsw lpr {on|off}
msh> spoolsw ipp {on|off}
msh> spoolsw smb {on|off}
msh> spoolsw ftp {on|off}
msh> spoolsw sftp {on|off}
msh> spoolsw wsprn {on|off}
```

ssdp

Use the "ssdp" command to view and configure the SSDP settings.

View settings

```
msh> ssdp
```

Setting effective time

```
msh> ssdp profile [1801-86400]
```

The default is 10800 seconds.

Advertise packet TTL settings

```
msh> ssdp ttl [1-255]
```

The default is 4.

ssh

Use the "ssh" command to view and configure the SSH settings.

View settings

```
msh> ssh
```

Data compression communication settings

```
msh> ssh compression {on|off}
```

The default is "on".

SSH/SFTP communication port setting

```
msh> ssh port [22, 1024-65535]
```

The default is 22.

SSH/SFTP communication timeout setting

```
msh> ssh timeout [0-65535]
```

The default is 300.

SSH/SFTP communication login timeout setting

```
msh> ssh logintimeout [0-65535]
```

The default is 300.

Setting an open key for SSH/SFTP

```
msh> ssh genkey {512|768|1024} "character string"
```

Create an open key for SSH/SFTP communication.

Usable characters are ASCII 0x20-0x7e (32 bytes) other than "0".

The default key length is 1024, and the character string is blank.

If you do not specify this parameter, an open key with the default value will be created.

Deleting open key for ssh/sftp communication

```
msh> ssh delkey
```

Note

- If you do not specify a character string, current setting is displayed.
- ssh can be used only with sftp.

status

Use the "status" command to display the printer status.

View messages

```
msh> status
```

Reference

- p.198 "Getting Machine Information over the Network"

syslog

Use the "syslog" command to display the information stored in the printer's system log.

View message

```
msh> syslog
```

Reference

- p.216 "Message List"

upnp

Use the "upnp" command to display and configure the universal plug and play.

Public URL display

```
msh> upnp url
```

Public URL configuration

```
msh> upnp url "string"
```

- Enter the URL string in the character string.

web

Use the "web" command to display and configure parameters on Web Image Monitor.

View settings

```
msh> web
```

URL configuration

You can set URLs linked by clicking [URL] on Web Image Monitor.

```
msh> web "ID" url http://"The URL or IP address you want to register"/
```

Specify "1" or "2" for ID as the number corresponding to the URL. Up to two URLs can be registered and specified.

Resetting URLs registered as link destinations

```
msh> web "ID" clear url
```

Specify "1" or "2" for ID as the corresponding number to the URL.

Link name configuration

You can enter the name for URL that appears on Web Image Monitor.

```
msh> web "ID" name "Name you want to display"
```

Specify "1" or "2" for ID the corresponding number to the link name.

Resetting URL names registered as link destinations

```
msh> web "ID" clear name
```

Specify "1" or "2" for ID as the number corresponding to the link name.

Help URL configuration

You can set URLs linked by clicking "?" on Web Image Monitor.

```
msh> web help http://"Help URL or IP address"/help/
```

Resetting Help URL

```
msh> web clear help
```

wiconfig

Use the "wiconfig" command to make settings for IEEE 802.11.

View settings

```
msh> wiconfig
```

View IEEE 802.11 information

```
msh> wiconfig cardinfo
```

If IEEE 802.11 is disabled or unavailable, information about it will not appear.

Configuration

```
msh> wiconfig "parameter"
```

Parameter	Value configured
mode {ap|802.11adhoc}	You can set the infrastructure mode (ap) or the 802.11 Ad hoc mode (802.11adhoc). The default is the infrastructure mode.
ssid "ID value"	You can specify an SSID in infrastructure mode. The characters you can enter in the SSID string are ASCII 0x20-0x7e (32 bytes). If you do not specify a character string, the machine will connect to the nearest access point. The default SSID is blank.
channel "channel no."	In 802.11 ad hoc mode, you can select a channel between 1 and 13, or 36, 40, 44, or 48. Be sure to set the same channel for all ports that will transmit and receive data. The default is "11". The channel in use might differ depending on the country. For details, see "Wireless LAN".
key "key value" val [1|2|3|4]	You can specify the WEP key by entering in hexadecimal. With a 64-bit WEP, you can use 10 digit hexadecimals. With a 128-bit WEP, you can use 26 digit hexadecimals. Up to four WEP keys can be registered. Specify the number to be registered with "val". When a WEP is specified by key, the WEP specified by key phrase is overwritten. To use this function, set the same key number and WEP key for all ports that transmit data to each other. Put "0x"on the front of WEP key. You can omit the numbers with "val". The key number is set to 1 when making these omissions. The default is blank.

Parameter	Value configured
keyphrase "phrase" val [1|2|3|4]	You can specify the WEP key by entering in ASCII. With a 64-bit WEP, you can use 5 digit hexadecimals. With a 128-bit WEP, you can use 13 digit hexadecimals. Up to four WEP keys can be registered. Specify the number to be registered with "val". When a WEP is specified by key phrase, the WEP specified by key is overwritten. To use this function, set the same key number and WEP key for all ports that transmit data to each other. You can omit the numbers with "val". The key number is set to1 when making these omissions. The default is blank.
encval [1|2|3|4]	You can specify which of the four WEP keys is used for packet encoding. "1" is set if a number is not specified.
wepauth {open|shared}	You can set an authorization mode when using WEP. The specified value and authorized mode are as follows: open: open system authorization (default) shared: shared key authorization
security {none|wep|wpa}	You can specify the Security Mode. none: No encryption (default) wep: WEP encryption wpa: WPA encryption
wpaenc {tkip|ccmp}	You can specify WPA encryption key when using WPA encryption. tkip: TKIP ccmp: CCMP (AES) (default)

Parameter	Value configured
wpaauth {wpapsk|wpa|wpa2psk|wpa2}	You can specify the WPA authentication mode when using WPA encryption. wpapsk: WPA-PSK authentication (default) wpa: WPA authentication wpa2psk: WPA2-PSK authentication wpa2: WPA2 authentication
psk "character string"	You can specify the Pre-Shared key. Usable characters: ASCII 0x20-0x7e (8 to 63 bytes). The default is blank.
eap {tls|ttls|leap|peap} {chap|mschap|mschapv2|pap|md5|tls}	You can specify the EAP authentication type. tls: EAP-TLS (default) ttls: EAP-TTLS leap: LEAP peap: PEAP chap, mschap, mschapv2, pap, md5, and tls are settings for the phase 2 method, and one of these must be specified if EAP-TTLS or PEAP is selected. Do not make these settings when using other EAP authentication types. If you select EAP-TTLS, you can select chap, mschap, mschapv2, pap, or md5. If you select PEAP, you can select mschapv2 or tls.
username "character string"	You can specify the login user name for the Radius server. Usable characters: ASCII 0x20-0x7e (31 bytes). The default is blank.

Parameter	Value configured
username2 "character string"	You can specify the phase 2 username for EAP-TTLS/PEAP phase 2 authentication. Usable characters: ASCII 0x20-0x7e (31 bytes). The default is blank.
domain "character string"	You can specify the login domain name for the Radius server. The characters you can enter are ASCII 0x20-0x7e (31 bytes), but not "@" or "\". The default is blank.
password "character string"	You can specify the login for the Radius server. Usable characters: ASCII 0x20-0x7e (128 bytes). The default is blank.
srvcert {on|off}	You can set the server certificate. The default is "off".
imca {on|off}	You can enable or disable the certificate when the intermediate certificate authority is present. The default is "off".
srvid "character string"	You can set the server ID and sub domain of the certificate server. Usable characters: ASCII 0x20-0x7e (128 bytes). The default is blank.
subdomain {on|off}	You can specify whether or not to permit access to the machine by users in subdomains. The default is "off".
connectinfo	Obtains connection information.
clear {a each command|all}	Returns the selected setting to its default value. If you specify "all", all settings will be restored to their default values.

Parameter	Value configured
miccheck {on|off}	You can enable or disable the MIC check function. The default setting is "On" (enabled). If you specify "Off", you cannot perform MIC checks. We recommend you specify "On" for the MIC check function when using this machine.

Reference

- p.44 "Wireless LAN"

wins

Use the "wins" command to configure the WINS server settings.

Viewing settings

```
msh> wins
```

- If the IPv4 address obtained from DHCP differs from the WINS IPv4 address, the DHCP address is the valid address.

Configuration

```
msh> wins "interface_name" {on|off}
```

- {on} means "active" and {off} means "inactive".
- Be sure to specify the interface.
- wlan can be specified only when the IEEE 802.11 interface is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	IEEE 802.11 interface

Address configuration

Use the following command to configure a WINS server IP address:

```
msh> wins "interface_name" {primary|secondary} "IP address"
```

- Use the "primary" command to configure the primary WINS server IP address.
- Use the "secondary" command to configure the secondary WINS server IP address.
- Do not use "255.255.255.255" as the IP address.

NBT (NetBIOS over TCP/IP) scope ID selection

You can specify the NBT scope ID.

```
msh> wins "interface_name" scope "ScopeID"
```

- The scope ID can be entered using up to 31 alphanumeric characters.
- Be sure to specify the interface.
- wlan can be specified only when the IEEE 802.11 interface is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	IEEE 802.11 interface

wsmfp

Use the "wsmfp" command to view and configure the WSD (Device), WSD (Printer) and WSD (Scanner) settings.

View settings

```
msh> wsmfp
```

Comment settings

```
msh> wsmfp comments "comment"
```

- If you do not specify a comment, current setting is displayed.

Location configuration

```
mah> wsmfp location "location"
```

- If you do not specify a comment, current setting is displayed.

Presentation URL configuration

```
msh> wsmfp url "URL"
```

- Enter the URL string in the "URL".

WSD (Device) TCP port configuration

```
msh> wsmfp devport "port_number"
```

- The Default is 53000.

WSD (Printer) TCP port configuration

```
msh> wsmfp prnport "port_number"
```

- The Default is 53001.

WSD (Printer) timeout configuration

```
msh> wsmfp prntimeout [30-65535]
```

- The default is 900 seconds.

WSD (Scanner) TCP port configuration

```
msh> wsmfp scnport "port_number"
```

- The Default is 53002.

Comment initialization

```
msh> wsmfp clear comments
```

Location initialization

```
msh> wsmfp clear location
```

Presentation URL initialization

```
msh> wsmfp clear url
```

8021x

Use "8021x" command to display IEEE 802.1x related information.

View settings

```
msh> 8021x
```

Configuration

```
msh> 8021x "parameter"
```

Parameter	Value configured
eap {tls|ttls|leap|peap} {chap|mschap|mschapv2|pap|md5|tls}	You can specify the EAP authentication type. tls: EAP-TLS (default) ttls: EAP-TTLS leap: LEAP peap: PEAP chap, mschap, mschapv2, pap, md5, and tls are settings for the phase 2 method, and one of these must be specified if EAP-TTLS or PEAP is selected. Do not make these settings when using other EAP authentication types. If you select EAP-TTLS, you can select chap, mschap, mschapv2, pap, or md5. If you select PEAP, you can select mschapv2 or tls.
username "character string"	You can specify the login user name for the Radius server. Usable characters: ASCII 0x20-0x7e (31 bytes). The default is blank.
username2 "character string"	You can specify the phase 2 username for EAP-TTLS/PEAP phase 2 authentication. Usable characters: ASCII 0x20-0x7e (31 bytes). The default is blank.
domain "character string"	You can specify the login domain name for the Radius server. The characters you can enter are ASCII 0x20-0x7e (64 bytes), but not "@" or "\". The default is blank.
password "character string"	You can specify the login password for the Radius server. Usable characters: ASCII 0x20-0x7e (128 bytes). The default is blank.

Parameter	Value configured
srvcert {on|off}	You can set the server certificate. The default is "off".
imca {on|off}	You can enable or disable the certificate when the intermediate certificate authority is present. The default is "off".
srvid "character string"	You can set the server ID and sub domain of the certificate server. Usable characters: ASCII 0x20-0x7e (128 bytes). The default is blank.
subdomain {on|off}	You can specify whether or not to permit access to the machine by users in subdomains use. The default is "off".
claer {a each command|all}	Returns the selected setting to its default value. If you specify "all", all settings will be restored to their default values. However, IEEE 802.1x Auth. status (enable or disable) for Ethernet and wireless LAN will not be initialized.

SNMP

Using the SNMP manager, you can get information about the machine.

The SNMP agent operating on UDP and IPX is incorporated into the built-in Ethernet board and optional IEEE 802.11 interface unit of this machine.

This machine also supports SNMPv3, which increases user authentication, data encryption, and access control security.

To encrypt communication by SNMPv3, you must specify the machine's encrypted password.

Important

- **If you changed the machine's community name, change the configuration of the connected computer accordingly, using SNMP Setup Tool. For details, see SNMP Setup Tool Help.**
- **To use SNMP Setup Tool, you must first download SmartDeviceMonitor for Admin from the manufacturer's Web site and install it on your computer. Contact your local dealer for information on downloading SmartDeviceMonitor for Admin.**

The default community names are [public] and [admin]. You can get MIB information using these community names.

Start SNMP Setup Tool

- Windows 2000:

  Click the [Start] button.

  Point to [SmartDeviceMonitor for Admin] on the [Programs] menu.

  Click [SNMP Setup Tool].

- Windows XP/Vista/7, Windows Server 2003/2003 R2/2008/2008 R2

  Click the [Start] button.

  Point to [SmartDeviceMonitor for Admin] on the [All Programs] menu.

  Click [SNMP Setup Tool].

Getting Machine Information over the Network

This section explains details of each item displayed in the machine status and information.

Current Machine Status

This section explains how you can check the machine's status and the items displayed. Depending on the options installed on the machine, some items might not be displayed.

- UNIX: Use the "stat" parameter and the "rsh", "rcp", "ftp", and "sftp" commands. "rsh" and "rcp" cannot be used in a Windows environment.
- telnet: Use the "status" command.

Messages	Description
Access Restricted	The job was canceled because user have no authority.
Add staples (Booklet: Back)	The staple of booklet finisher (back) is exhausted.
Add staples (Booklet: Both)	The staple of booklet finisher is exhausted.
Add staples (Booklet: Front)	The staple of booklet finisher (front) is exhausted.
Adjusting...	The machine is initializing or calibrating.
Call Service Center	There is a malfunction in the machine.
Canceled	The job is reset.
Canceling Job...	The job is being reset.
Cannot Eject Original Through	The original cannot be ejected.
Cannot multi-install: SD Card	The SD card has been configured using another device.
Card/Counter not inserted	The machine is waiting for prepaid card or key.
Coin or amount not inserted	The machine is waiting for coin to be inserted.
Coin/Key Counter not inserted	The machine is waiting for coin or key counter.
Configuring...	Setting is being changed.
Cooling Down Fusing Unit...	The fusing unit is cooling down.

Messages	Description
Cover Open: ADF	The document feeder is open.
Cover Open: Bridge Unit Left	The cover of the bridge unit left is open.
Cover Open: Bridge Unit Right	The cover of the bridge unit right is open.
Cover Open: Duplex Unit	The cover of the duplex unit is open.
Cover Open: Finisher	The cover of Finisher is open.
Cover Open: Finisher Front	The front cover of Finisher is open.
Cover Open: Finisher Upper	The upper cover of Finisher is open.
Cover Open: Front Cover	The front cover is open.
Cover Open: LCT	The cover of the Large Capacity tray is open.
Cover Open: Lower Right Cover	The lower right cover is open.
Cover Open: Upper Right Cover	The upper right cover is open.
Current Job Suspended	The current job is suspended.
Data Size Error	The data size error occurred.
Empty: Black Toner	The black toner cartridge is almost empty.
Empty: Cyan Toner	The cyan toner cartridge is almost empty.
Empty: Magenta Toner	The magenta toner cartridge is almost empty.
Empty: Yellow Toner	The yellow toner cartridge is almost empty.
Energy Saver Mode	The machine is in Energy Saver Mode.
Envelope Setting Error: None	Printing paper type other than envelope is instructed when B2 lever is down.
Envelope Setting Error: Others	Printing envelope is instructed when B2 lever is down.
Error	An error has occurred.
Error: Address Book	An error has occurred in the data of the address book.
Error: Command Transmission	An error has occurred in the machine.

Messages	Description
Error: DIMM Value	A memory error occurred.
Error: Ethernet Board	An Ethernet board error has occurred.
Error: HDD Board	A hard disk drive board error has occurred.
Error: Media Link Board	An error has occurred on the File Format Converter.
Error: Memory Switch	A memory switch error has occurred.
Error: Optional Font	An error has occurred in the font file of the machine.
Error: Optional RAM	An error has occurred in the optional memory unit.
Error: Parallel I/F Board	An error has occurred in the parallel interface.
Error: PDL	An error has occurred in the page description language.
Error: Rem. Certificate Renewal	An error has occurred in the remote server renewal.
Error: USB Board	An error has occurred in the USB interface board.
Error: USB Interface	An error has occurred in the USB interface.
Error: Wireless Board	An error has occurred in the wireless interface board or IEEE 802.11 interface unit.
Error: Wireless Card	Wireless card is not inserted during start up, or the IEEE 802.11 interface unit or the wireless card is taken out after start up.
Exceed Booklet Stapling Limit	The printing has exceeded the stapling limit of the booklet finisher.
Exceed Stapling Limit	The printing has exceeded the stapling limit.
Full: Finisher	Finisher tray is full.
Full: Finisher Booklet Tray	Booklet tray of Finisher is full.
Full: Finisher Shift Tray	Shift tray of Finisher is full.
Full: Finisher Shift Tray 1, 2	The shift tray 1 and 2 of Finisher are full.
Full: Finisher Upper Tray	Finisher's upper tray is full.
Full: Hole Punch Receptacle	Punch Chip receptacle for hole punch is full.

Messages	Description
Full: Internal Tray 1	The internal tray 1 is full.
Full: Log Data Capacity	The log data capacity is full.
Full: Waste Toner	The waste toner is full.
Hex Dump Mode	It is a hex dump mode.
Immed. Trans. not connected	It did not connect directly with the other party of the transmission.
Immediate Transmission Failed	An error has occurred while transmitting directly.
In Use: Copier	The copier is being used.
In Use: Fax	The fax is being used.
In Use: Finisher	Other functions is using Finisher.
In Use: Input Tray	Other functions is using the input tray.
In Use: Staple Unit	Other functions is using the staple unit.
Independent-supplier Toner	Toner that is not recommended is set.
Jobs Suspended	All jobs are suspended.
Key Card not inserted	The machine is waiting for key card to be inserted.
Key Card/Counter not inserted	The machine is waiting for key card or key counter to be inserted.
Key Counter not inserted	The machine is waiting for key counter to be left in it.
Loading Toner...	Toner is being supplied.
Log Data Transfer failed	Log transfer has failed.
Low: Black Toner	The black toner cartridge is not set correctly, or toner is almost running out.
Low: Cyan Toner	The cyan toner cartridge is not set correctly, or toner is almost running out.
Low: Magenta Toner	The magenta toner cartridge is not set correctly, or toner is almost running out.

Messages	Description
Low: Toner	The toner cartridge is not set correctly, or toner is almost running out.
Low: Yellow Toner	The yellow toner cartridge is not set correctly, or toner is almost running out.
Malfunction: Booklet Processor	There is a problem with booklet finisher.
Malfunction: Duplex Unit	There is a problem with the duplex unit.
Malfunction: Ext. Charge Unit	There is a problem with the external charge unit.
Malfunction: Finisher	There is a problem with the finisher.
Malfunction: Interposer	There is a problem with the interposer.
Malfunction: LCT	There is a problem with the large capacity tray.
Malfunction:Lower Paper Tray(s)	There is a problem with the bank motor.
Malfunction: Output Tray	There is a problem with the output tray.
Malfunction: Punch Unit	There is a problem with the punch unit.
Malfunction: Staple Unit	There is a problem with the staple unit.
Malfunction: Tray 1	There is a problem with tray 1.
Malfunction: Tray 2	There is a problem with tray 2.
Malfunction: Tray 3	There is a problem with tray 3.
Malfunction: Tray 4	There is a problem with tray 4.
Memory Low: Copy	Memory shortage has occurred while the copy was operating.
Memory Low: Data Storage	Memory shortage has occurred while the document was being accumulated.
Memory Low: Fax Scanning	Memory shortage has occurred while transmitting the fax.
Memory Low: Scanning	Memory shortage has occurred while the scanner was working.
Miscellaneous Error	Other error has occurred.

Messages	Description
Mismatch: Paper Size	Indicated paper tray does not contain paper of selected size.
Mismatch: Paper Size and Type	Indicated paper tray does not contain paper of selected size and type.
Mismatch: Paper Type	Indicated paper tray does not contain paper of selected type.
Near Replacing: Black PCU	Prepare the new black photoconductor unit.
Near Replacing: Color Dev. Unit	Prepare the new color development unit.
Near Replacing: Color PCU	Prepare the new color photoconductor unit.
Near Replacing: Develop. Unit C	Prepare the new development unit (cyan).
Near Replacing: Develop. Unit K	Prepare the new development unit (black).
Near Replacing: Develop. Unit M	Prepare the new development unit (magenta).
Near Replacing: Develop. Unit Y	Prepare the new development unit (yellow).
Near Replacing: Fusing Roller	Prepare the new fusing roller.
Near Replacing: Fusing Unit	Prepare the new fusing unit.
Nearly Full: Log Data Capacity	The log is nearing data capacity
Nearly Full: Waste Toner	Waste toner bottle is nearly full.
Need more Staples	Stapler has almost run out of staples.
No Paper: Interposer Tray	There is no paper in interposer unit.
No Paper: LCT	There is no paper in Large Capacity Tray.
No Paper: Selected Tray	There is no paper in specified tray.
No Paper: Tray 1	There is no paper in tray 1.
No Paper: Tray 2	There is no paper in tray 2.
No Paper: Tray 3	There is no paper in tray 3.
No Paper: Tray 4	There is no paper in tray 4.
Not Detected: B2 Lever	B2 lever is not correctly set.

Messages	Description
Not Detected: Black Toner	Black toner is not correctly set.
Not Detected: Cyan Toner	Cyan toner is not correctly set.
Not Detected: Develop. Unit (C)	The development unit (cyan) is not correctly set.
Not Detected: Develop. Unit (K)	The development unit (black) is not correctly set.
Not Detected: Develop. Unit (M)	The development unit (magenta) is not correctly set.
Not Detected: Develop. Unit (Y)	The development unit (yellow) is not correctly set.
Not Detected: Duplex Feed Unit	The duplex unit is not correctly set.
Not Detected: Duplex Unit	The duplex feed unit is not correctly set.
Not Detected: Finisher	The finisher is not correctly set.
Not Detected: Fusing Unit	The fusing unit is not correctly set.
Not Detected: Input Tray	The paper feed tray is not correctly set.
Not Detected: Interposer	Interposer unit is not correctly set.
Not Detected: LCT	Large Capacity Tray is not correctly set.
Not Detected: Magenta Toner	Magenta toner is not correctly set.
Not Detected: PCU (C)	The photoconductor unit (cyan) is not correctly set.
Not Detected: PCU (K)	The photoconductor unit (black) is not correctly set.
Not Detected: PCU (M)	The photoconductor unit (magenta) is not correctly set.
Not Detected: PCU (Y)	The photoconductor unit (yellow) is not correctly set.
Not Detected: Transfer Unit	The transfer unit is not correctly set.
Not Detected: Tray 1	Tray 1 is not correctly set.
Not Detected: Tray 2	Tray 2 is not correctly set.
Not Detected: Tray 3	Tray 3 is not correctly set.
Not Detected: Tray 4	Tray 4 is not correctly set.

Messages	Description
Not Detected: Waste Toner Bottle	Waste toner bottle is not correctly set.
Not Detected: Yellow Toner	Yellow toner is not correctly set.
Not Detected: Int. Transfer Unit	Int.transfer unit is not correctly set.
Not Reached, Data Deleted	Unreached job is deleted.
Not Reached, Data Stored	Unreached documents are saved.
Offline	Machine is offline.
Operating Thermo-range Error	The machine is operating outside the permissible temperature range.
Original on Exposure Glass	The original remains on the exposure glass.
Panel Off Mode	The machine is in Panel-Off mode.
Panel Off Mode>>Printing ava.	The machine is in Control Panel-Off mode.
Paper in Duplex Unit	The paper remains in the duplex unit.
Paper in Finisher	The paper remains in Finisher.
Paper Misfeed: ADF	The paper has jammed in Document Feeder.
Paper Misfeed: Duplex Unit	The paper has jammed in Duplex Unit.
Paper Misfeed: Finisher	The paper has jammed in Finisher.
Paper Misfeed: Input Tray	The paper has jammed in the input tray.
Paper Misfeed: Internal Path	The paper has jammed inside the machine.
Paper on FinisherShiftTray1, 2	The paper remains in Finisher Shift Tray 1 and 2.
Paper on Finisher Shift Tray 2	The paper remains in Finisher Shift Tray 2.
Prepaid Card not inserted	The prepaid card is not inserted, or has insufficient credit.
Print Complete	The print was completed.
Printing...	Printing is in progress.
Processing	Data is being processed.

Messages	Description
Proxy Address/Port Incorrect	The proxy address and port setting is incorrect.
Proxy User/Password Incorrect	The proxy user name and password setting is incorrect.
Readjusting...	The machine is readjusting itself.
Ready	The machine is ready to print.
Renewing Remote Certificate	The remote certificate is being renewed.
Replace Charger Kit	It is time to replace the charger kit.
Replace Cleaning Web	It is time to replace the Cleaning Web.
Replace Develop. Unit	It is time to replace the development unit.
Replace Develop. Unit (Black)	It is time to replace the development unit (black).
Replace Develop. Unit (Color)	It is time to replace the development unit (color).
Replace Develop. Unit (Cyan)	It is time to replace the development unit (cyan).
Replace Develop. Unit (Magenta)	It is time to replace the development unit (magenta).
Replace Develop. Unit (Yellow)	It is exchange time of the development unit (yellow).
Replace Fusing Roller	It is time to replace the fusing roller.
Replace Fusing Unit	It is time to replace the fusing unit.
Replace Int. Transfer Unit	It is time to replace the int. transfer unit.
Replace Transfer Cleaning Unit	It is time to replace the transfer cleaning unit.
Replace Transfer Roller	It is time to replace the transfer roller.
Reset IPDS fonts	An IPDS font error occurred.
Retarding...	Printing has stopped momentarily to allow printed sheets to dry.
SD Card Authentication failed	SD card authentication failed.
SD Card not inserted	The machine is waiting for SD card.
Setting Remotely	The RDS setting is being processed.

Messages	Description
Skipped due to Error	Skipped the error.
Storage Complete	The storage is complete.
Storage Failed	The storage has failed.
Supplies Order Call failed	The supply order call has failed.
Suspend / Resume Key Error	Finisher stop button was pressed.
Transmission Aborted	The transmission was interrupted.
Transmission Complete	The transmission completion was completed.
Transmission Failed	The transmission has failed.
Tray Error: Chaptering	The paper feed tray specification error has occurred because chaptering as well as the normal paper use the same tray for printing.
Tray Error: Duplex Printing	Selected paper tray cannot be used for duplex printing.
Unit Left Open: ADF	Document feeder is opened.
Waiting for Job Suspension	The machine is waiting for Job Suspension.
Warming Up...	The machine is warming up.

Note

- For details about UNIX commands, see UNIX Supplement.
- Check the error contents that may be printed in the configuration page.

Printer configuration

You can check the printer configuration using telnet.

This section explains the checking procedure for input/output tray and printer language.

- UNIX: Use the "info" parameter and the "rsh", "rcp", "ftp", and "sftp" commands. "rsh" and "rcp" cannot be used in a Windows environment.
- telnet: Use the "info" command.

Input Tray

Item	Description
No.	ID number of the paper tray
Name	Name of the paper tray
Paper Size	Size of paper loaded in the paper tray
Status	Current status of the paper tray • Normal: Normal • NoInputTray: No tray • PaperEnd: No paper

Output Tray

Item	Description
No.	ID number of the output tray
Name	Name of the output tray
Status	Current status of the output tray • Normal: Normal • PaperExist: Paper exist • OverFlow: Paper is full • Error: Other errors

Printer Language

Item	Description
No.	ID number of the printer language used by the machine
Name	Name of the printer language used in the machine
Version	Version of the printer language

Note

- For details about UNIX commands and parameters, see UNIX Supplement.

Understanding the Displayed Information

This section explains how to read status information returned by the network interface board.

Print Job Information

Use the following command to display print job information:

- UNIX: Use the "stat" parameter and the "rsh", "rcp", "ftp", and "sftp" commands. "rsh" and "rcp" cannot be used in a Windows environment.
- telnet: Use the "status" command.

Item	Description
Rank	Print job status. • Active Printing or preparing for printing. • 1st, 2nd, 3rd, 4th... Waiting to be transferred to the printer.
Owner	Print request user name.
Job	Print request number.
Files	The name of the document.
Total Size	The size of the data (spooled). The default is 0 bytes.

Note

- For details about UNIX commands and parameters, see UNIX Supplement.

Print Log Information

This is a record of the most recent jobs printed.

Use the following command to display print log information:

- UNIX: Use the "prnlog" parameter and the "rsh", "rcp", "ftp", and "sftp" commands.
- telnet : Use the "prnlog" command.

Item	Description
ID	Print request ID.
User	Print request user name.
Page	Number of pages printed
Result	Print Request Result Communication Result • Finished Print was completed normally. However, the print result may not be as required due to printer problems. • Failed Printing was not completed normally. • Canceled An "rcp", "rsh", or "lpr" command print request was canceled, possibly due to the printing application. Not applicable to the "ftp" or "rprinter" command.
Time	Time the print requested was received. Time of print request reception
User ID (when designating Job ID on telnet)	Printer driver-configured User ID. Appears when the print request ID is specified.
JobName (when designating Job ID on telnet)	Name of the document for printing Appears when the print request ID is specified.

Note

- For details about UNIX commands and parameters, see UNIX Supplement.

Configuring the Network Interface Board

Use the following command to display network interface board settings:

- telnet : Use the "show" command.

Protocol Up/Down

The following protocols are displayed ("Up" indicates enabled; "Down" indicates disabled):.

IPv4, IPv6, IPsec, NetWare, SMB

Device Up/Down

The following devices are displayed ("Up" indicates enabled; "Down", indicates disabled):.

Parallel, USB

Ethernet interface

Displays the Ethernet speed.

Syslog priority

"LOG_INFO" is displayed.

NVRAM version

Displays the NVRAM version.

Device name

Displays the device name.

Comment

Displays the comment(s).

Location

Displays the location of the device.

Contact

Displays the contact details.

Soft switch

Displays the soft switch.

TCP/IP

The following items are displayed: ("Up" indicates enabled; "Down", indicates disabled):.

- Mode (IPv4)
- Mode (IPv6)

  ftp, lpr, rsh, diprint, web, http, ftpc, snmp, ipp, autonet, Bonjour, ssl, nrs, rfu, nbt, ssdp, ssh, sftp, WSD (Device), WSD (Printer), WSD (Scanner), rhpp
- IPv4

  DHCP, Address, Netmask, Broadcast, Gateway
- IPv6

  Stateless, Manual, Gateway, DHCPv6-lite, DUID, DHCPv6 option lifetime
- IPsec

  Manual Mode, Excluded Protocol (https, dns, dhcp, wins)
- EncapType

- Host name
- DNS Domain
- Access Control

  IPv4: Access Entry [1]-[5]

  IPv6: Access Entry [1]-[5]
- SNTP Server
- Time Zone
- SNTP Server polling time
- SYSLOG server
- Home page URL1
- Home page link name1
- Home page URL2
- Home page link name2
- Help page URL
- RHPP Port
- RHPP timeout

NetWare

The following items are displayed:

- EncapType
- RPRINTER number
- Print server name
- File server name
- Context name
- Switch

  Mode, NDS/Bindery, Packet negotiation, Login Mode
- Print job timeout
- Protocol
- SAP interval time
- NDS Tree Name
- Transfer Protocol

SMB

The following items are displayed:

- Switch

Mode, Direct print, Notification

- Workgroup name
- Computer name
- Comment
- Share name [1]
- Protocol

Wireless LAN

The following items are displayed:

Host name, Communication Mode, SSID, Channel, Security, WEP Authentication, WEP Encryption key number, WEP Encryption keys [1]-[4], WPA Encryption, WPA Authentication, Pre-Shared Key, User name, Domain name, EAP Type, Password, Phase 2 user name, Phase 2 Method TTLS, Phase 2 Method PEAP, Server cert., Intermediate CA, Server ID, Sub domain, Mic check

Ethernet

The following item is displayed:

802.1X Authentication

DNS

The following items are displayed:

- IPv4

  Server [1]-[3], Selected IPv4 DNS Server

- IPv6

  Server [1]-[3], Selected IPv6 Dns Server, Resolver Protocol

Domain name

The following items are displayed:

ether, wlan

DDNS

The following items are displayed:

ether, wlan

WINS

The following items are displayed:

- ether

  Primary WINS, Secondary WINS

- wlan

  Primary WINS, Secondary WINS

SSDP

The following items are displayed:

UUID, Profile, TTL

UPnP

The following item is displayed:

URL

Bonjour

The following items are displayed:

Computer Name (cname), Local Hostname (ether), Local Hostname (wlan), Location, Priority (diprint), Priority (lpr), Priority (ipp), IP TTL, LinkLocal Route for Multi I/F, IPP Port

SNMP

The following items are displayed:

SNMPv1v2, SNMPv3, protocol, v1Trap, v2Trap, v3Trap, SNMPv1v2 Remote Setting, SNMPv3 Privacy

ssh

The following items are displayed:

Compression, Port, TimeOut, LoginTimeOut

AuthFree

The following items are displayed:

- IPv4

  AuthFree Entry [1]-[5]
- IPv6

  AuthFree Entry [1]-[5]
- Parallel
- USB

LPR

The following items are displayed:

lprm check host, lpr prnerrchk

Certificate

The following item is displayed:

Verification

WS-MFP

The following items are displayed:

Network Device Name, Comments, Location, Presentation URL, WSD (Device) TCP Port, WSD (Printer) TCP Port, WSD (Printer) Job Timeout, WSD (Scanner) TCP Port, MetadataVersion, UUID

IEEE 802.1X

The following items are displayed:

User name, Domain name, EAP Type, Password, Phase 2 user name, Phase 2 Method TTLS, Phase 2 Method PEAP, Server cert, Intermediate CA, Server ID, Sub domain

Shell mode

"User mode" is displayed.

Message List

This is a list of messages that appear in the machine's system log. The system log can be viewed using the "syslog" command.

System Log Information

Use the following command to display the system log information:

- UNIX: Use the "syslog" parameter and the "rsh", "rcp", "ftp", and "sftp" commands. "rsh" and "rcp" cannot be used in a Windows environment.
- telnet: Use the "syslog" command.

Message	Problem and solutions
Access to NetWare server <file server name> denied. Either there is no account for this print server on the NetWare server on password was incorrect.	Login to the file server failed when the print server was online. Make sure the print server is registered in <file server name>. If a password is specified for the print server, delete the password.
account is unavailable: same account name be used.	User account is disabled. This could be because it use the same account name as the administrator account.
account is unavailable: The authentication password is not set up.	User account is disabled. This could be because the authentication password is not set, and only the encryption account is set.
account is unavailable: encryption is impossible.	Encryption is not possible and account is disabled. This could be because: • Security option is not installed. • Encryption password has not been specified.
add_sess_IPv4: bad trap addr: <IPv4 address>, community: <community name>	The IPv4 address (0.0.0.0.) is unavailable when the community access type is TRAP. Specify the host IPv4 address for the TRAP destination.
add_sess_IPv6: bad trap addr: <IPv6 address>, community: <community name>	The IPv6 address [::] is unavailable when the community access type is TRAP. Specify the host IPv6 address for the TRAP destination.
add_sess_IPv4: community <community name> already defined.	The same community name already exists. Use another community name.

Message	Problem and solutions
add_sess_IPv6: community <community name> already defined.	The same community name already exists. Use another community name.
add_sess_IPX: bad trap addr: <IPX address> community <community name>	The IPX address (00:00:00:00:00:00) is unavailable when the community access type is TRAP. Specify the host IPX address for the TRAP destination.
add_sess_IPX: community <communityname> already defined.	The same community name already exists. Use another community name.
adjust time server <NTP server name> offset: xx sec.	ncsd tells you the timing of the NTP server and whether or not the time system clock is set. NTP Server: NTP server name offset: number of seconds of delay (minus number if a time in advance is specified)
Attach FileServer=<file server>	Connection to the file server as the nearest server has been established.
Attach to print queue <print queue name>	The system connects to the print queue when the print server goes online.
authenticated	The supplicant has been authenticated. Authentication was successful. When authentication is successful, this message always appears at the end of the process.
authenticating	The supplicant is authenticating with the access point (EAP or WPA).
authentication mode mismatch	The authentication mode of the access point is different from the authentication mode of the supplicant. Use the same authentication mode between the access point and the supplicant.
centrod is disabled.	Parallel communication could not be established. Enable centrod in the Security Mode setting.
child process exec error ! (process name)	The network service failed to start. Turn the machine off and then on. If this does not work, contact your service or sales representative.

Message	Problem and solutions
cipher suite mismatch	The uni-cast / multi-cast suite (TKIP/AES/WEP) of the access point is different from the suite used by the supplicant.
client EAP method rejected	The authentication mode of the access point is different with the authentication mode of the supplicant. Use the same authentication mode between the access point and the supplicant.
client password rejected	The client's password was rejected. Check the client password.
client TLS certificate rejected	The client's TLS certificate was rejected. Check the certificate.
Connected DHCP server <DHCP server address>	The IP address was successfully received from the DHCP server.
Connected DHCPv6 server <IPv6 address>	The IP address was successfully received from the DHCPv6 server.
connecting	The supplicant is establishing the Wireless LAN connection with the access point.
connection from <IP address>	A user logged in from the host <IP address>.
Could not attach to FileServer <error number>	Connection to the file server could not be established when the remote printer went online. The file server refused the connection for unknown reason. Check the file server's configuration.
Could not attach to PServer <print server>	Connection to the print server has not been established when the remote printer is turned on. The print server has refused the connection. Check the print server configuration.
Current Interface Speed: xxx Mbps	Speed of the network (10Mbps, 100 Mbps, or 1Gbps).
Current IP address (<current IP address>)	The IP address <current IP address> was acquired from the DHCP server.
Current IPX address <IPX address>	The current IP address is <IPX address>.

Message	Problem and solutions
dpsd is disabled.	Communication via PictBridge is unavailable because PictBridge is disabled in the security mode. Enable PictBridge in the security mode.
DHCP lease time expired.	The DHCP lease time has expired. Perform the DHCP discover again. The IP address you have been using is no longer available.
DHCP server not found.	The DHCP server was not found. Make sure that the DHCP is on the network.
DHCPv6 server not found.	The DHCPv6 server was not found. Make sure that the DHCPv6 is on the network.
disconnected	The supplicant has no connection.
Duplicate IP=<IP address>(from <MAC address>).	A conflicting IPv4 or IPv6 address was used. Each IPv4 or IPv6 address must be unique. Check the device address in [MAC address].
Established SPX Connection with PServer, (RPSocket=<socket number>, connID=<connection ID>)	Connection to the print server was established when the remote printer went online.
exiting	The LPD service has completed and the process is exiting.
Exit pserver	(In the print server mode) The print server function is disabled because the necessary print server settings have not been made.
Frametype=<frametype name>	The specified frame type name <frame type name> is for NetWare use.
httpd start.	The httpd has started.
IEEE 802.11 Card does NOT support WPA.	A wireless card that does not support WPA is installed. Install a wireless card that supports WPA.
IEEE 802.11 Card Firmware REV.<version>	Displays the version number of the 802.11 card's firmware.
IEEE 802.11 current channel <channel number>	Displays the current channel number of the active wireless card (in ad hoc and infrastructure mode).

Message	Problem and solutions
IEEE 802.11 MAC Address = <MAC address>	Displays the MAC address of the wireless interface.
IEEE 802.11 SSID <ssid> (AP MAC Address <MAC address>)	The MAC address and SSID of the access point are connected in infrastructure mode.
IEEE 802.11 <communication mode> mode	Displays the IEEE 802.11 communication mode.
(IKE phase-1) mismatched authentication type: local=<authentication type 1> remote=<authentication type 2>	This machine's <authentication type 1> in IKE phase 1 does not match the communicating host's <authentication type 2>, Make sure this machine's ISAKMP SA authentication type matches that of the communicating host.
(IKE phase-1) mismatched encryption type: local=<encryption algorithm 1> remote=<encryption algorithm 2>	This machine's ISAKMP SA Oakley group <encryption algorithm 1> in IKE phase 1 does not match the communicating host's ISAKMP SA Oakley group < encryption algorithm 2>, Make sure this machine's ISAKMP SA Oakley group matches that of the communicating host.
(IKE phase-1) mismatched DH group: local=<DH group number 1> remote=<DH group number 2>	This machine's ISAKMP SA Oakley group <DH group number 1> in IKE phase 1 does not match the communicating host's ISAKMP SA Oakley group <DH group number 2>, Make sure this machine's ISAKMP SA Oakley group matches that of the communicating host.
(IKE phase-1) mismatched hash type: local=<Hash Algorithm 1> remote=<Hash Algorithm 2>	This machine's ISAKMP SA <Hash Algorithm 1> in IKE phase 1 does not match the communicating host's ISAKMP SA <Hash Algorithm 2>, Make sure this machine's ISAKMP SA Hash Algorithm matches that of the communicating host.
IKE [% s] is disable, set PSK text.	The specified IKE entry invalid. Enter the PSK text.
inetd start.	The inetd service has started.
Interface (interface name): Duplicate IP Address (<IP address>).	The same IP (IPv4 or IPv6) address was used. Each IP address must be unique. Check the address of the device indicated in [IP address].
<Interface name> card removed	The interface managed by the supplicant has been removed.

Message	Problem and solutions
<Interface name> interface down	The interface managed by the supplicant is disabled, or cannot connect to the access point.
<Interface name> interface up	The interface managed by the supplicant is enabled, or is connected to the access point.
< Interface > started with IP: < IP address >	IP address (IPv4 or IPv6 address) has been set for the interface and is operating.
< Interface >: Subnet overlap.	The same IP address (IPv4, or IPv6 address) and the subnet mask is used with other device.
IPP cancel -job: permission denied.	The spooled job was canceled due to error or user request.
IPP job canceled. jobid=%d.	The spooled job was canceled due to error or user request.
job canceled. jobid=< job ID >	The spooled job was canceled due to error or user request.
LEAP challenge to access point failed	The LEAP challenge to the access point has failed.
LeaseTime=<lease time>(sec), RenewTime=<renew time>(sec).	The resource lease time received from the DHCP server is displayed in [lease time] in seconds. The renewal time is displayed in [renew time] in seconds.
Login to fileserver <file server name> (<IPX|IP>), <NDS|BINDERY>	When the print server was online, the system logged in to <file server> in NDS or BINDERY mode. The transfer protocol in use is also displayed.
Manual [%s] is disable, set authentication key.	The specified manual SA entry is invalid. Set the authentication key.
Manual [%s] is disable, set encryption key.	The specified manual SA entry is invalid. Set the authentication key.
Memory allocate error.	Date cannot be obtained. Disconnect the USB cable, and then connect it.
MIC failure TKIP counter measures started	The supplicant using TKIP has detected two instances of tampering within 60 seconds and has started counter measures.

Message	Problem and solutions
MIC failure TKIP counter measures stopped	Counter measures have stopped after 60 seconds (since the supplicant using TKIP started counter measures against tampering).
Name registration failed. name=<NetBIOS name>	Name registration of <NetBIOS Name> failed. Change to a different NetBIOS name.
Name registration success in Broadcast name=<NetBIOS name>	Name registration by <NetBIOS Name> broadcast was successful.
Name registration success. WINS server=<WINS server address> NetBIOS Name=<NetBIOS name>	Name registration of <NetBIOS Name> to <WINS server address> was successful.
nbtd start.	The nbtd (NetBIOS over TCP/IP Daemon) has started.
npriter start. (NetWare)	(In the remote printer mode) The NetWare service has started.
no RADIUS/authentication server	The supplicant has received a message reporting that a usable RADIUS server cannot be found.
no smart card detected on device	PEAP/GTC (Generic Token Card) is selected, but a smart card using GTC authentication cannot be found.
no SSID in scan result	A network with the SSID you specified was not found. The specified SSID might not be available, or the signal from the access point/multi-channel might be weak.
no WPA information element in probe response, rescanning	There is no WPA information on the response from the SSID probe of the access point you want to use. The supplicant is rescanning.
nwstart start. (NetWare)	The NetWare protocol stack setup server has started.
Open log file <file name>	The specified log file was opened when the print server was online.

Message	Problem and solutions
permission denied.	When canceling a job, it was determined after checking the user name and host address that the user's privileges were insufficient. (Does not apply to root privileges.)
Printer <printer name> has no queue	The print queue is not assigned to the printer when the print server was online. Assign the print queue to the printer using NetWare administrator account, and then restart the printer.
Print queue <print queue name> cannot be serviced by printer 0, <print server name>	The print queue cannot be established when the print server is online. Make sure that the print queue exists on the specified file server.
Print server <print server name> has no printer	The printer was not assigned to the print server when the print server was online. Use the NetWare administrator account to assign the printer, and then restart the printer.
print sessions full	No more print jobs can be accepted. Wait a while before sending any more print jobs.
pserver start. (NetWare)	NetWare service has started in print server mode at the print server operation.
Required file server (<file server name>) not found	The required file server <file server name> could not be found.
restarted.	The LPD has started.
sap enable. saptype=<SAP type>, sapname=<SAP name>	The SAP function was started. The SAP packet is issued to advertise the service in the SAP table on the NetWare server.
server certificate invalid	The server ID is disabled. Check the server authentication.
server identity invalid	The server ID is disabled. Check the server authentication.
server not trusted	The RADIUS server cannot be trusted.
session_IPv4 <community name> not defined.	The requested community name is not defined.
session_IPv6 <community name> not defined.	The requested community name is not defined.

Message	Problem and solutions
session_IPX <community name> not defined.	The requested community name is not defined.
Set context to <NDS context name>	The NDS context name <NDS context name> has been set.
shutdown signal received. network service rebooting...	The smbd service has started.
smbd start. (NetBIOS)	SMBD (Server Message Block Daemon) has been started.
SMTPC: failed to get smtp server ip-address.	The SMTP server IP address could not be obtained. This could be because: • The specified DNS server could not be found. • No connection to the network has been established. • The specified DNS server could not be found. • An incorrect DNS server is specified. • The specified SMTP server IP address could not be found in the DNS server.
SMTPC: failed to connect smtp server. timeout.	Connection to the SMTP server failed due to timeout. This could be because the specified SMTP server name is incorrect, or no connection to the network has been established, or the network configuration is incorrect, so there is no response from the SMTP server. Check the SMTP server name, or the network connection and configuration.
SMTPC: refused connect by smtp server.	Connection to the SMTP server is denied. This could be because server other than the SMTP server has been specified, or the specified SMTP server port number is incorrect. Check the SMTP server name, port number, or the SMTP server port number.

Message	Problem and solutions
SMTPC: no smtp server. connection close.	Connection to the SMTP server failed due to no response from SMTP. This could be because a server other than the SMTP server has been specified, or the specified SMTP server port number is incorrect. Check the SMTP server name, port number, or the SMTP server port number.
SMTPC: failed to connect smtp server.	Connection to the SMTP server failed. This could be because no connection to the network has been established, or the network configuration is incorrect, so there is no response from the SMTP server, or the specified SMTP server name is incorrect, or the specified SMTP server IP address could not be found in the DNS server, or a server other than the SMTP server has been specified, or the specified SMTP server port number is incorrect. Check the DNS Server's IP address and SMTP server's IP address, or the SMTP server name and SMTP port number, or the SMTP server's SMTP port number, or the network connection and configuration.
SMTPC: username or password wasn't correct. [response code] (information)	Connection to the SMTP server failed, because the specified SMTP user name is incorrect, or the specified SMTP password is incorrect. Check the SMTP user name and password.
Snmp over IPv4 is ready.	Communication over IPv4 with snmp is available.
Snmp over IPv6 is ready.	Communication over IPv6 with snmp is available.
Snmp over IPX is ready.	Communication over IPX with snmp is available.
Snmpd Start.	The snmpd has started. This message is displayed only when the power is turned on.
started.	The direct printing service has started.
started.	The IKE service has started.
Started.	The bonjour (rendezvous) function has started.
stopped	The supplicant has just stopped.

Message	Problem and solutions
success key received	The supplicant received the EAP-Success key.
success but invalid key	The supplicant received a message reporting that EAP authentication was successful, but the EAPOL key was invalid.
supplicant started	The supplicant has just started.
supplicant unbound	The supplicant is not connected to the unbound access point.
terminated.	The IKE service has stopped because no configurations for manual SA or IKE exist.
Terminated.	The bonjour (rendezvous) function is disabled.
There is problem in dhcp server operation.	There is a problem with the DHCP server. If multiple DHCP servers are active on the network, check that they are assigning unique IP addresses to each machine.
The print server received error <error number> during attempt to log in to the network. Access to the network was denied. Verify that the print server name and password are correct.	Login to the file server failed when the print server was online. The print server is not registered or a password is specified. Register the print server without specifying a password.
too many pictures.	PictBridge printing failed because too many images are sent during one print transaction. Reduce the number of images at one print transaction.
trap account is unavailable.	v3Trap cannot be sent. This could be because the Trap destination account is different from the account specified by the machine.
unauthenticated	The authentication failed. The supplicant was denied access to the access point, or was not authenticated.
Updated (option name)(value) via DHCPv6 Server	The parameter obtained from the DHCP server has been updated.
usbd is disabled.	Plug and Play is unavailable because the machine is in Security Mode. Enable USBD in Security Mode.

Message	Problem and solutions
waiting for keys	The supplicant is waiting for the session key.
WINS name registration: No response to server (WINS server address)	There was no response from the WINS server. Check that the correct WINS server address is entered. Also, check that the WINS server is functioning properly.
WINS wrong scopeID=<scope ID>	The scope ID is invalid. Use a valid scope ID.
write error occurred. (diskfull)	A "diskfull" error occurred while the machine was writing to the spool file. Wait for the current print job to finish, When it finishes, more HDD space will be available. Only pages that were spooled when the error occurred will be printed.
write error occurred. (fatal)	A "fatal" error occurred while the machine was writing to the spool file. Wait for the current print job to finish, When it finishes, more HDD space will be available. Only pages that were spooled when the error occurred will be printed.
WSD (Device) started.	WSD (Device) has started.
WSD (Printer) started.	WSD (Printer) has started.
WSD (Scanner) started.	WSD (Scanner) has started.

Note

- For details about UNIX commands and parameters, see UNIX Supplement.

5. Registering Addresses and Users for Facsimile/Scanner Functions

This chapter describes how to register destinations and users in the Address Book. For details on how to access System Settings, see "Accessing User Tools".

Address Book

This section describes Address Book settings.

Registering information such as the names of users and their e-mail addresses in the Address Book allows you to manage them easily.

We recommend you back up the Address Book regularly.

For details about backing up/restoring the Address Book, see "Administrator Tools".

Important

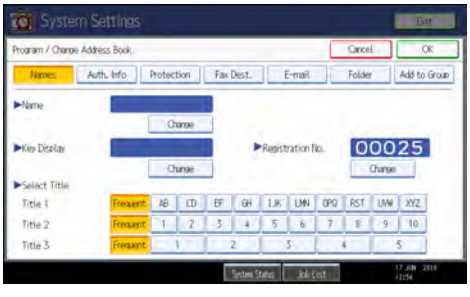
- **Address Book data is stored on the hard disk. It can be lost if there is some kind of hard disk failure.**
- **The manufacturer shall not be held responsible for any damages resulting in data loss.**

You can register and manage the following items in the Address Book:

Names

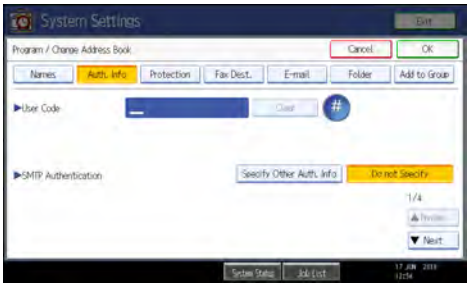
You can register the name of the user and the key display. This is the basic information required for managing users of the machine.

To register a fax number or e-mail address in the Address Book, you must register information such as the user name and destination name in advance.



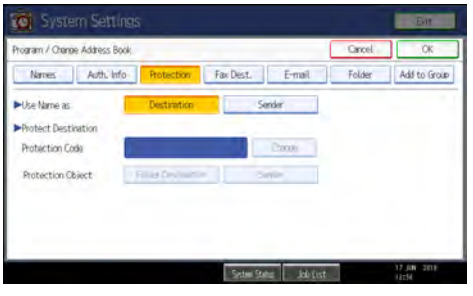
Auth. Info

You can register user codes in order to restrict particular functions to certain users, and to check their use of each function. You can also register login user names and login passwords to be used when sending e-mail, sending to folders, or accessing an LDAP server.



Protection

You can set protection codes to stop sender's name from being used or folders from being accessed without authorization.



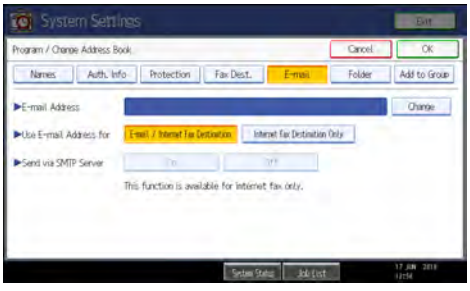
Fax Dest.

You can register fax numbers, line, fax header and select label insertion.

When using IP-Fax, you can register the IP-Fax destination and select the protocol.

E-mail

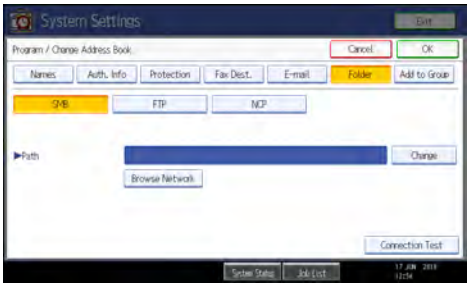
You can register e-mail destinations in the Address Book.



Folder

You can register the protocol, path name and server name.

- SMB

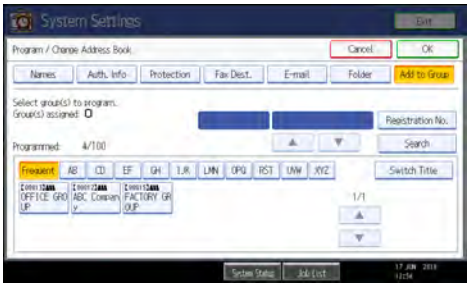


- FTP

- NCP

Add to Group

You can put registered e-mail and folder destinations into a group for easier management.



Note

- You can also use Web Image Monitor to register names in the Address Book.
- For details about using Web Image Monitor, see Web Image Monitor Help.
- Using Web Image Monitor, you can backup Address Book data. We recommend backing up data when using the Address Book. For details, see Web Image Monitor Help.

5

Reference

- p.55 "Administrator Tools"

Managing names in the Address Book

By registering a name and key display beforehand, you can specify e-mail and folder destinations simply by selecting the name key.

Reference

- p.235 "Registering Names"

Sending fax by Quick Dial

Register a fax number in the Address Book so you can specify it only by selecting the fax destination, shown on the fax initial display when sending a fax. When label insertion is set to "On", the receiver's name and standard messages are printed on the fax message when it is received at the other end.

By registering IP-Fax destinations in the Address Book, you can specify a destination simply by selecting it from the destinations that appear in the initial fax display. Registered IP-Fax numbers can be used and printed as sender's IP-Fax numbers.

Reference

- p.250 "Fax Destination"

Sending e-mail by Quick Dial

By registering e-mail addresses in the Address Book, you can specify e-mail destinations simply by selecting them from the fax initial display when sending a document by Internet fax or e-mail.

You can also specify an e-mail address by selecting the destination shown on the initial scanner display when sending a document using the scanner function. A registered e-mail address can be used as the sender's address, and the sender's addresses are automatically entered in the "From" field of an e-mail header.

Reference

- p.263 "E-mail Destination"

Sending received fax documents or scanned files to a shared folder directly

After registering the path name, user name and password, you can connect to a shared folder simply by selecting the destination shown on the initial facsimile display whenever sending files using the facsimile function to a shared folder. You can also connect to a shared folder by selecting the destination shown on the initial scanner display whenever sending files using the scanner function.

To share the folder using Windows, select the SMB protocol.

To register the folder to the FTP server, select the FTP protocol.

To register the folder to the NetWare server, select the NCP protocol.

Reference

- p.268 "Registering Folders"

Preventing unauthorized user access to shared folders from the machine

After registering a protection code, you can specify the object of protection to prevent an e-mail destination from being used without permission.

You can prevent unauthorized access to registered folders.

Reference

- p.296 "Registering a Protection Code"

Managing users and machine usage

Register user codes to limit users to the following functions and check their use of each function:

- Copier
- Document Server

- Facsimile
- Printer
- Scanner

Reference

- p.240 "Authentication Information"

Registering Names

Register user information including their names.

The user name is useful for selecting a destination when sending faxes or e-mail.

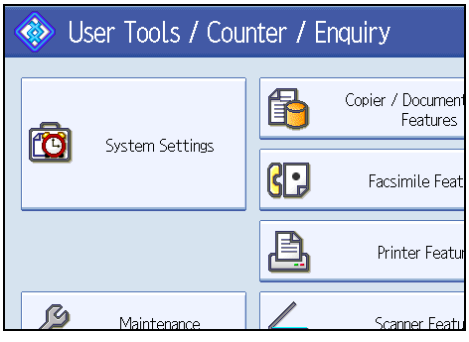
You can also use it as a folder destination.

You can register up to 2000 names.

Registering Names

This section describes how to register names.

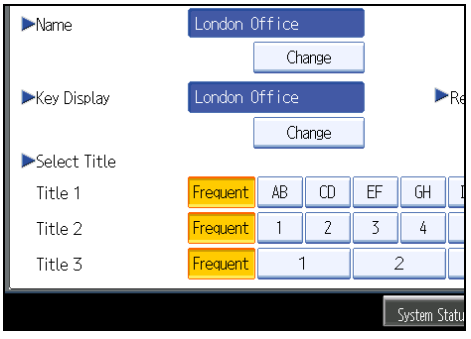
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Press [New Program].**
7. **Press [Change] under "Name".**

   The name entry display appears.
8. **Enter the name, and then press [OK].**

9. **Press the key for the classification you want to use under "Select Title".**



The keys you can select are as follows:

- [Frequent]: Added to the page that is displayed first.
- [AB], [CD], [EF], [GH], [IJK], [LMN], [OPQ], [RST], [UVW], [XYZ], [1] to [10]: Added to the list of items in the selected title.

You can select [Frequent] and one more page for each title.

10. **Press [OK].**
11. **Press [Exit].**
12. **Press the [User Tools/Counter] key.**

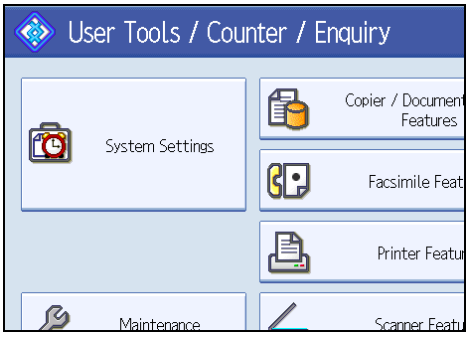
Note

- The name can be used for documents in the Document Server. For details about the Document Server, see "Using the Document Server", Copy and Document Server Reference.

Changing a Registered Name

This section describes how to change a name.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the registered name you want to change.**

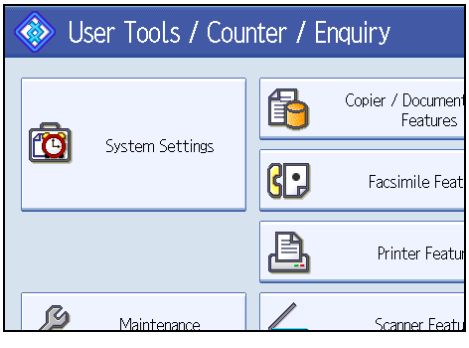
   Press the name key, or enter the registered number using the number keys.

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **To change the name or key display, press [Change] under "Name" or "Key Display".**
8. **Enter the name or key display, and then press [OK].**
9. **To change the title, press the key for the classification you want to use from "Select Title".**
10. **To change the registration number, press [Change] under "Registration No.".**
11. **Enter a new registration number using the number keys, and then press the [#] key.**
12. **Press [OK].**
13. **Press [Exit].**
14. **Press the [User Tools/Counter] key.**

Deleting a Registered Name

This section describes how to delete a name.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Press [Delete].**
6. **Select the name you want to delete.**

   Press the name key, or enter the registered number using the number keys.

7. Press [Yes].
8. Press [Exit].
9. Press the [User Tools/Counter] key.

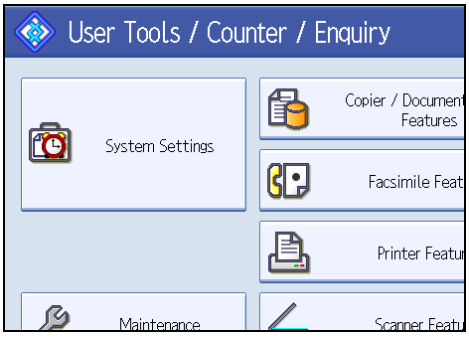
Carrying Over Registered Data for Use by Address Book Auto Register

By using Data Carry-over Settings for Address Book Auto Program, you can carry over user authentication information that has already been registered to the Address Book of the Windows authentication, LDAP authentication, or integration server authentication.

Important

- **For details about the Windows authentication, LDAP authentication, or Integration server authentication, consult your administrator.**

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Data Carry-over Setting for Address Book Auto-program].**
5. **Press [Carry-over Data].**
6. **Press the [Clear] key, enter the registration number using the number keys, and then press the [#] key.**
7. **Press [OK].**
8. **Press the [User Tools/Counter] key.**

Authentication Information

Following describes the procedure for authenticating a user code.

Important

- **The functions associated with each user code are the same. If you change or delete user codes, management data and limits associated with that code become invalid.**

Register user codes to limit users to the following functions and check their use of each function:

- Copier
- Document Server
- Facsimile
- Printer
- Scanner

Note

- You can register up to 500 user codes.
- The number of copies made of documents stored in the Document Server using the facsimile function is counted for each user code. This allows you to check each user's usage.
- The number of copies scanned using the scanner function is counted for each user code. This allows you to check each user's usage.
- To automatically register the printer driver user code, select [PC Control] under "Printer" for the printer in User Code Authentication. To use the user code set in User Tools, set the user codes registered in User Tools for the printer driver.
- For details about setting user codes for the printer driver, see the printer driver Help.

Reference

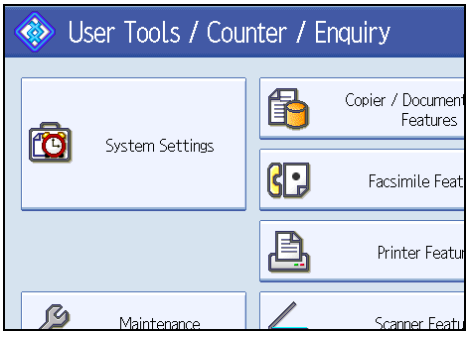
- p.55 "Administrator Tools"

Registering a User Code

This section describes how to register a user code.

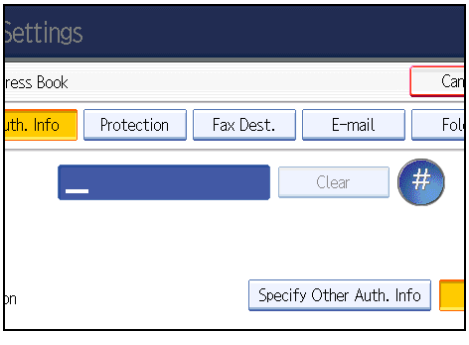
1. **Press the [User Tools/Counter] key.**

2. **Press [System Settings].**



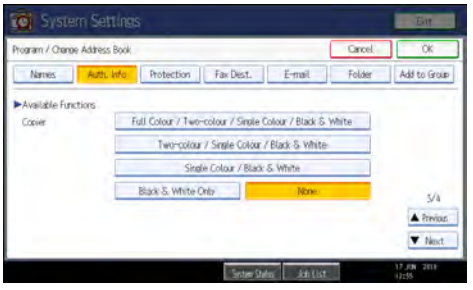
3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Press the name whose code is to be registered, or enter the registered number using the number key.**

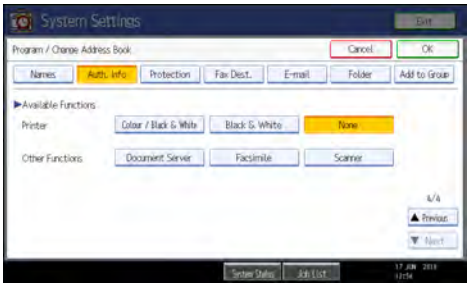
   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **Press [Auth. Info].**
8. **Enter the user code using the number keys, and then press the [#] key.**



   If you make a mistake, press [Clear] or the [Clear/Stop] key.
9. **Press [▼Next] twice.**

10. **Select the functions to be used with the user code from "Available Functions".**





11. **Press [OK].**
12. **Press [Exit].**
13. **Press the [User Tools/Counter] key.**

Note

- You can enter a one-to eight-digit user code.
- To register the name, see "Registering Names".

Reference

- p.235 "Registering Names"

Changing a User Code

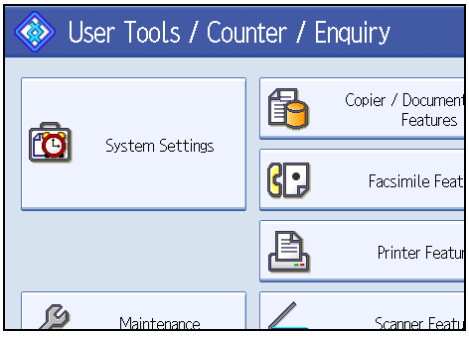
This section describes how to change a user code.

Important

- **Even if you change a user code, the counter value will not be cleared.**

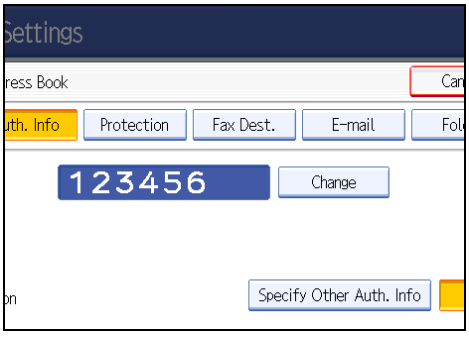
1. **Press the [User Tools/Counter] key.**

2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the user whose user code you want to change.**

   Press the name key, or enter the registered number using the number keys. You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **Press [Auth. Info].**
8. **Press [Change], and then enter the new user code using the number keys.**



9. **Press the [#] key.**
10. **To change the available functions, press [▼Next] twice.**
11. **Press the key to select the functions to enable them.**

    Press the key to highlight it, and then the function is enabled. To cancel a selection, press the highlighted key.
12. **Press [OK].**
13. **Press [Exit].**
14. **Press the [User Tools/Counter] key.**

Note

- To change the name, key display and title, see "Registering Names".

Reference

- p.235 "Registering Names"

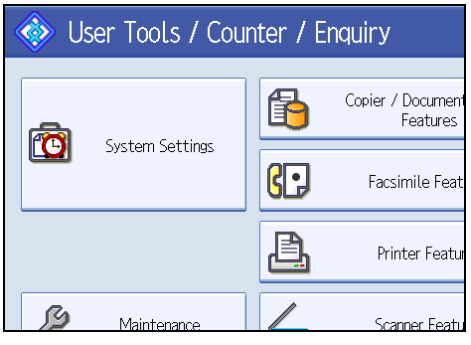
Deleting a User Code

This section describes how to delete a user code.

Important

- **After clearing the user code, the counter is automatically cleared.**

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



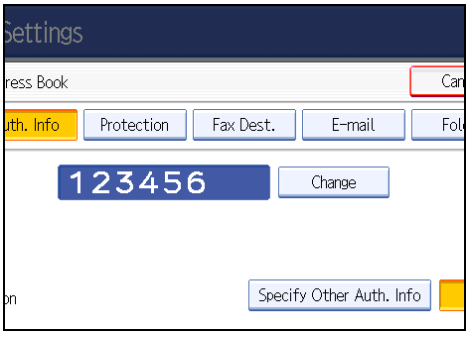
3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Press [Program / Change].**
6. **Select the name whose code is to be deleted.**

   Press the name key, or enter the registered number using the number keys.

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. **Press [Auth. Info].**

8. **Press [Change] to delete the user code, and then press the [#] key.**



9. **Press [OK].**
10. **Press [Exit].**
11. **Press the [User Tools/Counter] key.**

Note

- To delete a name from the Address Book entirely, see "Registering Names".

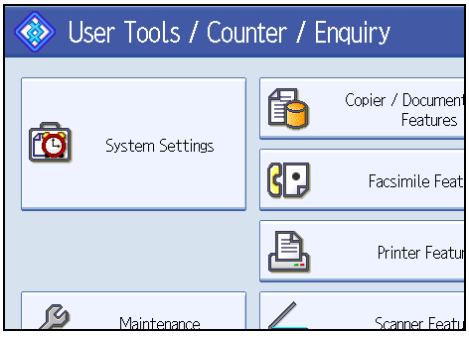
Reference

- p.235 "Registering Names"

Displaying the Counter for Each User

This section describes how to display the counter for each user.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



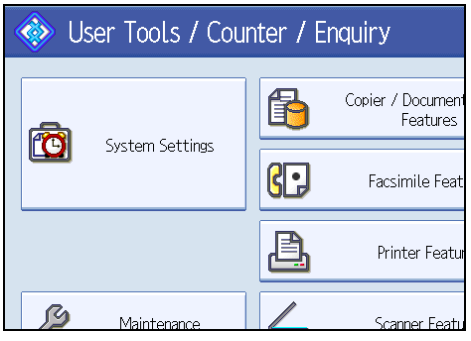
3. **Press [Administrator Tools].**
4. **Press [Display / Clear / Print Counter per User].**
5. **Select the function usage you want to print from [Copier] [Printer], [Facsimile] or [Scanner].**

   Counters for individual function usage under each user code appear.

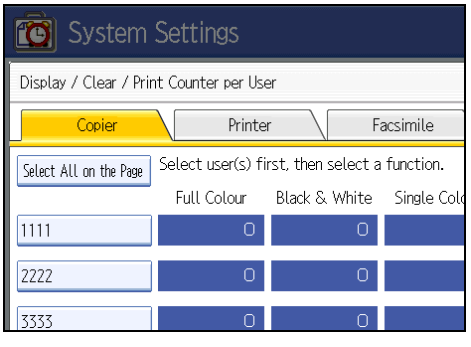
Printing the Counter for Each User

This section describes how to print the counter for each user.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**

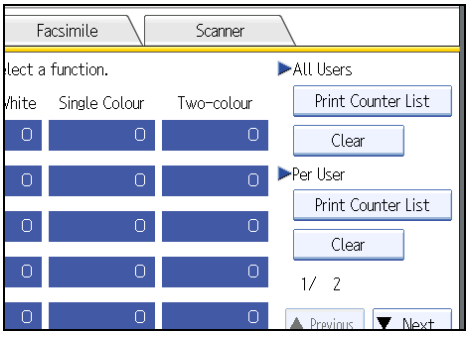


3. **Press [Administrator Tools].**
4. **Press [Display / Clear / Print Counter per User].**
5. **Select a user code from the left side of the display.**



Press [Select All on the Page] to select all user codes on the page.

6. **Press [Print Counter List] under "Per User".**



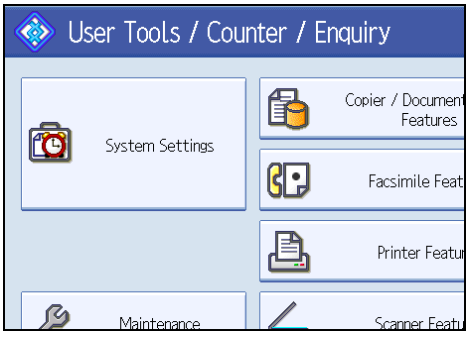
Enter the user code, and then press the [#] key if the user code is registered.

7. **Select the function usage you want to print from [Copier], [Printer], [Fax Prints], [Fax Transmission], [Scanner], and [Total Prints].**
8. **Press [Print].**
9. **Press [Exit].**
10. **Press the [User Tools/Counter] key.**

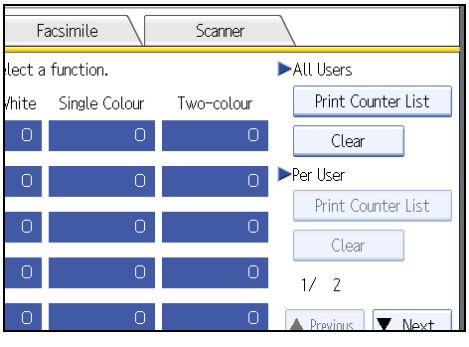
Printing the Counter for All Users

This section describes how to print the counter for all users.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Display / Clear / Print Counter per User].**
5. **Press [Print Counter List] under "All Users".**



Enter the user code, and then press the [#] key if the user code is registered.

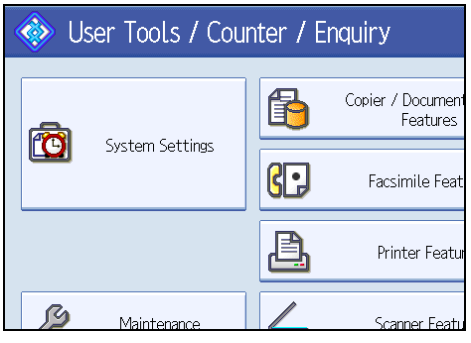
6. **Select the function usage you want to print from [Copier], [Printer], [Fax Prints], [Fax Transmission], [Scanner], and [Total Prints].**
7. **Press [Print].**

8. **Press [Exit].**
9. **Press the [User Tools/Counter] key.**

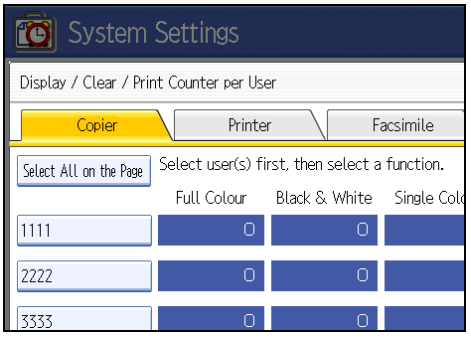
Clearing the Number of Prints

This section describes how to clear the counter.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Display / Clear / Print Counter per User].**
5. **Select the user code to clear.**
6. **To clear the number of prints made under a user code, select the user code from the left side of the display.**



   Press [Select All on the Page] to select all user codes on the page.

7. **Press [Clear] under "Per User".**
8. **Select the function usage you want to clear from [Copier], [Printer], [Fax Prints], [Fax Transmission], [Scanner], and [All Counters].**
9. **Press [OK].**
10. **To clear the number of prints for all user codes, press [Clear] under "All Users".**

11. Select the function usage you want to clear from [Copier], [Printer], [Fax Prints], [Fax Transmission], [Scanner], and [All Counters].
12. Press [OK].
13. Press [Exit].
14. Press the [User Tools/Counter] key.

Fax Destination

This section describes the procedure for registering, changing, and deleting Fax Destinations.

Register a fax destination so you do not need to enter fax numbers each time, and can send documents that have been scanned in using the facsimile function.

- It is easy to select the fax destination if you register "Name" and "Key Display" for the fax destination.
- You can register fax destinations as a group. For details about registering a group, see "Registering Names to a Group".
- You can register fax destinations by selecting them from redial function.
- Registered Fax numbers can be used as sender's Fax numbers. You can stop sender's names or folders being accessed by setting a protection code. For details, see "Registering a Protection Code".

There are two types of fax destination, as shown below:

- Fax Destination

  Select this to send the fax over the telephone network.

- IP-Fax

  Select this to send the fax to a machine on a TCP/IP network.

  You cannot send the fax to a machine on another network if that network is behind a firewall.

You can program the following items in a fax destination:

Fax number

Registers the destination's fax number. You can enter a fax number using up to 128 digits. You must include every digit in the number.

SUB Code

Registering a SUB Code allows you to use Confidential Transmission to send messages to the other fax machines which support a similar function called "SUB Code". See "Setting SUB Codes for Transmission", Facsimile Reference.

SEP Code

Registering a SEP Code allows you to use Polling Reception to receive faxes from the other fax machines which support Polling Reception. See "Setting SEP Codes for Reception", Facsimile Reference.

Select Line

If the extra G3 interface unit is installed, you can select the line type per destination.

International TX mode

When setting the International TX mode to [On], the machine transmits more carefully by lowering transmission speed. However, communication times increase.

Fax header

You can select to print a fax header on fax messages the other party receives.

The default is "1st Name".

Label insertion

Use label insertion to print information such as the destination name on the sheet printed out at the destination.

Data is printed as follows:

- Destination Name

  The destination name specified in [Fax Destination] is printed with "To" before it at the top of the sheet.

- Standard Message

  A registered two-line sentence is printed under "Destination Name".

  To use this function, set Label Insertion to [On] when programming fax destinations and also press [Label Insertion] when sending fax documents.

  Fax header and label insertion are also printed when sending by e-mail using the fax function.

  You can program a standard message other than those registered in the machine.

  See " Send Settings ", Facsimile Reference.

You can program the following items in an IP-Fax Destination:

IP-Fax

Register the IP-Fax destination. You can register the name using up to 128 characters. You must make this setting when using IP-Fax.

This setting only works if the IP-Fax function has been selected.

SUB Code

Registering a SUB Code allows you to use Confidential Transmission to send messages to the other fax machines which support a similar function called "SUB Code". See "Setting SUB Codes for Transmission", Facsimile Reference.

SEP Code

Registering a SEP Code allows you to use Polling Reception to receive faxes from the other fax machines which support Polling Reception. See "Setting SEP Codes for Reception", Facsimile Reference.

Select Protocol

Select the protocol for the IP-Fax transmission.

This setting only works if the IP-Fax function has been selected.

Reference

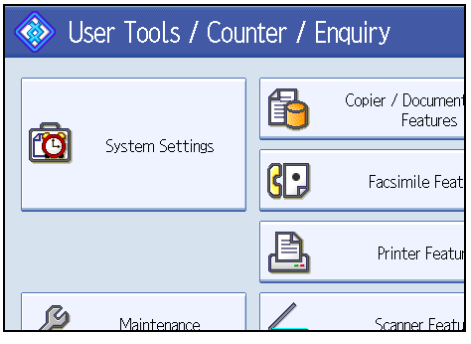
- p.286 "Registering Names to a Group"

- p.296 "Registering a Protection Code"

Registering a Fax Destination

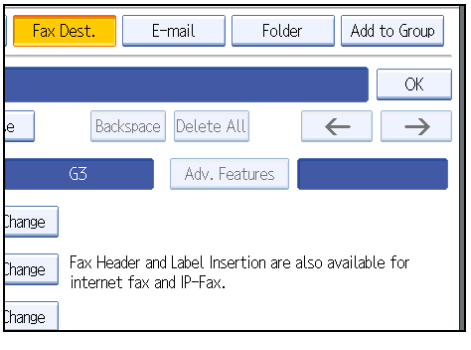
This section describes how to register a fax destination.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the name whose fax destination you want to register.**

   Press the name key, or enter the registered number using the number keys.
7. **Press [Fax Dest.].**
8. **Press [Change] under "Fax Destination".**
9. **Enter the fax number using the number keys, and then press [OK].**



10. **Specify optional settings such as "SUB Code", "SEP Code", and "International TX Mode".**
11. **Press [OK].**
12. **Press [Exit].**

13. **Press the [User Tools/Counter] key.**

Note

- To register the name, see "Registering Names".
- When a group is registered, you can also add this fax destination to the group. For details about registering groups, see "Registering Names to a Group".

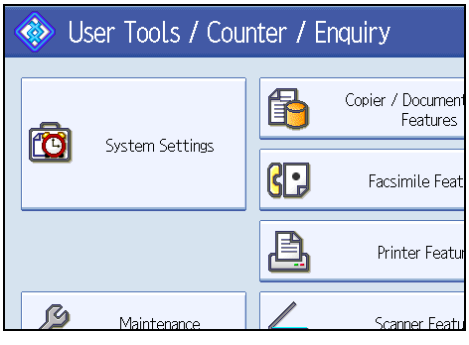
Reference

- p.235 "Registering Names"
- p.286 "Registering Names to a Group"

Changing a Fax Destination

This section describes how to change a registered fax destination.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the name whose fax destination you want to change.**

   Press the name key, or enter the registered number using the number keys.

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **Press [Fax Dest.].**
8. **Change the settings.**
9. **Press [OK].**
10. **Press [Exit].**
11. **Press the [User Tools/Counter] key.**

Note

- To change the name, key display and title, see "Registering Names".

Reference

- p.235 "Registering Names"

To change the fax number

This section describes how to change the fax number.

1. **Press [Change] under "Fax Destination".**
2. **Enter the new fax number using the number keys, and then press [OK].**

To select line

This section describes how to select the line.

1. **Press [Select Line] under "Fax Destination".**
2. **Select the using line.**
3. **Press [OK].**

To program the SUB Code

This section describes how to program the SUB Code.

1. **Press [Adv. Features], and then press [SUB Code].**
2. **Press [Change] under "TX SUB Code".**
3. **Enter the new SUB Code, and then press [OK].**
4. **To change the password, press [Change] under "Password (SID)".**
5. **Enter the new password, and then press [OK].**
6. **Press [OK].**

To program the SEP Code

This section describes how to program the SEP Code.

1. **Press [Adv. Features], and then press [SEP Code].**
2. **Press [Change] under "RX SEP Code".**
3. **Enter the new SEP Code, and then press [OK].**
4. **To change the password, press [Change] under "Password (PWD)".**

5. **Enter the new password, and then press [OK].**
6. **Press [OK].**

To set the International TX Mode

This section describes how to set the International TX Mode.

1. **Press [Change] under "International TX Mode".**
2. **Select [Off] or [On], and then press [OK].**

To select the fax header

This section describes how to select the fax header.

You can register the fax header in Program Fax Information in the system settings for Facsimile Features.

1. **Press [Change] under "Fax Header".**
2. **Select [1st Name] or [2nd Name], and then press [OK].**

To set label insertion

This section describes how to set label insertion.

When Label Insertion is set to ON, the receiver's name and standard messages are printed on the fax message when it is received at the other end.

1. **Press [Change] under "Label Insertion".**
2. **Press [On].**
3. **Press [Change] under "Line 2".**
4. **Select the new standard message or press [Manual Entry] to enter the new message.**
5. **Enter the new message, and then press [OK].**
6. **Press [OK].**
7. **Press [Change] under "Line 3".**
8. **Select the new standard message, and then press [OK].**
9. **Press [OK].**

Note

- To change the name, key display and title, see "Registering Names".

Reference

- p.235 "Registering Names"

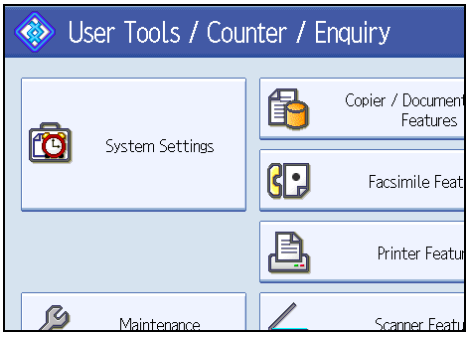
Deleting a Fax Destination

This section describes how to delete a registered fax destination.

Important

- **If you delete a destination that is a specified delivery destination, messages to its registered Personal Box, for example, cannot be delivered. Be sure to check the settings in the fax function before deleting any destinations.**

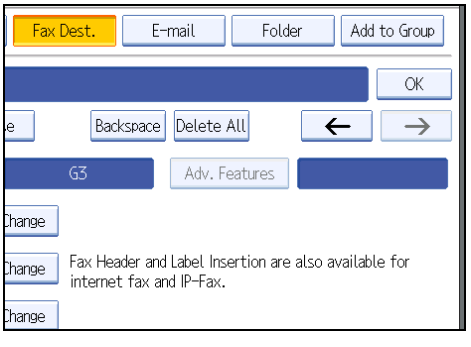
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the name whose fax destination you want to delete.**

   Press the name key, or enter the registered number using the number keys.

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **Press [Fax Dest.].**
8. **Press [Change] under "Fax Destination".**
9. **Press [Delete All], and then press [OK].**



10. **Press [OK].**
11. **Press [Exit].**
12. **Press the [User Tools/Counter] key.**

Note

- To delete the name, key display, and title, see "Registering Names".

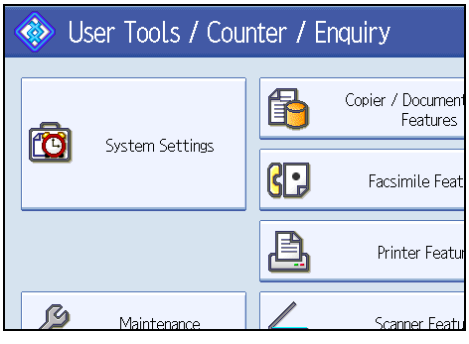
Reference

- p.235 "Registering Names"

Registering an IP-Fax Destination

This section describes how to register an IP-Fax Destination.

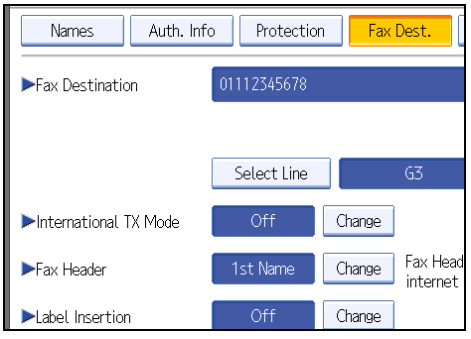
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the name whose IP-Fax destination you want to register.**

   Press the name key, or enter the registered number using the number keys.
7. **Press [Fax Dest.].**

8. **Press [Select Line], and then select [H.323] or [SIP].**



9. **Press [OK].**
10. **Press [Change] under "Fax Destination".**
11. **Enter the IP-Fax destination.**
12. **Press [OK].**
13. **Press [OK].**
14. **Press [Exit].**
15. **Press the [User Tools/Counter] key.**

Note

- To register the name, see "Registering Names".

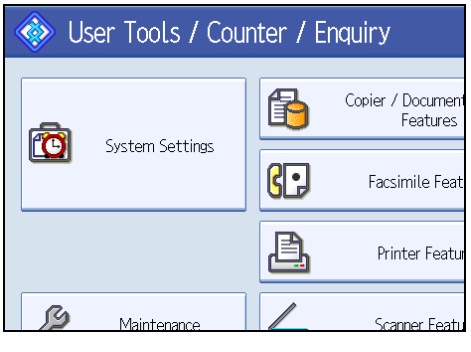
Reference

- p.235 "Registering Names"

Changing a Registered IP-Fax Destination

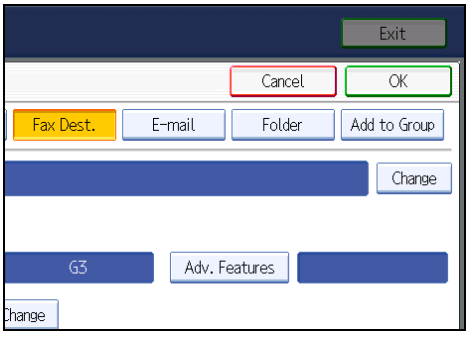
This section describes how to change an IP-Fax Destination.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the name whose IP-Fax destination you want to change.**

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **Press [Fax Dest.].**
8. **Press [Change] under "Fax Destination".**



   Enter the new destination, and then press [OK].
9. **Press [OK].**
10. **Press [Exit].**
11. **Press the [User Tools/Counter] key.**

Note

- To change the name, key display and title, see "Registering Names".

Reference

- p.235 "Registering Names"

To change the IP-Fax Destination

This section describes how to change a registered IP-Fax destination.

1. **Press [Change] under "Fax Destination".**
2. **Enter the new destination, and then press [OK].**

To change the protocol

This section describes how to select the protocol.

1. Press [Select Line].
2. Select [H.323] or [SIP].
3. Press [OK].

To program the SUB Code

This section describes how to program the SUB Code.

1. Press [Adv. Features], and then press [SUB Code].
2. Press [Change] under "TX SUB Code".
3. Enter the SUB Code, and then press [OK].
4. To enter a password, press [Change] under "Password (SID)".
5. Enter a password using the number keys, and then press [OK].
6. Press [OK].

To program the SEP Code

This section describes how to program the SEP Code.

1. Press [Adv. Features], and then press [SEP Code].
2. Press [Change] under "RX SEP Code".
3. Enter a SEP Code using the number keys, and then press [OK].
4. To enter a password, press [Change] under "Password (PWD)".
5. Enter a password using the number keys, and then press [OK].
6. Press [OK].

To set the International TX Mode

This section describes how to set the International TX Mode.

1. Press [Change] under "International TX Mode".
2. Select [Off] or [On], and then press [OK].

To select the fax header

This section describes how to select the fax header.

1. Press [Change] under "Fax Header".
2. Select [1st Name] or [2nd Name], and then press [OK].

To set label insertion

This section describes how to set label insertion.

When Label Insertion is set to ON, the receiver's name and standard messages are printed on the fax message when it is received at the other end.

1. **Press [Change] under "Label Insertion".**
2. **Press [On].**
3. **Press [Change] under "Line 2".**
4. **Select the new standard message or press [Manual Entry] to enter the new message.**
5. **Enter the new message, and then press [OK].**
6. **Press [OK].**
7. **Press [Change] under "Line 3".**
8. **Select the new standard message, and then press [OK].**
9. **Press [OK].**

Note

- To change the name, key display and title, see "Registering Names".

Reference

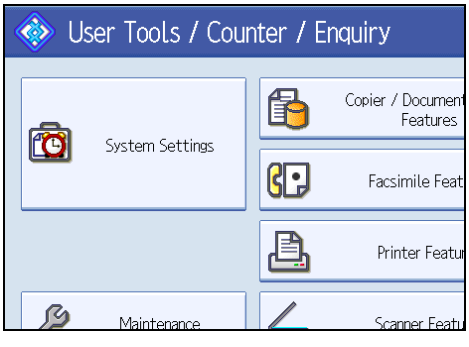
- p.235 "Registering Names"

Deleting a Registered IP-Fax Destination

This section describes how to delete a registered IP-Fax destination.

If you delete a destination that is a specified delivery destination, messages to its registered Personal Box, for example, cannot be delivered. Be sure to check the settings in the fax function before deleting any destinations.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Press [Program / Change].**
6. **Select the name whose IP-Fax destination you want to delete.**

   Press the name key, or enter the registered number using the number keys.

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **Press [Fax Dest.].**
8. **Press [Change] under "Fax Destination".**
9. **Press [Delete All], and then press [OK].**
10. **Press [OK].**
11. **Press [Exit].**
12. **Press the [User Tools/Counter] key.**

Note

- To delete the name, key display and title, see "Registering Names".

Reference

- p.235 "Registering Names"

E-mail Destination

This section describes the procedure for registering, changing, and deleting E-mail Destination.

Register e-mail destinations so you do not need to enter an e-mail address every time, and can send scan files from scanner or fax function by e-mail.

- It is easy to select the e-mail destination if you register "Name" and "Key Display" as the e-mail destination.
- You can register e-mail destinations as a group.
- You can use the e-mail address as the sender's address when sending scan files in scanner mode. If you want to do this, set a protection code on the sender address to prevent unauthorized access.

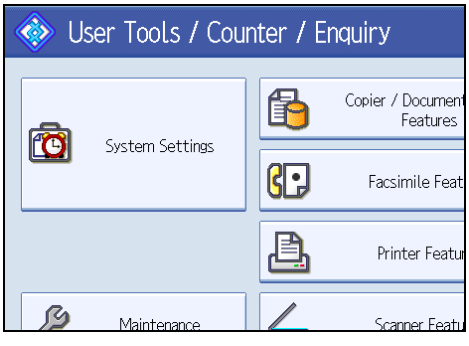
Note

- You can select an e-mail address from an LDAP server, and then register it in the Address Book. See "Sending Scan Files by E-mail", Scanner Reference.
- You can set the machine to send a Transmission Result Report by e-mail whenever a transmission is sent. See Facsimile Reference.

Registering an E-mail Destination

This section describes how to register an e-mail destination.

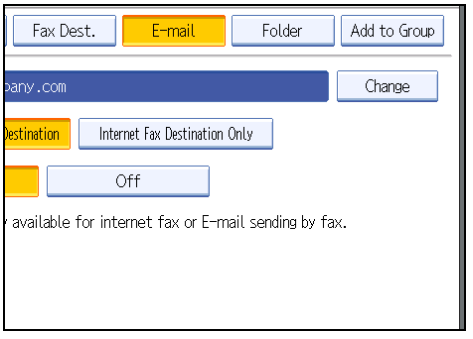
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



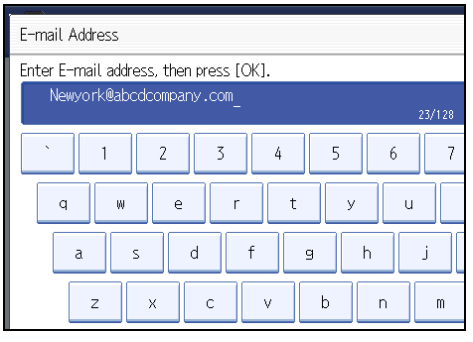
3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the name whose e-mail address you want to register.**

   Press the name key, or enter the registered number using the number keys.
7. **Press [E-mail].**

8. **Press [Change].**



9. **Enter the e-mail address.**



10. **Press [OK].**
11. **Select [E-mail / Internet Fax Destination] or [Internet Fax Destination Only].**

    If [E-mail / Internet Fax Destination] is specified, registered e-mail addresses appear in both the internet fax address display and E-mail address display on the fax function screen, and in the address display on the scanner function screen.

    If [Internet Fax Destination Only] is specified, registered e-mail addresses only appear in the internet fax display on the fax function screen.

12. **If you want to use Internet fax, specify whether or not to use "Send via SMTP Server".**
13. **Press [OK].**
14. **Press [Exit].**
15. **Press the [User Tools/Counter] key.**

Note

- You can enter up to 128 characters for the e-mail address.
- To register the name, see "Registering Names".

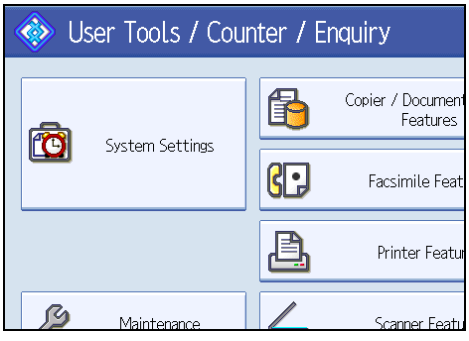
Reference

- p.235 "Registering Names"

Changing an E-mail Destination

This section describes how to change an e-mail destination.

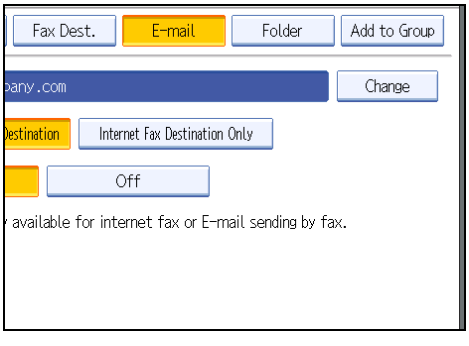
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the name whose e-mail address you want to change.**

   Press the name key, or enter the registered number using the number keys.

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **Press [E-mail].**
8. **Press [Change] under "E-mail Address".**



9. **Enter the e-mail address, and then press [OK].**
10. **Press [OK].**
11. **Press [Exit].**
12. **Press the [User Tools/Counter] key.**

Note

- To change the name, key display and title, see "Registering Names".

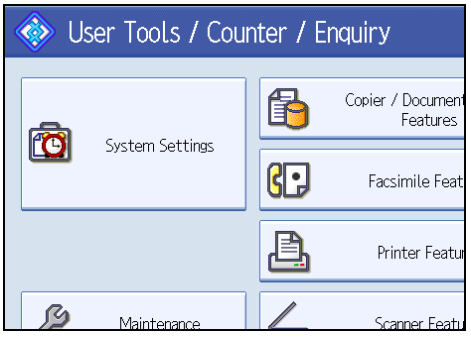
Reference

- p.235 "Registering Names"

Deleting an E-mail Destination

This section describes how to delete an e-mail destination.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the name whose e-mail address you want to delete.**

   Press the name key, or enter the registered number using the number keys. You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **Press [E-mail].**
8. **Press [Change] under "E-mail Address".**
9. **Press [Delete All], and then press [OK].**
10. **Press [OK].**
11. **Press [Exit].**
12. **Press the [User Tools/Counter] key.**

Note

- To delete the name, key display and title, see "Registering Names".

Reference

- p.235 "Registering Names"

Registering Folders

This section describes the procedure for registering, changing, and deleting folders.

By registering a shared folder, you can send scan files or received fax documents to it directly.

There are three types of protocol you can use:

- SMB

  For sending files to shared folders on Windows and Mac OS X.

- FTP

  Use when sending files to an FTP server.

- NCP

  Use when sending files to a NetWare server.

Note

- For details about protocols, server names, and folder levels, consult your network administrator.
- You can prevent unauthorized users from accessing folders from the machine. See "Registering a Protection Code".
- You can only select either SMB, FTP, or NCP. If you change protocol after finishing your settings, all previous entries are cleared.

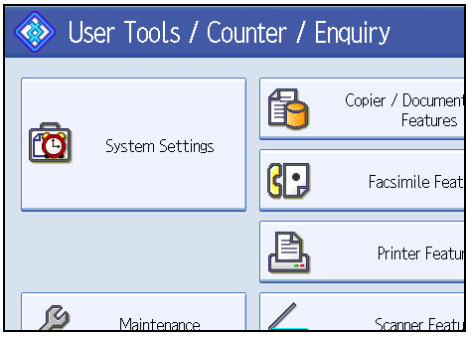
Reference

- p.296 "Registering a Protection Code"

Registering an SMB Folder

This section describes how to register an SMB folder.

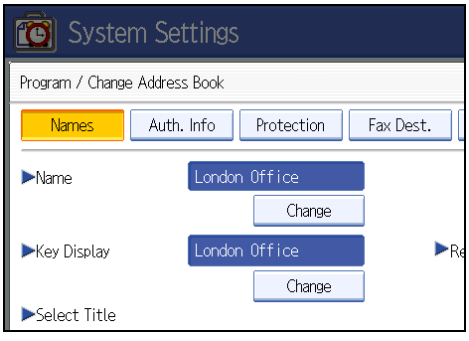
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**

4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the name whose folder you want to register.**

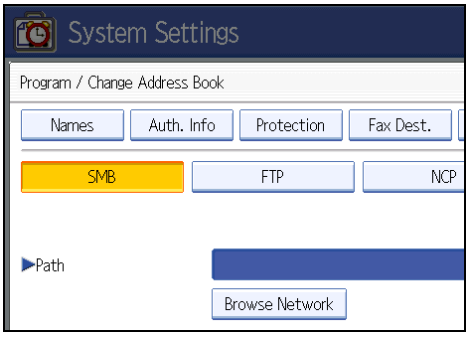
   Press the name key, or enter the registered number using the number keys.
7. **Press [Auth. Info], and then press [▼Next].**



8. **Press [Specify Other Auth. Info] on the right side of "Folder Authentication".**

   When [Do not Specify] is selected, the SMB User Name and SMB Password that you have specified in "Default User Name / Password (Send)" of File Transfer settings applies.
9. **Press [Change] under "Login User Name".**
10. **Enter the login user name of the destination computer, and then press [OK].**
11. **Press [Change] under "Login Password".**
12. **Enter the password of the destination computer, and then press [OK].**
13. **Enter the password again to confirm, and then press [OK].**
14. **Press [Folder].**
15. **Check that [SMB] is selected.**

    To specify a folder, you can either enter the path manually or locate the folder by browsing the network.



16. **Press [Change] or [Browse Network], and then specify the folder.**

    To specify a folder, you can enter the path to it manually, or select it by browsing the network.

For details about how to specify the path manually, see "Locating the SMB folder manually".

For details about how to specify the path using Browse Network, see "Locating the SMB folder using Browse Network".

17. **Press [Connection Test] to check the path is set correctly.**
18. **Press [Exit].**

    If the connection test fails, check the settings, and then try again.
19. **Press [OK].**
20. **Press [Exit].**
21. **Press the [User Tools/Counter] key.**

Note

- To register the name, see "Registering Names".
- You can enter up to 64 characters for the user name.
- You can enter up to 64 characters for the password.
- You can enter a path using up to 128 characters.
- If User Authentication is specified, contact your administrator.

Reference

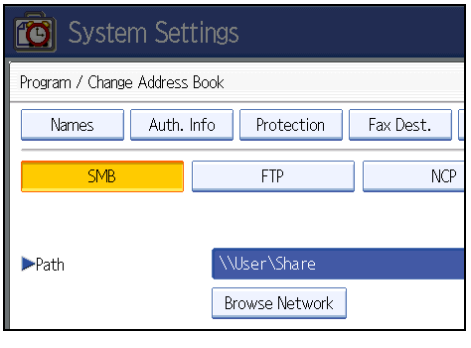
- p.235 "Registering Names"

Locating the SMB folder manually

This section describes how to locate the SMB folder manually.

1. **Press [Change] under "Path".**
2. **Enter the path where the folder is located.**

   For example: if the name of the destination computer is "User", and the folder name is "Share", the path will be \\User\Share.



If the network does not allow automatic obtaining of IP addresses, include the destination computer's IP address in the path. For example: if the IP address of the destination computer is "192.168.0.191", and the folder name is "Share", the path will be \\192.168.0.191\Share.

3. **Press [OK].**

   If the format of the entered path is not correct, a message appears. Press [Exit], and then enter the path again.

Note

- Enter the path using this format: "\\ServerName\Share- Name\PathName".
- You can also enter an IPv4 address.
- You can enter a path using up to 128 characters.

Locating the SMB folder using Browse Network

This section describes how to locate the SMB folder using Browse Network.

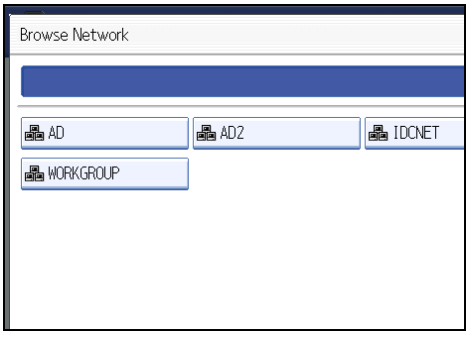
1. **Press [Browse Network].**

   The client computers sharing the same network as the machine appear.

   Network display only lists client computers you are authorized to access.

2. **Select the group that contains the destination computer.**
3. **Select the computer name of the destination computer.**

   Shared folders under it appear.



   You can press [Up One Level] to switch between levels.

4. **Select the folder you want to register.**
5. **Press [OK].**

If a Login Screen Appears

This section describes how to log in to the machine if the login screen appears when you try to access a folder by browsing the network.

If you have not specified folder authentication, or if an incorrect user name or password has been entered for folder authentication, the login screen appears.

1. **Enter the login user name, and then press [OK].**

   Enter the login user name specified for folder authentication.

2. **Enter the password, and then press [OK].**

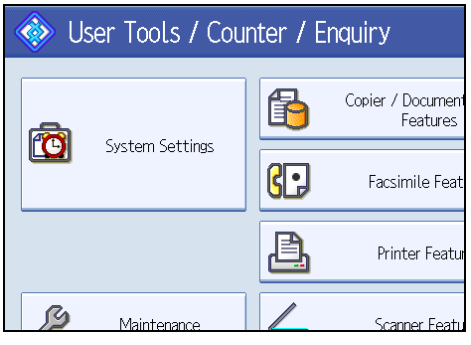
   The path to the selected folder appears.

   If a message appears, press [Exit], and then enter the login user name and password again.

Changing an SMB Folder

This section describes how to change settings of the registered SMB folder.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the name whose folder you want to change.**

   Press the name key, or enter the registered number using the number keys.

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. **Press [Folder].**
8. **Select the items you want to change.**

   When specifying a folder, enter the path directly or select it by referencing the network. For more information, see "Locating the SMB folder manually" and "Locating the SMB folder using Browse Network".

9. **Press [Connection Test] to check the path is set correctly.**

10. **Press [Exit].**
11. **Press [OK].**
12. **Press [Exit].**
13. **Press the [User Tools/Counter] key.**

Note

- To change the name, key display and title, see "Registering Names".

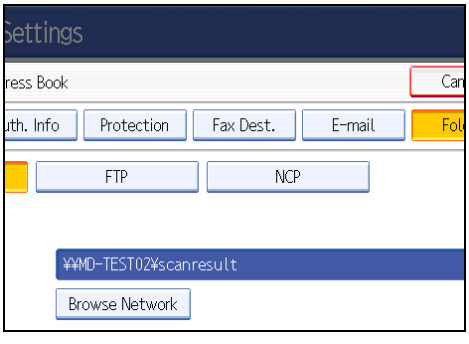
Reference

- p.235 "Registering Names"

Changing the protocol

This section describes how to change the protocol.

1. **Press [FTP] or [NCP].**



   A confirmation message appears.

2. **Press [Yes].**

   Changing the protocol will clear all settings made under the previous protocol.

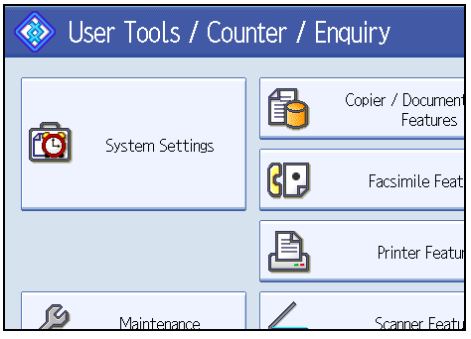
3. **Enter each item again.**

Deleting an SMB Registered Folder

This section describes how to delete the registered SMB folder.

1. **Press the [User Tools/Counter] key.**

2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the name whose folder you want to delete.**

   Press the name key, or enter the registered number using the number keys.

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **Press [Folder].**
8. **Press the protocol which is not currently selected.**

   A confirmation message appears.
9. **Press [Yes].**
10. **Press [OK].**
11. **Press [Exit].**
12. **Press the [User Tools/Counter] key.**

Note

- To delete the name, key display and title, see "Registering Names".

Reference

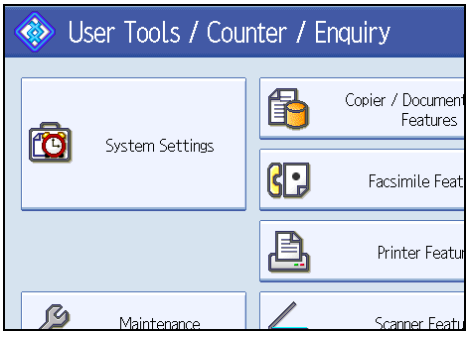
- p.235 "Registering Names"

Registering an FTP Folder

This section describes how to register an FTP folder.

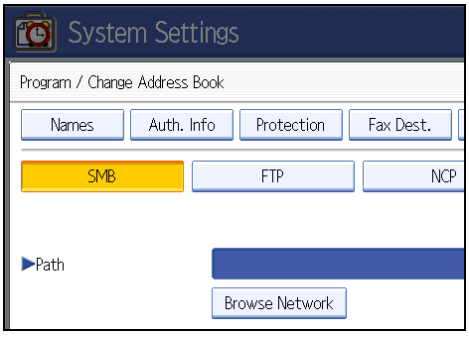
1. **Press the [User Tools/Counter] key.**

2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the name whose folder you want to register.**

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **Press [Folder].**
8. **Press [FTP].**



9. **Press [Change] under "Server Name".**
10. **Enter the server name, and then press [OK].**
11. **Press [Change] under "Path".**
12. **Enter the path, and then press [OK].**

    You can enter an absolute path, using this format: "\user\ home\username"; or a relative path, using this format: "directory\sub-directory".

    If you leave the path blank, the login directory is assumed to be the current working directory.

    You can also enter an IPv4 address.

    You can enter a path using up to 128 characters.
13. **To change the port number, press [Change] under "Port Number".**

14. **Enter the port number using the number keys, and then press the [#] key.**

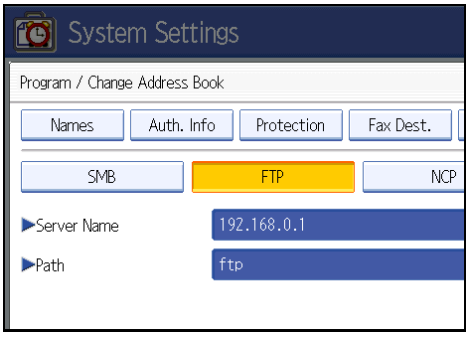
    You can enter 1 to 65535.

15. **Press [Connection Test] to check the path is set correctly.**

16. **Press [Exit].**

    If the connection test fails, check the settings, and then try again.

17. **Press [Auth. Info], and then press [▼Next].**



18. **Press [Specify Other Auth. Info] on the right side of "Folder Authentication".**

    When [Do not Specify] is selected, the FTP User Name and FTP Password that you have specified in "Default User Name / Password (Send)" of File Transfer settings applies. For details, see "File Transfer".

19. **Press [Change] under "Login User Name".**

20. **Enter the login user name, and then press [OK].**

21. **Press [Change] under "Login Password".**

22. **Enter the password, and then press [OK].**

23. **Enter the password again to confirm, and then press [OK].**

24. **Press [OK].**

25. **Press [Exit].**

26. **Press the [User Tools/Counter] key.**

Note

- To register the name, see "Registering Names".
- You can enter up to 64 characters for the user name.
- You can enter up to 64 characters for the password.
- You can enter a server name using up to 64 characters.
- If User Authentication is specified, contact your administrator.

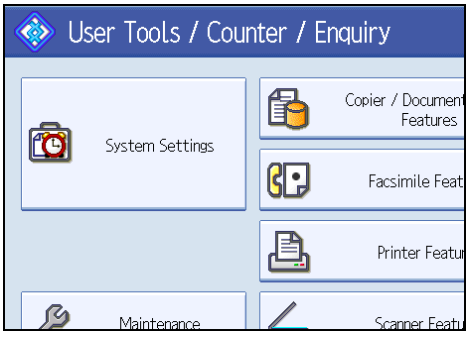
Reference

- p.48 "File Transfer"
- p.235 "Registering Names"

Changing an FTP Folder

This section describes how to change the registered FTP folder.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the name whose folder you want to change.**

   Press the name key, or enter the registered number using the number keys.

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **Press [Folder].**
8. **Select the items you want to change.**
9. **Press [Connection Test] to check the path is set correctly.**
10. **Press [Exit].**
11. **Press [OK].**
12. **Press [Exit].**
13. **Press the [User Tools/Counter] key.**

Note

- To change the name, key display and title, see "Registering Names".

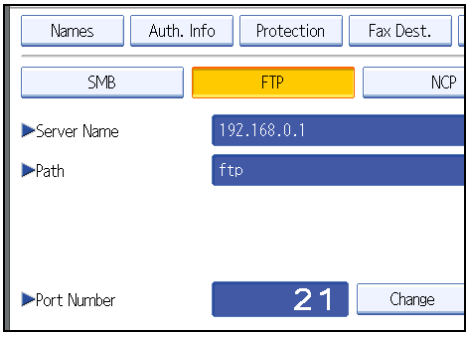
Reference

- p.235 "Registering Names"

Changing the protocol

This section describes how to change the protocol.

1. **Press [SMB] or [NCP].**



   A confirmation message appears.

2. **Press [Yes].**

   Changing the protocol will clear all settings made under the previous protocol.

3. **Enter each item again.**

Changing the registered FTP folder

This section describes how to change the registered FTP folder.

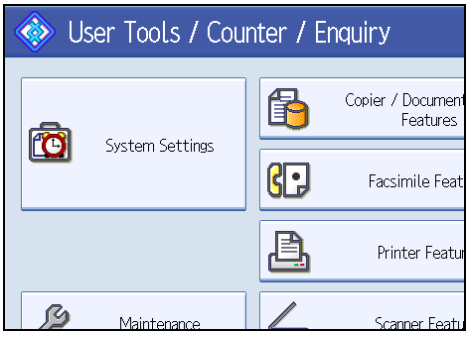
1. **Press [Change] under "Port Number".**
2. **Enter the new port number, and then press the [#] key.**
3. **Press [Change] under "Server Name".**
4. **Enter the new server name, and then press [OK].**
5. **Press [Change] under "Path".**
6. **Enter the new path, and then press [OK].**

Deleting an FTP Folder

This section describes how to delete the registered FTP folder.

1. **Press the [User Tools/Counter] key.**

2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the name whose folder you want to delete.**

   Press the name key, or enter the registered number using the number keys.

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **Press [Folder].**
8. **Press the protocol which is not currently selected.**

   A confirmation message appears.
9. **Press [Yes].**
10. **Press [OK].**
11. **Press [Exit].**
12. **Press the [User Tools/Counter] key.**

Note

- To delete a name entirely, see "Registering Names".

Reference

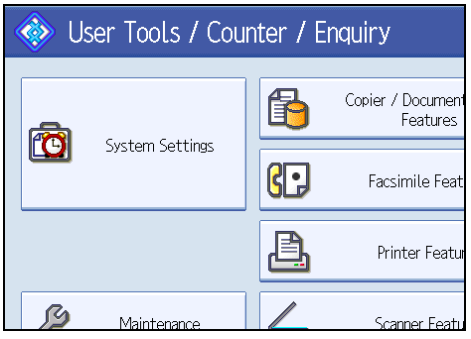
- p.235 "Registering Names"

Registering an NCP Folder

This section describes how to register an NCP folder.

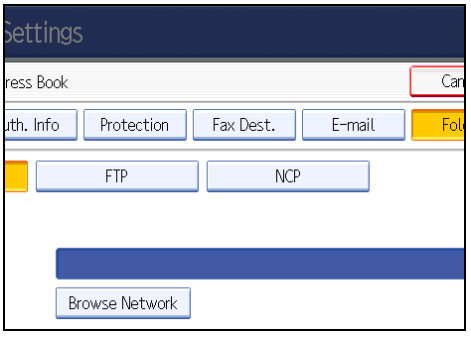
1. **Press the [User Tools/Counter] key.**

2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Press the name you want to register or enter the registered number using the number keys.**

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **Press [Folder].**
8. **Press [NCP].**



9. **Select "Connection Type".**

   If you want to specify a folder in an NDS tree, press [NDS]. If you want to specify a folder on a NetWare server, press [Bindery].

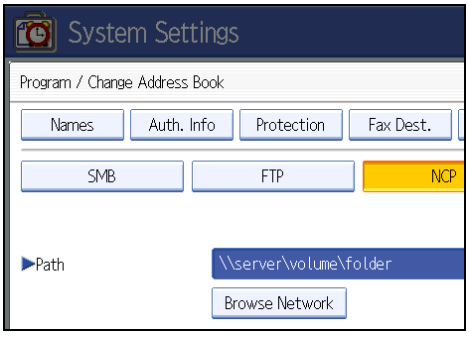
   If you have set "Connection Type" to [NDS], enter the user name followed by the name of the context where the user object is located. If the user name is "user" and the context name is "context", enter "user.context".
10. **Specify the path.**

    For details about how to specify the path manually, see "Locating the NCP folder manually".

    For details about how to specify the path using Browse Network, see "Locating the NCP folder using Browse Network".

11. **Press [Connection Test] to check the path is set correctly.**
12. **Press [Exit].**

    If the connection test fails, check the settings, and then try again.
13. **Press [Auth. Info], and then press [▼Next].**



14. **Press [Specify Other Auth. Info] on the right side of "Folder Authentication".**

    When [Do not Specify] is selected, the NCP User Name and NCP Password that you have specified in "Default User Name / Password (Send)" of File Transfer settings applies. For details, see "File Transfer".
15. **Press [Change] under "Login User Name".**
16. **Enter the login user name, and then press [OK].**
17. **Press [Change] under "Login Password".**
18. **Enter the password, and then press [OK].**
19. **Enter the password again to confirm, and then press [OK].**
20. **Press [OK].**
21. **Press [Exit].**
22. **Press the [User Tools/Counter] key.**

Note

- To register the name, see "Registering Names".
- You can enter up to 64 characters for the user name.
- You can enter up to 64 characters for the password.
- To specify a folder, you can either enter the path manually or locate the folder by browsing the network.
- If User Authentication is specified, contact your administrator.

Reference

- p.48 "File Transfer"
- p.235 "Registering Names"

Locating the NCP folder manually

This section describes how to locate the NCP folder manually.

1. **Press [Change] under "Path".**
2. **Enter the path where the folder is located.**
3. **Press [OK].**
4. **Press [Connection Test] to check the path is set correctly.**
5. **Press [Exit].**

Note

- If you set "Connection Type" to [NDS], and if the NDS tree name is "tree", the name of the context including the volume is "context", the volume name is "volume" and the folder name is "folder", then the path will be "\\tree\volume\context\folder".
- If you set "Connection Type" to [Bindery], and if the NetWare server name is "server", the volume name is "volume" and the folder name is "folder", then the path will be "\\server\volume\folder".
- You can enter a path using up to 128 characters.
- If the connection test fails, check the settings, and then try again.

Locating the NCP folder using Browse Network

This section describes how to locate the NCP folder using Browse Network.

1. **Press [Browse Network].**
2. **If you have set "Connection Type" to [NDS], a list of items in the NDS tree appears. If you have set "Connection Type" to [Bindery], a list of items on the NetWare server appears.**
3. **Search for the destination folder in the NDS tree or NetWare server.**

   You can press [Up One Level] to switch between levels.
4. **Select the folder you want to register.**
5. **Press [OK].**

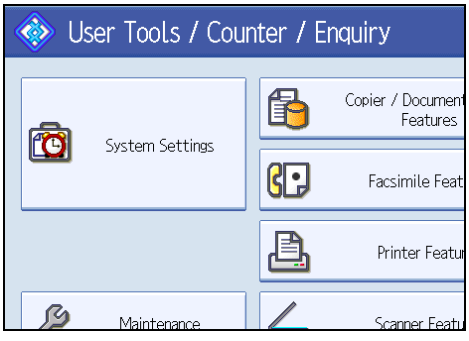
Note

- Only the folders you are allowed to access appear in [Browse Network].
- If the languages used on the machine and the destination you want to view differ, the items in the list may not appear correctly.
- Up to 100 items can be displayed in the list.

Changing an NCP Registered Folder

This section describes how to change the registered NCP folder.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the user of the registered folder you want to change.**

   Press the name key, or enter the registered number using the number keys.

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **Press [Folder].**
8. **Select "Connection Type".**

   If you want to specify a folder in an NDS tree, press [NDS]. If you want to specify a folder on a NetWare server, press [Bindery].
9. **Specify the folder.**

   To specify a folder, you can either enter the path manually or locate the folder by browsing the network.
10. **Press [Connection Test] to check the path is set correctly.**
11. **Press [Exit].**
12. **Press [OK].**
13. **Press [Exit].**
14. **Press the [User Tools/Counter] key.**

Note

- To change the name, key display and title, see "Registering Names".

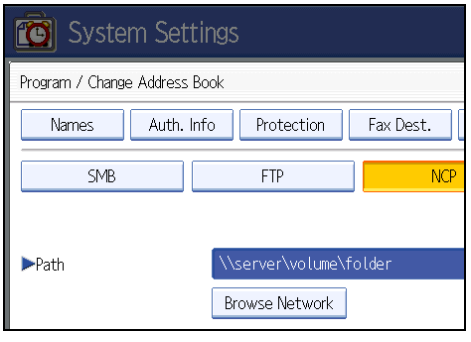
Reference

- p.235 "Registering Names"

Changing the protocol

This section describes how to change the protocol.

1. **Press [SMB] or [FTP].**



2. **A confirmation message appears. Press [Yes].**

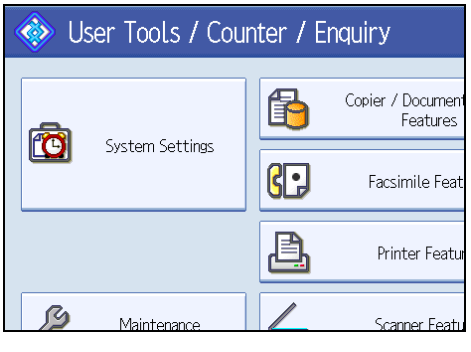
   Changing the protocol will clear all settings made under the previous protocol.

3. **Enter each item again.**

Deleting an NCP Folder

This section describes how to delete the registered NCP folder.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**

6. **Select a user of the folder you want to delete.**

   Press the name key, or enter the registered number using the number keys.

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. **Press [Folder].**
8. **Press the protocol which is not currently selected.**

   A confirmation message appears.

9. **Press [Yes].**
10. **Press [OK].**
11. **Press [Exit].**
12. **Press the [User Tools/Counter] key.**

Note

- To delete a name entirely, see "Registering Names".

Reference

- p.235 "Registering Names"

Registering Names to a Group

This section describes how to register names to a group.

You can register names to a group to enable easy management of e-mail addresses and folders for each group.

To add names to a group, the groups must be registered beforehand.

Important

- **When using Scan to Folder function, you cannot send scan files to a group with over 50 folders registered.**
- **The maximum number of destinations registerable to a group is 100.**

Note

- You can set a protection code to prevent unauthorized access to the folders registered in a group. For details, see "Registering a Protection Code".

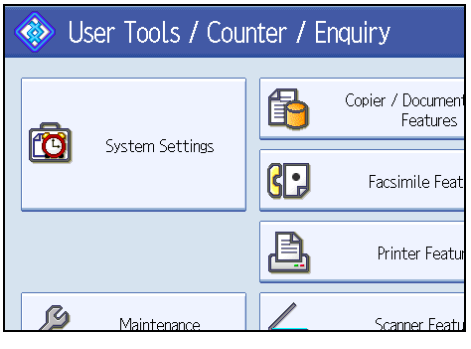
Reference

- p.296 "Registering a Protection Code"

Registering a Group

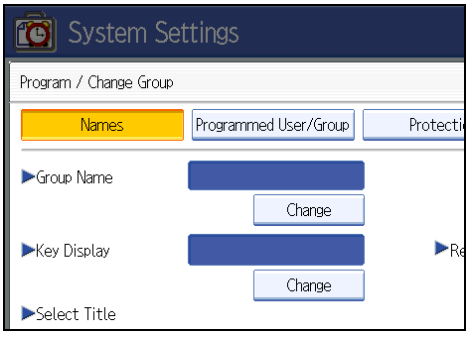
This section describes how to register a group.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book: Program / Change / Delete Group].**
5. **Check that [Program / Change] is selected.**
6. **Press [New Program].**

7. **Press [Change] under "Group Name".**



8. **Enter the group name, and then press [OK].**

   The Key Display name is set automatically.

9. **Press the title key under "Select Title", if necessary.**

   The keys you can select are as follows:

   - [Frequent]: Added to the page that is displayed first.
   - [AB], [CD], [EF], [GH], [IJK], [LMN], [OPQ], [RST], [UVW], [XYZ], [1] to [10].

     Added to the list of items in the selected title.

   You can select [Frequent] and one more page for each title.

10. **When you want to change the key display, press [Change] under "Key Display".**
11. **Enter the key display, and then press [OK].**
12. **Press [OK].**
13. **Press [Exit].**
14. **Press the [User Tools/Counter] key.**

Registering Names to a Group

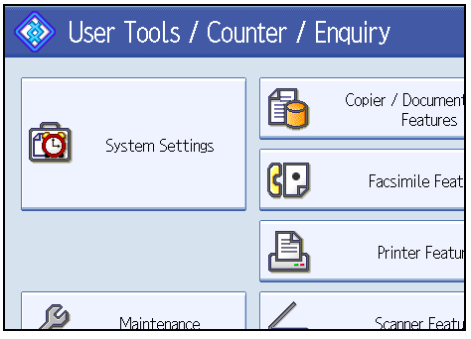
This section describes how to register names to a registered group.

You can put names that have been registered in the Address Book into a group.

When registering new names, you can also register groups at the same time.

1. **Press the [User Tools/Counter] key.**

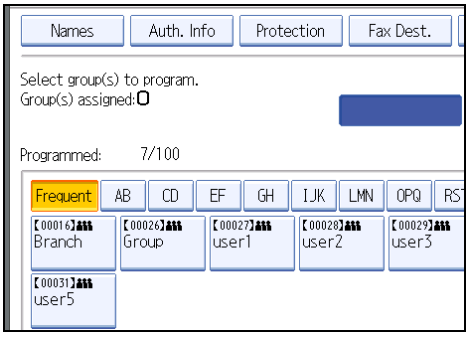
2. **Press [System Settings].**



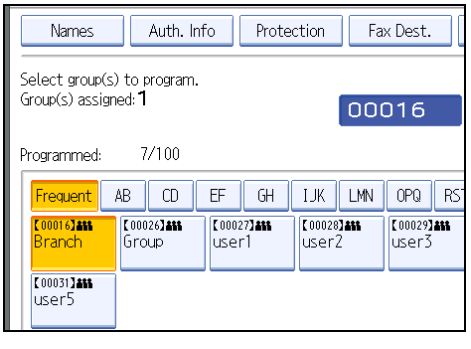
3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the name to register in a group.**

   Press the name key, or enter the registered number using the number keys.

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **Press [Add to Group].**
8. **Select a group to which you want to add the name.**



The group key that you have selected becomes highlighted, and the name is added to it.

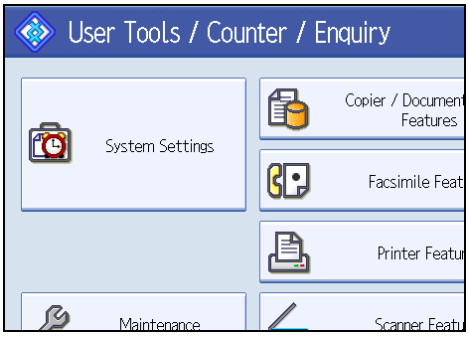


9. **Press [OK].**
10. **Press [Exit].**
11. **Press the [User Tools/Counter] key.**

Adding a Group to Another Group

This section describes how to add a group to another group.

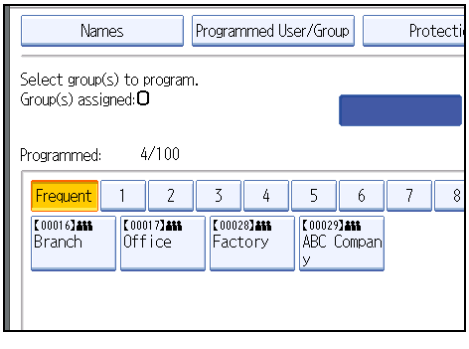
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



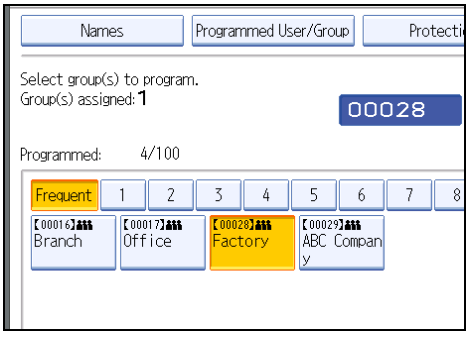
3. **Press [Administrator Tools].**
4. **Press [Address Book: Program / Change / Delete Group].**
5. **Check that [Program / Change] is selected.**
6. **Select the group that you want to put into another group.**

   Press the group key, or enter the registered number using the number keys.

   You can search by the registered name.
7. **Press [Add to Group].**
8. **Select the group to which you want to add.**



The group key that you have selected becomes highlighted, and the group is added to it.



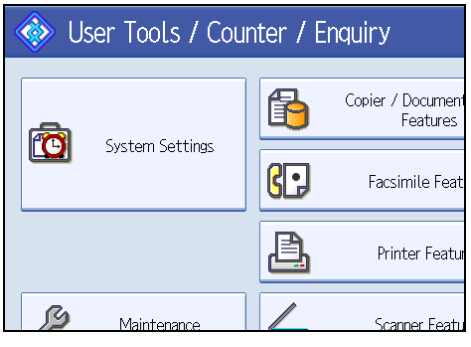
9. **Press [OK].**
10. **Press [Exit].**
11. **Press the [User Tools/Counter] key.**

5 Displaying Names Registered in a Group

This section describes how to display names registered in a group.

You can check the names or groups registered in each group.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book: Program / Change / Delete Group].**
5. **Check that [Program / Change] is selected.**
6. **Select the group where the members you want to check is registered.**

   You can search by the registered name.
7. **Press [Programmed User/Group].**

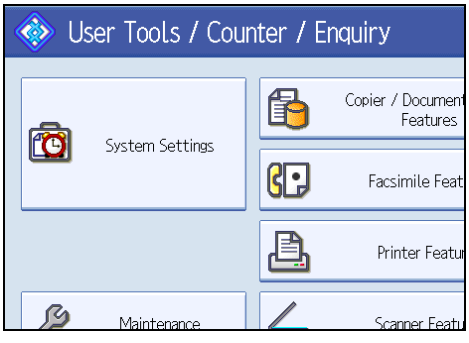
   All the names registered will be displayed.
8. **Press [OK].**

9. **Press [Exit].**
10. **Press the [User Tools/Counter] key.**

Removing a Name from a Group

This section describes how to remove a name from a group.

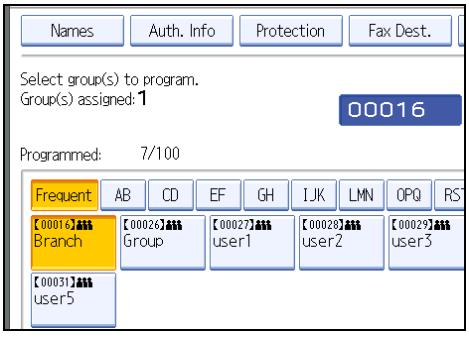
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the name to remove from a group.**

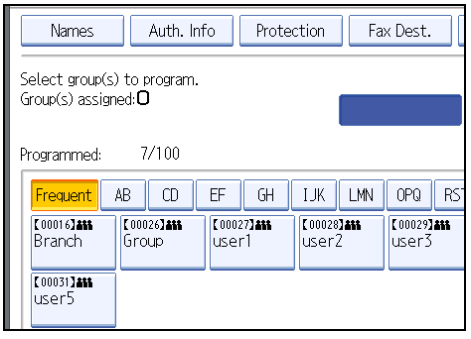
   Press the name key, or enter the registered number using the number keys.

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **Press [Add to Group].**
8. **Select the group from which you want to remove the name.**



   The group key is deselected and the name is removed from it.

9. **Press [OK].**



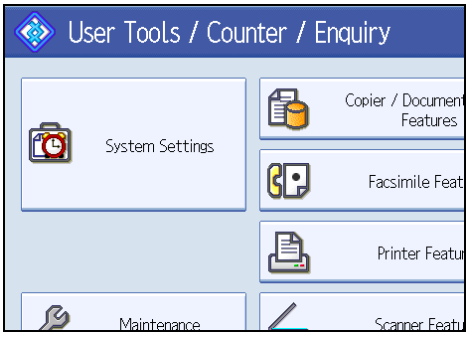
10. **Press [Exit].**
11. **Press the [User Tools/Counter] key.**

5

Deleting a Group Within Another Group

This section describes how to delete a group within another group.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



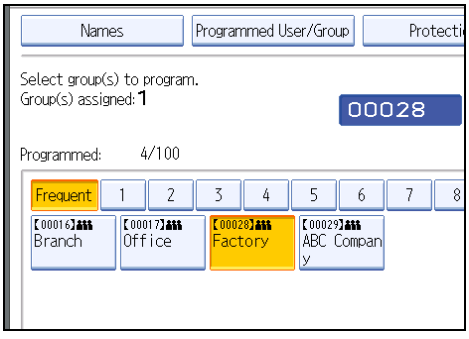
3. **Press [Administrator Tools].**
4. **Press [Address Book: Program / Change / Delete Group].**
5. **Check that [Program / Change] is selected.**
6. **Select the group that you want to delete from.**

   Press the group key, or enter the registered number during the number keys.

   You can search by the registered name.
7. **Press [Add to Group].**

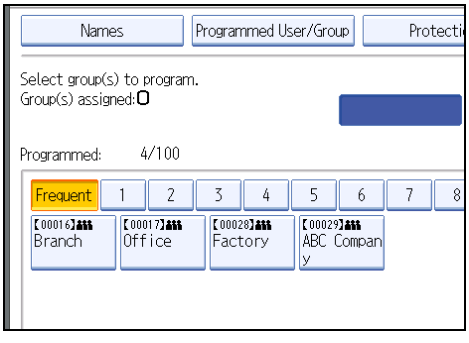
   The keys of groups in which the group is registered appear highlighted.

8. **Select the group that you want to delete from.**



The group key is deselected and the group is deleted from it.

9. **Press [OK].**

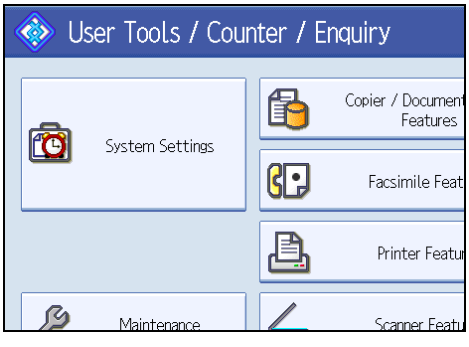


10. **Press [Exit].**
11. **Press the [User Tools/Counter] key.**

Changing a Group Name

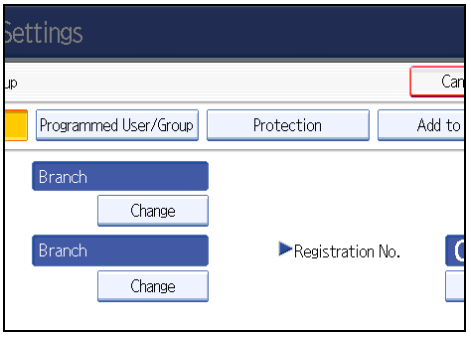
This section describes how to change a group name.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book: Program / Change / Delete Group].**
5. **Check that [Program / Change] is selected.**
6. **Press the group key you want to change.**

   You can search by the registered name.
7. **To change the group name and key display, press [Change] under "Group Name" or "Key Display".**



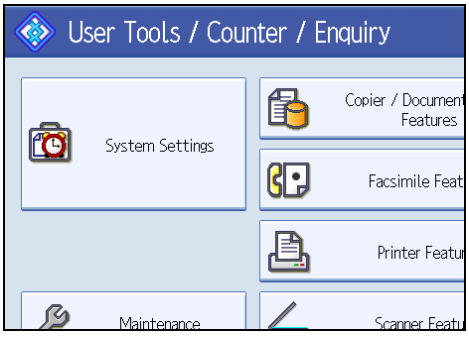
8. **Enter the new group name or key display, and then press [OK].**
9. **To change the title, press the title key under "Select Title".**
10. **To change the registration number, press [Change] under "Registration No.".**
11. **Enter the new registration number using the number keys.**
12. **Press the [#] key.**
13. **Press [OK].**
14. **Press [Exit].**
15. **Press the [User Tools/Counter] key.**

Deleting a Group

This section describes how to delete a group.

1. **Press the [User Tools/Counter] key.**

2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book: Program / Change / Delete Group].**
5. **Press [Delete].**
6. **Press a group key you want to delete.**

   You can search by the registered name.
7. **Press [Yes].**
8. **Press [Exit].**
9. **Press the [User Tools/Counter] key.**

Registering a Protection Code

This section describes how to register a Protection Code.

You can stop sender's names or folders being accessed by setting a protection code.

You can use this function to protect the following:

- Folders

  You can prevent unauthorized access to folders.

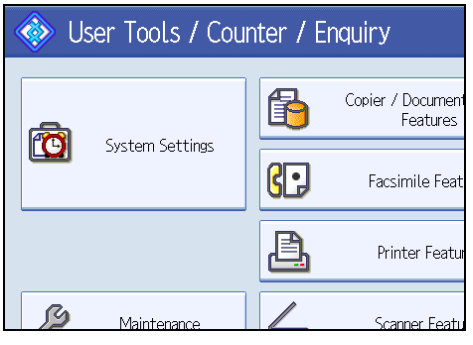
- Sender's names

  You can prevent misuse of sender's names.

Registering a Protection Code to a Single User

This section describes how to register a Protection code to a single user.

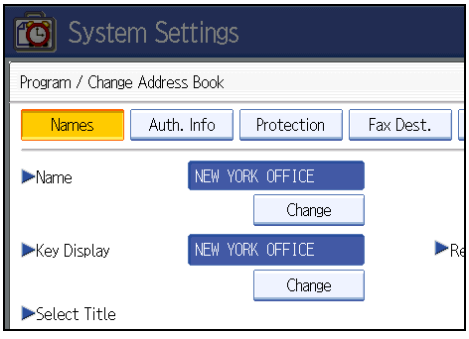
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



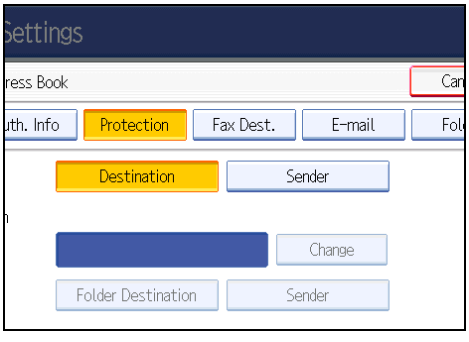
3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Select the name whose protection code you want to register.**

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. **Press [Protection].**



8. **Press [Destination] or [Sender] under "Use Name as".**



Both [Destination] and [Sender] can be selected at the same time.

9. **Press [Folder Destination] or [Sender] under "Protection Object".**
10. **Press [Change] under "Protection Code".**
11. **Enter a protection code using the number keys, and then press the [#] key.**
12. **Press [OK].**
13. **Press [Exit].**
14. **Press the [User Tools/Counter] key.**

Note

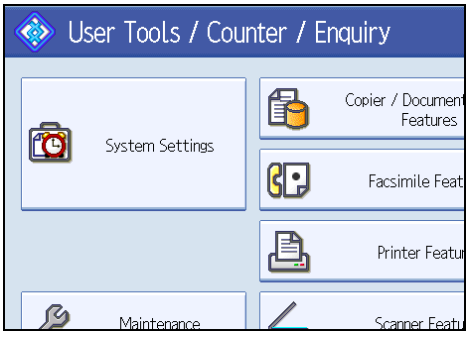
- Specify a protection code of up to eight digits. You can also specify "Protection" without specifying a protection code.

Registering a Protection Code to a Group User

This section describes how to register a Protection Code to a Group User.

1. **Press the [User Tools/Counter] key.**

2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book: Program / Change / Delete Group].**
5. **Check that [Program / Change] is selected.**
6. **Press the group key you want to register or enter the registered number using the number keys.**

   You can search by the registered name.
7. **Press [Protection].**
8. **Press [Folder Destination] under "Protection Object".**
9. **Press [Change] under "Protection Code".**
10. **Enter a protection code using the number keys, and then press the [#] key.**
11. **Press [OK].**
12. **Press [Exit].**
13. **Press the [User Tools/Counter] key.**

Note

- Specify a protection code of up to eight digits. You can also specify "Protection" without specifying a protection code.

Registering SMTP and LDAP Authentication

This section describes how to register SMTP and LDAP Authentication.

SMTP Authentication

This section describes how to register SMTP Authentication.

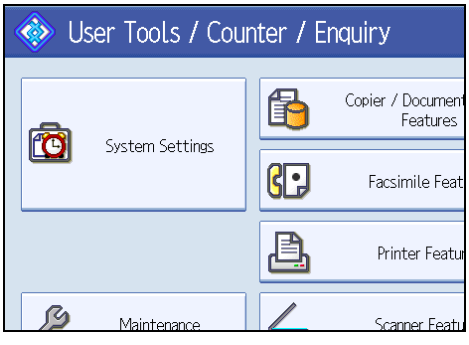
For each user registered in the Address Book, you can register a login user name and login password to be used when accessing an SMTP server.

To use an SMTP server, you need to program it beforehand.

Important

- **When [Do not Specify] is selected for SMTP Authentication the User Name and Password that you have specified in SMTP Authentication of File Transfer settings applies. For details, see "File Transfer".**

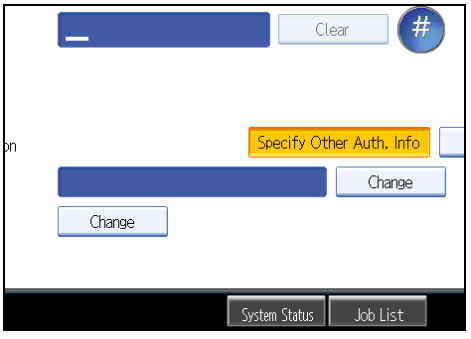
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Press the name you want to register or enter the registered number using the number keys.**

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **Press [Auth. Info].**
8. **Press [Specify Other Auth. Info] under "SMTP Authentication".**

9. **Press [Change] under "Login User Name".**



10. **Enter the login user name, and then press [OK].**
11. **Press [Change] under "Login Password".**
12. **Enter the password, and then press [OK].**
13. **Enter the password again to confirm, and then press [OK].**
14. **Press [OK].**
15. **Press [Exit].**
16. **Press the [User Tools/Counter] key.**

Note

- To register the name, see "Registering Names".
- You can enter up to 191 characters for the user name.
- You can enter up to 128 characters for the password.

Reference

- p.48 "File Transfer"
- p.235 "Registering Names"

LDAP Authentication

This section describes how to register LDAP Authentication.

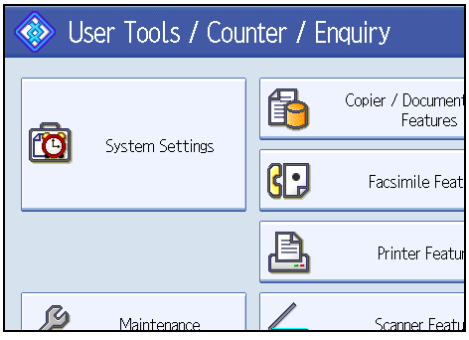
For each user registered in the Address Book, you can register a login user name and login password to be used when accessing an LDAP server.

To use an LDAP server, you need to program it beforehand. For details, see "Programming the LDAP server".

Important

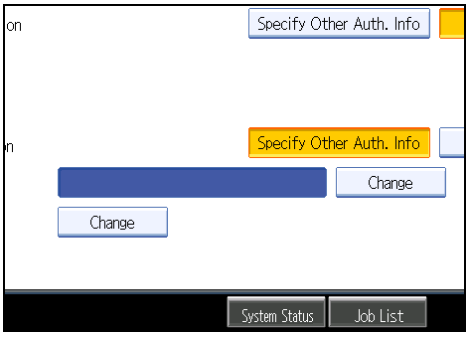
- **When [Do not Specify] is selected for LDAP Authentication, the User Name and Password that you have specified in Program / Change LDAP Server of Administrator Tools settings applies. For details, see "Programming the LDAP server".**

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**



3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Check that [Program / Change] is selected.**
6. **Press the name you want to register or enter the registered number using the number keys.**

   You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. **Press [Auth. Info], and then press [▼Next].**
8. **Press [Specify Other Auth. Info] under "LDAP Authentication".**
9. **Press [Change] under "Login User Name".**



10. **Enter the login user name, and then press [OK].**
11. **Press [Change] under "Login Password".**
12. **Enter the password, and then press [OK].**
13. **Enter the password again to confirm, and then press [OK].**
14. **Press [OK].**
15. **Press [Exit].**
16. **Press the [User Tools/Counter] key.**

Note

- To register the name, see "Registering Names".
- You can enter up to 128 characters for the user name.
- You can enter up to 128 characters for the password.

Reference

- p.66 "Programming the LDAP server"
- p.235 "Registering Names"

6. Special Operations under Windows

This chapter describes how to print files directly from Windows.

Printing Files Directly from Windows

You can print files directly using Windows commands (lpr, ftp, or sftp). For example, you can print PostScript files for PostScript 3.

Setup

Follow the procedure below to make network environment settings.

1. **Enable TCP/IP with the control panel, and then set up the printer's network environment about TCP/IP including IP addresses.**

   TCP/IP of the machine is set as default.

2. **Install a TCP/IP in Windows to set up the network environment.**

   Consult the network administrator for the local setting information.

3. **To print under Windows 2000/XP/Vista/7, Windows Server 2003/2003 R2/ 2008/2008 R2, install "Printing service for UNIX" as the network application.**

Reference

- p.309 "Using DHCP"

Using a Host Name Instead of an IPv4 Address

When a host name is defined, you can specify a printer by host name instead of IP address. The host names vary depending on the network environment.

When using DNS

Use the host name set to the data file on the DNS server.

When setting the IPv4 address of a printer using DHCP

Use the printer name on the configuration page as the host name.

In other cases

Add the IP address and host name of the network printer to the hosts file on the computer used for printing. Methods of addition vary depending on operating systems.

1. **Open the hosts file using memo pad files, for instance.**

   On computers running Windows 2000, the hosts file can be found in the following folder:

   `\WINNT\SYSTEM32\DRIVERS\ETC\HOSTS`

   On computers running Windows XP/Vista/7 and Windows Server 2003/2003 R2/2008/2008 R2, the hosts file can be found in the following folder:

   `\WINDOWS\SYSTEM32\DRIVERS\ETC\HOSTS`

2. **Add an IPv4 or IPv6 address and host name to the hosts file using the following format:**

   `192.168.15.16 host # NP`

   "192.168.15.16" is the IPv4 address, "host" is the printer's host name, and "#NP" is replaced by comments. Insert a space or tab between "192.168.15.16" and "host", between "host" and "#NP" respectively, using one line for this format.

   `2001:DB::100 host # NP`

   "2001:DB::100" is the IPv6 address, "host" is the printer's host name, and "#NP" is replaced by comments. Insert a space or tab between "2001:DB::100" and "host", between "host" and "#NP" respectively, using one line for this format.

3. **Save the file.**

Note

- When using a host name under Windows Server 2003/2003 R2/2008/2008 R2, with IPv6 protocol, perform host name resolution using an external DNS server. The host file cannot be used.

Printing Commands

The following explains printing operations using the "lpr", "ftp" and "sftp" commands.

Enter commands using the command prompt window. The location of the command prompts varies depending on operating systems:

- Windows 2000

  [Start] - [Programs] - [Accessories] - [Command Prompt]

- Windows XP/Vista/7, Windows Server 2003/2003 R2/2008/2008 R2

  [Start] - [All Programs] - [Accessories] - [Command Prompt]

Note

- Match the data format of the file to be printed with the emulation mode of the printer.

- If the message "print requests full" appears, no print jobs can be accepted. Try again when sessions end. For each command, the amount of possible sessions is indicated as follows:
  - lpr: 5 (When the spool printing function is available: 10)
  - ftp: 3
  - sftp: 3
- Enter the file name in a format including the path from the directory executing commands.
- The "option" specified in a command is an intrinsic printer option and its syntax is similar to printing from UNIX. For details, see UNIX Supplement.

lpr

When specifying a printer by IP address

```
c:> lpr -Sprinter's IP address [-Poption] [-ol] \path\file name
```

When using a host name instead of an IP address

```
c:> lpr -Sprinter's host name [-Poption] [-ol] \path\file name
```

When printing a binary file, add the "-ol" option (lowercase O, and lowercase L).

When using a printer with the host name "host" to print a PostScript file named "file 1" located in the "C:\PRINT" directory, the command line is as follows:

```
c:> lpr -Shost -Pfiletype=RPS -ol C:\PRINT\file1
```

Printing from the virtual printer

```
C:\>lpr -S "printer's IP address" -P[virtual printer name] [-ol] \path\file name
```

Note

- For details about the virtual printer configuration, see "Using the Virtual Printer", Printer Reference.

ftp / sftp

Use the "put" or "mput" command according to the number of files to be printed.

When one file is printed

```
ftp> put \path\file name [option]
```

Printing from the virtual printer

```
ftp> put \path\file name [virtual printer name],
```

When multiple files are printed

```
ftp> mput \path\file name [\path\file name...] [option]
```

Follow the procedure below to print using the "ftp" command.

1. **Formulate the printer's IP address or the host name of the hosts file printer as an argument and use the "ftp" command.**

   ```
   % ftp "printer's IP address"
   ```

2. **Enter the user name and password, and then press the [Enter] key.**

   For details about the user name and password, consult your network administrator.

   ```
   User:
   Password:
   ```

   When user authentication is set, enter a login user name and password.

3. **When printing a binary file, set the file mode to binary.**

   ```
   ftp> bin
   ```

   When printing a binary file in ASCII mode, print may not come out correctly.

4. **Specify files to be printed.**

   The following shows the examples of printing a PostScript file named "file 1" in the "C:\PRINT" directory and printing file 1 and file 2.

   ```
   ftp> put C:\PRINT\file1 filetype=RPS
   ftp> mput C:\PRINT\file1 C:\PRINT\file2
   ```

5. **Quit ftp.**

   ```
   ftp> bye
   ```

Note

- "=", ",", "_", and ";" cannot be used for filenames. File names will be read as option strings.
- If you are using ftp, you cannot specify an option using the "mput" command.
- If you are using ftp, you cannot specify an option using the "pwd" command.
- If you are using sftp, you cannot specify an option using the "cd" command.
- If you are using sftp, you cannot specify an option using the "pwd" command.
- To use SFTP, you must create an open key for SSH communication. Use Web Image Monitor to create an open key. For details, see Web Image Monitor help.
- If personal authentication (Basic, Windows, LDAP, or Integrated Server Authentication) is enabled, only authenticated users (users authenticated by login user name and password) can log in.
- For "mput" command, "*" and "?" can be used as wild cards in file names.
- When printing a binary file in ASCII mode, print may not come out correctly.
- For details about login user name and password, see Security Reference, which is the administrator's manual.
- For details about the virtual printer configuration, see "Using the Virtual Printer", Printer Reference.

7. Appendix

When Using Windows Terminal Service/Citrix Presentation Server/Citrix XenApp

The following explains how to use Windows Terminal Service and Maintenance.

Operating Environment

The following operating systems and Citrix Presentation Server/Citrix XenApp versions are supported.

Citrix Presentation Server 4.0, 4.5/XenApp 5.0

- Windows 2000 Server / Advanced Server
- Windows Server 2003/2003 R2
- Windows Server 2008

Supported Printer Drivers

When Windows Terminal Service is operating

- PCL drivers
- PostScript 3

Limitations

The following limitations apply to the Windows Terminal Service environment.

These limitations are built in Windows Terminal Service or Citrix Presentation Server/Citrix XenApp.

Windows Terminal Service

In the Windows Terminal Service environment, some of the printer driver's functions are unavailable.

In an environment where Windows Terminal Service is installed, some of the printer driver's functions are available, even if any function of Windows Terminal Service is not used. When you install SmartDeviceMonitor for Client in an environment where the Terminal Service is running on the Windows 2000 Server family computer, be sure to install it using the install mode. The following are the two methods of installation using the install mode:

1. Use [Add/Remove Programs] in [Control Panel] to install SmartDeviceMonitor for Client.
2. Enter the following command in the MS-DOS command prompt:

   CHANGE USER /INSTALL

To quit the install mode, enter the following command in the MS-DOS command prompt.

CHANGE USER /EXECUTE

Citrix Presentation Server/Citrix XenApp [Auto-creating client printers]

Using [Auto-creating client printers] can select a logical printer created by copying the client's local printer data to the Citrix server. We strongly recommend testing this function in your network environment before using it for your work.

- The settings for optional equipment will not be stored in the server after the equipment is disconnected. The settings for optional equipment will be restored to its defaults each time the client computer logs on to the server.
- When printing a large number of bitmap images or using the server in a WAN environment over dial-up lines such as ISDN, printing may not be possible or errors may occur, depending on data transfer rates.

Citrix Presentation Server/Citrix XenApp [Printer driver replication]

Using [Printer driver replication] can distribute printer drivers across all servers in a server farm. We strongly recommend testing this function in your network environment before using it for your work.

- If the printer drivers are not properly copied, install them directly onto each server.

Using DHCP

You can use the printer in a DHCP environment. You can also register the printer NetBIOS name on a WINS server when it is running.

- Printers that register the printer NetBIOS name on a WINS server must be configured for the WINS server.
- Supported DHCP servers are Microsoft DHCP Server included with Windows 2000 Server, and Windows Server 2003/2003/2008/2008 R2, and the DHCP server included with NetWare and UNIX.
- If you do not use the WINS server, reserve the printer's IP address in the DHCP server so the same IP address is assigned every time.
- To use the WINS server, change the WINS server setting to "active" using the control panel.
- Using the WINS server, you can configure the host name via the remote network printer port.
- DHCP relay-agent is not supported. If you use DHCP relay-agent on a network via ISDN, it will result in increased line charges. This is because your computer connects to the ISDN line whenever a packet is transferred from the printer.
- If there is more than one DHCP server, use the same setting for all servers. The machine operates using data from the DHCP server that responds first.
- DHCP servers can operate in an IPv6 environment, but they cannot be configured to allocate IPv6 addresses or obtain host names.

Using AutoNet

If the machine IPv4 address is not automatically assigned by the DHCP server, a temporary IP address starting with 169.254 and not used on the network can be automatically selected by the machine.

Note

- The IP address assigned by the DHCP server is given priority over that selected by AutoNet.
- You can confirm the current IPv4 address on the configuration page.
- When AutoNet is running, the NetBIOS name is not registered on the WINS server.
- The machine cannot communicate with devices that do not have the AutoNet function. However, this machine can communicate with Macintosh computers running Mac OS X 10.2.3. or higher.

Configuring the WINS Server

This section explains configuring the WINS server.

The printer can be configured to register its NetBIOS name with a WINS server when the power is turned on. This enables the NetBIOS name of the printer to be specified from SmartDeviceMonitor for Admin even in a DHCP environment.

Note

- The WINS server is supported with Windows 2000 Servers WINS Manager.
- For details about the WINS server settings, see Windows Help.
- If there is no reply from the WINS server, the NetBIOS name is registered by broadcast.
- The NetBIOS name can be entered using up to 15 alphanumeric characters.

Using Web Image Monitor

1. **Start a Web browser.**
2. **Enter "http://(machine's IP address or host name)/" in the address bar to access the printer whose settings you want to change.**

   Top Page of Web Image Monitor appears.
3. **Click [Login].**

   The dialog box for entering the user name and password appears.
4. **Enter the user name and password, and then click [Login].**

   Contact your administrator for information about the settings.

   Depending on the configuration of your Web browser, the login user name and password might be saved. If you do not want to save them, configure your Web browser's settings so that this information is not saved.
5. **In the menu area, click [Configuration].**
6. **Under "Network", click [IPv4].**
7. **Check that [Active] is selected for [WINS] in the [Ethernet + Wireless LAN] column, and then enter the WINS server IPv4 address in [Primary WINS Server] and [Secondary WINS Server].**
8. **Click [OK].**
9. **"Updating..." appears. Wait for about one or two minutes, and then click [OK].**
10. **Quit Web Image Monitor.**

Reference

- p.133 "Using Web Image Monitor"

Using telnet

You can also use telnet to configure WINS.

Use the "wins" command to make the setting with telnet.

Reference

- p.155 "Remote Maintenance Using telnet"

Using the Dynamic DNS Function

Dynamic DNS is a function which dynamically updates (registers and deletes) records (A record, AAAA record, CNAME, and PTR record) managed by the DNS server. When a DNS server is part of the network environment to which this machine, a DNS client, is connected, records can be dynamically updated using this function.

Updating

Updating procedure varies depending on whether the machine IP address is static or acquired by DHCP.

Important

- **Dynamic update using message authentication (TSIG, SIG(0)) is not supported.**

For a static IPv4 setting

If the IP address or host name is changed, the A and PTR records are updated. If the A record is registered, CNAME is also registered. CNAMEs that can be registered are as follows:

- Ethernet and IEEE 802.11

  RNPXXXXXX (XXXXXX represents the last 3 hexadecimal bytes of the MAC address)

  However, if CNAME (PRNXXXXXX) overlaps with the host name, CNAME will not be registered.

For DHCPv4 settings

As a substitute for the machine, the DHCP server updates the record, and one of the following occurs:

- When the machine acquires the IP address from the DHCP server, the DHCP server updates the A and PTR records.
- When the machine acquires the IP address from the DHCP server, the machine updates the A record, and the DHCP server updates the PTR record.

If the A record is registered, CNAME is also registered. CNAMEs that can be registered are as follows:

- Ethernet and IEEE 802.11

  RNPXXXXXX (XXXXXX represents the last 3 hexadecimal bytes of the MAC address)

For IPv6 settings

This machine updates the AAAA record and PTR record.

It also updates CNAME when the AAAA record is updated.

When a stateless address is newly set, it is automatically registered on the DNS server also.

Note

- When the dynamic DNS function is not used, records managed by the DNS server must be updated manually, if the machine's IP address is changed.
- To update the record using the machine, the DNS server has to have one of the following:

- No security settings are made.
- If security settings are made, an IP-specified client (this machine) permits updating.

DNS servers targeted for operation

For static IP setting

- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003/2003 R2/2008/2008 R2 features
- BIND 8.2.3 or higher

For DHCP setup, when the machine updates the A record

- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003/2003 R2/2008/2008 R2 features
- BIND 8.2.3 or higher

For DHCP setup, when the DHCP server updates records

- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003/2003 R2/2008/2008 R2 features
- BIND 8.2.3 or higher
- DNS servers with standard NetWare 5 (or a higher version) features

For IPv6 setting

- Microsoft DNS servers with standard Windows Server 2003/2003 R2/2008/2008 R2 features
- BIND 9.2.3 or higher

DHCPv4 servers targeted for operation

As a substitute for the machine, DHCP servers capable of updating the A record and PTR record are as follows:

- Microsoft DHCP servers with standard Windows 2000 Server (Service Pack 3 or higher versions)/ Windows Server 2003/2003 R2/2008 features
- ISC DHCP 3.0 or higher
- DHCP server with standard NetWare 5 (or a higher version) features

Setting the dynamic DNS function

Make settings with telnet using the "dns" command.

Note

- For details, see "Remote Maintenance Using telnet".

Reference

- p.155 "Remote Maintenance Using telnet"

Precautions

Please pay attention to the following when using the network interface board. When configuration is necessary, follow the appropriate procedures below.

Connecting a Dial-Up Router to a Network

When using NetWare (file server)

If the NetWare file server and printer are on opposite sides of a router, packets are sent back and forth continuously, possibly incurring communications charges. Because packet transmission is a feature of NetWare, you need to change the configuration of the router. If the network you are using does not allow you to configure the router, configure the machine instead.

Filter packets so they do not pass over the dial-up router.

The MAC address of the filtering printer is printed on the printer configuration page.

For more information about configuring the printer if the router cannot be configured, see the following instructions.

Configuring the printer with NetWare

1. **Following the setup method described earlier in this manual, configure the file server.**
2. **Set the frame type for NetWare environment.**

Configuring the printer without NetWare

1. **When not printing, the network interface board sends packets over the network. Set NetWare to "inactive".**

Note

- For more information about selecting a frame type, see "Interface Settings".
- For more information about selecting a protocol, see "Interface Settings".

Reference

- p.39 "Interface Settings"

When using network utility

Important

- **If the machine is set up to connect to the delivery server via a dial-up router, the router will dial and go online whenever a connection to the delivery server is made. Telephone charges may be incurred.**

If the machine is connected to a network, observe the following points when setting up the machine or changing settings:

For more details, see the operating instructions and Help for the ScanRouter delivery software and DeskTopBinder.

When a dial-up router is connected in a network environment

The settings for the delivery server to be connected must be made appropriately for the machine with the ScanRouter delivery software, Auto Document Link, or DeskTopBinder. In addition, set up connected devices using the I/O settings of the ScanRouter delivery software administration utility.

If the network environment changes, make the necessary changes for the delivery server using the machine, the administration utility of client computers, Auto Document Link, and DeskTopBinder. Also, set the correct information for the connected devices using the I/O settings of the ScanRouter delivery software administration utility.

When connected to a computer that uses dial-up access

- Do not install the ScanRouter delivery software on a computer which uses dial-up access.
- When using the ScanRouter delivery software, DeskTopBinder, Auto Document Link, or a TWAIN driver on a computer with dial-up access, a dial-up connection may be performed when connecting to the delivery server and other equipment, depending on the setup. If the computer is set up to connect to the Internet automatically, the confirmation dialog box will not appear, and telephone charges may be incurred without your being aware of it. To prevent unnecessary connections, the computer should be set up so the confirmation dialog box always appears before establishing a connection. Do not make unnecessary connections when using the above listed software.

NetWare Printing

Important

- **IPv6 cannot be used on this function.**

Form feed

You should not configure form feed on NetWare. Form feed is controlled by the printer driver on Windows. If NetWare form feed is configured, the printer might not work properly. If you want to change form feed settings, always configure them using Windows.

- Under Windows 2000/XP and Windows Server 2003/2003 R2, clear the [Form feed] check box on the [NetWare Settings] tab in the printer properties dialog box.

Banner page

You should not configure a banner page on NetWare. If you want to change the banner page setting, always configure it using Windows.

- Under Windows 2000/XP and Windows Server 2003/2003 R2, clear the [Enable banner] check box on the [NetWare Settings] tab in the printer properties dialog box.

Printing after resetting the machine

After resetting the remote printer, the connection from the print server will be cut off for about 30-40 seconds before re-connecting. Depending on the NetWare specification, print jobs may be accepted, but they will not be printed during this interval.

When using the machine as a remote printer, wait about two minutes after resetting before attempting to print.

When the IEEE 802.11 Interface Unit is Installed

Please pay attention to the following when using the IEEE 802.11 interface on the network.

When using the wireless LAN interface on the network, note the following:

When moving the machine

Detach the antennas when relocating the machine locally.

After moving the machine, reattach the antennas, ensuring that:

- The antennas are positioned clear of obstacles.
- Region A (mainly Europe and Asia)

  There is 40 to 60 mm between the antennas, so that they do not touch.
- Region B (mainly North America)

  There is 1.6 to 2.4 inch between the antennas, so that they do not touch.
- The exposure glass cover and the ADF do not knock the antennas.

If the network area provides poor radio environment

Where radio wave conditions are bad, the network may not function due to interrupted or failed connections. When checking the wireless LAN signal and the access point, follow the procedure below to improve the situation:

- Position the access point nearer to the machine.
- Clear the space between access point and machine of obstructions.
- Move radio wave generating appliances, such as microwaves, away from the machine and access point.

Note

- For more information about access point radio wave conditions, refer to the access point manual.

Configuring IEEE 802.1X

IEEE 802.1X can be configured using Web Image Monitor's administrator mode. You can select four types of EAP authentication method: EAP-TLS, LEAP, EAP-TTLS and PEAP. Note that each EAP authentication method has different configuration settings and authentication procedures.

Types and requirements of certificates are as follows:

EAP Types Requiring a "Site Certificate"

EAP-TLS, EAP-TTLS, PEAP (Necessary except LEAP)

EAP Types Requiring a "Site Certificate" and a "Device Certificate"

EAP-TLS, PEAP (Phase 2 is for TLS only)

If a certificate is required, configure all settings after installing the certificate.

Installing a Site Certificate

Access the authentication server and obtain the CA certificate.

Methods of obtaining certificates differ according to the operating system you are using.

1. **Log in to Web Image Monitor in the administrator mode.**
2. **In the menu area, click [Configuration].**
3. **Under "Security", click [Site Certificate].**
4. **Click [Browse] on the "Site Certificate to Import" window, and then select the CA certificate you obtained.**
5. **Click [Import].**
6. **Check that the imported certificate's [Status] shows "Trustworthy".**

   If [Site Certificate Check] shows [Active], and the [Status] of the certificate shows [Untrustworthy], communication might not be possible.
7. **Click [OK].**
8. **Click [Logout].**
9. **Quit the Web Image Monitor.**

Installing Device Certificate

1. **Log in to Web Image Monitor in the administrator mode.**
2. **In the menu area, click [Configuration].**
3. **Under "Security", click [Device Certificate].**
4. **Click [Certificate 2] on the "Device Certificate" window, and then click [Request].**

5. **Enter appropriate "Common Name" and "Country Code" on "Certificate Information" page, and then click [OK].**
6. **"Updating..." appears. Wait for about 2 minutes, and then click [OK].**
7. **Click [Details], shown in the "Device Certificate" window as the memo pad icon for "Requesting".**
8. **Select all, and then copy the entire "Text for Requested Certificate" text that is displayed in the "Certificate Status" window.**
9. **Access the certificate authority server, and then obtain the CA signified certificate using the text copied into "Text for Requested Certificate" windows.**

   Obtaining the certificate differs depending on the environment you want to use.
10. **Click [Certificate 2] on "Device Certificate" window, and then click [Install].**
11. **Using a text editor, open the CA signified certificate downloaded in step 9, and then copy over all the text.**
12. **In the "Enter Certificate Request" window, paste all the text copied into the CA signified certificate.**
13. **Click [OK].**
14. **"Updating..." appears. Wait for about one or two minutes, and then click [OK].**
15. **Check that the "Device Certificate" shows "Installed".**
16. **Click [Certificate 2] on "Certification", and then click [OK].**
17. **Click [Logout].**
18. **Quit Web Image Monitor.**

Note

- If you request two certificates simultaneously, the certificate authority might not display either certificate. Click [Cancel Request] to cancel the request.
- You can select [Certificate 1-4] in the "Device Certificate" window. Note that if you select [Certificate 1] in the "Device Certificate" window, you must select "Certificate 1" in the "IEEE 802.1X" drop down menu in the "Certification" window.
- Click [Cancel Request] to cancel the request for the server certificate.
- If "Not found" appears after clicking [OK] in steps 6 and 14, wait one or two minutes, and then click [Refresh].

Setting Items of IEEE 802.1X for Ethernet

1. **Log in to Web Image Monitor in the administrator mode.**
2. **In the menu area, click [Configuration].**
3. **Under "Security", click [IEEE 802.1X].**

4. **In "User Name", enter the user name set in the RADIUS server.**
5. **Enter the domain name in "Domain Name".**
6. **Select "EAP Type". Configurations differ according to the EAP Type.**

   EAP-TLS

   - Make the following settings according to the operating system you are using:
     - Select [On] or [Off] in "Authenticate Server Certificate".
     - Select [On] or [Off] in "Trust Intermediate Certificate Authority".
     - Enter the host name of the RADIUS server on "Server ID".
     - Select [On] or [Off] in "Permit Sub-domain".

   LEAP

   - Click [Change] in "Password", and then enter the password set in the RADIUS server.

   EAP-TTLS

   - Click [Change] in "Password", and then enter the password set in the RADIUS server.
   - Click [Change] in "Phase 2 User Name", and then enter the user name set in the RADIUS server.
   - Select [CHAP], [MSCHAP], [MSCHAPv2], [PAP], or [MD5] in "Phase 2 Method".

     Certain methods might not be available, depending on the RADIUS server you want to use.
   - Make the following settings according to the operating system you are using:
     - Select [On] or [Off] in "Authenticate Server Certificate".
     - Select [On] or [Off] in "Trust Intermediate Certificate Authority".
     - Enter the host name of the RADIUS server in "Server ID".
     - Select [On] or [Off] in "Permit Sub-domain".

   PEAP

   - Click [Change] in "Password", and then enter the password set in the RADIUS server.

     If [TLS] is selected for "Phase 2 Method", you do not need to specify a password.
   - Click [Change] on "Phase 2 User Name", and then enter the user name set in the RADIUS server.
   - Select [MSCHAPv2] or [TLS] in "Phase 2 Method".

     When you select [TLS], you must install "IEEE 802.1X Client Certificate".
   - Make the following settings according to the operating system you are using:
     - Select [On] or [Off] in "Authenticate Server Certificate".
     - Select [On] or [Off] in "Trust Intermediate Certificate Authority".
     - Enter the host name of the RADIUS server on "Server ID".
     - Select [On] or [Off] in "Permit Sub-domain".
7. **Click [OK].**

8. **"Updating..." appears. Wait for about one or two minutes, and then click [OK].**
9. **In the menu area, click [Configuration].**
10. **Under "Interface", click [Interface Settings].**
11. **Select [Active] in "Ethernet Security".**
12. **Click [OK].**
13. **"Updating..." appears. Wait for about one or two minutes, and then click [OK].**
14. **Click [Logout].**
15. **Quit the Web Image Monitor.**

Note

- If there is a problem with settings, you might not be able to communicate with the printer. To identify the problem, print a network summary.
- If you cannot identify the problem, reset the printer interface to normal, and then repeat the procedure from the beginning.

Setting Items of IEEE 802.1X for Wireless LAN

1. **Log in to Web Image Monitor in the administrator mode.**
2. **In the menu area, click [Configuration].**
3. **Under "Security", click [IEEE 802.1X].**
4. **In "User Name", enter the user name set in the RADIUS server.**
5. **Enter the domain name in "Domain Name".**
6. **Select "EAP Type". Configurations differ according to the EAP Type.**

   EAP-TLS

   - Make the following settings according to the operating system you are using:
     - Select [On] or [Off] in "Authenticate Server Certificate".
     - Select [On] or [Off] in "Trust Intermediate Certificate Authority".
     - Enter the host name of the RADIUS server on "Server ID".
     - Select [On] or [Off] in "Permit Sub-domain".

   LEAP

   - Click [Change] in "Password", and then enter the password set in the RADIUS server.

   EAP-TTLS

   - Click [Change] in "Password", and then enter the password set in the RADIUS server.
   - Click [Change] in "Phase 2 User Name", and then enter the user name set in the RADIUS server.
   - Select [CHAP], [MSCHAP], [MSCHAPv2], [PAP], or [MD5] in "Phase 2 Method".

Certain methods might not be available, depending on the RADIUS server you want to use.

- Make the following settings according to the operating system you are using:
  - Select [On] or [Off] in "Authenticate Server Certificate".
  - Select [On] or [Off] in "Trust Intermediate Certificate Authority".
  - Enter the host name of the RADIUS server in "Server ID".
  - Select [On] or [Off] in "Permit Sub-domain".

PEAP

- Click [Change] in "Password", and then enter the password set in the RADIUS server.

  If [TLS] is selected for "Phase 2 Method", you do not need to specify a password.
- Click [Change] on "Phase 2 User Name", and then enter the user name set in the RADIUS server.
- Select [MSCHAPv2] or [TLS] in "Phase 2 Method".

  When you select [TLS], you must install "IEEE 802.1X Client Certificate".
- Make the following settings according to the operating system you are using:
  - Select [On] or [Off] in "Authenticate Server Certificate".
  - Select [On] or [Off] in "Trust Intermediate Certificate Authority".
  - Enter the host name of the RADIUS server on "Server ID".
  - Select [On] or [Off] in "Permit Sub-domain".

7. **Click [OK].**
8. **"Updating..." appears. Wait for about one or two minutes, and then click [OK].**
9. **In the menu area, click [Configuration].**
10. **Under "Interface", click [Wireless LAN Settings].**
11. **Select [Wireless LAN] in "LAN Type".**
12. **Select [Infrastructure Mode] in "Communication Mode".**
13. **Enter the alphanumeric characters (a-z, A-Z, or 0-9) in [SSID] according to the access point you want to use.**
14. **Select [WPA] in "Security Method".**
15. **Select [TKIP] or [CCMP (AES)] in "WPA Encryption Method" according to the access point you want to use.**
16. **Select [WPA] or [WPA2] in "WPA Authentication Method".**
17. **Click [OK].**
18. **"Updating..." appears. Wait for about one or two minutes, and then click [OK].**
19. **Click [Logout].**
20. **Quit the Web Image Monitor.**

Note

- If there is a problem with settings, you might not be able to communicate with the printer. To identify the problem, print a network summary.
- If you cannot identify the problem, reset the printer interface to normal, and then repeat the procedure from the beginning.

Specifications

Component	Specification
Interface	1000BASE-T, 100BASE-TX, 10BASE-T, IEEE 802.11 a/b/g
Frame type	Ethernet II, IEEE 802.2, IEEE 802.3, SNAP
Printer (LAN-Fax)	• TCP/IP (IPv4/IPv6) LPR RSH RCP DIPRINT FTP IPP IPP-SSL • IPX/SPX (NetWare) • SMB • WSD (Printer)
Internet Fax	• TCP/IP (IPv4/IPv6) SMTP SMTP-C POP3 IMAP4
Network Scanner	• IPv4 RSH FTP FTP-C SMTP SMTP-C POP3 • SMB • NCP • WSD (Scanner)

Component	Specification
Document Server	• TCP/IP (IPv4/IPv6) FTP FTP-C HTTP HTTPS
Management Function	• TCP/IP (IPv4/IPv6) RSH RCP FTP FTP-C SNMP SNMP-C HTTP HTTPS TELNET NBT DHCP DNS DNS-C LDAP

To use IPP and SMB, use the SmartDeviceMonitor for Client port.

To use IPP under Windows XP/Vista/7, Windows Server 2003/2003 R2/ 2008/2008 R2, use the Standard IPP port.

To use IPP under Windows 2000, use SmartDeviceMonitor for Client.

Under Windows Vista/7, or Windows Server 2008/2008 R2, WSD (Printer), WSD (Scanner), uses the WSD Port.

Only the rsh / rcp commands in the Unix OS standard command set are supported.

Copyrights

Boost

Boost Software License - Version 1.0 - August 17th, 2003

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

expat

Copyright (c) 1998, 1999, 2000 Thai Open Source Software Centre, Ltd. and Clark Cooper.

Copyright (c) 2001, 2002 Expat maintainers.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

FreeBSD 4.6.2/netipx

Copyright (c) 1984, 1985, 1986, 1987, 1993

The Regents of the University of California. All rights reserved.

Modifications Copyright (c) 1995, Mike Mitchell

Modifications Copyright (c) 1995, John Hay

Heimdal

Copyright (c) 1997-2005 Kungliga Tekniska Högskolan (Royal Institute of Technology, Stockholm, Sweden). All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the Institute nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE INSTITUTE AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE INSTITUTE OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

ILU

Copyright (c) 1991-1999 Xerox Corporation. All Rights Reserved.

Unlimited use, reproduction, modification, and distribution of this software and modified versions thereof is permitted. Permission is granted to make derivative works from this software or a modified version thereof. Any copy of this software, a modified version thereof, or a derivative work must include both the above copyright notice of Xerox Corporation and this paragraph. Any distribution of this software, a modified version thereof, or a derivative work must comply with all applicable United States export control laws. This software is made available AS IS, and XEROX CORPORATION DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND NOTWITHSTANDING ANY OTHER PROVISION CONTAINED HEREIN, ANY LIABILITY FOR DAMAGES RESULTING FROM THE SOFTWARE OR ITS USE IS EXPRESSLY DISCLAIMED, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR STRICT LIABILITY, EVEN IF XEROX CORPORATION IS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

IPS™ print language emulations

Copyright (c) 1987-2006 Zoran Corporation. All rights reserved.

JPEG LIBRARY

- The software installed on this product is based in part on the work of the Independent JPEG Group.

libusb

libusb is covered by the LGPL:

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 59 Temple Place - Suite 330, Boston, MA 02111-1307, USA.

libxml2

Copyright (C) 1998-2003 Daniel Veillard. All Rights Reserved.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE DANIEL VEILLARD BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CON-NECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE

Lua

License for Lua 5.0 and later versions

Copyright © 1994-2008 Lua.org, PUC-Rio.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN

AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

The m17n library

http://www.m17n.org/index.html

The m17n library 1.2.0 release

Copyright (C) 2003, 2004

National Institute of Advanced Industrial Science and Technology (AIST) Registration Number H15PRO112

The m17n library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

The m17n library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with the m17n library; if not, write to the Free Software Foundation,

Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307, USA.

MD4

Copyright (c) 1990-2, RSA Data Security, Inc. All rights reserved.

License to copy and use this software is granted provided that it is identified as the "RSA Data Security, Inc. MD4 Message-Digest Algorithm" in all material mentioning or referencing this software or this function.

License is also granted to make and use derivative works provided that such works are identified as "derived from the RSA Data Security, Inc. MD4 Message-Digest Algorithm" in all material mentioning or referencing the derived work.

RSA Data Security, Inc. makes no representations concerning either the merchantability of this software or the suitability of this software for any particular purpose. It is provided "as is" without express or implied warranty of any kind.

These notices must be retained in any copies of any part of this documentation and/or software.

MD5

Copyright (c) 1991-2, RSA Data Security, Inc. Created 1991. All rights reserved.

License to copy and use this software is granted provided that it is identified as the "RSA Data Security, Inc. MD5 Message-Digest Algorithm" in all material mentioning or referencing this software or this function.

License is also granted to make and use derivative works provided that such works are identified as "derived from the RSA Data Security, Inc. MD5 Message-Digest Algorithm" in all material mentioning or referencing the derived work.

RSA Data Security, Inc. makes no representations concerning either the merchantability of this software or the suitability of this software for any particular purpose. It is provided "as is" without express or implied warranty of any kind.

These notices must be retained in any copies of any part of this documentation and/or software.

nana

Copyright (c) 1995,1996,1997,1998 Phil Maker All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Net-SNMP

Various copyrights apply to this package, listed in various separate parts below. Please make sure that you read all the parts.

---- Part 1: CMU/UCD copyright notice: (BSD like) -----

Copyright 1989, 1991, 1992 by Carnegie Mellon University

Derivative Work - 1996, 1998-2000

Copyright 1996, 1998-2000 The Regents of the University of California

All Rights Reserved

Permission to use, copy, modify and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of CMU and The Regents of the University of California not be used in advertising or publicity pertaining to distribution of the software without specific written permission.

CMU AND THE REGENTS OF THE UNIVERSITY OF CALIFORNIA DISCLAIM ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL CMU OR THE REGENTS OF THE UNIVERSITY OF CALIFORNIA BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM THE LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

---- Part 2: Networks Associates Technology, Inc copyright notice (BSD) -----

Copyright (c) 2001-2003, Networks Associates Technology, Inc

All rights reserved.

Redistribution and use in source and binary forms, with or without

modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of the Networks Associates Technology, Inc nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 3: Cambridge Broadband Ltd. copyright notice (BSD) -----

Portions of this code are copyright (c) 2001-2003, Cambridge Broadband Ltd.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* The name of Cambridge Broadband Ltd. may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDER ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 4: Sun Microsystems, Inc. copyright notice (BSD) -----

Copyright © 2003 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. All rights reserved.

Use is subject to license terms below.

This distribution may include materials developed by third parties.

Sun, Sun Microsystems, the Sun logo and Solaris are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of the Sun Microsystems, Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)

ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 5: Sparta, Inc copyright notice (BSD) -----

Copyright (c) 2003-2008, Sparta, Inc

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of Sparta, Inc nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 6: Cisco/BUPTNIC copyright notice (BSD) -----

Copyright (c) 2004, Cisco, Inc and Information Network

Center of Beijing University of Posts and Telecommunications.

All rights reserved.

Redistribution and use in source and binary forms, with or without

modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of Cisco, Inc, Beijing University of Posts and Telecommunications, nor the names of their contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED

WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 7: Fabasoft R&D Software GmbH & Co KG copyright notice (BSD) -----

Copyright (c) Fabasoft R&D Software GmbH & Co KG, 2003

oss@fabasoft.com

Author: Bernhard Penz <bernhard.penz@fabasoft.com>

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* The name of Fabasoft R&D Software GmbH & Co KG or any of its subsidiaries, brand or product names may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDER ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetBSD

1. Copyright Notice of NetBSD

For all users to use this product: This product contains NetBSD operating system:

For the most part, the software constituting the NetBSD operating system is not in the public domain; its authors retain their copyright.

The following text shows the copyright notice used for many of the NetBSD source code. For exact copyright notice applicable for each of the files/binaries, the source code tree must be consulted.

A full source code can be found at http://www.netbsd.org/.

Copyright (c) 1996-2005 The NetBSD Foundation, Inc.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:

   This product includes software developed by the NetBSD Foundation, Inc. and its contributors.
4. Neither the name of The NetBSD Foundation nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE NETBSD FOUNDATION, INC. AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE FOUNDATION OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

2. Authors Name List

All product names mentioned herein are trademarks or registered trade-marks of their respective owners.

The following notices are required to satisfy the license terms of the software that we have mentioned in this document:

- This product includes software developed by the University of California,Berkeley and its contributors.
- This product includes software developed by the NetBSD Foundation.
- This product includes software developed by The NetBSD Foundation, Inc. and its contributors.
- This product includes software developed for the NetBSD Project. See http://www.netbsd.org/ for information about NetBSD.
- This product contains software developed by Ignatios Souvatzis for the NetBSD project.
- This product contains software written by Ignatios Souvatzis and MichaelL. Hitch for the NetBSD project.
- This product contains software written by Michael L. Hitch for the NetBSD project.

- This product includes cryptographic software written by Eric Young(eay@cryptsoft.com)
- This product includes cryptographic software written by Eric Young(eay@mincom.oz.au)
- This product includes software designed by William Allen Simpson.
- This product includes software developed at Ludd, University of Lulea,Sweden and its contributors.
- This product includes software developed at Ludd, University of Lulea.
- This product includes software developed at the Information Technology Division, US Naval Research Laboratory.
- This product includes software developed by Berkeley Software Design, Inc.
- This product includes software developed by David Jones and Gordon Ross.
- This product includes software developed by Gordon W. Ross and Leo Weppelman.
- This product includes software developed by Hellmuth Michaelis and Joerg Wunsch.
- This product includes software developed by Internet Research Institute, Inc.
- This product includes software developed by Leo Weppelman and Waldi Ravens.
- This product includes software developed by Mika Kortelainen.
- This product includes software developed by Aaron Brown and Harvard University.
- This product includes software developed by Adam Ciarcinski for the NetBSD project.
- This product includes software developed by Adam Glass and Charles M.Hannum.
- This product includes software developed by Adam Glass.
- This product includes software developed by Advanced Risc Machines Ltd.
- This product includes software developed by Alex Zepeda, and Colin Wood for the NetBSD Projet.
- This product includes software developed by Alex Zepeda.
- This product includes software developed by Alistair G. Crooks.
- This product includes software developed by Alistair G. Crooks. for the NetBSD project.
- This product includes software developed by Allen Briggs.
- This product includes software developed by Amancio Hasty and Roger Hardiman.
- This product includes software developed by Berkeley Software Design, Inc.
- This product includes software developed by Berkeley Software Design, Inc.
- This product includes software developed by Bill Paul.
- This product includes software developed by Bodo Moeller. (If available, substitute umlauted o for oe)
- This product includes software developed by Boris Popov.
- This product includes software developed by Brad Pepers
- This product includes software developed by Bradley A. Grantham.
- This product includes software developed by Brini.

- This product includes software developed by Causality Limited.
- This product includes software developed by Charles D. Cranor and Seth Widoff.
- This product includes software developed by Charles D. Cranor and Washington University.
- This product includes software developed by Charles D. Cranor, Washington University, and the University of California, Berkeley and its contributors.
- This product includes software developed by Charles D. Cranor, Washington University, the University of California, Berkeley and its contributors.
- This product includes software developed by Charles D. Cranor.
- This product includes software developed by Charles Hannum.
- This product includes software developed by Charles M. Hannum, by the University of Vermont and State Agricultural College and Garrett A.Wollman, by William F. Jolitz, and by the University of California,Berkeley, Lawrence Berkeley Laboratory, and its contributors.
- This product includes software developed by Charles M. Hannum.
- This product includes software developed by Christian E. Hopps, Ezra Story, Kari Mettinen, Markus Wild, Lutz Vieweg and Michael Teske.
- This product includes software developed by Christian E. Hopps.
- This product includes software developed by Christian Limpach
- This product includes software developed by Christopher G. Demetriou for the NetBSD Project.
- This product includes software developed by Christopher G. Demetriou.
- This product includes software developed by Christos Zoulas.
- This product includes software developed by Chuck Silvers.
- This product includes software developed by Colin Wood for the NetBSD Project.
- This product includes software developed by Colin Wood.
- This product includes software developed by Cybernet Corporation and Nan Yang Computer Services Limited
- This product includes software developed by Daishi Kato
- This product includes software developed by Dale Rahn.
- This product includes software developed by Daniel Widenfalk and Michael L. Hitch.
- This product includes software developed by Daniel Widenfalk for the NetBSD Project.
- This product includes software developed by Darrin B. Jewell
- This product includes software developed by David Miller.
- This product includes software developed by Dean Huxley.
- This product includes software developed by Eduardo Horvath.
- This product includes software developed by Eric S. Hvozda.
- This product includes software developed by Eric S. Raymond

- This product includes software developed by Eric Young (eay@@mincom.oz.au)
- This product includes software developed by Eric Young (eay@cryptsoft.com)
- This product includes software developed by Eric Young (eay@mincom.oz.au)
- This product includes software developed by Ezra Story and by Kari Mettinen.
- This product includes software developed by Ezra Story, by Kari Mettinen and by Bernd Ernesti.
- This product includes software developed by Ezra Story, by Kari Mettinen, Michael Teske and by Bernd Ernesti.
- This product includes software developed by Ezra Story, by Kari Mettinen, and Michael Teske.
- This product includes software developed by Ezra Story.
- This product includes software developed by Frank van der Linden for the NetBSD Project.
- This product includes software developed by Gardner Buchanan.
- This product includes software developed by Gary Thomas.
- This product includes software developed by Gordon Ross
- This product includes software developed by Gordon W. Ross
- This product includes software developed by HAYAKAWA Koichi.
- This product includes software developed by Harvard University and its contributors.
- This product includes software developed by Harvard University.
- This product includes software developed by Herb Peyerl.
- This product includes software developed by Hubert Feyrer for the NetBSD Project.
- This product includes software developed by Iain Hibbert
- This product includes software developed by Ian F. Darwin and others.
- This product includes software developed by Ian W. Dall.
- This product includes software developed by Ichiro FUKUHARA.
- This product includes software developed by Ignatios Souvatzis for the NetBSD Project.
- This product includes software developed by Internet Initiative Japan Inc.
- This product includes software developed by James R. Maynard III.
- This product includes software developed by Jared D. McNeill.
- This product includes software developed by Jason L. Wright
- This product includes software developed by Jason R. Thorpe for And Communications, http://www.and.com/
- This product includes software developed by Joachim Koenig-Baltes.
- This product includes software developed by Jochen Pohl for The NetBSD Project.
- This product includes software developed by Joerg Wunsch
- This product includes software developed by John Birrell.

- This product includes software developed by John P. Wittkoski.
- This product includes software developed by John Polstra.
- This product includes software developed by Jonathan R. Stone for the NetBSD Project.
- This product includes software developed by Jonathan Stone and Jason R. Thorpe for the NetBSD Project.
- This product includes software developed by Jonathan Stone.
- This product includes software developed by Jukka Marin.
- This product includes software developed by Julian Highfield.
- This product includes software developed by Kazuhisa Shimizu.
- This product includes software developed by Kazuki Sakamoto.
- This product includes software developed by Kenneth Stailey.
- This product includes software developed by Kiyoshi Ikehara.
- This product includes software developed by Klaus Burkert,by Bernd Ernesti, by Michael van Elst, and by the University of California, Berkeley and its contributors.
- This product includes software developed by LAN Media Corporation and its contributors.
- This product includes software developed by Leo Weppelman for the NetBSD Project.
- This product includes software developed by Leo Weppelman.
- This product includes software developed by Lloyd Parkes.
- This product includes software developed by Luke Mewburn.
- This product includes software developed by Lutz Vieweg.
- This product includes software developed by MINOURA Makoto, Takuya Harakawa.
- This product includes software developed by Manuel Bouyer.
- This product includes software developed by Marc Horowitz.
- This product includes software developed by Marcus Comstedt.
- This product includes software developed by Mark Brinicombe for the NetBSD project.
- This product includes software developed by Mark Brinicombe.
- This product includes software developed by Mark Murray
- This product includes software developed by Mark Tinguely and Jim Lowe
- This product includes software developed by Markus Wild.
- This product includes software developed by Martin Husemann and Wolfgang Solfrank.
- This product includes software developed by Masanobu Saitoh.
- This product includes software developed by Masaru Oki.
- This product includes software developed by Mats O Jansson and Charles D.Cranor.
- This product includes software developed by Mats O Jansson.

- This product includes software developed by Matt DeBergalis
- This product includes software developed by Matthew Fredette.
- This product includes software developed by Matthias Pfaller.
- This product includes software developed by Michael Graff for the NetBSD Project.
- This product includes software developed by Michael Graff.
- This product includes software developed by Michael L. Hitch.
- This product includes software developed by Michael Shalayeff.
- This product includes software developed by Michael Smith.
- This product includes software developed by Mike Glover and contributors.
- This product includes software developed by Mike Pritchard.
- This product includes software developed by Minoura Makoto.
- This product includes software developed by Nan Yang Computer Services Limited.
- This product includes software developed by Niels Provos.
- This product includes software developed by Niklas Hallqvist, Brandon Creighton and Job de Haas.
- This product includes software developed by Niklas Hallqvist.
- This product includes software developed by Onno van der Linden.
- This product includes software developed by Paul Kranenburg.
- This product includes software developed by Paul Mackerras.
- This product includes software developed by Per Fogelstrom
- This product includes software developed by Peter Galbavy.
- This product includes software developed by Phase One, Inc.
- This product includes software developed by Philip A. Nelson.
- This product includes software developed by Philip L. Budne.
- This product includes software developed by RiscBSD.
- This product includes software developed by Roar Thronaes.
- This product includes software developed by Rodney W. Grimes.
- This product includes software developed by Roger Hardiman
- This product includes software developed by Roland C. Dowdeswell.
- This product includes software developed by Rolf Grossmann.
- This product includes software developed by Ross Harvey for the NetBSD Project.
- This product includes software developed by Ross Harvey.
- This product includes software developed by Scott Bartram.
- This product includes software developed by Scott Stevens.

- This product includes software developed by Shingo WATANABE.
- This product includes software developed by Softweyr LLC, the University of California, Berkeley, and its contributors.
- This product includes software developed by Soren S. Jorvang.
- This product includes software developed by Stephan Thesing.
- This product includes software developed by Steve Woodford.
- This product includes software developed by Takashi Hamada
- This product includes software developed by Takumi Nakamura.
- This product includes software developed by Tatoku Ogaito for the NetBSD Project.
- This product includes software developed by Terrence R. Lambert.
- This product includes software developed by Tetsuya Isaki.
- This product includes software developed by Thomas Gerner
- This product includes software developed by Thomas Klausner for the NetBSD Project.
- This product includes software developed by Tobias Weingartner.
- This product includes software developed by Todd C. Miller.
- This product includes software developed by Tohru Nishimura and Reinoud Zandijk for the NetBSD Project.
- This product includes software developed by Tohru Nishimura for the NetBSD Project.
- This product includes software developed by Tohru Nishimura. for the NetBSD Project.
- This product includes software developed by TooLs GmbH.
- This product includes software developed by Toru Nishimura.
- This product includes software developed by Trimble Navigation, Ltd.
- This product includes software developed by WIDE Project and its contributors.
- This product includes software developed by Waldi Ravens.
- This product includes software developed by Wasabi Systems for Zembu Labs, Inc. http://www.zembu.com/
- This product includes software developed by Winning Strategies, Inc.
- This product includes software developed by Wolfgang Solfrank.
- This product includes software developed by Yasushi Yamasaki
- This product includes software developed by Zembu Labs, Inc.
- This product includes software developed by the Alice Group.
- This product includes software developed by the Center for Software Science at the University of Utah.
- This product includes software developed by the Charles D. Cranor, Washington University, University of California, Berkeley and its contributors.

- This product includes software developed by the Computer Systems Engineering Group at Lawrence Berkeley Laboratory.
- This product includes software developed by the David Muir Sharnoff.
- This product includes software developed by the Harvard University and its contributors.
- This product includes software developed by the Kungliga Tekniska Hogskolan and its contributors.
- This product includes software developed by the Network Research Group at Lawrence Berkeley Laboratory.
- This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.OpenSSL.org/)
- This product includes software developed by the PocketBSD project and its contributors.
- This product includes software developed by the RiscBSD kernel team
- This product includes software developed by the RiscBSD team.
- This product includes software developed by the SMCC Technology Development Group at Sun Microsystems, Inc.
- This product includes software developed by the University of California, Berkeley and its contributors, as well as the Trustees of Columbia University.
- This product includes software developed by the University of California, Lawrence Berkeley Laboratory and its contributors.
- This product includes software developed by the University of California, Lawrence Berkeley Laboratory.
- This product includes software developed by the University of Illinois at Urbana and their contributors.
- This product includes software developed by the University of Vermont and State Agricultural College and Garrett A. Wollman.
- This product includes software developed by the University of Vermont and State Agricultural College and Garrett A. Wollman, by William F. Jolitz, and by the University of California, Berkeley, Lawrence Berkeley Laboratory, and its contributors.
- This product includes software developed for the FreeBSD project
- This product includes software developed for the NetBSD Project by Bernd Ernesti.
- This product includes software developed for the NetBSD Project by Christopher G. Demetriou.
- This product includes software developed for the NetBSD Project by Christos Zoulas
- This product includes software developed for the NetBSD Project by Emmanuel Dreyfus.
- This product includes software developed for the NetBSD Project by Frank van der Linden
- This product includes software developed for the NetBSD Project by Ignatios Souvatzis.
- This product includes software developed for the NetBSD Project by Jason R. Thorpe.
- This product includes software developed for the NetBSD Project by John M. Vinopal.
- This product includes software developed for the NetBSD Project by Matthias Drochner.

- This product includes software developed for the NetBSD Project by Michael L. Hitch.
- This product includes software developed for the NetBSD Project by Perry E. Metzger.
- This product includes software developed for the NetBSD Project by Scott Bartram and Frank van der Linden
- This product includes software developed for the NetBSD Project by Allegro Networks, Inc., and Wasabi Systems, Inc.
- This product includes software developed for the NetBSD Project by Genetec Corporation.
- This product includes software developed for the NetBSD Project by Jonathan Stone.
- This product includes software developed for the NetBSD Project by Piermont Information Systems Inc.
- This product includes software developed for the NetBSD Project by SUNET,Swedish University Computer Network.
- This product includes software developed for the NetBSD Project by Shigeyuki Fukushima.
- This product includes software developed for the NetBSD Project by Wasabi Systems, Inc.
- This product includes software developed under OpenBSD by Per Fogelstrom Opsycon AB for RTMX Inc, North Carolina, USA.
- This product includes software developed under OpenBSD by Per Fogelstrom.
- This software is a component of "386BSD" developed by William F. Jolitz,TeleMuse.
- This software was developed by Holger Veit and Brian Moore for use with "386BSD" and similar operating systems. "Similar operating systems" includes mainly non-profit oriented systems for research and education, including but not restricted to "NetBSD", "FreeBSD", "Mach" (by CMU).
- This software includes software developed by the Computer Systems Labora-tory at the University of Utah.
- This product includes software developed by Computing Services at Carnegie Mellon University (http://www.cmu.edu/computing/).
- This product includes software developed by Allen Briggs.
- In the following statement, "This software" refers to the Mitsumi CD-ROM driver:
- This software was developed by Holger Veit and Brian Moore for use with "386BSD" and similar operating systems. "Similar operating systems" includes mainly non-profit oriented systems for research and education, including but not restricted to "NetBSD" , "FreeBSD" , "Mach" (by CMU).
- In the following statement, "This software" refers to the parallel port driver:
- This software is a component of "386BSD" developed by William F. Jolitz, TeleMuse.

Open LDAP

Copyright (c) 1999-2003 The OpenLDAP Foundation, Redwood City, California, USA. All Rights Reserved. Permission to copy and distribute verbatim copies of this document is granted.

The OpenLDAP Public License Version 2.8, 17 August 2003.

Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided that the following conditions are met:

1. Redistributions in source form must retain copyright statements and notices,

2. Redistributions in binary form must reproduce applicable copyright statements and notices, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution, and

3. Redistributions must contain a verbatim copy of this document.

The OpenLDAP Foundation may revise this license from time to time. Each revision is distinguished by a version number. You may use this Software under terms of this license revision or under the terms of any subsequent revision of the license.

THIS SOFTWARE IS PROVIDED BY THE OPENLDAP FOUNDATION AND ITS CONTRIBUTORS "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OPENLDAP FOUNDATION, ITS CONTRIBUTORS, OR THE AUTHOR(S) OR OWNER(S) OF THE SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The names of the authors and copyright holders must not be used in advertising or otherwise to promote the sale, use or other dealing in this Software without specific, written prior permission. Title to copyright in this Software shall at all times remain with copyright holders.

Open SSH

The licences which components of this software fall under are as follows. First, we will summarize and say that all components are under a BSD licence, or a licence more free than that.

OpenSSH contains no GPL code.

1)

Copyright (c) 1995 Tatu Ylonen <ylo@cs.hut.fi>, Espoo, Finland All rights reserved

As far as I am concerned, the code I have written for this software can be used freely for any purpose. Any derived versions of this software must be clearly marked as such, and if the derived work is incompatible with the protocol description in the RFC file, it must be called by a name other than "ssh" or "Secure Shell".

[Tatu continues]

However, I am not implying to give any licenses to any patents or copyrights held by third parties, and the software includes parts that are not under my direct control. As far as I know, all included source code is used in accordance with the relevant license agreements and can be used freely for any purpose (the GNU license being the most restrictive); see below for details.

[However, none of that term is relevant at this point in time. All of these restrictively licenced software components which he talks about have been removed from OpenSSH, i.e.,

- RSA is no longer included, found in the OpenSSL library
- IDEA is no longer included, its use is deprecated
- DES is now external, in the OpenSSL library
- GMP is no longer used, and instead we call BN code from OpenSSL
- Zlib is now external, in a library
- The make-ssh-known-hosts script is no longer included
- TSS has been removed
- MD5 is now external, in the OpenSSL library
- RC4 support has been replaced with ARC4 support from OpenSSL
- Blowfish is now external, in the OpenSSL library

[The licence continues]

Note that any information and cryptographic algorithms used in this software are publicly available on the Internet and at any major bookstore, scientific library, and patent office worldwide. More information can be found e.g. at "http://www.cs.hut.fi/crypto".

The legal status of this program is some combination of all these permissions and restrictions. Use only at your own responsibility. You will be responsible for any legal consequences yourself; I am not making any claims whether possessing or using this is legal or not in your country, and I am not taking any responsibility on your behalf.

NO WARRANTY

BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY

MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

2)

The 32-bit CRC compensation attack detector in deattack.c was contributed by CORE SDI S.A. under a BSD-style license.

Cryptographic attack detector for ssh - source code

Copyright (c) 1998 CORE SDI S.A., Buenos Aires, Argentina. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that this copyright notice is retained.

THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES ARE DISCLAIMED. IN NO EVENT SHALL CORE SDI S.A. BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR MISUSE OF THIS SOFTWARE.

Ariel Futoransky <futo@core-sdi.com>

<http://www.core-sdi.com>

3)

One component of the ssh source code is under a 3-clause BSD license, held by the University of California, since we pulled these parts from original Berkeley code.

Copyright (c) 1983, 1990, 1992, 1993, 1995

The Regents of the University of California. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR

BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

4)

Remaining components of the software are provided under a standard 2-term BSD licence with the following names as copyright holders:

Markus Friedl

Theo de Raadt

Niels Provos

Dug Song

Kevin Steves

Daniel Kouril

Wesley Griffin

Per Allansson

Jason Downs

Solar Designer

Todd C. Miller

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

5)

Portable OpenSSH contains the following additional licenses:

c) Compatibility code (openbsd-compat)

Apart from the previously mentioned licenses, various pieces of code in the openbsd-compat/ subdirectory are licensed as follows:

Some code is licensed under a 3-term BSD license, to the following copyright holders:

Todd C. Miller

Theo de Raadt

Damien Miller

Eric P. Allman

The Regents of the University of California

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Open SSL

Copyright (c) 1998-2004 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. All advertising materials mentioning features or use of this software must display the following acknowledgment:

"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/)"

4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.

5. Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.

6. Redistributions of any form whatsoever must retain the following acknowledgment:

"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/)"

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Original SSLeay License

Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com) All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com). The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are aheared to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. All advertising materials mentioning features or use of this software must display the following acknowledgement: "This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)" The word 'cryptographic' can be left out if the rouines from the library being used are not cryptographic related :-).

4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence.

[including the GNU Public Licence.]

racoon

Copyright (C) 1995, 1996, 1997, and 1998 WIDE Project.

All rights reserved.

RSA BSAFE®

- This product includes RSA BSAFE (c) cryptographic software from RSA Security Inc.
- RSA, BSAFE are either registered trademarks or trademarks of RSA Security Inc. in the United States and/or other countries.
- RSA Security Inc. All rights reserved.

Sablotron (Version 0.82)

Copyright (c) 2000 Ginger Alliance Ltd. All Rights Reserved.

a) The application software installed on this product includes the Sablotron software Version 0.82 (hereinafter, "Sablotron 0.82"), with modifications made by the product manufacturer. The original code of the Sablotron 0.82 is provided by Ginger Alliance Ltd., the initial developer, and the modified code of the Sablotron 0.82 has been derived from such original code provided by Ginger Alliance Ltd.

b) The product manufacturer provides warranty and support to the application software of this product including the Sablotron 0.82 as modified, and the product manufacturer makes Ginger Alliance Ltd., the initial developer of the Sablotron 0.82, free from these obligations.

c) The Sablotron 0.82 and the modifications thereof are made available under the terms of Mozilla Public License Version 1.1 (hereinafter, "MPL 1.1"), and the application software of this product constitutes the "Larger Work" as defined in MPL 1.1. The application software of this product except for the Sablotron 0.82 as modified is licensed by the product manufacturer under separate agreement (s).

d) The source code of the modified code of the Sablotron 0.82 is available at: http://support-download.com/services/device/sablot/notice082.html

e) The source code of the Sablotron software is available at: http://www.gingerall.com

f) MPL 1.1 is available at: http://www.mozilla.org/MPL/MPL-1.1.html

Samba

For SMB transmission, this machine uses Samba.

Copyright (c) Andrew Tridgell 1994-1998.

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 675 Mass Ave, Cambridge, MA 02139, USA.

Note

- The source code for SMB transmission by this machine can be downloaded from the following website: http://support-download.com/services/scbs

Copyright (C) 1989, 1991 Free Software Foundation, Inc.59 Temple Place, Suite 330, Boston, MA 02111-1307 USAEveryone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either

verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any

other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW . EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND /OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE . THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH

YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER , OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

one line to give the program's name and a brief idea of what it does. Copyright (C)

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA

02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'. This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program `Gnomovision' (which makes passes at compilers) written by James Hacker.

signature of Ty Coon, 1 April 1989

Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

SASL

Copyright (c) 2001 Carnegie Mellon University. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name "Carnegie Mellon University" must not be used to endorse or promote products derived from this software without prior written permission.

   For permission or any other legal details, please contact:

   Office of Technology Transfer

   Carnegie Mellon University

   5000 Forbes Avenue

   Pittsburgh, PA 15213-3890

   (412) 268-4387, fax: (412) 268-7395

   tech-transfer@andrew.cmu.edu
4. Redistributions of any form whatsoever must retain the following acknowledgment: "This product includes software developed by Computing Services at Carnegie Mellon University (http://www.cmu.edu/computing/)."

CARNEGIE MELLON UNIVERSITY DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL CARNEGIE MELLON UNIVERSITY BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

SPX/IPX

Copyright (c) 1984, 1985, 1986, 1987, 1993

The Regents of the University of California. All rights reserved.

Modifications Copyright (c) 1995, Mike Mitchell

Modifications Copyright (c) 1995, John Hay

TinyScheme

LICENSE TERMS

Copyright (c) 2000, Dimitrios Souflis

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of Dimitrios Souflis nor the names of the contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

TrouSerS

THE ACCOMPANYING PROGRAM IS PROVIDED UNDER THE TERMS OF THIS COMMON PUBLIC LICENSE ("AGREEMENT"). ANY USE, REPRODUCTION OR DISTRIBUTION OF THE PROGRAM CONSTITUTES RECIPIENT'S ACCEPTANCE OF THIS AGREEMENT.

1. DEFINITIONS

"Contribution" means:

a) in the case of the initial Contributor, the initial code and documentation distributed under this Agreement, and

b) in the case of each subsequent Contributor:

i) changes to the Program, and

ii) additions to the Program;

where such changes and/or additions to the Program originate from and are distributed by that particular Contributor. A Contribution 'originates' from a Contributor if it was added to the Program by such Contributor itself or anyone acting on such Contributor's behalf. Contributions do not include additions to the Program which: (i) are separate modules of software distributed in conjunction with the Program under their own license agreement, and (ii) are not derivative works of the Program.

"Contributor" means any person or entity that distributes the Program.

"Licensed Patents " mean patent claims licensable by a Contributor which are necessarily infringed by the use or sale of its Contribution alone or when combined with the Program.

"Program" means the Contributions distributed in accordance with this Agreement.

"Recipient" means anyone who receives the Program under this Agreement, including all Contributors.

2. GRANT OF RIGHTS

a) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free copyright license to reproduce, prepare derivative works of, publicly display, publicly perform, distribute and sublicense the Contribution of such Contributor, if any, and such derivative works, in source code and object code form.

b) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in source code and object code form. This patent license shall apply to the combination of the Contribution and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents. The patent license shall not apply to any other combinations which include the Contribution. No hardware per se is licensed hereunder.

c) Recipient understands that although each Contributor grants the licenses to its Contributions set forth herein, no assurances are provided by any Contributor that the Program does not infringe the patent or other intellectual property rights of any other entity. Each Contributor disclaims any liability to Recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, each Recipient hereby assumes sole responsibility to secure any other intellectual property rights needed, if any. For example, if a third party patent license is required to allow Recipient to distribute the Program, it is Recipient's responsibility to acquire that license before distributing the Program.

d) Each Contributor represents that to its knowledge it has sufficient copyright rights in its Contribution, if any, to grant the copyright license set forth in this Agreement.

3. REQUIREMENTS

A Contributor may choose to distribute the Program in object code form under its own license agreement, provided that:

a) it complies with the terms and conditions of this Agreement; and

b) its license agreement:

i) effectively disclaims on behalf of all Contributors all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose;

ii) effectively excludes on behalf of all Contributors all liability for damages, including direct, indirect, special, incidental and consequential damages, such as lost profits;

iii) states that any provisions which differ from this Agreement are offered by that Contributor alone and not by any other party; and

iv) states that source code for the Program is available from such Contributor, and informs licensees how to obtain it in a reasonable manner on or through a medium customarily used for software exchange.

When the Program is made available in source code form:

a) it must be made available under this Agreement; and

b) a copy of this Agreement must be included with each copy of the Program.

Contributors may not remove or alter any copyright notices contained within the Program.

Each Contributor must identify itself as the originator of its Contribution, if any, in a manner that reasonably allows subsequent Recipients to identify the originator of the Contribution.

4. COMMERCIAL DISTRIBUTION

Commercial distributors of software may accept certain responsibilities with respect to end users, business partners and the like. While this license is intended to facilitate the commercial use of the Program, the Contributor who includes the Program in a commercial product offering should do so in a manner which does not create potential liability for other Contributors. Therefore, if a Contributor includes the Program in a commercial product offering, such Contributor ("Commercial Contributor") hereby agrees to defend and indemnify every other Contributor ("Indemnified Contributor") against any losses, damages and costs (collectively "Losses") arising from claims, lawsuits and other legal actions brought by a third party against the Indemnified Contributor to the extent caused by the acts or omissions of such Commercial Contributor in connection with its distribution of the Program in a commercial product offering. The obligations in this section do not apply to any claims or Losses relating to any actual or alleged intellectual property infringement. In order to qualify, an Indemnified Contributor must: a) promptly notify the Commercial Contributor in writing of such claim, and b) allow the Commercial Contributor to control, and cooperate with the Commercial Contributor in, the defense and any related settlement negotiations. The Indemnified Contributor may participate in any such claim at its own expense.

For example, a Contributor might include the Program in a commercial product offering, Product X. That Contributor is then a Commercial Contributor. If that Commercial Contributor then makes performance claims, or offers warranties related to Product X, those performance claims and warranties are such Commercial Contributor's responsibility alone. Under this section, the Commercial Contributor would have to defend claims against the other Contributors related to those performance claims and warranties, and

if a court requires any other Contributor to pay any damages as a result, the Commercial Contributor must pay those damages.

5. NO WARRANTY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE PROGRAM IS PROVIDED ON AN "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OR CONDITIONS OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Each Recipient is solely responsible for determining the appropriateness of using and distributing the Program and assumes all risks associated with its exercise of rights under this Agreement, including but not limited to the risks and costs of program errors, compliance with applicable laws, damage to or loss of data, programs or equipment, and unavailability or interruption of operations.

6. DISCLAIMER OF LIABILITY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER RECIPIENT NOR ANY CONTRIBUTORS SHALL HAVE ANY LIABILITY FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS), HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OR DISTRIBUTION OF THE PROGRAM OR THE EXERCISE OF ANY RIGHTS GRANTED HEREUNDER, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7. GENERAL

If any provision of this Agreement is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this Agreement, and without further action by the parties hereto, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

If Recipient institutes patent litigation against a Contributor with respect to a patent applicable to software (including a cross-claim or counterclaim in a lawsuit), then any patent licenses granted by that Contributor to such Recipient under this Agreement shall terminate as of the date such litigation is filed. In addition, if Recipient institutes patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Program itself (excluding combinations of the Program with other software or hardware) infringes such Recipient's patent(s), then such Recipient's rights granted under Section 2(b) shall terminate as of the date such litigation is filed.

All Recipient's rights under this Agreement shall terminate if it fails to comply with any of the material terms or conditions of this Agreement and does not cure such failure in a reasonable period of time after becoming aware of such noncompliance. If all Recipient's rights under this Agreement terminate, Recipient agrees to cease use and distribution of the Program as soon as reasonably practicable. However, Recipient's obligations under this Agreement and any licenses granted by Recipient relating to the Program shall continue and survive.

Everyone is permitted to copy and distribute copies of this Agreement, but in order to avoid inconsistency the Agreement is copyrighted and may only be modified in the following manner. The Agreement Steward reserves the right to publish new versions (including revisions) of this Agreement from time to time. No one

other than the Agreement Steward has the right to modify this Agreement. IBM is the initial Agreement Steward. IBM may assign the responsibility to serve as the Agreement Steward to a suitable separate entity. Each new version of the Agreement will be given a distinguishing version number. The Program (including Contributions) may always be distributed subject to the version of the Agreement under which it was received. In addition, after a new version of the Agreement is published, Contributor may elect to distribute the Program (including its Contributions) under the new version. Except as expressly stated in Sections 2 (a) and 2(b) above, Recipient receives no rights or licenses to the intellectual property of any Contributor under this Agreement, whether expressly, by implication, estoppel or otherwise. All rights in the Program not expressly granted under this Agreement are reserved.

This Agreement is governed by the laws of the State of New York and the intellectual property laws of the United States of America. No party to this Agreement will bring a legal action under this Agreement more than one year after the cause of action arose. Each party waives its rights to a jury trial in any resulting litigation.

Note

- To obtain the source code for opening TrouSerS (Version 0.27), which is provided with this machine, access the Web site at the following URL: http://www.ricoh.com/support/trousers/index.html
- TrouSerS version control is by SourceForge CVS. For methods of obtaining the source code, access the Web site at the following URL: http://sourceforge.net/cvs/?group_id=126012

WPA Supplicant

Copyright (c) 2003-2009, Jouni Malinen <j@w1.fi> and contributors All Rights Reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and /or other materials provided with the distribution.

3. Neither the name (s) of the above-listed copyright holder (s) nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)

ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Zilb

Copyright notice:

(C) 1995-2004 Jean-loup Gailly and Mark Adler

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

Jean-loup Gailly

jloup@gzip.org

Mark Adler

madler@alumni.caltech.edu

Trademarks

Adobe, Acrobat, Acrobat Reader, PostScript, and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Apple, Bonjour, Macintosh, Mac OS, and TrueType are registered trademarks of Apple Inc, registered in the U.S. and other countries.

Citrix, Citrix Presentation Server and Citrix XenApp are either registered trademarks or trademarks of Citrix Systems, Inc.

Firefox is trademarks or registered trademarks of the Mozilla Foundation in the U.S. and other countries.

IPS is a trademark or registered trademark of Zoran Corporation and/or its subsidiaries in the United States or other countries.

JAWS® is a registered trademark of Freedom Scientific, Inc., St. Petersburg, Florida and/or other countries.

Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries.

Microsoft®, Windows®, Windows Server®, and Windows Vista® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Monotype is a registered trademark of Monotype Imaging Inc.

NetWare, IPX, IPX/SPX, NCP, and NDS are either registered trademarks or trademarks of Novell, Inc.

OpenLDAP is a registered trademark of the OpenLDAP Foundation.

PCL® is a registered trademark of Hewlett-Packard Company.

UNIX is a registered trademark in the United States and other countries, licensed exclusively through, X/Open Company Limited.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights to those marks.

The proper names of the Windows operating systems are as follows:

- The product names of Windows 2000 are as follows:

  Microsoft® Windows® 2000 Professional

  Microsoft® Windows® 2000 Server

  Microsoft® Windows® 2000 Advanced Server
- The product names of Windows XP are as follows:

  Microsoft® Windows® XP Professional Edition

  Microsoft® Windows® XP Home Edition

  Microsoft® Windows® XP Media Center Edition

  Microsoft® Windows® XP Tablet PC Edition
- The product names of Windows Vista are as follows:

  Microsoft® Windows Vista® Ultimate

Microsoft® Windows Vista® Business

Microsoft® Windows Vista® Home Premium

Microsoft® Windows Vista® Home Basic

Microsoft® Windows Vista® Enterprise

- The product names of Windows 7 are as follows:

  Microsoft® Windows® 7 Home Premium

  Microsoft® Windows® 7 Professional

  Microsoft® Windows® 7 Ultimate

  Microsoft® Windows® 7 Enterprise

- The product names of Windows Server 2003 are as follows:

  Microsoft® Windows Server® 2003 Standard Edition

  Microsoft® Windows Server® 2003 Enterprise Edition

- The product names of Windows Server 2003 R2 are as follows:

  Microsoft® Windows Server® 2003 R2 Standard Edition

  Microsoft® Windows Server® 2003 R2 Enterprise Edition

- The product names of Windows Server 2008 are as follows:

  Microsoft® Windows Server® 2008 Standard

  Microsoft® Windows Server® 2008 Enterprise

- The product names of Windows Server 2008 R2 are as follows:

  Microsoft® Windows Server® 2008 R2 Standard

  Microsoft® Windows Server® 2008 R2 Enterprise

INDEX

A

Account for e-mail notification....151
Ad-hoc Channel....44
Adding a group to another group....289
Address book....229
Address Book
- Change Order....56
- Edit Title....58
- Program / Change / Delete Group....56
- Switch Title....59

Address Book Management....55
ADF Original Table Elevation....23
Administrator Authentication Management....61
Administrator mode....136
Administrator tools....55
Administrator's E-mail Address....51
Authentication information....240
Auto Delete File in Document Server....62
Auto Erase Memory Setting....64
Auto Logout Timer....38
Auto Off Setting....64
Auto Off Timer (Type 1 and 2)....36
Auto Off Timer (Type 3 and 4)....36
Auto Specify Sender Name....53
AutoNet....309

B

Back up / Restore Address Book....59
Bidirectional Communication....43

C

Capture
- Delete All Unsent Files....63
- Owner Defaults....63
- Ownership....63
- Public Priority....63

Capture Priority....63
Capture Server IPv4 Address....48
Carrying Over Registered Data for Use by Address Book Auto Register....239
Changing a fax destination....253
Changing a group name....293
Changing a Registered IP-Fax destination....258
Changing a registered name....236
Changing a user code....242
Changing an e-mail destination....265
Changing an FTP Folder....277
Changing an NCP Registered Folder....283
Changing an SMB folder....272
Citrix XenApp....307
Clearing the number of prints....248
Communication Mode....44
Connecting the Telephone Line (Type 1 and 2)....119
Connecting the Telephone Line (Type 3 and 4)....119
Connecting to the interfaces....75
Copier / Document Server Auto Reset Timer....37
Copy Count Display....22
Copy speed....13
Copyrights....327
Cover Sheet Tray....35

D

Data Carry-over Setting for Address Book Auto-program....59
DDNS Configuration....40
Default User Name / Password (Send)....52
Delete All Files in Document Server....62
Delete All Logs....65
Deleting a fax destination....256
Deleting a group....294
Deleting a group within another group....292
Deleting a registered IP-Fax destination....261
Deleting a registered name....237
Deleting a user code....244
Deleting an e-mail destination....266
Deleting an FTP Folder....278
Deleting an NCP Folder....284
Deleting an SMB Registered Folder....273
Delivery Option....48
DHCP....309
DHCPv6....309
Dial-up router....315
Direct printing....303
Display / Clear / Print Counter per User....60
Display / Print Counter....60
Display Panel....18

Displayed information....209
Displaying names registered in a group....290
Displaying the counter for each user....245
DNS Configuration....39
Document server
Ethernet....108
wireless LAN....109
Domain Name....40
Dynamic DNS....312

E

E-mail
ethernet....92
wireless LAN....93
E-mail Communication Port....52
E-mail destination....263
E-mail Reception Interval....52
E-mail Storage in Server....52
Effective Protocol....40
Energy Saver Level....64
Energy Saver Timer....37
Enhanced External Charge Unit Management....62
Erase All Memory....65
Ethernet interface
connecting....76
Ethernet Speed....41
Extended Security....62
External Charge Unit Management....62

F

Facsimile Auto Reset Timer....38
Fax destination....250
Fax E-mail Account....54
Fax header....251
Fax number....250
Fax RX File Transmission....48
File transfer....48
Firmware Version....64
Fixed USB Port....65
Format of on-demand e-mail messages....154
ftp....198, 207, 209, 216, 304
Function Priority....22
Function Reset Timer....22

G

General features....21
Gigabit Ethernet interface
connecting....77
Guest mode....136

H

Host name....303
Host Name....42

I

IEEE 1284 Interface
connecting....81
IEEE 802.11 a/b/g interface
checking the signal....83
connecting....82
setup procedure....82
IEEE 802.11 interface....318
IEEE 802.1X....319
device certificate....319
Ethernet....320
site certificate....319
wireless LAN....322
IEEE 802.1X Authentication for Ethernet....41
info....207, 209
Input Prime....43
Interface settings....39
International TX mode....250
Internet Fax
ethernet....88
wireless LAN....90
IP address....15
IP-Fax....251
IPsec....40
IPv4 Gateway Address....39
IPv6 Gateway Address....39
IPv6 Stateless Address Autoconfiguration....39

K

Key Counter Management....61
Key Repeat....23

L

Label insertion....251
LAN Type....42

Laws and regulations....16
LDAP....66
changing....70
deleting....70
programming....66
LDAP authentication....300
LDAP Search....64
Legal prohibition....16
Limitations....307
Line type....120
Locating the NCP folder manually....282
Locating the NCP folder using browse network....282
Locating the SMB folder manually....270
Locating the SMB folder using Browse Network....271
Login
administrator mode....138
Web Image Monitor....136
lpr....304

M

Machine Action When Limit is Reached....60
Machine Data Encryption Settings....65
Machine IPv4 Address....39
Machine IPv6 Address....39
Machine Name....42
Machine status
ftp....198
rcp....198
rsh....198
sftp....198
status....198
Managing names in the Address Book....232
Managing users and machine usage....233
Max. Reception E-mail Size....52
Message....216
Model-specific information....17
Models....13

N

Names of Major Items....14
NCP Delivery Protocol....40
NetWare
banner page....317
form feed....316
printing....316
NetWare 3.x....122, 127
NetWare 4.x....124, 129
NetWare 5....124, 125, 129
NetWare 5.1....124, 125, 129
NetWare 6....124, 125, 129
NetWare 6.5....124, 125, 129
Network....39
Network delivery scanner
Ethernet....99
wireless LAN....100
Network interface board configuration....210
Network Security Level....64
Network settings
file transfer....116
interface settings....111
Network TWAIN scanner
Ethernet....105
wireless LAN....106
Notes....14
Notice....12
Notify Machine Status....64
Number of Scanner Resends....54
NW Frame Type....40

O

Output Copier....22
Output Document Server....22
Output Facsimile....22
Output Printer....23
Output Tray Settings (Type 1 and 2)....23
Output Tray Settings (Type 3 and 4)....24

P

Panel Key Sound....21
Panel Off Timer....37
Paper Tray Priority
Copier....27
Facsimile....27
Printer....27
Paper Type
Bypass Tray....30
LCT(the LCT)....34
Tray 1....30
Tray 2....31

Tray 3....33
Tray 3-4....32
Tray 3(the LCT)....33
Parallel Communication Speed....43
Parallel Interface....43
Parallel Timing....43
Permit SNMPv3 Communication....42
Permit SSL / TLS Communication....42
Ping Command....42
POP before SMTP....50
POP3 / IMAP4 Settings....51
Preventing unauthorized user access to shared folders from the machine....233
Print Address Book
Destination List....57
Print job information
ftp....209
info....209
rcp....209
rsh....209
sftp....209
Print List....46
Print log information
ftp....209
prnlog....209
rcp....209
rsh....209
sftp....209
Print Priority....22
Print server
NetWare 3.x....122
NetWare 4.x....124
NetWare 5....124
NetWare 5.1....124
NetWare 6....124
NetWare 6.5....124
Print speed....13
Print Volume Use Limitation
Unit Count Setting....60
Printer Auto Reset Timer....38
Printer Bypass Paper Size....29
Printer configuration
ftp....207
info....207
rcp....207
rsh....207
sftp....207
Printer server....121
Printer/LAN-Fax
Ethernet....85
wireless LAN....86
Printing commands
ftp....304
lpr....304
sftp....304
Printing the counter for all users....247
Printing the counter for each user....246
prnlog....209
Program / Change / Delete E-mail Message....52
Program / Change / Delete LDAP Server....63
Program / Change / Delete Realm....65
Program / Change Administrator....61
Program/Change/Delete User Text....21
Pure IP environment
NetWare 5....125
NetWare 5.1....125
NetWare 6....125
NetWare 6.5....125

R

rcp....198, 207, 209, 216
Realm....72
changing....73
deleting....74
programming....72
Reception Protocol....51
Registering a fax destination....252
Registering a FTP folder....274
Registering a Group....286
Registering a protection code....296
Registering a protection code to a group user....297
Registering a protection code to a single user....296
Registering a user code....240
Registering an e-mail destination....263
Registering an IP-Fax destination....257
Registering an NCP Folder....279
Registering an SMB folder....268
Registering folders....268
Registering names....235

Registering names to a group.....286
Registering Names to a Group.....287
Remote maintenance.....155
Remote printer
NetWare 3.x.....127
NetWare 4.x.....129
NetWare 5.....129
NetWare 5.1.....129
NetWare 6.....129
NetWare 6.5.....129
Removing a name from a group.....291
Restore Factory Defaults.....45
Restore IEEE 802.1X Authentication to Defaults.....42
rsh.....198, 207, 209, 216

S

Scan to folder function
Ethernet.....96
wireless LAN.....97
Scanner Auto Reset Timer.....38
Scanner Resend Interval Time.....54
Security Method.....45
Select Line.....250
Select Protocol.....251
Selection Signal Status.....43
Sending e-mail by quick dial.....233
Sending fax by quick dial.....232
Sending scanned files to a shared folder directly.....233
SEP Code.....250, 251
Service Mode Lock.....64
Service Test Call.....64
Set Date.....38
Set Time.....38
sftp.....198, 207, 209, 216, 304
Signal Control.....43
Slip Sheet Tray.....35
Small Size Paper Tray.....23
SMB Computer Name.....41
SMB Work Group.....41
SMTP Authentication.....49, 299
SMTP Server.....49
SNMP.....197
SSID Setting.....44
status.....198
SUB Code.....250, 251
Supported printer drivers.....307
Symbol.....13
syslog.....216
System Auto Reset Timer.....37
System log information
ftp.....216
rcp.....216
rsh.....216
sftp.....216
syslog.....216
System Status/Job List Display Time.....23

T

telnet.....155
8021x.....194
access.....156
authfree.....157
autonet.....158
bonjour.....158
devicename.....160
dhcp.....160
dhcp6.....161
diprint.....162
dns.....163
domainname.....165
etherauth.....165
etherconfig.....165
help.....166
hostname.....166
ifconfig.....167
info.....168
ipp.....168
ipsec.....169
ipv6.....169
logout.....170
lpr.....170
netware.....171
passwd.....172
pathmtu.....172
prnlog.....173
rhpp.....173
route.....174
set.....175
show.....178
slp.....178
smb.....179

snmp....180
sntp....183
spoolsw....184
ssdp....185
ssh....185
status....186
syslog....186
upnp....186
web....187
wiconfig....187
wins....192
wsmfp....193
Timer settings....36
To change the fax number....254
To change the SEP code....254
To change the SUB code....254
To select line....254
To select the fax header....255
To set label insertion....255
To set the international TX mode....255
Top Page....135
Trademarks....365
Transfer Log Setting....65
Tray paper settings....27
Tray Paper Size
Tray 2....27
Tray 2-4(the small size paper tray)....29
Tray 3....28
Tray 3-4....28

U

USB Host Interface
connecting....80
USB interface
connecting....80
User Authentication Management....61
User tools....19
change the settings....19
quit the settings....20
Using NetWare....122

V

Virtual printer....304

W

Warm-up Beeper....22
Web Image Monitor....133
administrator mode....136
auto e-mail notification....153
e-mail notification....149
guest mode....136
help....146
log out....136
login....136
mail authentication....151
menu....136
mode....136
on-demand e-mail notification....153
setting items....139
top page....134
When Using IPP with SmartDeviceMonitor for Client
IPP....148
SmartDeviceMonitor for Client....148
WINS Configuration....40
WINS server....310
telnet....311
Web Image Monitor....310
Wireless LAN....44, 318
Wireless LAN interface
checking the signal....83
connecting....82
setup procedure....82
Wireless LAN Signal....45
WSD scanner
Ethernet....102
wireless LAN....103

© 2010

Operating Instructions Network and System Settings Reference

Operating Instructions

PostScript 3 Supplement

1 Windows Configuration
2 Mac OS Configuration
3 Using the PostScript 3 Printer Driver
4 Appendix

Read this manual carefully before you use this machine and keep it handy for future reference. For safe and correct use, be sure to read the Safety Information in "About This Machine" before using the machine.

TABLE OF CONTENTS

Manuals for This Machine....5
Notice....7
Important....7
How to Read This Manual....8
Symbols....8
Notes....8
About IP Address....8
Laws and Regulations....9
Legal Prohibition....9

1. Windows Configuration

Using the Standard TCP/IP Port....11
Installing the PostScript 3 Printer Driver (Windows 2000)....11
Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003 / 2003 R2)....12
Installing the PostScript 3 Printer Driver (Windows Vista/7, Windows Server 2008)....14
Using the IPP Port....16
Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003/ 2003 R2)....16
Installing the PostScript 3 printer driver (Windows Vista/7, Windows Server 2008)....17
Using the LPR Port....19
Installing the PostScript 3 Printer Driver (Windows 2000)....19
Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003 / 2003 R2)....20
Installing the PostScript 3 Printer Driver (Windows Vista/7, Windows Server 2008)....21
Using the WSD Port....23
Installing the PostScript 3 Printer Driver (Windows Vista, Windows Server 2008)....23
Installing the PostScript 3 Printer Driver (Windows 7)....24
Using the SmartDeviceMonitor for Client Port....26
Installing the PostScript 3 Printer Driver (Windows 2000 - TCP/IP)....26
Installing the PostScript 3 Printer Driver (Windows 2000 - IPP)....27
Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003 / 2003 R2 - TCP/IP)....29
Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003 / 2003 R2 - IPP)....30
Installing the PostScript 3 Printer Driver (Windows Vista/7, Windows Server 2008 - TCP/IP)....32
Installing the PostScript 3 Printer Driver (Windows Vista/7, Windows Server 2008 - IPP)....33
Changing the Port Settings for SmartDeviceMonitor for Client....35

Using as a Windows Network Printer....37
Installing the PostScript 3 Printer Driver (Windows 2000)....37
Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003 / 2003 R2)....38
Installing the PostScript 3 Printer Driver (Windows Vista/7, Windows Server 2008)....39
Using as a NetWare Print Server / Remote Printer....41
When using the PostScript 3 Printer Driver....41
Installing the Printer Driver Using USB....42
Windows 2000 - USB....42
Windows XP, Windows Server 2003 / 2003 R2 - USB....43
Windows Vista, Windows Server 2008 - USB....44
Windows 7 - USB....45
Troubleshooting for Using USB....46
Printing with Parallel Connection....47
Installing the PostScript 3 printer driver (Windows 2000)....47
Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003 / 2003 R2)....48
Installing the PostScript 3 Printer Driver (Windows Vista/7, Windows Server 2008)....49
If a Message Appears during Installation....51
Making Option Settings for the Printer....53
Setting Up the Printer Driver....54
Windows 2000 - Accessing the Printer Properties....54
Windows XP, Windows Server 2003 / 2003 R2 - Accessing the Printer Properties....56
Windows Vista/7, Windows Server 2008/2008 R2 - Accessing the Printer Properties....58
Making Printer Settings - One Click Presets....60

2. Mac OS Configuration

Using the Printer Driver under Mac OS X....61
Installing the PPD Files....61
Setting Up the PPD Files....61
Setting Up Options for Mac OS X....62
Using USB Interface....63
Using Bonjour....64

3. Using the PostScript 3 Printer Driver

Setting Up Options for PostScript 3 Printer Driver....65
Printing a Document....66

Job Type....66
User Code....80
Orientation....81
Color Mode....81
Rotate by 180 degrees....82
Copies....82
Paper Size....83
Reduce/Enlarge....83
Paper Source....84
Media Type....84
Fit to Paper....84
Pages per Sheet/ Booklet....85
Layout....85
Booklet Binding Edge....86
Page Order....86
Draw Border....86
Duplex Printing....87
Resolution....88
Gradation....88
Dithering....88
Image Smoothing....89
Gray Reproduction....90
Black Over Print....90
Color Control....91
Color Setting....91
Color Profile....92
Separate into CMYK....93
CMYK Simulation Profile....93
Print Mode/ Toner Saving....94
Barrier-free Color Management....94
Destination....94
Collate....95
Page Output Order....95

Orientation Override....95
Staple....96
Punch....96
Watermark....97
Watermark Text....97
Watermark Font....98
Watermark Size....98
Watermark Angle....98
Watermark Style....98

4. Appendix

Trademarks....101
INDEX....103

Manuals for This Machine

Read this manual carefully before you use this machine.

Refer to the manuals that are relevant to what you want to do with the machine.

Important

- **Media differ according to manual.**
- **The printed and electronic versions of a manual have the same contents.**
- **Adobe Acrobat Reader/Adobe Reader must be installed in order to view the manuals as PDF files.**
- **A Web browser must be installed in order to view the html manuals.**

About This Machine

Before using the machine, be sure to read the section of this manual entitled Safety Information.

This manual introduces the machine's various functions. It also explains the control panel, preparation procedures for using the machine, how to enter text, how to install the CD-ROMs provided, and how to replace paper, toner, staples, and other consumables.

Troubleshooting

Provides a guide for resolving common usage-related problems.

Copy and Document Server Reference

Explains Copier and Document Server functions and operations. Also refer to this manual for explanations on how to place originals.

Facsimile Reference

Explains Facsimile functions and operations.

Printer Reference

Explains Printer functions and operations.

Scanner Reference

Explains Scanner functions and operations.

Network and System Settings Reference

Explains how to connect the machine to a network, configure and operate the machine in a network environment, and use the software provided. Also explains how to change User Tools settings and how to register information in the Address Book.

Security Reference

This manual is for administrators of the machine. It explains security functions that you can use to prevent unauthorized use of the machine, data tampering, or information leakage. For enhanced security, we recommend that you first make the following settings:

- Install the Device Certificate.
- Enable SSL (Secure Sockets Layer) Encryption.

- Change the user name and password of the administrator using Web Image Monitor.

For details, see "Setting up the Machine", Security Reference.

Be sure to read this manual when setting the enhanced security functions, or user and administrator authentication.

PostScript 3 Supplement

Explains how to set up and use PostScript 3.

VM Card Extended Feature Settings Device Reference

Explains how to set up the extended features settings with the machine.

VM Card Extended Feature Settings Web Reference

Explains how to set up the extended features settings using Web Image Monitor.

Other manuals

- UNIX Supplement
- Quick Reference Copy Guide
- Quick Reference Printer Guide
- Quick Reference Fax Guide
- Quick Reference Scanner Guide
- App2Me Start Guide

Note

- Manuals provided are specific to machine types.
- For "UNIX Supplement", please visit our Web site or consult an authorized dealer. This manual includes descriptions of functions and settings that might not be available on this machine.

Notice

Important

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

For good copy quality, the manufacturer recommends that you use genuine toner from the manufacturer.

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

How to Read This Manual

Symbols

This manual uses the following symbols:

Important

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

Note

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys on the machine's display or control panels.

Notes

Contents of this manual are subject to change without prior notice.

Colors on color keys or the color circle may differ slightly from the colors of actual copies.

Two kinds of size notation are employed in this manual.

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Depending on which country you are in, certain units may be optional. For details, please contact your local dealer.

About IP Address

In this manual, "IP address" covers both IPv4 and IPv6 environments. Read the instructions that are relevant to the environment you are using.

Laws and Regulations

Legal Prohibition

Do not copy or print any item for which reproduction is prohibited by law.

Copying or printing the following items is generally prohibited by local law:

bank notes, revenue stamps, bonds, stock certificates, bank drafts, checks, passports, driver's licenses.

The preceding list is meant as a guide only and is not inclusive. We assume no responsibility for its completeness or accuracy. If you have any questions concerning the legality of copying or printing certain items, consult with your legal advisor.

This machine is equipped with a function that prevents making counterfeit bank bills. Due to this function the original images similar to bank bills may not be copied properly.

1. Windows Configuration

This chapter explains how to install and configure the printer drivers for use on the Windows operating system.

Using the Standard TCP/IP Port

This section explains how to install the PostScript 3 printer driver for use on the Standard TCP/IP port.

Installing the PostScript 3 Printer Driver (Windows 2000)

This section explains how to install the PostScript 3 printer driver under Windows 2000 for use on the Standard TCP/IP port.

Important

- Manage Printers permission is required to install the driver. Log on as an Administrators group member.
- You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.
- In an IPv6 environment, you cannot use the Standard TCP/IP Port. Use the SmartDeviceMonitor for Client port.

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.
4. **Click [PostScript 3 Printer Driver].**

   Add Printer Wizard starts.
5. **Click [Next >].**
6. **Click [Local printer], and then click [Next >].**
7. **Click [Create a new port:].**
8. **Select [Standard TCP/IP Port], and then click [Next >].**
9. **Click [Next >].**
10. **Enter the machine name or IP address in the [Printer Name or IP Address] box, and then click [Next >].**

    The [Port Name] text box automatically obtains a port name. Change this name if necessary.

11. **Click [Finish].**
12. **Check that the name of the machine whose driver you want to install is selected, and then click [Next >].**
13. **Change the machine name if you want, and then click [Next >].**

    Select [Yes] to configure the machine as default.
14. **Specify whether or not to share the machine, and then click [Next >].**
15. **Specify whether or not to print a test page, and then click [Next >].**
16. **Click [Finish].**

    If the [Digital Signature Not Found] message appears, click [Yes].

    The printer driver installation starts.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.
- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003 / 2003 R2)

This section explains how to install the PostScript 3 printer driver under Windows XP or Windows Server 2003 /2003 R2 for use on the Standard TCP/IP port.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**
- **In an IPv6 environment, you cannot use the Standard TCP/IP Port. Use the SmartDeviceMonitor for Client port.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.

3. **Select an interface language, and then click [OK].**

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. **Click [PostScript 3 Printer Driver].**

   Add Printer Wizard starts.

5. **Click [Next >].**
6. **Click [Local printer attached to this computer], and then click [Next >].**
7. **Click [Create a new port:].**
8. **Click [Standard TCP/IP Port] in [Type of port:], and then click [Next >].**
9. **Click [Next >] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.**
10. **Enter the machine name or IP address in the [Printer Name or IP Address] box.**

    The [Port Name] text box automatically obtains a port name. Change this name if necessary.

11. **Click [Next >].**
12. **Click [Finish] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.**
13. **Check that the name of the machine whose driver you want to install is selected, and then click [Next >].**
14. **Change the machine name if you want, and then click [Next >].**

    Select [Yes] to configure the machine as default.

15. **Specify whether or not to share the machine, and then click [Next >].**
16. **Specify whether or not to print a test page, and then click [Next >].**
17. **Click [Finish].**

    If the [Hardware Installation] message appears, click [Continue Anyway].

    The printer driver installation starts.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.
- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Installing the PostScript 3 Printer Driver (Windows Vista/7, Windows Server 2008)

This section explains how to install the PostScript 3 printer driver under Windows Vista/7 or Windows Server 2008 for use on the Standard TCP/IP port.

Important

- Manage Printers permission is required to install the driver. Log on as an Administrators group member.
- You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.
- If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.
- In an IPv6 environment, you cannot use the Standard TCP/IP Port. Use the SmartDeviceMonitor for Client port.

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.
4. **Click [PostScript 3 Printer Driver].**

   Add Printer Wizard starts.
5. **Click [Add a local printer].**
6. **Click [Create a new port:], and then select [Standard TCP/IP Port] in [Type of port:].**
7. **Click [Next].**
8. **Select [TCP/IP Device] in [Device type].**
9. **Enter the machine's IP address in [Hostname or IP address:], and then click [Next].**

   The [Port name:] text box automatically obtains a port name. Change this name if necessary.

   A printer driver installation screen appears when Standard TCP/IP port is detected.
10. **Check that the name of the machine whose driver you want to install is selected, and then click [Next].**
11. **Change the machine name if you want, and then click [Next].**

    If a check box for setting the machine as a default printer appears, configure as necessary.

If the [Windows can't verify the publisher of this driver software] message appears, click [Install this driver software anyway].

12. **Specify whether or not to share the machine, and then click [Next].**
13. **Specify whether or not to print a test page, and then click [Finish].**

    If a check box for setting the machine as a default printer appears, configure as necessary.

    The printer driver installation starts.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.
- Depending on your computer's operating system, the [AutoPlay] dialog box may appear. If this happens, click [Run SETUP.EXE]. If the [User Account Control] dialog box appears, click [Yes] or [Continue] to allow the auto play program to run.
- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Using the IPP Port

This section explains how to install the PostScript 3 printer driver for use on the IPP port.

Important

- Manage Printers permission is required to install the driver. Log on as an Administrators group member.
- You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.
- If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.
- In an IPv6 environment, you cannot use the IPP Port. Use the SmartDeviceMonitor for Client port.
- The IPP port cannot be used under Windows 2000. If you are using Windows 2000, install the PostScript 3 printer driver using the SmartDeviceMonitor for Client port. To use the SmartDeviceMonitor for Client port, you must first download SmartDeviceMonitor for Client from the manufacturer's Web site. For details about the SmartDeviceMonitor for Client port, see "Using the SmartDeviceMonitor for Client Port".
- To print via IPP-SSL, use the SmartDeviceMonitor for Client port.
- To print via IPP-SSL under Windows Vista/7 or Windows Server 2008/2008 R2, you must install the certificate on your computer before you install the printer driver using the IPP port. For details, consult your administrator.

Reference

- p.26 "Using the SmartDeviceMonitor for Client Port"

Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003/2003 R2)

This section explains how to install the PostScript 3 printer driver under Windows XP or Windows Server 2003/2003 R2 for use on the IPP port.

1. **Quit all applications currently running.**
2. **On the [Start] menu, click [Printers and Faxes].**
3. **Click [Add a printer].**

   The [Add Printer Wizard] dialog box appears.
4. **Click [Next>].**
5. **Click [A network printer, or a printer attached to another computer].**
6. **Click [Next>].**
7. **Click [Connect to a printer on the Internet or on a home or official network:].**

8. **In the [URL:] box, enter "http:// machine's IP address/printer (or ipp)" as the machine's address, and then click [Next>].**
9. **Click [Have Disk...].**
10. **Insert the provided CD-ROM into the computer's CD-ROM drive.**

    If Auto Run starts, click [Cancel], and then [Exit].
11. **Click [Browse...], and then specify a location for the INF file.**

    If the CD-ROM drive letter is D, the printer driver's source files are stored in "D:\DRIVERS\PS\XP_VISTA\(Language)\DISK1".
12. **Click [Open].**
13. **Click [OK] to close the Install From Disk window.**
14. **Select the machine you want to use, and then click [OK].**

    If the [Hardware Installation] message appears, click [Continue Anyway].
15. **Configure the default printer as necessary, and then click [Next >].**
16. **Click [Finish].**

    If installation is successful, the icon of the printer connected to the IPP port is added to the [Printers and Faxes] window.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.

Installing the PostScript 3 printer driver (Windows Vista/7, Windows Server 2008)

This section explains how to install the PostScript 3 printer driver under Windows Vista/7 or Windows Server 2008 for use on the IPP port.

1. **Quit all applications currently running.**
2. **On the [Start] menu, click [Control Panel].**

   The [Control Panel] window appears.
3. **Click [Printers] in [Hardware and Sound].**

   If using Windows 7, click [View devices and printers].
4. **Click [Add a printer].**

   The [Add Printer] dialog box appears.
5. **Click [Add a network, wireless or Bluetooth printer].**
6. **Click [The printer that I want isn't listed].**

7. **Insert the provided CD-ROM into the computer's CD-ROM drive.**

   If the [AutoPlay] dialog box appears, click the [Close] button.

8. **Click [Select a shared printer by name].**
9. **Enter "http:// machine's IP address/printer (or ipp)" as the machine's address, and then click [Next].**
10. **Click [Have Disk...].**
11. **Click [Browse...], and then specify a location for the inf file.**

    If the CD-ROM drive letter is D, the printer driver's source files are stored in "D:\DRIVERS\PS\XP_VISTA\(Language)\DISK1".

12. **Click [Open].**
13. **Click [OK] to close the Install From Disk window.**
14. **Select the machine you want to use, and then click [OK].**

    If the [Windows can't verify the publisher of this driver software] message appears, click [Install this driver software anyway].

15. **Click [Next].**

    If a check box for setting the machine as a default printer appears, configure as necessary.

16. **Specify whether or not to print a test page, and then click [Finish].**

    If a check box for setting the machine as a default printer appears, configure as necessary.

    If installation is successful, the icon of the printer connected to the IPP port is added to the [Printers] or [Devices and Printers] window.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.

Using the LPR Port

This section explains how to install the PostScript 3 printer driver for use on the LPR port.

Installing the PostScript 3 Printer Driver (Windows 2000)

This section explains how to install the PostScript 3 printer driver under Windows 2000 for use on the LPR port.

Important

- Manage Printers permission is required to install the driver. Log on as an Administrators group member.
- You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.

1. Quit all applications currently running.
2. Insert the CD-ROM into the CD-ROM drive.

   The installer starts.
3. Select an interface language, and then click [OK].

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.
4. Click [PostScript 3 Printer Driver].

   Add Printer Wizard starts.
5. Click [Next >].
6. Click [Local printer], and then click [Next >].
7. Click [Create a new port:].
8. Click [LPR Port], and then click [Next >].
9. Enter the machine's IP address in the [Name or address of server providing lpd:] box.
10. Enter "lp" in the [Name of printer or print queue on that server:] box, and then click [OK].
11. Check that the name of the machine whose driver you want to install is selected, and then click [Next >].
12. Change the machine name if you want, and then click [Next >].

    Select [Yes] to configure the machine as default.
13. Specify whether or not to share the machine, and then click [Next >].
14. Specify whether or not to print a test page, and then click [Next >].

15. **Click [Finish].**

    If the [Digital Signature Not Found] message appears, click [Yes].

    The printer driver installation starts.

1

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.
- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003 / 2003 R2)

This section explains how to install the PostScript 3 printer driver under Windows XP or Windows Server 2003 /2003 R2 for use on the LPR port.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**
- **In an IPv6 environment, you cannot use the LPR Port. Use the SmartDeviceMonitor for Client port.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.
4. **Click [PostScript 3 Printer Driver].**

   Add Printer Wizard starts.
5. **Click [Next >].**
6. **Click [Local printer attached to this computer], and then click [Next >].**
7. **Click [Create a new port:].**

8. **Click [LPR Port] in [Type of port:], and then click [Next >].**
9. **Enter the machine's IP address in the [Name or address of server providing lpd:] box.**
10. **Enter "lp" in the [Name of printer or print queue on that server:] box, and then click [OK].**
11. **Check that the name of the machine whose driver you want to install is selected, and then click [Next >].**
12. **Change the machine name if you want, and then click [Next >].**

    Select [Yes] to configure the machine as default.
13. **Specify whether or not to share the machine, and then click [Next >].**
14. **Specify whether or not to print a test page, and then click [Next >].**
15. **Click [Finish].**

    If the [Hardware Installation] message appears, click [Continue Anyway].

    The printer driver installation starts.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.
- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Installing the PostScript 3 Printer Driver (Windows Vista/7, Windows Server 2008)

This section explains how to install the PostScript 3 printer driver under Windows Vista/7 or Windows Server 2008 for use on the LPR port.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**
- **In an IPv6 environment, you cannot use the LPR Port. Use the SmartDeviceMonitor for Client port.**

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.

3. **Select an interface language, and then click [OK].**

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. **Click [PostScript 3 Printer Driver].**

   Add Printer Wizard starts.

5. **Click [Add a local printer].**

6. **Click [Create a new port:], and then click [LPR Port] in [Type of port:].**

7. **Click [Next].**

8. **Enter the machine's IP address in [Name or address of server providing lpd:].**

9. **Enter "lp" in [Name of printer or print queue on that server:], and then click [OK].**

10. **Check that the name of the machine whose driver you want to install is selected, and then click [Next].**

11. **Change the machine name if you want, and then click [Next].**

    If a check box for setting the machine as a default printer appears, configure as necessary.

    If the [Windows can't verify the publisher of this driver software] message appears, click [Install this driver software anyway].

12. **Specify whether or not to share the machine, and then click [Next].**

13. **Specify whether or not to print a test page, and then click [Finish].**

    If a check box for setting the machine as a default printer appears, configure as necessary.

    The printer driver installation starts.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.
- Depending on your computer's operating system, the [AutoPlay] dialog box may appear. If this happens, click [Run SETUP.EXE]. If the [User Account Control] dialog box appears, click [Yes] or [Continue] to allow the auto play program to run.
- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Using the WSD Port

This section explains how to install the PostScript 3 printer driver for use on the WSD port.

Important

- The WSD Port can be used under Windows Vista/7, or Windows Server 2008/2008 R2.
- You can connect to the machine only if both the machine and computer are on the same network segment, or "Network discovery" is enabled. For details, see Windows Help.

Installing the PostScript 3 Printer Driver (Windows Vista, Windows Server 2008)

This section explains how to install the PostScript 3 printer driver under Windows Vista or Windows Server 2008 for use on the WSD port.

Important

- Manage Printers permission is required to install the driver. Log on as an Administrators group member.
- You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.
- If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.

1. **Quit all applications currently running.**
2. **Click [Start], and then click [Network].**

   The [Network] window appears, and the device search begins automatically.
3. **Right-click the machine's icon, and then click [Install].**

   If the [User Account Control] dialog box appears, click [Yes] or [Continue].

   The [Found New Hardware] dialog box appears.
4. **Click [Locate and install driver software (recommended)].**

   If the [User Account Control] dialog box appears, click [Yes] or [Continue].
5. **Click [Browse my computer for driver software (advanced)].**
6. **Insert the provided CD-ROM into the computer's CD-ROM drive.**

   If the [AutoPlay] dialog box appears, click the [Close] button.
7. **Click [Browse...], and then specify a location for the printer driver.**

   If the CD-ROM drive letter is D, the printer driver's source files are stored in "D:\DRIVERS\PS\(Language)\XP_VISTA\DISK1".

8. **Click [Next].**

   If the [Windows can't verify the publisher of this driver software] message appears, click [Install this driver software anyway].

9. **Click [Close].**

   If installation is successful, the icon of the machine connected to the WSD port is added to the [Printers] window.

Note

- The port name that follows "WSD" uses random character strings. It cannot be changed freely.
- To stop the installation, click [Cancel] before the installation is complete. When re-installing the WSD Port, right-click the machine's icon in the [Network] window, and then click [Uninstall].

Installing the PostScript 3 Printer Driver (Windows 7)

This section explains how to install the PostScript 3 printer driver under Windows 7 for use on the WSD port.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**

1. **Quit all applications currently running.**
2. **On the [Start] menu, click [Computer].**
3. **Click [Network].**
4. **Right-click the machine's icon, and then click [Install].**

   Driver installation starts automatically.

   If the "Device driver software was not successfully installed" message appears, close the message, and then proceed to step 5.

5. **On the [Start] menu, click [Devices and Printers].**
6. **Click [Add a printer].**
7. **Click [Add a local printer].**
8. **Check the [Use an existing port:] check box, and select WSD port.**
9. **Click [Next].**
10. **Click [Have Disk...].**

11. **Insert the CD-ROM into the CD-ROM drive.**

    If the [AutoPlay] dialog box appears, click the [Close] button.

12. **Click [Browse...], and then specify a location for the printer driver.**

    If the CD-ROM drive letter is D, the printer driver's source files are stored in "D:\DRIVERS\PS\(Language)\XP_VISTA\DISK1".

13. **Click [OK] to close the [Install From Disk] window.**

14. **Select the manufacturer and model name of the machine you want to use, and then click [Next].**

15. **Follow the instructions on the screens.**

    According to your needs, you may change the machine name, configure the machine as a default printer and/or a shared printer, and print a test page.

16. **Click [Finish].**

    If installation is successful, the icon of the printer connected to the WSD port is added to the [Devices and Printers] window.

Note

- The port name that follows "WSD" uses random character strings. It cannot be changed freely.
- To stop the installation, click [Cancel] before the installation is complete. When re-installing the WSD Port, right-click the machine's icon in the [Network] window, and then click [Uninstall].

Using the SmartDeviceMonitor for Client Port

This section explains how to install the PostScript 3 printer driver for use on the SmartDeviceMonitor for Client port. To use this function, you must first download SmartDeviceMonitor for Client from the manufacturer's Web site and install it on your computer. Contact your local dealer for information on downloading SmartDeviceMonitor for Client.

Installing the PostScript 3 Printer Driver (Windows 2000 - TCP/IP)

This section explains how to install the PostScript 3 printer driver under Windows 2000 for use on the SmartDeviceMonitor for Client port.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.
4. **Click [PostScript 3 Printer Driver].**

   Add Printer Wizard starts.
5. **Click [Next >].**
6. **Click [Local printer], and then click [Next >].**
7. **Click [Create a new port:].**
8. **Click [SmartDeviceMonitor], and then click [Next >].**
9. **Click [TCP/IP], and then click [Search].**

   A list of machines using TCP/IP appears.
10. **Select the machine you want to use, and then click [OK].**

    Only machines that respond to a broadcast from the computer appear. To use a machine not listed here, click [Specify Address], and then enter the IP address or host name of the machine.
11. **Check that the name of the machine whose driver you want to install is selected, and then click [Next >].**

12. **Change the machine name if you want, and then click [Next >].**

    Select [Yes] to configure the machine as default.

13. **Specify whether or not to share the machine, and then click [Next >].**
14. **Specify whether or not to print a test page, and then click [Next >].**
15. **Click [Finish].**

    If the [Digital Signature Not Found] message appears, click [Yes].

    The printer driver installation starts.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.
- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Installing the PostScript 3 Printer Driver (Windows 2000 - IPP)

This section explains how to install the PostScript 3 printer driver under Windows 2000 for use on the SmartDeviceMonitor for Client port.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.

3. **Select an interface language, and then click [OK].**

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. **Click [PostScript 3 Printer Driver].**

   Add Printer Wizard starts.

5. **Click [Next >].**
6. **Click [Local printer], and then click [Next >].**
7. **Click [Create a new port:].**

8. **Click [SmartDeviceMonitor], and then click [Next >].**
9. **Click [IPP].**
10. **In the [Printer URL] box, enter "http://(machine's IP address or host name)/printer" as the machine's address.**

    If the server authentication is issued, to enable SSL (a protocol for encrypted communication), enter "https://(machine's IP address or host name)/printer" (Internet Explorer 5.01, or a higher version must be installed).

    (example IP address: 192.168.15.16)

    `http://192.168.15.16/printer`

    `https://192.168.15.16/printer`

    You can enter "http://machine's IP address or host name/ipp" as the machine's address.

    If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.
11. **Enter a name for identifying the machine in [IPP Port Name]. Use a name different from the name of any existing port.**

    If a name is not specified here, the address entered in the [Printer URL] box becomes the IPP port name.
12. **Click [Detailed Settings] to make necessary settings, and then click [OK].**

    For information about the settings, see SmartDeviceMonitor for Client Help.
13. **Click [OK].**
14. **Check that the name of the machine whose driver you want to install is selected, and then click [Next >].**
15. **Change the machine name if you want, and then click [Next >].**

    Select [Yes] to configure the machine as default.
16. **Specify whether or not to share the machine, and then click [Next >].**
17. **Specify whether or not to print a test page, and then click [Next >].**
18. **Click [Finish].**

    If the [Digital Signature Not Found] message appears, click [Yes].

    The printer driver installation starts.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.
- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003 / 2003 R2 - TCP/IP)

This section explains how to install the PostScript 3 printer driver under Windows XP or Windows Server 2003 /2003 R2 for use on the SmartDeviceMonitor for Client port.

Important

- Manage Printers permission is required to install the driver. Log on as an Administrators group member.
- You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.
- If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.
4. **Click [PostScript 3 Printer Driver].**

   Add Printer Wizard starts.
5. **Click [Next >].**
6. **Click [Local printer attached to this computer], and then click [Next >].**
7. **Click [Create a new port:].**
8. **Click [SmartDeviceMonitor] in [Type of port:], and then click [Next >].**
9. **Click [TCP/IP], and then click [Search].**

   A list of machines using TCP/IP appears.
10. **Select the machine you want to use, and then click [OK].**

    Only machines that respond to a broadcast from the computer appear. To use a machine not listed here, click [Specify Address], and then enter the IP address or host name of the machine.
11. **Check that the name of the machine whose driver you want to install is selected, and then click [Next >].**
12. **Change the machine name if you want, and then click [Next >].**

    Select [Yes] to configure the machine as default.
13. **Specify whether or not to share the machine, and then click [Next >].**

14. **Specify whether or not to print a test page, and then click [Next >].**
15. **Click [Finish].**

    If the [Hardware Installation] message appears, click [Continue Anyway].

    The printer driver installation starts.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.
- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003 / 2003 R2 - IPP)

This section explains how to install the PostScript 3 printer driver under Windows XP or Windows Server 2003 /2003 R2 for use on the SmartDeviceMonitor for Client port.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.
4. **Click [PostScript 3 Printer Driver].**

   Add Printer Wizard starts.
5. **Click [Next >].**
6. **Click [Local printer attached to this computer], and then click [Next >].**
7. **Click [Create a new port:].**

8. **Click [SmartDeviceMonitor] in [Type of port:], and then click [Next >].**
9. **Click [IPP].**
10. **In the [Printer URL] box, enter "http://(machine's IP address or host name)/printer" as the machine's address.**

    If the server authentication is issued, to enable SSL (a protocol for encrypted communication), enter "https://(machine's IP address or host name)/printer" (Internet Explorer 5.01, or a higher version must be installed).

    (example IP address: 192.168.15.16)

    `http://192.168.15.16/printer`

    `https://192.168.15.16/printer`

    You can enter "http://machine's IP address or host name/ipp" as the machine's address.

    If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.
11. **Enter a name for identifying the machine in [IPP Port Name]. Use a name different from the one of any existing port.**

    If a name is not specified here, the address entered in the [Printer URL] box becomes the IPP port name.
12. **Click [Detailed Settings] to make necessary settings, and then click [OK].**

    For information about the settings, see SmartDeviceMonitor for Client Help.
13. **Click [OK].**
14. **Check that the name of the printer driver you want to install is selected, and then click [OK].**
15. **Change the name of the machine if you want, and then click [Next >].**

    Select [Yes] to configure the machine as default.
16. **Specify whether or not to share the machine, and then click [Next >].**
17. **Specify whether or not to print a test page, and then click [Next >].**
18. **Click [Finish].**

    If the [Hardware Installation] message appears, click [Continue Anyway].

    The printer driver installation starts.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.
- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Installing the PostScript 3 Printer Driver (Windows Vista/7, Windows Server 2008 - TCP/IP)

This section explains how to install the PostScript 3 printer driver under Windows Vista/7 or Windows Server 2008 for use on the SmartDeviceMonitor for Client port.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.
4. **Click [PostScript 3 Printer Driver].**

   Add Printer Wizard starts.
5. **Click [Add a local printer].**
6. **Click [Create a new port:], and then select [SmartDeviceMonitor] in [Type of port:].**
7. **Click [Next].**
8. **Click [TCP/IP], and then click [Search].**

   A list of machines using TCP/IP appears.
9. **Select the machine you want to use, and then click [OK].**

   Only machines that respond to a broadcast from the computer appear. To use a machine not listed here, click [Specify Address], and then enter the IP address or host name of the machine.
10. **Check that the name of the machine whose driver you want to install is selected, and then click [Next].**
11. **Change the machine name if you want, and then click [Next].**

    If a check box for setting the machine as a default printer appears, configure as necessary.

    If the [Windows can't verify the publisher of this driver software] message appears, click [Install this driver software anyway].

12. **Specify whether or not to share the machine, and then click [Next].**
13. **Specify whether or not to print a test page, and then click [Finish].**

    If a check box for setting the machine as a default printer appears, configure as necessary.

    The printer driver installation starts.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.
- Depending on your computer's operating system, the [AutoPlay] dialog box may appear. If this happens, click [Run SETUP.EXE]. If the [User Account Control] dialog box appears, click [Yes] or [Continue] to allow the auto play program to run.
- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Installing the PostScript 3 Printer Driver (Windows Vista/7, Windows Server 2008 - IPP)

This section explains how to install the PostScript 3 printer driver under Windows Vista/7 or Windows Server 2008 for use on the SmartDeviceMonitor for Client port.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.
4. **Click [PostScript 3 Printer Driver].**

   Add Printer Wizard starts.
5. **Click [Add a local printer].**

6. **Click [Create a new port:].**
7. **Click [SmartDeviceMonitor] in [Type of port:], and then click [Next].**
8. **Click [IPP].**
9. **In the [Printer URL] box, enter "http://(machine's IP address or host name)/printer" as the machine's address.**

   If the server authentication is issued, to enable SSL (a protocol for encrypted communication), enter "https://(machine's IP address or host name)/printer" (Internet Explorer 5.01, or a higher version must be installed).

   (example IP address: 192.168.15.16)

   `http://192.168.15.16/printer`

   `https://192.168.15.16/printer`

   You can enter "http://machine's IP address or host name/ipp" as the machine's address.

   If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.
10. **Enter a name for identifying the machine in [IPP Port Name]. Use a name different from the one of any existing port.**

    If a name is not specified here, the address entered in the [Printer URL] box becomes the IPP port name.
11. **Click [Detailed Settings] to make necessary settings, and then click [OK].**

    For information about the settings, see SmartDeviceMonitor for Client Help.
12. **Click [OK].**
13. **Check that the name of the printer driver you want to install is selected, and then click [Next].**
14. **Change the name of the machine if you want, and then click [Next].**

    If a check box for setting the machine as a default printer appears, configure as necessary.
15. **Specify whether or not to share the machine, and then click [Next].**
16. **Specify whether or not to print a test page, and then click [Finish].**

    If a check box for setting the machine as a default printer appears, configure as necessary.

    The printer driver installation starts.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.
- Depending on your computer's operating system, the [AutoPlay] dialog box may appear. If this happens, click [Run SETUP.EXE]. If the [User Account Control] dialog box appears, click [Yes] or [Continue] to allow the auto play program to run.
- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.

- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Changing the Port Settings for SmartDeviceMonitor for Client

Follow the procedure below to change the SmartDeviceMonitor for Client settings, such as TCP/IP timeout, recovery/parallel printing, and printer groups.

Windows 2000:

1. **Open the [Printers] window from the [Start] menu.**
2. **Click the icon of the machine you want to use. On the [File] menu, click [Properties].**

   The printer properties appear.
3. **On the [Ports] tab, click [Configure Port...].**

   The [Port Configuration] dialog box appears.

Windows XP, Windows Server 2003 / 2003 R2:

1. **Open the [Printers and Faxes] window from the [Start] menu.**

   The [Printers and Faxes] window appears.
2. **Click the icon of the machine you want to use. On the [File] menu, click [Properties].**

   The printer properties appear.
3. **Click the [Ports] tab, and then click [Configure Port...].**

   The [Port Configuration] dialog box appears.
   - User, proxy, and timeout settings can be configured for IPP.

Note

- For information about these settings, see SmartDeviceMonitor for Client Help.

Windows Vista, Windows Server 2008:

1. **Open the [Printers] window from [Control Panel] on the [Start] menu.**

   The [Printers] window appears.
2. **Right - click the icon of the machine you want to use, and then click [Properties].**

   The printer properties appear.

3. **Click the [Port] tab, and then click [Configure Port].**

   The [Port Configuration] dialog box appears.

   - User, proxy, and timeout settings can be configured for IPP.

1

Note

- For information about these settings, see SmartDeviceMonitor for Client Help.

Windows 7, Windows Server 2008 R2:

1. **Open the [Devices and Printers] window from the [Start] menu.**

   The [Devices and Printers] window appears.

2. **Right-click the icon of the printer you want to use, and then click [Printer properties].**

   The printer properties appear.

3. **Click the [Ports] tab, and then click [Configure Port].**

   The [Port Configuration] dialog box appears.

   - User, proxy, and timeout settings can be configured for IPP.

Note

- For information about these settings, see SmartDeviceMonitor for Client Help.

How to enable Recovery/Parallel Printing

If no settings on the [Recovery/Parallel Printing] tab are available, follow the procedure below.

1. **Start SmartDeviceMonitor for Client, and then right-click the SmartDeviceMonitor for Client icon on the taskbar.**
2. **Point to [Property], click [Extended Features Settings], and then select the [Set Recovery/Parallel Printing for each port] check box.**
3. **Click [OK] to close the [Extended Features Settings] dialog box.**

Using as a Windows Network Printer

This section explains how to install the PostScript 3 printer driver when using the printer as a Windows network printer.

Installing the PostScript 3 Printer Driver (Windows 2000)

This section explains how to install the PostScript 3 printer driver under Windows 2000 when using the printer as a Windows network printer.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**
- **If you print from a print server connected to the machine using the SmartDeviceMonitor for Client port, Recovery Printing and Parallel Printing cannot be used from the client computer.**
- **You can install the printer driver from the CD-ROM provided with this printer or download it from the manufacturer's Web site.**

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.
4. **Click [PostScript 3 Printer Driver].**

   Add Printer Wizard starts.
5. **Click [Next >].**
6. **Click [Network printer], and then click [Next >].**
7. **Select the location method from the [Locate Your Printer] screen, and then click [Next >].**
8. **Double-click the computer name you want to use as a print server in the [Shared printers:] window.**
9. **Select the machine you want to use, and then click [Next >].**
10. **Click [Next >].**

    Select [Yes] to configure the machine as default.
11. **Click [Finish].**

    Restart the computer to complete installation.

1

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.
- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003 / 2003 R2)

This section explains how to install the PostScript 3 printer driver under Windows XP or Windows Server 2003 /2003 R2 when using the printer as a Windows network printer.

Important

- Manage Printers permission is required to install the driver. Log on as an Administrators group member.
- If you print from a print server connected to the machine using the SmartDeviceMonitor for Client port, the client cannot use Recovery Printing and Parallel Printing.
- If you print under Windows XP or Windows Server 2003 / 2003 R2 print server, notification functions of SmartDeviceMonitor may not be used with the client computer.
- You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.
- If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.

1. Quit all applications currently running.
2. Insert the CD-ROM into the CD-ROM drive.

   The installer starts.
3. Select an interface language, and then click [OK].

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.
4. Click [PostScript 3 Printer Driver].

   Add Printer Wizard starts.
5. Click [Next >].
6. Click [A network printer, or a printer attached to another computer] and then click [Next >].
7. Select [Browse for a printer], and then click [Next >].

8. **Double-click the computer name you want to use as a print server in the [Shared printers:] window.**
9. **Select the machine you want to use, and then click [Next >].**

   If a security warning message appears, click [Yes].

   The printer driver installation starts.
10. **Click [Next >].**

    Select [Yes] to configure the machine as default.
11. **Click [Finish].**

    Restart the computer to complete installation.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.
- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Installing the PostScript 3 Printer Driver (Windows Vista/7, Windows Server 2008)

This section explains how to install the PostScript 3 printer driver under Windows Vista/7 or Windows Server 2008 when using the printer as a Windows network printer.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**
- **If you print from a print server connected to the machine using the SmartDeviceMonitor for Client port, the client cannot use Recovery Printing and Parallel Printing.**
- **If you print under Windows Vista/7 or Windows Server 2008 print server, notification functions of SmartDeviceMonitor may not be used with the client computer.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.

3. **Select an interface language, and then click [OK].**

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. **Click [PostScript 3 Printer Driver].**

   Add Printer Wizard starts.

5. **Click [Add a network, wireless or Bluetooth printer].**

6. **Click [The printer that I want isn't listed].**

7. **Select [Browse for a printer], and then click [Next].**

8. **Select your machine, and then click [Select].**

   If a security warning message appears, click [Install driver].

   The printer driver installation starts.

9. **Check the machine name, and then click [Next].**

   If a check box for setting the machine as a default printer appears, configure as necessary.

10. **Specify whether or not to print a test page, and then click [Finish].**

    If a check box for setting the machine as a default printer appears, configure as necessary.

    The printer driver installation starts.

Note

- To stop installation of the selected driver, click [Cancel] before installation is complete.
- Depending on your computer's operating system, the [AutoPlay] dialog box may appear. If this happens, click [Run SETUP.EXE]. If the [User Account Control] dialog box appears, click [Yes] or [Continue] to allow the auto play program to run.
- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Using as a NetWare Print Server / Remote Printer

This section explains how to set up a Windows computer used as a NetWare client.

When using the PostScript 3 Printer Driver

This section explains how to set up a Windows computer used as a NetWare client when using the PostScript 3 printer driver.

Important

- **In an IPv6 environment, Netware servers cannot be used.**

Follow the procedure below to set up the PostScript 3 printer driver.

1. **In the [Printers] or [Printers and Faxes] window, open the printer properties.**
2. **Click the [Device Settings] tab.**
3. **Select [No] on the [Send CTRL-D Before Each Job:] and [Send CTRL-D After Each Job:], and then click [Apply].**
4. **Click [OK] to close the printer properties dialog box.**

Installing the Printer Driver Using USB

This section explains how to install the PostScript 3 printer driver for use over a USB interface.

Important

- **Make sure that machine is connected to the computer's USB ports using the USB interface cable.**
- **Before installing, check that only the operating system is running on the computer and no print jobs are in progress.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**

Windows 2000 - USB

This section explains how to install the PostScript 3 printer driver under Windows 2000 for use over a USB interface.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**

If the printer driver has already been installed, plug and play is enabled, and the icon of the machine connected to the "USB" port is added to the [Printers] window.

If the printer driver is not installed, follow the plug-and-play instructions of the machine to install it from the CD-ROM provided with this machine.

1. **Connect the machine to the computer using the USB cable.**

   Connect the USB cable firmly.
2. **Click [Next >].**
3. **In the Found New Hardware Wizard window, click [Search for a suitable driver for my device [recommended]], and then click [Next >].**
4. **Select the [Specify a location] check box, and then click [Next >].**
5. **Insert the CD-ROM into the CD-ROM drive.**

   If Auto Run starts, click [Cancel], and then [Exit].

   To disable Auto Run, press the left [Shift] key when inserting the CD-ROM into the drive and keep it pressed until the computer finishes reading from the CD-ROM.

6. **Specify the location where the source files of the printer driver is stored.**

   If the CD-ROM drive is D, the source files of the printer driver are stored in the following location: D:\DRIVERS\PS\XP_VISTA\(Language)\DISK1

7. **Check the printer driver location, and then click [OK].**
8. **Click [Next >].**

   If the [Digital Signature Not Found] message appears, click [Yes].

9. **Click [Finish].**

   If the installation is successful, the icon of the machine connected to the "USB001" port is added to the [Printers] window.

Note

- The number after "USB" varies depending on the number of machines connected.

Windows XP, Windows Server 2003 / 2003 R2 - USB

This section explains how to install the PostScript 3 printer driver under Windows XP or Windows Server 2003 / 2003 R2 for use over a USB interface.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**

If the printer driver has already been installed, plug and play is enabled, and the icon of the machine connected to the "USB" port is added to the [Printers and Faxes] window.

The printer drivers can be installed from the CD-ROM provided with this machine.

If the printer driver is not installed, follow the plug-and-play instructions of the machine to install it from the CD-ROM provided with this machine.

1. **Connect the machine to the computer using the USB cable.**

   Connect the USB cable firmly.

2. **Select [No, not this time], and then click [Next>].**
3. **In the Found New Hardware Wizard window, click [Install from a list or specific location [Advanced]], and then click [Next >].**
4. **Insert the CD-ROM into the CD-ROM drive.**

   If Auto Run starts, click [Cancel], and then [Exit].

   To disable Auto Run, press the left [Shift] key when inserting the CD-ROM into the drive and keep it pressed until the computer finishes reading from the CD-ROM.

5. **Select the [Include this location in the search] check box under [Search for the best driver in these locations.], and then click [Browse] to select the printer driver location.**

   If the CD-ROM drive is D, the source files of the printer driver are stored in the following location: D:\DRIVERS\PS\XP_VISTA\(Language)\DISK1

6. **Check the printer driver location, and then click [Next >].**
7. **Select the name of the machine whose driver you want to install, and then click [Next >].**

   If the [Hardware Installation] message appears, click [Continue Anyway].

8. **Click [Finish].**

   If installation is successful, the icon of the machine connected to the "USB001" port is added to the [Printers and Faxes] window.

Note

- The number after "USB" varies depending on the number of machines connected.

Windows Vista, Windows Server 2008 - USB

This section explains how to install the PostScript 3 printer driver under Windows Vista or Windows Server 2008 for use over a USB interface.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**

If the printer driver has already been installed, plug and play is enabled, and the icon of the machine connected to the "USB" port is added to the [Printers] window.

The printer drivers can be installed from the CD-ROM provided with this machine.

If the printer driver is not installed, follow the plug-and-play instructions of the machine to install it from the CD-ROM provided with this machine.

1. **Connect the machine to the computer using the USB cable.**

   Connect the USB cable firmly.

2. **In the Found New Hardware window, select [Locate and install driver software (recommended)].**

   Click [Yes] or [Continue] if the [User Account Control] window appears.

3. **When a message prompting insertion of the CD-ROM, insert the CD-ROM into the CD-ROM drive.**

   If the [AutoPlay] dialog box appears, click the [Close] button.

4. **Select the name of the machine whose driver you want to install, and then click [Next].**

   Installation of the printer driver is automatically started.

If "Windows can't verify the publisher of this software" display appears in the installation, click [Install this driver software anyway].

5. **Click [Close].**

   If installation is successful, the icon of this machine connected to the "USB001" port is added to the [Printers] window.

Note

- When a printer driver meeting this machine is found on a network, a message prompting insertion of the CD-ROM is not displayed.
- The number after "USB" varies depending on the number of machines connected.

Windows 7 - USB

This section explains how to install the PostScript 3 printer driver under Windows 7 for use over a USB interface.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**

If the printer driver has already been installed, plug and play is enabled, and the icon of the machine connected to the "USB" port is added to the [Devices and Printers] window.

The printer drivers can be installed from the CD-ROM provided with this machine.

If the printer driver is not installed, follow the plug-and-play instructions of the machine to install it from the CD-ROM provided with this machine.

1. **Connect the machine to the computer using the USB cable.**

   Connect the USB cable firmly.

2. **Click [Devices and Printers] from the [Start] menu.**

   [Devices and Printers] window appears.

3. **In [Unspecified], double-click the name of the machine whose driver you want to install.**
4. **Click the [Hardware] tab in the printer properties dialog box.**
5. **Select the name of the machine whose driver you want to install, and then click [Properties].**
6. **Click [Change settings].**
7. **Click the [Driver] tab.**
8. **Insert the CD-ROM into the CD-ROM drive.**

   If the [AutoPlay] dialog box appears, click the [Close] button.

   To disable Auto Run, press the left [Shift] key when inserting the CD-ROM into the drive and keep it pressed until the computer finishes reading from the CD-ROM.

9. **Click [Update Driver...].**

10. **Click [Browse my computer for driver software].**
11. **Click [Browse] to select the printer driver location.**

    If the CD-ROM drive is D, the source files of the printer driver are stored in the following location: D:\DRIVERS\PS\XP_VISTA\(Language)\DISK1
12. **Click [Next].**

    If "Windows can't verify the publisher of this software" display appears in the installation, click [Install this driver software anyway].
13. **Click [Close].**

    If installation is successful, the icon of this machine connected to the "USB001" port is added to the [Devices and Printers] window.

Note

- The number after "USB" varies depending on the number of machines connected.

Troubleshooting for Using USB

The following table explains general problems you might encounter and their solutions when installing the printer drivers for use over a USB interface.

Problems	Solutions
The machine is not automatically recognized.	Turn off the power of the machine, reconnect the USB cable, and then turn it on again.
Windows has already configured the USB settings.	Open Windows' Device Manager, and then remove any conflicting devices under [Universal Serial Bus controllers] or [USB Controller]. Conflicting devices have a yellow [!] or [?] icon by them. Take care not to accidentally remove required devices. For details, see Windows Help.

Printing with Parallel Connection

This section explains how to install the PostScript 3 printer driver for use over a parallel port.

To use a machine connected using a parallel interface, click [LPT1] when installing the printer driver.

Installing the PostScript 3 printer driver (Windows 2000)

This section explains how to install the PostScript 3 printer driver under Windows 2000 for use over a parallel port.

Important

- Manage Printers permission is required to install the driver. Log on as an Administrators group member.
- You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.
4. **Click [PostScript 3 Printer Driver].**

   Add Printer Wizard starts.
5. **Click [Next >].**
6. **Click [Local printer], and then click [Next >].**
7. **Select [LPT1:] under [Use the following port:], and then click [Next >].**
8. **Select the name of the machine whose driver you want to install, and then click [Next >].**
9. **Change the machine name if you want, and then click [Next >].**

   Select [Yes] to configure the machine as default.
10. **Select whether or not to share the machine, and then click [Next >].**
11. **Select whether or not you want to print a test page, and then click [Next >].**
12. **Click [Finish].**

    If the [Digital Signature Not Found] message appears, click [Yes].

    The printer driver installation starts.
13. **Restart the computer to complete installation if necessary.**

1

Note

- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Installing the PostScript 3 Printer Driver (Windows XP, Windows Server 2003 / 2003 R2)

This section explains how to install the PostScript 3 printer driver under Windows XP or Windows Server 2003 /2003 R2 for use over a parallel port.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.
4. **Click [PostScript 3 Printer Driver].**

   Add Printer Wizard starts.
5. **Click [Next >].**
6. **Click [Local printer attached to this computer], and then click [Next >].**
7. **Select the port you want to use, and then click [Next >].**

   A dialog box for selecting the machine manufacturer and model name appears.
8. **Select the name of the machine whose driver you want to install, and then click [Next >].**
9. **Change the machine name if you want, and then click [Next >].**

   Select [Yes] to configure the machine as default.
10. **Select whether or not to share the machine, and then click [Next >].**

11. **Specify whether or not to print a test page, and then click [Next >].**
12. **Click [Finish].**

    If the [Hardware Installation] message appears, click [Continue Anyway].

Note

- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Installing the PostScript 3 Printer Driver (Windows Vista/7, Windows Server 2008)

This section explains how to install the PostScript 3 printer driver under Windows Vista/7 or Windows Server 2008 for use over a parallel port.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**
- **You can install the printer driver from the CD-ROM provided with this machine or download it from the manufacturer's Web site.**
- **If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. Select this machine and the operating system you are using, and then download it.**

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Select an interface language, and then click [OK].**

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.
4. **Click [PostScript 3 Printer Driver].**

   Add Printer Wizard starts.
5. **Click [Add a local printer].**
6. **Select the port you want to use, and then click [Next].**

   A dialog box for selecting the machine manufacturer and model name appears.
7. **Select the name of the machine whose driver you want to install, and then click [Next].**

8. **Change the machine name if you want, and then click [Next].**

   If a check box for setting the machine as a default printer appears, configure as necessary.

   The printer driver installation starts.

   If the [Windows can't verify the publisher of this driver software] message appears, click [Install this driver software anyway].

9. **Specify whether or not to share the machine, and then click [Next].**

10. **Specify whether or not to print a test page, and then click [Finish].**

    If a check box for setting the machine as a default printer appears, configure as necessary.

Note

- Depending on your computer's operating system, the [AutoPlay] dialog box may appear. If this happens, click [Run SETUP.EXE]. If the [User Account Control] dialog box appears, click [Yes] or [Continue] to allow the auto play program to run.
- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

If a Message Appears during Installation

Message number 58 or 34 indicates the printer driver cannot be installed using Auto Run. Install the printer driver using [Add Printer] or [Install Printer].

For Windows 2000:

1. **On the [Start] menu, point to [Settings], and then click [Printers].**
2. **Double-click the Add Printer icon.**
3. **Follow the instructions in Add Printer Wizard.**

   If the printer driver is on a CD-ROM, the location of the PostScript 3 printer driver is D:\DRIVERS\PS\XP_VISTA\(Language)\DISK1.

For Windows XP Professional and Windows Server 2003 / 2003 R2:

1. **On the [Start] menu, click [Printers and Faxes].**
2. **Click [Add a printer].**
3. **Follow the instructions in Add Printer Wizard.**

   If the printer driver is on a CD-ROM, the location of the PostScript 3 printer driver is D:\DRIVERS\PS\XP_VISTA\(Language)\DISK1.

For Windows XP Home Editions:

1. **On the [Start] menu, click [Control Panel].**
2. **Click [Printers and Other Hardware].**
3. **Click [Printers and Faxes].**
4. **Click [Install Printer].**
5. **Follow the instructions in Add Printer Wizard.**

   If the printer driver is on a CD-ROM, the location of the PostScript 3 printer driver is D:\DRIVERS\PS\XP_VISTA\(Language)\DISK1.

For Windows Vista and Windows Server 2008:

1. **On the [Start] menu, click [Control Panel].**

   The [Control Panel] window appears.
2. **Click [Printer] in "Hardware and Sound".**
3. **Click [Add a printer].**
4. **Follow the instructions in Add Printer Wizard.**

   If the printer driver is on a CD-ROM, the location of the PostScript 3 printer driver is D:\DRIVERS\PS\XP_VISTA\(Language)\DISK1.

For Windows 7:

1. **On the [Start] menu, click [Control Panel].**
2. **Click [Hardware and Sound].**
3. **Click [Add a printer].**
4. **Follow the instructions in Add Printer Wizard.**

   If the printer driver is on a CD-ROM, the location of the PostScript 3 printer driver is D:\DRIVERS\PS\XP_VISTA\(Language)\DISK1.

Note

- If the installer starts, click [Cancel] to quit.

Making Option Settings for the Printer

Make option settings for the machine using the printer driver when bidirectional communication is disabled.

Set up option settings when bidirectional communications are disabled.

Important

- **Manage Printers permission is required to change the printer properties. Log on as an Administrators group member.**

1. **On the [Start] menu, click [Printers and Faxes].**
   - When using Windows 2000, point to [Settings] on the [Start] menu, and then click [Printers].
   - When using Windows Vista or Windows Server 2008, click [Control Panel] on the [Start] menu, and then click [Printer] in "Hardware and Sound".
   - When using Windows 7 or Windows Server 2008 R2, click the [Start] menu, and then click [Devices and Printers].
2. **Click the icon of the printer you want to use.**
3. **On the [File] menu, click [Properties].**
   - When using Windows Vista or Windows Server 2008, right-click the icon of the printer you want to use, and then click [Properties].
   - When using Windows 7 or Windows Server 2008 R2, right-click the icon of the printer you want to use, and then click [Printer properties].
4. **Click the [Device Settings] tab.**
5. **Select options installed from the [Installable Options] area, and then make the necessary settings.**
6. **Click [Apply], and then click [OK] to close the printer properties dialog box.**

Note

- For details about making option settings for the machine using a Mac, see "Setting Up Options for Mac OS X".

Reference

- p.62 "Setting Up Options for Mac OS X"

Setting Up the Printer Driver

This section explains how to open and configure the printer driver properties.

Windows 2000 - Accessing the Printer Properties

This section explains how to open and configure the printer driver properties under Windows 2000.

Making printer default settings - the printer properties

This section explains how to open the printer driver properties under Windows 2000.

Important

- **Manage Printers permission is required to change the printer properties. Log on as an Administrators group member.**
- **You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.**

1. **On the [Start] menu, point to [Settings], and then click [Printers].**

   The [Printers] window appears.

2. **Click the icon of the printer you want to use.**
3. **On the [File] menu, click [Properties].**

   The printer properties dialog box appears.

4. **Make the necessary settings, and then click [OK].**

Note

- Depending on the applications, the settings you make here may not be used as the default settings.
- Do not make a setting for [Form to Tray Assignment].
- For details, see the printer driver Help.

Making printer default settings - Printing Preferences

This section explains how to open the [Printing Preferences] dialog box under Windows 2000.

Important

- **When the printer driver is distributed from the print server, the setting values specified by the server are displayed as the default for [Printing Defaults...].**

1. **On the [Start] menu, point to [Settings], and then click [Printers].**

   The [Printers] window appears.

2. **Click the icon of the printer you want to use.**
3. **On the [File] menu, click [Printing Preferences...].**

   The [Printing Preferences] dialog box appears.
4. **Make the necessary settings, and then click [OK].**

   The setting is temporarily registered as [Unregistered] in the [One Click Preset List:] area.

Note

- Depending on the applications, the settings you make here may not be used as the default settings.
- The [Unregistered] setting is invalid when the other One Click Presets icon is selected. If you wish to confirm the [Unregistered] setting, click [Register Current Settings...]. For details about confirming the setting, see "Making Printer Settings - One Click Presets".
- For details, see the printer driver Help.

Reference

- p.60 "Making Printer Settings - One Click Presets"

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the [Printing Preferences] dialog box from that application.

The following explains how to make settings for the WordPad application.

1. **Open the application.**
2. **On the [File] menu, click [Print...].**

   The [Print] dialog box appears.
3. **Select the printer you want to use in the [Select Printer] list, and then click the tab for the settings you want to change.**
4. **Make the necessary settings, and then click [Apply].**
5. **Click [Print].**

Note

- The procedure to open the [Printing Preferences] dialog box may vary depending on the application. For details, see the manuals provided with the application you use.
- Depending on the applications, the printer default settings may not be applied.
- The printer settings you configure in the current application before printing might not be saved as the default settings.
- General users can change the properties displayed in the [Print] dialog box of an application. Settings made here are used as defaults when printing from this application.

- For details, see the printer driver Help.

Windows XP, Windows Server 2003 / 2003 R2 - Accessing the Printer Properties

This section explains how to open and configure the printer driver properties under Windows XP or Windows Server 2003 / 2003 R2.

Making printer default settings - the printer properties

This section explains how to open the printer driver properties under Windows XP or Windows Server 2003 / 2003 R2.

Important

- **Manage Printers permission is required to change the printer properties. Log on as an Administrators group member.**
- **You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.**

1. **On the [Start] menu, click [Printers and Faxes].**

   The [Printers and Faxes] window appears.
2. **Click the icon of the printer you want to use.**
3. **On the [File] menu, click [Properties].**

   The printer properties dialog box appears.
4. **Make the necessary settings, and then click [OK].**

Note

- Depending on the applications, the settings you make here may not be used as the default settings.
- Do not make a setting for [Form to Tray Assignment].
- For details, see the printer driver Help.

Making printer default settings - Printing Preferences

This section explains how to open the [Printing Preferences] dialog box under Windows XP or Windows Server 2003 / 2003 R2.

Important

- **You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.**
- **When the printer driver is distributed from the print server, the setting values specified by the server are displayed as the default for [Printing Defaults...].**

1. **On the [Start] menu, click [Printers and Faxes].**

   The [Printers and Faxes] window appears.

2. **Click the icon of the printer you want to use.**

3. **On the [File] menu, click [Printing Preferences...].**

   The [Printing Preferences] dialog box appears.

4. **Make the necessary settings, and then click [OK].**

   The setting is temporarily registered as [Unregistered] in the [One Click Preset List:] area.

Note

- Depending on the applications, the settings you make here may not be used as the default settings.
- The [Unregistered] setting is invalid when the other One Click Presets icon is selected. If you wish to confirm the [Unregistered] setting, click [Register Current Settings...]. For details about confirming the setting, see "Making Printer Settings - One Click Presets".
- For details, see the printer driver Help.

Reference

- p.60 "Making Printer Settings - One Click Presets"

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the [Printing Preferences] dialog box from that application. The following explains how to make settings for the WordPad application provided with Windows XP.

1. **On the [File] menu, click [Print...].**

   The [Print] dialog box appears.

2. **Select the printer you want to use in the [Select Printer] list, and then click [Preferences].**

3. **Make the necessary settings, and then click [OK].**

Note

- The procedure to open the [Printing Preferences] dialog box may vary depending on the application. For details, see the manuals provided with the application you use.
- Depending on the applications, the printer default settings may not be applied.
- The printer settings you configure in the current application before printing might not be saved as the default settings.
- General users can change the properties displayed in the [Print] dialog box of an application. Settings made here are used as defaults when printing from this application.
- For details, see the printer driver Help.

Windows Vista/7, Windows Server 2008/2008 R2 - Accessing the Printer Properties

1

This section explains how to open and configure the printer driver properties under Windows Vista/7 or Windows Server 2008/2008 R2.

Making printer default settings - the printer properties

This section explains how to open the printer driver properties under Windows Vista/7 or Windows Server 2008/2008 R2.

Important

- **Manage Printers permission is required to change the printer properties. Log on as an Administrators group member.**
- **You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.**

1. **On the [Start] menu, click [Control Panel].**

   The [Control Panel] window appears.

2. **Click [Printer] in "Hardware and Sound".**
   - If using Windows 7, click [View devices and printers] in "Hardware and Sound".
   - If using Windows Server 2008 R2, click [View devices and printers] in "Hardware".

3. **Right-click the icon of the printer you want to use, and then click [Properties].**

   If using Windows 7 or Windows Server 2008 R2, right-click the icon of the printer you want to use, and then click [Printer properties].

4. **Make the necessary settings, and then click [OK].**

Note

- Depending on the applications, the settings you make here may not be used as the default settings.
- Do not make a setting for [Form to Tray Assignment].
- For details, see the printer driver Help.

Making printer default settings - Printing Preferences

This section explains how to open the [Printing Preferences] dialog box under Windows Vista/7 or Windows Server 2008/2008 R2.

Important

- **You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.**

- **When the printer driver is distributed from the print server, the setting values specified by the server are displayed as the default for [Printing Defaults...].**

1. **On the [Start] menu, click [Control Panel].**

   The [Control Panel] window appears.

2. **Click [Printer] in "Hardware and Sound".**

   - If using Windows 7, click [View devices and printers] in "Hardware and Sound".
   - If using Windows Server 2008 R2, click [View devices and printers] in "Hardware".

3. **Right-click the icon of the printer you want to use, and then click [Printing Preferences...].**

   If using Windows 7 or Windows Server 2008 R2, right-click the icon of the printer you want to use, and then click [Printing preferences].

   The [Printing Preferences] dialog box appears.

4. **Make the necessary settings, and then click [OK].**

   The setting is temporarily registered as [Unregistered] in the [One Click Preset List:] area.

Note

- Depending on the applications, the settings you make here may not be used as the default settings.
- The [Unregistered] setting is invalid when the other One Click Presets icon is selected. If you wish to confirm the [Unregistered] setting, click [Register Current Settings...]. For details about confirming the setting, see "Making Printer Settings - One Click Presets".
- For details, see the printer driver Help.

Reference

- p.60 "Making Printer Settings - One Click Presets"

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the [Printing Preferences] dialog box from that application. The following explains how to make settings for the WordPad application.

1. **On the [File] menu, click [Print...].**

   If using Windows 7 or Windows Server 2008 R2, on the [File] menu, point to [Print], and then click [Print].

   The [Print] dialog box appears.

2. **Select the printer you want to use in the [Select Printer] list, and then click [Preferences].**
3. **Make the necessary settings, and then click [OK].**

Note

- The procedure to open the [Printing Preferences] dialog box may vary depending on the application. For details, see the manuals provided with the application you use.
- Depending on the applications, the printer default settings may not be applied.
- The printer settings you configure in the current application before printing might not be saved as the default settings.
- General users can change the properties displayed in the [Print] dialog box of an application. Settings made here are used as defaults when printing from this application.
- For details, see the printer driver Help.

Making Printer Settings - One Click Presets

This section explains how to register and use one click presets.

Each function explained in this chapter is preconfigured and registered under [One Click Preset List:] on the [One Click Presets] tab.

You can apply the relevant setting simply by clicking on the one click preset name. This helps to avoid incorrect settings and misprints.

One click presets can be added, modified, and deleted as required. By using registered one click presets, users without in-depth knowledge of the printer driver can utilize advanced printing functions easily.

Follow the procedure to register one click presets.

1. **In the application, on the [File] menu, click [Print].**

   The [Print] dialog box appears.

2. **Select the machine, and then open the [Printing Preferences] dialog box in the document's native application.**

   The [Printing Preferences] dialog box appears.

3. **Make the settings you require.**

4. **Click [Register Current Settings...]. Enter a name and comment that describe the setting, and then click [OK].**

   The newly registered icon appears with its registered name in the [One Click Preset List:] area.

5. **Click [OK].**

Note

- For details about modifying and deleting one click presets, see the printer driver Help.

2. Mac OS Configuration

This chapter explains how to install and configure the printer drivers for use on the Mac OS X operating system.

Using the Printer Driver under Mac OS X

This section explains how to configure a Mac OS X to use USB and TCP/IP.

Use the following procedures to configure the printer drivers for Mac OS X 10.3.7. The procedures vary depending on the operating system.

Important

- **Mac OS X 10.2 or higher is required.**

Note

- The PPD files are stored in the following folder on the CD-ROM.

  `Mac OS X: MacOSX PPD Installer`

Installing the PPD Files

Follow the procedure below to install a PPD file to print from Mac OS X.

Important

- **You need an administrator name and a password (phrase). For details, consult your network administrator.**

1. **Insert the CD-ROM into the CD-ROM drive.**
2. **Double-click the CD-ROM drive icon.**
3. **Double-click the [Mac OS X] folder.**
4. **Double-click the manufacturer folder for your machine model.**
5. **Double-click the [MAC OS X 10.2 or later] or [MAC OS X 10.5 or later] folder, depending on your operating system.**
6. **Double-click the [MacOSX PPD Installer] folder.**
7. **Double-click the package file icon.**
8. **Follow the instructions on the screen.**

Setting Up the PPD Files

This section explains how to add the PPD file to your system.

1. **Start System Preferences.**
2. **Click [Print & Fax].**
3. **Click [Set Up Printers].**

   Depending on your computer's operating system, [Set Up Printers] may not appear. If [Set Up Printers] does not appear, proceed to the following step.
4. **Click the [Add] or [+] button.**
5. **Select [IP Printing] from the drop-down menu, and then select the machine from the list.**

   Mac OS X 10.5 or higher

   Click [IP].

   Mac OS X 10.4

   Click [IP Printer].
6. **In [Printer Address], type the machine's IP address. Select [LPD/LPR] for [Printer Type], and leave the queue blank.**

   Mac OS X 10.4 or higher

   Enter machine's IP address in the [Address:] box. Select [LPD] as the protocol, and leave the queue blank.
7. **Select the connected printer from the list of printer models, and then click [Add].**

   If [Installable Options] dialog box appears, configure settings as needed, and then click [Continue].
8. **Quit System Preferences.**

Setting Up Options for Mac OS X

This section explains how to configure the printer driver.

1. **Start System Preferences.**
2. **Click [Print & Fax].**
3. **Click [Set Up Printers].**

   Depending on your computer's operating system, [Set Up Printers] may not appear. If [Set Up Printers] does not appear, proceed to the following step.
4. **Select the machine you are using, and then click [Show Info].**

   Mac OS X 10.5 or higher

   Select the machine you are using, and then click [Options & Supplies...].

   Mac OS X 10.4

   Select the machine you are using, and then click [Printer Setup].

5. **Select [Installable Options] in the drop-down menu, and then configure settings as needed.**

   Mac OS X 10.5 or higher

   Click [Driver], and then configure settings as needed.

6. **Click [Apply Changes].**

   Mac OS X 10.5 or higher

   Click [OK].

Note

- If the option you want to select is not displayed, PPD files may not be set up correctly. To complete the setup, check the name of the PPD file displayed in the dialog box.

Using USB Interface

Follow the procedure below to set up USB connection.

Important

- **USB2.0 can be used only with Mac OS X 10.3.3 or higher.**

1. **Start System Preferences.**
2. **Click [Print & Fax].**
3. **Click [Set Up Printers].**

   Depending on your computer's operating system, [Set Up Printers] may not appear. If [Set Up Printers] does not appear, proceed to the following step.

4. **Click the [Add] or [+] button.**

   Mac OS X 10.5 or higher

   Click [Default].

   Mac OS X 10.4

   Click a printer that has "USB" indicated in the "Connection" column.

   Other Mac OS X

   Click [USB] on the pop-up menu.

   The connected printer appears.

5. **Select the printer, and then select its manufacturer from the [Printer Model:] pop-up menu.**

   Under Mac OS X 10.4, select the printer you are using from the [Print Using] pop-up menu.

   A list of printer types appears.

   Under Mac OS X 10.5 or higher, select the printer you are using from the [Printer Name] list, and [Kind] of USB.

6. **Select the connected printer from the list of printer models, and then click [Add].**

7. **Quit System Preferences.**

Note

- When printing with a USB connection to a Macintosh computer, printer language does not change automatically. Use the control panel on this machine to change printer language to [Auto Detect] or [PS] before printing.

Using Bonjour

Follow the procedure below to print using Bonjour under Mac OS X 10.2.3 or higher. Mac OS X 10.3.7 is used as the example of the procedure. Ethernet, wireless LAN connections can also be used.

1. **Start System Preferences.**
2. **Click [Print & Fax].**
3. **Click [Set Up Printers].**

   Depending on your computer's operating system, [Set Up Printers] may not appear. If [Set Up Printers] does not appear, proceed to the following step.
4. **Click the [Add] or [+] button.**

   Mac OS X 10.5 or higher

   Click [Default]. If the machine name is not displayed, select the icon that corresponds to your network environment (TCP/IP, etc.).

   Mac OS X 10.4

   Click a printer that has "Bonjour" indicated in the "Connection" column.

   Other Mac OS X

   Click [Rendezvous] on the pop-up menu.
5. **Select the name of the connected printer from the [Printer Model:] pop-up menu, and then click [Add].**

   Under Mac OS X 10.4, Installable Options window appears. Select the option you want to set up, and then select an appropriate setting for it, and then [Continue].

   Under Mac OS X 10.5 or higher, select the printer you are using from the [Printer Name] list, and [Kind] of Bonjour.
6. **Quit System Preferences.**

Note

- When printing with a Rendezvous connection to a Macintosh computer, printer language does not change automatically. Use the control panel on this machine to change printer language to [Auto Detect] or [PS] before printing.

3. Using the PostScript 3 Printer Driver

This chapter explains the printing functions and advanced features that are available with the PostScript 3 printer driver.

Setting Up Options for PostScript 3 Printer Driver

To use installed options correctly, first set up the printer driver. If the options are not recognized, you cannot use them, even though they are physically installed.

Important

- **Manage Printers permission is required to change the printer properties. Log on as an Administrators group member.**
- **If you are using Adobe PageMaker 6.0, 6.5, or 7.0, you have to set up options in Adobe PageMaker's print dialog box.**

The following table shows where you can set up a printer driver on each operating system.

The procedure to set up a printer driver varies depending on the operating system.

Windows XP and Mac OS X 10.5 are used as examples of their respective operating system families.

Windows operating system	You can set up any of the options on [Installable Options] on the [Device Settings] tab in the Printer Properties.
Mac OS X	You can set up all options on [Options & Supplies...] in [Print & Fax] in System Preferences.

Note

- To set up options, access the printer driver from Windows. You cannot set up options if you access the printer driver from an application.
- See "Making Option Settings for the Printer" or "Setting Up Options for Mac OS X" for the installation method appropriate to your printing environment.

Reference

- p.53 "Making Option Settings for the Printer"
- p.62 "Setting Up Options for Mac OS X"

Printing a Document

This documentation describes the specific printer functions and menus that are added by installing the PPD file.

Each printer function can be configured using the [Menu:] icons on the [Detailed Settings] tab under Windows, or the print dialog box under Mac OS X.

Windows XP and Mac OS X 10.5 are used as examples of their respective operating system families. Procedures for other versions of these operating systems may vary slightly.

Important

- **On a Macintosh, Mac OS X 10.2 or higher is required.**
- **Applications, such as PageMaker, that have their own drivers do not support the following functions:**
  - **Sample Print**
  - **Locked Print**
  - **Hold Print**
  - **Stored Print**
  - **Store and Print**
  - **Document Server**
  - **User Code**

Note

- Depending on the version of Mac OS X, the display in the print dialog box may be different.
- If you are using the Windows operating system, some of the settings made on the [Detailed Settings] tab can be registered to One Click Preset List. The settings registered in One Click Preset List can be modified from the [One Click Presets] tab also. For details about One Click Presets, see "Making Printer Settings - One Click Presets".

Reference

- p.60 "Making Printer Settings - One Click Presets"

Job Type

Use this to select the type of print job.

The following table shows where you can select this function.

Windows	[Job Type:] is displayed on the [One Click Presets] tab in the [Printing Preferences] dialog box.

Mac OS X	[Job Type:] is displayed on [Job Log] in the print dialog box.

You can select the following items:

Normal Print

Select this for normal printing. The print job starts immediately after the print command is given.

Sample Print

Use this function to print only one set of a multiple print jobs.

The other sets are saved in the machine. The saved job can be printed from the machine's control panel. You can also delete the saved job.

The "User ID" can contain up to eight alphanumeric (a- z, A- Z, 0- 9) characters.

Entering the "User ID" helps you distinguish your print job from others.

For details about the Sample Print function, see "How to use the Sample Print function".

Locked Print

Use this function to save documents in the machine memory with a password, and then edit and print them as you want.

The "User ID" can contain to eight alphanumeric (a-z, A-Z, 0-9) characters. The "Password" must be 4-8 digits.

Entering the "User ID" helps you distinguish your print job from others.

For details about the Locked Print function, see "How to use the Locked Print function".

Hold Print

Use this function to temporarily hold a file in the machine, and print it from the computer or the machine's control panel later.

The "User ID" can contain up to eight alphanumeric (a- z, A- Z, 0- 9) characters.

The "File Name" can contain to 16 alphanumeric (a-z, A-Z, 0-9) characters.

Entering the "User ID" helps you distinguish your print job from others.

For details about the Hold Print function, see "How to use the Hold Print function".

Stored Print

Use this function to store a file in the machine, and then print it from the computer or the machine's control panel later.

The "User ID" can contain up to eight alphanumeric (a- z, A- Z, 0- 9) characters. The "Password" must be 4-8 digits.

The File Name can contain to 16 alphanumeric (a-z, A-Z, 0-9) characters.

You can assign a password to a saved document, but password assignment is not mandatory.

Entering the "User ID" helps you distinguish your print job from others.

For details about the Stored Print function, see "How to use Stored Print/Store and Print functions".

Store and Print

Use this function to print the file at once and also store the file in the printer.

The "User ID" can contain up to eight alphanumeric (a- z, A- Z, 0- 9) characters. The "Password" must be 4-8 digits.

The "File Name" can contain up to 16 alphanumeric (a-z, A-Z, 0-9) characters.

You can assign a password to a saved document, but password assignment is not mandatory.

Entering the "User ID" helps you distinguish your print job from others.

For details about the Stored and Print function, see "How to use Stored Print/Store and Print functions".

Document Server

Use this function to store documents that you want to print in the printer, as well as documents you might want to later combine or process for printing.

The "File Name" can contain to 16 alphanumeric (a-z, A-Z, 0-9) characters.

For details about the Document Server function, see "Accessing the Document Server", Printer Reference.

Reference

- p.68 "How to use the Sample Print function"
- p.71 "How to use the Locked Print function"
- p.74 "How to use the Hold Print function"
- p.76 "How to use Stored Print/Store and Print functions"

How to use the Sample Print function

Follow the procedure below to print a document using the Sample Print function.

Windows

1. **In the application, on the [File] menu, click [Print].**

   The [Print] dialog box appears.
2. **Select the printer, and then open the [Printing Preferences] dialog box.**
3. **On the [One Click Presets] tab, in the [Job Type:] list, click [Sample Print].**
4. **Click [Details...].**
5. **In the [User ID:] box, enter a user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters.**

   The user ID associates the user with his / her jobs.
6. **Click [OK].**

7. **Set the number of copies to two or more in the [Copies:] box, and then click [OK] to close the [Printing Preferences] dialog box.**

   If the application has a collate option, make sure it is not selected before sending a print job. The printer driver automatically collates Sample Print jobs by default. If the collate option is selected in the application's [Print] dialog box, there may be more prints than required.

8. **Start the printing from the application's [Print] dialog box.**

   The sample print job is sent to the machine, and one set is printed.

9. **Check the printed output to make sure the settings are correct.**

   If the settings are correct, perform the following steps to print the remaining sets.

   If you want to delete saved jobs, see "Deleting Sample Print files".

10. **On the machine's control panel, press the [Printer] key to display the printer screen.**
11. **Press [Print Jobs].**
12. **Press [Sample Print Job List].**

    A list of print files stored in the machine appears.

    [User ID], [Date / Time] and [File Name] also appear.

    Depending on the security settings, certain print jobs may not be displayed.

13. **Select the file you want to print by pressing it.**
14. **Press [Print].**
15. **Enter the new number of sets using the number keys if necessary, and then press [Yes].**

    You can enter up to 999 sets.

    Press the [Clear/Stop] key to correct any entry mistakes.

    When multiple files are selected without setting a quantity, 1 page less than the minimum number of all settings is applied.

    The remaining sets are printed.

Mac OS X

1. **In the application, on the [File] menu, click [Print].**

   The [Print] dialog box appears.

2. **Set the number of copies to two or more.**

   The sample print job is sent to the machine, and one set is printed.

3. **In the pop-up menu, click [Job Log].**
4. **On the [Job Type:] pop-up menu, select [Sample Print].**
5. **In the [User ID:] box, enter a user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters.**

   The user ID associates the user with his / her jobs.

6. **After making the necessary settings, click [Print].**
7. **Check the printed output to make sure the settings are correct.**

   If the settings are correct, perform the following steps to print the remaining sets.

   If you want to delete saved jobs, see "Deleting Sample Print files".
8. **On the machine's control panel, press the [Printer] key to display the printer screen.**
9. **Press [Print Jobs].**
10. **Press [Sample Print Job List].**

    A list of print files stored in the machine appears.

    [User ID], [Date / Time] and [File Name] also appear.

    Depending on the security settings, certain print jobs may not be displayed.
11. **Select the file you want to print by pressing it.**
12. **Press [Print].**
13. **Enter the new number of sets using the number keys if necessary, and then press [Yes].**

    You can enter up to 999 sets.

    Press the [Clear/Stop] key to correct any entry mistakes.

    When multiple files are selected without setting a quantity, 1 page less than the minimum number of all settings is applied.

    The remaining sets are printed.

Note

- To cancel printing, press [Exit]. Then, press [Job Reset]. The file will be deleted.
- If there is a print job outstanding, this is printed before the sample print job.
- When printing is completed, the stored file is deleted automatically.

Reference

- p.70 "Deleting Sample Print files"

Deleting Sample Print files

If the printed document is no longer required, you can delete the Sample Print file.

1. **On the machine's control panel, press the [Printer] key to display the printer screen.**
2. **Press [Print Jobs].**
3. **Press [Sample Print Job List].**

   A list of print files stored in the machine appears.

   Depending on the security settings, certain print jobs may not be displayed.

4. **Select the file you want to delete by pressing it.**

   To cancel a selection, press the highlighted jobs again.

5. **Press [Delete].**

   A confirmation screen appears.

6. **Press [Yes] to delete the file.**

   The selected file is deleted.

Note

- Press [No] to cancel the delete request.

How to use the Locked Print function

Follow the procedure below to print a document using the Locked Print function.

Windows

1. **In the application, on the [File] menu, click [Print].**

   The [Print] dialog box appears.

2. **Select the printer, and then open the [Printing Preferences] dialog box.**
3. **On the [One Click Presets] tab, in the [Job Type:] list, click [Locked Print].**
4. **Click [Details...].**
5. **In the [User ID:] box, enter a user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters, and then enter a 4-8 digit password in the [Password:] box.**

   The user ID associates user with his / her jobs.

6. **Click [OK].**
7. **Click [OK] to close the [Printing Preferences] dialog box.**

   If the application has a collate option, make sure it is not selected before sending a print job. The printer driver automatically collates Locked Print jobs by default. If the collate option is selected in the application's [Print] dialog box, there may be more prints than required.

8. **Start the printing from the application's [Print] dialog box.**

   The document file is saved in the machine.

   To print the document, perform the following steps.

   To delete the documents, see "Deleting Locked Print files".

9. **On the machine's control panel, press the [Printer] key to display the printer screen.**
10. **Press [Print Jobs].**
11. **Press [Locked Print Job List].**

    A list of print files stored in the machine appears.

[User ID], [Date / Time] and [File Name] also appear.

Depending on the security settings, certain print jobs may not be displayed.

12. **Select the file you want to print by pressing it.**
13. **Press [Print].**

    The password screen appears.
14. **Enter the password using the number keys, and then press [OK].**

    A confirmation screen appears.

    A confirmation screen will appear if the password is not entered correctly. Press [Exit] to enter the password again.

    When multiple print files are selected, the machine prints only files that correspond to the entered password. The number of files is displayed on the confirmation screen.
15. **Press [Yes].**

    The locked file is printed.

Mac OS X

1. **In the application, on the [File] menu, click [Print].**

   The [Print] dialog box appears.
2. **In the pop-up menu, click [Job Log].**
3. **On the [Job Type:] pop-up menu, click [Locked Print].**
4. **In the [User ID:] box, enter a user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters, and then enter a 4-8 digit password in the [Password:] box.**

   The user ID associates the user with his / her jobs.
5. **After making the necessary settings, click [Print].**

   The document file is saved in the machine.

   To print the document, perform the following steps.

   To delete the documents, see "Deleting Locked Print files".
6. **On the machine's control panel, press the [Printer] key to display the printer screen.**
7. **Press [Print Jobs].**
8. **Press [Locked Print Job List].**

   A list of print files stored in the machine appears.

   [User ID], [Date / Time] and [File Name] also appear.

   Depending on the security settings, certain print jobs may not be displayed.
9. **Select the file you want to print by pressing it.**

10. **Press [Print].**

    The password screen appears.

11. **Enter the password using the number keys, and then press [OK].**

    A confirmation screen appears.

    A confirmation screen will appear if the password is not entered correctly. Press [Exit] to enter the password again.

    When multiple print files are selected, the machine prints only files that correspond to the entered password. The number of files is displayed on the confirmation screen.

12. **Press [Yes].**

    The locked file is printed.

Note

- To cancel printing, press [Exit]. Then, press [Job Reset]. The file will be deleted.
- When printing is completed, the stored file is deleted automatically.

Reference

- p.73 "Deleting Locked Print files"

Deleting Locked Print files

If the printed document is no longer required, you can delete the Locked Print file.

1. **On the machine's control panel, press the [Printer] key to display the printer screen.**
2. **Press [Print Jobs].**
3. **Press [Locked Print Job List].**

    A list of print files stored in the machine appears.

    Depending on the security settings, certain print jobs may not be displayed.

4. **Select the file you want to delete by pressing it.**

    To cancel a selection, press the highlighted job again.

5. **Press [Delete].**

    A password screen appears.

6. **Enter the password using the number keys, and then press [OK].**

    A confirmation screen appears.

    A confirmation screen will reappear if the password was entered incorrectly. Press [Exit] to enter the password again.

    When multiple files are selected, the machine deletes only files that correspond to the entered password. The number of files to be deleted is displayed on the confirmation screen.

7. **Press [Yes].**

   The selected file is deleted.

Note

- Press [No] to cancel the delete request.
- If you forgot your password, ask your file administrator for help.

How to use the Hold Print function

Follow the procedure below to print a document using the Hold Print function.

Windows

1. **In the application, on the [File] menu, click [Print].**

   The [Print] dialog box appears.
2. **Select the printer, and then open the [Printing Preferences] dialog box.**
3. **On the [One Click Presets] tab, in the [Job Type:] list, click [Hold Print].**
4. **Click [Details...].**
5. **In the [User ID:] box, enter a user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters. A file name can also be entered arbitrarily.**

   The user ID associates the user with his / her jobs.
6. **Click [OK].**
7. **Click [OK] to close the [Printing Preferences] dialog box.**

   If the application has a collate option, make sure it is not selected before sending a print job. The printer driver automatically collates Hold Print files by default. If a collate option is selected from the application's Print dialog box, there may be more prints than required.
8. **Start the printing from the application's [Print] dialog box.**

   The document file is saved in the machine.

   To print the document, perform the following steps.

   To delete the documents, see "Deleting Hold Print files".
9. **On the machine's control panel, press the [Printer] key to display the printer screen.**
10. **Press [Print Jobs].**
11. **Press [Hold Print Job List].**

    A list of print files stored in the machine appears.

    [User ID], [Date / Time] and [File Name] also appear.

    Depending on the security settings, certain print jobs may not be displayed.
12. **Select the file you want to print by pressing it.**

13. **Press [Print].**
14. **A confirmation screen appears.**
15. **Press [Yes].**

    The hold print file is printed.

Mac OS X

1. **In the application, on the [File] menu, click [Print].**

   The [Print] dialog box appears.
2. **In the pop-up menu, click [Job Log].**
3. **On the [Job Type:] pop-up menu, click [Hold Print].**
4. **In the [User ID:] box, enter the user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters. A file name can also be entered arbitrarily.**

   The user ID associates the user with his / her jobs.
5. **After making the necessary settings, click [Print].**

   The document file is saved in the machine.

   To print the document, perform the following steps.

   To delete the documents, see "Deleting Hold Print files".
6. **On the machine's control panel, press the [Printer] key to display the printer screen.**
7. **Press [Print Jobs].**
8. **Press [Hold Print Job List].**

   A list of print files stored in the machine appears.

   [User ID], [Date / Time] and [File Name] also appear.

   Depending on the security settings, certain print jobs may not be displayed.
9. **Select the file you want to print by pressing it.**
10. **Press [Print].**

    A confirmation screen appears.
11. **Press [Yes].**

    The hold print file is printed.

Note

- To cancel printing, press [Exit]. Then, press [Job Reset]. The file will be deleted.
- When printing is completed, the stored file is deleted automatically.

Reference

- p.76 "Deleting Hold Print files"

Deleting Hold Print files

If the printed document is no longer required, you can delete the Hold Print file.

1. **On the machine's control panel, press the [Printer] key to display the printer screen.**
2. **Press [Print Jobs].**
3. **Press [Hold Print Job List].**

   A list of print files stored in the machine appears.

   Depending on the security settings, certain print jobs may not be displayed.
4. **Select the file you want to delete by pressing it.**

   To cancel a selection, press the highlighted job again.
5. **Press [Delete].**

   A confirmation screen appears.
6. **Press [Yes].**

   The selected file is deleted.

Note

- Press [No] to cancel the delete request.

How to use Stored Print/Store and Print functions

Follow the procedure below to print a document using the Stored Print/Store and Print functions.

Windows

1. **In the application, on the [File] menu, click [Print].**

   The [Print] dialog box appears.
2. **Select the printer, and then open the [Printing Preferences] dialog box.**
3. **On the [One Click Presets] tab, in the [Job Type:] list, click [Stored Print] or [Store and Normal Print].**
   - Stored Print

     Stores the file in the printer and print it later using the control panel.
   - Store and Normal Print

     Prints the file at once and also stores the file in the machine.
4. **Click [Details...].**
5. **In the [User ID:] box, enter the user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters. A file name and password can also be entered arbitrarily.**

   The user ID associates the user with his / her job.

You can assign a password to a saved document, but password assignment is not mandatory.

The same password must be entered when printing or deleting.

6. **Click [OK].**
7. **Click [OK] to close the [Printing Preferences] dialog box.**

   If the application has a collate option, make sure it is not selected before sending a print job. The printer driver automatically collates Stored Print files by default. If a collate option is selected from the application's Print dialog box, there may be more prints than required.
8. **Start the printing from the application's [Print] dialog box.**

   The document file is saved in the machine.

   To print the document, perform the following steps.

   To delete the documents, see "Deleting Stored Print files".
9. **On the machine's control panel, press the [Printer] key to display the printer screen.**
10. **Press [Print Jobs].**
11. **Press [Stored Print Job List].**

    A list of print files stored in the machine appears.

    [User ID], [Date / Time] and [File Name] also appear.

    Depending on the security settings, certain print jobs may not be displayed.
12. **Select the file you want to print by pressing it.**
13. **Press [Print].**

    A confirmation screen appears.

    If you have already set a password, proceed to the following step.
14. **Enter a password using the number keys on the password screen, and then press [OK].**

    A confirmation screen will appear if the password is not entered correctly. Press [OK] to enter the password again.

    If you have not set the password, proceed to the following step.
15. **Enter the new number of sets using the number keys if necessary, and then press [Yes].**

    You can enter up to 999 sets.

    Press the [Clear/Stop] key to correct any entry mistakes.

    The stored file is printed.

Mac OS X

1. **In the application, on the [File] menu, click [Print].**

   The [Print] dialog box appears.
2. **In the pop-up menu, click [Job Log].**

3. **On the [Job Type:] pop-up menu, click [Stored Print] or [Store and Print].**
   - Stored Print

     Stores the file in the printer and print it later using the control panel.
   - Store and Print

     Prints the file at once and also stores the file in the machine.
4. **In the [User ID:] box, enter the user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters. A file name and password can also be entered arbitrarily.**

   The user ID associates the user with his / her jobs.

   You can assign a password to a saved document, but password assignment is not mandatory.

   The same password must be entered when printing or deleting.
5. **After making the necessary settings, click [Print].**

   The document file is saved in the machine.

   To print the document, perform the following steps.

   To delete the documents, see "Deleting Stored Print files".
6. **On the machine's control panel, press the [Printer] key to display the printer screen.**
7. **Press [Print Jobs].**
8. **Press [Stored Print Job List].**

   A list of print files stored in the machine appears.

   [User ID], [Date / Time] and [File Name] also appear.

   Depending on the security settings, certain print jobs may not be displayed.
9. **Select the file you want to print by pressing it.**
10. **Press [Print].**

    A confirmation screen appears.

    If you have already set a password, proceed to the following step.
11. **Enter a password using the number keys on the password screen, and then press [OK].**

    A confirmation screen will appear if the password is not entered correctly. Press [OK] to enter the password again.

    If you have not set the password, proceed to the following step.
12. **Enter the new number of sets using the number keys if necessary, and then press [Yes].**

    You can enter up to 999 sets.

    Press the [Clear/Stop] key to correct any entry mistakes.

    The stored file is printed.

Note

- To cancel printing, press [Exit]. Then, press [Job Reset]. The file will be deleted.

- Stored Print file sent to the machine is not deleted unless you delete them in the machine or select [Auto Delete Stored Print Jobs]. For details about the [Auto Delete Stored Print Jobs] settings, see "System", Printer Reference. For details about deleting stored files, see "Deleting Stored Print files".

Reference

- p.79 "Deleting Stored Print files"

Deleting Stored Print files

If the printed document is no longer required, you can delete the Stored Print files.

1. **On the machine's control panel, press the [Printer] key to display the printer screen.**
2. **Press [Print Jobs].**
3. **Press [Stored Print Job List].**

   A list of print files stored in the machine appears.

   Depending on the security settings, certain print jobs may not be displayed.
4. **Select the file you want to delete by pressing it.**

   To cancel a selection, press the highlighted job again.
5. **Press [Delete].**

   A confirmation screen appears.
6. **Enter a password using the number keys on the password screen, and then press [OK].**

   A confirmation screen will appear if the password is not entered correctly. Press [OK] to enter the password again.

   If you have not set the password, proceed to the following step.
7. **Press [Yes].**

   The selected file is deleted.

Note

- Press [No] to cancel the delete request.
- If you have already set a password in the printer driver, enter it to delete.
- If you forgot your password, ask your file administrator for help.

How to use the Document Server function

Follow the procedure below to print a document using the Document Server function.

Windows

1. **In the application, on the [File] menu, click [Print].**

   The [Print] dialog box appears.
2. **Select the printer, and then open the [Printing Preferences] dialog box.**
3. **In the [Job Type:] list, click [Send to Document Server].**
4. **Click [Details...].**
5. **In the [User ID:] box, enter the user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters. A file name and password can also be entered arbitrarily.**

   The user ID associates the user with his / her job.

   You can assign a password to a saved document, but password assignment is not mandatory.

   The same password must be entered when printing or deleting.
6. **Click [OK].**
7. **Click [OK] to close the printer properties dialog box.**
8. **Start the printing from the application's [Print] dialog box.**

Mac OS X

1. **In the application, on the [File] menu, click [Print].**

   The [Print] dialog box appears.
2. **In the pop-up menu, click [Job Log].**
3. **On the [Job Type:] pop-up menu, click [Document Server].**
4. **In the [User ID:] box, enter the user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters. A file name and password can also be entered arbitrarily.**

   The user ID associates the user with his / her job.

   You can assign a password to a saved document, but password assignment is not mandatory.

   The same password must be entered when printing or deleting.
5. **Start the printing from the application's [Print] dialog box.**

User Code

Use this to set a user code for print logging.

Enter a user code using up to eight digits. A user code identifies a group of users and allows you to check the number of sheets printed under each code with SmartDeviceMonitor for Admin.

The following table shows where you can select this function.

Windows	Enter a user code in the [User Code:] box on the [Job Setup] menu in the [Printing Preferences] dialog box.
Mac OS X	Select the [Enable User Code] check box, and then enter a user code in the [User Code:] box on [Job Log] in the print dialog box.

Note

- For details about using SmartDeviceMonitor for Admin, see SmartDeviceMonitor for Admin Help.

Orientation

Use this to set the paper orientation.

The following table shows where you can select this function.

Windows	[Orientation:] is displayed on the [Basic] menu in the [Printing Preferences] dialog box.
Mac OS X	[Orientation:] is displayed in the print dialog box.

You can select the following items:

- Portrait
- Landscape
- Rotated Landscape

Note

- If you are using a Mac OS X, click to select the button that means "Landscape" or "Portrait".
- Under Mac OS X, "Rotated Landscape" cannot be selected.

Color Mode

Use this to select whether the document is printed in color or black and white.

The following table shows where you can select this function.

Windows	[Color Mode] is displayed on the [Basic] menu in the [Printing Preferences] dialog box.

Mac OS X	[Color Mode] is displayed under [General 1] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

You can select the following items:

Color

Prints color documents in full color.

Black and White

Prints everything, including color documents, in black and white. Black and White printing is faster than Color printing. To stop black and white areas being printed with CMYK toner, select [Black and White] in the printer driver as well as in the application.

Note

- Color images will be printed using CMYK toner, Cyan, Magenta, Yellow and Black. CMYK are three primary subtractive colors.
- If you want to adjust the print color, adjust the color settings. For details, see "Color Control".

Reference

- p.91 "Color Control"

Rotate by 180 degrees

Use this to rotate the print image by 180 degrees.

The following table shows where you can select this function.

Windows	Check the [Rotate by 180 degrees:] check box on the [Basic] menu in the [Printing Preferences] dialog box.
Mac OS X	[Rotate by 180 degrees] is displayed under [General 3] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

Copies

Use this function to specify the number of copies to print.

The following table shows where you can select this function.

Windows	[Copies:] is displayed on the [Basic] menu in the [Printing Preferences] dialog box.
Mac OS X	[Copies:] is displayed in the print dialog box.

Paper Size

Use this to select the size of paper you want to use.

The following table shows where you can select this function.

Windows	[Paper Size:] is displayed on the [Basic] menu in the [Printing Preferences] dialog box.
Mac OS X	[Paper Size] is displayed in the print dialog box.

Note

- For details about the paper sizes supported by this machine, see "System Settings", Network and System Settings Reference.

Reduce/Enlarge

Use this function to specify a scaling mode for reducing or enlarging the print size of documents.

The following table shows where you can select this function.

Windows	[Reduce/Enlarge] is displayed on the [Basic] menu in the [Printing Preferences] dialog box.
Mac OS X	This function is not available.

You can select the following items for Windows:

Full Size

Prints the document at its original size.

Scale To Fit

Prints the document by scaling it up or down to fit the specified paper size.

Scale

Prints the document at the specified reproduction ratio.

Paper Source

Use this to select a paper tray.

The following table shows where you can select this function.

Windows	[Paper Source:] is displayed on the [Paper] menu in the [Printing Preferences] dialog box.
Mac OS X	[All pages from:] is displayed on [Paper Feed] in the print dialog box.

Note

- For details about paper trays, see "Loading Paper", About This Machine.

Media Type

Use this to select the paper type.

The following table shows where you can select this function.

Windows	[Media Type:] is displayed on the [Paper] menu in the [Printing Preferences] dialog box.
Mac OS X	[Paper Type] is displayed under [General 3] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

Note

- For details about paper types available in each tray, see "Recommended Paper Sizes and Types", About This Machine.

Fit to Paper

When the size of the document and paper size differ, set whether or not to print according to paper size.

The following table shows where you can select this function.

Windows	[Fit to Paper] is displayed on the [Paper] menu in the [Printing Preferences] dialog box.

Mac OS X	[Fit to Paper] is displayed under [General 1] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

Prompt User

Print is performed with the size of document to be printed unchanged.

Nearest Size and Scale

If the paper size is smaller than the selected paper size, the driver reduces the print size.

If the paper size is larger than the size of document to be printed, print is not to fit the paper size.

Nearest Size and Crop

Print is performed regardless of any differences between selected and actual paper size. However, the print output is not adjusted to fit the paper size.

Pages per Sheet/ Booklet

Use this function to specify the number of pages to be printed on a single sheet of paper. Under the Windows operating system, you can also specify booklet printings.

The following table shows where you can select this function.

Windows	[Pages per Sheet:] is displayed on the [Edit] menu in the [Printing Preferences] dialog box. If you want to specify booklet printings, select [Booklet] in the [Pages per Sheet:] list.
Mac OS X	[Pages per Sheet:] is displayed on [Layout] in the print dialog box. The booklet printing is not available.

Layout

Use this function to specify the layout when printing multiple pages onto a single sheet of paper.

The following table shows where you can select this function.

Windows	[Pages per Sheet Layout:] is displayed on the [Edit] menu in the [Printing Preferences] dialog box.
Mac OS X	[Layout] is displayed in the list in the print dialog box.

Note

- If you are using a Mac OS X, click to select the button.

Booklet Binding Edge

Use this function to specify image layout order when [Layout] is specified.

The following table shows where you can select this function.

Windows	[Booklet Binding Edge:] is displayed on the [Edit] menu in the [Printing Preferences] dialog box.
Mac OS X	This function is not available.

Page Order

Use this function to specify image layout order when [Layout] is specified.

The following table shows where you can select this function.

Windows	[Pages per Sheet Layout:] is displayed on [Edit] menu in the [Printing Preferences] dialog box.
Mac OS X	[Page Order:] is displayed on [Paper Handling] in the print dialog box.

Note

- Depending on the version of the Mac OS X operating system, this function may not be available.

Draw Border

Use this function to specify whether or not to draw a page border on each page.

The following table shows where you can select this function.

Windows	Check the [Draw Border] check box on the [Edit] menu in the [Printing Preferences] dialog box.
Mac OS X	[Border:] is displayed on [Layout] in the print dialog box.

Duplex Printing

Use this function to select duplex printing.

The following table shows where you can select this function.

Windows	[Duplex:] is displayed on the [Edit] menu in the [Printing Preferences] dialog box.
Mac OS X	Check the [Two-Sided] check box in the print dialog box.

Windows

The following items may vary depending on the operating system you are using.

Off

Disables Duplex Printing.

Long Edge

Prints output so that you can open it to the long edge when bound along the long edge.

Short Edge

Prints output so that you can open it to the short edge when bound along the short edge.

Mac OS X

The following functions are selectable under Mac OS X 10.3 or higher (for Mac OS X 10.2, see Note below). The following items may vary depending on the operating system you are using.

Off

Disables Duplex Printing.

Long-edge binding

Prints output so that you can open it to the long edge when bound along the long edge.

Short-edge binding

Prints output so that you can open it to the short edge when bound along the short edge.

Note

- If you are using a Mac OS X 10.2, click to select the button that means "Flip on Long Edge" or "Flip on Short Edge".

Resolution

Use this to set the resolution types.

The following table shows where you can select this function.

Windows	[Resolutions:] is displayed on the [Print Quality] menu in the [Printing Preferences] dialog box.
Mac OS X	[Resolution:] is displayed under [General 1] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

Note

- For more information about the resolution types, see the printer driver Help.

Gradation

Use this to select a type of gradation based on your purpose.

The following table shows where you can select this function.

Windows	[Gradation:] is displayed on the [Print Quality] menu in the [Printing Preferences] dialog box.
Mac OS X	[Gradation] is displayed under [General 1] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

Note

- For details about the gradation types, see the printer driver Help.

Dithering

Use this to set the Image Rendering mode.

The following table shows where you can select this function.

Windows	[Dithering:] is displayed on the [Print Quality] menu in the [Printing Preferences] dialog box.

Mac OS X	[Dithering] is displayed under [General 2] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

You can select the following items:

Auto

Use this setting to configure the best dithering method automatically depending on the appearance of the document to be printed.

Photographic

Performs dithering using an appropriate pattern for photographs.

Text

Performs dithering using an appropriate pattern for text.

User Setting

Use this setting to print images set in half tone in your application.

Image Smoothing

Use this to select the image smoothing type.

The following table shows where you can select this function.

Windows	[Image Smoothing:] is displayed on the [Print Quality] menu in the [Printing Preferences] dialog box.
Mac OS X	[Image Smoothing] is displayed under [General 1] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

You can select the following items:

Off

Disables image smoothing.

On

Performs image smoothing unconditionally.

Auto

Performs image smoothing automatically for images that have a resolution less than 25% of supported printer resolution.

Less than 90 ppi to Less than 300 ppi

Performs image smoothing only when the image has an image resolution (pixels per inch) less than the respective value you have selected in the list.

Note

- When [Auto] is selected, data processing may take a long time.
- When Image Smoothing is used for a mask image, this function may have an undesired effect on the print result.

Gray Reproduction

Use this to select the Black Color mode for text and line art.

The following table shows where you can select this function.

Windows	Click [Details...] on the [Print Quality] menu to open a dialog, and then select the item in the [Gray Reproduction:] list.
Mac OS X	[Gray Reproduction (Text/Line Art)] is displayed under [General 2] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

You can select the following items:

Black/Gray by K

Prints black and gray text and graphics using black toner only.

Black by K

Prints black text and graphics using black toner only.

CMY+K

Prints black and gray text and graphics using all toner colors.

Black/Gray by K (Text only)

Prints black and gray text using black toner only.

Black by K (Text only)

Prints black text using black toner only.

Black Over Print

Select whether or not to apply a black color over any other colors when printing.

The following table shows where you can select this function.

Windows	Click [Details...] on the [Print Quality] menu to open a dialog, and then click the [Black Over Print:] check box.
Mac OS X	[Black Over Print:] is displayed under [General 2] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

Color Control

Use this to select whether or not you want the colors in the documents to be adjusted before printing so that the printed page matches closer to the colors on the screen.

The following table shows where you can select this function.

Windows	Click [Details...] on the [Print Quality] menu to open a dialog, and then select the items in the [ICM Method:] and [ICM Intent:] lists.
Mac OS X	Select [Color Matching] in the print dialog box.

ColorSync

Select this item to specify the color management system for Mac OS X.

ICM Method:

Select this item to specify the color management system for the Windows operating system.

Color Setting

Use this to select the correction method used for color conversion.

The following table shows where you can select this function.

Windows	Click [Details...] on the [Print Quality] menu to open a dialog, and then select the item in the [Color Setting] list.
Mac OS X	[Color Setting] is displayed under [General 2] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

You can select the following items:

Off

No modification to the color setting.

Fine

Select this setting to perform color matching based on one of the printer's built- in color rendering dictionaries and perform CMYK conversion. This setting performs the printing which output target is Monitor Gamma= 1.8.

Super Fine

Select this setting to use a color rendering dictionary as in the [Fine] setting but produce output that is more vivid. Use this setting to emphasize light colors. This setting performs the printing which output target is Monitor Gamma= 2.2.

Note

- The color rendering dictionary that is selected in the [Color Profile] setting is used.

Color Profile

Use this to select the color profile pattern.

The following table shows where you can select this function.

Windows	Click [Details...] on the[Print Quality] menu to open a dialog, and then select the item in the [Color Profile:] list.
Mac OS X	[Color Profile] is displayed under [General 2] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

You can select the following items:

Auto

Use this setting to configure the best color profile pattern automatically depending on the appearance of the document to be printed.

Photographic

Use this setting to enhance the reproduction of photos and graphics that include midtones.

Presentation

Use this setting to enhance the reproduction of documents that contain text and graphics. This CRD is best for printing colored charts, graphs, presentation materials and so on. If you use this CRD for printing photographs, the color or gradations might not be reproduced well.

Solid Color

Use this setting to print specific colors, logos and so on.

User Setting

Use this setting to print images with downloaded CRD from your application.

CLP Simulation1

Use this setting to print blue color more brightly and vividly.

CLP Simulation2

Use this setting to print blue color more brightly and vividly. Print results are lighter than those of CLP Simulation1.

Enable ICM Processing

Use this setting to enable image color management. This setting is only available under a Windows operating system.

Note

- Use this to select a color rendering dictionary (CRD). The CRD is referred to color matching, so you should select the appropriate CRD for the document you are printing. The selected CRD is also referred to when [Fine] or [Super Fine] is selected for [Color Setting]: The following items are available: [Auto], [Photographic], [Presentation] and [Solid Color].

Separate into CMYK

Use this to select the print separation type.

You can separate the printing data into CMYK to specify a specific color combination.

The following table shows where you can select this function.

Windows	Click [Details...] on the [Print Quality] menu to open a dialog, and then select the item in the [Separate into CMYK] list.
Mac OS X	[Separate into CMYK] is displayed under [General 2] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

CMYK Simulation Profile

You can simulate the color tone of the printing ink.

You can select the printing ink from US OffsetPrint, Euroscale, JapanColor, and PaletteColor.

The following table shows where you can select this function.

Windows	Click [Details...] on the[Print Quality] menu to open a dialog, and then select the item in the [CMYK Simulation Profile:] list.
Mac OS X	[CMYK Simulation Profile] is displayed under [General 3] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

Print Mode/ Toner Saving

Use this to select the toner saving mode.

The following table shows where you can select this function.

Windows	[Print Mode:] is displayed on the [Print Quality] menu in the [Printing Preferences] dialog box.
Mac OS X	[Print Mode] is displayed under [General 1] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

Barrier-free Color Management

Use this function to enable enhanced color output for color vision impaired users.

The following table shows where you can select this function.

Windows	[Barrier-free Color Management:] is displayed on the [Print Quality] menu in the [Printing Preferences] dialog box.
Mac OS X	This function is not available.

Destination

Use this to select an output tray.

The following table shows where you can select this function.

Windows	[Destination:] is displayed on the [Finishing] menu in the [Printing Preferences] dialog box.

Mac OS X	[Destination] is displayed under [General 3] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

Note

- For details about output trays supported by this machine, see "Output Tray Settings (Type 1 and 2)" or "Output Tray Settings (Type 3 and 4)", Network and System Settings Reference.

Collate

Use this function to enable collation. With this feature, the machine can efficiently print collated sets of multiple-page documents.

The following table shows where you can select this function.

Windows	Set the number of copies to two or more on the [Basic] menu, and then select [On] or [Off] on the [Collate:] list on the [Finishing] menu in the [Printing Preferences] dialog box.
Mac OS X	Check the [Collated] check box in the printer dialog box.

Page Output Order

Specify the order of pages to print.

The following table shows where you can select this function.

Windows	[Page Output Order] is displayed on the [Finishing] menu in the [Printing Preferences] dialog box.
Mac OS X	Select [Reverse] in [Page Order:] on [Paper Handling] in the print dialog box.

Orientation Override

Use this to set the paper orientation.

The following table shows where you can select this function.

Windows	[Orientation Override:] is displayed on the [Finishing] menu in the [Printing Preferences] dialog box.
Mac OS X	[Orientation Override] is displayed under [General 4] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

You can select the following items:

- Off
- Landscape
- Portrait

Staple

Use this function to staple sheets of printed paper together.

Important

- **When stapling, use the finisher option. See "System Settings", Network and System Settings Reference or "Printing Documents", Printer Reference.**

The following table shows where you can select this function.

Windows	[Staple:] is displayed on the [Finishing] menu in the [Printing Preferences] dialog box.
Mac OS X	[Staple] is displayed under [General 3] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

Note

- The stapling position might differ depending on the paper orientation set on the machine and the orientation of the data to be printed. For details, see Printer Reference.

Punch

Use this function to punch holes in the printed documents.

Important

- **When stapling, use the finisher option. See "System Settings", Network and System Settings Reference or "Printing Documents", Printer Reference.**

The following table shows where you can select this function.

Windows	[Punch:] is displayed on the [Finishing] menu in the [Printing Preferences] dialog box.
Mac OS X	[Punch] is displayed under [General 3] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

Note

- Punch positions and the number of punch holes that are available will change depending on the type of finisher, the original's orientation, and the printing paper size and orientation. For details, see Printer Reference.

Watermark

Set the Watermark function.

The following table shows where you can select this function.

Windows	[Watermark:] is displayed on the [Effects] menu in the [Printing Preferences] dialog box.
Mac OS X	[Watermark:] is displayed under [General 4] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

Watermark Text

Select the Watermark Text type.

The following table shows where you can select this function.

Windows	[Watermark Text:] is displayed on the [Effects] menu in the [Printing Preferences] dialog box.
Mac OS X	[Watermark Text] is displayed under [General 4] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

Watermark Font

Select the Watermark Font type.

The following table shows where you can select this function.

Windows	[Watermark Font:] is displayed on the [Effects] menu in the [Printing Preferences] dialog box.
Mac OS X	[Watermark Font] is displayed under [General 4] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

Watermark Size

Select the Watermark size.

The following table shows where you can select this function.

Windows	[Watermark Size:] is displayed on the [Effects] menu in the [Printing Preferences] dialog box.
Mac OS X	[Watermark Size] is displayed under [General 4] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

Watermark Angle

Select the Watermark angle.

The following table shows where you can select this function.

Windows	[Watermark Angle:] is displayed on the [Effects] menu in the [Printing Preferences] dialog box.
Mac OS X	[Watermark Angle] is displayed under [General 4] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

Watermark Style

Select the Watermark style.

The following table shows where you can select this function.

Windows	[Watermark Style:] is displayed on the [Effects] menu in the [Printing Preferences] dialog box.
Mac OS X	[Watermark Style] is displayed under [General 5] in the [Feature Sets:] list on [Printer Features] in the print dialog box.

4. Appendix

Trademarks

Adobe, Acrobat, Acrobat Reader, Adobe Type Manager, PageMaker, PostScript, and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Apple, Bonjour, Macintosh, Mac OS and TrueType are registered trademarks of Apple Inc., registered in the United States and other countries.

The Bluetooth® word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Ricoh Company, Ltd. is under license.

Microsoft®, Windows®, Windows Server®, and Windows Vista® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights to those marks.

The proper names of the Windows operating systems are as follows:

- The product names of Windows 2000 are as follows:

  Microsoft® Windows® 2000 Professional

  Microsoft® Windows® 2000 Server

  Microsoft® Windows® 2000 Advanced Server
- The product names of Windows XP are as follows:

  Microsoft® Windows® XP Professional Edition

  Microsoft® Windows® XP Home Edition

  Microsoft® Windows® XP Media Center Edition

  Microsoft® Windows® XP Tablet PC Edition
- The product names of Windows Vista are as follows:

  Microsoft® Windows® Vista Ultimate

  Microsoft® Windows® Vista Business

  Microsoft® Windows® Vista Home Premium

  Microsoft® Windows® Vista Home Basic

  Microsoft® Windows® Vista Enterprise
- The product names of Windows 7 are as follows:

  Microsoft® Windows® 7 Home Premium

  Microsoft® Windows® 7 Professional

  Microsoft® Windows® 7 Ultimate

Microsoft® Windows® 7 Enterprise

- The product names of Windows Server 2003 are as follows:
  Microsoft® Windows Server® 2003 Standard Edition
  Microsoft® Windows Server® 2003 Enterprise Edition
- The product names of Windows Server 2003 R2 are as follows:
  Microsoft® Windows Server® 2003 R2 Standard Edition
  Microsoft® Windows Server® 2003 R2 Enterprise Edition
- The product names of Windows Server 2008 are as follows:
  Microsoft® Windows Server® 2008 Standard
  Microsoft® Windows Server® 2008 Enterprise
- The product names of Windows Server 2008 R2 are as follows:
  Microsoft® Windows Server® 2008 R2 Standard
  Microsoft® Windows Server® 2008 R2 Enterprise

INDEX

A

About This Machine....5

B

Barrier-free color management....94
Black Over Print....90
Booklet....85
Booklet Binding Edge....86

C

CMYK Simulation Profile....93
Collate....95
Color Control....91
Color Mode....81
Color Profile....92
Color Setting....91
Copies....82
Copy and Document Server Reference....5

D

Destination Tray....94
Dithering....88
Document Server....79
Draw Border....86
Duplex Printing....87

F

Facsimile Reference....5
Fit to Paper....84

G

Gradation....88
Gray Reproduction....90

H

Hold Print....74
How to Read This Manual....8

I

Image Smoothing....89
Installing the printer driver
- USB - Mac OS X....63
- USB - Windows operating system....42

IPP port....16

J

Job Type....66

L

Laws and regulations....9
Layout....85
Legal prohibition....9
Locked Print....71
LPR port....19

M

Making option settings
- Mac OS X....62
- Windows operating system....53

Making paper settings
- Mac OS X....62
- Windows operating system....53

Media type....84

N

Network and System Settings Reference....5
Notice....7

O

Orientation....81
Orientation override....95
Other manuals....5
Output Tray....94

P

Page order....86
Page output order....95
Pages per Sheet....85
Paper Size....83
Paper source....84
Parallel connection....47
PostScript 3 Supplement....5
PPD files for Mac OS X....61
Print Mode....94
Printer driver configuration
- Mac OS X....61
- Windows operating system....54

Printer Reference....5
Punch....96

R

Reduce/Enlarge....83
Resolution....88
Rotate by 180 degrees....82

S

Sample Print....68
Scanner Reference....5
Security Reference....5
Separate into CMYK....93
Setting up options
- Mac OS X....65
- Windows operating system....65

Setting up the PPD files for Mac OS X....61
SmartDeviceMonitor for Client port....26
Standard TCP/IP port....11
Staple....96
Store and Print....76
Stored Print....76

T

Toner Saving....94
Trademarks....101
Troubleshooting....5
- Printer driver installation....51
- USB....46

U

User Code....80
Using Bonjour for Mac OS X....64
Using USB interface
- Mac OS X....63
- Windows operating system....42

V

VM Card Extended Feature Settings Device Reference....5
VM Card Extended Feature Settings Web Reference....5

W

Watermark....97
Watermark Angle....98
Watermark Font....98
Watermark Size....98
Watermark Style....98
Watermark Text....97
Windows 2000
- Installing the printer driver....11, 19, 26, 27, 37, 42, 47
- Printer default settings....54

Windows 7
- Installing the printer driver....14, 17, 21, 24, 32, 33, 39, 45, 49
- Printer default settings....58

Windows computer....41
Windows Network Printer....37
Windows Server 2003 / 2003 R2
- Installing the printer driver....12, 16, 20, 29, 30, 38, 43, 48
- Printer default settings....56

Windows Server 2008
- Installing the printer driver....14, 17, 21, 23, 32, 33, 39, 44, 49

Windows Server 2008 / 2008 R2
- Printer default settings....58

Windows Vista
- Installing the printer driver....14, 17, 21, 23, 32, 33, 39, 44, 49
- Printer default settings....58

Windows XP
- Installing the printer driver....12, 16, 20, 29, 30, 38, 43, 48
- Printer default settings....56

WSD port....23

© 2010

Operating Instructions PostScript 3 Supplement

EN US
EN AU
D088-7969A

Operating Instructions
UNIX Supplement

1 UNIX Configuration

Read this manual carefully before you use this machine and keep it handy for future reference. For safe and correct use, be sure to read the Safety Information in "About This Machine" before using the machine.

TABLE OF CONTENTS

Notice....3
Important....3
How to Read This Manual....4
Symbols....4
Notes....4
Laws and Regulations....5
Legal Prohibition....5

1. UNIX Configuration

Before Setup....7
Using the lp/lpr Commands....7
Using the rsh/rcp/ftp Commands....7
Using the Installation Shell Script....8
Assigning the IP Address....8
Executing the Installation Shell Script....9
After Executing the Installation Shell Script....12
Printing Method....17
Printing with lpr, lp....17
Printing with rsh, rcp, ftp....17
Printer Status....20
Viewing the Print Job Status with lpq and lpstat....20
Viewing the Printer Status with rsh and ftp....20
Copying Information to a File....21
Specifying the Device Option....22
Configuring the Device Option....22
Printer Language....26
Text Printing....27
Input Tray....27
Paper Size....28
Paper Type....30
Output Tray....32
Copies....32
Collating....33
Duplex Printing....33

Binding....34
Orientation....35
Image Direction....35
Resolution....36
Gradation Quality....36
Billing Code....37
Staple....37
Punch, Punchhole....38
Usercode....40
Symbol Set....40
Trademarks....44
INDEX....47

Notice

Important

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

For good copy quality, the manufacturer recommends that you use genuine toner from the manufacturer.

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

How to Read This Manual

Symbols

This manual uses the following symbols:

Important

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

Note

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys on the machine's display or control panels.

Notes

Contents of this manual are subject to change without prior notice.

Laws and Regulations

Legal Prohibition

Do not copy or print any item for which reproduction is prohibited by law.

Copying or printing the following items is generally prohibited by local law:

bank notes, revenue stamps, bonds, stock certificates, bank drafts, checks, passports, driver's licenses.

The preceding list is meant as a guide only and is not inclusive. We assume no responsibility for its completeness or accuracy. If you have any questions concerning the legality of copying or printing certain items, consult with your legal advisor.

This machine is equipped with a function that prevents making counterfeit bank bills. Due to this function the original images similar to bank bills may not be copied properly.

1. UNIX Configuration

This section explains how to set up a network printer and check print status using UNIX.

Before Setup

Important

- To print from a UNIX workstation, use a file that the printer supports.
- Setting up varies depending on the printing commands. Make sure to make settings accordingly.

Using the lp/lpr Commands

1. **Use the installation shell script to register the device option, as well as the printer host name and the IP address.**

   For details, see "Using the Installation Shell Script".

2. **Start printing.**

   For details, see "Printing Method".

Reference

- p.8 "Using the Installation Shell Script"
- p.17 "Printing Method"

Using the rsh/rcp/ftp Commands

1. **Edit the host file to register the printer host name and the IP address.**

   For details, see "After Executing the Installation Shell Script".

2. **Start printing.**

   For details, see "Printing Method".

Note

- If you cannot edit the host file, use the install shell script to register the host name.

Reference

- p.12 "After Executing the Installation Shell Script"
- p.17 "Printing Method"

Using the Installation Shell Script

The installation shell script helps with the setup process. The installation shell script automates some of the tasks in configuring/etc/hosts, /etc/printcap; creating the spool directory for BSD UNIX; and running the lpadmin command for System V UNIX.

Important

- **Download the installation shell script from our Web site. Keep the installation shell script as local folders.**
- **The installation shell script can be used on the following workstations: (it cannot be used with other types of workstations.)**
  - **SunOS 4.1.4**
  - **Solaris 2.6, 7, 8, 9**
  - **HP-UX 11.x**
  - **Red Hat Linux 6.2, 7.0, 7.1, 7.2, 8**
  - **UnixWare 7.1.1**
  - **OpenServer 5.06**

Note

- Depending on security settings when installed, rsh/rcp/telnet may not be usable with Red Hat 7.1 or later. Change the security level to allow use of rsh/rcp/telnet. For details about how to change the setting, see the operating instructions for Red Hat.
- When you use NIS (Network Information Service) or DNS, you should configure the server before running the installation shell script.
- Installation shell script does not support CUPS.
- When you use Solaris and HP-UX, you can set UNIX configuration with admintools that came with Solaris and HP-UX. For details about setting using the admintools, see the admintool's manual.
- For details about the configuration utility of your operating system, see the manual that came with the utility.

Assigning the IP Address

Important

- **Configure the machine to use TCP/IP.**
  - **Make sure that TCP/IP on the machine is set to active. (Default setting is active.)**
  - **Assign an IP address to the machine and configure the other settings required for TCP/IP.**

Note

- For details about how to make the above settings, see the manual that comes with this machine.

Checking the IP address configuration

Follow the procedure below to make sure that the IP address has been configured correctly.

- The following procedure uses the sample IP address: 192.168.15.16.

1. **Enter the following:**

   ```
   # ping 192.168.15.16
   ```

   If the address has been configured correctly, the following message appears:

   ```
   192.168.15.16 is alive
   ```

   If the address has been configured incorrectly, the following message appears:

   ```
   no answer from 192.168.15.16
   ```

Note

- When you use NIS, the IP address and host name are written to /etc/hosts on the master server. When you use DNS, the information is written to a data file on the name server. After writing the host name and IP address to the file, make sure that the configuration is correct by pinging the host.

  ```
  # ping host_name
  ```

- If the host name is registered with an IP address, the server can access the printer using its host name instead of its IP address.

Executing the Installation Shell Script

Having configured the printer IP address, follow the procedure below to execute the installation shell script and set up the workstation printing environment.

Important

- **Before executing the installation shell script, the IP address, host name, and printer name are required.**
- **Download the installation shell script from our Web site. Keep the installation shell script as local folders.**

The following procedures use the sample IP address: 192.168.15.16; sample host name: nphost; and sample printer name: np.

1. **Move to the directory that has kept the installation shell script.**
2. **Run the installation shell script.**

   ```
   # sh ./install
   ```

   Insert a period and slash before the current directory.

3. **Enter a number to select the workstation operating system that you are using.**

```
Network printer install shell
Select your workstation OS type
1. SunOS 4.x.x
2. Solaris 2.x, Solaris 7-9 (SunOS5.x)
3. HP-UX
4. UnixWare
5. Linux
6. OpenServer
7. Quit
Enter <1-7>:
2
```

If you select "7", the installation shell script ends.

4. **Enter the printer's IP address.**

```
Enter Printer host IP address <xxx.xxx.xxx.xxx> [return=skip]:
192.168.15.16
```

If the host name of the printer has already been configured, press the [RETURN] ([ENTER]) key. Nothing will be added to the /etc/hosts file.

5. **Enter the printer's host name.**

```
Enter Printer host name : nphost
```

If no IP address was entered in step 4, nothing is added to the /etc/hosts file.

6. **Configure the printer name.**

```
Enter logical printer name [default nphost_prn]
```

If you want to use the default name, press the [RETURN] ([ENTER]) key. Enter a new name, if you want to use a different one.

The host name entered in step 5 followed by "_prn" appears in "default".

7. **Set the print option.**

```
Enter remote printer name [default lp]:
```

- Press the [RETURN] ([ENTER]) key, and printing with PostScript is enabled.
- If you want to set the device option, enter the option parameter.

  ```
  Enter remote printer name [default lp]:tray=tray1
  ```

- If you enter "text", text printing is enabled.
- If you enter "text", printing with PostScript is disabled.

  ```
  Enter remote printer name [default lp]:text
  ```

You can enter up to 14 characters for HP-UX 11.0, 256 for Solaris 8 and Red Hat Linux 7.0, and 51 for Red Hat Linux 6.2.

After setup with the installation shell script is complete, and if you entered the IP address in step 4, the following message appears:

```
hosts file is modified
```

8. **Perform a test print to make sure that the settings are correct.**

```
# lpr -Pnp file_name
# lp -d np file_name
```

Note

- SunOS, UnixWare, and OpenServer appear on the screen, but they are not supported. Use Solaris, HP-UX, or Linux.
- The IP address will be added to the /etc/hosts file.
- The host name will be added to the /etc/hosts file.
- When printing with the lp command, use (_) instead of (=) and (;) instead of (,) for operating systems that cannot use (=) and (,) such as Solaris 2.5 or later.
- For details about how to download the installation shell script, contact your sales or service representative.
- For details about lpr and lp, see "Printing Method".
- For details about the device option, see "Specifying the Device Option".

Reference

- p.17 "Printing Method"
- p.22 "Specifying the Device Option"

Deleting the printer

To print using the lp or lpr command, the option specified when the installation shell script is executed is used. Change the option in accordance with the workstation you are using.

BSD UNIX workstation, Linux

Delete the printer entry from /etc/printcap, and then execute the installation shell script again. Select options during the setup process.

Alternatively, search the printer entry from /etc/printcap, and change its rp capability to option setting.

Solaris, HP-UX

Delete the printer entry, and then execute the installation shell script again.

Select options during the setup process. To delete the printer entry, follow the procedure below:

1. Stop the scheduler.

```
# /usr/sbin/lpshut
```

2. Delete the printer.

```
# /usr/sbin/lpadmin -x printer_name
```

3. Restart the scheduler.

```
# /usr/lib/lpsched
```

After Executing the Installation Shell Script

The printing environment is set up automatically when the installation shell script is executed.

This section describes setup contents when the installation shell script is executed under Red Hat Linux, Solaris, and HP-UX.

Linux

Adding the IP address and host name to the /etc/hosts file

The following line is added to the /etc/hosts file. The IP address and printer host name which you previously entered in the installation script will be used:

```
192.168.15.16 nphost # Network Printer
```

- "192.168.15.16" is the IP address, "nphost" is the host name, from # to the end of the line is the comment.

Note

- The /etc/hosts file contains a list of the IP addresses and host names of all hosts communicating on the network. Each entry is delimited with a space or a tab, and each line is separated with a return.
- If you do not use NIS or DNS, you must manually enter the IP address and host name of each workstation using the network printer in the /etc/hosts file.

Adding an entry to the /etc/printcap file

The following entry is added to the /etc/printcap file, which is the configuration for printing with the lpr command. In order to use the lpr command to print, you need to edit the /etc/hosts file, add an entry for the network printer to the /etc/printcap file and create a spool directory:

```
##PRINTTOOL3## REMOTE
np|Network Printer:\
:rm=nphost:\
:rp=option:\
:sd=/var/spool/lpd/npd:\
:lf=/var/log/npd-errs:\
:sh:\
```

```
:mx#0:
```

Note

- The /etc/printcap file is used to register the name and attributes of a printer. You must make an entry for the network printer in the /etc/printcap file of all workstations using the network printer.
- You must make an entry for each printer option when using the same printer.
- Each entry is separated with colons into several fields. The syntax is to begin each entry with a colon, followed by the entry, and then end with a colon, a back slash, and then a return.
- The first line of the field is the name of the printer. You use this name when logging on to a network printer from a workstation. You can define several different names by separating each name with the "|" character.
- The second and following lines contain the printer's attributes. Attributes are represented by two-character names referred to as capabilities. For details about capabilities, see the following table:

Capability	Explanation	Value required for the network printer
rm	Host name of the printer.	The host name that was registered with the /etc/hosts file.
rp	Optional specification. "lp" will be assigned, if the option is not used.	Select options for printing. For details about available options, see "Specifying the Device Option".
sd	Path name of the spool directory.	Path name of the spool directory that is to be created.
lf	Path name of the log file.	Path name of the log file. For example /var/log/lpd-errs.
mx	Maximum file size which the directory can copy. When set to 0, the size is unlimited. If nothing is entered, the size is set to 1024 k.	None, or something suitable.

Reference

- p.22 "Specifying the Device Option"

Making the spool directory

Create a spool directory under /var/spool/lpd. The name of the spool directory should be the name of the printer followed by a "d".

Note

- The spool directory is used to control data used for print jobs. For example, when a print job is created, a temporary copy of the data used is created in the spool directory. All workstations accessing the network printer need to have a spool directory for the network printer.
- A spool directory should be made for every network printer entry listed in the /etc/printcap file.
- The spool directory should normally be made under /var/spool/lpd and the name should match that listed under the sd capability in /etc/printcap.
- Change the owner and group of the directory to root and lp. The following examples show how to make a /var/spool/lpd/npd spool directory:

```
# cd /var/spool/lpd
# mkdir npd
# chown root npd
# chgrp lp npd
```

Making the log file

Error messages are logged to a file created in the /var/log directory. The log file name is the printer name followed by "d-errs".

Note

- The log file is used for logging errors or warning messages by the UNIX workstation.
- The log file should be made for every network printer entry listed in the /etc/printcap file.
- The log file should normally be made under /var/log directory and the name should match that listed under the lf capability in /etc/printcap. Change the owner and group of the log file to root and lp. The following examples show how to make a /var/log/npd-errs file:

```
# cd /var/log
# touch npd-errs
# chown root npd-errs
# chgrp lp npd-errs
```

Solaris

Adding the IP address and host name to the /etc/hosts file

The following line is added to the /etc/hosts file. The IP address and printer host name previously entered in the installation script will be used.

```
192.168.15.16 nphost # Network Printer
```

- "192.168.15.16" is the IP address, "nphost" is the host name, from # to the end of the line is the comment.

Note

- The /etc/hosts file contains a list of IP addresses and host names of all hosts communicating on the network. Each entry is delimited with a space or a tab, and each line is separated with a return.
- If you do not use NIS or DNS, you must manually enter the IP address and host name of each workstation using the network printer in the /etc/hosts file.

Registering the printer

The installation shell script registers the printer as a remote printer following the procedure below:

1. If your workstation is Solaris 2.5.1, register the print server and print client to the print service.

   ```
   # lpsystem -t bsd -R 0 -y Network Printer nphost
   ```

2. Register the printer as a remote printer.

   ```
   # lpadmin -p np -s nphost!option -T dump -I any
   ```

   - "np" is the printer name, "nphost" is the host name. For details about "option", see "Specifying the Device Option".

     "lp" will be assigned, if the option is not used.

     When printing with the lp command, use (_) instead of (=) and (;) instead of (,) for operating systems that cannot use (=) and (,) such as Solaris 2.5 or later.

3. If your workstation is Solaris 2.5.1, set the print job to active so it can be accepted by the print queue.

   ```
   /usr/lib/accept np
   ```

4. If your workstation is Solaris 2.5.1, set the print job to active to print.

   ```
   /usr/lib/enable np
   ```

Reference

- p.22 "Specifying the Device Option"

HP-UX

Adding the IP address and host name to the /etc/hosts file

The following line is added to the /etc/hosts file. The IP address and printer host name previously entered in the installation script will be used:

```
192.168.15.16 np # Network Printer
```

- "192.168.15.16" is the IP address, "np" is the host name, from # to the end of the line is the comment.

Note

- The /etc/hosts file contains a list of IP addresses and host names of all hosts communicating on the network. Each entry is delimited with a space or a tab, and each line is separated with a return.

- If you do not use NIS or DNS, you must manually enter the IP address and host name of each workstation using the network printer in the /etc/hosts file.

Registering the printer

The installation shell script registers the printer as a remote printer following the procedure below:

1. Stop the scheduler.

   ```
   /usr/lib/lpshut
   ```

2. Register the printer.

   ```
   /usr/lib/lpadmin -Pnp -v/dev/null -mrmodel
   -ormnphost -orpoption -ob3
   ```

   - "np" is the printer name, "nphost" is the host name.

     For details about "option", see "Specifying the Device Option".

     "lp" will be assigned, if the option is not used.

3. Set the printer so the print job is listed in the print queue.

   ```
   /usr/lib/accept np
   ```

4. Set the printer to perform the print job.

   ```
   /usr/lib/enable np
   ```

5. Restart the scheduler.

   ```
   /usr/lib/lpsched
   ```

Reference

- p.22 "Specifying the Device Option"

Printing Method

This section explains how to print documents using commands.

Printing with lpr, lp

Execute one of the following commands according to type of workstation used:

BSD UNIX workstation, Linux

```
% lpr -Pprinter_name file_name [file_name...]
```

For example:

The printer name is np, file names are file1 and file2

```
% lpr -Pnp file1 file2
```

Solaris, HP-UX

```
% lp -d printer_name file_name [file_name...]
```

For example:

The printer name is np, file names are file1 and file2

```
% lp -d np file1 file2
```

Note

- "printer_name" is the printer name entered when executing the installation shell script.
- You can use wild cards (* or ?) for the file name.
- The message "print session full" appears when the maximum number of print requests has been reached (max. 5 sessions - Job Spool setting available).
- You should try to print again when the number of requests is less than five. You can check the number of print requests using telnet. For details about using telnet, see the manual that comes with this machine.
- The number of print sessions does not change, whether you increase or reduce the machine's total memory size.

Printing with rsh, rcp, ftp

You can also print using the rsh, rcp, and ftp commands.

Note

- Print using a format the printer supports.
- You should try to print again when the number of requests is zero.
- The message "print session full" appears when the maximum number of print requests is reached.

- The maximum number of print sessions varies depending on the command.
- When using the rsh or rcp command, the maximum number of print sessions is 5; when using the ftp command, the number is 3.

1

rsh

```
% rsh host_name print < file_name
```

For example:

host name is nphost, file name is file1

```
% rsh nphost print < file1
```

Note

- "host_name" is the name entered when executing the installation shell script.
- If you are using HP-UX, use the remsh command instead of rsh.

rcp

To specify and print the file

```
% rcp file_name [file_name...] host_name:
```

For example:

host name is nphost, file names are file1 and file2

```
% rcp file1 file2 nphost:
```

To print all of the files in a directory

```
% rcp -r directory_name host_name:
```

For example:

host name is nphost, directory name is directory

```
% rcp -r directory1 nphost:
```

Note

- "host_name" is the name entered when executing the installation shell script.
- You can use wild cards (* or ?) for the file name.

ftp

Use the put or mput command depending on the number of files to be printed.

Important

- **File names cannot contain "=", ",", or ";".**

- **You can use wild cards (* or ?) for the file name with the mput command.**

To print one file

```
ftp> put file_name [Option]
```

To print several files

```
ftp> mput file_name [file_name...] [Option]
```

The following procedure shows an example of how to print a file using ftp.

It is not possible to set options with the mput command:

1. **Start ftp using the IP address or host name of the printer.**

   ```
   % ftp IP_address
   ```

2. **Enter the user name and password, and then press the [RETURN] ([ENTER]) key.**

   For details about the user name and password, consult your administrator.

   ```
   Name:
   Password:
   ```

3. **Set the file transfer mode to binary.**

   ```
   ftp> bin
   ```

   If the file transfer mode is not set to binary, the image may not be printed correctly.

4. **Print the file.**

   For example, to print the file named file1:

   ```
   ftp> put \path\file1
   ```

   For example, to print the two files named file1 and file2:

   ```
   ftp> mput \path\file1 \path\file2
   ```

5. **Exit ftp.**

   ```
   ftp> bye
   ```

Printer Status

You can use the following commands to have information and printer status displayed or copied to a file.

Use the lpq or lpstat command to display the status of the printer or information about print jobs.

Use the rsh, rcp or ftp commands to get more detailed information from the printer.

Viewing the Print Job Status with lpq and lpstat

BSD UNIX workstation, Linux

```
% lpq -Pprinter_name
```

For example: Printer name is np

```
% lpq -Pnp
```

System V UNIX, Solaris, HP-UX

```
% lpstat -o printer_name
```

For example: Printer name is np

```
% lpstat -o np
```

Note

- If you are using HP-UX, do not put a space between "-o" and "printer name".

Viewing the Printer Status with rsh and ftp

Use the rsh or ftp command to display printer status or information about print jobs using specified parameters.

You can use these commands for BSD and System V UNIX.

If your workstation is HP-UX, use the remsh command instead of rsh.

- rsh

  ```
  % rsh host_name parameter
  ```

- ftp

  ```
  % ftp host_name
  User user_name
  password:
  ftp> get parameter -
  ```

Parameters that can be used with rsh, rcp and ftp :

Parameter	Information returned
stat	Status of the printer. Information about print jobs.
info	Information about the paper tray, output tray and printer language.
prnlog	Record of the last 10 jobs printed.
syslog	Record of messages about the network interface board.

Note

- Leave the user name and password blank, and then press the [RETURN] ([ENTER]) key.
- "-" indicates standard output. Display will be displayed on screen if standard output has not been specified.

Copying Information to a File

Use the rcp or ftp command to copy information about specified parameters to a file.

You can use these commands for BSD and System V UNIX.

Important

- **The same parameters are used as those above.**
  - **rcp**

    ```
    % rcp host_name:parameter file_name
    ```
  - **ftp**

    ```
    % ftp host_name
    User:user_name
    password:
    ftp> get parameter file_name
    ```

Note

- Leave the user name and password blank, and then press the [RETURN] ([ENTER]) key.

Specifying the Device Option

With the following options, you can print with specific printer functions.

This manual covers all models, and therefore contains functions and settings that may not be available for your model.

Configuring the Device Option

Important

- **The optional character strings the printer can recognize contain a maximum of 512 bytes.**
- **The number of available characters used as options is limited, depending on operating systems.**

The configuration of the print option varies, depending on printing commands.

- rsh

  ```
  % rsh host_name print option1=value1,... < file_name
  ```

- rcp

  ```
  % rcp file_name host_name:option1=value1,...
  ```

- ftp

  ```
  ftp> put file_name option1=value1,...
  ```

"host_name" is the printer host name. "file_name" is the file name you want to print.

The device option is specified in the form of "option=value". For details about types of device options and values, see the following explanations.

For example, the following settings are for printing with rsh, rcp, and ftp : switch to PostScript, feed paper from paper feed tray 1, set the printing amount to 3 sets, and print with the resolution set to 600 dpi (host_name :nphost, file_name :file1).

- rsh

  ```
  % rsh nphost print filetype=postscript,tray=tray1,copies=3,resolution=600 <
  file1
  ```

- rcp

  ```
  % rcp file1 nphost:filetype=postscript,tray=tray1,copies=3,resolution=600
  ```

- ftp

  ```
  ftp> put file1 filetype=postscript,tray=tray1,copies=3,resolution=600
  ```

Note

- Multiple options must be separated by commas (,). Do not use spaces.
- When the printing file contains the PostScript commands that control the options, the command takes priority.

- Enter the option using the lp or lpr command, when the shell script is implemented.
- The option settings made here are configured as default. You must create another printer if you want to change printer option settings. For details about changing the configured option, see "Deleting the printer".
- When printing with the lp command, use (_) instead of (=) and (;) instead of (,) for operating systems that cannot use (=) and (,) such as Solaris 2.5 or later.

Reference

- p.11 "Deleting the printer"

Using the cd command with ftp

For printing with ftp, if the option is specified using the cd command, it becomes available whenever the put or mput command is used.

```
ftp> cd option
```

Note

- The pwd command shows the current option settings.

  ```
  ftp> pwd
  ```

List of the device options

Device option	Value	Function summary
filetype	rpcs (rcs), pcl, postscript (rps), pdf, pictbridge	Specifies the printer language for printing.
filter	text	Specifies the text printing.
tray	tray1 - tray4, lct, bypass, all	Specifies the input tray.
paper	a3, a3wide, a4, a5, a6, jisb4, jisb5, jisb6, ledger, letter, governmentlg, engquatro, halfletter, legal, executive, fgl, foolscap, folio, com10, c5, c6, dl, monarch, k8, k16, inch11x15, inch10x14, custom	Specifies the paper size.

Device option	Value	Function summary
mediatype	plain, recycled, special, special2, special3, thick, thick2, thick3, thick4, thin, transparency, letterhead, preprinted, labels, bond, cardstock, thickduplexbackside, thickduplexbackside2, thickduplexbackside3, thickduplexbackside4, color, middlethick, plainorrecycled, envelope, coated, glossy, glossycoated, thickglossycoated, matcoated,thickmatcoated, waterproof, auto	Specifies the paper type.
outbin	upper, inner, lower, finishershift, finisherproof, finisherbooklet	Specifies the output tray.
copies	Number of copies (1-999)	Specifies the number to collate.
qty	Number of collated sets (1-999)	Specifies the number to collate.
duplex	on, off	Specifies whether duplex printing is on or off.
binding	longedge, shortedge, left, right, top	Specifies the binding direction for duplex printing.
orientation	portrait, landscape	Specifies the feed direction of the paper.
image direction	normal, reverse	Specifies the print image rotation.
resolution	value of resolution (200, 300, 400, 600, 1200)	Specifies the resolution for printing.
bitsperdot	1, 2, 4	Specifies the print quality.
billing code	Value of billing code (0x09 (<HT>), 0x20-0xFF (except 0x22))	Specifies the billing code.

Device option	Value	Function summary
staple	off, lefttopslantport, lefttopslantland, lefttopvertport, lefttopvertland, lefttophorizport, lefttophorizland, left2port, left2land, righttopslantport, righttopslantland, righttopvertport, righttopvertland, righttophorizport, righttophorizland, right2port, right2land, top2port, top2land, booklet, lefttop, righttop	Specifies the staple position.
punch	off, leftport, leftland, rightport, rightland, topport, topland	Specifies the punch position.
punchhole	us2, eu4, neu4, us3	Specifies the number of punch holes.
usercode	Value of user code (0x21 to 0x7e, except 0x22)	Specifies the usercode.

Device option	Value	Function summary
symbol set	arabic8, desktop, greek8, hebrew7, hebrew8, iso4, iso6, iso11, iso15, iso17, iso21, iso60, iso69, isocyr, isogrk, isoheb, isol1, isol2, isol5, isol6, isol9, legal, math8, mctext, mspubl, pc8, pc775, pc850, pc851, pc852, pc858, pc862, pc864, pc866, pc866u, pc8dn, pc8grk, pc8tk, pc-1004, pifont, psmath, pstext, roman8, roman9, ucs2, win baltic, win30, winarb, wincyr, wingrk, winl1, winl2, winl5	Specify the set of print characters.

Printer Language

Select a printer language to be used.

```
filetype=printer language
fil=printer language
```

Printer language	Value
RPCS	rpcs or rcs
PCL 5c or PCL 5e	pcl
PostScript 3	postscript or rps
PDF	pdf
PictBridge	pictbridge

The following sample shows how to print with PostScript 3 (host name: nphost, file name: file1):

- rsh

  ```
  % rsh nphost print filetype=postscript < file1
  ```

- rcp

  ```
  % rcp file1 nphost:filetype=postscript
  ```

- ftp

```
ftp> put file1 filetype=postscript
```

Text Printing

Set this function when printing text files directly.

`filter=text`

The following sample shows how to print text files directly.

- rsh

  ```
  % rsh nphost print filter=text < file1
  ```

- rcp

  ```
  % rcp file1 nphost:filter=text
  ```

- ftp

  ```
  ftp> put file1 filter=text
  ```

Input Tray

Select a default input tray.

Important

- **Only installed input trays are available.**

`tray=value of input tray`

Input tray	Value
Tray 1	tray1
Tray 2	tray2
Tray 3	tray3
Tray 4	tray4
Large Capacity Tray (LCT)	lct
Bypass tray	bypass
Auto Tray Select	all

The following sample shows how to print from tray 2 (host name: nphost, file name: file1):

- rsh

```
% rsh nphost print tray=tray2 < file1
```

- rcp

```
% rcp file1 nphost:tray=tray2
```

- ftp

```
ftp> put file1 tray=tray2
```

Note

- The value or actions that can be selected differ depending on the model you are using. For details about available tray, see the manual that comes with this machine.

Paper Size

Select the paper size.

Important

- **Only the loaded paper sizes are available.**
- **When PostScript 3 is selected in Printer Language, and a custom paper size that exceeds "297x418.4 mm" is specified, a printout is counted as an A3 size output. Be careful if you are using the charge option, etc.**

```
paper=value of paper size
```

Paper size	Value
A3	a3
12 × 18	a3wide
A4	a4
A5	a5
A6	a6
B4JIS (Japanese Industrial Standard)	jisb4
B5JIS	jisb5
B6JIS	jisb6
11 × 17	ledger
11 × 15	inch11x15
10 × 14	inch10x14

Paper size	Value
$8^1/_2 \times 14$	legal
$8^1/_2 \times 11$	letter
$8^1/_4 \times 14$	governmentlg
8×10	engquatro
$5^1/_2 \times 8^1/_2$	halfletter
$7^1/_4 \times 10^1/_2$	executive
8×13	fgl
$8^1/_2 \times 13$	foolscap
$8^1/_4 \times 13$	folio
$4^1/_8 \times 9^1/_2$	com10
6.38 × 9.02 (162 × 229 mm)	c5
4.49 × 6.38 (114 × 162 mm)	c6
4.33 × 8.66 (110 × 220 mm)	dl
$3^7/_8 \times 7^1/_2$	monarch
10.5 × 15 .35 (267 × 390 mm)	K8
7.68 × 10 .5 (195 × 267 mm)	k16
Custom size	custom

The following sample shows how to print using A4 size paper (host name: nphost, file name: file1):

- rsh

  ```
  % rsh nphost print paper=a4 < file1
  ```

- rcp

  ```
  % rcp file1 nphost:paper=a4
  ```

- ftp

  ```
  ftp> put file1 paper=a4
  ```

Note

- The value or actions that can be selected differ depending on the model you are using. For details about available paper size, see the manual that comes with this machine.

Paper Type

Select the paper type.

1

Important

- **Only the loaded paper types are available.**

```
mediatype=value of paper type
```

Paper type	Value
Plain paper/recycled paper	plainorrecycled
Plain paper	plain
Recycled paper	recycled
Special paper	special
Special paper2	special2
Special paper3	special3
Thick paper	thick
	thick2
	thick3
	thick4
Thin Paper	thin
OHP transparency	transparency
Letterhead	letterhead
Preprinted paper	preprinted
Labels	labels
Bond paper	Bond
Cardstock	cardstock

Paper type	Value
Thick paper (Duplex backside)	thickduplexbackside
	thickduplexbackside2
	thickduplexbackside3
	thickduplexbackside4
Middle thick	middlethick
Envelope	envelope
Color Paper	color
Coated Paper	coated
Glossy Paper	glossy
Coated (Glossy)	glossycoated
Coated (Glossy: Thick paper)	thickglossycoated
Coated (Matted)	matcoated
Coated (Matted: Thick paper)	thickmatcoated
Waterproof	waterproof
Auto Paper Select	auto

The following sample shows how to print using recycled paper (host name: nphost, file name: file1):

- rsh

  ```
  % rsh nphost print mediatype=recycled < file1
  ```

- rcp

  ```
  % rcp file1 nphost:mediatype=recycled
  ```

- ftp

  ```
  % ftp> put file1 mediatype=recycled
  ```

Note

- The value or actions that can be selected differ depending on the model you are using. For details about available paper type, see the manual that comes with this machine.

Output Tray

Select the output tray.

Important

- **Only installed output trays are available.**

```
outbin=value of output tray
```

Value
upper, inner, lower, finishershift, finisherproof, finisherbooklet

The following sample shows how to print to the standard tray (standard tray: upper, host name: nphost, file name: file1):

- rsh

  ```
  % rsh nphost print outbin=upper < file1
  ```

- rcp

  ```
  % rcp file1 nphost:outbin=upper
  ```

- ftp

  ```
  ftp> put file1 outbin=upper
  ```

Note

- The value or actions that can be selected differ depending on the model you are using. For details about available output tray, see the manual that comes with this machine.

Copies

Specify the number of copies.

```
copies=number of copies (1 to 999)
```

Important

- **Do not specify "copies" and "qty *1 " commands at the same time.**

  *1 "qty" specifies the number of collated sets.

The following sample shows how to print 10 copies (host name: nphost, file name: file1):

- rsh

  ```
  % rsh nphost print copies=10 < file1
  ```

- rcp

  ```
  % rcp file1 nphost:copies=10
  ```

- ftp

  ```
  ftp> put file1 copies=10
  ```


Collating

Specify the number of collated sets.

```
qty=number of collated sets (1 to 999)
```

The following sample shows how to print 10 copies using the collate function (host name: nphost, file name: file1):

- rsh

  ```
  % rsh nphost print qty=10 < file1
  ```

- rcp

  ```
  % rcp file1 nphost:qty=10
  ```

- ftp

  ```
  ftp> put file1 qty=10
  ```

Duplex Printing

This option enables duplex printing.

Important

- **The duplex unit is required.**

```
duplex=value of duplex printing
```

Duplex printing	Value
enable	on
disable	off

The following sample shows how to set duplex printing (host name: nphost, file name: file1):

- rsh

  ```
  % rsh nphost print duplex=on,binding=longedge < file1
  ```

- rcp

  ```
  % rcp file1 nphost:duplex=on,binding=longedge
  ```

- ftp

  ```
  ftp> put file1 duplex=on,binding=longedge
  ```

1

Note

- Before selecting duplex, the binding option must be set to on.
- Data and paper volume affect the completion of the print job.
- For details about available paper size for duplex printing, see the manual that comes with this machine.

Binding

Select the binding direction for duplex printing.

Important

- **The duplex unit is required.**

```
binding=value of binding
```

Binding direction	Value
Longedge	longedge
Shortedge	shortedge
Left	left
Right	right
Top	top

The following sample shows how to set duplex printing and long-edge binding (host name: nphost, file name: file1):

- rsh

  ```
  % rsh nphost print duplex=on,binding=longedge < file1
  ```

- rcp

  ```
  % rcp file1 nphost:duplex=on,binding=longedge
  ```

- ftp

  ```
  ftp> put file1 duplex=on,binding=longedge
  ```

Note

- Before selecting the binding option, the duplex option must be set to on.
- Data and paper volume affect completion of the print job.

Orientation

Select the paper feed orientation.

```
orientation=feed direction (portrait or landscape)
```

Orientation	value
Portrait	portrait
Landscape	landscape

The following sample shows how to print the paper vertically using the orientation function (host name : nphost, file name : file1):

- rsh

  ```
  % rsh nphost print orientation=portrait < file1
  ```

- rcp

  ```
  % rcp file1 nphost:orientation=portrait
  ```

- ftp

  ```
  ftp> put file1 orientation=portrait
  ```

Image Direction

Select the print image rotation.

```
imagedirection=value of print image rotation
```

Rotation	Value
0 degree	normal
180 degrees	reverse

The following sample shows how to print the 180 degrees rotation using the imagedirection function (host name : nphost, file name : file1):

- rsh

  ```
  % rsh nphost print imagedirection = reverse < file1
  ```

- rcp

  ```
  % rcp file1 nphost: imagedirection = reverse
  ```

- ftp

  ```
  ftp> put file1 imagedirection = reverse
  ```

Resolution

Select the printing resolution.

```
resolution=value of resolution
```

Resolution	Value
1200 dpi	1200
600 dpi	600
400 dpi	400
300 dpi	300
200 dpi	200

The following sample shows how to print with 600 dpi and better quality. (host name: nphost, file name: file1):

- rsh

  ```
  % rsh nphost print resolution=600 < file1
  ```

- rcp

  ```
  % rcp file1 nphost:resolution=600
  ```

- ftp

  ```
  ftp> put file1 resolution=600
  ```

Gradation Quality

Select this option to improve print quality.

Important

- **Before you can select the bitsperdot option, the printer language must be set to PostScript 3 and the resolution must be set to 600 dpi.**

```
bitsperdot=value of gradation quality
```

Gradation quality	Value
Super Fine	4
Fine	2
Standard	1

The following sample shows how to print with 600 dpi and the fine quality. (host name: nphost, file name: file1):

- rsh

  ```
  % rsh nphost print filetype=postscript,resolution=600,bitsperdot=2 < file1
  ```

- rcp

  ```
  % rcp file1 nphost:filetype=postscript,resolution=600,bitsperdot=2
  ```

- ftp

  ```
  ftp> put file1 filetype=postscript,resolution=600,bitsperdot=2
  ```

Billing Code

Specify the billing code.

`billingcode=Value of billingcode (0x09(<HT>), 0x20-0xFF (except 0x22))` *1

*1 MAX 228 bytes = 255byte (Max number of characters allowed for each PJL command line on GW-PJL source) - 27 bytes (number of characters for @PJL SET BILLINGCODE = ""<CR><LF>)

- rsh

  ```
  % rsh nphost print billingcode=0x09 < file1
  ```

- rcp

  ```
  % rcp file1 nphost: billingcode=0x09
  ```

- ftp

  ```
  ftp> put file1 billingcode=0x09
  ```

Note

- Note that PJL syntax allows unlimited spaces (for example, more than one space can be placed between "@PJL" and "SET," or before/after the "=" sign).
- Therefore, a password can be less than the maximum value (228 bytes).
- This also implies the maximum value (228 bytes) is secured as long as the normal syntax is used.

Staple

Select the staple position for the output.

Important

- **When using this option, the optional finisher unit is required.**

`staple=value of staple position`

Position	Value
Off	off
Left top	lefttop
Right top	righttop
Left top horiz	lefttophorizland, lefttophorizport
Left top slant	lefttopslantland, lefttopslantport
Left top vert	lefttopvertland, lefttopvertport
Right top horiz	righttophorizland, righttophorizport
Right top slant	righttopslantland, righttopslantport
Right top vert	righttopvertland, righttopvertport
Left 2	left2land, left2port
Right 2	right2land, right2port
Top 2	top2land, top2port
Booklet	booklet

The following sample shows how to print with the staple on the upper left using finisher shift tray (host name : nphost, file name : file1, finisher shift tray):

- rsh

  ```
  % rsh nphost print staple=lefttop,outbin=finishershift <file1
  ```

- rcp

  ```
  % rcp file1 nphost:staple=lefttop,outbin=finishershift
  ```

- ftp

  ```
  ftp> put file1 staple=lefttop,outbin=finishershift
  ```

Note

- Available staple positions vary depending on type of installed output tray. For details about staple, see the manual that comes with this machine.

Punch, Punchhole

Select the punch position for the output and the number of punch holes.

Important

- **When using this option, the optional finisher unit is required.**

`punch=value of punch position`

Position	Value
Off	off
Left	leftport leftland
Right	rightport rightland
Top	topport topland

`punchhole=value of punchhole`

Available numbers of punch holes may vary depending on the type of installed Punch Kit. Specify an appropriate value referring to the table below.

Number of punch holes	Value
2	us2
3	us3
4	eu4, neu4

The following sample shows how to print with four punch holes on the left using finisher tray 1 (host name : nphost, file name : file1, finisher tray 1: finishershift).

- rsh

  ```
  % rsh nphost print punch=leftport,punchhole=eu4,outbin=
  finishershift < file1
  ```

- rcp

  ```
  % rcp file1 nphost:punch=leftport,punchhole=eu4,outbin=
  finishershift
  ```

- ftp

  ```
  ftp > put file1 punch=leftport,punchhole=eu4,outbin=finishershift
  ```

Note

- Available punch positions may vary depending on the type of installed output tray. For details about punch, see the manual that comes with this machine.
- When "punchhole" is not specified, the machine executes the punch function by the default number of punch holes.
- When "punchhole" is not specified correctly, the machine does not execute the function.

Usercode

Specify the usercode.

```
Usercode=\"value of usercode\"
```

The usercode must be specified using up to eight digits.

The usercode must be inside double quotation marks (" ").

Some operating systems cannot forward the user code if it is inside double quotation marks. If this is the case, include escape characters such as back slashes (\) (0x5c) in place of double quotation marks.

- rsh

  ```
  % rsh nphost print usercode=\"12345\" < file1
  ```

- rcp

  ```
  % rcp file1 nphost: usercode=\"12345\"
  ```

- ftp

  ```
  ftp> put file1 USERCODE=\"12345\"
  ```

Note

- If you are printing with the ftp command, enter the usercode in uppercase letters.

Symbol Set

Select the set of print characters for the chosen font.

Important

- **This function is only for PCL.**

```
symset=value of font
```

Symbol Set	Value
Arabic-8	arabic8
Desktop	desktop

Symbol Set	Value
Greek-8	greek8
Hebrew-7	hebrew7
Hebrew-8	hebrew8
ISO 4	iso4
ISO 6	iso6
ISO 11	iso11
ISO 15	iso15
ISO 17	iso17
ISO 21	iso21
ISO 60	iso60
ISO 69	iso69
ISO Cyrillic	isocyr
ISO Greek	isogrk
ISO Hebrew	isoheb
ISO L1	isol1
ISO L2	isol2
ISO L5	isol5
ISO L6	isol6
ISO L9	isol9
Legal	legal
Math-8	math8
MC Text	mctext
MS Publ	mspubl
PC-8	pc8
PC-775	pc775

Symbol Set	Value
PC-850	pc850
PC-851	pc851
PC-852	pc852
PC-858	pc858
PC-862	pc862
PC-864	pc864
PC-866	pc866
PC-866U	pc866u
PC-1004	Pc-1004
PC-8 D/N	pc8dn
PC-8 Greek	pc8grk
PC8-TK	pc8tk
Pifont	pifont
PS Math	psmath
PS Text	pstext
Roman-8	roman8
Roman-9	roman9
UCS-2	ucs2
Win 3.0	win30
Win Arabic	winarb
Win Baltic	win baltic
Win Cyrillic	wincyr
Win Greek	wingrk
Win L1	winl1
Win L2	winl2

Symbol Set	Value
Win L5	winl5

The following sample shows how to print the ISO 4 character set (host name : nphost, file name : file1):

- rsh

  ```
  % rsh nphost print symset=iso4 < file1
  ```

- rcp

  ```
  % rcp file1 nphost:symset=iso4
  ```

- ftp

  ```
  ftp> put file1 symset=iso4
  ```

Trademarks

Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries.

Microsoft®, Windows®, Windows Server®, and Windows Vista® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Monotype is a registered trademark of Monotype Imaging, Inc.

NetWare, IPX, IPX/SPX are either registered trademarks or trademarks of Novell, Inc.

PCL® is a registered trademark of Hewlett-Packard Company.

PictBridge is a trademark.

PostScript is a registered of Adobe Systems Incorporated.

RED HAT is a registered trademark of Red Hat, Inc.

Sun, SunOS and Solaris are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.

UNIX is a registered trademark of The Open Group.

UPnP™ is a trademark of the UPnP Implementers Corporation.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all right to those marks.

The proper names of the Windows operating systems are as follows:

- The product names of Windows 2000 are as follows:

  Microsoft® Windows® 2000 Professional

  Microsoft® Windows® 2000 Server

  Microsoft® Windows® 2000 Advanced Server
- The product names of Windows XP are as follows:

  Microsoft® Windows® XP Professional Edition

  Microsoft® Windows® XP Home Edition

  Microsoft® Windows® XP Media Center Edition

  Microsoft® Windows® XP Tablet PC Edition
- The product names of Windows Vista are as follows:

  Microsoft® Windows Vista® Ultimate

  Microsoft® Windows Vista® Business

  Microsoft® Windows Vista® Home Premium

  Microsoft® Windows Vista® Home Basic

  Microsoft® Windows Vista® Enterprise
- The product names of Windows 7 are as follows:

Microsoft® Windows® 7 Home Premium

Microsoft® Windows® 7 Professional

Microsoft® Windows® 7 Ultimate

Microsoft® Windows® 7 Enterprise

- The product names of Windows Server 2003 are as follows:

  Microsoft® Windows Server® 2003 Standard Edition

  Microsoft® Windows Server® 2003 Enterprise Edition

- The product names of Windows Server 2003 R2 are as follows:

  Microsoft® Windows Server® 2003 R2 Standard Edition

  Microsoft® Windows Server® 2003 R2 Enterprise Edition

- The product names of Windows Server 2008 are as follows:

  Microsoft® Windows Server® 2008 Standard

  Microsoft® Windows Server® 2008 Enterprise

- The product names of Windows Server 2008 R2 are as follows:

  Microsoft® Windows Server® 2008 R2 Standard

  Microsoft® Windows Server® 2008 R2 Enterprise

INDEX

B

Before setup....7
Billing code....37
Binding....34
BSD UNIX workstation....17, 20

C

Collating....33
Configuring the device option....22
Copies....32
Copying information....21

D

Deleting the printer....11
Device option....22
Duplex printing....33

F

ftp....17, 20
ftp commands....7

G

Gradation quality....36

H

How to read this manual....4
HP-UX....15, 17, 20

I

Image direction....35
Input tray....27
Installation shell script....8, 9, 12
IP address....8

L

Laws and regulations....5
Legal prohibition....5
Linux....17, 20
lp....17
lp commands....7
lpq....20
lpr....17
lpr commands....7
lpstat....20

N

Note....4
Notice....3

O

Orientation....35
Output tray....32

P

Paper size....28
Paper type....30
Print job status....20
Printer language....26
Printer status....20
Printing method....17
Punch....38
Punchhole....38

R

rcp....17
rcp commands....7
Resolution....36
rsh....17, 20
rsh commands....7

S

Solaris....14, 17, 20
Staple....37
Symbol set....40
System V UNIX....20

T

Text printing....27
Trademarks....44

U

Usercode....40

MEMO

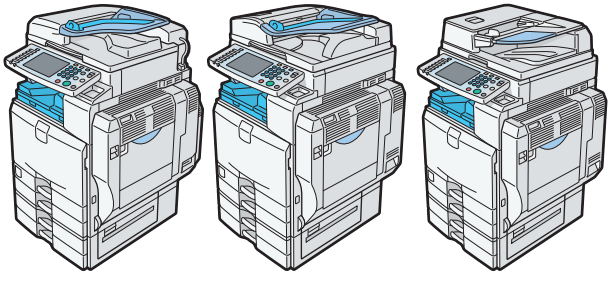
© 2010

Operating Instructions UNIX Supplement

GB EN
US EN
AU EN
D088-7968A

*C**9130**/C**9135**/C**9145**/C**9145**A/C**9155**/C**9155**A*
*C**9130**G/C**9135**G/C**9145**G/C**9145**AG/C**9155**G/C**9155**AG*
LD630C/LD635C/LD645C/LD645CA/LD655C/LD655CA
LD630CG/LD635CG/LD645CG/LD645CAG/LD655CG/LD655CAG
Aficio™ MP C3001/C3501/C4501/C4501A/C5501/C5501A
Aficio™ MP C3001G/C3501G/C4501G/C4501AG/C5501G/C5501AG

Operating Instructions
Security Reference



1 Getting Started
2 Configuring Administrator Authentication
3 Configuring User Authentication
4 Protecting Data from Information Leaks
5 Securing Information Sent over the Network or Stored on Hard Disk
6 Managing Access to the Machine
7 Enhanced Network Security
8 Specifying the Extended Security Functions
9 Troubleshooting
10 Appendix

Read this manual carefully before you use this machine and keep it handy for future reference. For safe and correct use, be sure to read the Safety Information in "About This Machine" before using the machine.

TABLE OF CONTENTS

Manuals for This Machine....8
Notice....10
Important....10
How to Read This Manual....11
Symbols....11
IP Address....11
Notes....11

1. Getting Started

Before Using the Security Functions....13
Setting up the Machine....14
Enhanced Security....17
Glossary....18
Security Measures Provided by this Machine....20
Using Authentication and Managing Users....20
Ensuring Information Security....20
Limiting and Controlling Access....22
Enhancing Network Security....22

2. Configuring Administrator Authentication

Administrators....25
User Administrator....25
Machine Administrator....26
Network Administrator....26
File Administrator....26
Supervisor....26
About Administrator Authentication....27
Enabling Administrator Authentication....29
Specifying Administrator Privileges....29
Registering the Administrator....32
Logging in Using Administrator Authentication....35
Logging out Using Administrator Authentication....36
Changing the Administrator....36
Using Web Image Monitor to Configure Administrator Authentication....37

3. Configuring User Authentication

Users....39
About User Authentication....40
Configuring User Authentication....41
Enabling User Authentication....42
User Code Authentication....43
Specifying User Code Authentication....43
Basic Authentication....47
Specifying Basic Authentication....47
Authentication Information Stored in the Address Book....49
Specifying Login User Names and Passwords....50
Specifying Login Details....52
Windows Authentication....54
Specifying Windows Authentication....55
Installing Internet Information Services (IIS) and Certificate Services....63
Creating the Server Certificate....64
Installing the Device Certificate (Issued by a Certificate Authority)....64
Installing an Intermediate Certificate (Issued by a Certificate Authority)....65
If the Fax Number Cannot be Obtained....66
LDAP Authentication....67
Specifying LDAP Authentication....68
Integration Server Authentication....75
Specifying Integration Server Authentication....75
Printer Job Authentication....82
If User Authentication is Specified....85
If User Code Authentication is Specified....85
If Basic, Windows, LDAP or Integration Server Authentication is Specified....86
Logging in Using Web Image Monitor....89
Logging out Using Web Image Monitor....89
User Lockout Function....89
Auto Logout....92
Authentication Using an External Device....94

4. Protecting Data from Information Leaks

Printing a Confidential Document....95
Specifying Locked Print File....95
Printing a Locked Print File....96
Deleting Locked Print Files....97
Changing the Password of a Locked Print File....98
Unlocking a Locked Print File....99
Configuring Access Permissions for Stored Files....101
Specifying User and Access Permissions for Stored Files....102
Changing the Owner of a Document....105
Specifying Access Permissions for Files Stored Using the Scanner and Fax Functions....105
Specifying User and Access Permissions for Files Stored by a Particular User....109
Specifying Passwords for Stored Files....110
Unlocking Files....111

5. Securing Information Sent over the Network or Stored on Hard Disk

Preventing Information Leakage Due to Unauthorized Transmission....113
Restricting Destinations....113
Using S/MIME to Protect E-mail Transmission....116
E-mail Encryption....116
Attaching an Electronic Signature....118
Protecting the Address Book....125
Configuring Address Book Access Permissions....125
Encrypting Data in the Address Book....126
Encrypting Data on the Hard Disk....129
Enabling the Encryption Settings....129
Printing the Encryption Key....133
Updating the Encryption Key....134
Canceling Data Encryption....135
Deleting Data on the Hard Disk....137
Conditions for Use....137
Auto Erase Memory....138
Erase All Memory....142

6. Managing Access to the Machine

Preventing Changes to Machine Settings....147
Menu Protect....149
Enabling Menu Protect....149
Disabling Menu Protect....149
Specifying Menu Protect....149
Limiting Available Functions....154
Specifying Which Functions are Available....154
Managing Print Volume per User....156
Limiting Print Volume per User....156
Specifying the Maximum Use Count per User....160
Checking Print Volume per User....162
Printing a List of Print Volume Use Counters....163
Clearing Print Volume Use Counters....164
Managing Log Files....167
Using the Control Panel to Specify Log File Settings....167
Using Remote Communication Gate S to Manage Log Files....169
Using Web Image Monitor to Manage Log Files....169
Logs That Can Be Managed Using Web Image Monitor....177

7. Enhanced Network Security

Preventing Unauthorized Access....195
Access Control....195
Enabling and Disabling Protocols....196
Specifying Network Security Level....204
Encrypting Transmitted Passwords....208
Specifying a Driver Encryption Key....208
Specifying an IPP Authentication Password....209
Protection Using Encryption....211
SSL (Secure Sockets Layer) Encryption....211
User Settings for SSL (Secure Sockets Layer)....217
Setting the SSL/TLS Encryption Mode....218
Enabling SSL for SMTP Connections....219
SNMPv3 Encryption....220

Transmission Using IPsec....222
Encryption and Authentication by IPsec....222
Encryption Key Auto Exchange Settings and Encryption Key Manual Settings....223
IPsec Settings....224
Encryption Key Auto Exchange Settings Configuration Flow....232
Encryption Key Manual Settings Configuration Flow....237
telnet Setting Commands....238
Authentication by telnet....246
"authfree" Command....246
Authentication by IEEE802.1X....247

8. Specifying the Extended Security Functions

Specifying the Extended Security Functions....249
Changing the Extended Security Functions....249
Extended Security Settings....250
Other Security Functions....255
Fax Function....255
Scanner Function....255
System Status....256
Limiting Machine Operations to Customers Only....257
Settings....257
Additional Information for Enhanced Security....260
Settings You Can Configure Using the Control Panel....260
Settings You Can Configure Using Web Image Monitor....263
Settings You Can Configure When IPsec Is Available/Unavailable....264

9. Troubleshooting

If Authentication Fails....267
If a Message is Displayed....267
If an Error Code is Displayed....269
If the Machine Cannot Be Operated....285

10. Appendix

Supervisor Operations....291
Logging in as the Supervisor....291
Logging out as the Supervisor....292

Changing the Supervisor....292
Resetting the Administrator's Password....293
User Administrator Settings....295
System Settings....295
Settings via Web Image Monitor....296
Machine Administrator Settings....297
System Settings....297
Maintenance....299
Copier / Document Server Features....299
Facsimile Features....300
Printer Features....301
Scanner Features....302
Extended Feature Settings....303
Settings via Web Image Monitor....303
Network Administrator Settings....308
System Settings....308
Facsimile Features....309
Printer Features....309
Scanner Features....309
Settings via Web Image Monitor....310
File Administrator Settings....313
System Settings....313
Facsimile Features....313
Printer Features....314
Settings via Web Image Monitor....314
Document Server File Permissions....315
The Privilege for User Account Settings in the Address Book....317
User Settings - Control Panel Settings....321
System Settings....322
Copier / Document Server Features....330
Printer Functions....336
Printer Features....337
Scanner Features....341

Facsimile Features....343
Maintenance....346
User Settings - Web Image Monitor Settings....347
Device Settings....348
Printer....355
Scanner....361
Fax....363
Interface....366
Network....368
Webpage....372
Trademarks....373
INDEX....375

Manuals for This Machine

Read this manual carefully before you use this machine.

Refer to the manuals that are relevant to what you want to do with the machine.

Important

- **Media differ according to manual.**
- **The printed and electronic versions of a manual have the same contents.**
- **Adobe Acrobat Reader/Adobe Reader must be installed in order to view the manuals as PDF files.**
- **A Web browser must be installed in order to view the html manuals.**
- **For enhanced security, we recommend that you first make the following settings. For details, see "Setting up the Machine".**
  - **Install the Device Certificate.**
  - **Enable SSL (Secure Sockets Layer) Encryption.**
  - **Change the user name and password of the administrator using Web Image Monitor.**

About This Machine

Before using the machine, be sure to read the section of this manual entitled Safety Information.

This manual introduces the machine's various functions. It also explains the control panel, preparation procedures for using the machine, how to enter text, how to install the CD-ROMs provided, and how to replace paper, toner, staples, and other consumables.

Troubleshooting

Provides a guide for resolving common usage-related problems.

Copy and Document Server Reference

Explains Copier and Document Server functions and operations. Also refer to this manual for explanations on how to place originals.

Facsimile Reference

Explains Facsimile functions and operations.

Printer Reference

Explains Printer functions and operations.

Scanner Reference

Explains Scanner functions and operations.

Network and System Settings Reference

Explains how to connect the machine to a network, configure and operate the machine in a network environment, and use the software provided. Also explains how to change User Tools settings and how to register information in the Address Book.

Security Reference

This manual is for administrators of the machine. It explains security functions that you can use to prevent unauthorized use of the machine, data tampering, or information leakage. Be sure to read this manual when setting the enhanced security functions, or user and administrator authentication.

PostScript 3 Supplement

Explains how to set up and use PostScript 3.

VM Card Extended Feature Settings Device Reference

Explains how to set up the extended features settings with the machine.

VM Card Extended Feature Settings Web Reference

Explains how to set up the extended features settings using Web Image Monitor.

Other manuals

- Unix Supplement
- Quick Reference Copy Guide
- Quick Reference Printer Guide
- Quick Reference Fax Guide
- Quick Reference Scanner Guide
- App2Me Start Guide

Note

- Manuals provided are specific to machine types.
- For "UNIX Supplement", please visit our Web site or consult an authorized dealer. This manual includes descriptions of functions and settings that might not be available on this machine.
- The following software products are referred to using general names:

Product name	General name
DeskTopBinder Lite and DeskTopBinder Professional *1	DeskTopBinder
ScanRouter EX Professional *1 and ScanRouter EX Enterprise *1	the ScanRouter delivery software
Remote Communication Gate S Pro for @Remote Enterprise *1 and Remote Communication Gate S *1	Remote Communication Gate S

*1 Optional

Notice

Important

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

For good copy quality, the manufacturer recommends that you use genuine toner from the manufacturer.

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

How to Read This Manual

Symbols

This manual uses the following symbols:

Important

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

Note

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys on the machine's display or control panels.

IP Address

In this manual, "IP address" covers both IPv4 and IPv6 environments. Read the instructions that are relevant to the environment you are using.

Notes

Contents of this manual are subject to change without prior notice.

Colors on color keys or the color circle may differ slightly from the colors of actual copies.

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Depending on which country you are in, certain units may be optional. For details, please contact your local dealer.

1. Getting Started

This chapter describes the machine's security features and how to specify initial security settings.

Before Using the Security Functions

Important

- **If the security settings are not configured, the data in the machine is vulnerable to attack.**

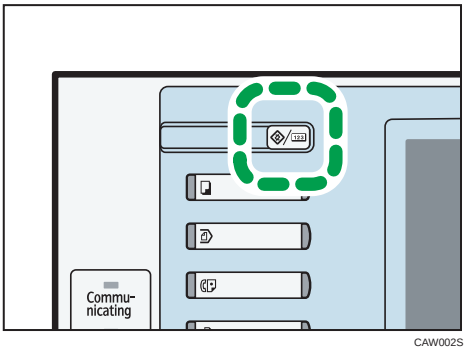
1. To prevent this machine being stolen or willfully damaged, etc., install it in a secure location.
2. Purchasers of this machine must make sure that people who use it do so appropriately, in accordance with operations determined by the machine administrator and supervisor. If the administrator or supervisor does not make the required security settings, there is a risk of security breaches by users.
3. Before setting this machine's security features and to ensure appropriate operation by users, administrators must read the Security Reference completely and thoroughly, paying particular attention to the section entitled "Before Using the Security Functions".
4. Administrators must inform users regarding proper usage of the security functions.
5. Administrators should routinely examine the machine's logs to check for irregular and unusual events.
6. If this machine is connected to a network, its environment must be protected by a firewall or similar.
7. For protection of data during the communication stage, apply the machine's communication security functions and connect it to devices that support security functions such as encrypted communication.

Setting up the Machine

This section explains how to enable encryption of transmitted data and configure the administrator account. If you want a high level of security, make the following setting before using the machine.

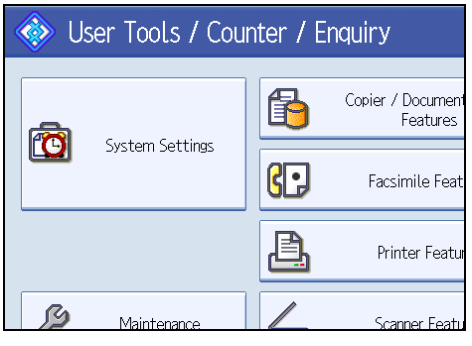
Enabling security

1. **Turn the machine on.**
2. **Press the [User Tools/Counter] key.**

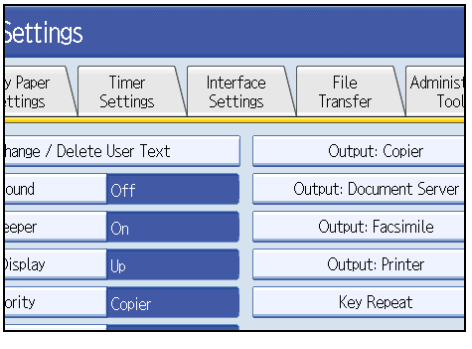


CAW002S

3. **Press [System Settings].**



4. **Press [Interface Settings].**



5. **Specify IPv4 Address.**

   For details on how to specify the IPv4 address, see "Interface Settings", Network and System Settings Reference.

6. **Be sure to connect this machine to a network that only administrators can access.**
7. **Start Web Image Monitor, and then log in to the machine as the administrator.**

   For details about logging in to Web Image Monitor as an administrator, see "Using Web Image Monitor to Configure Administrator Authentication".

8. **On the Configuration screen, click [E-mail] under "Device Setting", and then specify the administrator address in "Administrator E-mail Address".**
9. **Install the device certificate.**

   For information on how to install the device certificate, see "Protection Using Encryption".

   The settings for device certificate creation can be configured only if an administrator e-mail address is specified.

10. **Enable secure sockets layer (SSL).**

    For details about enabling SSL, see "Protection Using Encryption".

11. **Change the administrator's user name and password.**

    For details about specifying administrators' user names and passwords, see "Registering the Administrator".

    To enable higher security, proceed to step 2 in the following "Enabling enhanced security".

12. **Press [OK] twice.**

    You will be automatically logged out.

13. **Press the [User Tools/Counter] key.**

Enabling enhanced security

1. **Configure the security settings for the machine by following steps 1 to 11 in the previous section, "Enabling security".**
2. **To use only the ports that have high security, set [Network Security Level] to [Level 2].**

   If [Network Security Level] is set to [Level 2], some functions will be unavailable.

   For details, see "Specifying Network Security Level" and "Enabling and Disabling Protocols".

3. **In Web Image Monitor, log in to the machine as the network administrator and set [FTP], which has weak security, to [Inactive] and also set [SNMPv3 Function] to [Inactive].**

   For details about the functions that will be unavailable if "FTP" and "SNMPv3" are set to [Inactive], see "Enabling and Disabling Protocols".

4. **Press the [User Tools/Counter] key on the control panel.**
5. **Press [System Settings].**

6. **Press [Administrator Tools].**
7. **Press [Extended Security].**
8. **If you are not using [@Remote Service], set [@Remote Service] to [Prohibit].**

   For details about "Update Firmware", see the following "Firmware Update Cautions".
9. **Press [OK].**
10. **Press the [User Tools/Counter] key.**
11. **Disconnect this machine from the administrator-only access network, and then connect it to the general usage network environment.**

Firmware Update Cautions

If IPsec is enabled, all information on the network will be encrypted. This allows you to perform firmware updates securely.

If IPsec is not enabled, the information on the network may not be encrypted depending on the protocol. If you want to perform a firmware update when IPsec is not enabled, be sure to do so only if your network environment is protected against electronic eavesdropping and similar security threats.

Reference

- p.37 "Using Web Image Monitor to Configure Administrator Authentication"
- p.211 "Protection Using Encryption"
- p.32 "Registering the Administrator"
- p.204 "Specifying Network Security Level"
- p.196 "Enabling and Disabling Protocols"

Enhanced Security

This machine's security functions can be enhanced by managing the machine and its users using the improved authentication functions.

By specifying access limits for the machine's functions and the documents and data stored in the machine, information leaks and unauthorized access can be prevented.

Data encryption also prevents unauthorized data access and tampering via the network.

The machine also automatically checks the configuration and manufacturer of the firmware each time the main power is switched on and whenever firmware is installed.

Authentication and Access Limits

Using authentication, administrators manage the machine and its users. To enable authentication, information about both administrators and users must be registered in order to authenticate users via their login user names and passwords.

Four types of administrators manage specific areas of machine usage, such as settings and user registration.

Access limits for each user are specified by the administrator responsible for user access to machine functions and documents and data stored in the machine.

For details about the administrator, see "Administrators".

For details about the user, see "Users".

Encryption Technology

This machine can establish secure communication paths by encrypting transmitted data and passwords.

Reference

- p.25 "Administrators"
- p.39 "Users"

Glossary

Administrator

There are four types of administrators according to administrative function: machine administrator, network administrator, file administrator, and user administrator. We recommend a different person for each administrator role.

In this way, you can spread the workload and limit unauthorized operation by a single administrator.

Basically, administrators make machine settings and manage the machine; but they cannot perform normal operations, such as copying and printing.

Supervisor

The supervisor can reset an administrator's password. This is required if an administrator's password is lost or revealed, or if an administrator is changed.

The supervisor can neither perform normal operations nor specify default settings.

User

A user performs normal operations on the machine, such as copying and printing.

File Creator (Owner)

This is a user who can store files in the machine and authorize other users to view, edit, or delete those files.

Registered User

Users with personal information registered in the Address Book who have a login password and user name.

Administrator Authentication

Administrators are authenticated by their login user name and login password, supplied by the administrator, when specifying the machine's settings or accessing the machine over the network.

User Authentication

Users are authenticated by a login user name and login password, supplied by the user, when specifying the machine's settings or accessing the machine over the network.

The user's login user name and password, as well as such personal information items as facsimile number and e-mail address, are stored in the machine's address book. The personal information can be obtained from the Windows domain controller (Windows authentication), LDAP Server (LDAP authentication), or Integration Server (Integration Server authentication) connected to the machine via the network. The "Integration Server" is the computer on which Authentication Manager is installed.

Login

This action is required for administrator authentication and user authentication. Enter your login user name and login password on the machine's control panel. A login user name and login password may also be required when accessing the machine over the network or using such utilities as Web Image Monitor.

Logout

This action is required with administrator and user authentication. This action is required when you have finished using the machine or changing the settings.

Security Measures Provided by this Machine

1

Using Authentication and Managing Users

Enabling Authentication

To control administrators' and users' access to the machine, perform administrator authentication and user authentication using login user names and login passwords. To perform authentication, the authentication function must be enabled. For details about authentication settings, see "Configuring User Authentication".

Specifying Authentication Information to Log in

Users are managed using the personal information managed in the machine's Address Book.

By enabling user authentication, you can allow only people registered in the Address Book to use the machine. Users can be managed in the Address Book by the user administrator. For information on specifying information to log in, see "Basic Authentication".

Specifying Which Functions are Available

This can be specified by the user administrator. Specify the functions available to registered users. By making this setting, you can limit the functions available to users. For information on how to specify which functions are available, see "Limiting Available Functions".

Reference

- p.41 "Configuring User Authentication"
- p.47 "Basic Authentication"
- p.154 "Limiting Available Functions"

Ensuring Information Security

Printing Confidential files

Using the printer's Locked Print, you can store files in the machine as confidential files and then print them. You can print a file using the machine's control panel and collect it on the spot to prevent others from seeing it. For details about printing confidential files, see "Printing a Confidential Document".

Protecting Stored Files from Unauthorized Access

You can specify who is allowed to use and access scanned files and the files in Document Server. You can prevent activities such as the printing of stored files by unauthorized users. For details about protecting stored files from unauthorized access, see "Configuring Access Permissions for Stored Files".

Protecting Stored Files from Theft

You can specify who is allowed to use and access scanned files and the files in Document Server. You can prevent activities such as the sending and downloading of stored files by unauthorized users.

For details about protecting stored files from theft, see "Configuring Access Permissions for Stored Files".

Preventing Data Leaks Due to Unauthorized Transmission

You can specify in the Address Book which users are allowed to send files using the scanner or fax function.

You can also limit the direct entry of destinations to prevent files from being sent to destinations not registered in the Address Book. For details about preventing data leaks due to unauthorized transmission, see "Preventing Information Leakage Due to Unauthorized Transmission".

Using S/MIME to Protect E-mail Transmission

When sending mail from the scanner or forwarding a fax to a user registered in the Address Book, you can use S/MIME to protect its contents from interception and alteration, and attach an electronic signature to guarantee the sender's identity. For details about using S/MIME to protect e-mail transmission, see "Using S/MIME to Protect E-mail Transmission".

Protecting Registered Information in the Address Book

You can specify who is allowed to access the data in the Address Book. You can prevent the data in the Address Book being used by unregistered users.

To protect the data from unauthorized reading, you can also encrypt the data in the Address Book. For details about protecting registered information in the Address Book, see "Protecting the Address Book".

Managing Log Files

The logs record failed access attempts and the names of users who accessed the machine successfully. You can use this information to help prevent data leaks.

To transfer the log data, Remote Communication Gate S is required. For details about managing log files, see "Managing Log Files".

Encrypting Data on the Hard Disk

Encrypt data stored on the hard disk to prevent information leakage. For details, see "Encrypting Data on the Hard Disk".

Overwriting the Data on the Hard Disk

To prevent data leaks, you can set the machine to automatically overwrite temporary data. We recommend that before disposing of the machine, you overwrite all the data on the hard disk.

For details about overwriting the data on the hard disk, see "Deleting Data on the Hard Disk".

Reference

- p.95 "Printing a Confidential Document"
- p.101 "Configuring Access Permissions for Stored Files"
- p.113 "Preventing Information Leakage Due to Unauthorized Transmission"
- p.116 "Using S/MIME to Protect E-mail Transmission"

- p.125 "Protecting the Address Book"
- p.167 "Managing Log Files"
- p.129 "Encrypting Data on the Hard Disk"
- p.137 "Deleting Data on the Hard Disk"

Limiting and Controlling Access

Preventing Modification or Deletion of Stored Data

You can allow selected users to access stored scan files and files stored in Document Server.

You can permit selected users who are allowed to access stored files to modify or delete the files. For details about limiting and controlling access, see "Configuring Access Permissions for Stored Files".

Preventing Modification of Machine Settings

The machine settings that can be modified depend on the type of administrator account.

Register the administrators so that users cannot change the administrator settings. For details about preventing modification of machine settings, see "Preventing Changes to Machine Settings".

Limiting Available Functions

To prevent unauthorized operation, you can specify who is allowed to access each of the machine's functions. For details about limiting available functions for users and groups, see "Limiting Available Functions".

Reference

- p.101 "Configuring Access Permissions for Stored Files"
- p.147 "Preventing Changes to Machine Settings"
- p.154 "Limiting Available Functions"

Enhancing Network Security

Preventing Unauthorized Access

You can limit IP addresses or disable ports to prevent unauthorized access over the network and protect the Address Book, stored files, and default settings. For details about preventing unauthorized access, see "Preventing Unauthorized Access".

Encrypting Transmitted Passwords

We recommend you use one or more of the following security protocols: IPsec, SNMPv3, and SSL. Using these protocols can enhance your machine's security to make login and IPP authentication passwords harder to break.

Also, encrypt the login password for administrator authentication and user authentication. For details about encrypting transmitted passwords, see "Encrypting Transmitted Passwords".

Safer Communication Using SSL, SNMPv3 and IPsec

You can encrypt this machine's transmissions using SSL, SNMPv3, and IPsec. By encrypting transmitted data and safeguarding the transmission route, you can prevent sent data from being intercepted, analyzed, and tampered with. For details about safer communication using SSL, SNMPv3 and IPsec, see "Protection Using Encryption" and "Transmission Using IPsec".

Reference

- p.195 "Preventing Unauthorized Access"
- p.208 "Encrypting Transmitted Passwords"
- p.211 "Protection Using Encryption"
- p.222 "Transmission Using IPsec"

1

2. Configuring Administrator Authentication

This chapter describes what an administrator can do, how to register an administrator, how to specify administrator authentication, and how to log in to and out from the machine as an administrator.

Administrators

Administrators manage user access to the machine and various other important functions and settings.

When an administrator controls limited access and settings, first select the machine's administrator and enable the authentication function before using the machine. When the authentication function is enabled, the login user name and login password are required in order to use the machine. The roles of user administrator, machine administrator, network administrator, and file administrator can be assigned to separate administrators. Sharing administrator tasks eases the burden on individual administrators while also reducing the possibility of unauthorized access and operations. Multiple administrator roles can be assigned to one administrator, and one role can also be shared by more than one administrator. You can also specify a supervisor who can change each administrator's password. Administrators cannot use functions such as copying and printing. To use these functions, the administrator must be authenticated as the user.

For instructions on registering the administrator, see "Registering the Administrator", and for instructions on changing the administrator's password, see "Supervisor Operations". For details on Users, see "Users".

Important

- **If user authentication is not possible because of a problem with the hard disk or network, you can use the machine by accessing it using administrator authentication and disabling user authentication. Do this if, for instance, you need to use the machine urgently.**

Reference

- p.32 "Registering the Administrator"
- p.291 "Supervisor Operations"
- p.39 "Users"

User Administrator

This is the administrator who manages personal information in the Address Book.

A user administrator can register/delete users in the Address Book or change users' personal information.

Users registered in the Address Book can also change and delete their own information.

If any of the users forget their password, the user administrator can delete it and create a new one, allowing the user to access the machine again.

Machine Administrator

This is the administrator who mainly manages the machine's default settings. You can set the machine so that the default for each function can only be specified by the machine administrator. By making this setting, you can prevent unauthorized people from changing the settings and allow the machine to be used securely by its many users.

Network Administrator

This is the administrator who manages the network settings. You can set the machine so that network settings such as the IP address and settings for sending and receiving e-mail can only be specified by the network administrator.

By making this setting, you can prevent unauthorized users from changing the settings and disabling the machine, and thus ensure correct network operation.

File Administrator

This is the administrator who manages permission to access stored files. You can specify passwords to allow only registered users with permission to view and edit files stored in Document Server. By making this setting, you can prevent data leaks and tampering due to unauthorized users viewing and using the registered data.

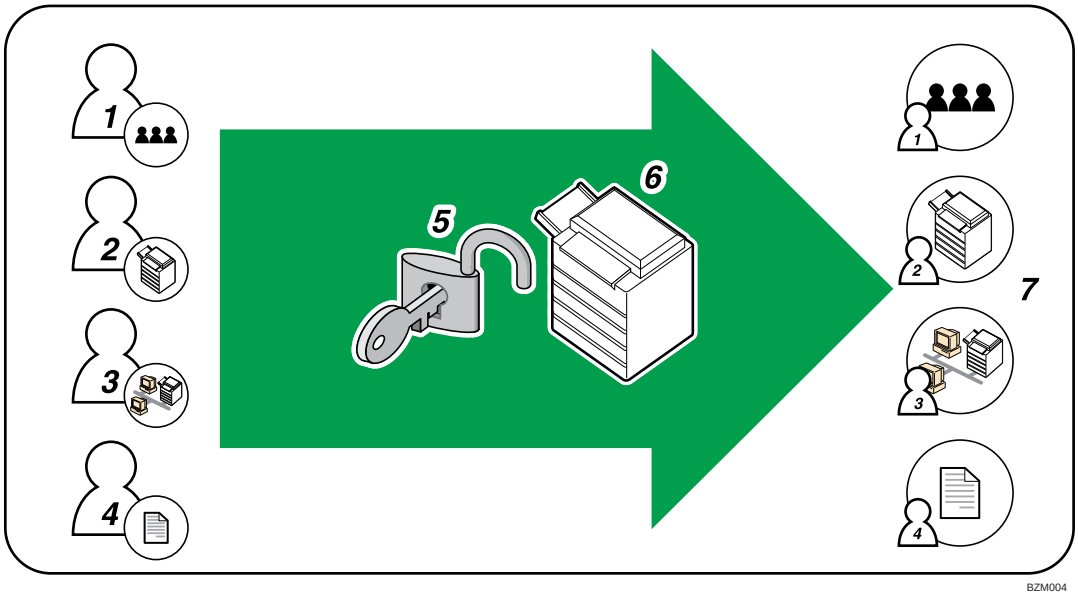
Supervisor

The supervisor can delete an administrator's password and specify a new one. The supervisor cannot specify defaults or use normal functions. However, if any of the administrators forget their password and cannot access the machine, the supervisor can provide support.

About Administrator Authentication

There are four types of administrators: user administrator, machine administrator, network administrator, and file administrator.

For details about each administrator, see "Administrators".



1. **User Administrator**

   This administrator manages personal information in the Address Book. You can register/delete users in the Address Book or change users' personal information.

2. **Machine Administrator**

   This administrator manages the machine's default settings. It is possible to enable only the machine administrator to set log deletion and other defaults.

3. **Network Administrator**

   This administrator manages the network settings. You can set the machine so that network settings such as the IP address and settings for sending and receiving e-mail can be specified by the network administrator only.

4. **File Administrator**

   This administrator manages permission to access stored files. You can specify passwords for Locked Print files stored in Document Server so that only authorized users can view and change them.

5. **Authentication**

   Administrators must enter their login user name and password to be authenticated.

6. **This machine**

7. **Administrators manage the machine's settings and access limits.**

Reference

- p.25 "Administrators"

Enabling Administrator Authentication

To control administrators' access to the machine, perform administrator authentication using login user names and passwords. When registering an administrator, you cannot use a login user name already registered in the Address Book. Administrators are handled differently from the users registered in the Address Book. Windows Authentication, LDAP Authentication and Integration Server Authentication are not performed for an administrator, so an administrator can log in even if the server is unreachable due to a network problem. Each administrator is identified by a login user name. One person can act as more than one type of administrator if multiple administrator authorities are granted to a single login user name. For instructions on registering the administrator, see "Registering the Administrator".

You can specify the login user name, login password, and encryption password for each administrator. The encryption password is used for encrypting data transmitted via SNMPv3. It is also used by applications such as SmartDeviceMonitor for Admin that use SNMPv3. Administrators are limited to managing the machine's settings and controlling user access, so they cannot use functions such as copying and printing. To use these functions, the administrator must register as a user in the Address Book and then be authenticated as the user. Specify administrator authentication, and then specify user authentication. For details about specifying authentication, see "Configuring User Authentication".

Note

- Administrator authentication can also be specified via Web Image Monitor. For details, see Web Image Monitor Help.
- You can specify User Code Authentication without specifying administrator authentication.

Reference

- p.32 "Registering the Administrator"
- p.41 "Configuring User Authentication"

Specifying Administrator Privileges

To specify administrator authentication, set "Administrator Authentication Management" to [On]. In addition, if enabled in the settings, you can choose how the initial settings are divided among the administrators as controlled items.

To log in as an administrator, use the default login user name and login password.

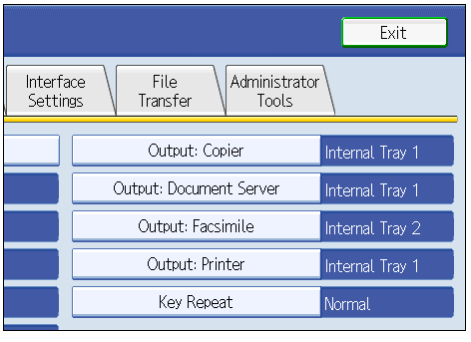
The defaults are "admin" for the login name and blank for the password. For details about changing the administrator password using the supervisor's authority, see "Supervisor Operations".

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

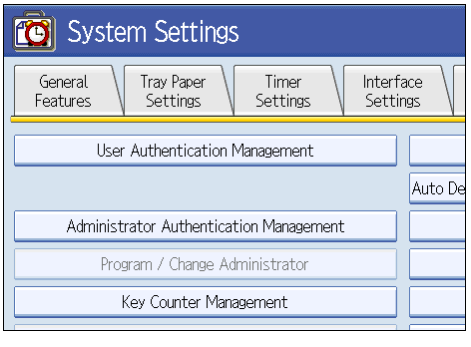
Important

- If you have enabled "Administrator Authentication Management", make sure not to forget the administrator login user name and login password. If an administrator login user name or login password is forgotten, a new password must be specified using the supervisor's authority. For instructions on registering the supervisor, see "Supervisor Operations".
- Be sure not to forget the supervisor login user name and login password. If you do forget them, a service representative will have to return the machine to its default state. This will result in all data in the machine being lost. Charges may also apply to the service call.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].
3. Press [Administrator Tools].

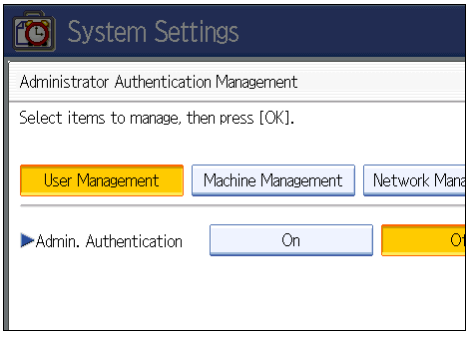


4. Press [Administrator Authentication Management].

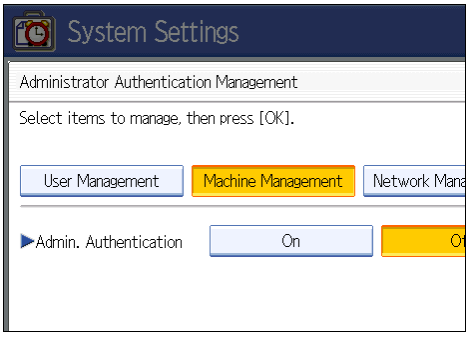


If this item is not visible, press [▼Next] to display more settings.

5. **Press [User Management], [Machine Management], [Network Management], or [File Management] to select which settings to manage.**

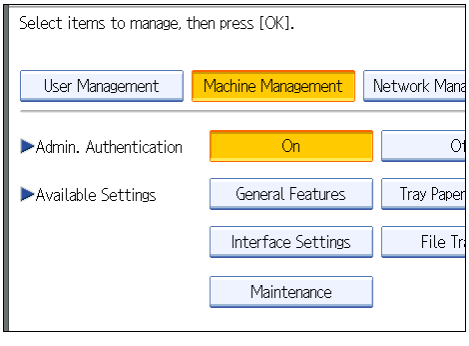


6. **Set "Admin. Authentication" to [On].**



"Available Settings" appears.

7. **Select the settings to manage from "Available Settings".**



The selected settings will be unavailable to users.

"Available Settings" varies depending on the administrator.

For details about "Available Settings", see "Limiting Available Functions".

To specify administrator authentication for more than one category, repeat steps 5 to 7.

8. **Press [OK].**
9. **Press the [User Tools/Counter] key.**

Reference

- p.291 "Supervisor Operations"
- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"
- p.154 "Limiting Available Functions"

2

Registering the Administrator

If administrator authentication has been specified, we recommend only one person take each administrator role.

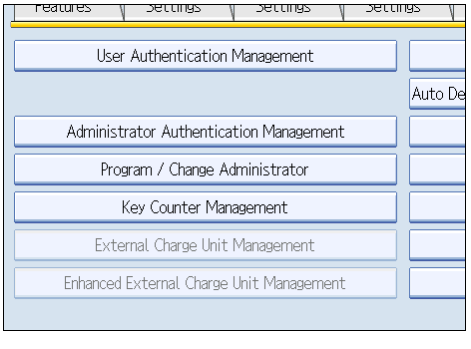
The sharing of administrator tasks eases the burden on individual administrators while also limiting unauthorized operation by a single administrator. You can register up to four login user names (Administrators 1-4) to which you can grant administrator privileges.

Administrator authentication can also be specified via Web Image Monitor. For details, see Web Image Monitor Help.

If administrator authentication has already been specified, log in using a registered administrator name and password.

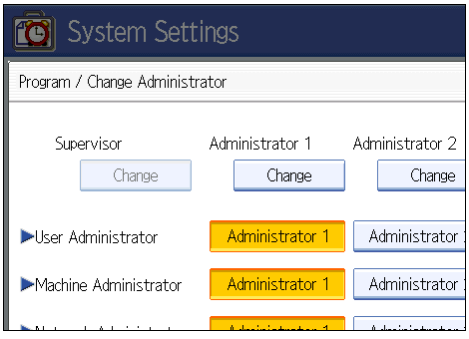
For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Program / Change Administrator].**

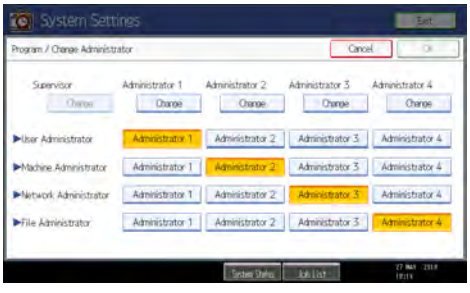


If this item is not visible, press [▼Next] to display more settings.

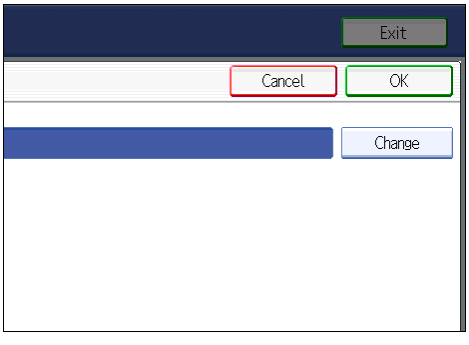
5. **In the line for the administrator whose authority you want to specify, press [Administrator 1], [Administrator 2], [Administrator 3] or [Administrator 4], and then press [Change].**



If you allocate each administrator's authority to a different person, the screen appears as follows:

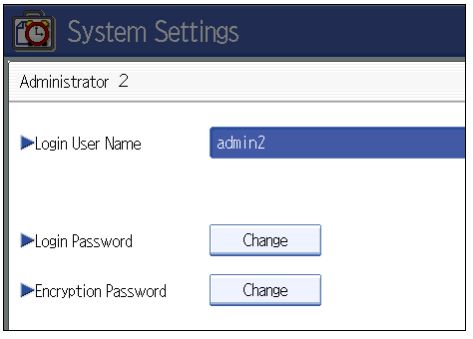


6. **Press [Change] for the login user name.**



7. **Enter the login user name, and then press [OK].**

8. **Press [Change] for the login password.**



9. **Enter the login password, and then press [OK].**

   Follow the password policy to make the login password more secure.

   For details about the password policy and how to specify it, see "Specifying the Extended Security Functions".

10. **If a password reentry screen appears, enter the login password, and then press [OK].**
11. **Press [Change] for the encryption password.**
12. **Enter the encryption password, and then press [OK].**
13. **If a password reentry screen appears, enter the encryption password, and then press [OK].**
14. **Press [OK] twice.**

    You will be automatically logged out.

15. **Press the [User Tools/Counter] key.**

Note

- When registering login user names and login passwords, you can specify up to 32 alphanumeric characters and symbols. Keep in mind that user names and passwords are case-sensitive. User names cannot contain numbers only, a space, colon (:), or quotation mark ("), nor can they be left blank. For details about characters that the password can contain, see "Specifying the Extended Security Functions".

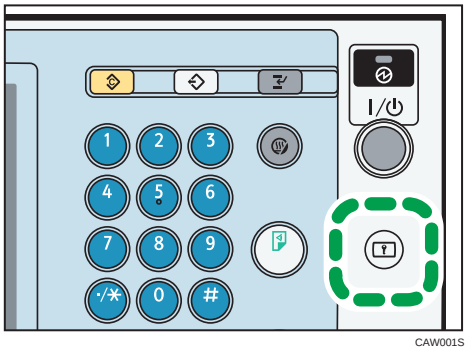
Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"
- p.249 "Specifying the Extended Security Functions"

Logging in Using Administrator Authentication

If administrator authentication has been specified, log in using an administrator's user name and password. This section describes how to log in. When you log in with a user name that has multiple administrator privileges, one of the administrator privileges associated with that name is displayed.

1. **Press the [User Tools/Counter] key.**
2. **Press the [Login/Logout] key.**



CAW001S

The message, "Press [Login], then enter login user name and login password." appears.

3. **Press [Login].**

   If you do not want to log in, press [Cancel].

4. **Enter the login user name, and then press [OK].**

   When you log in to the machine for the first time as the administrator, enter "admin".

5. **Enter the login password, and then press [OK].**

   When the administrator is making settings for the first time, a password is not required; the administrator can simply press [OK] to proceed.

   "Authenticating... Please wait." appears, followed by the screen for specifying the default.

Note

- If user authentication has already been specified, a screen for authentication appears.
- To log in as an administrator, enter the administrator's login user name and login password.

- If you log in using administrator authority, the name of the administrator logging on appears.
- If you try to log in from an operating screen, "You do not have the privileges to use this function. You can only change setting(s) as an administrator." appears. Press the [User Tools/Counter] key to change the default.

Logging out Using Administrator Authentication

If administrator authentication has been specified, be sure to log out after completing settings. This section explains how to log out after completing settings.

1. **Press the [Login/Logout] key.**
2. **Press [Yes].**

Changing the Administrator

Change the administrator's login user name and login password. You can also assign administrator authority to the login user names [Administrator 1] to [Administrator 4]. To combine the authorities of multiple administrators, assign multiple administrators to a single administrator.

For example, to assign machine administrator authority and user administrator authority to [Administrator 1], press [Administrator 1] in the lines for the machine administrator and the user administrator.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Program / Change Administrator].**

   If this item is not visible, press [▼Next] to display more settings.
5. **In the line for the administrator you want to change, press [Administrator 1], [Administrator 2], [Administrator 3] or [Administrator 4], and then press [Change].**
6. **Press [Change] for the setting you want to change, and re-enter the setting.**
7. **Press [OK].**
8. **Press [OK] twice.**

   You will be automatically logged out.
9. **Press the [User Tools/Counter] key.**

Note

- An administrator's privileges can only be changed by an administrator with the relevant privileges.

- Administrator privileges cannot be revoked by any single administrator.

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

Using Web Image Monitor to Configure Administrator Authentication

Using Web Image Monitor, you can log in to the machine and change the administrator settings. This section describes how to access Web Image Monitor.

For details about Web Image Monitor, see Web Image Monitor Help.

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.
3. **Click [Login].**
4. **Enter the login name and password of an administrator, and then click [Login].**

   The Web browser might be configured to auto complete login dialog boxes by retaining user names and passwords. This function reduces security. To prevent the browser retaining user names and passwords, disable the browser's auto complete function.
5. **Make settings as desired.**
6. **Click [Logout].**

Note

- When logging in as an administrator, use the login name and password of an administrator set in the machine. The default login name is "admin" and the password is blank.

3. Configuring User Authentication

This chapter describes what a user can do, how to specify user authentication, and how to log into and out from the machine as a user.

Users

A user performs normal operations on the machine, such as copying and printing. Users are managed using the personal information in the machine's Address Book, and can use only the functions they are permitted to access by administrators. By enabling user authentication, you can allow only people registered in the Address Book to use the machine. Users can be managed in the Address Book by the user administrator. For details about administrator, see "Administrators". For details about user registration, see "Registering Names", Network and System Settings Reference or Web Image Monitor Help.

Important

- **If user authentication is not possible because of a problem with the hard disk or network, you can use the machine by accessing it using administrator authentication and disabling user authentication. Do this if, for instance, you need to use the machine urgently.**

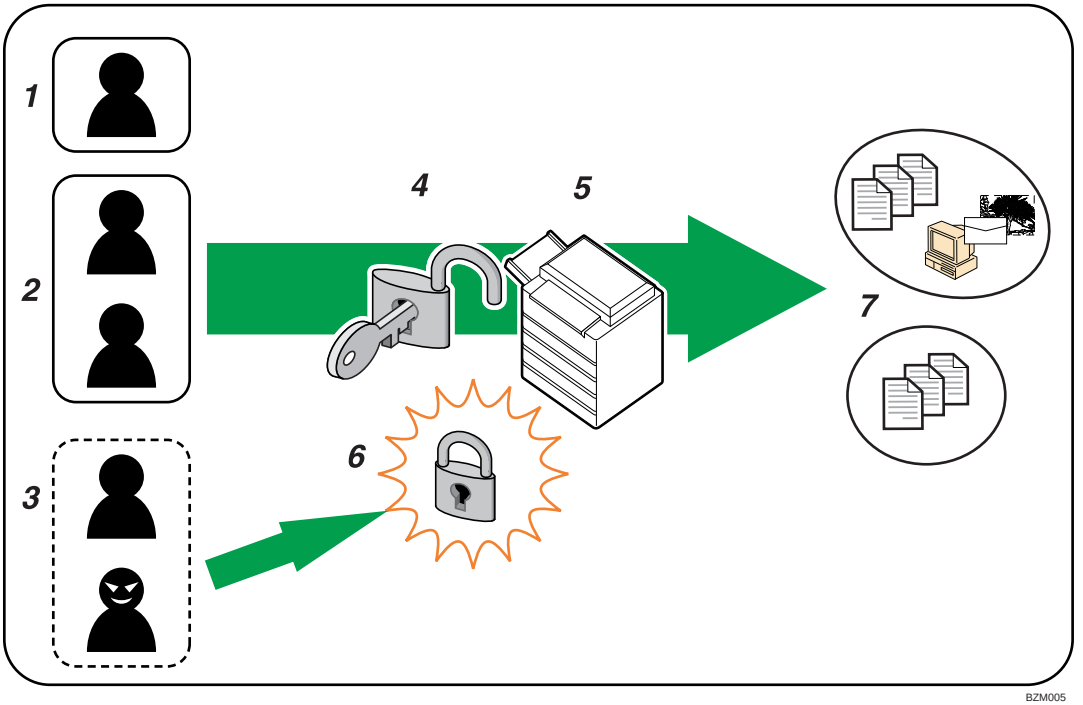
Reference

- p.25 "Administrators"

About User Authentication

This machine has an authentication function to prevent unauthorized access.

By using login user name and login password, you can specify access limits for individual users and groups of users.



1. **User**

   A user performs normal operations on the machine, such as copying and printing.

2. **Group**

   A group performs normal operations on the machine, such as copying and printing.

3. **Unauthorized User**

4. **Authentication**

   Using a login user name and password, user authentication is performed.

5. **This Machine**

6. **Access Limit**

   Using authentication, unauthorized users are prevented from accessing the machine.

7. **Authorized users and groups can use only those functions permitted by the administrator.**

Configuring User Authentication

Specify administrator authentication and user authentication according to the following chart:

Administrator authentication	Specify administrator privileges. Register administrators.
User authentication	Specify user authentication. Five types of user authentication are available: • User Code Authentication • Basic Authentication • Windows Authentication • LDAP Authentication • Integration Server Authentication

Note

- To specify Basic Authentication, Windows Authentication, LDAP Authentication, or Integration Server Authentication, you must first enable user administrator privileges in "Administrator Authentication Management".
- You can specify User Code Authentication without specifying administrator authentication.

Reference

- p.29 "Enabling Administrator Authentication"
- p.42 "Enabling User Authentication"
- p.29 "Specifying Administrator Privileges"
- p.32 "Registering the Administrator"
- p.43 "User Code Authentication"
- p.47 "Basic Authentication"
- p.54 "Windows Authentication"
- p.67 "LDAP Authentication"
- p.75 "Integration Server Authentication"

Enabling User Authentication

To control users' access to the machine, perform user authentication using login user names and passwords. There are five types of user authentication methods: User Code authentication, Basic authentication, Windows authentication, LDAP authentication, and Integration Server authentication. To use user authentication, select an authentication method on the control panel, and then make the required settings for the authentication. The settings depend on the authentication method. Specify administrator authentication, and then specify user authentication.

Note

- User Code authentication is used for authenticating on the basis of a user code, and Basic authentication, Windows authentication, LDAP authentication, and Integration Server authentication are used for authenticating individual users.
- You can specify User Code authentication without specifying administrator authentication.
- A user code account, that has no more than eight digits and is used for User Code authentication, can be carried over and used as a login user name even after the authentication method has switched from User Code authentication to Basic authentication, Windows authentication, LDAP authentication, or Integration Server authentication. In this case, since the User Code authentication does not have a password, the login password is set as blank.
- When authentication switches to an external authentication method (Windows authentication, LDAP authentication, or Integration Server authentication), authentication will not occur, unless the external authentication device has the carried over user code account previously registered. However, the user code account will remain in the Address Book of the machine despite an authentication failure.
- From a security perspective, when switching from User Code authentication to another authentication method, we recommend that you delete accounts you are not going to use, or set up a login password. For details about deleting accounts, see "Deleting a Registered Name", Network and System Settings Reference. For details about changing passwords, see "Specifying Login User Names and Passwords".
- You cannot use more than one authentication method at the same time.
- User authentication can also be specified via Web Image Monitor. For details, see Web Image Monitor Help.

Reference

- p.50 "Specifying Login User Names and Passwords"

User Code Authentication

This is an authentication method for limiting access to functions according to a user code. The same user code can be used by more than one user. For details about specifying user codes, see "Authentication Information", Network and System Settings Reference.

For details about specifying the user code for the printer driver, see Printer Reference or the printer driver Help.

For details about specifying the TWAIN driver user code, see the TWAIN driver Help.

Important

- **To control the use of DeskTopBinder for the delivery of files stored in the machine, select Basic Authentication, Windows Authentication, LDAP Authentication, or Integration Server Authentication.**

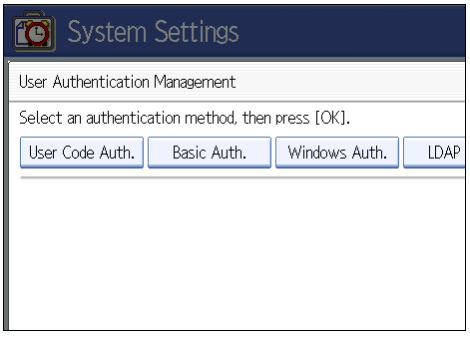
Specifying User Code Authentication

This can be specified by the machine administrator.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

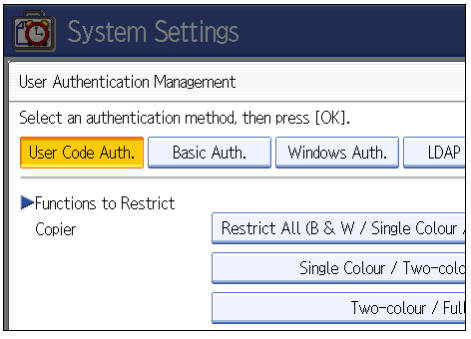
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [User Authentication Management].**

   If this item is not visible, press [▼Next] to display more settings.
5. **Select [User Code Auth.].**



If you do not want to use user authentication management, select [Off].

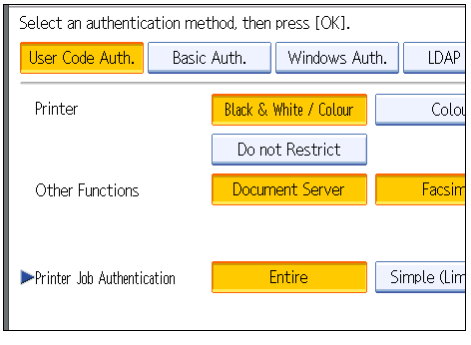
6. **Select which of the machine's functions you want to limit.**



The selected settings will be unavailable to users.

For details about limiting available functions for individuals or groups, see "Limiting Available Functions".

7. **Select the "Printer Job Authentication" level.**



If this item is not visible, press [▼Next] to display more settings.

If you select [Entire] or [Simple (All)], proceed to "Selecting Entire or Simple (All)".

If you select [Simple (Limitation)], proceed to "Selecting Simple (Limitation)".

For a description of the printer job authentication levels, see "Printer Job Authentication".

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"
- p.154 "Limiting Available Functions"
- p.57 "Selecting Entire or Simple (All)"
- p.45 "Selecting Simple (Limitation)"
- p.82 "Printer Job Authentication"

Selecting Entire or Simple (All)

If you select [Entire], you cannot print using a printer driver or a device that does not support authentication. To print under an environment that does not support authentication, select [Simple (All)] or [Simple (Limitation)].

If you select [Simple (All)], you can print even with unauthenticated printer drivers or devices. Specify this setting if you want to print with a printer driver or device that cannot be identified by the machine or if you do not require authentication for printing. However, note that, because the machine does not require authentication in this case, it may be used by unauthorized users.

1. **Press [Entire] or [Simple (All)].**
2. **Press [OK].**
3. **Press [Exit].**

   A confirmation message appears.

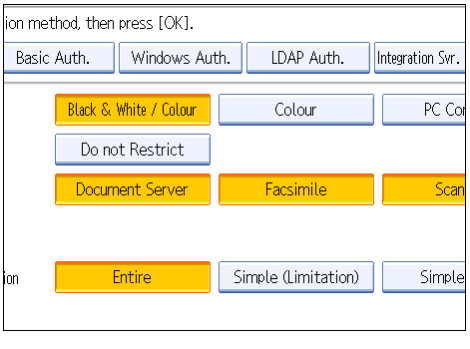
   If you press [Yes], you will be automatically logged out.
4. **Press the [User Tools/Counter] key.**

Selecting Simple (Limitation)

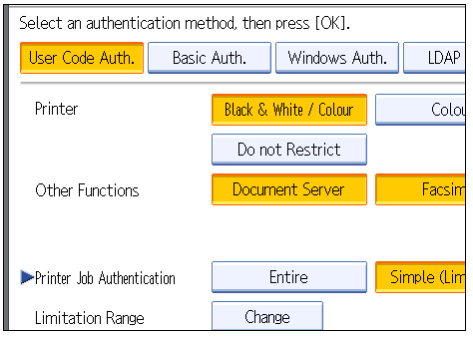
If you select [Simple (Limitation)], you can specify clients for which printer job authentication is not required. Specify [Parallel Interface: Simple], [USB: Simple] and the clients' IPv4 address range in which printer job authentication is not required. Specify this setting if you want to print using unauthenticated printer drivers or without any printer driver. Authentication is required for printing with non-specified devices.

If you select [Simple (Limitation)], you can print even with unauthenticated printer drivers or devices. Specify this setting if you want to print with a printer driver or device that cannot be identified by the machine or if you do not require authentication for printing. However, note that, because the machine does not require authentication in this case, it may be used by unauthorized users.

1. **Press [Simple (Limitation)].**



2. **Press [Change].**



3. **Specify the range in which [Simple (Limitation)] is applied to "Printer Job Authentication".**

You can specify the IPv4 address range to which this setting is applied, and whether or not to apply the setting to the parallel and USB interfaces.

4. **Press [Exit].**
5. **Press [OK].**
6. **Press [Exit].**

   A confirmation message appears.

   If you press [Yes], you will be automatically logged out.

7. **Press the [User Tools/Counter] key.**

Basic Authentication

Specify this authentication method when using the machine's Address Book to authenticate each user. Using Basic authentication, you can not only manage the machine's available functions but also limit access to stored files and to the personal data in the Address Book. Under Basic authentication, the administrator must specify the functions available to each user registered in the Address Book. For details about limitation of functions, see "Authentication Information Stored in the Address Book".

Note

- p.49 "Authentication Information Stored in the Address Book"

Specifying Basic Authentication

Before beginning to configure the machine, make sure that administrator authentication is properly configured under "Administrator Authentication Management".

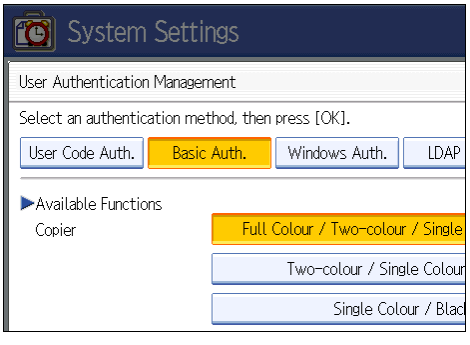
This can be specified by the machine administrator.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [User Authentication Management].**

   If this item is not visible, press [▼Next] to display more settings.
5. **Select [Basic Auth.].**

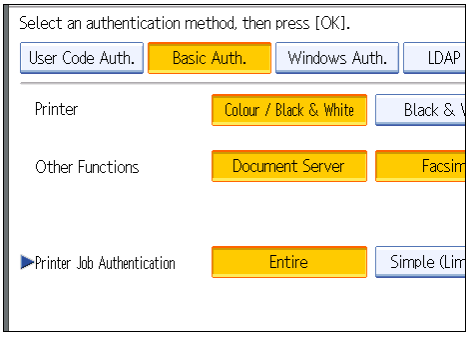
   If you do not want to use user authentication management, select [Off].
6. **Select which of the machine's functions you want to permit.**



The functions you select here become the default Basic Authentication settings that will be assigned to all new users of the Address Book.

For details about specifying available functions for individuals or groups, see "Limiting Available Functions".

7. **Select the "Printer Job Authentication" level.**



If you select [Entire] or [Simple (All)], proceed to "Selecting Entire or Simple (All)".

If you select [Simple (Limitation)], proceed to "Selecting Simple (Limitation)".

For a description of the printer job authentication levels, see "Printer Job Authentication".

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"
- p.154 "Limiting Available Functions"
- p.48 "Selecting Entire or Simple (All)"
- p.49 "Selecting Simple (Limitation)"
- p.82 "Printer Job Authentication"

Selecting Entire or Simple (All)

If you select [Entire], you cannot print using a printer driver or a device that does not support authentication. To print under an environment that does not support authentication, select [Simple (All)] or [Simple (Limitation)].

If you select [Simple (All)], you can print even with unauthenticated printer drivers or devices. Specify this setting if you want to print with a printer driver or device that cannot be identified by the machine or if you do not require authentication for printing. However, note that, because the machine does not require authentication in this case, it may be used by unauthorized users.

1. **Press [Entire] or [Simple (All)].**
2. **Press [OK].**
3. **Press [Exit].**

   A confirmation message appears.

If you press [Yes], you will be automatically logged out.

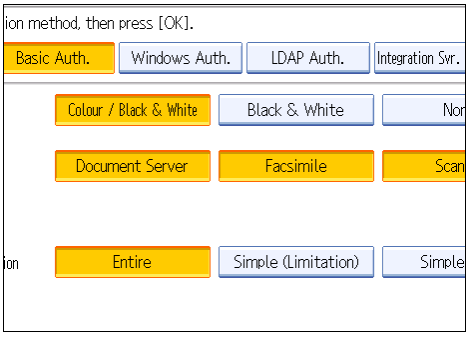
4. **Press the [User Tools/Counter] key.**

Selecting Simple (Limitation)

If you select [Simple (Limitation)], you can specify clients for which printer job authentication is not required. Specify [Parallel Interface: Simple], [USB: Simple] and the clients' IPv4 address range in which printer job authentication is not required. Specify this setting if you want to print using unauthenticated printer drivers or without any printer driver. Authentication is required for printing with non-specified devices.

If you select [Simple (Limitation)], you can print even with unauthenticated printer drivers or devices. Specify this setting if you want to print with a printer driver or device that cannot be identified by the machine or if you do not require authentication for printing. However, note that, because the machine does not require authentication in this case, it may be used by unauthorized users.

1. **Press [Simple (Limitation)].**



2. **Press [Change].**
3. **Specify the range in which [Simple (Limitation)] is applied to "Printer Job Authentication".**

   You can specify the IPv4 address range to which this setting is applied, and whether or not to apply the setting to the parallel and USB interfaces.
4. **Press [Exit].**
5. **Press [OK].**
6. **Press [Exit].**

   A confirmation message appears.

   If you press [Yes], you will be automatically logged out.
7. **Press the [User Tools/Counter] key.**

Authentication Information Stored in the Address Book

This can be specified by the user administrator.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

If you have enabled user authentication, you can specify access limits and usage limits to the machine's functions for each user or group of users. Specify the necessary settings in the Address Book entry of each user. For details about limiting which functions of the machine are available, see "Limiting Available Functions".

Users must have a registered account in the Address Book in order to use the machine when User Authentication is specified. For details about user registration, see "Registering Names", Network and System Settings Reference.

User authentication can also be specified via Web Image Monitor. For details, see Web Image Monitor Help.

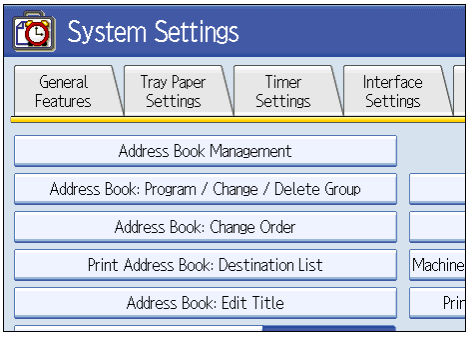
Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"
- p.154 "Limiting Available Functions"

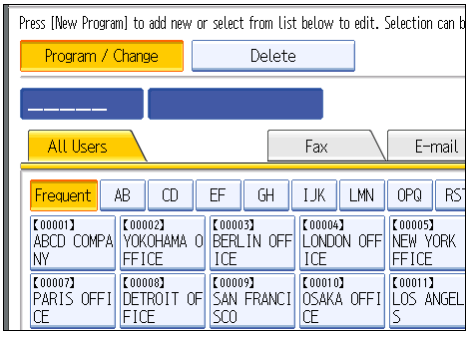
Specifying Login User Names and Passwords

In "Address Book Management", specify the login user name and login password to be used for User Authentication Management.

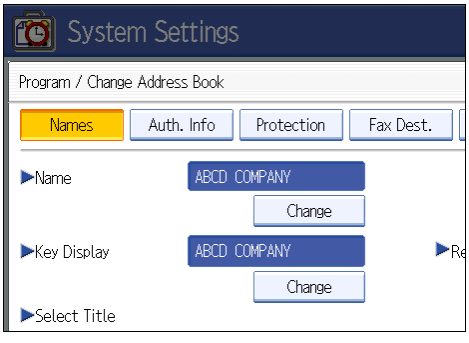
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**



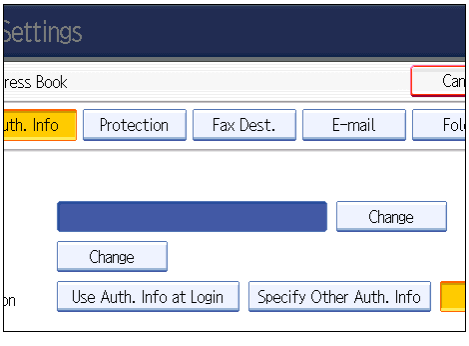
5. Select the user.



6. Press [Auth. Info].

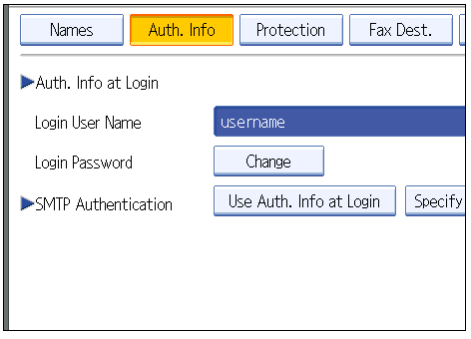


7. Press [Change] for "Login User Name".



8. Enter a login user name, and then press [OK].

9. **Press [Change] for "Login Password".**



10. **Enter a login password, and then press [OK].**
11. **If a password reentry screen appears, enter the login password, and then press [OK].**
12. **Press [OK].**
13. **Press [Exit] twice.**
14. **Press the [User Tools/Counter] key.**

Note

- The administrator must inform general users concerning the number of characters that passwords can contain.
  - Login user names and passwords can contain both alphanumeric characters and symbols.
  - Login user names can contain up to 32 characters; passwords can contain up to 128 characters.
  - Login user names cannot contain spaces, colons or quotation marks, and cannot be left blank.
  - Do not use Japanese, Traditional Chinese, Simplified Chinese, or Hangul double-byte characters.
- If you use multi-byte characters when entering the login user name or password, you cannot authenticate using Web Image Monitor. For details about characters that the password can contain, see "Specifying the Extended Security Functions".

Reference

- p.249 "Specifying the Extended Security Functions"

Specifying Login Details

The login user name and password specified in "Address Book Management" can be used as the login information for "SMTP Authentication", "Folder Authentication", and "LDAP Authentication".

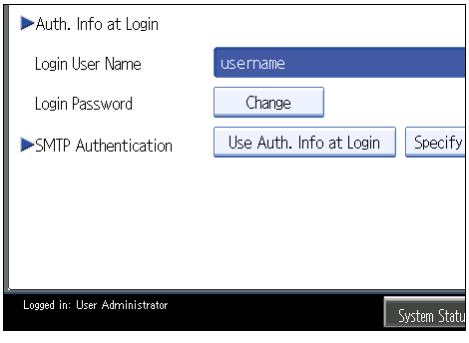
If you do not want to use the login user name and password specified in "Address Book Management" for "SMTP Authentication", "Folder Authentication", or "LDAP Authentication", see "Registering Folders" and "Registering SMTP and LDAP Authentication", Network and System Settings Reference.

For details about specifying login user name and login password, see "Specifying Login User Names and Passwords".

Important

- When using "Use Auth. Info at Login" for "SMTP Authentication", "Folder Authentication", or "LDAP Authentication", a user name other than "other", "admin", "supervisor" or "HIDE***" must be specified. The symbol "****" represents any character.
- To use "Use Auth. Info at Login" for "SMTP Authentication", a login password up to 128 characters in length must be specified.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Select the user.
6. Press [Auth. Info].
7. Select [Use Auth. Info at Login] in "SMTP Authentication".



If this item is not visible, press [▼Next] to display more settings.

For folder authentication, select [Use Auth. Info at Login] in "Folder Authentication".

For LDAP authentication, select [Use Auth. Info at Login] in "LDAP Authentication".

8. Press [OK].
9. Press [Exit].
10. Press the [User Tools/Counter] key.

Reference

- p.50 "Specifying Login User Names and Passwords"

Windows Authentication

Specify this authentication when using the Windows domain controller to authenticate users who have their accounts on the directory server. Users cannot be authenticated if they do not have their accounts in the directory server. Under Windows authentication, you can specify the access limit for each group registered in the directory server. The Address Book stored in the directory server can be registered to the machine, enabling user authentication without first using the machine to register individual settings in the Address Book. Obtaining user information can prevent the use of false identities because the sender's address (From:) is determined by the authentication system when scanned data is sent or a received fax message is transferred via e-mail.

Windows authentication can be performed using one of two authentication methods: NTLM or Kerberos authentication. The operational requirements for both methods are listed below.

Operational requirements for NTLM authentication

To specify NTLM authentication, the following requirements must be met:

- This machine supports NTLMv1 authentication and NTLMv2 authentication.
- A domain controller has been set up in a designated domain.
- This function is supported by the operating systems listed below. To obtain user information when running Active Directory, use LDAP. If you are using LDAP, we recommend you use SSL to encrypt communication between the machine and the LDAP server. Encryption by SSL is possible only if the LDAP server supports TLSv1, SSLv2, or SSLv3.
  - Windows 2000 Server
  - Windows Server 2003/2003 R2
  - Windows Server 2008/2008 R2

Operational requirements for Kerberos authentication

To specify Kerberos authentication, the following requirements must be met:

- A domain controller must be set up in a designated domain.
- The operating system must support KDC (Key Distribution Center). To obtain user information when running Active Directory, use LDAP. If you are using LDAP, we recommend you use SSL to encrypt communication between the machine and the LDAP server. Encryption by SSL is possible only if the LDAP server supports TLSv1, SSLv2, or SSLv3. Compatible operating systems are listed below.
  - Windows 2000 Server
  - Windows Server 2003/2003 R2
  - Windows Server 2008/2008 R2

  To use Kerberos authentication under Windows Server 2008, Service Pack 2 or later must be installed.

Important

- **During Windows Authentication, data registered in the directory server, such as the user's e-mail address, is automatically registered in the machine. If user information on the server is changed, information registered in the machine may be overwritten when authentication is performed.**
- **Users managed in other domains are subject to user authentication, but they cannot obtain items such as e-mail addresses.**
- **If you have created a new user in the domain controller and selected "User must change password at next logon", log in to the machine from the computer to change the password before logging in from the machine's control panel.**
- **If the authenticating server only supports NTLM when Kerberos authentication is selected on the machine, the authenticating method will automatically switch to NTLM.**
- **If Kerberos authentication and SSL encryption are set at the same time, e-mail addresses cannot be obtained.**

Note

- Enter the login name and password correctly; keeping in mind that it is case-sensitive.
- The first time you access the machine, you can use the functions available to your group. If you are not registered in a group, you can use the functions available under "*Default Group". To limit which functions are available to which users, first make settings in advance in the Address Book.
- When accessing the machine subsequently, you can use all the functions available to your group and to you as an individual user.
- Users who are registered in multiple groups can use all the functions available to those groups.
- A user registered in two or more global groups can use all the functions available to members of those groups.
- If the "Guest" account on the Windows server is enabled, even users not registered in the domain controller can be authenticated. When this account is enabled, users are registered in the Address Book and can use the functions available under "*Default Group".
- If you fail in obtaining fax information during authentication, see "If the Fax Number Cannot Be Obtained".

Reference

- p.66 "If the Fax Number Cannot be Obtained"

Specifying Windows Authentication

Before beginning to configure the machine, make sure that administrator authentication is properly configured under "Administrator Authentication Management".

This can be specified by the machine administrator.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

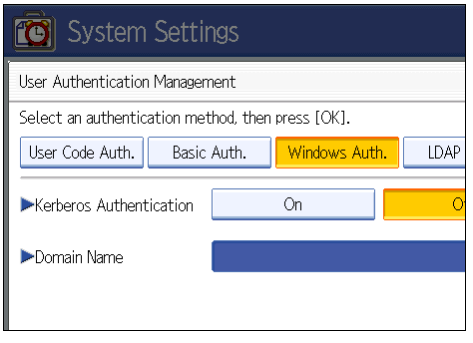
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [User Authentication Management].**

   If this item is not visible, press [▼Next] to display more settings.

5. **Select [Windows Auth.].**

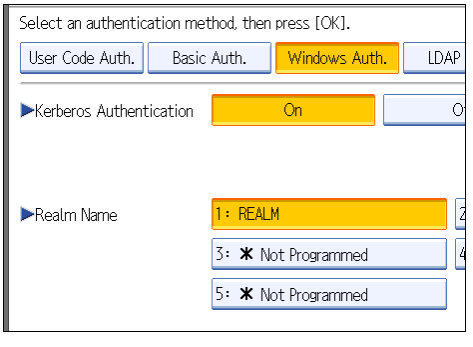
   If you do not want to use user authentication management, select [Off].

6. **If you want to use Kerberos authentication, press [On].**



If you want to use NTLM authentication, press [Off] and proceed to step 8.

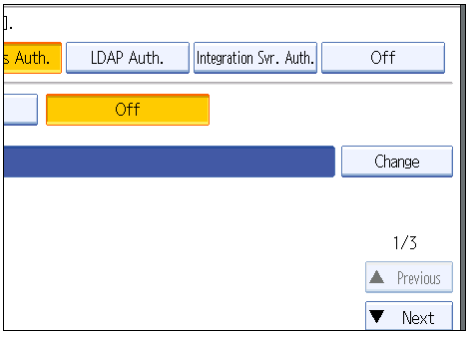
7. **Select Kerberos authentication realm and proceed to step 9.**



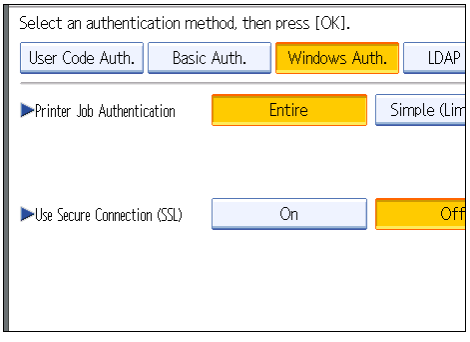
To enable Kerberos authentication, a realm must be registered beforehand. The realm name must be registered in capital letters. For details about registering a realm, see "Programming the Realm", Network and System Settings Reference.

Up to 5 realms can be registered.

8. **Press [Change] for "Domain Name", enter the name of the domain controller to be authenticated, and then press [OK].**



9. **Select the "Printer Job Authentication" level.**



If this item is not visible, press [▼Next] to display more settings.

If you select [Entire] or [Simple (All)], proceed to "Selecting Entire or Simple (All)".

If you select [Simple (Limitation)], proceed to "Selecting Simple (Limitation)".

For a description of the printer job authentication levels, see "Printer Job Authentication".

Reference

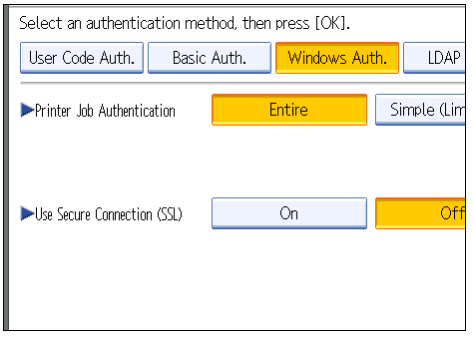
- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"
- p.57 "Selecting Entire or Simple (All)"
- p.60 "Selecting Simple (Limitation)"
- p.82 "Printer Job Authentication"

Selecting Entire or Simple (All)

If you select [Entire], you cannot print using a printer driver or a device that does not support authentication. To print in an environment that does not support authentication, select [Simple (All)] or [Simple (Limitation)].

If you select [Simple (All)], you can print even with unauthenticated printer drivers or devices. Specify this setting if you want to print with a printer driver or device that cannot be identified by the machine or if you do not require authentication for printing. However, note that, because the machine does not require authentication in this case, it may be used by unauthorized users.

1. **Press [Entire] or [Simple (All)].**
2. **Press [On] for "Use Secure Connection (SSL)".**



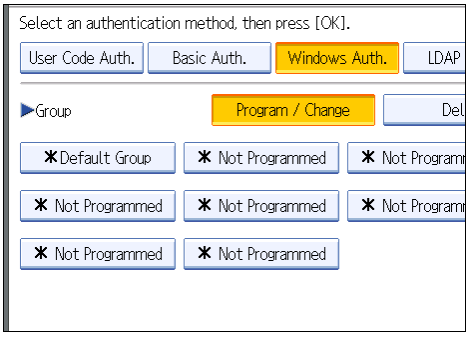
If you are not using secure sockets layer (SSL) for authentication, press [Off].

If global groups have been registered under Windows server, you can limit the use of functions for each global group.

You need to create global groups in the Windows server in advance and register in each group the users to be authenticated. You also need to register in the machine the functions available to the global group members. Create global groups in the machine by entering the names of the global groups registered in the Windows Server. (Keep in mind that group names are case sensitive.) Then specify the machine functions available to each group.

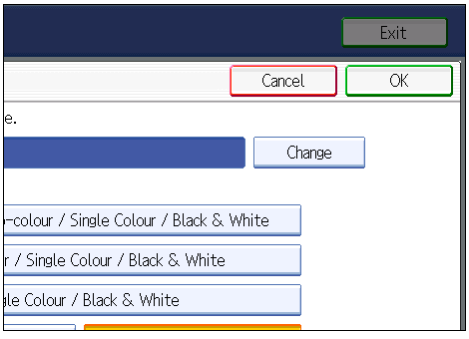
If global groups are not specified, users can use the available functions specified in [*Default Group]. If global groups are specified, users not registered in global groups can use the available functions specified in [*Default Group]. By default, all functions are available to *Default Group members. Specify the limitation on available functions according to user needs.

3. **Under "Group", press [Program / Change], and then press [* Not Programmed].**

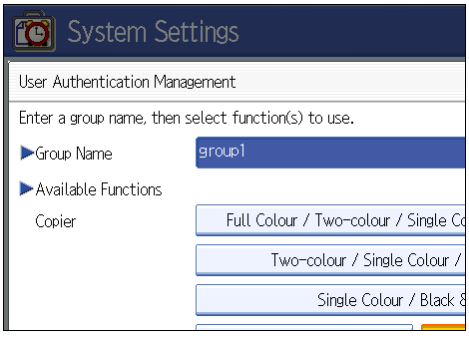


If this item is not visible, press [▼Next] to display more settings.

4. **Under "Group Name", press [Change], and then enter the group name.**



5. **Press [OK].**
6. **Select which of the machine's functions you want to permit.**



Windows Authentication will be applied to the selected functions.

Users can use the selected functions only.

For details about specifying available functions for individuals or groups, see "Limiting Available Functions".

7. **Press [OK] twice.**
8. **Press the [User Tools/Counter] key.**

A confirmation message appears.

If you press [Yes], you will be automatically logged out.

Note

- Under Windows Authentication, you can select whether or not to use secure sockets layer (SSL) authentication.
- To automatically register user information such as fax numbers and e-mail addresses under Windows authentication, it is recommended that communication between the machine and domain controller be encrypted using SSL.
- Under Windows Authentication, you do not have to create a server certificate unless you want to automatically register user information such as fax numbers and e-mail addresses using SSL.

Reference

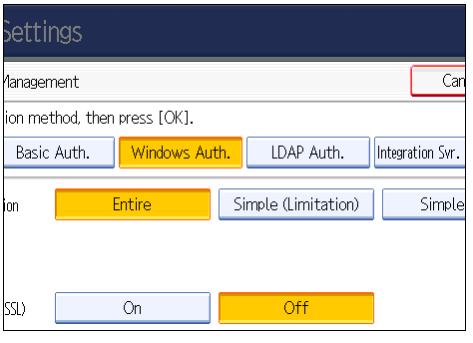
- p.154 "Limiting Available Functions"

Selecting Simple (Limitation)

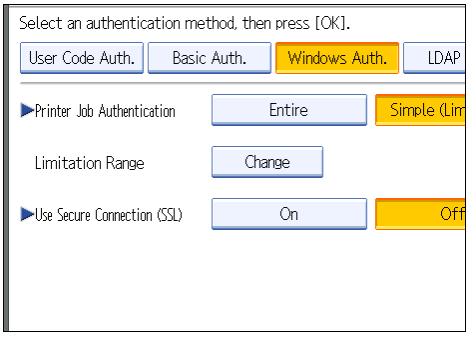
If you select [Simple (Limitation)], you can specify clients for which printer job authentication is not required. Specify [Parallel Interface: Simple], [USB: Simple] and the clients' IPv4 address range in which printer job authentication is not required. Specify this setting if you want to print using unauthenticated printer drivers or without any printer driver. Authentication is required for printing with non-specified devices.

If you select [Simple (Limitation)], you can print even with unauthenticated printer drivers or devices. Specify this setting if you want to print with a printer driver or device that cannot be identified by the machine or if you do not require authentication for printing. However, note that, because the machine does not require authentication in this case, it may be used by unauthorized users.

1. **Press [Simple (Limitation)].**



2. **Press [Change].**

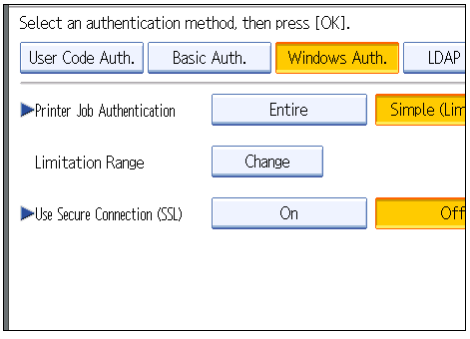


3. **Specify the range in which [Simple (Limitation)] is applied to "Printer Job Authentication".**

   You can specify the IPv4 address range to which this setting is applied, and whether or not to apply the setting to the parallel and USB interfaces.

4. **Press [Exit].**

5. **Press [On] for "Use Secure Connection (SSL)".**



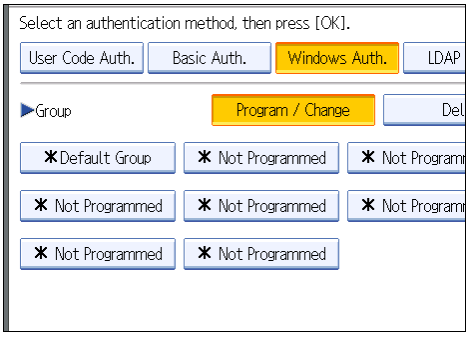
If you are not using secure sockets layer (SSL) for authentication, press [Off].

If global groups have been registered under Windows server, you can limit the use of functions for each global group.

You need to create global groups in the Windows server in advance and register in each group the users to be authenticated. You also need to register in the machine the functions available to the global group members. Create global groups in the machine by entering the names of the global groups registered in the Windows Server. (Keep in mind that group names are case sensitive.) Then specify the machine functions available to each group.

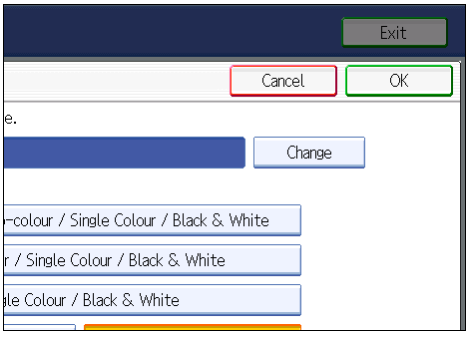
If global groups are not specified, users can use the available functions specified in [*Default Group]. If global groups are specified, users not registered in global groups can use the available functions specified in [*Default Group]. By default, all functions are available to *Default Group members. Specify the limitation on available functions according to user needs.

6. **Under "Group", press [Program / Change], and then press [* Not Programmed].**

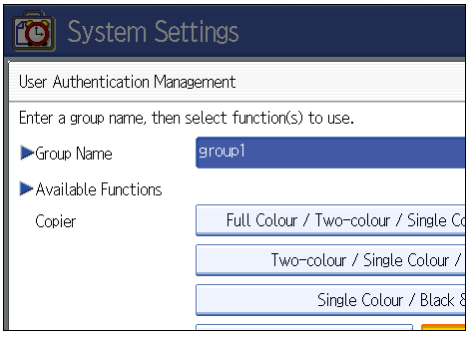


If this item is not visible, press [▼Next] to display more settings.

7. **Under "Group Name", press [Change], and then enter the group name.**



8. **Press [OK].**
9. **Select which of the machine's functions you want to permit.**



Windows Authentication will be applied to the selected functions.

Users can use the selected functions only.

For details about specifying available functions for individuals or groups, see "Limiting Available Functions".

10. **Press [OK] twice.**
11. **Press the [User Tools/Counter] key.**

A confirmation message appears.

If you press [Yes], you will be automatically logged out.

Note

- Under Windows Authentication, you can select whether or not to use secure sockets layer (SSL) authentication.
- To automatically register user information such as fax numbers and e-mail addresses under Windows authentication, it is recommended that communication between the machine and domain controller be encrypted using SSL.
- Under Windows Authentication, you do not have to create a server certificate unless you want to automatically register user information such as fax numbers and e-mail addresses using SSL.

Reference

- p.154 "Limiting Available Functions"

Installing Internet Information Services (IIS) and Certificate Services

Specify this setting if you want the machine to automatically obtain e-mail addresses registered in Active Directory.

We recommend you install Internet Information Services (IIS) and Certificate services as the Windows components.

Install the components, and then create the server certificate.

If they are not installed, install them as follows:

Windows Server 2008 R2 is used to illustrate the procedure.

1. **On the [Start] menu, point to [Administrator Tools], and then click [Server Manager].**
2. **Click [Roles] in the left column, click [Add Roles] from the [Action] menu.**
3. **Click [Next>].**
4. **Select the "Web Server (IIS)" and "Active Directory Certificate Services" check boxes, and then click [Next>].**
5. **Read the content information, and then click [Next>].**
6. **Confirm that [Certification Authority] is checked, and then click [Next>].**
7. **Select [Enterprise], and then click [Next>].**
8. **Select [Root CA], and then click [Next>].**
9. **Select [Create a new private key], and then click [Next>].**
10. **Select a cryptographic service provider, key length, and hash algorithm to create a new private key, and then click [Next>].**
11. **In "Common name for this CA:", enter the Certificate Authority name, and then click [Next>].**
12. **Select the validity period, and then click [Next>].**
13. **Leave the "Certificate database location:" and the "Certificate database log location:" settings set to their defaults, and then click [Next>].**
14. **Read the notes, and then click [Next>].**
15. **Select the role service you want to use, and then click [Next>].**
16. **Click [Install].**
17. **When the installation is complete, click [Close].**
18. **Close [Server Manager].**

Creating the Server Certificate

After installing Internet Information Services (IIS) and Certificate services Windows components, create the Server Certificate as follows:

Windows Server 2008 R2 is used to illustrate the procedure.

1. **On the [Start] menu, point to [Administrator Tools], and then click [Internet Information Services (IIS) Manager].**
2. **In the left column, click the server name, and then double-click [Server Certificates].**
3. **In the right column, click [Create Certificate Request...].**
4. **Enter all the information, and then click [Next].**
5. **In "Cryptographic service provider:", select a provider, and then click [Next].**
6. **Click [...], and then specify a file name for the certificate request.**
7. **Specify a location in which to store the file, and then click [Open].**
8. **Close [Internet Information Services (IIS) Manager] by clicking [Finish].**

Installing the Device Certificate (Issued by a Certificate Authority)

Install the device certificate using Web Image Monitor.

This section explains the use of a certificate issued by a certificate authority as the device certificate.

Enter the device certificate contents issued by the certificate authority.

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.
3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and password.
4. **Click [Configuration], and then click [Device Certificate] under [Security].**

   The Device Certificate page appears.
5. **Check the radio button next to the number of the certificate you want to install.**
6. **Click [Install].**
7. **Enter the contents of the device certificate.**

   In the certificate box, enter the contents of the device certificate issued by the certificate authority.

If you are installing an intermediate certificate, enter the contents of the intermediate certificate also.

For details about the displayed items and selectable items, see Web Image Monitor Help.

8. **Click [OK].**
9. **Wait a moment for the device to restart, and then click [OK].**

   "Installed" appears under "Certificate Status" to show that a device certificate for the machine has been installed.
10. **Click [Logout].**

Installing an Intermediate Certificate (Issued by a Certificate Authority)

This section explains how to use Web Image Monitor to install an intermediate certificate issued by a certificate authority.

If you do not have the intermediate certificate issued by the certificate authority, a warning message will appear during communication. If the certificate authority has issued an intermediate certificate, we recommend installing the intermediate certificate.

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.
3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and password.
4. **Click [Configuration], and then click [Device Certificate] under [Security].**

   The Device Certificate page appears.
5. **Check the radio button next to the number of the certificate you want to install.**
6. **Click [Install Intermediate Certificate].**
7. **Enter the contents of the intermediate certificate.**

   In the certificate box, enter the contents of the intermediate certificate issued by the certificate authority. For details about the items and settings of a certificate, see Web Image Monitor Help.
8. **Click [OK].**
9. **Wait a moment for the device to restart, and then click [OK].**

   The intermediate certificate will be installed on the device. The "Certificate Details" screen will inform you whether or not the installation of the intermediate certificate was successful. For details about the "Certificate Details" screen, see Web Image Monitor Help.

If the Fax Number Cannot be Obtained

If the fax number cannot be obtained during authentication, specify the setting as follows:

Windows Server 2008 R2 is used to illustrate the procedure.

1. **Open the command prompt window, enter "regsvr32 schmmgmt.dll", and then press the [Enter] key.**
2. **Click [OK], and then close the command prompt window.**
3. **On the [Start] menu, click [Run...].**
4. **Enter "mmc", and then click [OK].**
5. **On the [File] menu, click [Add/Remove Snap-in...].**
6. **Select [Active Directory Scheme], and then click [Add>].**
7. **Click [OK].**
8. **Click [Active Directory Scheme] in the left column, and then open the [Attributes] folder.**
9. **Right-click [facsimileTelephoneNumber], and then click [Properties].**
10. **Select the "Replicate this attribute to the Global Catalog" check box, and then click [Apply].**
11. **Click [OK].**
12. **On the [File] menu, click [Save].**
13. **Specify a file name and a location in which to store the file, and then click [Save].**
14. **Close the console window.**

LDAP Authentication

Specify this authentication method when using the LDAP server to authenticate users who have their accounts on the LDAP server. Users cannot be authenticated if they do not have their accounts on the LDAP server. The Address Book stored in the LDAP server can be registered to the machine, enabling user authentication without first using the machine to register individual settings in the Address Book. When using LDAP authentication, to prevent the password information being sent over the network unencrypted, it is recommended that communication between the machine and LDAP server be encrypted using SSL. You can specify on the LDAP server whether or not to enable SSL. To do this, you must create a server certificate for the LDAP server. For details about creating a server certificate, see "Creating the Server Certificate". The setting for using SSL can be specified in the LDAP server setting.

Using Web Image Monitor, you can enable a function that checks whether the SSL server is trustworthy when you connect to the server. For details about specifying LDAP authentication using Web Image Monitor, see Web Image Monitor Help.

Important

- **During LDAP authentication, the data registered in the LDAP server, such as the user's e-mail address, is automatically registered in the machine. If user information on the server is changed, information registered in the machine may be overwritten when authentication is performed.**
- **Under LDAP authentication, you cannot specify access limits for groups registered in the LDAP server.**
- **Enter the user's login user name using up to 128 characters, and then enter the user's login password using up to 128 characters. Make sure the first 32 characters of the login user name are unique.**
- **Do not use double-byte Japanese, Traditional Chinese, Simplified Chinese, or Hangul characters when entering the login user name or password. If you use double-byte characters, you cannot authenticate using Web Image Monitor.**
- **If using ActiveDirectory in LDAP authentication when Kerberos authentication and SSL are set at the same time, e-mail addresses cannot be obtained.**

Operational Requirements for LDAP Authentication

To specify LDAP authentication, the following requirements must be met:

- The network configuration must allow the machine to detect the presence of the LDAP server.
- When SSL is being used, TLSv1, SSLv2, or SSLv3 can function on the LDAP server.
- The LDAP server must be registered in the machine.
- When registering the LDAP server, the following setting must be specified.
  - Server Name
  - Search Base
  - Port Number
  - SSL Communication
  - Authentication

Select either Kerberos, DIGEST, or Cleartext authentication.

- User Name

  You do not have to enter the user name if the LDAP server supports "Anonymous Authentication".

- Password

  You do not have to enter the password if the LDAP server supports "Anonymous Authentication".

Note

- When you select Cleartext authentication, LDAP Simplified authentication is enabled. Simplified authentication can be performed with a user attribute (such as cn, or uid), instead of the DN.
- In LDAP simple authentication mode, authentication will fail if the password is left blank. To allow blank passwords, contact your service representative.
- Under LDAP Authentication, if "Anonymous Authentication" in the LDAP server's settings is not set to Prohibit, users who do not have an LDAP server account might still be able to gain access.
- If the LDAP server is configured using Windows Active Directory, "Anonymous Authentication" might be available. If Windows authentication is available, we recommend you use it.
- The first time an unregistered user accesses the machine after LDAP authentication has been specified, the user is registered in the machine and can use the functions available under "Available Functions" during LDAP Authentication. To limit the available functions for each user, register each user and corresponding "Available Functions" setting in the Address Book, or specify "Available Functions" for each registered user. The "Available Functions" setting becomes effective when the user accesses the machine subsequently.
- To enable Kerberos for LDAP authentication, a realm must be registered beforehand. The realm must be programmed in capital letters. For details about registering a realm, see "Programming the Realm", Network and System Settings Reference.
- The reference function is not available for SSL servers when a search for LDAP is in progress.

Reference

- p.64 "Creating the Server Certificate"

Specifying LDAP Authentication

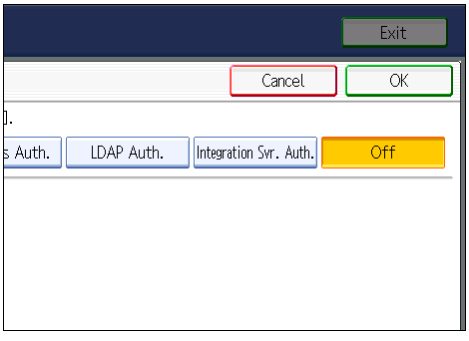
Before beginning to configure the machine, make sure that administrator authentication is properly configured under "Administrator Authentication Management".

This can be specified by the machine administrator.

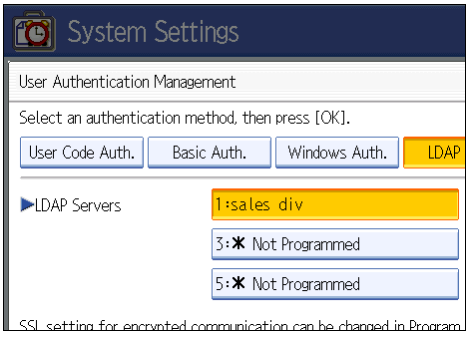
For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [User Authentication Management].**

   If this item is not visible, press [▼Next] to display more settings.
5. **Select [LDAP Auth.].**

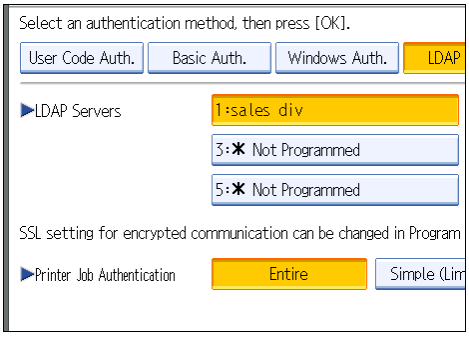


   If you do not want to use user authentication management, select [Off].
6. **Select the LDAP server to be used for LDAP authentication.**



7. **Select the "Printer Job Authentication" level.**

   You can specify the IPv4 address range to which this setting is applied, and whether or not to apply the setting to the parallel and USB interfaces.



If you select [Entire] or [Simple (All)], proceed to "Selecting Entire or Simple (All)".

If you select [Simple (Limitation)], proceed to "Selecting Simple (Limitation)".

For a description of the printer job authentication levels, see "Printer Job Authentication".

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"
- p.70 "Selecting Entire or Simple (All)"
- p.72 "Selecting Simple (Limitation)"
- p.82 "Printer Job Authentication"

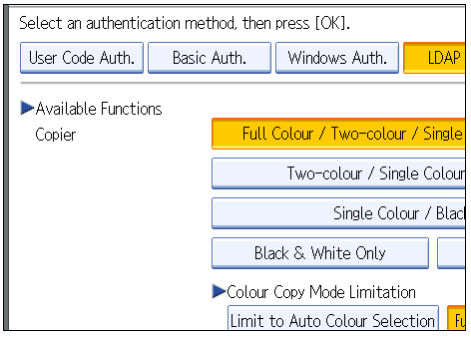
3

Selecting Entire or Simple (All)

If you select [Entire], you cannot print using a printer driver or a device that does not support authentication. To print under an environment that does not support authentication, select [Simple (All)] or [Simple (Limitation)].

If you select [Simple (All)], you can print even with unauthenticated printer drivers or devices. Specify this setting if you want to print with a printer driver or device that cannot be identified by the machine or if you do not require authentication for printing. However, note that, because the machine does not require authentication in this case, it may be used by unauthorized users.

1. **Press [Entire] or [Simple (All)].**
2. **Select which of the machine's functions you want to permit.**



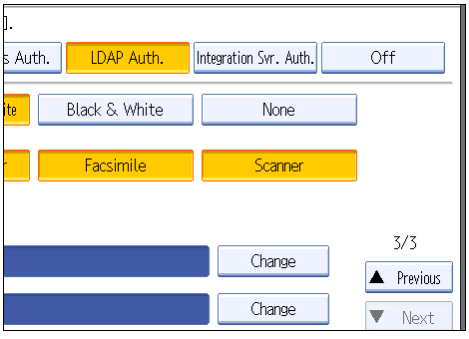
If this item is not visible, press [▼Next] to display more settings.

LDAP Authentication will be applied to the selected functions.

Users can use the selected functions only.

For details about specifying available functions for individuals or groups, see "Limiting Available Functions".

3. **Press [Change] for "Login Name Attribute".**



4. **Enter the login name attribute, and then press [OK].**

   Use the login name attribute as a search criterion to obtain information about an authenticated user. You can create a search filter based on the Login Name Attribute, select a user, and then retrieve the user information from the LDAP server so it is transferred to the machine's Address Book.

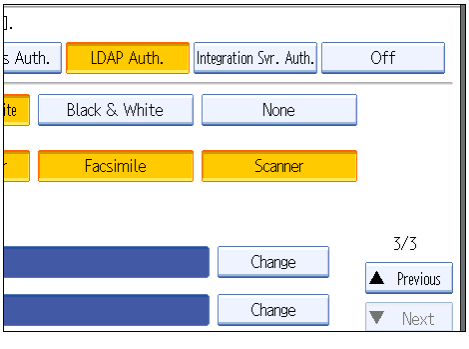
   To specify multiple login attributes, place a comma (,) between them. The search will return hits for either or both attributes.

   Also, if you place an equal sign (=) between a login attribute and a value (for example: cn=abcde, uid=xyz), the search will return only hits that match the values specified for the attributes. This search function can also be applied when Cleartext authentication is specified.

   When authenticating using the DN format, login attributes do not need to be registered.

   The method for selecting the user name depends on the server environment. Check the server environment and enter the user name accordingly.

5. **Press [Change] for "Unique Attribute".**



6. **Enter the unique attribute and then press [OK].**

   Specify Unique Attribute on the machine to match the user information in the LDAP server with that in the machine. By doing this, if the Unique Attribute of a user registered in the LDAP server matches that of a user registered in the machine, the two instances are treated as referring to the same user. You can enter an attribute such as "serialNumber" or "uid". Additionally, you can enter "cn" or "employeeNumber", provided it is unique. If you do not specify the Unique Attribute, an account with the same user information but with a different login user name will be created in the machine.

7. **Press [OK].**
8. **Press the [User Tools/Counter] key.**

   A confirmation message appears.

   If you press [Yes], you will be automatically logged out.

Reference

- p.154 "Limiting Available Functions"

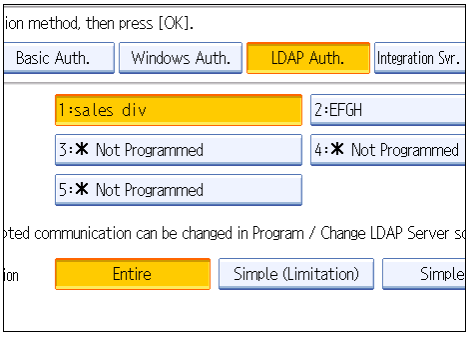
3

Selecting Simple (Limitation)

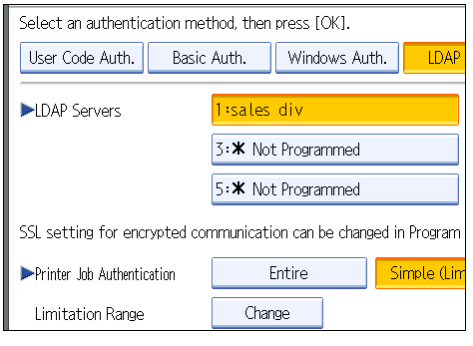
If you select [Simple (Limitation)], you can specify clients for which printer job authentication is not required. Specify [Parallel Interface: Simple], [USB: Simple] and the clients' IPv4 address range in which printer job authentication is not required. Specify this setting if you want to print using unauthenticated printer drivers or without any printer driver. Authentication is required for printing with non-specified devices.

If you select [Simple (Limitation)], you can print even with unauthenticated printer drivers or devices. Specify this setting if you want to print with a printer driver or device that cannot be identified by the machine or if you do not require authentication for printing. However, note that, because the machine does not require authentication in this case, it may be used by unauthorized users.

1. **Press [Simple (Limitation)].**



2. **Press [Change].**

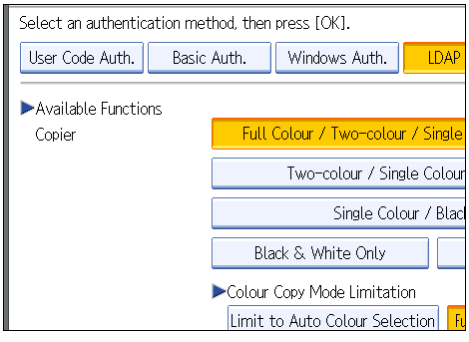


3. **Specify the range in which [Simple (Limitation)] is applied to "Printer Job Authentication".**

   You can specify the IPv4 address range to which this setting is applied, and whether or not to apply the setting to the parallel and USB interfaces.

4. **Press [Exit].**

5. **Select which of the machine's functions you want to permit.**



   If this item is not visible, press [▼Next] to display more settings.

   LDAP Authentication will be applied to the selected functions.

   Users can use the selected functions only.

   For details about specifying available functions for individuals or groups, see "Limiting Available Functions".

6. **Press [Change] for "Login Name Attribute".**

7. **Enter the login name attribute, and then press [OK].**

   Use the Login Name Attribute as a search criterion to obtain information about an authenticated user. You can create a search filter based on the Login Name Attribute, select a user, and then retrieve the user information from the LDAP server so it is transferred to the machine's Address Book.

   To specify multiple login attributes, place a comma (,) between them. The search will return hits for either or both attributes.

   Also, if you place an equals sign (=) between two login attributes (for example: cn=abcde, uid=xyz), the search will return only hits that match the attributes. This search function can also be applied when Cleartext authentication is specified.

   When authenticating using the DN format, login attributes do not need to be registered.

   The method for selecting the user name depends on the server environment. Check the server environment and enter the user name accordingly.

8. **Press [Change] for "Unique Attribute".**

9. **Enter the unique attribute and then press [OK].**

   Specify Unique Attribute on the machine to match the user information in the LDAP server with that in the machine. By doing this, if the Unique Attribute of a user registered in the LDAP server matches that of a user registered in the machine, the two instances are treated as referring to the same user. You

can enter an attribute such as "serialNumber" or "uid". Additionally, you can enter "cn" or "employeeNumber", provided it is unique. If you do not specify the Unique Attribute, an account with the same user information but with a different login user name will be created in the machine.

10. **Press [OK].**
11. **Press the [User Tools/Counter] key.**

    A confirmation message appears.

    If you press [Yes], you will be automatically logged out.

Reference

- p.154 "Limiting Available Functions"

Integration Server Authentication

To use Integration Server authentication, you need a server on which ScanRouter software that supports authentication is installed.

For external authentication, the Integration Server authentication collectively authenticates users accessing the server over the network, providing a server-independent, centralized user authentication system that is safe and convenient.

For example, if the delivery server and the machine share the same Integration Server authentication, single sign-on is possible using DeskTopBinder.

To use Integration Server authentication, access to a server on which ScanRouter System or Remote Communication Gate S and Authentication Manager are installed, other than the machine, is required. For details about the software, contact your sales representative.

Using Web Image Monitor, you can specify that the server reliability and site certificate are checked every time you access the SSL server. For details about specifying SSL using Web Image Monitor, see Web Image Monitor Help.

Important

- **During Integration Server Authentication, the data registered in the server, such as the user's e-mail address, is automatically registered in the machine.**
- **If user information on the server is changed, information registered in the machine may be overwritten when authentication is performed.**
- **The default administrator name for ScanRouter System and Remote Communication Gate S is "Admin". This is different from the default administrator name for the machine, which is "admin".**

Specifying Integration Server Authentication

Before beginning to configure the machine, make sure that administrator authentication is properly configured under "Administrator Authentication Management".

This can be specified by the machine administrator.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

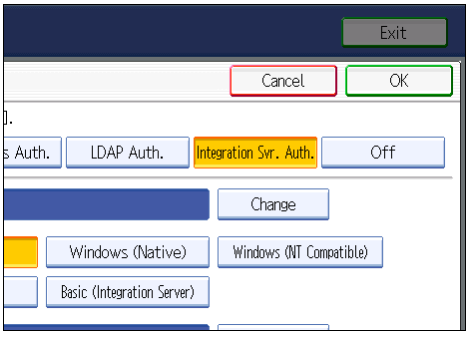
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [User Authentication Management].**

   If this item is not visible, press [▼Next] to display more settings.

5. **Select [Integration Svr. Auth.].**

   If you do not want to use User Authentication Management, select [Off].

6. **Press [Change] for "Server Name".**

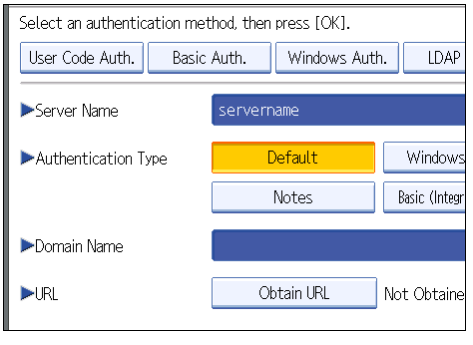


   Specify the name of the server for external authentication.

7. **Enter the server name, and then press [OK].**

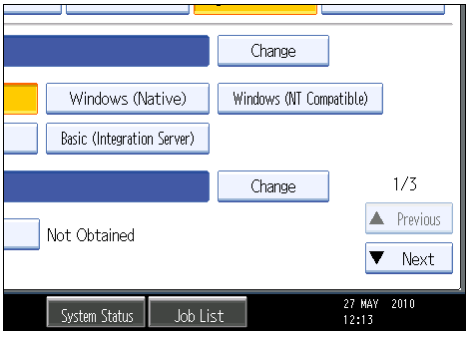
   Enter the IPv4 address or host name.

8. **In "Authentication Type", select the authentication system for external authentication.**



   Select an available authentication system. For general usage, select [Default].

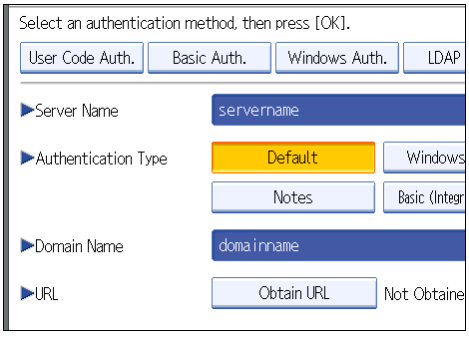
9. **Press [Change] for "Domain Name".**



10. **Enter the domain name, and then press [OK].**

    You cannot specify a domain name under an authentication system that does not support domain login.

11. **Press [Obtain URL].**



    The machine obtains the URL of the server specified in "Server Name".

    If "Server Name" or the setting for enabling SSL is changed after obtaining the URL, the URL is "Not Obtained".

12. **Press [Exit].**

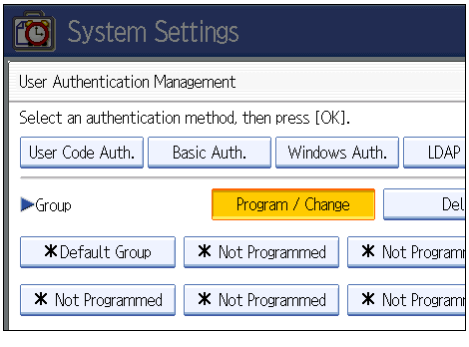
    In the "Authentication Type", if you have not registered a group, proceed to step 18.

    If you have registered a group, proceed to step 13.

    If you set "Authentication Type" to [Windows (Native)] or [Windows (NT Compatible)], you can use the global group.

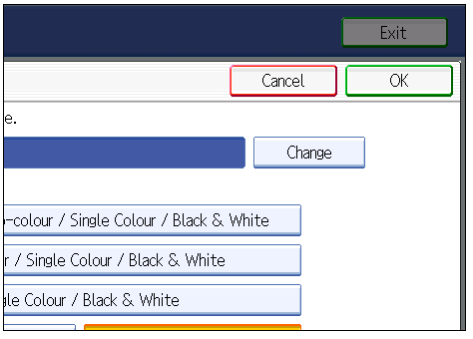
    If you set "Authentication Type" to [Notes], you can use the Notes group. If you set "Authentication Type" to [Basic (Integration Server)], you can use the groups created using the Authentication Manager.

13. **Under "Group", press [Program / Change], and then press [* Not Programmed].**



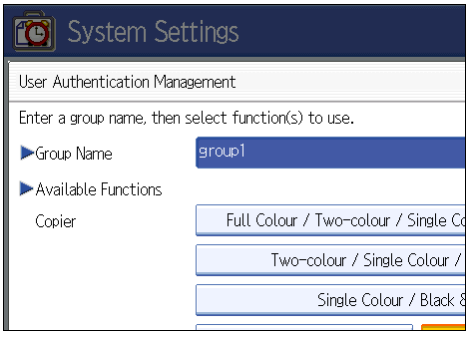
    If this item is not visible, press [▼Next] to display more settings.

14. **Under "Group Name", press [Change], and then enter the group name.**



15. **Press [OK].**

16. **Select which of the machine's functions you want to permit.**



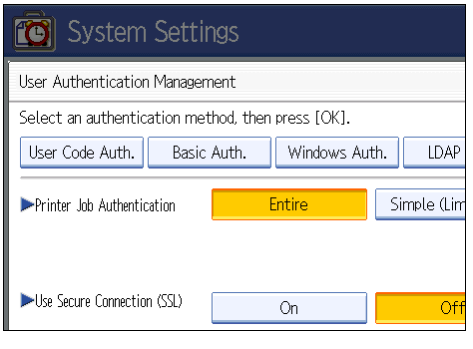
Authentication will be applied to the selected functions.

Users can use the selected functions only.

For details about specifying available functions for individuals or groups, see "Limiting Available Functions".

17. **Press [OK].**

18. **Select the "Printer Job Authentication" level.**



If this item is not visible, press [▼Next] to display more settings.

If you select [Entire] or [Simple (All)], proceed to "Selecting Entire or Simple (All)".

If you select [Simple (Limitation)], proceed to "Selecting Simple (Limitation)".

For a description of the printer job authentication levels, see "Printer Job Authentication".

Reference

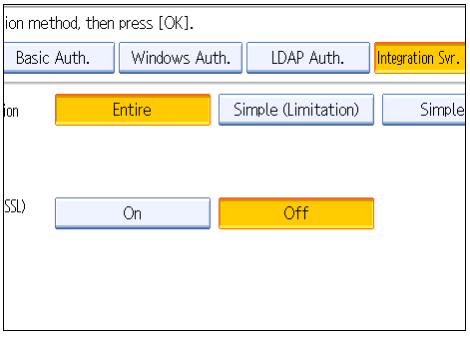
- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"
- p.154 "Limiting Available Functions"
- p.79 "Selecting Entire or Simple (All)"
- p.80 "Selecting Simple (Limitation)"
- p.82 "Printer Job Authentication"

Selecting Entire or Simple (All)

If you select [Entire], you cannot print using a printer driver or a device that does not support authentication. To print in an environment that does not support authentication, select [Simple (All)] or [Simple (Limitation)].

If you select [Simple (All)], you can print even with unauthenticated printer drivers or devices. Specify this setting if you want to print with a printer driver or device that cannot be identified by the machine or if you do not require authentication for printing. However, note that, because the machine does not require authentication in this case, it may be used by unauthorized users.

1. **Press [Entire] or [Simple (All)].**
2. **Press [On] for "Use Secure Connection (SSL)", and then press [OK].**



To not use secure sockets layer (SSL) for authentication, press [Off].

3. **Press the [User Tools/Counter] key.**

A confirmation message appears.

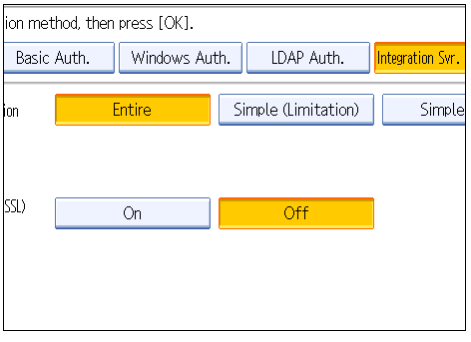
If you press [Yes], you will be automatically logged out.

Selecting Simple (Limitation)

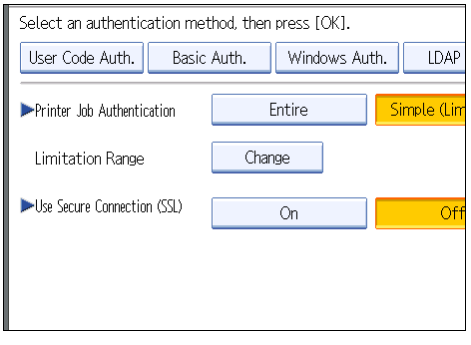
If you select [Simple (Limitation)], you can specify clients for which printer job authentication is not required. Specify [Parallel Interface: Simple], [USB: Simple] and the clients' IPv4 address range in which printer job authentication is not required. Specify this setting if you want to print using unauthenticated printer drivers or without any printer driver. Authentication is required for printing with non-specified devices.

If you select [Simple (Limitation)], you can print even with unauthenticated printer drivers or devices. Specify this setting if you want to print with a printer driver or device that cannot be identified by the machine or if you do not require authentication for printing. However, note that, because the machine does not require authentication in this case, it may be used by unauthorized users.

1. **Press [Simple (Limitation)].**



2. **Press [Change].**

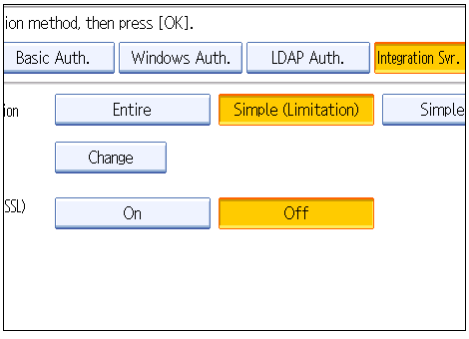


3. **Specify the range in which [Simple (Limitation)] is applied to "Printer Job Authentication".**

   You can specify the IPv4 address range to which this setting is applied, and whether or not to apply the setting to the parallel and USB interfaces.

4. **Press [Exit].**

5. **Press [On] for "Use Secure Connection (SSL)", and then press [OK].**



To not use secure sockets layer (SSL) for authentication, press [Off].

6. **Press the [User Tools/Counter] key.**

A confirmation message appears.

If you press [Yes], you will be automatically logged out.

Printer Job Authentication

This section explains the relationship between printer job authentication levels and printer job types.

Depending on the combination of printer job authentication level and printer job type, the machine may not print properly. Set an appropriate combination according to the operating environment.

User authentication is supported by the PCL printer driver and the LAN-FAX driver.

When user authentication is disabled, printing is possible for all job types.

Printer Job Authentication Levels and Printer Job Types

User Authentication Management	Specified	Specified	Specified	Specified
Printer Job Authentication	Simple (All)	Simple (All)	Entire	Entire
Restrict Use of Simple Encryption	Off	On	Off	On
Printer Job Type 1	C	C	C	C
Printer Job Type 2	B	X	B	X
Printer Job Type 3	X	X	X	X
Printer Job Type 4	A	A	B	B
Printer Job Type 5	A	A	X	X
Printer Job Type 6	A	A	X	X
Printer Job Type 7	B	B	B	B

A: Printing is possible regardless of user authentication.

B: Printing is possible if user authentication is successful. If user authentication fails, the print job is reset.

C: Printing is possible if user authentication is successful and "Driver Encryption Key" for the printer driver and machine match.

X: Printing is not possible regardless of user authentication, and the print job is reset.

Printer Job Authentication

- Entire

  The machine authenticates all printer jobs and remote settings, and cancels jobs and settings that fail authentication.

  Printer Jobs: Job Reset

  Settings: Disabled

- Simple (All)

  The machine authenticates printer jobs and remote settings that have authentication information, and cancels the jobs and settings that fail authentication.

  Printer jobs and settings without authentication information are performed without being authenticated.

- Simple (Limitation)

  You can specify the range to apply [Simple (Limitation)] to by specifying [Parallel Interface: Simple], [USB: Simple], and the client's IPv4 address.

Printer Job Types

1. The [User Authentication] and [With Encryption] check boxes are selected in the PCL printer driver, and/or the [General user authentication] and [Encryption] check boxes are selected in the LAN-FAX driver dialog box. Personal authentication information is added to the printer job. The printer driver applies advanced encryption to the login passwords. The printer driver encryption key enables driver encryption and prevents the login password from being stolen.

   For details about prohibiting the use of simple encryption using "Restrict Use of Simple Encryption", see "Specifying the Extended Security Functions".

2. The [User Authentication] check box is selected in the PCL printer driver, and/or the [General user authentication] check box is selected in the LAN-FAX driver dialog box. Personal authentication information is added to the printer job. The printer driver applies simple encryption to login passwords.

   For details about turning off "Restrict Use of Simple Encryption" and allowing the use of simple encryption, see "Specifying the Extended Security Functions".

3. The [User Authentication] check box is not selected in the PCL printer driver, and/or the [General user authentication] check box is not selected in the LAN-FAX driver dialog box. Personal authentication information is added to the printer job, but authentication is disabled.

4. When using the PostScript 3 printer driver, the printer job contains user code information. Personal authentication information is not added to the printer job but the user code information is. This also applies to recovery/parallel printing using a PCL printer driver that does not support authentication.

5. When using the PostScript 3 printer driver, the printer job does not contain user code information. Neither personal authentication information nor user code information is added to the printer job. This also applies to recovery/parallel printing using a PCL printer driver that does not support authentication.

6. A printer job or PDF file is sent from a host computer without a printer driver and is printed via LPR. Personal authentication information is not added to the printer job. The above is also true for Mail to Print. For details about Mail to Print, see "Mail to Print", Facsimile Reference.

7. A PDF file is printed via ftp. Personal authentication is performed using the user ID and password used for logging in via ftp. However, the user ID and password are not encrypted.

Reference

- p.249 "Specifying the Extended Security Functions"

If User Authentication is Specified

When user authentication (User Code Authentication, Basic Authentication, Windows Authentication, LDAP Authentication, or Integration Server Authentication) is set, the authentication screen is displayed. To use the machine's security functions, each user must enter a valid user name and password. Log in to operate the machine, and log out when you are finished operations. Be sure to log out to prevent unauthorized users from using the machine. When auto logout timer is specified, the machine automatically logs you off if you do not use the control panel within a given time. For details about auto logout timer, see "Auto Logout". Additionally, you can authenticate using an external device. For details about using an external device for user authentication, contact your service representative.

Note

- Consult the User Administrator about your login user name, password, and user code.
- For user code authentication, enter a number registered in the Address Book as "User Code".
- The auto logout timer function can only be used under Basic Authentication, Windows Authentication, LDAP Authentication, or Integration Server Authentication.

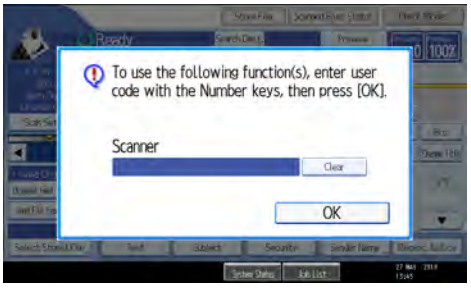
Reference

- p.92 "Auto Logout"

If User Code Authentication is Specified

When User Code Authentication is set, the following screen appears.

The scanner screen is used as an example.



Enter your user code.

Logging in Using the Control Panel

Use the following procedure to log in when User Code Authentication is enabled.

1. **Enter a user code (up to 8 digits), and then press [OK].**

   When the authentication is successful, a screen showing the corresponding function is displayed.

Note

- To log out, do one of the following:
  - Press the operation switch.
  - Press the [Energy Saver] key after jobs are completed.
  - Press the [Clear/Stop] key and the [Clear Modes] key at the same time.

Logging in Using the Printer Driver

When User Code Authentication is set, specify a user code in the printer driver's printing preferences dialog box. For details, see the printer driver Help.

If Basic, Windows, LDAP or Integration Server Authentication is Specified

When Basic Authentication, Windows Authentication, LDAP Authentication or Integration Server Authentication is set, the following screen appears.

Enter your login user name and password.

Logging in Using the Control Panel

Use the following procedure to log in if Basic Authentication, Windows Authentication, LDAP Authentication, or Integration Server Authentication is enabled.

1. **Press [Login].**
2. **Enter the login user name, and then press [OK].**
3. **Enter the login password, and then press [OK].**

   The message, "Authenticating... Please wait." appears.

   When the authentication is successful, a screen showing the corresponding function is displayed.

Logging out Using the Control Panel

Follow the procedure below to log out when Basic Authentication, Windows Authentication, LDAP Authentication, or Integration Server Authentication is set.

1. **Press the [Login/Logout] key.**
2. **Press [Yes].**

   The message, "Logging out... Please wait." appears.

Note

- You can log out using the following procedures also.
  - Press the operation switch.
  - Press the [Energy Saver] key.

Logging in Using the Printer Driver

When Basic Authentication, Windows Authentication, LDAP Authentication, or Integration Server Authentication is set, make encryption settings in printer properties on the printer driver, and then specify a login user name and password.

Windows XP is used to illustrate the procedure.

LAN-FAX driver

If the user authentication settings are made on the machine, make sure the user authentication settings are made on the LAN-Fax driver also.

With user authentication, only users registered in the machine or server can send and/or print faxes using the machine. Make sure the user's login user name and login password settings are entered on the LAN-Fax driver to enable that user to send and/or print. Users not registered on the machine cannot use the machine for sending and/or printing.

1. **Open the printer properties dialog box, and then click the [Advanced Options] tab.**
2. **Select the [General user authentication] check box.**
3. **If you want to encrypt the login password, select the [Encryption] check box.**

   Enter the driver encryption key set on the machine.
4. **Click [OK] to close the printer properties dialog box.**
5. **Open the document you want to send from an application.**
6. **Select [LAN-Fax] as the printer and then start the print job.**

   The [LAN-Fax] dialog box appears.
7. **Click [User Settings].**

   The [User Settings] dialog box appears.

8. **Enter the login user name and login password already set on the machine or server for user authentication.**

   If you enter an invalid login user name and login password, sending and/or printing does not start.

9. **Click [OK].**

   A confirmation message appears.

10. **Confirm the password by re-entering it, and then click [OK].**

11. **Click [Print].**

Note

- [User code:] and [Specify sender] settings on the [User Settings] dialog box are invalid when you use the user authentication function.

PCL printer driver

If the user authentication settings have been made on the machine, you also need to make the user authentication settings on the printer driver.

With user authentication, only users who are registered on the machine or the server can print using the machine. You need to make the login user name and login password settings for a user to enable that user to print. Users who are not registered on the machine printer or the server cannot use the machine for printing.

1. **Open the printer properties dialog box, and then click the [Advanced Options] tab.**
2. **Select the [User Authentication] check box.**
3. **If you want to encrypt the login password, select the [With Encryption] check box.**

   Enter the driver encryption key already set on the machine.

4. **Click [OK] to close the printer properties dialog box.**
5. **From the [Printers and Faxes] window, open the printing preferences dialog box of this machine.**
6. **Specify the user authentication setting.**

   When using the PCL 5c printer driver, click the [Valid Access] tab, and then click [Authentications...].

   When using the PCL 6 printer driver, click the [Detailed Settings] tab, click [Job Setup], and then click [Authentication...] in the [Job Setup] area.

7. **Enter a login user name and login password already set on the machine or the server for user authentication.**

   Make sure to re-enter the same password for confirmation.

   Be sure to enter the same login user name and login password that is registered on the machine or the server. Printing will not start unless you enter a valid login user name and login password.

8. **Click [OK] to close the [Authentication] dialog box.**
9. **Click [OK] to close the printing preferences dialog box.**

Note

- When you use the user authentication function, user code setting becomes invalid.
- When logged in using a printer driver, logging out is not required.
- Depending on the applications, the settings you make here may not be used as the default settings.
- For details about the printer driver setting screen, see "Displaying the Printer Driver Settings Screen", Printer Reference.

Logging in Using Web Image Monitor

This section explains how to log in to the machine via Web Image Monitor.

1. **Click [Login] on the top page of Web Image Monitor.**
2. **Enter a login user name and password, and then click [Login].**

Note

- For user code authentication, enter a user code in "Login User Name", and then click [Login].

Logging out Using Web Image Monitor

1. **Click [Logout] to log out.**

Note

- Delete the cache memory in Web Image Monitor after logging out.

User Lockout Function

If an incorrect password is entered several times, the User Lockout function prevents further login attempts under the same user name. Even if the locked out user enters the correct password later, authentication will fail and the machine cannot be used until the lockout period elapses or an administrator or supervisor disables the lockout.

To use the lockout function for user authentication, the authentication method must be set to Basic authentication. Under other authentication methods, the lockout function protects supervisor and administrator accounts only, not general user accounts.

Lockout setting items

The lockout function settings can be made using Web Image Monitor.

Setting Item	Description	Setting Values	Default Setting
Lockout	Specify whether or not to enable the lockout function.	• Active • Inactive	• Inactive
Number of Attempts before Lockout	Specify the number of authentication attempts to allow before applying lockout.	1-10	5
Lockout Release Timer	Specify whether or not to cancel lockout after a specified period elapses.	• Active • Inactive	• Inactive
Lock Out User for	Specify the number of minutes after which lockout is canceled.	1-9999 min.	60 min.

Lockout release privileges

Administrators with unlocking privileges are as follows.

Locked out User	Unlocking administrator
general user	user administrator
user administrator, network administrator, file administrator, machine administrator	supervisor
supervisor	machine administrator

Specifying the User Lockout Function

This can be specified by the machine administrator using Web Image Monitor.

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.

3. **Click [Login].**

   The machine administrator can log in.

   Enter the login user name and login password.

4. **Click [Configuration], and then click [User Lockout Policy] under "Security".**

   The User Lockout Policy page appears.

5. **Set "Lockout" to [Active].**

6. **In the drop down menu, select the number of login attempts to permit before applying lockout.**

7. **After lockout, if you want to cancel lockout after a specified time elapses, set "Lockout Release Timer" to [Active].**

8. **In the "Lock Out User for" field, enter the number of minutes until lockout is disabled.**

9. **Click [OK].**

   User Lockout Policy is set.

10. **Click [Logout].**

Canceling Password Lockout

This section explains how to cancel user password lockout. User password lockout is configured by the user administrator.

1. **Open a Web browser.**

2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.

3. **Click [Login].**

   The administrator or supervisor with unlocking privileges can log in.

   Enter the login user name and login password.

4. **Click [Address Book].**

   The Address Book page appears.

5. **Select the locked out user's account.**

6. **Click [Change].**

7. **Set "Lockout" to [Inactive] under "Authentication Information".**

8. **Click [OK].**

9. **Click [Logout].**

Note

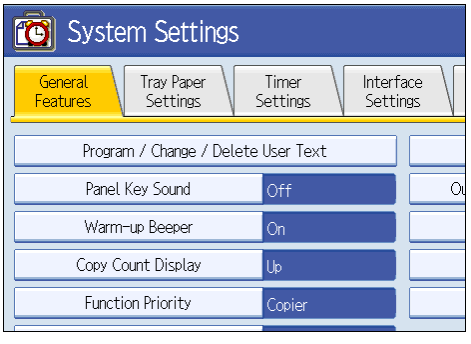
- You can cancel the administrator and supervisor password lockout by turning the power off and then turning it back on again, or by canceling the setting in [Program/Change Administrator] under [Configuration] in Web Image Monitor.

Auto Logout

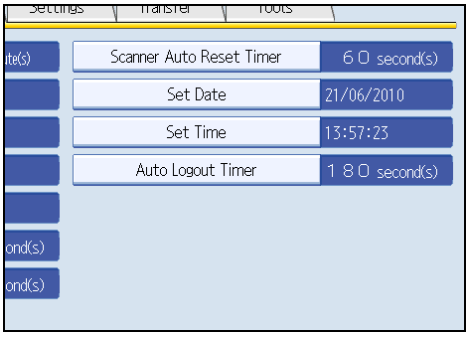
This can be specified by the machine administrator. For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

When using Basic Authentication, Windows Authentication, LDAP Authentication or Integration Server Authentication, the machine automatically logs you off if you do not use the control panel within a given time. This feature is called "Auto Logout". Specify how long the machine is to wait before performing Auto Logout.

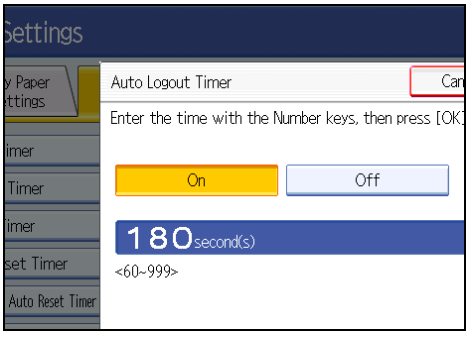
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Timer Settings].**



4. **Press [Auto Logout Timer].**

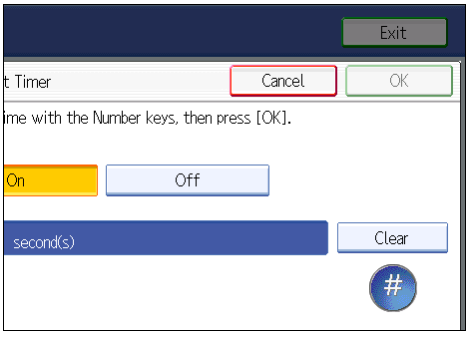


5. **Select [On].**



If you do not want to specify [Auto Logout Timer], select [Off].

6. **Enter "60" to "999" (seconds) using the number keys, and then press [#].**



7. **Press the [User Tools/Counter] key.**

A confirmation message appears.

If you press [Yes], you will be automatically logged out.

Note

- If a paper jam occurs or toner runs out, the machine might not be able to perform the Auto Logout function.

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

Authentication Using an External Device

To authenticate using an external device, see the device manual.

For details, contact your sales representative.

4. Protecting Data from Information Leaks

This chapter describes how to protect document data.

Printing a Confidential Document

Depending on the location of the machine, it is difficult to prevent unauthorized persons from viewing prints lying in the machine's output trays. When printing confidential documents, use the Locked Print function.

Locked Print

- Using the printer's Locked Print function, store files in the machine as Locked Print files and then print them from the control panel and retrieve them immediately, preventing others from viewing them.
- Confidential documents can be printed regardless of the User Authentication settings.

Note

- To store files temporarily, select [Stored Print] in the printer driver. If you select [Stored Print (Shared)], you can also share these files.

Specifying Locked Print File

Using the printer driver, specify a Locked Print file.

If user authentication has been enabled, you must enter the login user name and login password using the printer driver. For details about logging in, see the printer driver Help.

Locked Print is allowed even if user authentication is not yet configured. For configuring this setting, see "Locked Print", Printer Reference.

1. **Open the printing preferences dialog box.**
2. **Set "Job Type:" to [Locked Print].**

   When using the PCL 5c printer driver, the "Job Type:" list is on the "Setup" tab.

   When using the PCL 6 printer driver, the "Job Type:" list is on the "One Click Presets" tab.
3. **Click [Details...].**
4. **Enter the user ID and password.**

   Enter the user ID using up to 8 alphanumeric characters.

   Enter the password using 4 to 8 numbers.

   Enter the classification code using up to 32 alphanumeric characters.

Classification codes allow you to collate log files that show the number of pages printed under each code.

The password entered here lets you use the Locked Print function.

To print a Locked Print file, enter the same password on the control panel.

The password is encrypted during data transmission.

5. **Click [OK].**
6. **Click [OK].**
7. **Print the locked document.**

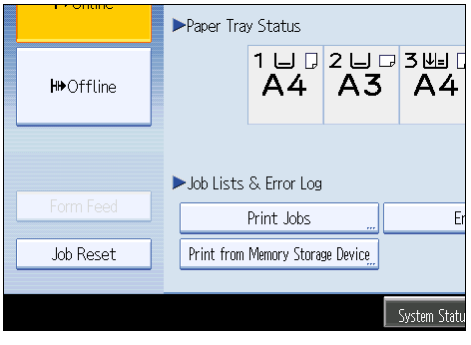
Printing a Locked Print File

To print a Locked Print file, you must be at the machine and print the file using the control panel.

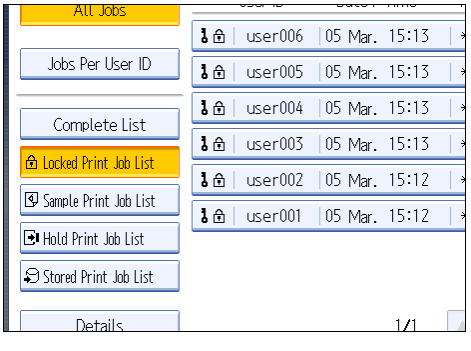
To print Locked Print files, the password is required. If you do not enter the correct password, you cannot print the files. The file administrator can change the user password if it is forgotten.

This can also be specified via Web Image Monitor. For details, see Web Image Monitor Help.

1. **Press the [Printer] key.**
2. **Press [Print Jobs].**

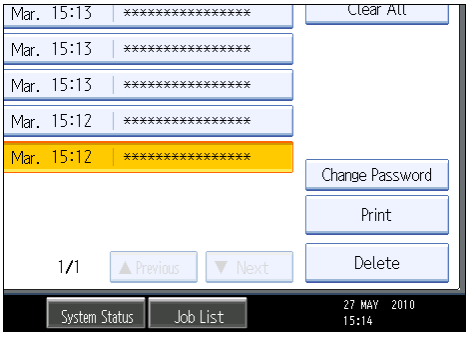


3. **Press [Locked Print Job List].**

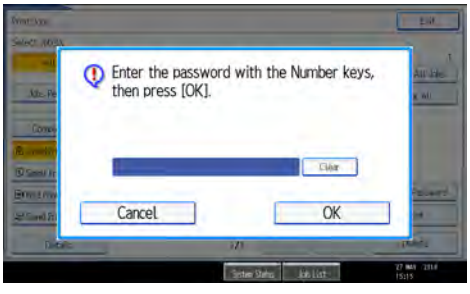


Only Locked Print files belonging to the user who has logged in appear.

4. **Select the Locked Print file to print.**
5. **Press [Print].**



6. **Enter the password for the stored file, and then press [OK].**



Enter the password specified in step 4 of "Specifying a Locked Print File".

7. **Press [Yes].**

Note

- For details about logging in and logging out with user authentication, see "If User Authentication is Specified".

Reference

- p.85 "If User Authentication is Specified"

Deleting Locked Print Files

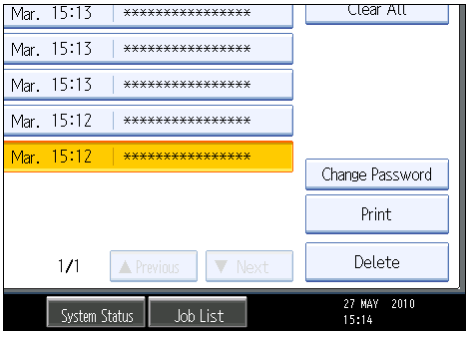
This can be specified by the file creator (owner).

To delete Locked Print files, you must enter the password for the files. If the password has been forgotten, ask the file administrator to change the password.

This can also be specified via Web Image Monitor. For details, see Web Image Monitor Help.

1. **Press the [Printer] key.**
2. **Press [Print Jobs].**

3. **Press [Locked Print Job List].**
4. **Select the file.**
5. **Press [Delete].**



6. **Enter the password of the Locked Print file, and then press [OK].**

   The password entry screen does not appear if the file administrator is logged in.

7. **Press [Yes].**

Note

- You can configure this machine to delete stored files automatically by setting the "Auto Delete Temporary Print Jobs" option to [On]. For details about "Auto Delete Temporary Print Jobs", see "System", Printer Reference.
- Locked Print files can also be deleted by the file administrator.

Changing the Password of a Locked Print File

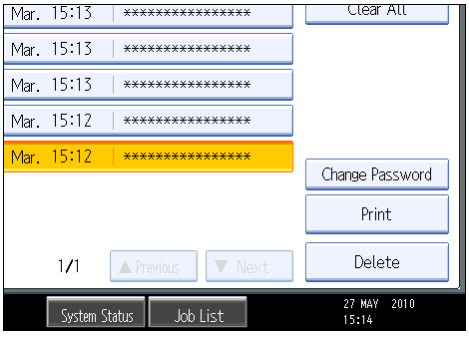
This can be specified by the file creator (owner) or file administrator.

If the password has been forgotten, the file administrator changes the password to restore access.

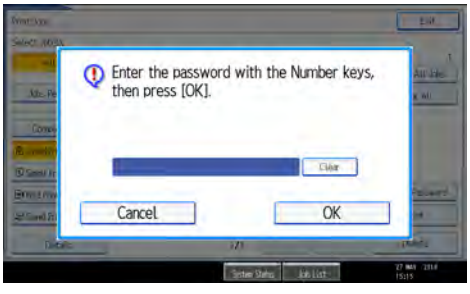
This can also be specified via Web Image Monitor. For details, see Web Image Monitor Help.

1. **Press the [Printer] key.**
2. **Press [Print Jobs].**
3. **Press [Locked Print Job List].**
4. **Select the file.**

5. **Press [Change Password].**

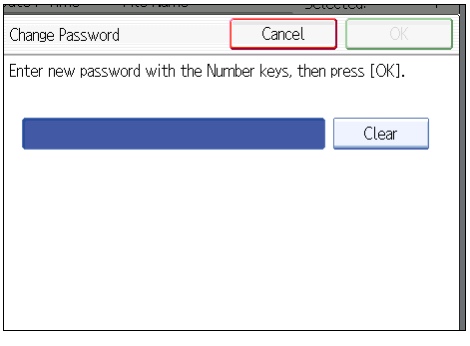


6. **Enter the password for the stored file, and then press [OK].**



The password entry screen will not appear if the file administrator is logged in.

7. **Enter the new password for the stored file, and then press [OK].**



8. **If a password reentry screen appears, enter the login password, and then press [OK].**

The password entry screen does not appear if the file administrator is logged in.

Unlocking a Locked Print File

If you specify [On] for "Enhance File Protection", the file will be locked and become inaccessible if an invalid password is entered ten times. This section explains how to unlock files.

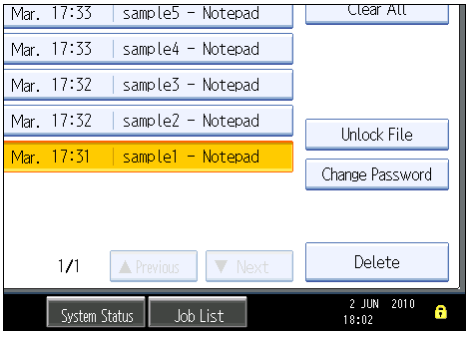
"Enhance File Protection" is one of the extended security functions. For details about this and other extended security functions, see "Specifying the Extended Security Functions".

Only the file administrator can unlock files. For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

This can also be specified via Web Image Monitor. For details, see Web Image Monitor Help.

1. **Press the [Printer] key.**
2. **Press [Print Jobs].**
3. **Press [Locked Print Job List].**
4. **Select the file.**

   The ⃠ icon appears next to a file locked by the Enhance File Protection function.
5. **Press [Unlock File].**



6. **Press [Yes].**

   The ⃠ icon disappears.

Note

- You can use the same procedure to unlock stored print files also.

Reference

- p.249 "Specifying the Extended Security Functions"
- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

Configuring Access Permissions for Stored Files

This section describes how to specify access permissions for stored files.

You can specify who is allowed to access stored scan files and files stored in Document Server.

This can prevent activities such as printing or sending of stored files by unauthorized users.

You can also specify which users can change or delete stored files.

Access Permission

To limit the use of stored files, you can specify four types of access permissions.

Read-only	In addition to checking the content of and information about stored files, you can also print and send the files.
Edit	You can change the print settings for stored files. This includes permission to view files.
Edit / Delete	You can delete stored files. This includes permission to view and edit files.
Full Control	You can specify the user and access permission. This includes permission to view, edit, and edit / delete files.

Password for Stored Files

- Passwords for stored files can be specified by the file creator (owner) or file administrator.
- You can obtain greater protection against the unauthorized use of files.
- Even if User Authentication is not set, passwords for stored files can be set.

Note

- For details about assigning a password to a stored file, see "Specifying Passwords for Stored Files".
- Files can be stored by any user who is allowed to use Document Server, copy function, scanner function or fax function.
- Using Web Image Monitor, you can check the content of stored files. For details, see Web Image Monitor Help.
- Access permission to documents sent from the printer driver and stored on the machine can only be set on Web Image Monitor. For details, see Web Image Monitor Help.
- The default access permission for the file creator (owner) is "Read-only". You can also specify the access permission.
- The file administrator can also delete stored files. For details, see "Deleting a Stored Document", Copy and Document Server Reference.

Reference

- p.110 "Specifying Passwords for Stored Files"

Specifying User and Access Permissions for Stored Files

This can be specified by the file creator (owner) or file administrator. For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

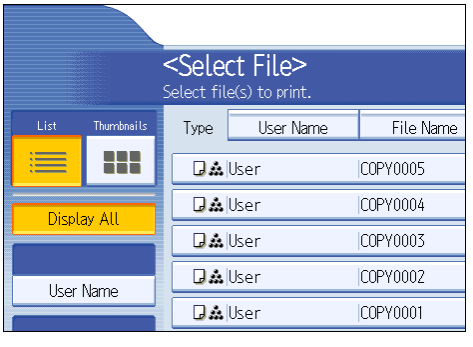
Specify the users and their access permissions for each stored file.

By making this setting, only users granted access permission can access stored files.

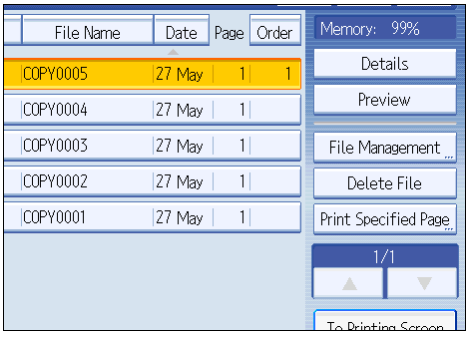
Important

- **If files become inaccessible, reset their access permission as the file creator (owner). This can also be done by the file administrator. If you want to access a file but do not have access permission, ask the file creator (owner).**
- **The file administrator can change the owner of a document using the document's [Change Access Priv.] setting. This setting also allows the file administrator to change the access privileges of the owner and other users. The document owner and users with the [Full Control] privilege for the document can change the access privileges of the owner and other users under the [Change Access Priv.] setting.**

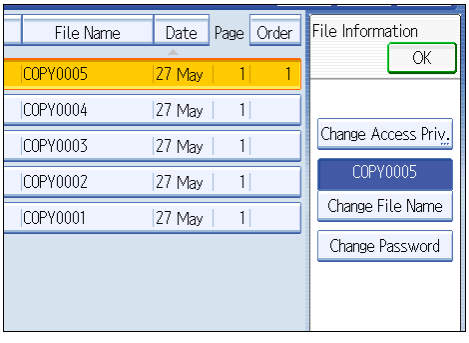
1. **Press the [Document Server] key.**
2. **Select the file.**



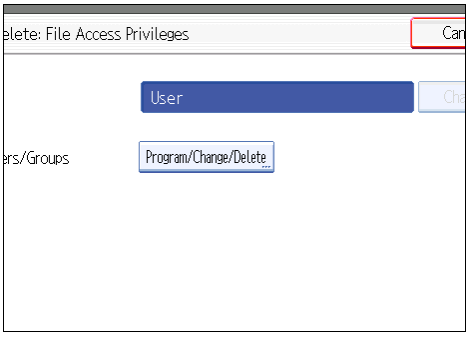
3. **Press [File Management].**



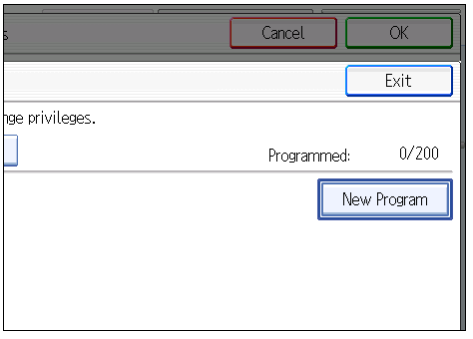
4. **Press [Change Access Priv.].**



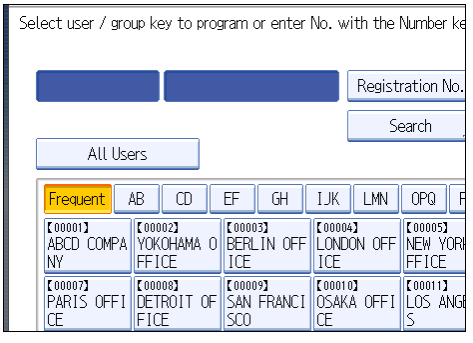
5. **Press [Program/Change/Delete].**



6. **Press [New Program].**



7. **Select the users or groups to whom you want to assign access permission.**

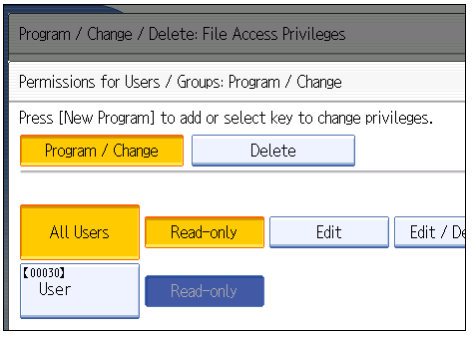


You can select more than one user.

By pressing [All Users], you can select all the users.

8. **Press [Exit].**

9. **Select the user to whom you want to assign access permission, and then select the permission.**



Select the access permission from [Read-only], [Edit], [Edit / Delete], or [Full Control].

10. **Press [Exit].**

11. **Press [OK].**

Note

- The "Edit", "Edit / Delete", and "Full Control" access permissions allow a user to perform high level operations that could result in loss of or changes to sensitive information. We recommend you grant only the "Read-only" permission to general users.

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

Changing the Owner of a Document

Use this procedure to change the owner of a document.

Only the file administrator can change the owner of a document.

1. **Press the [Document Server] key.**
2. **Select the file.**
3. **Press [File Management].**
4. **Press [Change Access Priv.].**
5. **Under "Owner", press [Change].**
6. **Select the user you want to register.**
7. **Press [Exit].**
8. **Press [OK] twice.**

Specifying Access Permissions for Files Stored Using the Scanner and Fax Functions

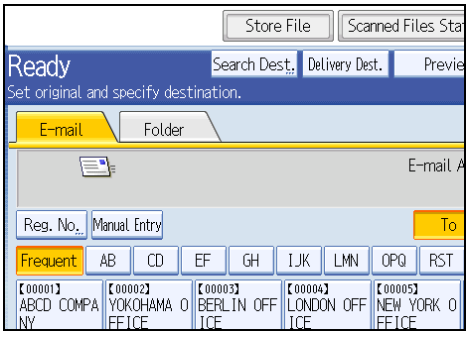
If user authentication is set for scanner and fax function, you can specify access privileges for stored files when storing them in Document Server. You can also change the access privileges for the file.

Specifying Access Permissions When Storing a File

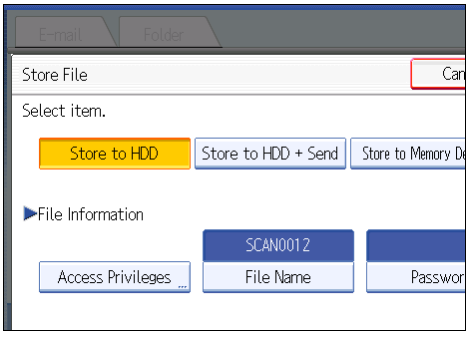
This section explains how to specify the access privileges and then store a file in Document Server under the scanner or fax function.

The scanner screen is used to illustrate the procedure.

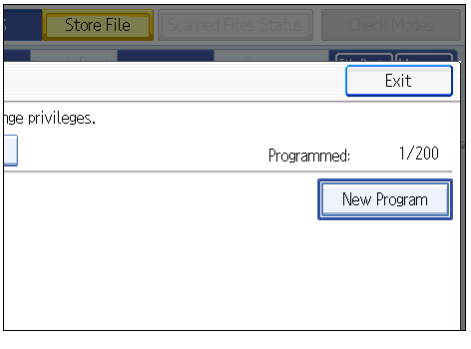
1. **Press [Store File].**



2. **Press [Access Privileges].**



3. **Press [New Program].**



4. **Select the users or groups to whom you want to assign permission.**

   You can select more than one user.

   By pressing [All Users], you can select all the users.

5. **Press [Exit].**

6. **Select the user to whom you want to assign access permission, and then select the permission.**

   Select the access permission from [Read-only], [Edit], [Edit / Delete], or [Full Control].

7. **Press [Exit].**

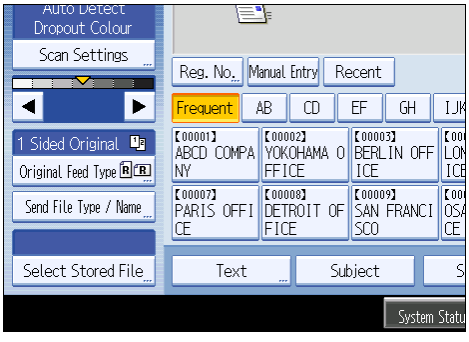
8. **Press [OK].**
9. **Store files in Document Server.**

Specifying Access Permissions for Stored Files

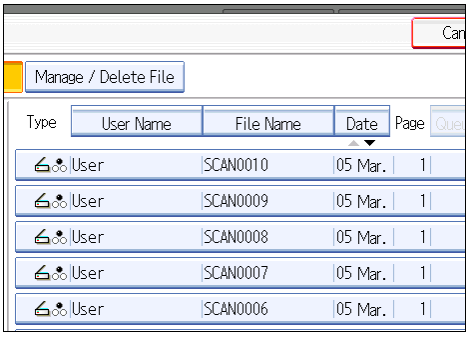
This section explains how to change access privileges for a file stored in Document Server under the scanner or fax function.

The scanner screen is used to illustrate the procedure.

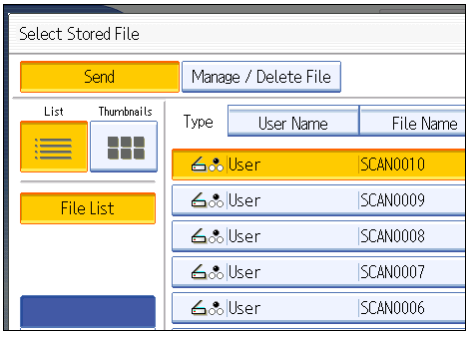
1. **Press [Select Stored File].**



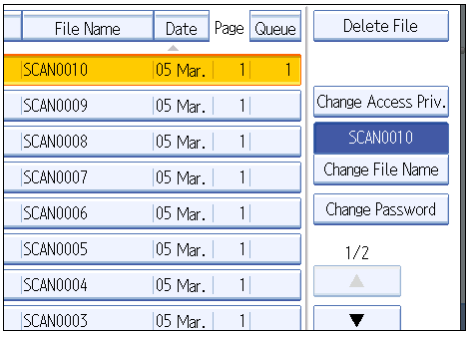
2. **Select the file.**



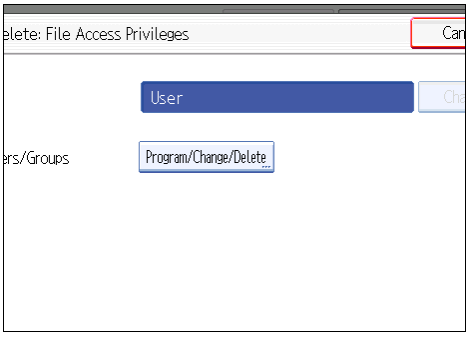
3. **Press [Manage / Delete File].**



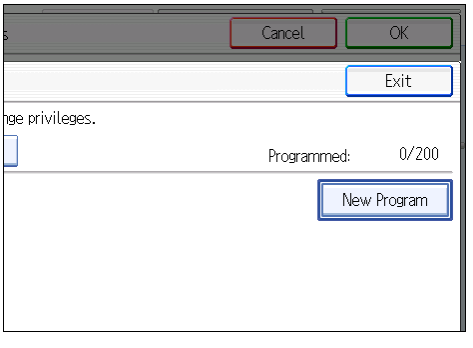
4. **Press [Change Access Priv.].**



5. **Press [Program/Change/Delete].**



6. **Press [New Program].**



7. **Select the users or groups to whom you want to assign permission.**

   You can select more than one user.

   By pressing [All Users], you can select all the users.

8. **Press [Exit].**

9. **Select the user to whom you want to assign access permission, and then select the permission.**

   Select the access permission from [Read-only], [Edit], [Edit / Delete], or [Full Control].

10. **Press [Exit].**

11. Press [OK].

Note

- The "Edit", "Edit / Delete", and "Full Control" access permissions allow a user to perform high level operations that could result in loss of or changes to sensitive information. We recommend you grant only the "Read-only" permission to general users.

Specifying User and Access Permissions for Files Stored by a Particular User

This can be specified by the file creator (owner) or user administrator. For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

Specify the users and their access permission to files stored by a particular user.

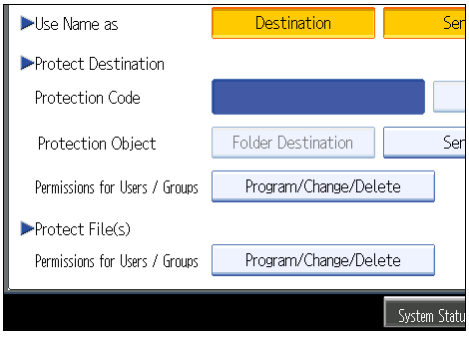
Only those users granted access permission can access stored files.

This makes managing access permission easier than specifying and managing access permissions for each stored file.

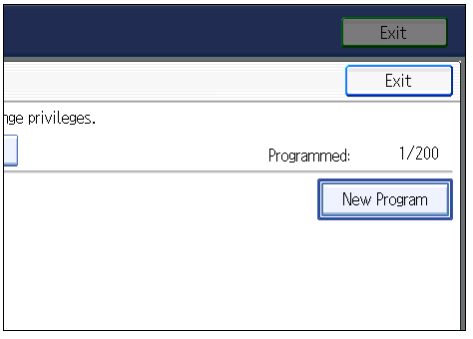
Important

- **If files become inaccessible, be sure to enable the user administrator, so that the user administrator can reset the access permission for the files in question.**

1. Press the [User Tools/Counter] key.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Select the user.
6. Press [Protection].
7. Under "Protect File(s)", press [Program/Change/Delete] for "Permissions for Users/Groups".



8. **Press [New Program].**



9. **Select the users or groups to register.**

   You can select more than one user.

   By pressing [All Users], you can select all the users.

10. **Press [Exit].**
11. **Select the user to whom you want to assign access permission, and then select the permission.**

    Select the access permission from [Read-only], [Edit], [Edit / Delete], or [Full Control].

12. **Press [Exit].**
13. **Press [OK].**
14. **Press [Exit].**
15. **Press the [User Tools/Counter] key.**

Note

- The "Edit", "Edit / Delete", and "Full Control" access permissions allow a user to perform high level operations that could result in loss of or changes to sensitive information. We recommend you grant only the "Read-only" permission to general users.

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

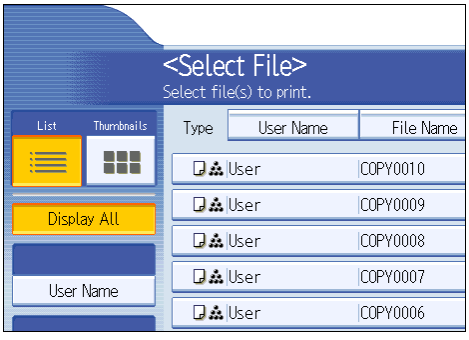
Specifying Passwords for Stored Files

This can be specified by the file creator (owner) or file administrator. For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

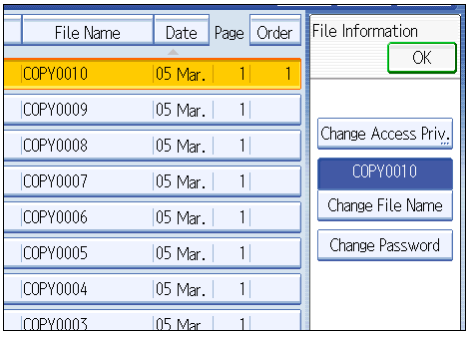
Specify passwords for stored files.

This provides increased protection against unauthorized use of files.

1. **Press the [Document Server] key.**
2. **Select the file.**



3. **Press [File Management].**
4. **Press [Change Password].**



5. **Enter the password using the number keys.**

   You can use 4 to 8 numbers as the password for the stored file.
6. **Press [OK].**
7. **Confirm the password by re-entering it using the number keys.**
8. **Press [OK].**

   The icon appears next to a stored file protected by password.
9. **Press [OK].**

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

Unlocking Files

If you specify "Enhance File Protection", the file will be locked and become inaccessible if an invalid password is entered ten times. This section explains how to unlock files.

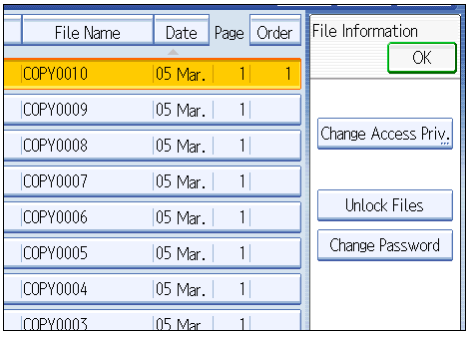
"Enhance File Protection" is one of the extended security functions. For details about this and other extended security functions, see "Specifying the Extended Security Functions".

Only the file administrator can unlock files.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

1. **Press the [Document Server] key.**
2. **Select the file.**

   The icon appears next to a file locked by the Enhance File Protection function.
3. **Press [File Management].**
4. **Press [Unlock Files].**



5. **Press [Yes].**

   The icon changes to the icon.
6. **Press [OK].**

Reference

- p.249 "Specifying the Extended Security Functions"
- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

5. Securing Information Sent over the Network or Stored on Hard Disk

This chapter describes how to protect information transmitted through the network or stored on the hard disk from unauthorized viewing and modification.

Preventing Information Leakage Due to Unauthorized Transmission

This section describes Preventing Data Leaks Due to Unauthorized Transmission.

If user authentication is specified, the user who has logged in will be designated as the sender to prevent data from being sent by an unauthorized person masquerading as the user.

You can also limit the direct entry of destinations to prevent files from being sent to destinations not registered in the Address Book.

Restricting Destinations

This can be specified by the user administrator.

Make the setting to disable the direct entry of e-mail addresses and phone numbers under the scanner and fax functions.

By making this setting, the destinations are restricted to addresses registered in the Address Book.

If you set "Restrict Use of Destinations (Fax)" and/or "Restrict Use of Destinations (Scanner)" to [On], users will not be able to directly enter phone numbers, e-mail addresses, and folder paths as file destinations on the fax or scanner screen. If you set "Restrict Use of Destinations (Fax)" to [Off], "Restrict Adding of User Destinations (Fax)" will appear. Similarly, if you set "Restrict Use of Destinations (Scanner)" to [Off], "Restrict Adding of User Destinations (Scanner)" will appear. Note that selecting [On] for "Restrict Adding of User Destinations (Fax)" or "Restrict Adding of User Destinations (Scanner)" will prevent users registering destinations entered using the fax or scanner screen in the Address Book.

If you set "Restrict Adding of User Destinations (Fax)" and/or "Restrict Adding of User Destinations (Scanner)" to [Off], users will be able to directly enter phone numbers, e-mail addresses, and folder paths as file destinations using "Prg. Dest." on the fax or scanner screen. If you set these settings to [On], the [Prg. Dest.] key will not appear. Users will still be able to enter a destination directly using the fax or scanner screen, but cannot then register that destination in the Address Book by pressing [Prg. Dest.]. Note too that if you set these functions to [On], only the user administrator can register new users in the Address Book and change the passwords and other information of existing registered users.

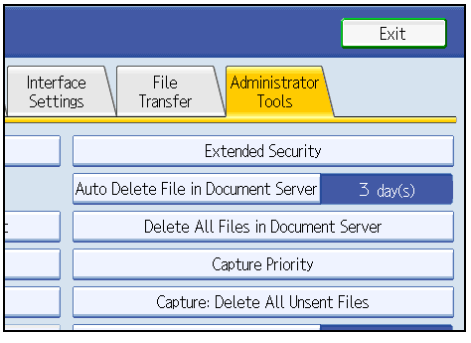
"Restrict Use of Destinations (Fax)", "Restrict Use of Destinations (Scanner)", "Restrict Adding of User Destinations (Fax)" and "Restrict Adding of User Destinations (Scanner)" are extended security functions.

For more information about these and the extended security functions, see "Specifying the Extended Security Functions".

"Restricting Destinations" can also be specified using Web Image Monitor. For details, see Web Image Monitor Help.

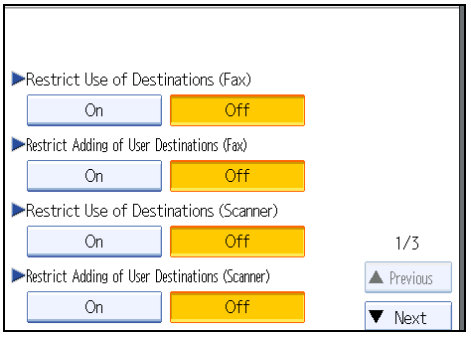
For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Extended Security].**



If this item is not visible, press [▼Next] to display more settings.

5. **Press [On] for "Restrict Use of Destinations (Fax)" and/or "Restrict Use of Destinations (Scanner)".**



If you set "Restrict Use of Destinations (Fax)" to [On], "Restrict Adding of User Destinations (Fax)" will not appear. Similarly, if you set "Restrict Use of Destinations (Scanner)" to [On], "Restrict Adding of User Destinations (Scanner)" will not appear.

6. **Press [OK].**
7. **Press the [User Tools/Counter] key.**

Reference

- p.249 "Specifying the Extended Security Functions"
- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

Using S/MIME to Protect E-mail Transmission

By registering a user certificate in the Address Book, you can send e-mail that is encrypted with a public key which prevents its content from being altered during transmission. You can also prevent sender impersonation (spoofing) by installing a device certificate on the machine, and attaching an electronic signature created with a private key. You can apply these functions separately or, for stronger security, together.

To send encrypted e-mail, both the sender (this machine) and the receiver must support S/MIME.

For details about using S/MIME with the scanner function, see "Security Settings to E-mails", Scanner Reference.

For details about using S/MIME with the fax function, see "Internet Fax Transmission" or "E-mail Transmission", or "Folder Transmission", Facsimile Reference.

Compatible Mailer Applications

The S/MIME function can be used with the following applications:

- Microsoft Outlook 98 and later
- Microsoft Outlook Express 5.5 and later
- Netscape Messenger 7.1 and later
- Lotus Notes R5 and later

Important

- **To use S/MIME, you must first specify "Administrator's E-mail Address" in [System Settings].**

Note

- If an electronic signature is specified for an e-mail, the administrator's address appears in the "From" field and the address of the user specified as "sender" appears in the "Reply To" field.
- When sending e-mail to users that support S/MIME and users that do not support S/MIME at the same time, the e-mail is separated into encrypted and unencrypted groups and then sent.
- When using S/MIME, the e-mail size is larger than normal.

E-mail Encryption

To send encrypted e-mail using S/MIME, the user certificate must first be prepared using Web Image Monitor and registered in the Address Book by the user administrator. Registering the certificate in the Address Book specifies each user's public key. After installing the certificate, specify the encryption algorithm using Web Image Monitor. The network administrator can specify the algorithm.

E-mail Encryption

1. Prepare the user certificate.

2. Install the user certificate in the Address Book using Web Image Monitor. (The public key on the certificate is specified in the Address Book.)
3. Specify the encryption algorithm using Web Image Monitor.
4. Using the shared key, encrypt the e-mail message.
5. The shared key is encrypted using the user's public key.
6. The encrypted e-mail is sent.
7. The receiver decrypts the shared key using a secret key that corresponds to the public key.
8. The e-mail is decrypted using the shared key.

Note

- There are three types of user certificates that can be installed on this machine, "DER encoded binary X.509", "Base 64 encoded X.509", and "PKCS #7 certificate".
- When installing a user certificate to the Address Book using Web Image Monitor, you might see an error message if the certificate file contains more than one certificate. If this error message appears, install the certificates one at a time.

Specifying the User Certificate

This can be specified by the user administrator.

Each user certificate must be prepared in advance.

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.
3. **Click [Login].**

   The user administrator can log in.

   Enter the login user name and login password.
4. **Click [Address Book].**

   The Address Book page appears.
5. **Select the user for whom the certificate will be installed, and then click [Change].**

   The Change User Information screen appears.
6. **Enter the user address in the "E-mail Address" field under "E-mail".**
7. **Click [Change] in "User Certificate".**
8. **Click [Browse], select the user certificate file, and then click [Open].**

9. **Click [OK].**

   The user certificate is installed.

10. **Click [OK].**

11. **Click [Logout].**

Specifying the Encryption Algorithm

This can be specified by the network administrator.

1. **Open a Web browser.**

2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.

3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and login password.

4. **Click [Configuration], and then click [S/MIME] under "Security".**

   The S/MIME settings page appears.

5. **Select the encryption algorithm from the drop down menu next to "Encryption Algorithm" under "Encryption".**

6. **Click [OK].**

   The algorithm for S/MIME is set.

7. **Click [Logout].**

Attaching an Electronic Signature

To attach an electronic signature to sent e-mail, a device certificate must be installed in advance.

It is possible to use either a self-signed certificate created by the machine, or a certificate issued by a certificate authority.

Important

- **To install an S/MIME device certificate, you must first register "Administrator's E-mail Address" in [System Settings] as the e-mail address for the device certificate. Note that even if you will not be using S/MIME, you must still specify an e-mail address for the S/MIME device certificate.**

Electronic Signature

1. Install a device certificate on the machine. (The secret key on the certificate is configured on the machine.)
2. Attach the electronic signature to an e-mail using the secret key provided by the device certificate.
3. Send the e-mail with the electronic signature attached to the user.
4. The receiver requests the public key and device certificate from the machine.
5. Using the public key, you can determine the authenticity of the attached electronic signature to see if the message has been altered.

Configuration flow (self-signed certificate)

1. Create and install the device certificate using Web Image Monitor.
2. Make settings for the certificate to be used for S/MIME using Web Image Monitor.
3. Make settings for the electronic signature using Web Image Monitor.

Configuration flow (certificate issued by a certificate authority)

1. Create the device certificate using Web Image Monitor.

   The application procedure for a created certificate depends on the certificate authority. Follow the procedure specified by the certificate authority.
2. Install the device certificate using Web Image Monitor.
3. Make settings for the certificate to be used for S/MIME using Web Image Monitor.
4. Make settings for the electronic signature using Web Image Monitor.

Creating and Installing the Self-Signed Certificate

This can be specified by the network administrator.

Create and install the device certificate using Web Image Monitor. For details about the displayed items and selectable items, see Web Image Monitor Help.

This section explains the use of a self-signed certificate as the device certificate.

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.
3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and login password.
4. **Click [Configuration], and then click [Device Certificate] under "Security".**

5. **Check the radio button next to the number of the certificate you want to create.**
6. **Click [Create].**
7. **Make the necessary settings.**
8. **Click [OK].**

   The setting is changed.
9. **Click [OK].**

   A security warning dialog box appears.
10. **Check the details, and then click [OK].**

    "Installed" appears under "Certificate Status" to show that a device certificate for the printer has been installed.
11. **Click [Logout].**

Note

- Click [Delete] to delete the device certificate from the machine.

Creating the Device Certificate (Issued by a Certificate Authority)

This can be specified by the network administrator.

Create the device certificate using Web Image Monitor. For details about the displayed and selectable items and settings, see Web Image Monitor Help.

Use this procedure to create a device certificate issued by a certificate authority.

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.
3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and login password.
4. **Click [Configuration], and then click [Device Certificate] under "Security".**

   The Device Certificate page appears.
5. **Check the radio button next to the number of the certificate you want to request.**
6. **Click [Request].**
7. **Make the necessary settings.**
8. **Click [OK].**

9. **Click [OK].**

   "Requesting" appears for "Certificate Status".

10. **Click [Logout].**

11. **Apply to the certificate authority for the device certificate.**

    The application procedure depends on the certificate authority. For details, contact the certificate authority.

    For application details, click the Web Image Monitor Details icon and use the information shown in "Certificate Details".

Note

- The issuing location may not be displayed if you request two certificates at the same time. When you install a certificate, be sure to check the certificate destination and installation procedure.
- Using Web Image Monitor, you can create the contents of the device certificate but you cannot send the certificate application.
- Click [Cancel Request] to cancel the request for the device certificate.

Installing the Device Certificate (Issued by a Certificate Authority)

This can be specified by the network administrator.

Install the device certificate using Web Image Monitor. For details about displayed and selectable items and settings, see Web Image Monitor Help.

Use this procedure to install a server certificate issued by a certificate authority.

Enter the details of the device certificate issued by the certificate authority.

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.

3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and login password.

4. **Click [Configuration], and then click [Device Certificate] under "Security".**

   The Device Certificate page appears.

5. **Check the radio button next to the number of the certificate you want to install.**
6. **Click [Install].**

7. **Enter the contents of the device certificate.**

   In the certificate box, enter the contents of the device certificate issued by the certificate authority.

   If you are installing an intermediate certificate, enter the contents of the intermediate certificate also.

   For details about the displayed items and selectable items, see Web Image Monitor Help.

8. **Click [OK].**
9. **Wait a moment for the device to restart, and then click [OK].**

   "Installed" appears under "Certificate Status" to show that a device certificate for the machine has been installed.

10. **Click [Logout].**

Installing an Intermediate Certificate (Issued by a Certificate Authority)

This section explains how to use Web Image Monitor to install an intermediate certificate issued by a certificate authority.

If you do not have the intermediate certificate issued by the certificate authority, a warning message will appear during communication. If the certificate authority has issued an intermediate certificate, we recommend installing the intermediate certificate.

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.

3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and password.

4. **Click [Configuration], and then click [Device Certificate] under "Security".**

   The Device Certificate page appears.

5. **Check the radio button next to the number of the certificate you want to install.**
6. **Click [Install Intermediate Certificate].**
7. **Enter the contents of the intermediate certificate.**

   In the certificate box, enter the contents of the intermediate certificate issued by the certificate authority. For details about the items and settings of a certificate, see Web Image Monitor Help.

8. **Click [OK].**

9. **Wait a moment for the device to restart, and then click [OK].**

   The intermediate certificate will be installed on the device. The "Certificate Details" screen will inform you whether or not the installation of the intermediate certificate was successful. For details about the "Certificate Details" screen, see Web Image Monitor Help.

Selecting the Device Certificate

This can be specified by the network administrator.

Select the device certificate to be used for S/MIME using Web Image Monitor.

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.
3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and login password.
4. **Click [Configuration], and then click [Device Certificate] under "Security".**

   The Device Certificate page appears.
5. **Select the certificate to be used for the electronic signature from the drop down box in "S/MIME" under "Certification".**
6. **Click [OK].**

   The certificate to be used for the S/MIME electronic signature is set.
7. **Click [OK].**
8. **Click [Logout].**

Specifying the Electronic Signature

This can be specified by the network administrator.

After installing the device certificate on the machine, configure the electronic signature using Web Image Monitor. The configuration procedure is the same regardless of whether you are using a self-signed certificate or a certificate issued by a certificate authority.

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

The top page of Web Image Monitor appears.

3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and login password.

4. **Click [Configuration], and then click [S/MIME] under "Security".**

   The S/MIME settings page appears.

5. **Select the digest algorithm to be used in the electronic signature next to "Digest Algorithm" under "Signature".**

6. **Select the method for attaching the electronic signature when sending e-mail from the scanner next to "When Sending E-mail by Scanner" under "Signature".**

7. **Select the method for attaching the electronic signature when forwarding received fax messages in "When Transferring by Fax" under "Signature".**

8. **Select the method for attaching the electronic signature when forwarding stored documents next to "When Transferring Files Stored in Document Server (Utility)" under "Signature".**

9. **Click [OK].**

   The settings for the S/MIME electronic signature are enabled.

10. **Click [Logout].**

Protecting the Address Book

If user authentication is specified, the user who has logged in will be designated as the sender to prevent data from being sent by an unauthorized person masquerading as the user.

To protect the data from unauthorized reading, you can also encrypt the data in the Address Book.

Configuring Address Book Access Permissions

This can be specified by the registered user.

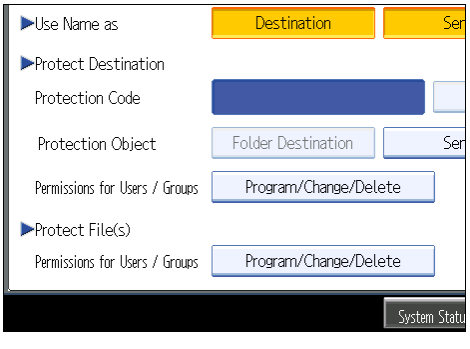
Access permission can also be specified by a user granted full control or the user administrator.

You can specify who is allowed to access the data in the Address Book.

By making this setting, you can prevent the data in the Address Book being used by unregistered users.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Select the user.**
6. **Press [Protection].**
7. **Press [Program/Change/Delete] for "Permissions for Users/Groups", under "Protect Destination".**



8. **Press [New Program].**
9. **Select the users or groups to register.**

   You can select more than one user.

   By pressing [All Users], you can select all the users.

10. **Press [Exit].**
11. **Select the user to whom you want to assign access permission, and then select the permission.**

    Select the permission, from [Read-only], [Edit], [Edit / Delete], or [Full Control].
12. **Press [Exit].**
13. **Press [OK].**
14. **Press [Exit].**
15. **Press the [User Tools/Counter] key.**

Note

- The "Edit", "Edit / Delete", and "Full Control" access permissions allow a user to perform high level operations that could result in loss of or changes to sensitive information. We recommend you grant only the "Read-only" permission to general users.

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

Encrypting Data in the Address Book

This can be specified by the user administrator.

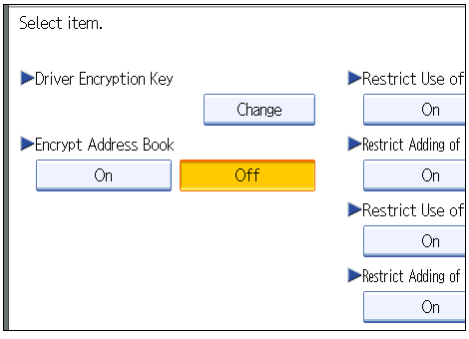
You can encrypt the data in the Address Book using the extended security function, "Encrypt Address Book". For details about this and other extended security functions, see "Specifying the Extended Security Functions".

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

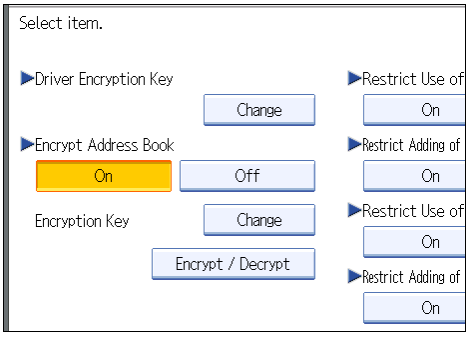
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Extended Security].**

   If this item is not visible, press [▼Next] to display more settings.

5. **Press [On] for "Encrypt Address Book".**



6. **Press [Change] for "Encryption Key".**



7. **Enter the encryption key, and then press [OK].**

   Enter the encryption key using up to 32 alphanumeric characters.

8. **Press [Encrypt / Decrypt].**

9. **Press [Yes].**

Do not switch the main power off during encryption, as doing so may corrupt the data.

Encrypting the data in the Address Book may take a long time.

The time it takes to encrypt the data in the Address Book depends on the number of registered users.

The machine cannot be used during encryption.

Normally, once encryption is complete, "Encryption / Decryption is successfully complete. Press [Exit]." appears.

If you press [Stop] during encryption, the data is not encrypted.

If you press [Stop] during decryption, the data stays encrypted.

10. **Press [Exit].**
11. **Press [OK].**
12. **Press the [User Tools/Counter] key.**

Note

- If you register additional users after encrypting the data in the Address Book, those users are also encrypted.
- The backup copy of the address book data stored in the SD card is encrypted. For details about backing up and then restoring the address book using an SD card, see "Administrator Tools", Network and System Settings Reference.

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"
- p.249 "Specifying the Extended Security Functions"

Encrypting Data on the Hard Disk

This can be specified by the machine administrator.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

Prevent information leakage by encrypting the Address Book, authentication information, and stored documents as the data is written. In addition, if the machine malfunctions or needs to be replaced, your service representative can easily transfer existing data to a new machine.

When the data encryption settings are enabled, an encryption key is generated and this is used to restore the data. This key can be changed at any time.

Data that is Encrypted

This function encrypts data that is stored in the machine's NVRAM (memory that remains even after the machine has been turned off) and on the hard disk.

The following data is encrypted:

- Address Book data
- User authentication information
- Data stored in Document Server
- Temporary stored documents
- Logs
- Network I/F setting information
- System settings information

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

Enabling the Encryption Settings

If you specify [Format All Data] to enable encryption when first setting up the machine, the encryption setting procedure will take only several minutes. Note that all data stored on the hard disk will be initialized when this setting is specified.

The table below describes which data will be kept and which data will be initialized when [Format All Data], [File System Data Only], or [All Data] is specified.

Setting	Data to be kept	Data not kept (Data to be initialized)	Required time
Format All Data	None	All Data: Both the data to be kept and data not kept when [File System Data Only] is specified	Several minutes
File System Data Only	• Embedded Software Architecture applications' program/log • Address Book • Registered fonts • Job logs/access logs • Image data in stored files (thumbnail images)	• Stored documents (stored documents in Document Server, Locked Print files / Sample Print files / Stored Print files / Hold Print files, and received and stored fax documents) • Registered stamps	Approximately 1 hour
All Data	All Data: Both the data to be kept and data not kept when [File System Data Only] is specified	None	Approximately 3 hours

Things to note when enabling encryption settings

- If you use Embedded Software Architecture application or App2Me, be sure to specify [File System Data Only] or [All Data].
- Note that the machine's settings will not be initialized to their system defaults even if [Format All Data], [File System Data Only], or [All Data] is specified.

Use the following procedure to enable the encryption settings when first setting up the machine, or after encryption settings have been canceled and settings must be made again.

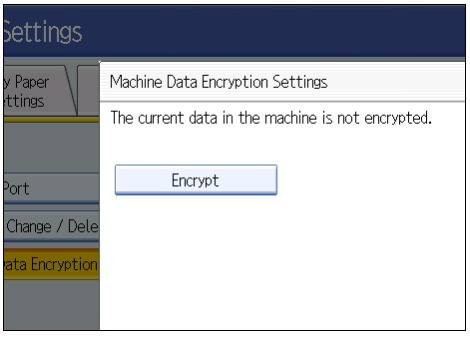
Important

- **The machine cannot be operated while data is being encrypted.**
- **Once the encryption process begins, it cannot be stopped. Make sure that the machine's main power is not turned off while the encryption process is in progress. If the machine's main power is turned off while the encryption process is in progress, the hard disk will be damaged and all data on it will be unusable.**

- The encryption key is required for data recovery if the machine malfunctions. Be sure to store the encryption key safely for retrieving backup data.
- Encryption begins after you have completed the control panel procedure and rebooted the machine by turning off and on the main power switch. If there is unencrypted data on the hard disk that must be both transferred and encrypted, rebooting will take up to three and a half hours. If there is encrypted data on the hard disk that must be re-encrypted, rebooting will also take up to three and a half hours. If both the erase-by-overwrite function and the encryption function are specified, encryption begins after the data that is stored on the hard disk has been overwritten and the machine has been rebooted with the turning off and on of the main power switch.
- If you want to specify encryption of unencrypted data with erase-by-overwrite, select [Random Numbers] as the overwrite method, and set the number of overwrites to "3". The entire process will take up to eight hours. If you specify re-encryption of encrypted data, the entire process will also take up to eight hours.
- The "Erase All Memory" function also clears the machine's security settings, with the result that afterward, neither machine nor user administration will be effective. Ensure that users do not save any data on the machine after "Erase All Memory" has completed.
- Rebooting will be faster if there is no data to carry over to the hard disk and if encryption is set to [Format All Data], even if all the data on the hard disk is formatted. Before you perform encryption, we recommend you back up important data such as the Address Book and all data stored in Document Server.
- If the encryption key update was not completed, the printed encryption key will not be valid.

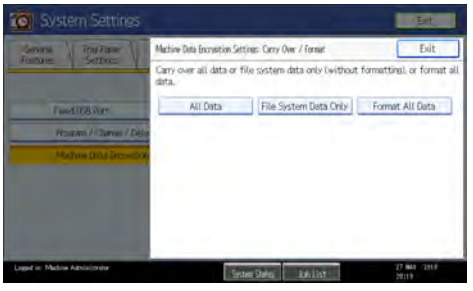
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Machine Data Encryption Settings].**

   If this item is not visible, press [▼Next] to display more settings.
5. **Press [Encrypt].**



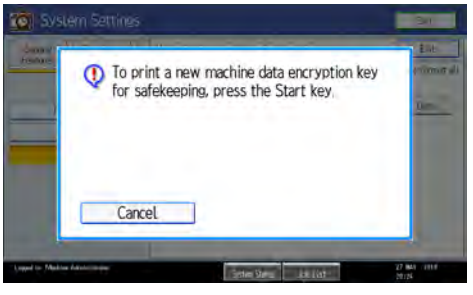
6. **Select the data to be carried over to the hard disk and not be reset.**

   To carry all of the data over to the hard disk, select [All Data]. To carry over only the machine settings data, select [File System Data Only]. To reset all of the data, select [Format All Data].



7. **Press the [Start] key.**

   The encryption key for backup data is printed.



8. **Press [OK].**

9. **Press [Exit].**
10. **Press [Exit].**
11. **Press the [User Tools/Counter] key.**
12. **Turn off the power and the main power switch, and then turn the main power switch back on.**

    For details about turning off the power, see "Turning On/Off the Power", About This Machine.

Printing the Encryption Key

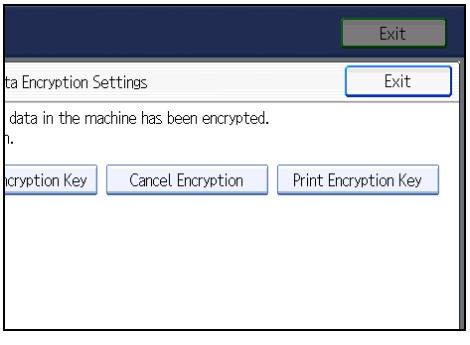
Use the following procedure to print the key again if it has been lost or misplaced.

Important

- **The encryption key is required for data recovery if the machine malfunctions. Be sure to store the encryption key safely for retrieving backup data.**
- **If the encryption key update was not completed, the printed encryption key will not be valid.**

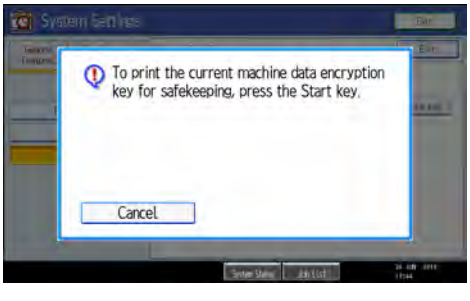
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Machine Data Encryption Settings].**

   If this item is not visible, press [▼Next] to display more settings.
5. **Press [Print Encryption Key].**



6. **Press the [Start] key.**

   The encryption key for retrieving backup data is printed.



7. **Press [Exit].**

Updating the Encryption Key

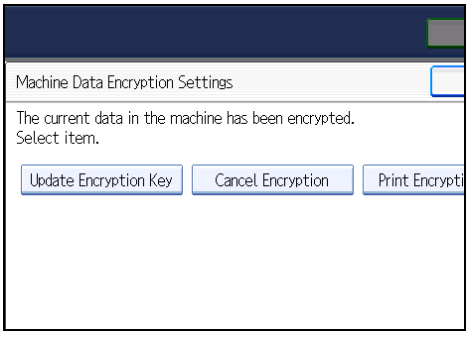
You can update the encryption key and create a new key. Updates are possible when the machine is functioning normally.

Important

- **The encryption key is required for recovery if the machine malfunctions. Be sure to store the encryption key safely for retrieving backup data.**
- **When the encryption key is updated, encryption is performed using the new key. After completing the procedure on the machine's control panel, turn off the power and restart the machine to enable the new settings. Restarting can be slow when there is data to be carried over to the hard disk.**

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Machine Data Encryption Settings].**

   If this item is not visible, press [▼Next] to display more settings.
5. **Press [Update Encryption Key].**

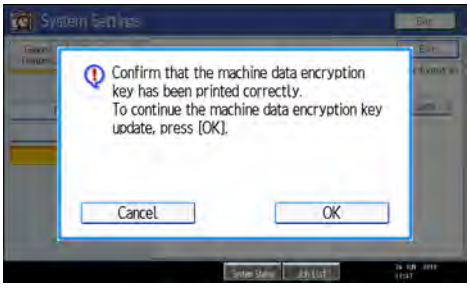


6. **Select the data to be carried over to the hard disk and not be reset.**

   To carry all of the data over to the hard disk, select [All Data]. To carry over only the machine settings data, select [File System Data Only]. To reset all of the data, select [Format All Data].
7. **Press the [Start] key.**

   The encryption key for retrieving the backup data is printed.

8. **Press [OK].**



9. **Press [Exit].**
10. **Press [Exit].**
11. **Press the [User Tools/Counter] key.**
12. **Turn off the power and the main power switch, and then turn the main power switch back on.**

    For details about turning off the power, see "Turning On/Off the Power", About This Machine.

Canceling Data Encryption

Use the following procedure to cancel the encryption settings when encryption is no longer necessary.

Important

- **After completing this procedure on the machine's control panel, turn off the power and restart the machine to enable the new settings. Restarting can be slow when there is data to be carried over to the hard disk.**
- **Before disposing of a hard disk, note that even if [Format All Data] is selected and encryption is canceled, data stored on the hard disk is not erased.**

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Machine Data Encryption Settings].**

   If this item is not visible, press [▼Next] to display more settings.
5. **Press [Cancel Encryption].**
6. **Select the data to be carried over to the hard disk and not be reset.**

   To carry all of the data over to the hard disk, select [All Data]. To carry over only the machine settings data, select [File System Data Only]. To reset all of the data, select [Format All Data].
7. **Press [OK].**
8. **Press [Exit].**

9. **Press [Exit].**
10. **Press the [User Tools/Counter] key.**
11. **Turn off the power and the main power switch, and then turn the main power switch back on.**

    For details about turning off the power, see "Turning On/Off the Power", About This Machine.

Deleting Data on the Hard Disk

This can be specified by the machine administrator.

The machine's hard disk stores all document data from the copier, printer and scanner functions. It also stores the data of users' Document Server and code counters, and the Address Book.

To prevent data on the hard disk being leaked before disposing of the machine, you can overwrite all data stored on the hard disk. You can also automatically overwrite temporarily-stored data.

Note

- Fax transmission data, fax numbers and network TWAIN scanner data are recorded in the memory installed on this machine. This information is not overwritten with the Hard Disk data.

Conditions for Use

When you use the erase-by-overwrite function, make sure to use it under the following conditions:

Operating Environment

- The machine is used in its normal state (i.e. it is neither damaged, modified nor are there missing components).
- The machine is managed by an administrator who has carefully read and understood this manual, and can ensure the safe and effective use of this machine by general users.

Note

- Customer engineers dispatched from the manufacturer and its affiliated companies are trained in the maintenance of this machine.

Instructions for Use

- Before turning off the main power of the machine, always make sure that the Data Overwrite icon has turned to "Clear".
- If the machine enters Energy Saver mode when overwriting is in progress, press the [Energy Saver] key to revive the display in order to check the icon.
- The machine will not enter Low Power mode or Off mode (Sleep mode) until overwriting has been completed.
- Should the Data Overwrite icon continue to be "Dirty" even after you have made sure that there is no data to be overwritten, turn off the main power of your machine. Turn it on again and see if the icon changes to "Clear". If it does not, contact your sales or service representative.

Auto Erase Memory

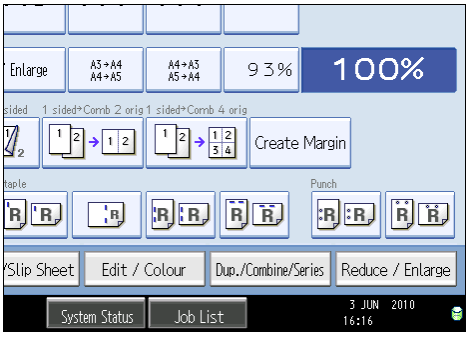
A document scanned in copier, or scanner mode, or print data sent from a printer driver is temporarily stored on the machine's hard disk. Even after the job is completed, it remains in the hard disk as temporary data. Auto Erase Memory erases the temporary data on the hard disk by writing over it.

Overwriting starts automatically once the job is completed.

The copier, fax and printer functions take priority over the Auto Erase Memory function. If a copy, fax or print job is in progress, overwriting will only be done after the job is completed.

Overwrite Icon

When Auto Erase Memory is set to [On], the Data Overwrite icon will be indicated in the bottom right hand corner of the panel display of your machine.



	Dirty	This icon is lit when there is temporary data to be overwritten, and blinks during overwriting.
	Clear	This icon is lit when there is no temporary data to be overwritten.

Important

- **The Data Overwrite icon will indicate "Clear" when there is a Sample Print/Locked Print/Hold Print/ Stored Print job.**

Note

- If the Data Overwrite icon is not displayed, first check if Auto Erase Memory has been set to [Off]. If the icon is not displayed even though Auto Erase Memory is [On], contact your service representative.

Methods of Overwriting

You can select a method of overwriting from the following:

- NSA

  Temporary data is overwritten twice with random numbers and once with zeros.

- DoD

  Temporary data is overwritten with a fixed value, the fixed value's complement, and random numbers. When completed, the overwriting is then verified.

- Random Numbers

  Temporary data is overwritten multiple times with random numbers. The number of overwrites can be selected from 1 to 9.

Note

- The default method for overwriting is "Random Numbers", and the default number of overwrites is 3.
- NSA stands for "National Security Agency", U.S.A.
- DoD stands for "Department of Defense", U.S.A.

Using Auto Erase Memory

This can be specified by the machine administrator.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

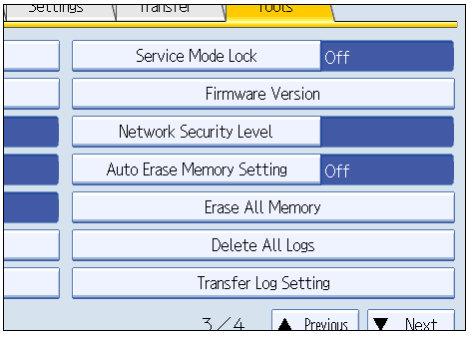
Important

- **When Auto Erase Memory is set to [On], temporary data that remained on the hard disk when Auto Erase Memory was set to [Off] might not be overwritten.**
- **If the main power switch is turned off before Auto Erase Memory is completed, overwriting will stop and data will be left on the hard disk.**
- **Do not stop the overwrite mid-process. Doing so will damage the hard disk.**
- **Should the main power switch be turned off before Auto Erase Memory is completed, overwriting will continue once the main power switch is turned back on.**
- **If an error occurs before overwriting is completed, turn off the main power. Turn it on, and then repeat from step 1.**

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**

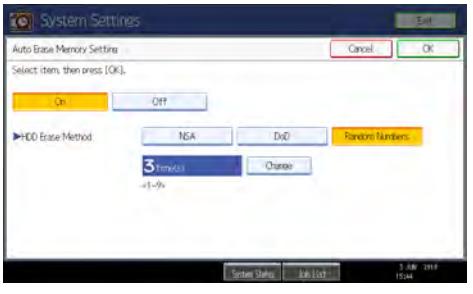
   Press [▼Next] repeatedly until [Auto Erase Memory Setting] appears.

4. **Press [Auto Erase Memory Setting].**



5. **Press [On].**

6. **Select the method of overwriting.**



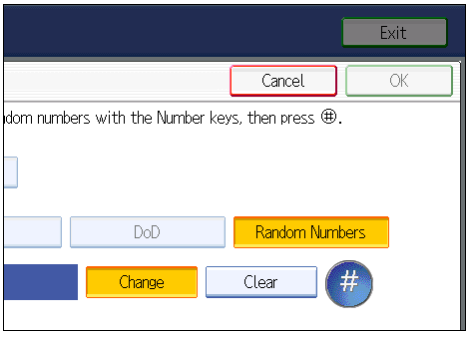
If you select [NSA] or [DoD], proceed to step 9.

If you select [Random Numbers], proceed to step 7.

For details about the methods of overwriting, see "Methods of Overwriting".

7. **Press [Change].**

8. **Enter the number of times that you want to overwrite using the number keys, and then press [#].**



9. **Press [OK].**

Auto Erase Memory is set.

Note

- If you specify to both overwrite and encrypt the data, the data will all be encrypted.

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"
- p.139 "Methods of Overwriting"

Canceling Auto Erase Memory

This can be specified by the machine administrator.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

1. **Follow steps 1 to 4 in "Using Auto Erase Memory".**
2. **Press [Off].**
3. **Press [OK].**

   Auto Erase Memory is disabled.

Note

- To set Auto Erase Memory to [On] again, repeat the procedure in "Using Auto Erase Memory".

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

Types of Data that Can or Cannot Be Overwritten

The following are the types of data that can or cannot be overwritten by "Auto Erase Memory".

Data Overwritten by Auto Erase Memory

Copier

- Copy jobs

Printer

- Print jobs
- Sample Print /Locked Print/Hold Print/Stored Print jobs

  A Sample Print/Locked Print/Hold Print job can only be overwritten after it has been executed. A Stored Print job is overwritten after it has been deleted.
- Spool Printing jobs

- PDF Direct Print data

Facsimile

- LAN-FAX print data

Data sent or received via facsimile, as well as fax numbers, will not be overwritten by Auto Erase Memory

Scanner

- Scanned files sent by e-mail
- Files sent by Scan to Folder
- Documents sent using DeskTopBinder, the ScanRouter delivery software or Web Image Monitor

Data scanned with network TWAIN scanner will not be overwritten by Auto Erase Memory.

Data Not Overwritten by Auto Erase Memory

- Documents stored by the user in Document Server using the Copier, Printer, Facsimile or Scanner functions

  A stored document can only be overwritten after it has been printed or deleted from Document Server.

- Information registered in the Address Book

  Data stored in the Address Book can be encrypted for security. For details, see "Protecting the Address Book".

- Counters stored under each user code

Reference

- p.125 "Protecting the Address Book"

Erase All Memory

This can be specified by the machine administrator.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

You can erase all the data on the hard disk by writing over it. This is useful if you relocate or dispose of your machine.

Important

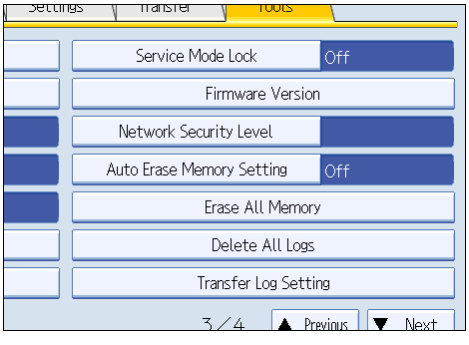
- **If you select "Erase All Memory", the following are also deleted: user codes, counters under each user code, user stamps, data stored in the Address Book, printer fonts downloaded by users, applications using Embedded Software Architecture, SSL server certificates, and the machine's network settings.**
- **If the main power switch is turned off before "Erase All Memory" is completed, overwriting will be stopped and data will be left on the hard disk.**

- Do not stop the overwrite mid-process. Doing so will damage the hard disk.
- We recommend that before you erase the hard disk, you use SmartDeviceMonitor for Admin to back up the user codes, the counters for each user code, and the Address Book. The Address Book can also be backed up using Web Image Monitor. For details, see SmartDeviceMonitor for Admin Help or Web Image Monitor Help.
- Other than pausing, no operations are possible during the "Erase All Memory" process. If [Random Numbers] is specified and the number of overwrites set to "3", the erase process will take up to four and a half hours.
- The "Erase All Memory" function also clears the machine's security settings, with the result that afterward, neither machine nor user administration will be effective. Ensure that users do not save any data on the machine after "Erase All Memory" has completed.

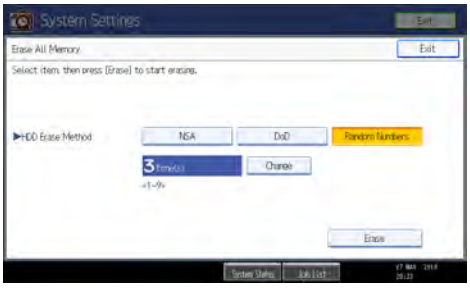
Using Erase All Memory

1. Disconnect communication cables connected to the machine.
2. Press the [User Tools/Counter] key.
3. Press [System Settings].
4. Press [Administrator Tools].

   Press [▼Next] repeatedly until [Erase All Memory] appears.
5. Press [Erase All Memory].



6. Select the method of overwriting.

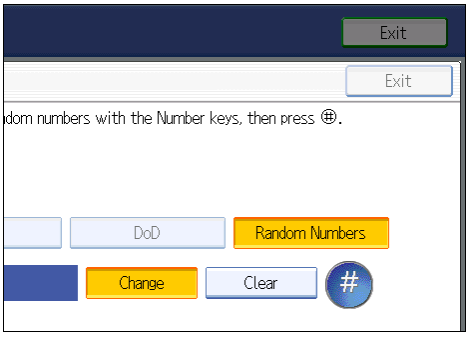


If you select [NSA] or [DoD], proceed to step 9.

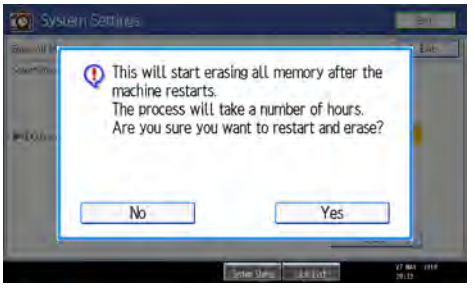
If you select [Random Numbers], proceed to step 7.

For details about the methods of overwriting, see "Methods of Overwriting".

7. **Press [Change].**
8. **Enter the number of times that you want to overwrite using the number keys, and then press [#].**



9. **Press [Erase].**
10. **Press [Yes].**



11. **When overwriting is completed, press [Exit], and then turn off the main power.**

Before turning the power off, see "Turning On the Power", About This Machine.

Note

- Should the main power switch be turned off before "Erase All Memory" is completed, overwriting will continue once the main power switch is turned back on.
- If an error occurs before overwriting is completed, turn off the main power. Turn it on again, and then repeat from step 2.
- If you specify to both overwrite and encrypt the data, the data will all be encrypted.

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"
- p.139 "Methods of Overwriting"

Suspending Erase All Memory

The overwriting process can be suspended temporarily.

Important

- **Erase All Memory cannot be canceled.**

1. **Press [Suspend] while Erase All Memory is in progress.**
2. **Press [Yes].**

   Erase All Memory is suspended.
3. **Turn off the main power.**

   Before turning the power off, see "Turning On the Power", About This Machine.

Note

- To resume overwriting, turn on the main power.

6. Managing Access to the Machine

This chapter describes how to prevent unauthorized access to and modification of the machine's settings.

Preventing Changes to Machine Settings

This section describes preventing modification of machine settings.

The administrator type determines which machine settings can be modified. Users cannot change the administrator settings. In "Available Settings" under "Administrator Authentication Management", the administrator can select which settings users cannot specify. For details about the administrator roles, see "Administrators".

Register the administrators before using the machine. For instructions on registering the administrator, see "Registering the Administrator".

Type of Administrator

Register the administrator on the machine, and then authenticate the administrator using the administrator's login user name and password. The administrator can also specify [Available Settings] in "Admin. Authentication" to prevent users from specifying certain settings. Administrator type determines which machine settings can be modified. The following administrator types are possible:

- User Administrator

  For a list of settings that the user administrator can specify, see "User Administrator Settings".

- Machine Administrator

  For a list of settings that the machine administrator can specify, see "Machine Administrator Settings".

- Network Administrator

  For a list of settings that the network administrator can specify, see "Network Administrator Settings".

- File Administrator

  For a list of settings that the file administrator can specify, see "File Administrator Settings".

Menu Protect

Use this function to specify the permission level for users to change those settings accessible by non-administrators.

You can specify Menu Protect for the following settings:

- Copier / Document Server Features
- Facsimile Features
- Printer Features
- Scanner Features

For a list of settings that users can specify according to the Menu Protect level, see "User Settings - Control Panel Settings", or "User Settings - Web Image Monitor Settings".

Reference

- p.25 "Administrators"
- p.32 "Registering the Administrator"
- p.295 "User Administrator Settings"
- p.297 "Machine Administrator Settings"
- p.308 "Network Administrator Settings"
- p.313 "File Administrator Settings"
- p.321 "User Settings - Control Panel Settings"
- p.347 "User Settings - Web Image Monitor Settings"

Menu Protect

The administrator can also limit users' access permission to the machine's settings. The machine's "System Settings" menu and the printer's regular menus can be locked so they cannot be changed. This function is also effective when management is not based on user authentication. For a list of settings that users can specify according to the Menu Protect level, see "User Settings - Control Panel Settings", or "User Settings - Web Image Monitor Settings".

Reference

- p.321 "User Settings - Control Panel Settings"
- p.347 "User Settings - Web Image Monitor Settings"

Enabling Menu Protect

If you want to enable "Menu Protect", specify it to [Level 1] or [Level 2]. Select [Level 2] to impose stricter restrictions on users' access permission to the machine settings.

For details about specifying "Menu Protect", see "Specifying Menu Protect".

Reference

- p.149 "Specifying Menu Protect"

Disabling Menu Protect

If you want to disable "Menu Protect", specify it to [Off]. If you select [Off], there are no restrictions of Menu Protect on users' access permission to the machine settings.

For details about canceling "Menu Protect", see "Specifying Menu Protect".

Reference

- p.149 "Specifying Menu Protect"

Specifying Menu Protect

This can be specified by the machine administrator.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

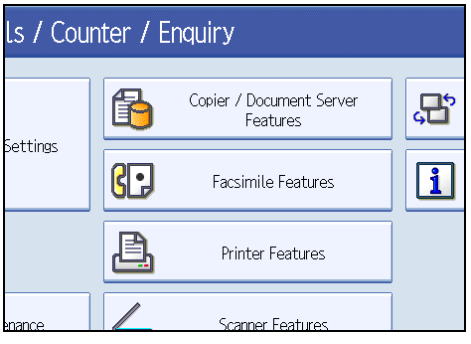
Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

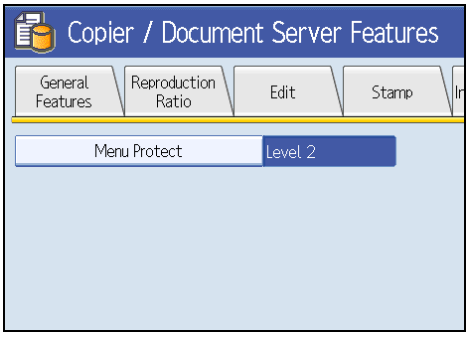
Copy Function

To specify "Menu Protect" in "Copier / Document Server Features", set "Machine Management" to [On] in "Administrator Authentication Management" in "Administrator Tools" in "System Settings".

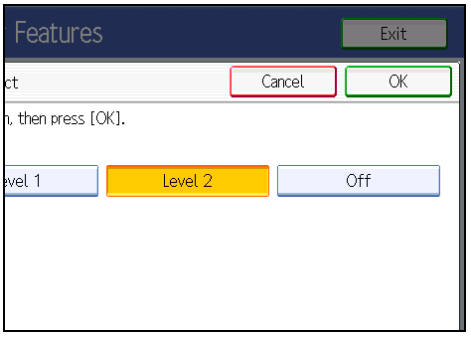
1. **Press the [User Tools/Counter] key.**
2. **Press [Copier / Document Server Features].**



3. **Press [Administrator Tools].**
4. **Press [Menu Protect].**



5. **Select the menu protect level, and then press [OK].**

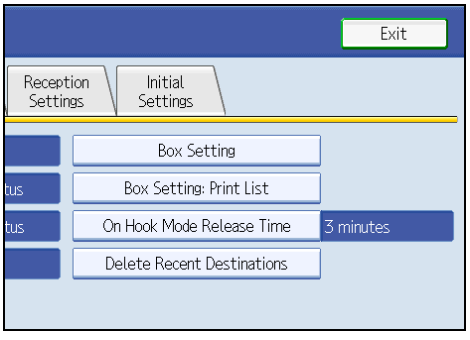


6. **Press the [User Tools/Counter] key.**

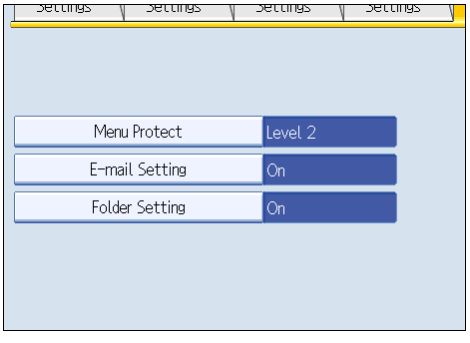
Fax Function

To specify "Menu Protect" in "Facsimile Features", set "Machine Management" to [On] in "Administrator Authentication Management" in "Administrator Tools" in "System Settings".

1. **Press the [User Tools/Counter] key.**
2. **Press [Facsimile Features].**
3. **Press [Initial Settings].**

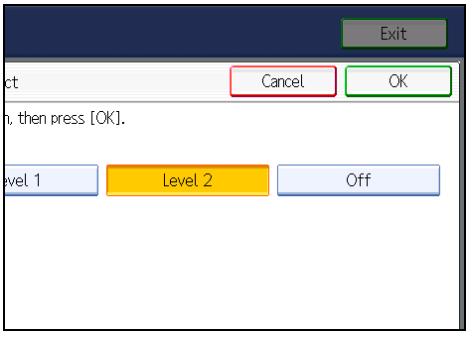


4. **Press [Menu Protect].**



If this item is not visible, press [▼Next] to display more settings.

5. **Select the menu protect level, and then press [OK].**

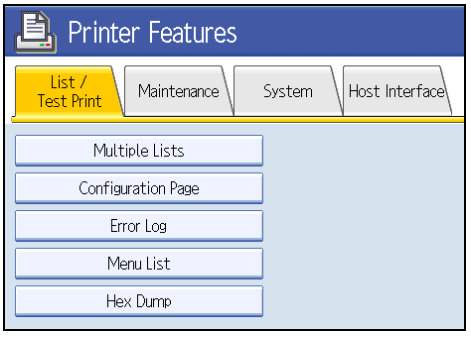


6. **Press the [User Tools/Counter] key.**

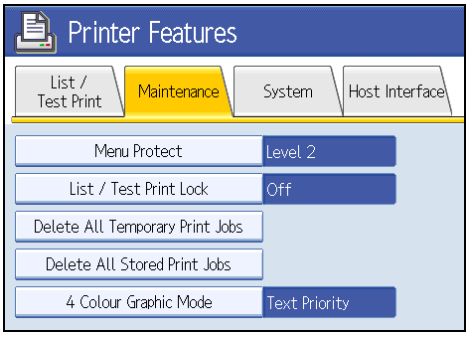
Printer Function

To specify "Menu Protect" in "Printer Features", set "Machine Management" to [On] in "Administrator Authentication Management" in "Administrator Tools" in "System Settings".

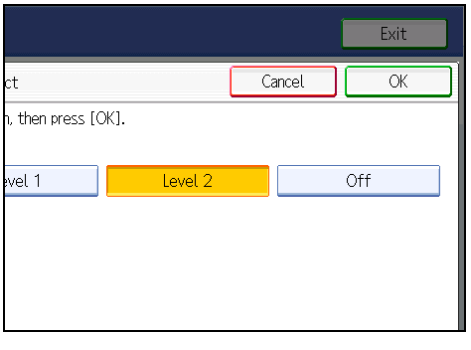
1. **Press the [User Tools/Counter] key.**
2. **Press [Printer Features].**
3. **Press [Maintenance].**



4. **Press [Menu Protect].**



5. **Select the menu protect level, and then press [OK].**

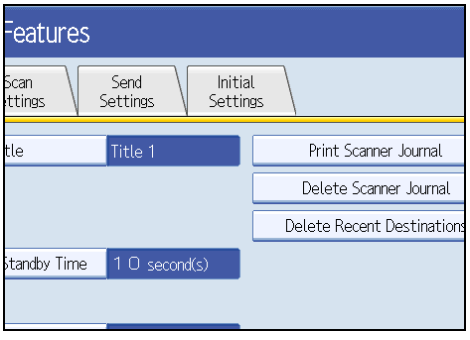


6. **Press the [User Tools/Counter] key.**

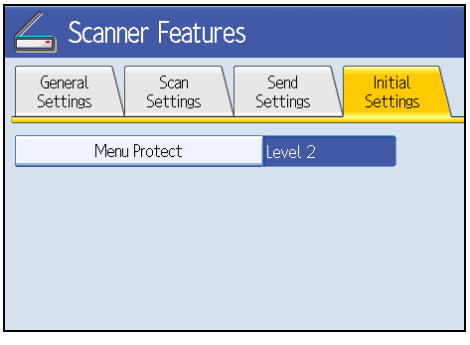
Scanner Function

To specify "Menu Protect" in "Scanner Features", set "Machine Management" to [On] in "Administrator Authentication Management" in "Administrator Tools" in "System Settings".

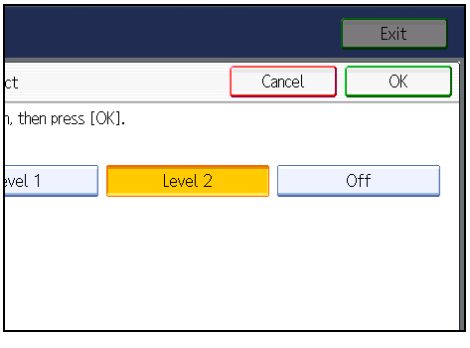
1. **Press the [User Tools/Counter] key.**
2. **Press [Scanner Features].**
3. **Press [Initial Settings].**



4. **Press [Menu Protect].**



5. **Select the menu protect level, and then press [OK].**



6. **Press the [User Tools/Counter] key.**

Limiting Available Functions

To prevent unauthorized operation, you can specify who is allowed to access each of the machine's functions.

Available Functions

Specify the available functions from the copier, Document Server, fax, scanner, and printer functions.

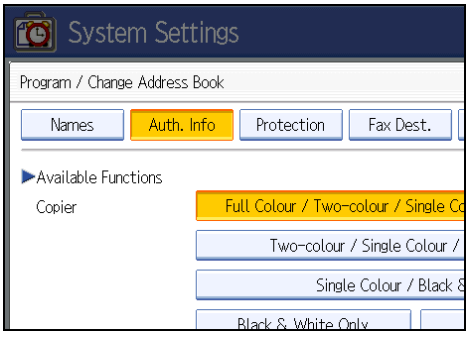
Specifying Which Functions are Available

This can be specified by the user administrator.

Specify the functions available to registered users. By making this setting, you can limit the functions available to users.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**
5. **Select the user.**
6. **Press [Auth. Info].**
7. **In "Available Functions", select the functions you want to specify.**



If this item is not visible, press [▼Next] to display more settings.

8. **Press [OK].**
9. **Press [Exit].**
10. **Press the [User Tools/Counter] key.**

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

Managing Print Volume per User

Limiting Print Volume per User

If machine access is being managed with User Code, Basic, Windows, or LDAP authentication, you can limit the print volume that is available to a user by specifying [Machine action when limit is reached] in "Administrator Tools" under "System Settings". When the user reaches his/her print volume limit, the machine will either suspend the current job or display a message.

Either the user administrator or the machine administrator can specify the print volume available to a user. For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

Print volume is counted for each user in "print volume use" units.

Each time a user prints a page, a unit is added to the user's print counter. You can specify different per-page unit counts for different print conditions. This allows weighting to be applied according to print conditions. Print volume is calculated by multiplying the number of pages printed by the unit counts.

The following table explains the settings for limiting print volume.

Item	Explanation	Setting
Machine action when limit is reached	Specify whether to limit print volume and the method for limiting prints. • Stop Job When the maximum print volume is reached, both the current job and waiting jobs are canceled. • Finish Job and Limit When the maximum print volume is reached, the current job is allowed to finish, but waiting jobs are canceled. • Allow Continue Use Print volume is not limited.	• Stop Job • Finish Job and Limit • **Allow Continue Use** (Default setting)

Item	Explanation	Setting
Print Volume Use Limitation: Unit Count Setting	For each of the eight print conditions, specify a per-page unit count between 0 and 200. A print condition is a combination of paper size, color mode, and function. The default per-page unit count for every print condition is 1. The paper size "Others" refers to paper sizes other than A3 and DLT (11 × 17 in).	• Copier:Colour:A3/DLT • Copier:Black & White:A3/DLT • Printer:Colour:A3/DLT • Printer:Black & White:A3/DLT • Copier:Colour:Others • Copier:Black & White:Others • Printer:Colour:Others • Printer:Black & White:Others

Things to note when limiting print volume

If the following occurs, the user will not be able to print:

- The login user name or user code registered in the Address Book is changed while the user is logged in and authenticated.

If the following occurs, print volume management will not function correctly:

- Under Windows or LDAP authentication, a user logs in to the same user account by using multiple login user names, and these multiple login names are registered in the Address Book as separate users.

The following operations are exempt from print volume limitation:

- Printing from an operating system that does not support the current authentication method
- Printing data using the Mail to Print function, received faxes, LAN-Fax data, and files stored using the fax function

Print volume restriction might not be applied to jobs that match all the following conditions. In this case, printing might not be limited even if the second or later pages are subject to print volume restriction.

- When [Finish Job and Limit] is selected in "Machine action when limit is reached".
- When multiple document files in Document Server are selected for simultaneous printing and the first page is a document to which print volume limitation does not apply (such as a file stored in Document Server using the fax function or a file whose per-page unit count is set to "0").

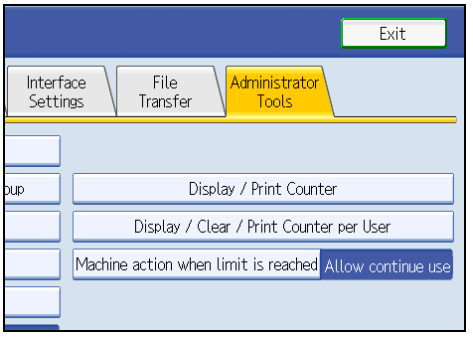
Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

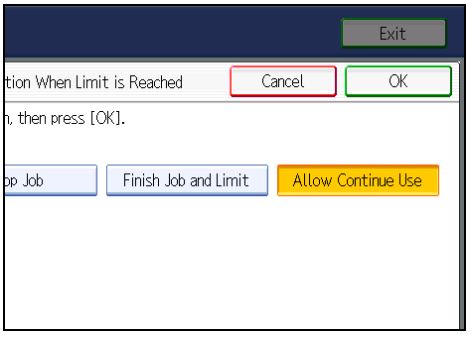
Specifying Limitations for Print Volume

Use the following procedure to specify print volume limits for each print condition. This setting can be made by the machine administrator.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Machine action when limit is reached].**

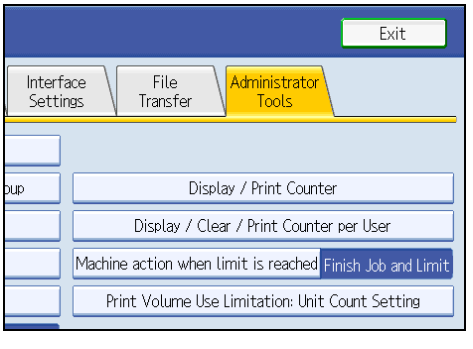


5. **Select [Stop Job] or [Finish Job and Limit], and then press [OK].**



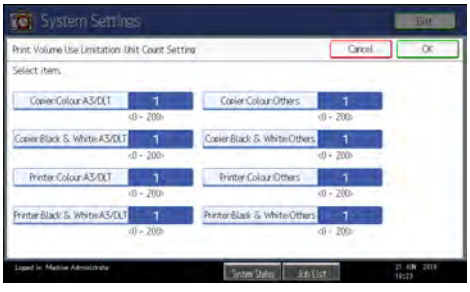
If you do not want to limit print volume, select [Allow Continue Use].

6. **Press [Print Volume Use Limitation: Unit Count Setting].**



If [Print Volume Use Limitation: Unit Count Setting] is not displayed, press [Exit] and repeat steps 2 to 3.

7. **For each print condition, use the number keys to enter a per-page unit count between "0" and "200", and then press [#].**



If you specify "0" for a print condition, no volume restriction is applied to jobs matching that condition.

8. **Press [OK].**
9. **Press the [Login/Logout] key.**
10. **Press [Yes].**

Note

- Limitations for print volume can also be specified in [Print Volume Use Limitation] under "Configuration" in Web Image Monitor.

Restrictions When User Code Authentication is Enabled

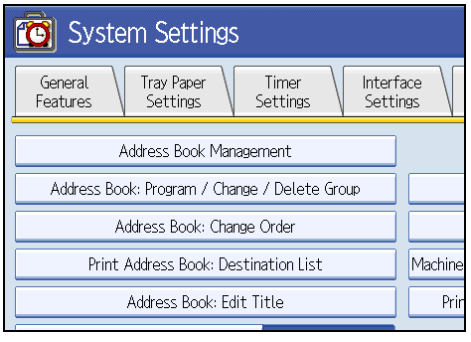
When User Code authentication is enabled, the following restrictions apply to the print volume limitation settings:

- If [PC Control] is selected for the printer function, the values specified for print volume use units might not be applied to users' print counters. Do not select [PC Control] if you want to limit print volume when running User Code authentication.
- Under Basic, Windows, and LDAP authentication, figures displayed on the lower left of the control panel show users how many of the total prints allotted to them by the administrator they have used. Under User Code authentication, users cannot check the print volume they have made, using either the control panel or Web Image Monitor. Under User Code authentication, administrators can inform users of the print volume they have made.
- Log information related to print use limitations is not recorded in the Job Log or Access Log.
- Depending on the settings configured for User Code authentication, users might be able to make prints before logging in, regardless of the print volume limitation set by the administrator. For this reason, we recommend that the administrator make settings to allow all functions to be controllable when User Code authentication is running.

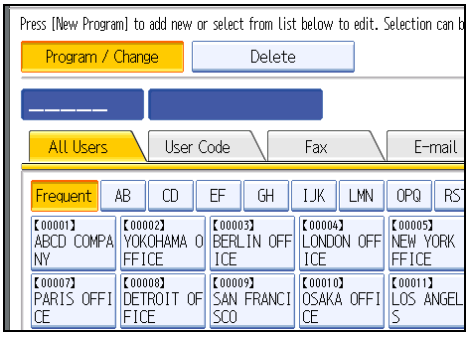
Specifying the Maximum Use Count per User

Use the following procedure to specify the maximum print volume available to a particular user. This setting can be made by the user administrator.

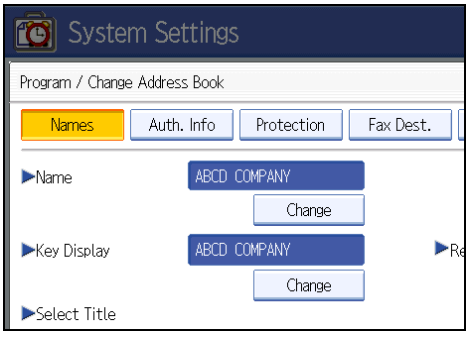
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Address Book Management].**



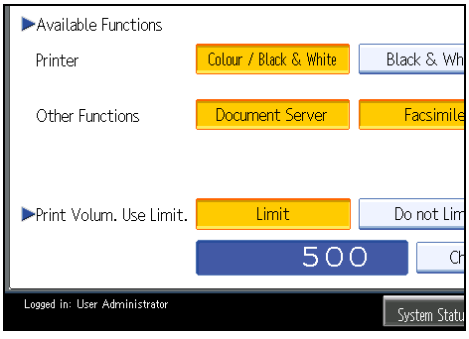
5. **Select the user whose maximum available print volume you want to specify.**



6. **Press [Auth. Info].**



7. **Press [Limit] in "Print Volum. Use Limit.".**

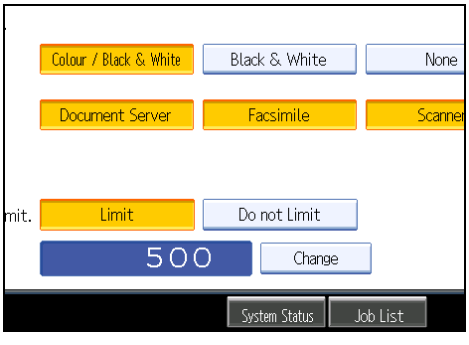


If this item is not visible, press [▼Next] to display more settings.

"Print Volum. Use Limit." does not appear if you have selected [Allow Continue Use] in "Machine action when limit is reached".

If you do not want to limit user's print volume, press [Do not Limit].

8. **Press [Change], and then use the number keys to enter a value between "0" and "999,999" as the maximum available print volume, and then press [#].**



A user whose maximum print volume is set to "0" can only print jobs whose print conditions match those with a unit value of "0".

9. **Press [OK].**
10. **Press the [Login/Logout] key.**
11. **Press [Yes].**

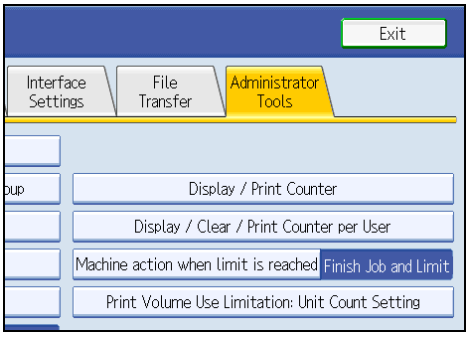
Note

- The maximum print volume for an individual user can also be specified in [Address Book] in Web Image Monitor.
- You can search for users by entering a name in the text box at the top of the control panel, and then pressing [Search].
- You can specify a maximum print volume for up to 500 users.

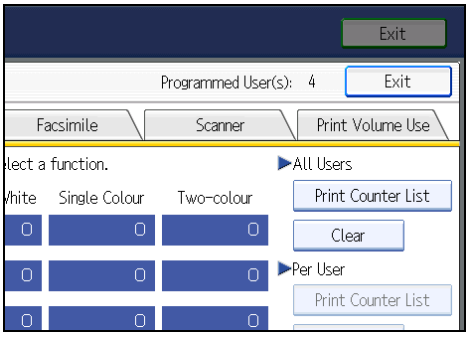
Checking Print Volume per User

Use the following procedure to check the volume of prints made per user to date. This procedure can be done by any administrator.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Display / Clear / Print Counter per User].**



5. **Press [Print Volume Use].**



Each user's print volume limit and print volume used to date are displayed.

6. **After checking the counters, press the [Login/Logout] key.**
7. **Press [Yes].**

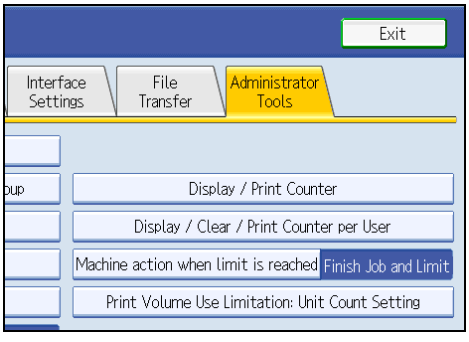
Note

- Authorized users and the user administrator can also use [Address Book] in Web Image Monitor to check users' print volume use counters.

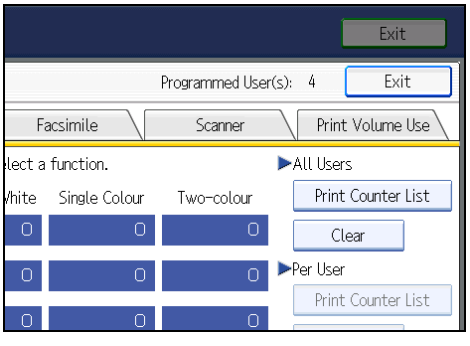
Printing a List of Print Volume Use Counters

Use the following procedure to print a list of users' print volume use counters. This procedure can be done by the machine administrator.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Display / Clear / Print Counter per User].**



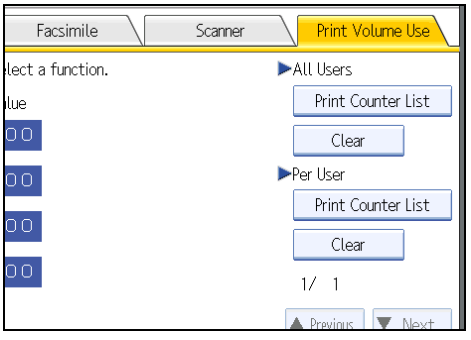
5. **Press [Print Volume Use].**



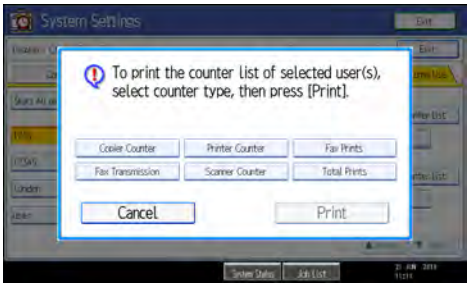
A list of users' print volume use counters is displayed.

To select all the users displayed on the page, press [Select All on the Page].

6. **To print a list of the volume use counters of every user, press [Print Counter List] under "All Users". To print a list of the volume use counters of selected users only, select the users whose counters you want to print, and then press [Print Counter List] under "Per User".**



7. **Select the counter you want to print in the list, and then press [Print].**



8. **Press the [Login/Logout] key.**
9. **Press [Yes].**

Note

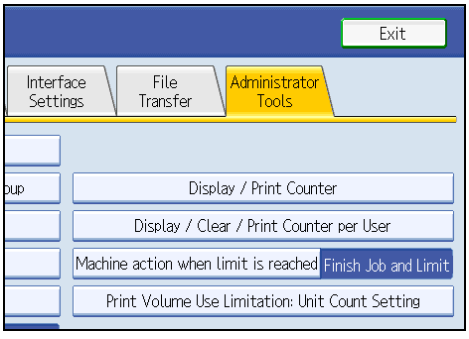
- Print volume use counter lists can be printed only if the following paper sizes is loaded in the paper tray: A4, 8 $^{1}/_{2}$ × 11 in, B4, 8 $^{1}/_{2}$ × 14 in, A3, or 11 × 17 in.

Clearing Print Volume Use Counters

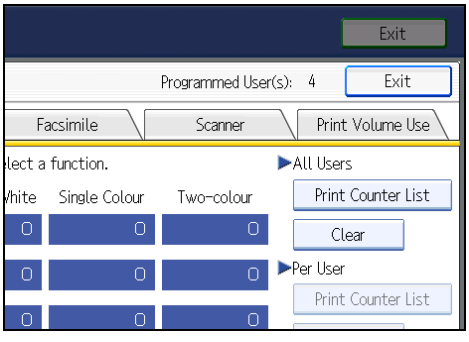
Use the following procedure to clear the print volume use counters. This procedure can be done by the user administrator. Clearing a user's print volume counter or increasing a user's print volume limit allows the user to continue printing beyond his/her original print volume limit.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**

4. **Press [Display / Clear / Print Counter per User].**

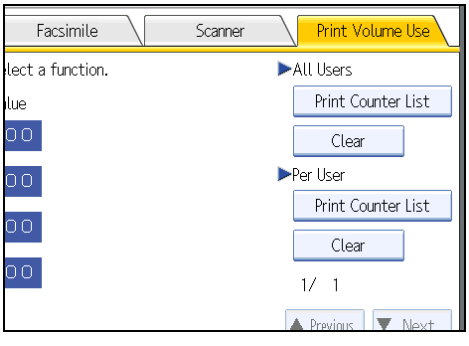


5. **Press [Print Volume Use].**



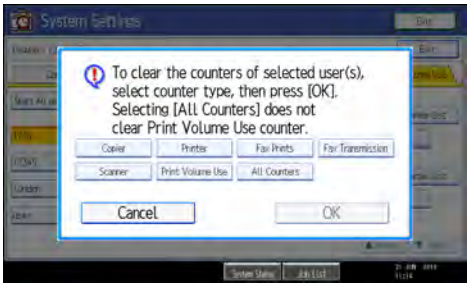
A list of users' print volume use counters is displayed.

6. **To clear the print volume use counters of every user, press [Clear] under "All Users". To clear the print volume use counters of selected users only, select the users whose counters you want to clear, and then press [Clear] under "Per User".**



To select all the users displayed on the page, press [Select All on the Page].

7. **Select [Print Volume Use], and then press [OK].**



8. **Press the [Login/Logout] key.**
9. **Press [Yes].**

Note

- You can also use [Address Book] in Web Image Monitor to clear the print volume use counters. However if you want to clear the print volume use counters of all users simultaneously, use the control panel.

Managing Log Files

The logs created by this machine allow you to track access to the machine, identities of users, and usage of the machine's various functions. For security, you can encrypt the logs. This prevents users who do not have the encryption key from accessing log information.

Note however that logs are data heavy and will consume hard disk space. To make hard disk space available, you might need to periodically delete the log files.

The logs can be viewed using Web Image Monitor or Remote Communication Gate S. Collected logs can be downloaded all at once from Web Image Monitor as CSV files. To use Remote Communication Gate S you must specify the log transfer setting under Remote Communication Gate S in advance.

Log types

This machine creates two types of log: the job log and the access log.

- Job Log

  Stores details of user file-related operations such as copying, printing, and saving in Document Server, and control panel operations such as sending and receiving faxes, sending scan files and printing reports (the configuration list, for example).

- Access Log

  Stores details of login/logout activity, stored file operations such as creating, editing, and deleting, service engineer operations such as hard disk formatting, system operations such as viewing the results of log transfers, and security operations such as specifying settings for encryption, unauthorized access detection, user lockout, and firmware authentication.

Note

- The log setting can be specified in [Logs] under [Configuration] in Web Image Monitor.

Using the Control Panel to Specify Log File Settings

This can be specified by the machine administrator.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

You can specify settings such as whether or not to transfer logs to Remote Communication Gate S and whether or not to delete all logs.

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

Disabling log transfer to Remote Communication Gate S

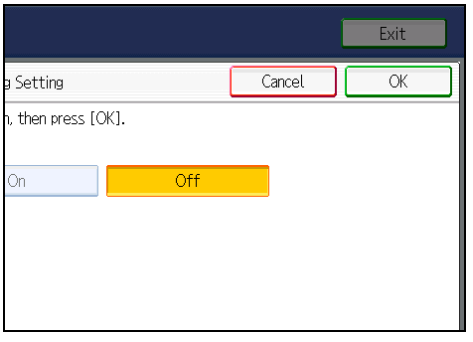
Use the following procedure to disable log transfer from the machine to Remote Communication Gate S. Note that you can change the log transfer setting to [Off] only if it is already set to [On].

For details about Remote Communication Gate S, contact your sales representative.

For details about the transfer log setting, see Remote Communication Gate S manual.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Transfer Log Setting].**

   If this item is not visible, press [▼Next] to display more settings.
5. **Press [Off].**



6. **Press [OK].**
7. **Press the [User Tools/Counter] key.**

Specifying Delete All Logs

By deleting the log stored in the machine, you can free up space on the hard disk.

To delete all logs from the control panel, you must use Remote Communication Gate S or enable the Job Log or Access Log collection settings using Web Image Monitor first.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Delete All Logs].**

   If this item is not visible, press [▼Next] to display more settings.

   The confirmation screen appears.
5. **Press [Yes].**

6. **Press [Exit].**
7. **Press the [User Tools/Counter] key.**

Using Remote Communication Gate S to Manage Log Files

For details about using Remote Communication Gate S to manage Log Files, see the manual supplied with Remote Communication Gate S.

Using Web Image Monitor to Manage Log Files

This can be specified by the machine administrator.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

You can specify the types of log to store in the machine and the log collection level. You can also encrypt, bulk delete, or download log files.

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

Specifying log collect settings

Specify collection log settings. The Log collection levels are listed below.

Job Log Collect Level

Level 1

User Settings

Access Log Collect Level

Level 1

Level 2

User Settings

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.

3. **Click [Login].**

   The machine administrator can log in using the appropriate login user name and login password.

4. **Click [Configuration], and then click [Logs] under "Device Settings".**
5. **Select "Collect Job Logs" to specify Job Log settings, or select "Collect Access Logs" to specify Access Log settings, and then select [Active].**
6. **Specify the recording levels for either "Job Log Collect Level" or "Access Log Collect Level".**

   The settings shown for "Job Log Collect Settings Listed by Function Type" or "Access Log Collect Settings Listed by Function Type" vary depending on the collection level selected.

   If you change the setting in the list, the setting for "Job Log Collect Level" or "Access Log Collect Level" automatically changes to [User Settings].

7. **Click [OK] twice.**

   Changes are also reflected in related log settings.

8. **Click [Logout].**

Note

- The greater the Access Log Collect setting value, the more logs are collected.

Disabling log transfer to Remote Communication Gate S

Use the following procedure to disable log transfer to Remote Communication Gate S. Note that you can change the log transfer setting to [Inactive] only if it is already set to [Active].

1. **Open a Web browser.**
2. **Enter " http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.

3. **Click [Login].**

   The machine administrator can log on using the appropriate login user name and login password.

4. **Click [Configuration], and then click [Logs] under "Device Settings".**
5. **Select [Inactive] under "Transfer Logs".**
6. **Click [OK].**
7. **Click [Logout].**

Specifying log encryption

Use the following procedure to enable/disable log encryption.

1. **Open a Web browser.**
2. **Enter " http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.
3. **Click [Login].**

   The machine administrator can log in using the appropriate login user name and login password.
4. **Click [Configuration], and then click [Logs] under "Device Settings".**
5. **Select [Active] under "Encrypt Logs".**

   To disable log encryption, select [Inactive].

   If other changes have been made in related log settings, they will occur at the same time.
6. **Click [OK].**

   A confirmation message appears.
7. **Click [OK].**

   The log is encrypted.
8. **Click [Logout].**

Note

- In order to enable encryption, either "Collect Job Logs" or "Collect Access Logs", or both must be set to [Active].
- If the data stored in the machine has been encrypted, the log files will still be encrypted, regardless of this setting.

Deleting all logs

Use the following procedure to delete all logs stored in the machine.

1. **Open a Web browser.**
2. **Enter " http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.
3. **Click [Login].**

   The machine administrator can log on using the appropriate login user name and login password.
4. **Click [Configuration], and then click [Logs] under "Device Settings".**
5. **Click [Delete] under "Delete All Logs".**

6. **Click [Back].**

   All job logs and device access log records are cleared.

7. **Click [Logout].**

Note

- On this page, "Delete All Logs" does not appear if either "Collect Job Logs" or "Collect Access Logs" are not set to [Active].

Downloading logs

Use the following procedure to convert the logs stored in the machine into a CSV file for simultaneous batch download.

1. **Open a Web browser.**
2. **In the Web browser's address bar, enter "http://(the machine's IP address or host name)/" to access the machine.**

   When entering an IPv4 address, do not begin segments with zeros. For example: if the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine. If you enter it as "192.168.001.010", you cannot access the machine.

   The top page of Web Image Monitor appears.

3. **Click [Login].**

   Log in using an administrator's user name and password.

4. **Click [Configuration], and then click [Download Logs].**
5. **Click [Download].**
6. **Specify the folder in which you want to save the file.**
7. **Click [OK].**
8. **Click [Logout].**

Note

- Downloaded logs contain data recorded up till the time you click the [Download] button. Any logs recorded after the [Download] button is clicked will not be downloaded. The "Result" field of the log entry for uncompleted jobs will be blank.
- Download time may vary depending on the number of logs.
- If an error occurs while the CSV file is downloading or being created, the download is canceled and details of the error are included at the end of the file.
- If a log is downloaded successfully, "Download completed." will appear in the last line of the log file.
- For details about saving CSV log files, see your browser's Help.
- Downloaded log files use UTF-8 character encoding. To view a log file, open it using an application that supports UTF-8.

- To collect logs, set "Collect Job Logs" and "Collect Access Logs" to [Active]. This setting can be specified in [Logs] under [Configuration] in Web Image Monitor.
- For details about the items contained in the logs, see "Attributes of logs you can download".

Reference

- p.181 "Attributes of logs you can download"

Note concerning downloading logs

When the number of stored logs reaches the maximum, the oldest logs will be overwritten by newer logs. This applies to both job and access logs and occurs regardless of whether or not the logs have been downloaded.

Overwritten old logs will not be included in downloaded log files.

For this reason, we recommend you take note of the information in the table below and perform regular log management using Web Image Monitor.

Maximum number of logs that can be stored in the machine

Job logs	Access logs
2,000	6,000

Estimated number of logs created per day

Job logs	Access logs
100 (100 logs per day)	300 This figure is based on 100 operations such as initialization and access operations over the Web and 200 access log entries (two entries per job: one login and one logout).

If the daily estimates are not exceeded, the machine can store logs for 20 days without having to overwrite older logs. However, we recommend that you download the logs every 10 days. This will prevent unwanted overwriting and ensure all logs are preserved, even if the daily estimate is exceeded.

It is the responsibility of the machine administrator to deal downloaded log files appropriately.

Note

- If you change the [Collect] / [Do not Collect] setting for log collection, you must perform a batch deletion of the logs.
- After downloading the logs, perform a batch deletion of the logs.

- During log downloads, do not perform operations that will create log entries, as logs that are in the process of downloading cannot be updated with new entries.
- Batch deletion of logs can be performed from the control panel or through Web Image Monitor.

Notes on operation when the number of log entries reaches maximum

The machine reads the number of access and job logs and begins overwriting the oldest log entries to make space for the new logs as they arrive.

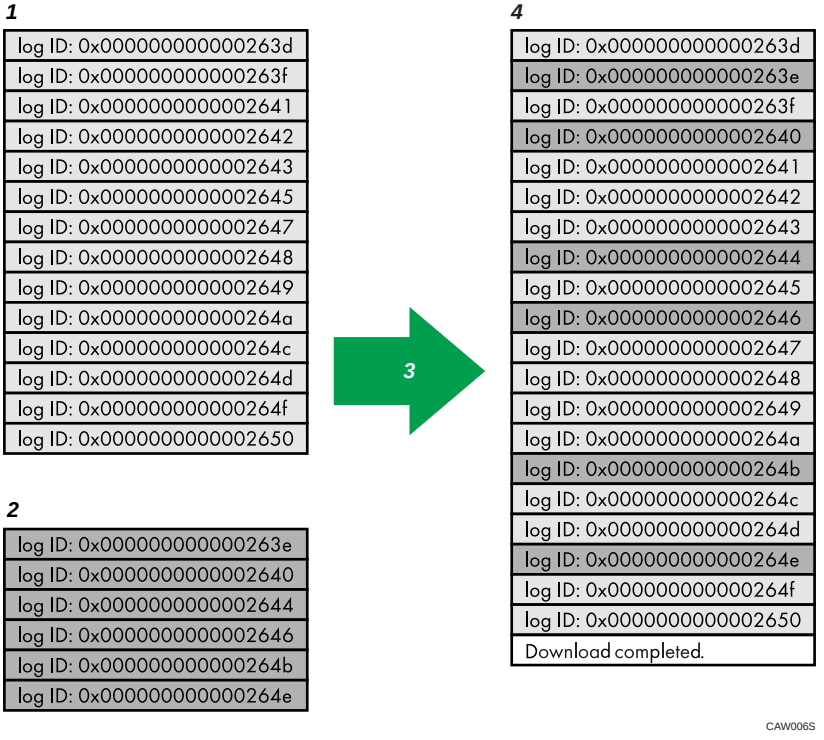
Downloaded log files include both access and job logs, with some log entries incomplete.

The following illustration shows an example in which logs are downloaded during access log overwriting.

In this example, some of the access log entries are incomplete.

Logs are overwritten in reverse priority order, meaning logs of lowest priority are overwritten first and logs of highest priority are overwritten last. This way, if the overwrite is canceled, there is a chance that logs of higher priority will still be available.

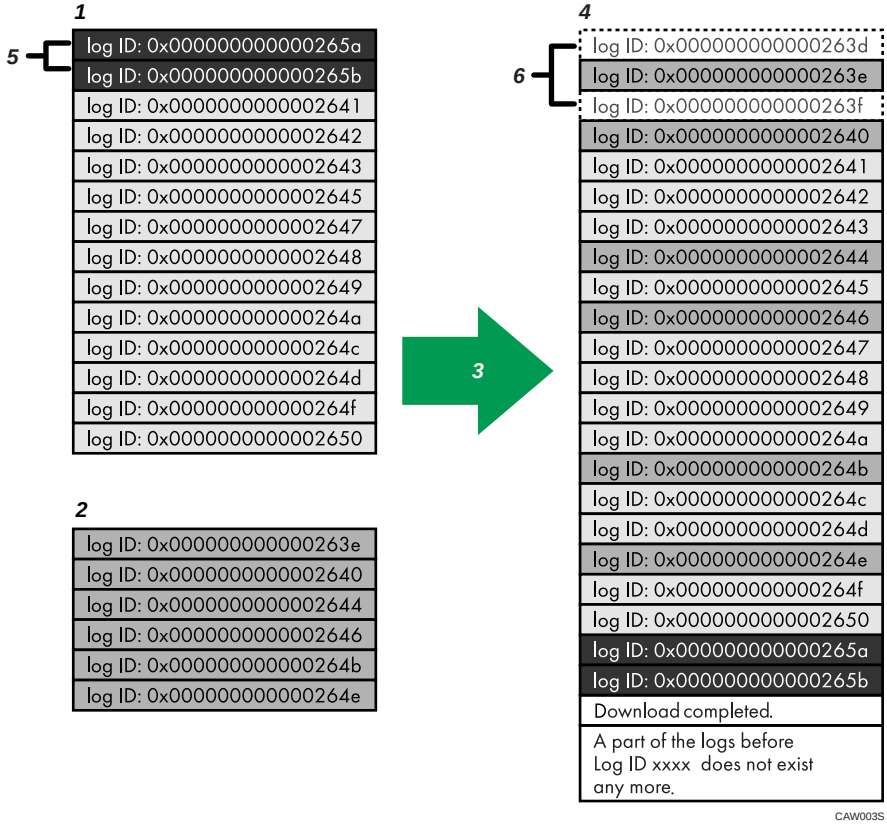
If logs are downloaded without overwriting



1. **Access log**
2. **Job log**
3. **Download**

4. **Downloaded logs**

If logs are downloaded during overwriting



1. **Access log**
2. **Job log**
3. **Download**
4. **Downloaded logs**
5. **Overwriting**
6. **Deleted by overwriting**

To determine whether or not overwriting occurred while the logs were downloading, check the message in the last line of the downloaded logs.

- If overwriting did not occur, the last line will contain the following message: Download completed.
- If overwriting did occur, the last line will contain the following message: Download completed. A part of the logs before Log ID xxxx does not exist any more.

Note

- Examine logs following "Log ID xxxx".

Detailed explanation of print job-related log entries

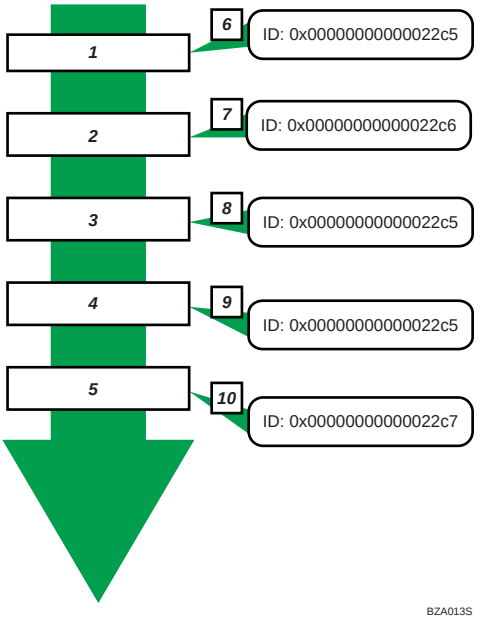
Print Log entries are made before the login entry is made in the Access Log.

Details of series of jobs (including reception, processing, and output of the jobs' data) are combined into single entries.

When the machine receives a print job, it creates an ID for the job and records this in the job log. The machine then creates a login ID for the print job and records this in the access log. It then creates a job log entry detailing the job's processing and outputting (under the same login ID). When the machine has finished processing the job, it creates a logout entry and places this in the access log.

Entries detailing the reception, processing, and output of a series of print jobs are created in the job log first, and then the login and logout details of those jobs are recorded in the access log.

Print job flowchart



1. **Print job data is received.**
2. **Authentication (login) data is received.**
3. **Print job is processed.**
4. **Print job is output.**
5. **Authentication (login) data is received.**
6. **An ID is assigned to the print job and recorded as an entry in the Job Log.**

7. **Authentication (login) data is recorded as an entry in the Access Log.**
8. **Information about the processing of the print job is recorded as an entry in the Job Log (using the same ID).**
9. **Information about the outputting of the print job is recorded as an entry in the Job Log (using the same ID).**
10. **Authentication (logout) data is recorded as an entry in the Access Log.**

Logs That Can Be Managed Using Web Image Monitor

This section details the information items contained in the logs that are created for retrieval by Web Image Monitor.

Logs that can be collected

The following tables explain the items in the job log and access log that the machine creates when you enable log collection using Web Image Monitor. If you require log collection, use Web Image Monitor to configure it. This setting can be specified in [Logs] under [Configuration] in Web Image Monitor.

Job log information items

Job Log Item	Log Type Attribute	Content
Copier: Copying	Copier: Copying	Details of normal and Sample Copy jobs.
Copier: Copying and Storing	Copier: Copying and Storing	Details of files stored in Document Server that were also copied at the time of storage.
Document Server: Storing	Document Server: Storing	Details of files stored using the Document Server screen.
Document Server: Stored File Downloading	Document Server: Stored File Downloading	Details of files stored in Document Server and downloaded using Web Image Monitor or DeskTopBinder.
Stored File Printing	Stored File Printing	Details of files printed using the Document Server screen.
Scanner: Sending	Scanner: Sending	Details of sent scan files.
Scanner: URL Link Sending and Storing	Scanner: URL Link Sending and Storing	Details of scan files stored in Document Server and whose URLs were sent by e-mail at the time of storage.

Job Log Item	Log Type Attribute	Content
Scanner: Sending and Storing	Scanner: Sending and Storing	Details of scan files stored in Document Server that were also sent at the time of storage.
Scanner: Storing	Scanner: Storing	Details of scan files stored in Document Server.
Scanner: Stored File Downloading	Scanner: Stored File Downloading	Details of scan files stored in Document Server and downloaded using Web Image Monitor, DeskTopBinder or Desk Top Editor For Production.
Scanner: Stored File Sending	Scanner: Stored File Sending	Details of stored scan files that were also sent.
Scanner: Stored File URL Link Sending	Scanner: Stored File URL Link Sending	Details of stored scan files whose URLs were sent by e-mail.
Printer: Printing	Printer: Printing	Details of normal print jobs.
Printer: Locked Print (Incomplete)	Printer: Locked Print (Incomplete)	Log showing Locked Print documents temporarily stored on the machine.
Printer: Locked Print	Printer: Locked Print	Log showing Locked Print documents temporarily stored on the machine and then printed from the control panel or through Web Image Monitor.
Printer: Sample Print (Incomplete)	Printer: Sample Print (Incomplete)	Log showing Sample Print documents temporarily stored on the machine.
Printer: Sample Print	Printer: Sample Print	Log showing Sample Print documents temporarily stored on the machine and then printed from the control panel or through Web Image Monitor.
Printer: Hold Print (Incomplete)	Printer: Hold Print (Incomplete)	Log showing Hold Print documents temporarily stored on the machine.
Printer: Hold Print	Printer: Hold Print	Log showing Hold Print documents temporarily stored on the machine and then printed from the control panel or through Web Image Monitor.
Printer: Stored Print	Printer: Stored Print	Details of Stored Print files stored on the machine.

Job Log Item	Log Type Attribute	Content
Printer: Store and Normal Print	Printer: Store and Normal Print	Details of Stored Print files that were printed at the time of storage (when "Job Type:" was set to "Store and Print" in printer properties).
Printer: Stored File Printing	Printer: Stored File Printing	Details of Stored Print files printed from the control panel or Web Image Monitor.
Printer: Document Server Sending	Printer: Document Server Sending	Details of files stored in Document Server when "Job Type:" was set to "Document Server" in printer properties.
Report Printing	Report Printing	Details of reports printed from the control panel.
Result Report Printing/ E-mailing	Result Report Printing/ E-mailing	Details of job results printed from the control panel or notified by e-mail.
Scanner: TWAIN Driver Scanning	Scanner: TWAIN Driver Scanning	Details of stored scan files that were sent using Network TWAIN Scanner.
Fax: Sending	Fax: Sending	Details of faxes sent from the machine.
Fax: LAN-Fax Sending	Fax: LAN-Fax Sending	Details of fax files sent from PCs.
Fax: Storing	Fax: Storing	Details of fax files stored on the machine using the facsimile function.
Fax: Stored File Printing	Fax: Stored File Printing	Details of fax files stored on the machine and printed using the facsimile function.
Fax: Stored File Downloading	Fax: Stored File Downloading	Details of fax files stored in Document Server and downloaded using Web Image Monitor or DeskTopBinder.
Fax: Receiving	Fax: Receiving	Details of storage of received fax files.
Fax: Receiving and Delivering	Fax: Receiving and Delivering	Details of faxes that received and delivered by the machine.
Fax: Receiving and Storing	Fax: Receiving and Storing	Details of fax files that received and stored by the machine.

Access log information items

Access Log Item	Log Type Attribute	Content
Login	Login	Times of login and identity of logged in users.
Logout	Logout	Times of logout and identity of logged out users.
File Storing	File Storing	Details of files stored in Document Server.
Stored File Deletion	Stored File Deletion	Details of files deleted from Document Server.
All Stored Files Deletion	All Stored Files Deletion	Details of deletions of all Document Server files.
HDD Format	HDD Format	Details of hard disk formatting.
All Logs Deletion	All Logs Deletion	Details of deletions of all logs.
Log Setting Change	Log Setting Change	Details of changes made to log settings.
Transfer Log Error	Transfer Log Error	Details of changes made to log settings.
Log Collection Item Change	Log Collection Item Change	Details of changes made to log settings.
Collect Encrypted Communication Logs	Collect Encrypted Communication Logs	Details of changes to job log collection levels, access log collection levels, and types of log collected.
Access Violation	Access Violation	Details of failed access attempts.
Lockout	Lockout	Details of lockout activation.
Firmware: Update	Firmware: Update	Details of firmware updates.
Firmware: Structure Change	Firmware: Structure Change	Details of structure changes that occurred when an SD card was inserted or removed, or when an unsupported SD card was inserted.
Firmware: Structure	Firmware: Structure	Details of checks for changes to firmware module structure made at times such as when the machine was switched on.
Machine Data Encryption Key Change	Machine Data Encryption Key Change	Details of changes made to encryption keys using the Machine Data Encryption setting.

Access Log Item	Log Type Attribute	Content
Firmware: Invalid	Firmware: Invalid	Details of checks for firmware validity made at times such as when the machine was switched on.
Date/Time Change	Date/Time Change	Details of changes made to date and time settings.
File Access Privilege Change	File Access Privilege Change	Log for changing the access privilege to the stored files.
Password Change	Password Change	Details of changes made to the login password.
Administrator Change	Administrator Change	Details of changes of administrator.
Address Book Change	Address Book Change	Details of changes made to address book entries.
Capture Error	Capture Error	Details of file capture errors.

There is no "Login" log made for SNMPv3.

If the hard disk is formatted, all the log entries up to the format are deleted and a log entry indicating the completion of the format is made.

"Access Violation" indicates the system has experienced frequent remote DoS attacks involving logon attempts through user authentication.

Note

- If "Job Log Collect Level" is set to "Level 1", all job logs are collected.
- If "Access Log Collect Level" is set to "Level 1", the following information items are recorded in the access log:
  - HDD Format
  - All Logs Deletion
  - Log Setting Change
  - Log Collection Item Change
- If "Access Log Collect Level" is set to "Level 2", all access logs are collected.
- The first log made following power on is the "Firmware: Structure" log.

Attributes of logs you can download

If you use Web Image Monitor to download logs, a CSV file containing the information items shown in the following table is produced.

Note that a blank field indicates an item is not featured in a log.

File output format

- Character Code Set: UTF-8
- Output Format: CSV (Comma-Separated Values)
- File Name: "Device Name + _log.csv"

Order of log entries

Log entries are printed in ascending order according to Log ID.

File structure

The data title is printed in the first line (header line) of the file.

The difference between the output format of access log and job log

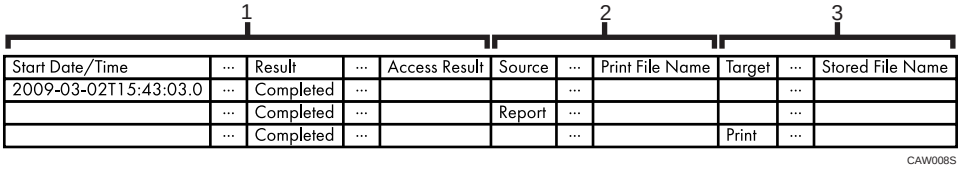
The output format of the access log and job log are different.

- Access log

  Items in the list and access log entries appear on separate lines.

- Job log

  Multiple lines appear in the order of All, Source (job input data), and Target (job output data). The same log ID is assigned to all lines corresponding to a single job log entry.



1. **All**

   Each item in the list is displayed on a separate line.

2. **Source**

   Displays details of the job log entry and the "Result" and "Status" of each item.

   If there are multiple sources, multiple lines are displayed.

3. **Target**

   Displays details of the job log entry and the "Result" and "Status" of each item.

   If there are multiple targets, multiple lines are displayed.

Job and access log information items

Item	Content
Start Date/Time	For a job log entry, indicates the start date and time of the operation. If the job has not been completed, this is blank. For an access log entry, indicates the same date and time as shown by "End Date/Time". This is in Item 1 of the CSV file.
End Date/Time	For a job log entry, indicates the end date and time of the operation. If the operation is still in progress, this will be blank. For an access log entry, indicates the same date and time as shown by "Result". This is Item 2 of the CSV file.
Log Type	Details of the log type. Access logs are classified under "Access Log Type". For details about the information items contained in each type of log, see "Logs that can be collected". This is Item 3 of the CSV file.
Result	Indicates the result of an operation or event: • If "Succeeded" is displayed for a job log entry, the operation completed successfully; "Failed" indicates the operation was unsuccessful. If the operation is still in progress, this will be blank. • If "Succeeded" is displayed for an access log entry, the event completed successfully; "Failed" indicates the event was unsuccessful.

Item	Content
Status	Indicates the status of an operation or event: • If "Completed" is displayed for a job log entry, the operation completed successfully; "Failed" indicates the operation was unsuccessful; "Processing" indicates the operation is still in progress. • If "Completed" is displayed for "Source" or "Target" in a job log entry, the operation completed successfully; "Failed" indicates the operation was unsuccessful; "Processing" indicates the operation is still in progress; "Error" indicates an error occurred; "Suspended" indicates the operation is currently suspended. • If "Succeeded" is displayed for an access log entry, the operation completed successfully; if any of the following are displayed, the operation was unsuccessful: "Password Mismatch", "User Not Programmed", "Other Failures", "User Locked Out", "File Password Mismatch", "No Privileges", "Failed to Access File", "File Limit Exceeded", "Transfer Cancelled", "Power Failure", "Lost File", "Functional Problem", "Communication Failure", or "Communication Result Unknown".

Item	Content
User Entry ID	Indicates the user's entry ID. This is a hexadecimal ID that identifies users who performed job or access log-related operations: For supervisors, only 0xffffff86 is available; for administrators, 0xffffff87, 0xffffff88, 0xffffff89, and 0xffffff8a are available. For general users, any value between 0x00000001 and 0xffffffeff is available. "0x00000000", "0xffffff80", and "0xffffff81" indicate system operations related to user authentication. IDs "0xffffff80" and "0xffffff81" indicate system operations related to stored files and the address book; "0x00000000" indicates other operations. "0xffffff80" indicates operations related to deleting Hold Print, Locked Print, and Stored Print jobs (such as when the [Auto Delete Temporary Print Jobs] setting is enabled), and operations related to changing the access permissions of such jobs. Displays Address Book updates when Auto registration of users is enabled through Windows, LDAP, or another authentication system. ID "0xffffff81" indicates only operations related to the creation of stored files when it is assumed such files will be deleted through system operations. "0x00000000" and "0xffffff81" indicate operations that do not require user authentication (such as copying and scanning) and that were performed by non-authenticated users. ID "0xffffff81" indicates operations related to stored files, the address book and job logs; "0x00000000" indicates other operations.
User Code/User Name	Identifies the user code or user name of the user who performed the operation. If an administrator performed the operation, this ID will contain the login name of that administrator.
Log ID	Identifies the ID that is assigned to the log. This is a hexadecimal ID that identifies the log.

The following log items are recorded only when the logged operations are executed successfully: "Document Server: Stored File Downloading", "Stored File Printing", "Scanner: Storing", "Scanner:

Stored File Sending", "Printer: Stored File Printing", and "Fax: Stored File Downloading" (Job logs) and "File Storing" and "Stored File Deletion" (Access logs).

Access log information items

Item	Content
Access Log Type	Indicates the type of access: "Authentication" indicates a user authentication access. "System" indicates a system access. "Stored File" indicates a stored file access. "Network Attack Detection/Encrypted Communication" indicates a network attack or encrypted communication access. "Firmware" indicates a firmware verification access. "Address Book" indicates an address book access.
Authentication Server Name	Indicates the name of the server where authentication was last attempted.
No. of Authentication Server Switches	Indicates the number of times server switching occurred when the authentication server was unavailable. You can determine whether or not authentication server availability is detected. The number of server switches is indicated as 0 to 4. A value of 0 indicates the authentication server is available.
Logout Mode	Mode of logout. The remark "by User's Operation" indicates manual logout by the user; "by Auto Logout Timer" indicates automatic logout following a timeout.
Login Method	Identifies the method of login (authorization): "Control Panel" indicates the login was performed through the control panel; "via Network" indicates the login was performed remotely through a network computer; and "Others" indicates the login was performed through another method.

Item	Content
Login User Type	Indicates the type of login user: "User" indicates the logged in user was a registered general user. "Guest" indicates the logged in user was a guest user. "File Administrator" indicates the logged in user was a registered file administrator. "Machine Administrator" indicates the logged in user was a registered machine administrator. "Network Administrator" indicates the logged in user was a registered network administrator. "Supervisor" indicates the logged in user was a registered supervisor. "Custom Engineer (Service Mode)" indicates the logged in user was a customer engineer. "Others" indicates the logged in user did not belong to any of the above types of user.
Target User Entry ID	Indicates the entry ID of the target user is. This is a hexadecimal ID that indicates users to whom the following settings are applied: • Lockout • Password Change
Target User Code/User Name	User code or user name of the user whose data was accessed. If the administrator's data was accessed, the administrator's user name is logged.
Lockout/Release	The mode of operation access. "Lockout" indicates activation of password lockout; "Release" indicates deactivation of password lockout.
Lockout Release Method	"Manual" is recorded if the machine is unlocked manually. "Auto" is recorded if the machine is unlocked by the lockout release timer.
Stored File ID	Identifies a created or deleted file. This is a hexadecimal ID that indicates created or deleted stored files.
Stored File Name	Name of a created or deleted file.

Item	Content
File Location	Region of all file deletion. "Document Server" indicates a deletion of all files from the machine's hard disk.
Collect Job Logs	Indicates the status of the job log collection setting: "Active" indicates job log collection is enabled. "Inactive" indicates job log collection is disabled. "Not Changed" indicates no changes have been made to the job log collection setting.
Collect Access Logs	Indicates the status of the access log collection setting: "Active" indicates access log collection is enabled. "Inactive" indicates access log collection is disabled. "Not Changed" indicates no changes have been made to the access log collection setting.
Transfer Logs	Indicates the status of the log transfer setting: "Active" indicates log transfer is enabled. "Inactive" indicates log transfer is disabled. "Not Changed" indicates no changes have been made to the log transfer setting.
Encrypt Logs	Indicates the status of the log encryption setting: "Active" indicates log encryption is enabled. "Inactive" indicates log encryption is disabled. "Not Changed" indicates no changes have been made to the log encryption setting.
Log Type	If a log's collection level setting has been changed, this function indicates details of the change: "Job Log" indicates the Job Log's collection level has been changed. "Access Log" indicates the Access Log's collection level has been changed. "Level 1" indicates a level 1 collection setting. "Level 2" indicates a level 2 collection setting. "User Settings" indicates a user-specified collection level setting. This is Item 24 of the CSV file.

Item	Content
Log Collect Level	Indicates the level of log collection: "Level 1", "Level 2", or "User Settings".
Encryption/Cleartext	Indicates whether communication encryption is enabled or disabled: "Encryption Communication" indicates encryption is enabled; "Cleartext Communication" indicates encryption is not disabled.
Machine Port No.	Indicates the machine's port number.
Protocol	Destination protocol. "TCP" indicates the destination's protocol is TCP; "UDP" indicates the destination's protocol is UDP; "Unknown" indicates the destination's protocol could not be identified.
IP Address	Destination IP address.
Port No.	Destination port number. This is in decimal.
MAC Address	Destination MAC (physical) address.
Primary Communication Protocol	Indicates the primary communication protocol.
Secondary Communication Protocol	Indicates the secondary communication protocol.
Encryption Protocol	Indicates the protocol used to encrypt the communication:
Communication Direction	Indicates the direction of communication: "Communication Start Request Receiver (In)" indicates the machine received a request to start communication; "Communication Start Request Sender (Out)" indicates the machine sent a request to start communication.
Communication Start Log ID	Indicates the log ID for the communication start time. This is a hexadecimal ID that indicates the time at which the communication started.
Communication Start/End	Indicates the times at which the communication started and ended.

Item	Content
Network Attack Status	Indicates the attack status of the network: "Violation Detected" indicates an attack on the network was detected. "Recovered from Violation" indicates the network recovered from an attack. "Max. Host Capacity Reached" indicates the machine became inoperable due to the volume of incoming data reaching the maximum host capacity. "Recovered from Max. Host Capacity" indicates that the machine became operable again following reduction of the volume of incoming data.
Network Attack Type	Identifies the type of network attack as either "Password Entry Violation" or "Device Access Violation".
Network Attack Type Details	Indicates details about the type of network attack: "Authentication Error" or "Encryption Error".
Network Attack Route	Identifies the route of the network attack as either "Attack from Control Panel" or "Attack from Other than Control Panel".
Login User Name used for Network Attack	Identifies the login user name that the network attack was performed under.
Add/Update/Delete Firmware	Indicates the method used to add, update, or delete the machine's firmware: "Updated with SD Card" indicates an SD card was used to perform the firmware update. "Added with SD Card" indicates an SD card was used to add the firmware update. "Deleted with SD Card" indicates an SD card was used to delete the firmware update. "Moved to Another SD Card" indicates the firmware update was moved to another SD card. "Updated via Remote" indicates the firmware update was updated remotely from a computer. "Updated for Other Reasons" indicates the firmware updated was performed using a method other than any of the above.
Module Name	Firmware module name.

Item	Content
Parts Number	Firmware module part number.
Version	Firmware version.
Machine Data Encryption Key Operation	Indicates the type of encryption key operation performed: "Back Up Machine Data Encryption Key" indicates an encryption key backup was performed. "Restore Machine Data Encryption Key" indicates an encryption key was restored. "Clear NVRAM" indicates the NVRAM was cleared. "Start Updating Machine Data Encryption Key" indicates an encryption key update was started. "Finish Updating Machine Data Encryption Key" indicates an encryption key update was finished.
Machine Data Encryption Key Type	Identifies the type of the encryption key as "Encryption Key for Hard Disk", "Encryption Key for NVRAM", or "Device Certificate".
Validity Error File Name	Indicates the name of the file in which a validity error was detected.
Access Result	Indicates the results of logged operations: "Completed" indicates an operation completed successfully; "Failed" indicates an operation completed unsuccessfully.

Job log information items

Input information

Item	Content
Source	Indicates the source of the job file: "Scan File" indicates the job file was scanned in; "Stored File" indicates the job file was stored on the hard disk; "Printer" indicates the job file was sent from the printer driver; "Received File" indicates the job file was received over the network; "Report" indicates the job file was a printed report.

Item	Content
Start Date/Time	Dates and times "Scan File", "Received File" and "Printer" operations started. This is Item 52 of the CSV file.
End Date/Time	Dates and times "Scan File", "Received File" and "Printer" operations ended. This is Item 53 of the CSV file.
Stored File Name	Names of "Stored File" files.
Stored File ID	Indicates the ID of data that is output as a stored file. This is a decimal ID that identifies the stored file.
Print File Name	Name of "Printer" files.

Output information

Item	Content
Target	Type of the job target. "Print" indicates a print file; "Store" indicates a stored file; "Send" indicates a sent file.
Start Date/Time	Dates and times "Print", "Store", and "Send" operations started. This is Item 58 of the CSV file.
End Date/Time	Dates and times "Print", "Store", and "Send" operations ended. This is Item 59 of the CSV file.
Destination Name	Names of "Send" destinations.
Destination Address	IP address, path, or e-mail address of "Send" destinations.
Stored File ID	Indicates the ID of data that is output as a store file. This is a decimal ID that identifies the stored file.
Stored File Name	If the Target Type is "Store", the file name of the stored file is recorded.

Printing stored faxes from the Fax screen before transmission will not be recorded in the job log.

Stored File ID logs are not logged for documents processed using fax functions.

Stored File Name logs are not logged for documents processed using fax functions.

Reference

- p.177 "Logs that can be collected"

7. Enhanced Network Security

This chapter describes how to increase security over the network using the machine's functions.

Preventing Unauthorized Access

You can limit IP addresses, disable ports and protocols, or use Web Image Monitor to specify the network security level to prevent unauthorized access over the network and protect the Address Book, stored files, and default settings.

Access Control

This can be specified by the network administrator using Web Image Monitor.

For details, see Web Image Monitor Help.

The machine can control TCP/IP access.

Limit the IP addresses from which access is possible by specifying the access control range.

For example, if you specify the access control range as [192.168.15.16]-[192.168.15.20], the client PC addresses from which access is possible will be from [192.168.15.16] to [192.168.15.20].

Important

- **Using access control, you can limit access involving LPR, RCP/RSH, FTP, SSH/SFTP, Bonjour, SMB, WSD (Device), WSD (Printer), WSD (Scanner), IPP, DIPRINT, RHPP, Web Image Monitor, SmartDeviceMonitor for Client or DeskTopBinder. You cannot limit the monitoring of SmartDeviceMonitor for Client. You cannot limit access involving telnet, or SmartDeviceMonitor for Admin, when using the SNMPv1 monitoring.**

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.
3. **Click [Login].**

   The network administrator can log in using the appropriate login user name and login password.
4. **Click [Configuration], and then click [Access Control] under "Security".**

   The Access Control page appears.

5. **To specify the IPv4 Address, enter an IP address that has access to the machine in "Access Control Range".**

   To specify the IPv6 Address, enter an IP address that has access to the machine in "Range" under "Access Control Range", or enter an IP address in "Mask" and specify the "Mask Length".

6. **Click [OK].**

   Access control is set.

7. **Click [Logout].**

8. **Click [Logout].**

Enabling and Disabling Protocols

This can be specified by the network administrator.

Specify whether to enable or disable the function for each protocol. By making this setting, you can specify which protocols are available and so prevent unauthorized access over the network. Network settings can be specified on the control panel, or using Web Image Monitor, telnet, SmartDeviceMonitor for Admin or Remote Communication Gate S. If you use SmartDeviceMonitor for Admin, start Web Image Monitor from SmartDeviceMonitor for Admin and configure the settings from there. For details about making settings using SmartDeviceMonitor for Admin or Remote Communication Gate S, see the manual for each application. For details about making settings using telnet, see "Remote Maintenance Using telnet", Network and System Settings Reference. To disable SMTP on Web Image Monitor, in E-mail settings, set the protocol to anything other than SMTP. For details, see Web Image Monitor Help.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

Protocol	Port	Setting Method	When Disabled
IPv4	-	• Control Panel • Web Image Monitor • telnet • SmartDeviceMonitor for Admin • Remote Communication Gate S	All applications that operate over IPv4 cannot be used. IPv4 cannot be disabled from Web Image Monitor when using IPv4 transmission.

Protocol	Port	Setting Method	When Disabled
IPv6	-	• Control Panel • Web Image Monitor • telnet • SmartDeviceMonitor for Admin • Remote Communication Gate S	All applications that operate over IPv6 cannot be used.
IPsec	-	• Control Panel • Web Image Monitor • telnet • SmartDeviceMonitor for Admin	Encrypted transmission using IPsec is disabled.
FTP	TCP:21	• Web Image Monitor • telnet • SmartDeviceMonitor for Admin • Remote Communication Gate S	Functions that require FTP cannot be used. You can restrict personal information from being displayed by making settings on the control panel using "Restrict Display of User Information".
ssh/sftp	TCP:22	• Web Image Monitor • telnet • SmartDeviceMonitor for Admin • Remote Communication Gate S	Functions that require sftp cannot be used. You can restrict personal information from being displayed by making settings on the control panel using "Restrict Display of User Information".
telnet	TCP:23	• Web Image Monitor • SmartDeviceMonitor for Admin	Commands using telnet are disabled.

Protocol	Port	Setting Method	When Disabled
SMTP	TCP:25 (variable)	• Control Panel • Web Image Monitor • SmartDeviceMonitor for Admin • Remote Communication Gate S	Internet Fax or e-mail notification functions that require SMTP reception cannot be used.
HTTP	TCP:80	• Web Image Monitor • telnet • SmartDeviceMonitor for Admin	Functions that require HTTP cannot be used. Cannot print using IPP on port 80.
HTTPS	TCP:443	• Web Image Monitor • telnet • SmartDeviceMonitor for Admin	Functions that require HTTPS cannot be used. @Remote cannot be used. You can also make settings to require SSL transmission using the control panel or Web Image Monitor.
SMB	TCP:139	• Control Panel • Web Image Monitor • telnet • SmartDeviceMonitor for Admin • Remote Communication Gate S	SMB printing functions cannot be used.
NBT	UDP:137 UDP:138	• telnet	SMB printing functions via TCP/IP, as well as NetBIOS designated functions on the WINS server cannot be used.

Protocol	Port	Setting Method	When Disabled
SNMPv1,v2	UDP:161	• Web Image Monitor • telnet • SmartDeviceMonitor for Admin • Remote Communication Gate S	Functions that require SNMPv1, v2 cannot be used. Using the control panel, Web Image Monitor or telnet, you can specify that SNMPv1, v2 settings are read-only, and cannot be edited.
SNMPv3	UDP:161	• Web Image Monitor • telnet • SmartDeviceMonitor for Admin • Remote Communication Gate S	Functions that require SNMPv3 cannot be used. You can also make settings to require SNMPv3 encrypted transmission and restrict the use of other transmission methods using the control panel, Web Image Monitor, or telnet.
RSH/RCP	TCP:514	• Web Image Monitor • telnet • SmartDeviceMonitor for Admin • Remote Communication Gate S	Functions that require RSH and network TWAIN functions cannot be used. You can restrict personal information from being displayed by making settings on the control panel using "Restrict Display of User Information".

Protocol	Port	Setting Method	When Disabled
LPR	TCP:515	• Web Image Monitor • telnet • SmartDeviceMonitor for Admin • Remote Communication Gate S	LPR functions cannot be used. You can restrict personal information from being displayed by making settings on the control panel using "Restrict Display of User Information".
IPP	TCP:631	• Web Image Monitor • telnet • SmartDeviceMonitor for Admin • Remote Communication Gate S	IPP functions cannot be used.
IP-Fax	TCP:1720 (H.323) UDP:1719 (Gatekeeper) TCP/UDP:5060 (SIP) TCP:5000 (H.245) UDP:5004, 5005 (Voice) TCP/UDP:49152 (T.38)	• Control Panel • Web Image Monitor • SmartDeviceMonitor for Admin • Remote Communication Gate S	IP-Fax connecting functions using H.323, SIP and T.38 cannot be used.
SSDP	UDP:1900	• Web Image Monitor • telnet • SmartDeviceMonitor for Admin	Device discovery using UPnP from Windows cannot be used.

Protocol	Port	Setting Method	When Disabled
Bonjour	UDP:5353	• Web Image Monitor • telnet • SmartDeviceMonitor for Admin • Remote Communication Gate S	Bonjour functions cannot be used.
@Remote	TCP:7443 TCP:7444	• telnet	@Remote cannot be used.
DIPRINT	TCP:9100	• Web Image Monitor • telnet • SmartDeviceMonitor for Admin • Remote Communication Gate S	DIPRINT functions cannot be used.
RFU	TCP:10021	• telnet	You can attempt to update firmware via FTP.
NetWare	(IPX/SPX)	• Control Panel • Web Image Monitor • telnet • SmartDeviceMonitor for Admin • Remote Communication Gate S	Cannot print with NetWare. SNMP over IPX cannot be used.
WSD (Device)	TCP:53000 (variable)	• Web Image Monitor • telnet • SmartDeviceMonitor for Admin • Remote Communication Gate S	WSD (Device) functions cannot be used.

Protocol	Port	Setting Method	When Disabled
WSD (Printer)	TCP:53001 (variable)	• Web Image Monitor • telnet • SmartDeviceMonitor for Admin • Remote Communication Gate S	WSD (Printer) functions cannot be used.
WSD (Scanner)	TCP-53002 (variable)	• Web Image Monitor • telnet • SmartDeviceMonitor for Admin • Remote Communication Gate S	WSD (Scanner) functions cannot be used.
WS-Discovery	UDP/TCP:3702	• telnet • Remote Communication Gate S	WSD (Device, Printer, Scanner) search function cannot be used.
RHPP	TCP:59100	• Web Image Monitor • telnet • SmartDeviceMonitor for Admin	Cannot print with RHPP.

Note

- "Restrict Display of User Information" is one of the Extended Security features. For details about making this setting, see "Specifying the Extended Security Functions".

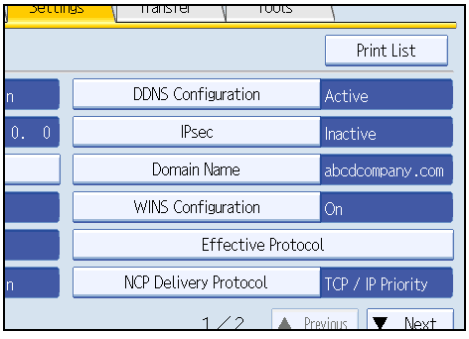
Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"
- p.249 "Specifying the Extended Security Functions"

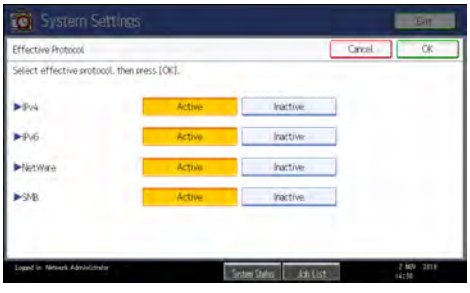
Enabling and Disabling Protocols Using the Control Panel

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Interface Settings].**

4. **Press [Effective Protocol].**



5. **Press [Inactive] for the protocol you want to disable.**



6. **Press [OK].**
7. **Press the [User Tools/Counter] key.**

Enabling and Disabling Protocols Using Web Image Monitor

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.
3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and login password.
4. **Click [Configuration], and then click [Network Security] under "Security".**
5. **Set the desired protocols to active/inactive (or open/close).**
6. **Click [OK].**
7. **Click [OK].**
8. **Click [Logout].**

Specifying Network Security Level

This can be specified by the network administrator.

This setting lets you change the security level to limit unauthorized access. You can make network security level settings on the control panel, as well as Web Image Monitor. However, the protocols that can be specified differ.

Set the security level to [Level 0], [Level 1], or [Level 2].

Select [Level 2] for maximum security to protect confidential information. Make this setting when it is necessary to protect confidential information from outside threats.

Select [Level 1] for moderate security to protect important information. Use this setting if the machine is connected to the office local area network (LAN).

Select [Level 0] for easy use of all the features. Use this setting when you have no information that needs to be protected from outside threats.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

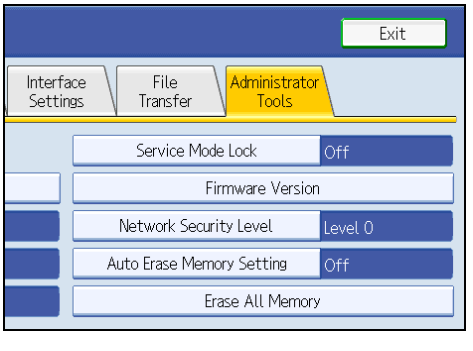
Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

7

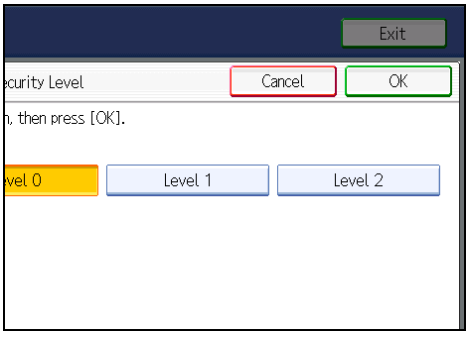
Specifying Network Security Level Using the Control Panel

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Network Security Level].**



If the setting you want to specify does not appear, press [▼Next] to scroll down to other settings.

5. **Select the network security level.**



Select [Level 0], [Level 1], or [Level 2].

6. **Press [OK].**
7. **Press [Exit].**
8. **Press the [User Tools/Counter] key.**

Specifying Network Security Level Using Web Image Monitor

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.
3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and login password.
4. **Click [Configuration], and then click [Network Security] under "Security".**
5. **Select the network security level in "Security Level".**
6. **Click [OK].**
7. **Click [OK].**
8. **Click [Logout].**

Status of Functions under Each Network Security Level

Tab Name:TCP/IP

Function	Level 0	Level 1	Level 2
TCP/IP	Active	Active	Active
HTTP> Port 80	Open	Open	Open
IPP> Port 80	Open	Open	Open
IPP> Port 631	Open	Open	Close
SSL/TLS> Port 443	Open	Open	Open
SSL/TLS> Permit SSL/TLS Communication	Ciphertext Priority	Ciphertext Priority	Ciphertext Only
DIPRINT	Active	Active	Inactive
LPR	Active	Active	Inactive
FTP	Active	Active	Active
sftp	Active	Active	Active
ssh	Active	Active	Active
RSH/RCP	Active	Active	Inactive
TELNET	Active	Inactive	Inactive
Bonjour	Active	Active	Inactive
SSDP	Active	Active	Inactive
SMB	Active	Active	Inactive
NetBIOS over TCP/IPv4	Active	Active	Inactive
WSD (Device)	Active	Active	Inactive
WSD (Printer)	Active	Active	Inactive
WSD (Scanner)	Active	Active	Inactive
RHPP	Active	Active	Inactive

The same settings are applied to IPv4 and IPv6.

[SSL/TLS version] and [Encryption Strength Setting] under [Network Security] are not affected by the network security level setting.

Tab Name:NetWare

Function	Level 0	Level 1	Level 2
NetWare	Active	Active	Inactive

If NetWare is not used on your network, the above settings are not applicable.

Tab Name:SNMP

Function	Level 0	Level 1	Level 2
SNMP	Active	Active	Active
Permit Settings by SNMPv1 and v2	On	Off	Off
SNMPv1,v2 Function	Active	Active	Inactive
SNMPv3 Function	Active	Active	Active
Permit SNMPv3 Communication	Encryption/ Cleartext	Encryption/ Cleartext	Encryption Only

Encrypting Transmitted Passwords

We recommend you use one or more of the following security protocols: IPsec, SNMPv3, and SSL. Using these protocols can enhance your machine's security to make login and IPP authentication passwords harder to break.

Also, encrypt the login password for administrator authentication and user authentication.

Driver Encryption Key

Encrypt the password transmitted when specifying user authentication.

To encrypt the login password, specify the driver encryption key on the machine and on the printer driver installed in the user's computer.

Password for IPP Authentication

To encrypt the IPP Authentication password on Web Image Monitor, set "Authentication" to [DIGEST], and then specify the IPP Authentication password set on the machine.

You can use telnet or FTP to manage passwords for IPP authentication, although it is not recommended.

Specifying a Driver Encryption Key

This can be specified by the network administrator.

Specify the driver encryption key on the machine.

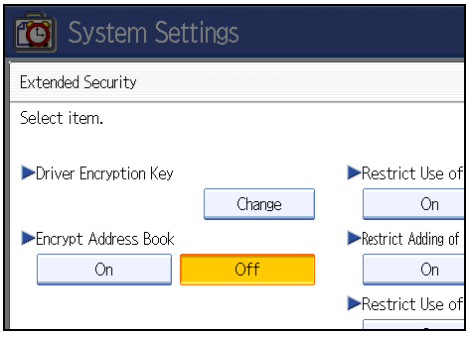
You can enhance security to make login passwords harder to break.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Extended Security].**

   If this item is not visible, press [▼Next] to display more settings.

5. **For "Driver Encryption Key", press [Change].**



"Driver Encryption Key" is one of the extended security functions. For details about this and other security functions, see "Specifying the Extended Security Functions".

6. **Enter the driver encryption key, and then press [OK].**

Enter the driver encryption key using up to 32 alphanumeric characters.

The network administrator must give users the driver encryption key specified on the machine so they can register it on their computers. Make sure to enter the same driver encryption key as that is specified on the machine.

7. **Press [OK].**
8. **Press the [User Tools/Counter] key.**

For details about specifying the encryption key on the printer driver, see the printer driver Help.

For details about specifying the encryption key on the TWAIN driver, see the TWAIN driver Help.

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"
- p.249 "Specifying the Extended Security Functions"

Specifying an IPP Authentication Password

This can be specified by the network administrator.

Specify the IPP authentication passwords for the machine using Web Image Monitor.

You can enhance security to make IPP authentication passwords harder to break.

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

The top page of Web Image Monitor appears.

3. **Click [Login].**

   The network administrator can log in. Enter the login user name and login password.

4. **Click [Configuration], and then click [IPP Authentication] under "Security".**

   The IPP Authentication page appears.

5. **Select [DIGEST] from the "Authentication" list.**

6. **Enter the user name in the "User Name" box.**

7. **Enter the password in the "Password" box.**

8. **Click [OK].**

   IPP authentication is specified.

9. **Click [OK].**

10. **Click [Logout].**

Note

- When using the IPP port under Windows XP/Vista/7, Windows Server 2003/2003 R2/2008/2008 R2, you can use the operating system's standard IPP port.

Protection Using Encryption

Establish encrypted transmission on this machine using SSL, SNMPv3, and IPsec. By encrypting transmitted data and safeguarding the transmission route, you can prevent sent data from being intercepted, analyzed, and tampered with.

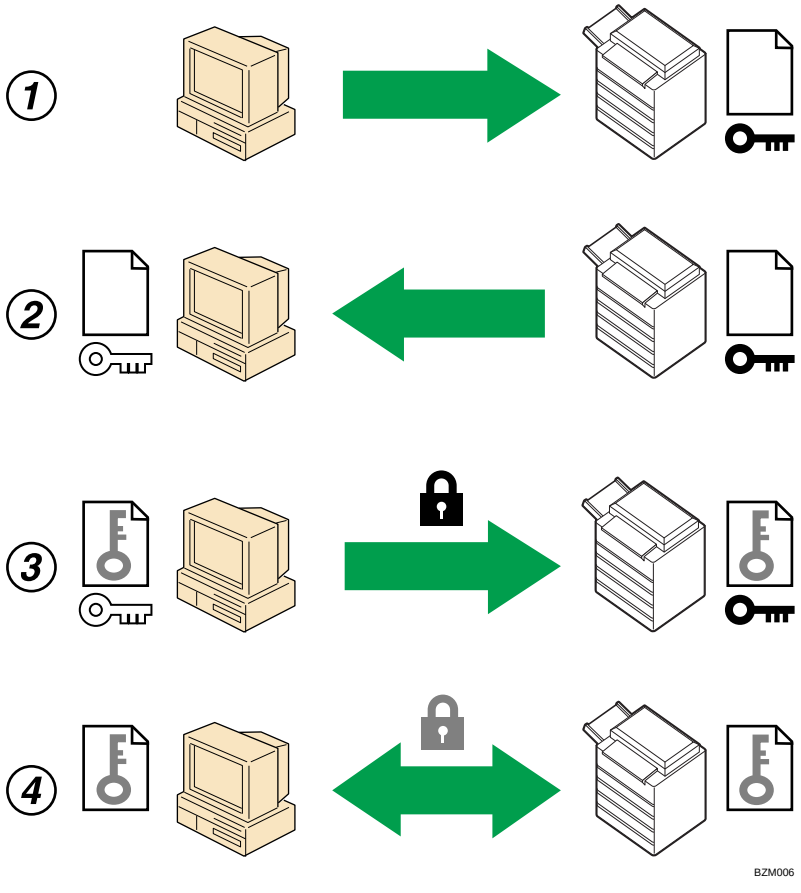
SSL (Secure Sockets Layer) Encryption

This can be specified by the network administrator.

To protect the communication path and establish encrypted communication, create and install the device certificate.

There are two ways of installing a device certificate: create and install a self-signed certificate using the machine, or request a certificate from a certificate authority and install it.

SSL (Secure Sockets Layer)



1. **To access the machine from a user's computer, request the SSL device certificate and public key.**

2. **The device certificate and public key are sent from the machine to the user's computer.**
3. **The shared key created with the computer is encrypted using the public key, sent to the machine, and then decrypted using the private key in the machine.**
4. **The shared key is used for data encryption and decryption, thus achieving secure transmission.**

Configuration flow (self-signed certificate)

1. Creating and installing the device certificate

   Install the device certificate using Web Image Monitor.
2. Enabling SSL/TLS

   Enable the "SSL/TLS" setting using Web Image Monitor.

Configuration flow (certificate issued by a certificate authority)

1. Creating the device certificate

   Create the device certificate using Web Image Monitor.

   The application procedure after creating the certificate depends on the certificate authority. Follow the procedure specified by the certificate authority.
2. Installing the device certificate

   Install the device certificate using Web Image Monitor.
3. Enabling SSL/TLS

   Enable the "SSL/TLS" setting using Web Image Monitor.

Note

- To confirm whether SSL configuration is enabled, enter "https://(the machine's IP address or host name)/" in your Web browser's address bar to access this machine. If the "The page cannot be displayed" message appears, check the configuration because the current SSL configuration is invalid.
- If you enable SSL for IPP (printer functions), sent data is encrypted, preventing it from being intercepted, analyzed, or tampered with.

Creating and Installing the Self-Signed Certificate

Create and install the device certificate using Web Image Monitor. For details about the displayed items and selectable items, see Web Image Monitor Help.

This section explains the use of a self-signed certificate as the device certificate.

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.

3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and login password.

4. **Click [Configuration], and then click [Device Certificate] under "Security".**

   The Device Certificate page appears.

5. **Click [Certificate1].**

6. **Click [Create].**

7. **Make the necessary settings.**

8. **Click [OK].**

   The setting is changed.

9. **Click [OK].**

   A security warning dialog box appears.

10. **Check the details, and then click [OK].**

    "Installed" appears under "Certificate Status" to show that a device certificate for the machine has been installed.

11. **Click [Logout].**

Note

- Click [Delete] to delete the device certificate from the machine.

Creating the Device Certificate (Issued by a Certificate Authority)

Create the device certificate using Web Image Monitor. For details about the displayed items and selectable items, see Web Image Monitor Help.

This section explains the use of a certificate issued by a certificate authority as the device certificate.

1. **Open a Web browser.**

2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.

3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and login password.

4. **Click [Configuration], and then click [Device Certificate] under "Security".**

   The Device Certificate page appears.

5. **Click [Certificate1].**
6. **Click [Request].**
7. **Make the necessary settings.**
8. **Click [OK].**

   The setting is changed.
9. **Click [OK].**

   "Requesting" appears for "Certificate Status".
10. **Click [Logout].**
11. **Apply to the certificate authority for the device certificate.**

    The application procedure depends on the certificate authority. For details, contact the certificate authority.

    For the application, click Web Image Monitor Details icon and use the information that appears in "Certificate Details".

Note

- The issuing location may not be displayed if you request two certificates at the same time. When you install a certificate, be sure to check the certificate destination and installation procedure.
- Using Web Image Monitor, you can create the contents of the device certificate but you cannot send the certificate application.
- Click [Cancel Request] to cancel the request for the device certificate.

Installing the Device Certificate (Issued by a Certificate Authority)

Install the device certificate using Web Image Monitor. For details about the displayed items and selectable items, see Web Image Monitor Help.

This section explains the use of a certificate issued by a certificate authority as the device certificate.

Enter the device certificate contents issued by the certificate authority.

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.
3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and login password.

4. **Click [Configuration], and then click [Device Certificate] under "Security".**

   The Device Certificate page appears.

5. **Click [Certificate1].**
6. **Click [Install].**
7. **Enter the contents of the device certificate.**

   In the certificate box, enter the contents of the device certificate issued by the certificate authority.

   If you are installing an intermediate certificate, enter the contents of the intermediate certificate also.

   For details about the displayed items and selectable items, see Web Image Monitor Help.

8. **Click [OK].**
9. **Wait a moment for the device to restart, and then click [OK].**

   "Installed" appears under "Certificate Status" to show that a device certificate for the machine has been installed.

10. **Click [Logout].**

Installing an Intermediate Certificate (Issued by a Certificate Authority)

This section explains how to use Web Image Monitor to install an intermediate certificate issued by a certificate authority.

If you do not have the intermediate certificate issued by the certificate authority, a warning message will appear during communication. If the certificate authority has issued an intermediate certificate, we recommend installing the intermediate certificate.

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.

3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and password.

4. **Click [Configuration], and then click [Device Certificate] under [Security].**

   The Device Certificate page appears.

5. **Check the radio button next to the number of the certificate you want to install.**
6. **Click [Install Intermediate Certificate].**

7. **Enter the contents of the intermediate certificate.**

   In the certificate box, enter the contents of the intermediate certificate issued by the certificate authority. For details about the items and settings of a certificate, see Web Image Monitor Help.

8. **Click [OK].**

9. **Wait a moment for the device to restart, and then click [OK].**

   The intermediate certificate will be installed on the device. The "Certificate Details" screen will inform you whether or not the installation of the intermediate certificate was successful. For details about the "Certificate Details" screen, see Web Image Monitor Help.

Enabling SSL/TLS

After installing the device certificate in the machine, enable the SSL/TLS setting.

This procedure is used for a self-signed certificate or a certificate issued by a certificate authority.

1. **Open a Web browser.**

2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.

3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and login password.

4. **Click [Configuration], and then click [SSL/TLS] under "Security".**

   The SSL/TLS page appears.

5. **Click [Active] for the protocol version used in "SSL/TLS".**

6. **Select the encryption communication mode for "Permit SSL/TLS Communication".**

7. **If you want to disable a protocol, click [Inactive] next to "SSL2.0", "SSL3.0", or "TLS".**

   Note that if you have selected [Active] in step 5, at least one of these protocols must be enabled.

8. **Under "Encryption Strength Setting", specify the strength of encryption to be applied for "AES", "3DES", "RC4", and/or "RC2". You must select at least one check box.**

   Note that the availability of encryption strengths will vary depending on the settings you have specified for "SSL2.0", "SSL3.0", and "TLS".

9. **Click [OK].**

   The SSL/TLS setting is enabled.

10. **Click [OK].**

11. **Click [Logout].**

Note

- If you set "Permit SSL/TLS Communication" to [Ciphertext Only], enter " https://(the machine's IP address or host name)/" to access the machine.
- The TLS version is 1.0.
- If you set "Permit SSL/TLS Communication" to [Ciphertext Only], communication will not be possible if you select a protocol that does not support a Web browser, or specify an encryption strength setting only. If this is the case, enable communication by setting [Permit SSL / TLS Communication] to [Ciphertext / Cleartext] using the machine's control panel, and then specify the correct protocol and encryption strength.
- The SSL/TLS version and encryption strength settings can be changed, even under [Network Security].
- Depending on the states you specify for "SSL2.0", "SSL3.0", and "TLS", the machine might not be able to connect to an external LDAP server.
- The following types of communication and data are always encrypted by SSL3.0: communication via @Remote, Integration Server authentication, files sent via a delivery server, and logs transferred to Remote Communication Gate S.

User Settings for SSL (Secure Sockets Layer)

We recommend that after installing the self-signed certificate or device certificate from a private certificate authority on the main unit and enabling SSL (communication encryption), you instruct users to install the certificate on their computers. Installation of the certificate is especially necessary for users who want to print via IPP-SSL from Windows Vista/7, Windows Server 2008/2008 R2. The network administrator must instruct each user to install the certificate.

Note

- Take the appropriate steps when you receive a user's inquiry concerning problems such as an expired certificate.
- For details about how to install the certificate and about where to store the certificate when accessing the machine using IPP, see Web Image Monitor Help.
- If a certificate issued by a certificate authority is installed in the machine, confirm the certificate store location with the certificate authority.
- Printing via the standard IPP port under Windows Vista/7, Windows Server 2008/2008 R2 is possible only after the hostname or IP address is specified in the device certificate's [Common Name] setting. If the host name or IP address has changed, the user must delete the printer installed on the client computer. The printer must be reinstalled if the client computer's device certificate has been updated. Also, if a user's authentication information (login user name and password) has changed, the printer must be deleted, then the user's information settings must be updated, and then the printer must be reinstalled.

Setting the SSL/TLS Encryption Mode

By specifying the SSL/TLS encrypted communication mode, you can change the security level.

Encrypted Communication Mode

Using the encrypted communication mode, you can specify encrypted communication.

Ciphertext Only	Allows encrypted communication only. If encryption is not possible, the machine does not communicate.
Ciphertext Priority	Performs encrypted communication if encryption is possible. If encryption is not possible, the machine communicates without it.
Ciphertext / Cleartext	Communicates with or without encryption, according to the setting.

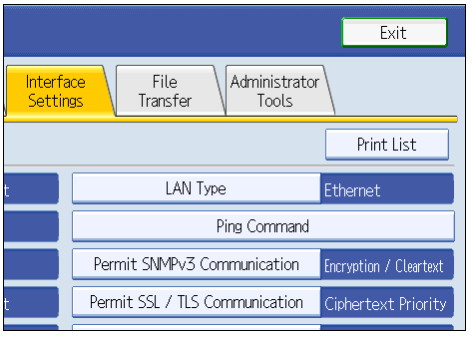
Specifying the SSL/TLS Encryption Mode

This can be specified by the network administrator.

After installing the device certificate, specify the SSL/TLS encrypted communication mode. By making this setting, you can change the security level.

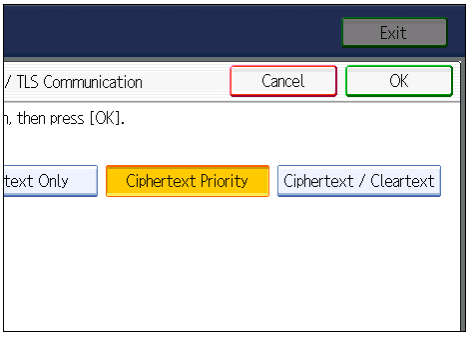
For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Interface Settings].**
4. **Press [Permit SSL / TLS Communication].**



If this item is not visible, press [▼Next] to display more settings.

5. **Select the encrypted communication mode.**



Select [Ciphertext Only], [Ciphertext Priority], or [Ciphertext / Cleartext] as the encrypted communication mode.

6. **Press [OK].**
7. **Press the [User Tools/Counter] key.**

Note

- The SSL/TLS encrypted communication mode can also be specified using Web Image Monitor. For details, see Web Image Monitor Help.

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

Enabling SSL for SMTP Connections

This can be specified by the network administrator.

Use the following procedure to enable SSL encryption for SMTP connections.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [File Transfer].**
4. **Press [SMTP Server].**
5. **In "Use Secure Connection (SSL)", press [On].**

If you are not using SSL for SMTP connections, press [Off].

When "Use Secure Connection (SSL)" is set to [On], the port number is set to 465 and cannot be changed.

6. **Press [OK].**
7. **Press [Exit].**
8. **Press the [User Tools/Counter] key.**

Note

- If you set "Use Secure Connection (SSL)" to [On], you cannot bypass the SMTP server to send Internet Fax documents directly.

SNMPv3 Encryption

This can be specified by the network administrator.

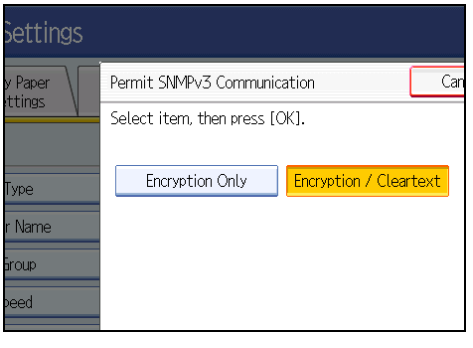
When using SmartDeviceMonitor for Admin or another application to make various settings, you can encrypt the data transmitted.

By making this setting, you can protect data from being tampered with.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Interface Settings].**
4. **Press [Permit SNMPv3 Communication].**

   If this item is not visible, press [▼Next] to display more settings.
5. **Press [Encryption Only].**



6. **Press [OK].**
7. **Press the [User Tools/Counter] key.**

Note

- To use SmartDeviceMonitor for Admin for encrypting the data for specifying settings, you need to specify the network administrator's [Encryption Password] setting and [Encryption Password] in [SNMP Authentication Information] in SmartDeviceMonitor for Admin, in addition to specifying [Permit SNMPv3 Communication] on the machine. For details about specifying [Encryption Password] in SmartDeviceMonitor for Admin, see SmartDeviceMonitor for Admin Help.
- If network administrator's [Encryption Password] setting is not specified, the data for transmission may not be encrypted or sent. For details about specifying the network administrator's [Encryption Password] setting, see "Registering the Administrator".

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"
- p.32 "Registering the Administrator"

Transmission Using IPsec

This can be specified by the network administrator.

For communication security, this machine supports IPsec. IPsec transmits secure data packets at the IP protocol level using the shared key encryption method, where both the sender and receiver retain the same key. This machine has two methods that you can use to specify the shared encryption key for both parties: encryption key auto exchange and encryption key manual settings. Using the auto exchange setting, you can renew the shared key exchange settings within a specified validity period, and achieve higher transmission security.

Important

- **When "Inactive" is specified for "Exclude HTTPS Communication", access to Web Image Monitor can be lost if the key settings are improperly configured. In order to prevent this, you can specify IPsec to exclude HTTPS transmission by selecting "Active". When you want to include HTTPS transmission, we recommend that you select "Inactive" for "Exclude HTTPS Communication" after confirming that IPsec is properly configured. When "Active" is selected for "Exclude HTTPS Communication", even though HTTPS transmission is not targeted by IPsec, Web Image Monitor might become unusable when TCP is targeted by IPsec from the computer side. If you cannot access Web Image Monitor due to IPsec configuration problems, disable IPsec in System Settings on the control panel, and then access Web Image Monitor. For details about enabling and disabling IPsec using the control panel, see "System Settings", Network and System Settings Reference.**
- **IPsec is not applied to data obtained through DHCP, DNS, or WINS.**
- **IPsec compatible operating systems are Windows XP SP2, Windows Vista/7, Windows Server 2003/2003 R2/2008/2008 R2, Mac OS X 10.4 and later, RedHat Linux Enterprise WS 4.0, and Solaris 10. However, some setting items are not supported depending on the operating system. Make sure the IPsec settings you specify are consistent with the operating system's IPsec settings.**

Encryption and Authentication by IPsec

IPsec consists of two main functions: the encryption function, which ensures the confidentiality of data, and the authentication function, which verifies the sender of the data and the data's integrity. This machine's IPsec function supports two security protocols: the ESP protocol, which enables both of the IPsec functions at the same time, and the AH protocol, which enables only the authentication function.

ESP Protocol

The ESP protocol provides secure transmission through both encryption and authentication. This protocol does not provide header authentication.

- For successful encryption, both the sender and receiver must specify the same encryption algorithm and encryption key. If you use the encryption key auto exchange method, the encryption algorithm and encryption key are specified automatically.

- For successful authentication, the sender and receiver must specify the same authentication algorithm and authentication key. If you use the encryption key auto exchange method, the authentication algorithm and authentication key are specified automatically.

AH Protocol

The AH protocol provides secure transmission through authentication of packets only, including headers.

- For successful authentication, the sender and receiver must specify the same authentication algorithm and authentication key. If you use the encryption key auto exchange method, the authentication algorithm and authentication key are specified automatically.

AH Protocol + ESP Protocol

When combined, the ESP and AH protocols provide secure transmission through both encryption and authentication. These protocols provide header authentication.

- For successful encryption, both the sender and receiver must specify the same encryption algorithm and encryption key. If you use the encryption key auto exchange method, the encryption algorithm and encryption key are specified automatically.
- For successful authentication, the sender and receiver must specify the same authentication algorithm and authentication key. If you use the encryption key auto exchange method, the authentication algorithm and authentication key are specified automatically.

Note

- Some operating systems use the term "Compliance" in place of "Authentication".

Encryption Key Auto Exchange Settings and Encryption Key Manual Settings

This machine provides two key setting methods: manual and auto exchange. Using either of these methods, agreements such as the IPsec algorithm and key must be specified for both sender and receiver. Such agreements form what is known as an SA (Security Association). IPsec communication is possible only if the receiver's and sender's SA settings are identical.

If you use the auto exchange method to specify the encryption key, the SA settings are auto configured on both parties' machines. However, before setting the IPsec SA, the ISAKMP SA (Phase 1) settings are auto configured. After this, the IPsec SA (Phase 2) settings, which allow actual IPsec transmission, are auto configured.

Also, for further security, the SA can be periodically auto updated by applying a validity period (time limit) for its settings. This machine only supports IKEv1 for encryption key auto exchange.

If you specify the encryption key manually, the SA settings must be shared and specified identically by both parties. To preserve the security of your SA settings, we recommend that they are not exchanged over a network.

Note that for both the manual and auto method of encryption key specification, multiple settings can be configured in the SA.

Settings 1-4 and Default Setting

Using either the manual or auto exchange method, you can configure four separate sets of SA details (such as different shared keys and IPsec algorithms). In the default settings of these sets, you can include settings that the fields of sets 1 to 4 cannot contain.

When IPsec is enabled, set 1 has the highest priority and 4 has the lowest. You can use this priority system to target IP addresses more securely. For example, set the broadest IP range at the lowest priority (4), and then set specific IP addresses at a higher priority level (3 and higher). This way, when IPsec transmission is enabled for a specific IP address, the higher level security settings will be applied.

IPsec Settings

IPsec settings for this machine can be made on Web Image Monitor. The following table explains individual setting items.

Encryption Key Auto Exchange / Manual Settings - Shared Settings

Setting	Description	Setting Value
IPsec	Specify whether to enable or disable IPsec.	• Active • Inactive
Exclude HTTPS Communication	Specify whether to enable IPsec for HTTPS transmission.	• Active • Inactive Specify "Active" if you do not want to use IPsec for HTTPS transmission.
Encryption Key Manual Settings	Specify whether to enable Encryption Key Manual Settings, or use Encryption Key Auto Exchange Settings only.	• Active • Inactive Specify "Active" if you want to use "Encryption Key Manual Settings".

The IPsec setting can also be made from the control panel.

Encryption Key Auto Exchange Security Level

When you select a security level, certain security settings are automatically configured. The following table explains security level features.

Security Level	Security Level Features
Authentication Only	Select this level if you want to authenticate the transmission partner and prevent unauthorized data tampering, but not perform data packet encryption. Since the data is sent in cleartext, data packets are vulnerable to eavesdropping attacks. Do not select this if you are exchanging sensitive information.
Authentication and Low Level Encryption	Select this level if you want to encrypt the data packets as well as authenticate the transmission partner and prevent unauthorized packet tampering. Packet encryption helps prevent eavesdropping attacks. This level provides less security than "Authentication and High Level Encryption".
Authentication and High Level Encryption	Select this level if you want to encrypt the data packets as well as authenticate the transmission partner and prevent unauthorized packet tampering. Packet encryption helps prevent eavesdropping attacks. This level provides higher security than "Authentication and Low Level Encryption".

The following table lists the settings that are automatically configured according to the security level.

Setting	Authentication Only	Authentication and Low Level Encryption	Authentication and High Level Encryption
Security Policy	Apply	Apply	Apply
Encapsulation Mode	Transport	Transport	Transport
IPsec Requirement Level	Use When Possible	Use When Possible	Always Require
Authentication Method	PSK	PSK	PSK
Phase 1 Hash Algorithm	MD5	SHA1	SHA1
Phase 1 Encryption Algorithm	DES	3DES	3DES
Phase 1 Diffie-Hellman Group	2	2	2

Setting	Authentication Only	Authentication and Low Level Encryption	Authentication and High Level Encryption
Phase 2 Security Protocol	AH	ESP	ESP
Phase 2 Authentication Algorithm	HMAC-MD5-96/ HMAC-SHA1-96	HMAC-MD5-96/ HMAC-SHA1-96	HMAC-SHA1-96
Phase 2 Encryption Algorithm	Cleartext (NULL encryption)	DES/3DES/ AES-128/AES-192/ AES-256	3DES/AES-128/ AES-192/AES-256
Phase 2 PFS	Inactive	Inactive	2

Encryption Key Auto Exchange Settings Items

When you specify a security level, the corresponding security settings are automatically configured, but other settings, such as address type, local address, and remote address must still be configured manually.

After you specify a security level, you can still make changes to the auto configured settings. When you change an auto configured setting, the security level switches automatically to "User Setting".

Setting	Description	Setting Value
Address Type	Specify the address type for which IPsec transmission is used.	• Inactive • IPv4 • IPv6 • IPv4/IPv6 (Default Settings only)
Local Address	Specify the machine's address. If you are using multiple addresses in IPv6, you can also specify an address range.	The machine's IPv4 or IPv6 address. If you are not setting an address range, enter 32 after an IPv4 address, or enter 128 after an IPv6 address.

Setting	Description	Setting Value
Remote Address	Specify the address of the IPsec transmission partner. You can also specify an address range.	The IPsec transmission partner's IPv4 or IPv6 address. If you are not setting an address range, enter 32 after an IPv4 address, or enter 128 after an IPv6 address.
Security Policy	Specify how IPsec is handled.	• Apply • Bypass • Discard
Encapsulation Mode	Specify the encapsulation mode. (auto setting)	• Transport • Tunnel (Tunnel beginning address - Tunnel ending address) Select the transport mode (this has no bearing on the security level). If you specify "Tunnel", you must then specify the "Tunnel End Point", which are the beginning and ending IP addresses. Set the same address for the beginning point as you set in "Local Address".
IPsec Requirement Level	Specify whether to only transmit using IPsec, or to allow cleartext transmission when IPsec cannot be established. (auto setting)	• Use When Possible • Always Require

Setting	Description	Setting Value
Authentication Method	Specify the method for authenticating transmission partners. (auto setting)	• PSK • Certificate If you specify "PSK", you must then set the PSK text (using ASCII characters). If you are using "PSK", specify a PSK password using up to 32 ASCII characters. If you specify "Certificate", the certificate for IPsec must be installed and specified before it can be used.
PSK Text	Specify the pre-shared key for PSK authentication.	Enter the pre-shared key required for PSK authentication.
Phase 1 Hash Algorithm	Specify the Hash algorithm to be used in phase 1. (auto setting)	• MD5 • SHA1
Phase 1 Encryption Algorithm	Specify the encryption algorithm to be used in phase 1. (auto setting)	• DES • 3DES
Phase 1 Diffie-Hellman Group	Select the Diffie-Hellman group number used for IKE encryption key generation. (auto setting)	• 1 • 2 • 14
Phase 1 Validity Period	Specify the time period for which the SA settings in phase 1 are valid.	Set in seconds from 300 sec. (5 min.) to 172800 sec. (48 hrs.).

Setting	Description	Setting Value
Phase 2 Security Protocol	Specify the security protocol to be used in Phase 2. To apply both encryption and authentication to sent data, specify "ESP" or "ESP+AH". To apply authentication data only, specify "AH". (auto setting)	• ESP • AH • ESP+AH
Phase 2 Authentication Algorithm	Specify the authentication algorithm to be used in phase 2. (auto setting)	• HMAC-MD5-96 • HMAC-SHA1-96
Phase 2 Encryption Algorithm Permissions	Specify the encryption algorithm to be used in phase 2. (auto setting)	• Cleartext (NULL encryption) • DES • 3DES • AES-128 • AES-192 • AES-256
Phase 2 PFS	Specify whether to activate PFS. Then, if PFS is activated, select the Diffie-Hellman group. (auto setting)	• Inactive • 1 • 2 • 14
Phase 2 Validity Period	Specify the time period for which the SA settings in phase 2 are valid.	Specify a period (in seconds) from 300 (5min.) to 172800 (48 hrs.).

Encryption Key Manual Settings Items

Setting	Description	Setting Value
Address Type	Specify the address type for which IPsec transmission is used.	• Inactive • IPv4 • IPv6 • IPv4/IPv6 (Default Settings only)
Local Address	Specify the machine's address. If you are using multiple IPv6 addresses, you can also specify an address range.	The machine's IPv4 or IPv6 address. If you are not setting an address range, enter 32 after an IPv4 address, or enter 128 after an IPv6 address.
Remote Address	Specify the address of the IPsec transmission partner. You can also specify an address range.	The IPsec transmission partner's IPv4 or IPv6 address. If you are not setting an address range, enter 32 after an IPv4 address, or enter 128 after an IPv6 address.
Encapsulation Mode	Select the encapsulation mode.	• Transport • Tunnel (Tunnel beginning address - Tunnel ending address) If you select "Tunnel", set the "Tunnel End Point", the beginning and ending IP addresses. In "Tunnel End Point", set the same address for the beginning point as you set in "Local Address".
SPI (Output)	Specify the same value as your transmission partner's SPI input value.	Any number between 256 and 4095

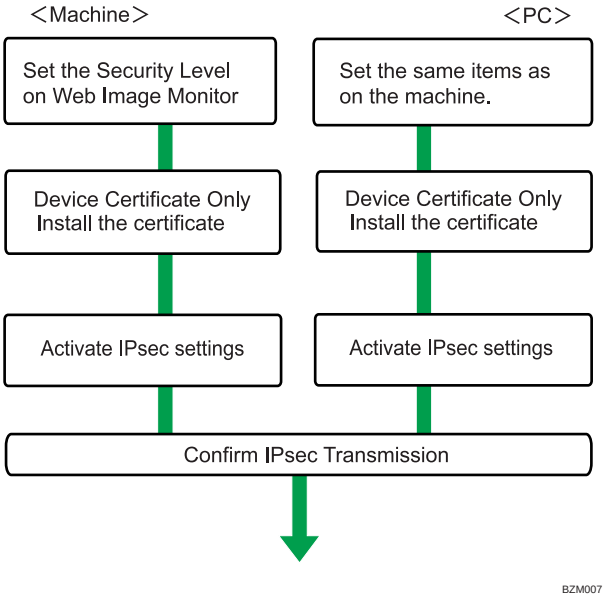
Setting	Description	Setting Value
SPI (Input)	Specify the same value as your transmission partner's SPI output value.	Any number between 256 and 4095
Security Protocol	To apply both encryption and authentication to sent data, specify "ESP" or "ESP+AH". To apply authentication data only, specify "AH".	• ESP • AH • ESP+AH
Authentication Algorithm	Specify the authentication algorithm.	• HMAC-MD5-96 • HMAC-SHA1-96
Authentication Key	Specify the key for the authentication algorithm.	Specify a value within the ranges shown below, according to the encryption algorithm. Hexadecimal value 0-9, a-f, A-F • If HMAC-MD5-96, set 32 digits • If HMAC-SHA1-96, set 40 digits ASCII • IF HMAC-MD5-96, set 16 characters • If HMAC-SHA1-96, set 20 characters
Encryption Algorithm	Specify the encryption algorithm.	• Cleartext (NULL encryption) • DES • 3DES • AES-128 • AES-192 • AES-256

Setting	Description	Setting Value
Encryption Key	Specify the key for the encryption algorithm.	Specify a value within the ranges shown below, according to the encryption algorithm. hexadecimal value 0-9, a-f, A-F • DES, set 16 digits • 3DES, set 48 digits • AES-128, set 32 digits • AES-192, set 48 digits • AES-256, set 64 digits ASCII • DES, set 8 characters • 3DES, set 24 characters • AES-128, set 16 characters • AES-192, set 24 characters • AES-256, set 32 characters

Encryption Key Auto Exchange Settings Configuration Flow

This section explains the procedure for specifying Encryption Key Auto Exchange Settings.

This can be specified by the network administrator.



Note

- To use a certificate to authenticate the transmission partner in encryption key auto exchange settings, a device certificate must be installed.
- After configuring IPsec, you can use "Ping" command to check if the connection is established correctly. However, you cannot use "Ping" command when ICMP is excluded from IPsec transmission on the computer side. Also, because the response is slow during initial key exchange, it may take some time to confirm that transmission has been established.

Specifying Encryption Key Auto Exchange Settings

This can be specified using Web Image Monitor.

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.
3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and login password.
4. **Click [Configuration], and then click [IPsec] under "Security".**

   The IPsec settings page appears.

5. **Click [Edit] under "Encryption Key Auto Exchange Settings".**
6. **Make encryption key auto exchange settings in [Settings 1].**

   If you want to make multiple settings, select the settings number and add settings.
7. **Click [OK].**
8. **Select [Active] for "IPsec" in "IPsec".**
9. **Set "Exclude HTTPS Communication" to [Active] if you do not want to use IPsec for HTTPS transmission.**
10. **Click [OK].**
11. **Click [OK].**
12. **Click [Logout].**

Note

- To change the transmission partner authentication method for encryption key auto exchange settings to "Certificate", you must first install and assign a certificate. For details about creating and installing a device certificate, see "Using S/MIME to Protect E-mail Transmission".

Reference

- p.116 "Using S/MIME to Protect E-mail Transmission"

7

Selecting the Certificate for IPsec

This can be specified by the network administrator.

Using Web Image Monitor, select the certificate to be used for IPsec. You must install the certificate before it can be used.

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.
3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and login password.
4. **Click [Configuration], and then click [Device Certificate] under "Security".**

   The Device Certificate page appears.
5. **Select the certificate to be used for IPsec from the drop down box in "IPsec" under "Certification".**

6. **Click [OK].**

   The certificate for IPsec is specified.

7. **Click [OK].**
8. **Click [Logout].**

Specifying IPsec Settings on the Computer

Specify exactly the same settings for IPsec SA settings on your computer as are specified by the machine's security level on the machine. Setting methods differ according to the computer's operating system. The example procedure shown here uses Windows XP when the Authentication and Low Level Encryption Security level is selected.

1. **On the [Start] menu, click [Control Panel], click [Performance and Maintenance], and then click [Administrative Tools].**
2. **Double-click [Local Security Policy].**
3. **Click [IP Security Policies on Local Computer].**
4. **In the "Action" menu, click [Create IP Security Policy].**

   The IP Security Policy Wizard appears.

5. **Click [Next].**
6. **Enter a security policy name in "Name", and then click [Next].**
7. **Clear the "Activate the default response rule" check box, and then click [Next].**
8. **Select "Edit properties", and then click [Finish].**
9. **In the "General" tab, click [Advanced].**
10. **In "Authenticate and generate a new key after every", enter the same validity period (in minutes) that is specified on the machine in Encryption Key Auto Exchange Settings Phase 1, and then click [Methods].**
11. **Confirm that the hash algorithm ("Integrity"), encryption algorithm ("Encryption") and "Diffie-Hellman Group" settings in "Security method preference order" all match those specified on the machine in Encryption Key Auto Exchange Settings Phase 1.**

    If the settings are not displayed, click [Add].

12. **Click [OK] twice.**
13. **Click [Add] in the "Rules" tab.**

    The Security Rule Wizard appears.

14. **Click [Next].**
15. **Select "This rule does not specify a tunnel", and then click [Next].**
16. **Select the type of network for IPsec, and then click [Next].**

17. **Select the authentication method, and then click [Next].**

    If you select "Certificate" for authentication method in Encryption Key Auto Exchange Settings on the machine, specify the device certificate. If you select "PSK", enter the same PSK text specified on the machine with the pre-shared key.

18. **Click [Add] in the IP Filter List.**
19. **In [Name], enter an IP Filter name, and then click [Add].**

    The IP Filter Wizard appears.

20. **Click [Next].**
21. **Select "My IP Address" in "Source address", and then click [Next].**
22. **Select "A specific IP Address" in "Destination address", enter the machine's IP address, and then click [Next].**
23. **Select the protocol type for IPsec, and then click [Next].**
24. **Click [Finish].**
25. **Click [OK].**
26. **Select the IP filter that was just created, and then click [Next].**
27. **Select the IPsec security filter, and then click [Edit].**
28. **In the "Security Methods" tab, check "Negotiate security" and then click [Add].**
29. **Select "Custom" and click [Settings].**
30. **In "Integrity algorithm", select the authentication algorithm that was specified on the machine in Encryption Key Auto Exchange Settings Phase 2.**
31. **In "Encryption algorithm", select the encryption algorithm that specified on the machine in Encryption Key Auto Exchange Settings Phase 2.**
32. **In Session key settings, select "Generate a new key every", and enter the validity period (in seconds) that was specified on the machine in Encryption Key Auto Exchange Settings Phase 2.**
33. **Click [OK] three times.**
34. **Click [Next].**
35. **Click [Finish].**

    If you are using IPv6 under Windows Vista or a newer version of Windows, you must repeat this procedure from step 13 and specify ICMPv6 as an exception. When you reach step 23, select [58] as the protocol number for the "Other" target protocol type, and then set [Negotiate security] to [Permit].

36. **Click [OK].**
37. **Click [Close].**

    The new IP security policy (IPsec settings) is specified.

38. **Select the security policy that was just created, right click, and then click [Assign].**

IPsec settings on the computer are enabled.

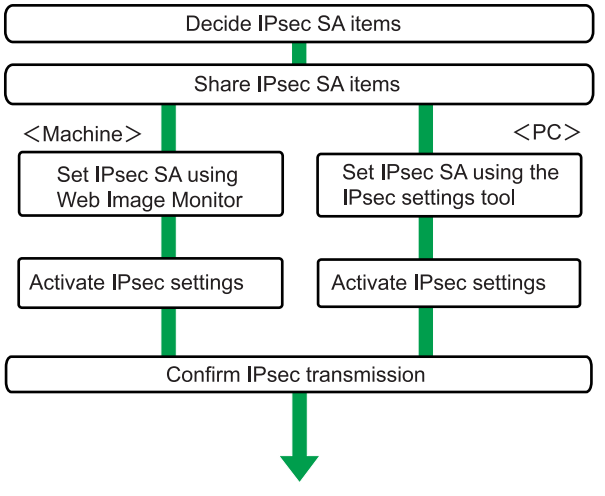
Note

- To disable the computer's IPsec settings, select the security policy, right click, and then click [Unassign].
- If you specify the "Authentication and High Level Encryption" security level in encryption key auto exchange settings, also select the "Master key perfect forward secrecy (PFS)" check box in the Security Filter Properties screen (which appears in step 27). If using PFS in Windows XP, the PFS group number used in phase 2 is automatically negotiated in phase 1 from the Diffie-Hellman group number (set in step 11). Consequently, if you change the security level specified automatic settings on the machine and "User Setting" appears, you must set the same the group number for "Phase 1 Diffie-Hellman Group" and "Phase 2 PFS" on the machine to establish IPsec transmission.

Encryption Key Manual Settings Configuration Flow

This section explains the procedure for specifying encryption key manual settings.

This can be specified by the network administrator.



Note

- Before transmission, SA information is shared and specified by the sender and receiver. To prevent SA information leakage, we recommend that this exchange is not performed over the network.
- After configuring IPsec, you can use "Ping" command to check if the connection is established correctly. However, you cannot use "Ping" command when ICMP is excluded from IPsec transmission. Also,

because the response is slow during initial key exchange, it may take some time to confirm that transmission has been established.

Specifying Encryption Key Manual Settings

This can be specified using Web Image Monitor.

1. **Open a Web browser.**
2. **Enter "http://(the machine's IP address or host name)/" in the address bar.**

   When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

   The top page of Web Image Monitor appears.
3. **Click [Login].**

   The network administrator can log in.

   Enter the login user name and login password.
4. **Click [Configuration], and then click [IPsec] under "Security".**

   The IPsec settings page appears.
5. **Select [Active] for "Encryption Key Manual Settings".**
6. **Click [Edit] under "Encryption Key Manual Settings".**
7. **Set items for encryption key manual settings in [Settings 1].**

   If you want to make multiple settings, select the settings number and add settings.
8. **Click [OK].**
9. **Select [Active] for "IPsec" in "IPsec".**
10. **Set "Exclude HTTPS Communication" to [Active] if you do not want to use IPsec for HTTPS communication.**
11. **Click [OK].**
12. **Click [OK].**
13. **Click [Logout].**

telnet Setting Commands

You can use telnet to confirm IPsec settings and make setting changes. This section explains telnet commands for IPsec. To log in as an administrator using telnet, the default login user name is "admin", and the password is blank. For details about logging in to telnet and telnet operations, see "Using telnet", Network and System Settings Reference.

Important

- **If you are using a certificate as the authentication method in encryption key auto exchange settings (IKE), install the certificate using Web Image Monitor. A certificate cannot be installed using telnet.**

ipsec

To display IPsec related settings information, use the "ipsec" command.

Display current settings

```
msh> ipsec
```

Displays the following IPsec settings information:

- IPsec shared settings values
- Encryption key manual settings, SA setting 1-4 values
- Encryption key manual settings, default setting values
- Encryption key auto exchange settings, IKE setting 1-4 values
- Encryption key auto exchange settings, IKE default setting values

Display current settings portions

```
msh> ipsec -p
```

- Displays IPsec settings information in portions.

ipsec manual mode

To display or specify encryption key manual settings, use the "ipsec manual_mode" command.

Display current settings

```
msh> ipsec manual_mode
```

- Displays the current encryption key manual settings.

Specify encryption key manual settings

```
msh> ipsec manual_mode {on|off}
```

- To enable encryption key manual settings, set to [on]. To disable settings, set to [off].

ipsec exclude

To display or specify protocols excluded by IPsec, use the "ipsec exclude" command.

Display current settings

```
msh> ipsec exclude
```

- Displays the protocols currently excluded from IPsec transmission.

Specify protocols to exclude

```
msh> ipsec exclude {https|dns|dhcp|wins|all} {on|off}
```

- Specify the protocol, and then enter [on] to exclude it, or [off] to include it for IPsec transmission. Entering [all] specifies all protocols collectively.

ipsec manual

To display or specify the encryption key manual settings, use the "ipsec manual" command.

Display current settings

```
msh> ipsec manual {1|2|3|4|default}
```

- To display the settings 1-4, specify the number [1-4].
- To display the default setting, specify [default].
- Not specifying any value displays all of the settings.

Disable settings

```
msh> ipsec manual {1|2|3|4|default} disable
```

- To disable the settings 1-4, specify the setting number [1-4].
- To disable the default settings, specify [default].

Specify the local/remote address for settings 1-4

```
msh> ipsec manual {1|2|3|4} {ipv4|ipv6} local address remote address
```

- Enter the separate setting number [1-4] and specify the local address and remote address.
- To specify the local or remote address value, specify masklen by entering [/] and an integer 0-32 if you are specifying an IPv4 address. If you are specifying an IPv6 address, specify masklen by entering [/] and an integer 0-128.
- Not specifying an address value displays the current setting.

Specify the address type in default setting

```
msh> ipsec manual default {ipv4|ipv6|any}
```

- Specify the address type for the default setting.
- To specify both IPv4 and IPv6, enter [any].

Security protocol setting

```
msh> ipsec manual {1|2|3|4|default} proto {ah|esp|dual}
```

- Enter the separate setting number [1-4] or [default] and specify the security protocol.
- To specify AH, enter [ah]. To specify ESP, enter [esp]. To specify AH and ESP, enter [dual].
- Not specifying a protocol displays the current setting.

SPI value setting

```
msh> ipsec manual {1|2|3|4|default} spi SPI input value SPI output value
```

- Enter the separate setting number [1-4] or [default] and specify the SPI input and output values.
- Specify a decimal number between 256-4095, for both the SPI input and output values.

Encapsulation mode setting

```
msh> ipsec manual {1|2|3|4|default} mode {transport|tunnel}
```

- Enter the separate setting number [1-4] or [default] and specify the encapsulation mode.
- To specify transport mode, enter [transport]. To specify tunnel mode, enter [tunnel].
- If you have set the address type in the default setting to [any], you cannot use [tunnel] in encapsulation mode.
- Not specifying an encapsulation mode displays the current setting.

Tunnel end point setting

```
msh> ipsec manual {1|2|3|4|default} tunneladdar beginning IP address ending IP
address
```

- Enter the separate setting number [1-4] or [default] and specify the tunnel end point beginning and ending IP address.
- Not specifying either the beginning or ending address displays the current settings.

Authentication algorithm and authentication key settings

```
msh> ipsec manual {1|2|3|4|default} auth {hmac-md5|hmac-sha1} authentication key
```

- Enter the separate setting number [1-4] or [default] and specify the authentication algorithm, and then set the authentication key.
- If you are setting a hexadecimal number, attach 0x at the beginning.
- If you are setting an ASCII character string, enter it as is.
- Not specifying either the authentication algorithm or key displays the current setting. (The authentication key is not displayed.)

Encryption algorithm and encryption key setting

```
msh> ipsec manual {1|2|3|4|default} encrypt {null|des|3des|aes128|aes192|aes256}
encryption key
```

- Enter the separate setting number [1-4] or [default], specify the encryption algorithm, and then set the encryption key.
- If you are setting a hexadecimal number, attach 0x at the beginning. If you have set the encryption algorithm to [null], enter an encryption key of arbitrary numbers 2-64 digits long.
- If you are setting an ASCII character string, enter it as is. If you have set the encryption algorithm to [null], enter an encryption key of arbitrary numbers 1-32 digits long.
- Not specifying an encryption algorithm or key displays the current setting. (The encryption key is not displayed.)

Reset setting values

```
msh> ipsec manual {1|2|3|4|default|all} clear
```

- Enter the separate setting number [1-4] or [default] and reset the specified setting. Specifying [all] resets all of the settings, including default.

ipsec ike

To display or specify the encryption key auto exchange settings, use the "ipsec ike" command.

Display current settings

```
msh> ipsec ike {1|2|3|4|default}
```

- To display the settings 1-4, specify the number [1-4].
- To display the default setting, specify [default].
- Not specifying any value displays all of the settings.

Disable settings

```
msh> ipsec manual {1|2|3|4|default} disable
```

- To disable the settings 1-4, specify the number [1-4].
- To disable the default settings, specify [default].

Specify the local/remote address for settings 1-4

```
msh> ipsec manual {1|2|3|4} {ipv4|ipv6} local address remote address
```

- Enter the separate setting number [1-4], and the address type to specify local and remote address.
- To set the local or remote address values, specify masklen by entering [/] and an integer 0-32 when settings an IPv4 address. When setting an IPv6 address, specify masklen by entering [/] and an integer 0-128.
- Not specifying an address value displays the current setting.

Specify the address type in default setting

```
msh> ipsec manual default {ipv4|ipv6|any}
```

- Specify the address type for the default setting.
- To specify both IPv4 and IPv6, enter [any].

Security policy setting

```
msh> ipsec ike {1|2|3|4|default} proc {apply|bypass|discard}
```

- Enter the separate setting number [1-4] or [default] and specify the security policy for the address specified in the selected setting.
- To apply IPsec to the relevant packets, specify [apply]. To not apply IPsec, specify [bypass].
- If you specify [discard], any packets to which IPsec can be applied are discarded.
- Not specifying a security policy displays the current setting.

Security protocol setting

```
msh> ipsec ike {1|2|3|4|default} proto {ah|esp|dual}
```

- Enter the separate setting number [1-4] or [default] and specify the security protocol.
- To specify AH, enter [ah]. To specify ESP, enter [esp]. To specify AH and ESP, enter [dual].
- Not specifying a protocol displays the current setting.

IPsec requirement level setting

```
msh> ipsec ike {1|2|3|4|default} level {require|use}
```

- Enter the separate setting number [1-4] or [default] and specify the IPsec requirement level.
- If you specify [require], data will not be transmitted when IPsec cannot be used. If you specify [use], data will be sent normally when IPsec cannot be used. When IPsec can be used, IPsec transmission is performed.
- Not specifying a requirement level displays the current setting.

Encapsulation mode setting

```
msh> ipsec ike {1|2|3|4|default} mode {transport|tunnel}
```

- Enter the separate setting number [1-4] or [default] and specify the encapsulation mode.
- To specify transport mode, enter [transport]. To specify tunnel mode, enter [tunnel].
- If you have set the address type in the default setting to [any], you cannot use [tunnel] in encapsulation mode.
- Not specifying an encapsulation mode displays the current setting.

Tunnel end point setting

```
msh> ipsec ike {1|2|3|4|default} tunneladdar beginning IP address ending IP
address
```

- Enter the separate setting number [1-4] or [default] and specify the tunnel end point beginning and ending IP address.
- Not specifying either the beginning or ending address displays the current setting.

IKE partner authentication method setting

```
msh> ipsec ike {1|2|3|4|default} auth {psk|rsasig}
```

- Enter the separate setting number [1-4] or [default] and specify the authentication method.
- Specify [psk] to use a shared key as the authentication method. Specify [rsasig] to use a certificate at the authentication method.
- You must also specify the PSK character string when you select [psk].
- Note that if you select "Certificate", the certificate for IPsec must be installed and specified before it can be used. To install and specify the certificate use Web Image Monitor.

PSK character string setting

```
msh> ipsec ike {1|2|3|4|default} psk PSK character string
```

- If you select PSK as the authentication method, enter the separate setting number [1-4] or [default] and specify the PSK character string.
- Specify the character string in ASCII characters. There can be no abbreviations.

ISAKMP SA (phase 1) hash algorithm setting

```
msh> ipsec ike {1|2|3|4|default} ph1 hash {md5|sha1}
```

- Enter the separate setting number [1-4] or [default] and specify the ISAKMP SA (phase 1) hash algorithm.
- To use MD5, enter [md5]. To use SHA1, enter [sha1].
- Not specifying the hash algorithm displays the current setting.

ISAKMP SA (phase 1) encryption algorithm setting

```
msh> ipsec ike {1|2|3|4|default} ph1 encrypt {des|3des}
```

- Enter the separate setting number [1-4] or [default] and specify the ISAKMP SA (phase 1) encryption algorithm.
- To use DES, enter [des]. To use 3DES, enter [3des].
- Not specifying an encryption algorithm displays the current setting.

ISAKMP SA (phase 1) Diffie-Hellman group setting

```
msh> ipsec ike {1|2|3|4|default} ph1 dhgroup {1|2|14}
```

- Enter the separate setting number [1-4] or [default] and specify the ISAKMP SA (phase 1) Diffie-Hellman group number.
- Specify the group number to be used.
- Not specifying a group number displays the current setting.

ISAKMP SA (phase 1) validity period setting

```
msh> ipsec ike {1|2|3|4|default} ph1 lifetime validity period
```

- Enter the separate setting number [1-4] or [default] and specify the ISAKMP SA (phase 1) validity period.
- Enter the validity period (in seconds) from 300 to 172800.
- Not specifying a validity period displays the current setting.

IPsec SA (phase 2) authentication algorithm setting

```
msh> ipsec ike {1|2|3|4|default} ph2 auth {hmac-md5|hmac-sha1}
```

- Enter the separate setting number [1-4] or [default] and specify the IPsec SA (phase 2) authentication algorithm.
- Separate multiple encryption algorithm entries with a comma (,). The current setting values are displayed in order of highest priority.
- Not specifying an authentication algorithm displays the current setting.

IPsec SA (phase 2) encryption algorithm setting

```
msh> ipsec ike {1|2|3|4|default} ph2 encrypt {null|des|3des|aes128|aes192|
aes256}
```

- Enter the separate setting number [1-4] or [default] and specify the IPsec SA (phase 2) encryption algorithm.
- Separate multiple encryption algorithm entries with a comma (,). The current setting values are displayed in order of highest priority.
- Not specifying an encryption algorithm displays the current setting.

IPsec SA (phase 2) PFS setting

```
msh> ipsec ike {1|2|3|4|default} ph2 pfs {none|1|2|14}
```

- Enter the separate setting number [1-4] or [default] and specify the IPsec SA (phase 2) Diffie-Hellman group number.
- Specify the group number to be used.
- Not specifying a group number displays the current setting.

IPsec SA (phase 2) validity period setting

```
msh> ipsec ike {1|2|3|4|default} ph2 lifetime validity period
```

- Enter the separate setting number [1-4] or [default] and specify the IPsec SA (phase 2) validity period.
- Enter the validity period (in seconds) from 300 to 172800.
- Not specifying a validity period displays the current setting.

Reset setting values

```
msh> ipsec ike {1|2|3|4|default|all} clear
```

- Enter the separate setting number [1-4] or [default] and reset the specified setting. Specifying [all] resets all of the settings, including default.

Authentication by telnet

This section explains Authentication by telnet. When using telnet, the default login name for administrator login is "admin" and the password is blank. For details on how to login to telnet, see "Using telnet", Network and System Settings Reference.

"authfree" Command

Use the "authfree" command to display and configure authentication exclusion control settings. If you use the "authfree" command in telnet, you can exclude printer job authentication and specify an IP address range. The authentication exclusion control display and setting methods are explained below.

View Settings

```
msh> authfree
```

If print job authentication exclusion is not specified, authentication exclusion control is not displayed.

IPv4 address settings

```
msh> authfree "ID" range_addr1 range_addr2
```

IPv6 address settings

```
msh> authfree "ID" range6_addr1 range6_addr2
```

IPv6 address mask settings

```
msh> authfree "ID" mask6_addr1 masklen
```

Parallel/USB settings

```
msh> authfree [parallel|usb] [on|off]
```

- To enable authfree, specify "on". To disable authfree, specify "off".
- Always specify the interface.

Authentication exclusion control initialization

```
msh> authfree flush
```

Note

- In both IPv4 and IPv6 environments, up to five access ranges can be registered and selected.

Authentication by IEEE802.1X

IEEE802.1X enables authentication in an Ethernet or wireless LAN environment. For details, see "Configuring IEEE 802.1X", Network and System Settings Reference.

8. Specifying the Extended Security Functions

This chapter describes the machine's extended security features and how to specify them.

Specifying the Extended Security Functions

In addition to providing basic security through user authentication and administrator specified access limits on the machine, security can also be increased by encrypting transmitted data and data in the Address Book. If you need extended security, specify the machine's extended security functions before using the machine.

This section outlines the extended security functions and how to specify them.

For details about when to use each function, see the corresponding chapters.

Changing the Extended Security Functions

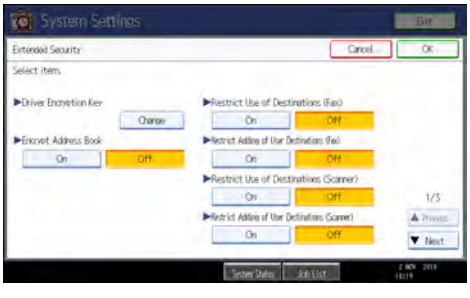
This section describes how to change the Extended Security Functions.

Administrators can change the extended security functions according to their role. For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

To change the extended security functions, display the extended security screen as follows.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Extended Security].**

   If this item is not visible, press [▼Next] to display more settings.
5. **Press the setting you want to change, and change the setting.**



6. **Press [OK].**

7. **Press the [User Tools/Counter] key.**

Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

Extended Security Settings

Driver Encryption Key

This can be specified by the network administrator. Encrypt the password transmitted when specifying user authentication. If you register the encryption key specified with the machine in the driver, passwords are encrypted. For details, see the printer driver Help, LAN Fax driver Help, or TWAIN driver Help.

Encrypt Address Book

This can be specified by the user administrator. Encrypt the data in the machine's Address Book.

For details on protecting data in the Address Book, see "Protecting the Address Book".

Default: [**Off**]

Restrict Use of Destinations (Fax), Restrict Use of Destinations (Scanner)

This can be specified by the user administrator.

The available fax and scanner destinations are limited to the destinations registered in the Address Book.

A user cannot directly enter the destinations for transmission.

If "Restrict Use of Destinations (Scanner)" is set to [On], you can register fax numbers only.

If you specify the setting to receive e-mails via SMTP, you cannot use "Restrict Use of Destinations (Fax)" and "Restrict Use of Destinations (Scanner)".

The destinations searched by "LDAP Search" can be used.

For details about preventing unauthorized transmission, see "Preventing Information Leakage Due to Unauthorized Transmission".

Default: [**Off**]

Restrict Adding of User Destinations (Fax), Restrict Adding of User Destinations (Scanner)

This can be specified by the user administrator.

If you set "Restrict Adding of User Destinations (Fax)" and/or "Restrict Adding of User Destinations (Scanner)" to [Off], users will be able to register a fax or scanner destination in the Address Book simply by entering the destination and then pressing [Prg. Dest.]. If you set these functions to [On], the [Prg. Dest.] key will not appear. Users will still be able to enter a destination directly using the fax or scanner screen, but cannot then register that destination in the Address Book by pressing [Prg. Dest.].

Note too that if you set these functions to [On], only the user administrator can register new users in the Address Book and change the passwords and other information of existing registered users.

Default: [Off]

Restrict Display of User Information

This can be specified by the machine administrator.

This can be specified if user authentication is specified. When the job history is checked using a network connection for which authentication is not available, all personal information can be displayed as "*********". For example, when someone not authenticated as an administrator checks the job history using SNMP in SmartDeviceMonitor for Admin, personal information can be displayed as "*********" so that users cannot be identified. Because information identifying registered users cannot be viewed, unauthorized users are prevented from obtaining information about the registered files.

Default: [Off]

Enhance File Protection

This can be specified by the file administrator. By specifying a password, you can limit operations such as printing, deleting, and sending files, and can prevent unauthorized people from accessing the files. However, it is still possible for the password to be cracked.

By specifying "Enhance File Protection", files are locked and so become inaccessible if an invalid password is entered ten times. This can protect the files from unauthorized access attempts in which a password is repeatedly guessed.

The locked files can only be unlocked by the file administrator. When "Enhance File Protection" is specified, ( ) appears in the lower right corner of the screen.

When files are locked, you cannot select them even if the correct password is entered.

Default: [Off]

Settings by SNMPv1, v2

This can be specified by the network administrator. When the machine is accessed using the SNMPv1, v2 protocol, authentication cannot be performed, allowing machine administrator settings such as the paper setting to be changed. If you select [Prohibit], the setting can be viewed but not specified with SNMPv1, v2.

Default: [Do not Prohibit]

Restrict Use of Simple Encryption

This can be specified by the network administrator. When a sophisticated encryption method cannot be enabled, simple encryption will be applied. For example, when using User Management Tool and Address Management in Smart Device Monitor for Admin to edit the Address Book, or DeskTopBinder and ScanRouter delivery software and SSL/TLS cannot be enabled, make this setting [Off] to enable simple encryption. When SSL/TLS can be enabled, make this setting [On].

For details about specifying SSL/TLS, see "Setting the SSL/TLS Encryption Mode".

If you select [On], specify the encryption setting using the printer driver.

Default: [**Off**]

Authenticate Current Job

This can be specified by the machine administrator. This setting lets you specify whether or not authentication is required for operations such as canceling jobs under the copier and printer functions.

If you select [Login Privilege], authorized users and the machine administrator can operate the machine. When this is selected, authentication is not required for users who logged in to the machine before [Login Privilege] was selected.

If you select [Access Privilege], users who canceled a copy or print job in progress and the machine administrator can operate the machine.

Even if you select [Login Privilege] and log in to the machine, you cannot cancel a copy or print job in progress if you are not authorized to use the copy and printer functions.

You can specify [Authenticate Current Job] only if [User Authentication Management] was specified.

Default: [**Off**]

Transfer to Fax Receiver

This can be specified by the machine administrator.

If you use [Forwarding] or [Transfer Box] under the fax function, files stored in the machine can be transferred or delivered.

To prevent stored files being transferred by mistake, select [Prohibit] for this setting.

Default: [**Do not Prohibit**]

If you select [Prohibit] for this setting, the following functions are disabled:

- Forwarding
- Transfer Box
- Delivery from Personal Box
- Information Box
- Delivery of Mail Received via SMTP
- Routing Received Documents

Password Policy

This can be specified by the user administrator.

The password policy setting is effective only if [Basic Auth.] is specified.

This setting lets you specify [Complexity Setting] and [Minimum Character No.] for the password. By making this setting, you can limit the available passwords to only those that meet the conditions specified in "Complexity Setting" and "Minimum Character No.".

If you select [Level 1], specify the password using a combination of two types of characters selected from upper-case letters, lower-case letters, decimal numbers, and symbols such as #.

If you select [Level 2], specify the password using a combination of three types of characters selected from upper-case letters, lower-case letters, decimal numbers, and symbols such as #.

Default: [**Off**]

Passwords can contain the following characters:

- Upper-case letters: A to Z (26 characters)
- Lower-case letters: a to z (26 characters)
- Numbers: 0 to 9 (10 characters)
- Symbols: (space) ! " # $ % & ' ( ) * + , - . / : ; < = > ? @ [\ ] ^ _ ` { | } (33 characters)

Some characters are not available, regardless of whether their codes are entered using the keyboard or the control panel.

@Remote Service

This can be specified by the machine administrator.

Communication via HTTPS for @Remote Service is disabled if you select [Prohibit].

Default: [**Do not Prohibit**]

Update Firmware

This can be specified by the machine administrator.

Specify whether to allow firmware updates on the machine. Firmware update means having the service representative update the firmware or updating the firmware via the network.

If you select [Prohibit], firmware on the machine cannot be updated.

If you select [Do not Prohibit], there are no restrictions on firmware updates.

Default: [**Do not Prohibit**]

Change Firmware Structure

This can be specified by the machine administrator.

Specify whether to prevent changes in the machine's firmware structure. The Change Firmware Structure function detects when the SD card is inserted, removed or replaced.

If you select [Prohibit], the machine stops during startup when a firmware structure change is detected and a message requesting administrator login is displayed. After the machine administrator logs in, the machine finishes startup with the updated firmware.

The administrator can confirm if the updated structure change is permissible or not by checking the firmware version displayed on the control panel screen. If the firmware structure change is not permissible, contact your service representative before logging in.

When Change Firmware Structure is set to [Prohibit], administrator authentication must be enabled.

After [Prohibit] is specified, turn off administrator authentication once, and the next time administrator authentication is specified, the setting will return to the default, [Do not Prohibit].

If you select [Do not Prohibit], firmware structure change detection is disabled.

Default: [**Do not Prohibit**]

Reference

- p.125 "Protecting the Address Book"
- p.113 "Preventing Information Leakage Due to Unauthorized Transmission"
- p.218 "Setting the SSL/TLS Encryption Mode"

Other Security Functions

This section explains settings for preventing information leaks, and functions that you can restrict to further increase security.

Fax Function

Not Displaying Destinations and Senders in Reports and Lists

In [Facsimile Features], you can specify whether to display destinations and sender names by setting "Switch 4, Bit No. 4" and "Switch 4, Bit No. 5" in [Parameter Setting], under [Initial Settings]. Making this setting helps prevent information leaks, because unintended users cannot read destinations and sender names on both the sending and receiving side. For details, see "Facsimile Features", Facsimile Reference.

Stored RX File User Setting

In [Facsimile Features], you can specify which users can manage fax files stored on the hard disk by setting [Stored Reception File User Setting] to [On], under [Reception Settings]. To access the machine over the network, specified users must enter their user codes or login user names and passwords. Only authorized users can manage fax files stored on the hard disk. For details, see "Facsimile Features", Facsimile Reference.

Printing the Journal

When user authentication is specified, the Journal is automatically set not to be printed in order to prevent automatic printing of personal information in transmission history. Also, if more than 200 transmissions are made, transmissions shown in the Journal are overwritten each time a further transmission is made. To prevent the transmission history from being overwritten, perform the following procedures:

- In [Facsimile Features], set "Switch 03, Bit 7" in [Parameter Setting] under [Initial Settings] to change the setting for automatically printing the Journal.
- In [Facsimile Features], set "Switch 21, Bit 4" in [Parameter Setting] under [Initial Settings] to send the Journal by e-mail.

Scanner Function

Print & Delete Scanner Journal

When user authentication is enabled, "Print & Delete Scanner Journal" is automatically set to [Do not Print: Disable Send] in order to prevent personal information in transmission/delivery history from being automatically printed. In this case, the scanner is automatically disabled when the journal history exceeds 250 transmissions/deliveries. When this happens, click [Print Scanner Journal] or [Delete

Scanner Journal]. To print the scanner journal automatically, set [On] for "Print & Delete Scanner Journal". For details, see "Scanner Features", Scanner Reference.

WSD scanner function

WSD scanner function is automatically disabled when user authentication is specified. Even if automatically disabled, it can be enabled from "Initial Settings" available in Web Image Monitor. For instructions on how to configure this function, see "Preparation for Sending Files Using WSD", Scanner Reference.

System Status

Pressing [System Status] on the control panel allows you to check the machine's current status and settings. If administrator authentication has been specified, the [Machine Address Info] tab is displayed only if you have logged in to the machine as an administrator.

Limiting Machine Operations to Customers Only

The machine can be set so that operation is impossible without administrator authentication.

The machine can be set to prohibit operation without administrator authentication and also prohibit remote registration in the Address Book by a service representative.

We maintain strict security when handling customers' data. Administrator authentication prevents us from operating the machine without administrator permission.

Use the following settings.

- Service Mode Lock

Settings

This can be specified by the machine administrator.

For details about logging in and logging out with administrator authentication, see "Logging in Using Administrator Authentication" and "Logging out Using Administrator Authentication".

Service Mode Lock

This can be specified by the machine administrator. Service mode is used by a service representative for inspection or repair. If you set "Service Mode Lock" to [On], service mode cannot be used unless the machine administrator logs on to the machine and cancels the service mode lock to allow the service representative to operate the machine for inspection and repair. This ensures that the inspection and repair are done under the supervision of the machine administrator.

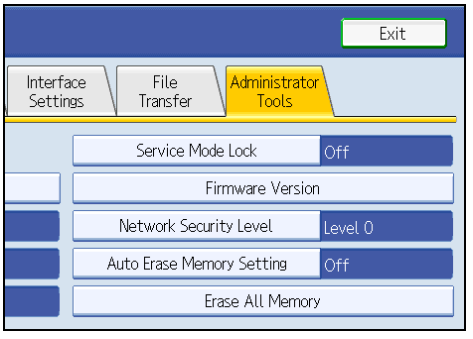
Reference

- p.35 "Logging in Using Administrator Authentication"
- p.36 "Logging out Using Administrator Authentication"

Specifying Service Mode Lock

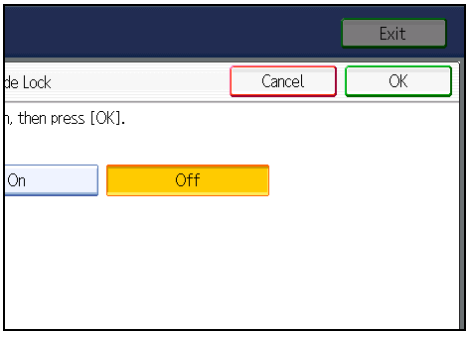
1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**

4. **Press [Service Mode Lock].**



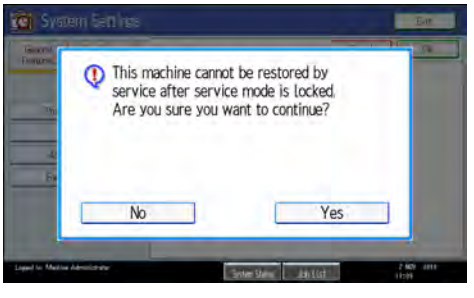
If this item is not visible, press [▼Next] to display more settings.

5. **Press [On], and then press [OK].**



A confirmation message appears.

6. **Press [Yes].**



7. **Press the [User Tools/Counter] key.**

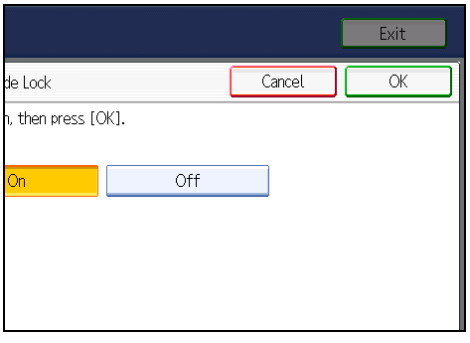
Canceling Service Mode Lock

Before the service representative can carry out an inspection or repair in service mode, the machine administrator must first log in to the machine, release the service mode lock, and then call the service representative.

After the inspection or repair is completed, the service mode lock must be reapplied.

1. **Press the [User Tools/Counter] key.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [Service Mode Lock].**

   If this item is not visible, press [▼Next] to display more settings.
5. **Press [Off], and then press [OK].**



6. **Press the [User Tools/Counter] key.**

   The service representative can switch to service mode.

Additional Information for Enhanced Security

This section explains the settings that you can configure to enhance the machine's security.

Settings You Can Configure Using the Control Panel

Use the control panel to configure the security settings shown in the following table.

Menu	Tab	Item	Setting
System Settings	Timer Settings	Auto Logout Timer	On: 180 seconds or less. You cannot change the Web Image Monitor auto logout time. See "Auto Logout".
System Settings	Administrator Tools	User Authentication Management	Select [Basic Auth.], and then set "Printer Job Authentication" to [Entire]. See "Basic Authentication".
System Settings	Administrator Tools	Administrator Authentication Management/User Management	Select [On], and then select [Administrator Tools] for "Available Settings". See "Enabling Administrator Authentication".
System Settings	Administrator Tools	Administrator Authentication Management/ Machine Management	Select [On], and then select [Timer Settings], [Interface Settings], [File Transfer], and [Administrator Tools] for "Available Settings". See "Enabling Administrator Authentication".
System Settings	Administrator Tools	Administrator Authentication Management/ Network Management	Select [On], and then select [Interface Settings], [File Transfer], and [Administrator Tools] for "Available Settings". See "Enabling Administrator Authentication".

Menu	Tab	Item	Setting
System Settings	Administrator Tools	Administrator Authentication Management/File Management	Select [On], and then select [Administrator Tools] for "Available Settings". See "Enabling Administrator Authentication".
System Settings	Administrator Tools	Extended Security/ Settings by SNMPv1, v2	Prohibit See "Specifying the Extended Security Functions".
System Settings	Administrator Tools	Extended Security/ Restrict Use of Simple Encryption	Off See "Specifying the Extended Security Functions".
System Settings	Administrator Tools	Extended Security/ Authenticate Current Job	Access Privilege See "Specifying the Extended Security Functions".
System Settings	Administrator Tools	Extended Security/ Password Policy	"Complexity Setting": Level 1 or higher, "Minimum Character No.": 8 or higher See "Specifying the Extended Security Functions".
System Settings	Administrator Tools	Network Security Level	Level 2 To acquire the machine status through printer driver or Web Image Monitor, set "SNMP" to Active on Web Image Monitor. See "Specifying Network Security Level".
System Settings	Administrator Tools	Service Mode Lock	On See "Limiting Machine Operations to Customers Only".

Menu	Tab	Item	Setting
System Settings	Administrator Tools	Machine Data Encryption Settings	Select [Encrypt], and then select [All Data] for "Carry over all data or file system data only (without formatting), or format all data". If [Encrypt] is already selected, further encryption settings are not necessary. See "Encrypting Data on the Hard Disk".

Menu	Tab	Item	Setting
Scanner Features	Initial Settings	Menu Protect	Level 2 See "Menu Protect".

Menu	Tab	Item	Setting
Facsimile Features	Reception Settings	Stored Reception File User Setting	Select [On], and then specify the users or groups who can perform operations on the received documents. See "Other Security Functions".
Facsimile Features	Initial Settings	Menu Protect	Level 2 See "Menu Protect".

Note

- The SNMP setting can be specified in [SNMP] under [Configuration] in Web Image Monitor.
- For details about the stored reception file user setting, see "Other Security Functions" or "Facsimile Features", Facsimile Reference.

Reference

- p.92 "Auto Logout"
- p.47 "Basic Authentication"
- p.29 "Enabling Administrator Authentication"
- p.249 "Specifying the Extended Security Functions"
- p.204 "Specifying Network Security Level"
- p.257 "Limiting Machine Operations to Customers Only"
- p.129 "Encrypting Data on the Hard Disk"
- p.255 "Other Security Functions"

- p.149 "Menu Protect"

Settings You Can Configure Using Web Image Monitor

Use Web Image Monitor to configure the security settings shown in the following table.

Category	Item	Setting
Device Settings/ Logs	Collect Job Logs	Active
Device Settings/ Logs	Collect Access Logs	Active
Security/User Lockout Policy	Lockout	Active
Security/User Lockout Policy	Number of Attempts before Lockout	5 times or less. See "User Lockout Function".
Security/User Lockout Policy	Lockout Release Timer	Set to Active or Inactive. When setting to [Active], set the Lockout release timer to 60 minutes or more. See "User Lockout Function".
Security/User Lockout Policy	Lock Out User for	When setting "Lockout Release Timer" to [Active], set the Lockout release timer to 60 minutes or more. See "User Lockout Function".
Network/ SNMPv3	SNMPv3 Function	Inactive To use SNMPv3 functions, set "SNMPv3 Function" to [Active], and set "Permit SNMPv3 Communication" to [Encryption Only]. Because SNMPv3 enforces authentication for each packet, Login log will be disabled as long as SNMPv3 is active.
Security/Network Security	FTP	Inactive Before specifying this setting, set "Network Security Level" to [Level 2] on the control panel.
Security	S/MIME	"Encryption Algorithm": 3DES-168 bit You must register the user certificate in order to use S/MIME.

Category	Item	Setting
Address Book/E-mail	User Certificate	You must register the user certificate in order to use S/MIME.

Note

- For details about specifying an encryption algorithm and registering a user certificate, see "Using S/MIME to Protect Email Transmission".

Reference

- p.89 "User Lockout Function"
- p.116 "Using S/MIME to Protect E-mail Transmission"

Settings You Can Configure When IPsec Is Available/Unavailable

All communication to and from machines on which IPsec is enabled is encrypted.

If your network supports IPsec, we recommend you enable it.

Settings you can configure when IPsec is available

If IPsec is available, configure the settings shown in the following table to enhance the security of the data traveling on your network.

Control panel settings

Menu	Tab	Item	Setting
System Settings	Interface Settings	IPsec	Active
System Settings	Interface Settings	Permit SSL / TLS Communication	Ciphertext Only

Web Image Monitor settings

Category	Item	Setting
Security/IPsec	Encryption Key Manual Settings	Inactive

Category	Item	Setting
Security/IPsec	Encryption Key Auto Exchange Settings/ Security Level	Authentication and High Level Encryption

Note

- You can set "IPsec" and "Permit SSL/TLS Communication" using either Web Image Monitor or the machine's control panel.

Settings you can configure when IPsec is unavailable

If IPsec is not available, configure the settings shown in the following table to enhance the security of the data traveling on your network.

Control panel settings

Menu	Tab	Item	Setting
System Settings	Interface Settings	IPsec	Inactive
System Settings	Interface Settings	Permit SSL / TLS Communication	Ciphertext Only

Securing data when IPsec is unavailable

The following procedures make user data more secure when IPsec is unavailable.

Administrators must inform users to carry out these procedures.

- Fax

  When sending faxes, specify destinations by fax number, Internet Fax destination, e-mail address, or folder destination. Do not specify destinations by IP-Fax destination. For details about specifying the destination for a facsimile, see "Specifying a Destination", Facsimile Reference.

- Printer

  To use the printer functions, specify "SFTP" as the protocol, or specify "IPP" and enable SSL.

  For details about SFTP, see "Special Operations under Windows", Network and System Settings Reference.

  For details about IPP settings, see "Installing the Printer Driver for the Selected Port", Printer Reference.

  For details about SSL settings, see "Protection Using Encryption".

- Scanner

Send the URL of scanned files to destinations by configuring [Send Settings] in [Scanner Features], instead of sending the actual scanned files. Use Web Image Monitor through your network to view, delete, send, and download scanned files.

When sending scanned files attached to e-mail, protect them by applying an S/MIME certificate. To do this, configure the "Security" settings prior to sending. For details about sending e-mail from the scanner, see "Sending Scan Files by E-mail", Scanner Reference.

Note

- For details about enabling and disabling IPsec using the control panel, see "System Settings", Network and System Settings Reference.
- For details about the setting for permitting SSL/TLS communication, see "Setting the SSL/TLS Encryption Mode".
- For details about specifying the IPsec setting via Web Image Monitor, see "Transmission Using IPsec".

Reference

- p.211 "Protection Using Encryption"
- p.218 "Setting the SSL/TLS Encryption Mode"
- p.222 "Transmission Using IPsec"

9. Troubleshooting

This chapter describes what to do if the machine does not function properly.

If Authentication Fails

This section explains what to do if a user cannot operate the machine because of a problem related to user authentication. Refer to this section if a user comes to you with such a problem.

If a Message is Displayed

This section explains how to deal with problems if a message appears on the screen during user authentication.

The most common messages are explained. If some other message appears, deal with the problem according to the information contained in the message.

Messages	Cause	Solutions
"You do not have the privileges to use this function."	The authority to use the function is not specified.	• If this appears when trying to use a function: The function is not specified in the Address Book management setting as being available. The user administrator must decide whether to authorize use of the function and then assign the authority. • If this appears when trying to specify a default setting: The administrator differs depending on the default settings you wish to specify. Using the list of settings, the administrator responsible must decide whether to authorize use of the function.

Messages	Cause	Solutions
"Failed to obtain URL."	The machine cannot connect to the server or cannot establish communication.	Make sure the server's settings, such as the IP address and host name, are specified correctly on the machine. Make sure the host name of the UA Server is specified correctly.
"Failed to obtain URL."	The machine is connected to the server, but the UA service is not responding properly.	Make sure the UA service is specified correctly.
"Failed to obtain URL."	SSL is not specified correctly on the server.	Specify SSL using Authentication Manager.
"Failed to obtain URL."	Server authentication failed.	Make sure server authentication is specified correctly on the machine.
"Authentication has failed."	The entered login user name or login password is incorrect.	Ask the user administrator for the correct login user name and login password. See the error codes below for possible solutions: B, W, L, I 0104-000 B, W, L, I 0206-003 W, L, I 0406-003
"Authentication has failed."	Authentication failed because no more users can be registered. (The number of users registered in the Address Book has reached capacity.)	Delete unnecessary user addresses. See the error codes below for possible solutions: W, L, I 0612-005
"Authentication has failed."	Cannot access the authentication server when using Windows Authentication, LDAP Authentication, or Integration Server Authentication.	A network or server error may have occurred. Confirm the network in use with the LAN administrator. If an error code appears, follow the instructions next to the error code in the table below.

Messages	Cause	Solutions
"Administrator Authentication for User Management must be set to on before this selection can be made."	User administrator privileges have not been enabled in Administrator Authentication Management.	To specify Basic Authentication, Windows Authentication, LDAP Authentication, or Integration Server Authentication, you must first enable user administrator privileges in Administrator Authentication Management. For details about authentication settings, see "Configuring User Authentication".
"The selected file(s) contained file (s) without access privileges. Only file(s) with access privileges will be deleted."	You have tried to delete files without the authority to do so.	Files can be deleted by the file creator (owner) or file administrator. To delete a file which you are not authorized to delete, contact the file creator (owner).

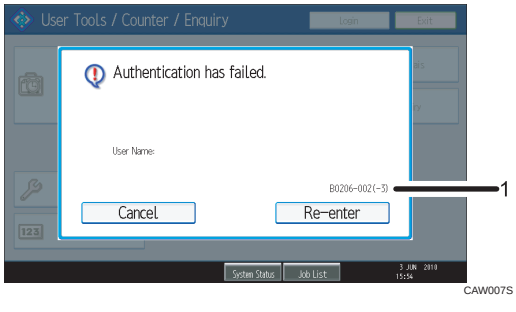
Reference

- p.41 "Configuring User Authentication"

If an Error Code is Displayed

When authentication fails, the message "Authentication has failed." appears with an error code. The following tables list the error codes, likely causes of the problems they indicate, and what you can do to resolve those problems. If the error code that appears is not on this table, take a note and contact your service representative.

Error Code Display Position



1. **error code**

   An error code appears.

Basic Authentication

Error Code	Cause	Solution
B0103-000	A TWAIN operation occurred during authentication.	Make sure no other user is logged on to the machine, and then try again.
B0104-000	Failed to decrypt password.	1. A password error occurred. Make sure the password is entered correctly. 2. "Restrict Use of Simple Encryption" is enabled. The administrator has restricted use of simple encryption. You can use the encryption key if it has been specified in the driver. 3. A driver encryption key error occurred. Make sure that the encryption key is correctly specified on the driver.
B0105-000	A login user name was not specified but a DeskTopBinder operation was performed.	Specify the DeskTopBinder login user name correctly.
B0206-002	1. A login user name or password error occurred.	Make sure the login user name and password are entered correctly and then log in.
B0206-002	2. The user attempted authentication from an application on the "System Settings" screen, where only the administrator has authentication ability.	Only the administrator has login privileges on this screen. Log in as a general user from the application's login screen.

Error Code	Cause	Solution
B0206-003	An authentication error occurred because the user name contains a space, colon (:), or quotation mark (").	Recreate the account if the account name contains any of these prohibited characters. If the account name was entered incorrectly, enter it correctly and log in again.
B0207-001	An authentication error occurred because the Address Book is being used at another location.	Wait a few minutes and then try again.
B0208-000	The account is locked because you have reached the maximum number of failed authentication attempts allowed.	Ask the user administrator to unlock the account.

Windows Authentication

Error Code	Cause	Solution
W0103-000	A TWAIN operation occurred during authentication.	Make sure no other user is logged in to the machine, and then try again.
W0104-000	Failed to encrypt password.	1. A password error occurred. Make sure the password is entered correctly. 2. "Restrict Use of Simple Encryption" is enabled. The administrator has restricted use of simple encryption. You can use the encryption key if it has been specified in the driver. 3. A driver encryption key error occurred. Make sure that the encryption key is correctly specified on the driver.

Error Code	Cause	Solution
W0105-000	A login user name was not specified but a DeskTopBinder operation was performed.	Set the DeskTopBinder login user name correctly.
W0206-002	The user attempted authentication from an application on the "System Settings" screen, where only the administrator has authentication ability.	Only the administrator has login privileges on this screen. Log in as a general user from the application's login screen.
W0206-003	An authentication error occurred because the user name contains a space, colon (:), or quotation mark (").	Recreate the account if the account name contains any of these prohibited characters. If the account name was entered incorrectly, enter it correctly and log in again.
W0207-001	An authentication error occurred because the Address Book is being used at another location.	Wait a few minutes and then try again.
W0406-101	Authentication cannot be completed because of the high number of authentication attempts.	Wait a few minutes and then try again. If the situation does not return to normal, make sure that an authentication attack is not occurring. Notify the administrator of the screen message by e-mail, and check the system log for signs of an authentication attack.
W0400-102	Kerberos authentication failed because the server or security module is not functioning correctly.	1. Make sure that the server is functioning properly. 2. Make sure that the security module is installed.

Error Code	Cause	Solution
W0406-104	1. Cannot connect to the authentication server.	Make sure that connection to the authentication server is possible. Use the PING Command to check the connection.
W0406-104	2. A login name or password error occurred.	Make sure that the user is registered on the server. Use a registered login user name and password.
W0406-104	3. A domain name error occurred.	Make sure that the Windows authentication domain name is specified correctly.
W0406-104	4. Cannot resolve the domain name.	Specify the IP address in the domain name and confirm that authentication is successful. If authentication was successful: 1. If the top-level domain name is specified in the domain name (such as domainname.xxx.com), make sure that DNS is specified in "Interface Settings". 2. If a NetBIOS domain name is specified in domain name (such as DOMAINNAME), make sure that WINS is specified in "Interface Settings".

Error Code	Cause	Solution
W0406-104	4. Cannot resolve the domain name.	Specify the IP address in the domain name and confirm that authentication is successful. If authentication was unsuccessful: 1. Make sure that Restrict LM/NTLM is not set in either "Domain Controller Security Policy" or "Domain Security Policy". 2. Make sure that the ports for the domain control firewall and the firewall on the machine to the domain control connection path are open. If you are using the Windows firewall, open the Properties window for "Network Connections", and then click "Settings" on the "Advanced" tab. On the "Exceptions" tab, specify ports 137 and 139 as exceptions. In the Properties window for "Network Connections", open TCP/IP properties. Then click detail settings, WINS, and then check the "Enable NetBIOS over TCP/IP" box and set number 137 to "Open".

Error Code	Cause	Solution
W0406-104	5. Kerberos authentication failed.	1. Kerberos authentication settings are not correctly configured. Make sure the realm name, KDC (Key Distribution Center) name and corresponding domain name are specified correctly. 2. The KDC and machine timing do not match. Authentication will fail if the difference between the KDC and machine timing is more than 5 minutes. Make sure the timing matches. 3. Kerberos authentication will fail if the realm name is specified in lower-case letters. Make sure the realm name is specified in capital letters. 4. Kerberos authentication will fail if automatic retrieval for KDC fails. Ask your service representative to make sure the KDC retrieval settings are set to "automatic retrieval". If automatic retrieval is not functioning properly, switch to manual retrieval.

Error Code	Cause	Solution
W0400-105	1. The UserPrincipleName (user@domainname.xxx.com) form is being used for the login user name.	The user group cannot be obtained if the UserPrincipleName (user@domainname.xxx.com) form is used. Use "sAMAccountName (user)" to log in, because this account allows you to obtain the user group.
W0400-105	2. Current settings do not allow group retrieval.	Make sure the user group's group scope is set to "Global Group" and the group type is set to "Security" in group properties. Make sure the account has been added to user group. Make sure the user group name registered on the machine and the group name on the DC (domain controller) are exactly the same. The DC is case sensitive. Make sure that "Use Auth. Info at Login" has been specified in "Auth. Info" in the user account registered on the machine. If there is more than one DC, make sure that a confidential relationship has been configured between each DC.
W0400-106	The domain name cannot be resolved.	Make sure that DNS/WINS is specified in the domain name in "Interface Settings".
W0400-200	Due to the high number of authentication attempts, all resources are busy.	Wait a few minutes and then try again.

Error Code	Cause	Solution
W0400-202	1. The SSL settings on the authentication server and the machine do not match.	Make sure the SSL settings on the authentication server and the machine match.
W0400-202	2. The user entered sAMAccountName in the user name to log in.	If a user enters sAMAccountName as the login user name, ldap_bind fails in a parent/subdomain environment. Use UserPrincipleName for the login name instead.
W0406-003	An authentication error occurred because the user name contains a space, colon (:), or quotation mark (").	Recreate the account if the account name contains any of these prohibited characters. If the account name was entered incorrectly, enter it correctly and log on again.
W0409-000	Authentication timed out because the server did not respond.	Check the network configuration, or settings on the authenticating server.
W0511-000	The authentication server login name is the same as a user name already registered on the machine. (Names are distinguished by the unique attribute specified in LDAP authentication settings.)	1. Delete the old, duplicated name or change the login name. 2. If the authentication server has just been changed, delete the old name on the server.
W0607-001	An authentication error occurred because the Address Book is being used at another location.	Wait a few minutes and then try again.
W0606-004	Authentication failed because the user name contains language that cannot be used by general users.	Do not use "other", "admin", "supervisor" or "HIDE*" in general user accounts.

Error Code	Cause	Solution
W0612-005	Authentication failed because no more users can be registered. (The number of users registered in the Address Book has reached capacity.)	Ask the user administrator to delete unused user accounts in the Address Book.
W0707-001	An authentication error occurred because the Address Book is being used at another location.	Wait a few minutes and then try again.

LDAP Authentication

Error Code	Cause	Solution
L0103-000	A TWAIN operation occurred during authentication.	Make sure no other user is logged in to the machine, and then try again.
L0104-000	Failed to encrypt password.	1. A password error occurred. Make sure the password is entered correctly. 2. "Restrict Use of Simple Encryption" is enabled. The administrator has restricted use of simple encryption. You can use the encryption key if it has been specified in the driver. 3. A driver encryption key error occurred. Make sure that the encryption key is correctly specified on the driver.
L0105-000	A login user name was not specified but a DeskTopBinder operation was performed.	Set the DeskTopBinder login user name correctly.

Error Code	Cause	Solution
L0206-002	A user attempted authentication from an application on the "System Settings" screen, where only the administrator has authentication ability.	Only the administrator has login privileges on this screen. Log in as a general user from the application's login screen.
L0206-003	An authentication error occurred because the user name contains a space, colon (:), or quotation mark (").	Recreate the account if the account name contains any of these prohibited characters. If the account name was entered incorrectly, enter it correctly and log in again.
L0207-001	An authentication error occurred because the Address Book is being used at another location.	Wait a few minutes and then try again.
L0306-018	The LDAP server is not correctly configured.	Make sure that a connection test is successful with the current LDAP server configuration.
L0307-001	An authentication error occurred because the Address Book is being used at another location.	Wait a few minutes and then try again.
L0406-200	Authentication cannot be completed because of the high number of authentication attempts.	Wait a few minutes and then try again. If the situation does not return to normal, make sure that an authentication attack is not occurring. Notify the administrator of the screen message by e-mail, and check the system log for signs of an authentication attack.
L0406-201	Authentication is disabled in the LDAP server settings.	Change the LDAP server settings in administrator tools, in "System Settings".

Error Code	Cause	Solution
L0406-202 L0406-203	1. There is an error in the LDAP authentication settings, LDAP server, or network configuration.	1. Make sure that a connection test is successful with the current LDAP server configuration. If connection is not successful, there might be an error in the network settings. Check the domain name or DNS settings in "Interface Settings". 2. Make sure the LDAP server is specified correctly in the LDAP authentication settings. 3. Make sure the login name attribute is entered correctly in the LDAP authentication settings. 4. Make sure the SSL settings are supported by the LDAP server.
L0406-202 L0406-203	2. A login user name or password error occurred.	1. Make sure the login user name and password are entered correctly. 2. Make sure a usable login name is registered on the machine. Authentication will fail in the following cases: If the login user name contains a space, colon (:), or quotation mark ("). If the login user name exceeds 128 bytes.

Error Code	Cause	Solution
L0406-202 L0406-203	3. There is an error in the simple encryption method.	1. Authentication will fail if the password is left blank in simple authentication mode. To allow blank passwords, contact your service representative. 2. In simple authentication mode, the DN of the login user name is obtained in the user account. Authentication fails if the DN cannot be obtained. Make sure there are no errors in the server name, login user name/password, or information entered for the search filter.
L0406-204	Kerberos authentication failed.	1. Kerberos authentication settings are not correctly configured. Make sure the realm name, KDC (Key Distribution Center) name, and supporting domain name are specified correctly. 2. The KDC and machine timing do not match. Authentication will fail if the difference between the KDC and machine timing is more than 5 minutes. Make sure the timing matches. 3. Kerberos authentication will fail if the realm name is specified in lower-case letters. Make sure the realm name is specified in capital letters.

Error Code	Cause	Solution
L0400-210	Failed to obtain user information in LDAP search.	The login attribute's search criteria might not be specified or the specified search information is unobtainable. Make sure the login name attribute is specified correctly.
L0406-003	An authentication error occurred because the user name contains a space, colon (:), or quotation mark (").	Recreate the account if the account name contains any of these prohibited characters. If the account name was entered incorrectly, enter it correctly and log in again.
L0409-000	Authentication timed out because the server did not respond.	Contact the server or network administrator. If the situation does not return to normal, contact your service representative.
L0511-000	The authentication server login name is the same as a user name already registered on the machine. (Names are distinguished by the unique attribute specified in the LDAP authentication settings.)	1. Delete the old, duplicated name or change the login name. 2. If the authentication server has just been changed, delete the old name on the server.
L0607-001	An authentication error occurred because the Address Book is being used at another location.	Wait a few minutes and then try again.
L606-004	Authentication failed because the user name contains language that cannot be used by general users.	Do not use "other", "admin", "supervisor" or "HIDE*" in general user accounts.
L0612-005	Authentication failed because no more users can be registered. (The number of users registered in the Address Book has reached capacity.)	Ask the user administrator to delete unused user accounts in the Address Book.

Error Code	Cause	Solution
L0707-001	An authentication error occurred because the Address Book is being used at another location.	Wait a few minutes and then try again.

Integration Server Authentication

Error Code	Cause	Solution
I0103-000	A TWAIN operation occurred during authentication.	Make sure no other user is logged in to the machine, and then try again.
I0104-000	Failed to decrypt password.	1. A password error occurred. Make sure the password is entered correctly. 2. "Restrict Use of Simple Encryption" is enabled. The administrator has restricted use of simple encryption. You can use the encryption key if it has been specified in the driver. 3. A driver encryption key error occurred. Make sure that the encryption key is correctly specified on the driver.
I0105-000	A login user name was not specified but a DeskTopBinder operation was performed.	Set the DeskTopBinder login user name correctly.
I0206-002	A user attempted authentication from an application on the "System Settings" screen, where only the administrator has authentication ability.	Only the administrator has login privileges on this screen. Log in as a general user from the application's login screen.

Error Code	Cause	Solution
I0206-003	An authentication error occurred because the user name contains a space, colon (:), or quotation mark (").	Recreate the account if the account name contains any of these prohibited characters. If the account name was entered incorrectly, enter it correctly and log in again.
I0207-001	An authentication error occurred because the Address Book is being used at another location.	Wait a few minutes and then try again.
I0406-003	An authentication error occurred because the user name contains a space, colon (:), or quotation mark (").	Recreate the account if the account name contains any of these prohibited characters. If account name was entered incorrectly, enter it correctly and log in again.
I0406-301	1. The URL could not be obtained.	Obtain the URL using Obtain URL in Integration Server authentication.
I0406-301	2. A login user name or password error occurred.	1. Make sure the login user name and password are entered correctly. 2. Make sure that a usable login name is registered on the machine. Authentication will fail in the following cases. If the login user name contains a space, colon (:), or quotation mark ("). If the login user name exceeds 128 bytes.
I0409-000	Authentication timed out because the server did not respond.	Contact the server or network administrator. If the situation does not return to normal, contact your service representative.

Error Code	Cause	Solution
I0511-000	The authentication server login name is the same as a user name already registered on the machine. (Names are distinguished by the unique attribute specified in the LDAP authentication settings.)	1. Delete the old, duplicated name or change the login name. 2. If the authentication server has just been changed, delete the old name on the server.
I0607-001	An authentication error occurred because the Address Book is being used at another location.	Wait a few minutes and then try again.
I0606-004	Authentication failed because the user name contains language that cannot be used by general users.	Do not use "other", "admin", "supervisor" or "HIDE*" in general user accounts.
I0612-005	Authentication failed because no more users can be registered. (The number of users registered in the Address Book has reached capacity.)	Ask the user administrator to delete unused user accounts in the Address Book.
I0707-001	An authentication error occurred because the Address Book is being used at another location.	Wait a few minutes and then try again.

If the Machine Cannot Be Operated

If the following conditions arise while users are operating the machine, provide the instructions on how to deal with them.

Condition	Cause	Solution
Cannot perform the following: • Print with the printer driver • Connect with the TWAIN driver • Send or print with the LAN-Fax driver	User authentication has been rejected.	Confirm the user name and login name with the administrator of the network in use if using Windows authentication, LDAP authentication, or Integration Server authentication. Confirm with the user administrator if using Basic authentication.
Cannot perform the following: • Print with the printer driver • Connect with the TWAIN driver • Send or print with the LAN-Fax driver	The encryption key specified in the driver does not match the machine's driver encryption key.	Specify the driver encryption key registered in the machine. See "Specifying a Driver Encryption Key".
Cannot connect with the TWAIN driver.	The SNMPv3 account, password, and encryption algorithm do not match settings specified on this machine.	Specify the account, password and the encryption algorithm of SNMPv3 registered in the machine using network connection tools.
Cannot authenticate using the TWAIN driver.	Another user is logging in to the machine.	Wait for the user to log out.
Cannot authenticate using the TWAIN driver.	Authentication is taking time because of operating conditions.	Make sure the LDAP server setting is correct. Make sure the network settings are correct.
Cannot authenticate using the TWAIN driver.	Authentication is not possible while the machine is editing the Address Book data.	Wait until editing of the Address Book data is complete.

Condition	Cause	Solution
After starting "User Management Tool" or "Address Management Tool" in SmartDeviceMonitor for Admin and entering the correct login user name and password, a message that an incorrect password has been entered appears.	"Restrict Use of Simple Encryption" is not set correctly. Alternatively, "SSL/TLS" has been enabled although the required certificate is not installed in the computer.	Set "Restrict Use of Simple Encryption" to [On]. Alternatively, enable "SSL/TLS", install the server certificate in the machine, and then install the certificate in the computer. See "Setting the SSL/TLS Encryption Mode".
Cannot log in to the machine using [Document Server (MFP): Authentication/Encryption] in DeskTopBinder.	"Restrict Use of Simple Encryption" is not set correctly. Alternatively, "SSL/TLS" has been enabled although the required certificate is not installed in the computer.	Set "Restrict Use of Simple Encryption" to [On]. Alternatively, enable "SSL/TLS", install the server certificate in the machine, and then install the certificate in the computer. See "Setting the SSL/TLS Encryption Mode".
Cannot access the machine using ScanRouter EX Professional V3 / ScanRouter EX Enterprise V2.	"Restrict Use of Simple Encryption" is not set correctly. Alternatively, "SSL/TLS" has been enabled although the required certificate is not installed in the computer.	Set "Restrict Use of Simple Encryption" to [On]. Alternatively, enable "SSL/TLS", install the server certificate in the machine, and then install the certificate in the computer. See "Setting the SSL/TLS Encryption Mode".
Cannot connect to the ScanRouter delivery software.	The ScanRouter delivery software may not be supported by the machine.	Update to the latest version of the ScanRouter delivery software.
Cannot access the machine using ScanRouter EX Professional V2.	ScanRouter EX Professional V2 does not support user authentication.	ScanRouter EX Professional V2 does not support user authentication.
Cannot log out when using the copying or scanner functions.	The original has not been scanned completely.	When the original has been scanned completely, press [#], remove the original, and then log out.

Condition	Cause	Solution
"Prg. Dest." does not appear on the fax or scanner screen for specifying destinations.	"Restrict Adding of User Destinations (Fax)" and/or "Restrict Adding of User Destinations (Scanner)" is set to [On] in "Restrict Use of Destinations (Fax)" and/or "Restrict Use of Destinations (Scanner)" under "Extended Security", so only the user administrator can register destinations in the Address Book on the fax or scanner screen.	Registration must be done by the user administrator.
User authentication is disabled, yet stored files do not appear.	User authentication might have been disabled without "All Users" being selected for user access to stored files.	Re-enable user authentication, and select [All Users] as the access permission setting of the files you want to display. For details, see "Configuring Access Permissions for Stored Files".
User authentication is disabled, yet destinations specified using the machine do not appear.	User authentication might have been disabled without "All Users" being selected for "Protect Destination".	Re-enable user authentication, and select [All Users] as the access permission setting of the destinations you want to display. For details, see "Protecting the Address Book".
Cannot print when user authentication has been enabled.	User authentication may not be specified in the printer driver.	Specify user authentication in the printer driver. For details, see the printer driver Help.
[Finish Job and Limit] is selected in "Machine action when limit is reached", but the current job is canceled before it is finished.	Depending on the application you are using, the machine might recognize a job as multiple jobs, causing cancelation of the job before it is finished.	Reset the print volume use setting for the user by, for example, clearing the print volume use counter, and then perform printing again. For details about clearing print volume counters, ask the user administrator.

Condition	Cause	Solution
If you try to interrupt a job while copying or scanning, an authentication screen appears.	With this machine, you can log out while copying or scanning. If you try to interrupt copying or scanning after logging out, an authentication screen appears.	Only the user who executed a copying or scanning job can interrupt it. Wait until the job has completed or consult an administrator or the user who executed the job.
After you execute "Encrypt Address Book", the "Exit" message does not appear.	The hard disk may be faulty. The file may be corrupt.	Contact your service representative.

Reference

- p.208 "Specifying a Driver Encryption Key"
- p.218 "Setting the SSL/TLS Encryption Mode"
- p.101 "Configuring Access Permissions for Stored Files"
- p.125 "Protecting the Address Book"

10. Appendix

Supervisor Operations

The supervisor can delete an administrator's password and specify a new one.

If any of the administrators forgets their password or if any of the administrators changes, the supervisor can assign a new password. If logged in using the supervisor's user name and password, you cannot use normal functions or specify defaults.

Log in as the supervisor only to change an administrator's password.

Important

- **The default login user name is "supervisor" and the login password is blank. We recommend changing the login user name and login password.**
- **When registering login user names and login passwords, you can specify up to 32 alphanumeric characters and symbols. Keep in mind that user names and passwords are case-sensitive. User names cannot contain numbers only, a space, colon (:), or quotation mark ("), nor can they be left blank. For details about characters that the password can contain, see "Specifying the Extended Security Functions".**
- **Be sure not to forget the supervisor login user name and login password. If you do forget them, a service representative will have to return the machine to its default state. This will result in all data in the machine being lost and the service call may not be free of charge.**

Note

- You cannot specify the same login user name for the supervisor and the administrators.
- Using Web Image Monitor, you can log in as the supervisor and delete an administrator's password or specify a new one.

Reference

- p.249 "Specifying the Extended Security Functions"

Logging in as the Supervisor

If administrator authentication has been specified, log in using the supervisor login user name and login password. This section describes how to log in.

1. **Press the [User Tools/Counter] key.**
2. **Press the [Login/Logout] key.**
3. **Press [Login].**

4. **Enter a login user name, and then press [OK].**

   When you assign the administrator for the first time, enter "supervisor".

5. **Enter a login password, and then press [OK].**

   When the supervisor is making settings for the first time, a password is not required; the supervisor can simply press [OK] to proceed.

   The message, "Authenticating... Please wait." appears.

Logging out as the Supervisor

If administrator authentication has been specified, be sure to log out after completing settings. This section describes how to log out after completing settings.

1. **Press the [Login/Logout] key.**
2. **Press [Yes].**

Changing the Supervisor

This section describes how to change the supervisor's login name and password.

To do this, you must enable the user administrator's privileges through the settings under "Administrator Authentication Management". For details, see "Specifying Administrator Privileges".

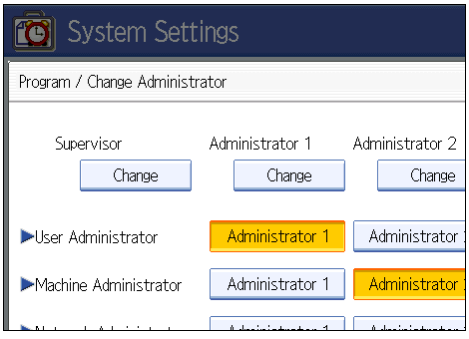
1. **Press the [User Tools/Counter] key.**
2. **Press the [Login/Logout] key.**
3. **Log in as the supervisor.**

   You can log in the same way as an administrator.

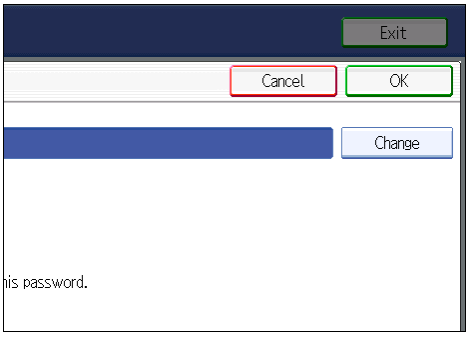
4. **Press [System Settings].**
5. **Press [Administrator Tools].**
6. **Press [Program / Change Administrator].**

   If this item is not visible, press [▼Next] to display more settings.

7. **Under "Supervisor", press [Change].**



8. **Press [Change] for the login user name.**



9. **Enter the login user name, and then press [OK].**
10. **Press [Change] for the login password.**
11. **Enter the login password, and then press [OK].**
12. **If a password reentry screen appears, enter the login password, and then press [OK].**
13. **Press [OK] twice.**

    You will be automatically logged out.
14. **Press the [User Tools/Counter] key.**

Reference

- p.29 "Specifying Administrator Privileges"
- p.291 "Supervisor Operations"

Resetting the Administrator's Password

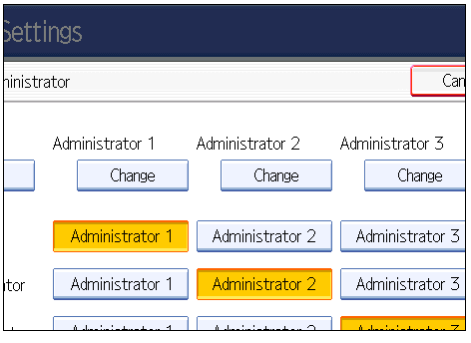
This section describes how to reset the administrators' passwords. Administrator login names cannot be changed.

For details about logging in and logging out as the supervisor, see "Supervisor Operations".

1. **Press the [User Tools/Counter] key.**
2. **Press the [Login/Logout] key.**
3. **Log in as the supervisor.**

   You can log in the same way as an administrator.
4. **Press [System Settings].**
5. **Press [Administrator Tools].**
6. **Press [Program / Change Administrator].**

   If this item is not visible, press [▼Next] to display more settings.
7. **Press [Change] for the administrator you wish to reset.**



8. **Press [Change] for the login password.**
9. **Enter the login password, and then press [OK].**
10. **If a password reentry screen appears, enter the login password, and then press [OK].**
11. **Press [OK] twice.**

    You will be automatically logged out.
12. **Press the [User Tools/Counter] key.**

10

Reference

- p.291 "Supervisor Operations"

User Administrator Settings

The user administrator settings that can be specified are as follows:

System Settings

The following settings can be specified.

Administrator Tools

- Address Book Management
- Address Book: Program / Change / Delete Group
- Address Book: Change Order
- Print Address Book: Destination List
- Address Book: Edit Title
- Address Book: Switch Title
- Back Up / Restore Address Book
- Data Carry-over Setting for Address Book Auto-program
- Display / Clear / Print Counter per User

  All Users: Clear

  Per User: Clear
- Administrator Authentication Management

  User Management

  User administrator authentication cannot be disabled while user authentication is enabled.
- Program / Change Administrator

  User Administrator
- Extended Security

  Encrypt Address Book

  Encryption Key

  Encrypt / Decrypt

  Restrict Use of Destinations (Fax)

  Restrict Adding of User Destinations (Fax)

  Restrict Use of Destinations (Scanner)

  Restrict Adding of User Destinations (Scanner)

  Password Policy

Settings via Web Image Monitor

The following settings can be specified.

Address Book

All the settings can be specified.

Device Settings

- Administrator Authentication Management

  User Administrator Authentication

  Available Settings for User Administrator

  User administrator authentication cannot be disabled while user authentication is enabled.

- Program/Change Administrator

  You can specify the following administrator settings for the user administrator.

  Login User Name

  Login Password

  Encryption Password

Webpage

- Webpage

  Download Help File

Machine Administrator Settings

The machine administrator settings that can be specified are as follows:

System Settings

The following settings can be specified.

General Features

All the settings can be specified.

Tray Paper Settings

All the settings can be specified.

Timer Settings

All the settings can be specified.

Interface Settings

The following settings can be specified.

- Network

  DNS Configuration

  You can perform a connection test.

- Parallel Interface

  All the settings can be specified.

File Transfer

The following settings can be specified.

- Delivery Option
- Capture Server IPv4 Address
- Fax RX File Transmission
- SMTP Authentication
- POP before SMTP
- Reception Protocol
- POP3 / IMAP4 Settings
- Administrator's E-mail Address
- Default User Name / Password (Send)
- Program / Change / Delete E-mail Message
- Fax E-mail Account

Administrator Tools

The following settings can be specified.

- Address Book Management

  Search

  Switch Title
- Address Book: Program / Change / Delete Group

  Search

  Switch Title
- Display / Print Counter

  Print Counter List
- Display / Clear / Print Counter per User

  All Users: Print Counter List

  Per User: Print Counter List
- Machine action when limit is reached
- Print Volume Use Limitation: Unit Count Setting
- User Authentication Management

  You can specify which authentication to use.

  You can also edit the settings for each function.
- Enhanced Authentication Management
- Administrator Authentication Management

  Machine Management
- Program / Change Administrator

  Machine Administrator
- Key Counter Management
- External Charge Unit Management
- Enhanced External Charge Unit Management
- Extended Security

  Restrict Display of User Information

  Authenticate Current Job

  Transfer to Fax Receiver

  @Remote Service

  Update Firmware

  Change Firmware Structure

- Capture Priority
- Capture: Delete All Unsent Files
- Capture: Ownership
- Capture: Public Priority
- Capture: Owner Defaults
- Program / Change / Delete LDAP Server
- LDAP Search
- Auto Off Setting
- Energy Saver Level
- Service Mode Lock
- Auto Erase Memory Setting
- Erase All Memory
- Delete All Logs
- Transfer Log Setting

  This setting can be changed only when it is set to [On].
- Fixed USB Port
- Program / Change / Delete Realm
- Machine Data Encryption Settings

Maintenance

Auto Colour Calibration

All the settings can be specified.

Colour Registration

All the settings can be specified.

Plain Paper Setting

All the settings can be specified.

Copier / Document Server Features

The following settings can be specified.

General Features

All the settings can be specified.

Reproduction Ratio

All the settings can be specified.

Edit

All the settings can be specified.

Stamp

All the settings can be specified.

Input / Output

All the settings can be specified.

Adjust Colour Image

All the settings can be specified.

Administrator Tools

All the settings can be specified.

Facsimile Features

The following settings can be specified.

General Settings

All the settings can be specified.

Scan Settings

All the settings can be specified.

Send Settings

The following settings can be specified.

- Program / Change / Delete Standard Message
- Memory File Transfer
- Backup File TX Setting

Reception Settings

The following settings can be specified.

- Switch Reception Mode
- Program Special Sender
- Program Special Sender: Print List
- Forwarding
- Reception File Setting
- SMTP RX File Delivery Settings
- 2 Sided Print

- Checkered Mark
- Centre Mark
- Print Reception Time
- Reception File Print Quantity
- Paper Tray
- Specify Tray for Lines
- Folder Transfer Result Report
- Memory Lock Reception

Initial Settings

The following settings can be specified.

- Parameter Setting
- Parameter Setting: Print List
- Program Closed Network Code
- Program Memory Lock ID
- Internet Fax Setting
- Select Dial / Push Phone
- Program Fax Information
- Menu Protect
- E-mail Setting
- Folder Setting

Printer Features

The following settings can be specified.

List / Test Print

All the settings can be specified.

Maintenance

The following settings can be specified.

- Menu Protect
- List / Test Print Lock
- 4 Colour Graphic Mode

System

The following settings can be specified.

- Print Error Report

- Auto Continue
- Memory Overflow
- Job Separation
- Rotate by 180 Degrees
- Initial Print Job List
- Print Compressed Data
- Memory Usage
- Duplex
- Copies
- Blank Page Print
- Reserved Job Waiting Time
- Printer Language
- Sub Paper Size
- Page Size
- Letterhead Setting
- Tray Setting Priority
- Edge to Edge Print
- Default Printer Language
- Tray Switching
- Extended Auto Tray Switching

Host Interface

All the settings can be specified.

PCL Menu

All the settings can be specified.

PS Menu

All the settings can be specified.

PDF Menu

All the settings can be specified.

Scanner Features

The following settings can be specified.

General Settings

All the settings can be specified.

Scan Settings

All the settings can be specified.

Send Settings

The following settings can be specified.

- Compression (Black & White)
- Compression (Grey Scale / Full Colour)
- Compression Method for High Compression PDF
- High Compression PDF Level
- Insert Additional E-mail Info
- No. of Digits for Single Page Files
- Stored File E-mail Method
- Default E-mail Subject

Initial Settings

All the settings can be specified.

Extended Feature Settings

The following settings can be specified.

Startup Setting

All the settings can be specified.

Install

All the settings can be specified.

Uninstall

All the settings can be specified.

Change Allocation

All the settings can be specified.

Extended Feature Info

All the settings can be specified.

Administrator Tools

All the settings can be specified.

Settings via Web Image Monitor

The following settings can be specified.

Top Page

- Reset Device
- Reset Printer Job

Device Settings

- System

  Spool Printing

  Protect Printer Display Panel

  Print Priority

  Function Reset Timer

  Permit Firmware Update

  Permit Firmware Structure Change

  Display IP Address on Device Display Panel

  Output Tray

  Paper Tray Priority

  Cover Sheet Tray

  Slip Sheet Tray
- Paper

  All the settings can be specified.
- Date/Time

  All the settings can be specified.
- Timer

  All the settings can be specified.
- Logs

  All the settings can be specified.

  The "Transfer Logs" setting can be changed only when it is set to [Active].
- Download Logs
- E-mail

  All the settings can be specified.
- Auto E-mail Notification

  All the settings can be specified.
- On-demand E-mail Notification

  All the settings can be specified.
- File Transfer

All the settings can be specified.

- User Authentication Management

  All the settings can be specified.

- Administrator Authentication Management

  Machine Administrator Authentication

  Available Settings for Machine Administrator

- Print Volume Use Limitation

  All the settings can be specified.

- Program/Change Administrator

  You can specify the following administrator settings for the machine administrator.

  Login User Name

  Login Password

  Encryption Password

- LDAP Server

  All the settings can be specified.

- Firmware Update

  All the settings can be specified.

- Program/Change Realm

  All the settings can be specified.

Printer

- System

  All the settings can be specified except the following.

  Auto Delete Temporary Print Jobs

  Auto Delete Stored Print Jobs

- Host Interface

  All the settings can be specified.

- PCL Menu

  All the settings can be specified.

- PS Menu

  All the settings can be specified.

- PDF Menu

  All the settings can be specified.

- Tray Parameters (PCL)

All the settings can be specified.

- Tray Parameters (PS)

  All the settings can be specified.

- Virtual Printer Settings

  All the settings can be specified.

- PDF Fixed Password

  All the settings can be specified.

Fax

- Initial Settings

  All the settings can be specified.

- Send / Reception Settings

  All the settings can be specified.

- Parameter Settings

  All the settings can be specified.

Scanner

- General Settings

  All the settings can be specified.

- Scan Settings

  All the settings can be specified.

- Send Settings

  All the settings can be specified except the following.

  Max. E-mail Size

  Divide & Send E-mail

- Initial Settings

  All the settings can be specified.

- Default Settings for Normal Screens on Device

  All the settings can be specified.

- Default Settings for Simplified Screens on Device

  All the settings can be specified.

Interface Settings

- USB
- PictBridge

Network

- SNMPv3

  Access Type(Machine Administrator)

Security

- User Lockout Policy

  All the settings can be specified.

RC Gate

All the settings can be specified.

Webpage

- Webpage

  Download Help File

Extended Feature Settings

All the settings can be specified.

Network Administrator Settings

The network administrator settings that can be specified are as follows:

System Settings

The following settings can be specified.

Interface Settings

If DHCP is enabled, the settings that are automatically obtained via DHCP cannot be specified.

- Print List
- Network

  All the settings can be specified.
- Wireless LAN

  All the settings can be specified.

File Transfer

- SMTP Server
- E-mail Communication Port

  All the settings can be specified.
- E-mail Reception Interval
- Max. Reception E-mail Size
- E-mail Storage in Server
- Auto Specify Sender Name
- Scanner Resend Interval Time
- Number of Scanner Resends

Administrator Tools

- Address Book Management

  Search

  Switch Title
- Address Book: Program / Change / Delete Group

  Search

  Switch Title
- Administrator Authentication Management

  Network Management
- Program / Change Administrator

Network Administrator

- Extended Security

  Driver Encryption Key

  Settings by SNMPv1, v2

  Restrict Use of Simple Encryption

- Network Security Level

Facsimile Features

The following settings can be specified.

Send Settings

- Max. E-mail Size

Initial Settings

- Enable H.323
- Enable SIP
- H.323 Settings
- SIP Settings
- Program / Change / Delete Gateway

Printer Features

The following settings can be specified.

System

- Print Compressed Data

Scanner Features

The following settings can be specified.

Send Settings

- Max. E-mail Size
- Divide & Send E-mail

Settings via Web Image Monitor

The following settings can be specified.

Device Settings

- System

  Device Name

  Comment

  Location
- E-mail

  All the settings can be specified.
- Administrator Authentication Management

  Network Administrator Authentication

  Available Settings for Network Administrator
- Program/Change Administrator

  You can specify the following administrator settings for the network administrator.

  Login User Name

  Login Password

  Encryption Password

Printer

- System

  Print Compressed Data

Fax

- Send / Reception Settings

  Maximum E-mail Size

  E-mail Size
- IP-Fax Settings

  All the settings can be specified.
- IP-Fax Gateway Settings

  All the settings can be specified.

Scanner

- Send Settings

  Max. E-mail Size

  Divide & Send E-mail

Interface

- Interface Settings

  LAN Type

  Ethernet Security

  Ethernet Speed
- Wireless LAN Settings

  LAN Type

  Communication Mode

  SSID

  Channel

  Security Method

  WEP Authentication

  WEP Key Number

  WEP Key

  WPA Encryption Method

  WPA Authentication Method

  WPA-PSK/WPA2-PSK

Network

- IPv4

  All the settings can be specified.
- IPv6

  All the settings can be specified.
- NetWare

  All the settings can be specified.
- SMB

  All the settings can be specified.
- SNMP

  All the settings can be specified.
- SNMPv3

  All the settings can be specified.
- SSDP

  All the settings can be specified.
- Bonjour

All the settings can be specified.

Security

- Network Security

  All the settings can be specified.

- Access Control

  All the settings can be specified.

- IPP Authentication

  All the settings can be specified.

- SSL/TLS

  All the settings can be specified.

- ssh

  All the settings can be specified.

- Site Certificate

  All the settings can be specified.

- Device Certificate

  All the settings can be specified.

- IPsec

  All the settings can be specified.

- IEEE 802.1X

  All the settings can be specified.

- S/MIME

  All the settings can be specified.

Webpage

All the settings can be specified.

File Administrator Settings

The file administrator settings that can be specified are as follows:

System Settings

The following settings can be specified.

Interface Settings

- DNS Configuration

  Connection Test

Administrator Tools

- Address Book Management

  Search

  Switch Title
- Address Book: Program / Change / Delete Group

  Search

  Switch Title
- Administrator Authentication Management

  File Management
- Program / Change Administrator

  File Administrator
- Extended Security

  Enhance File Protection
- Auto Delete File in Document Server
- Delete All Files in Document Server

Facsimile Features

The following settings can be specified.

Reception Settings

- Stored Reception File User Setting

Printer Features

The following settings can be specified.

Maintenance

- Delete All Temporary Print Jobs
- Delete All Stored Print Jobs

System

- Auto Delete Temporary Print Jobs
- Auto Delete Stored Print Jobs

Settings via Web Image Monitor

The following settings can be specified.

Document Server

All the settings can be specified.

Printer: Print Jobs

The file administrator can edit/delete "Print Job List" and unlock the print job.

Device Settings

- Administrator Authentication Management

  File Administrator Authentication

  Available Settings for File Administrator
- Program/Change Administrator

  You can specify the following administrator settings for the file administrator.

  Login User Name

  Login Password

  Encryption Password

Printer

- System

  Auto Delete Temporary Print Jobs

  Auto Delete Stored Print Jobs

Webpage

- Webpage

  Download Help File

Document Server File Permissions

The authorities for using the files stored in Document Server are as follows.

The authority designations in the list indicate users with the following authorities.

- Read-only

  This is a user assigned "Read-only" authority.

- Edit

  This is a user assigned "Edit" authority.

- Edit / Delete

  This is a user assigned "Edit / Delete" authority.

- Full Control

  This is a user granted full control.

- Owner

  This is a user who can store files in the machine and authorize other users to view, edit, or delete those files.

- File Administrator

  This is the file administrator.

A = Granted authority to operate.

- = Not granted authority to operate.

Settings	Read-only	Edit	Edit / Delete	Full Control	Owner	File Admin.
Viewing Details About Stored Files	A	A	A	A	A	A
Viewing Thumbnails	A	A	A	A	A	A
Print/Transmission	A	A	A	A	A	-
Changing File Name	-	A	A	A	A *1	-
Deleting Files	-	-	A	A	A *1	A
Specifying File Password	-	-	-	-	A	A
Specifying Permissions for Users/Groups	-	-	-	A	A	A

Settings	Read-only	Edit	Edit / Delete	Full Control	Owner	File Admin.
Unlocking Files	-	-	-	-	-	A
Changing Owner	-	-	-	-	-	A

*1 The owner can change the authorities for these settings as necessary.

The Privilege for User Account Settings in the Address Book

The authorities for using the Address Book are as follows:

The authority designations in the list indicate users with the following authorities.

- Abbreviations in the table heads

  Read-only (User) = This is a user assigned "Read-only" authority.

  Edit (User) = This is a user assigned "Edit" authority.

  Edit / Delete (User) = This is a user assigned "Edit / Delete" authority.

  User Admin. = This is the user administrator.

  Registered User = This is a user that has personal information registered in the Address Book and has a login password and user name.

  Full Control = This is a user granted full control.

- Abbreviations in the table columns

  R/W (Read and Write) = Both reading and modifying the setting are available.

  R (Read) = Reading only.

  N/A (Not Applicable) = Neither reading nor modifying the setting is available.

Tab Name: Names

Settings	Read-only (User)	Edit (User)	Edit / Delete (User)	Full Control	Registered User	User Admin.
Name	R	R/W	R/W	R/W	R/W	R/W
Key Display	R	R/W	R/W	R/W	R/W	R/W
Registration No.	R	R/W	R/W	R/W	R/W	R/W
Select Title	R	R/W	R/W	R/W	R/W	R/W

Tab Name: Auth. Info

Settings	Read-only (User)	Edit (User)	Edit / Delete (User)	Full Control	Registered User	User Admin.
User Code	N/A	N/A	N/A	N/A	N/A	R/W

Settings	Read-only (User)	Edit (User)	Edit / Delete (User)	Full Control	Registered User	User Admin.
Login User Name	N/A	N/A	N/A	N/A	R	R/W
Login Password	N/A	N/A	N/A	N/A	R/W *1	R/W *1
SMTP Authentication	N/A	N/A	N/A	N/A	R/W *1	R/W *1
Folder Authentication	R	R/W *1	R/W *1	R/W *1	R/W *1	R/W *1
LDAP Authentication	N/A	N/A	N/A	N/A	R/W *1	R/W *1
Available Functions	N/A	N/A	N/A	N/A	R	R/W
Print Volum. Use Limit.	N/A	N/A	N/A	N/A	R	R/W

*1 The password for "Login Password", "SMTP Authentication", or "LDAP Authentication" can be entered or changed but not displayed.

Tab Name: Protection

Settings	Read-only (User)	Edit (User)	Edit / Delete (User)	Full Control	Registered User	User Admin.
Use Name as	R	R/W	R/W	R/W	R/W	R/W
Protection Code	N/A	N/A	N/A	R/W *2	R/W *2	R/W *2
Protection Object	N/A	R/W	R/W	R/W	R/W	R/W
Protect Destination: Permissions for Users / Groups	N/A	N/A	N/A	R/W	R/W	R/W
Protect File(s): Permissions for Users / Groups	N/A	N/A	N/A	R/W	R/W	R/W

*2 The code for "Protection Code" can be entered or changed but not displayed.

Tab Name: Fax Dest.

Settings	Read-only (User)	Edit (User)	Edit / Delete (User)	Full Control	Registered User	User Admin.
Fax Destination	R	R/W	R/W	R/W	R/W	R/W
Select Line	R	R/W	R/W	R/W	R/W	R/W
International TX Mode	R	R/W	R/W	R/W	R/W	R/W
Adv. Features	R	R/W	R/W	R/W	R/W	R/W
Fax Header	R	R/W	R/W	R/W	R/W	R/W
Label Insertion	R	R/W	R/W	R/W	R/W	R/W

Tab Name: E-mail

Settings	Read-only (User)	Edit (User)	Edit / Delete (User)	Full Control	Registered User	User Admin.
E-mail Address	R	R/W	R/W	R/W	R/W	R/W
Use E-mail Address for	R	R/W	R/W	R/W	R/W	R/W
Send via SMTP Server	R	R/W	R/W	R/W	R/W	R/W

Tab Name: Folder

Settings	Read-only (User)	Edit (User)	Edit / Delete (User)	Full Control	Registered User	User Admin.
SMB/FTP/NCP	R	R/W	R/W	R/W	R/W	R/W
SMB: Path	R	R/W	R/W	R/W	R/W	R/W
FTP: Server Name	R	R/W	R/W	R/W	R/W	R/W
FTP: Path	R	R/W	R/W	R/W	R/W	R/W

Settings	Read-only (User)	Edit (User)	Edit / Delete (User)	Full Control	Registered User	User Admin.
FTP: Port Number	R	R/W	R/W	R/W	R/W	R/W
NCP: Path	R	R/W	R/W	R/W	R/W	R/W
NCP: Connection Type	R	R/W	R/W	R/W	R/W	R/W

Tab Name: Add to Group

Settings	Read-only (User)	Edit (User)	Edit / Delete (User)	Full Control	Registered User	User Admin.
Registration No.	R	R/W	R/W	R/W	R/W	R/W
Search	N/A	R/W	R/W	R/W	R/W	R/W
Switch Title	R/W	R/W	R/W	R/W	R/W	R/W

User Settings - Control Panel Settings

This section explains which functions and system settings are available to users when administrator authentication is specified. The administrator's configuration of Menu Protect and Available Settings determines which functions and system settings are available to users. If user authentication is specified, system settings and functions are available to authorized users only, who must log in to access them.

System Settings

When administrator authentication is enabled, the administrator's configuration of Available Settings determines which system settings are available to users. If user authentication is specified, no settings are accessible to unauthorized users or authorized users before logging in.

User privileges are as follows:

- Abbreviations in the table heads

  Not Specified = Authorized user when "Available Settings" have not been specified.

  Specified = Authorized user when "Available Settings" have been specified.

- Abbreviations in the table columns

  R/W (Read and Write) = Both reading and modifying the setting are available.

  R (Read) = Reading only.

  N/A (Not Applicable) = Neither reading nor modifying the setting is available.

Note

- Settings that are not in the list can only be viewed, regardless of whether "Available Settings" has been specified.

General Features

Settings	Not Specified	Specified
Program / Change / Delete User Text	R/W	R
Panel Key Sound	R/W	R
Warm-up Beeper	R/W	R
Copy Count Display	R/W	R
Function Priority	R/W	R
Print Priority	R/W	R
Function Reset Timer	R/W	R
Output: Copier	R/W	R
Output: Document Server	R/W	R
Output: Facsimile	R/W	R
Output: Printer	R/W	R

Settings	Not Specified	Specified
Key Repeat	R/W	R
ADF Original Table Elevation	R/W	R
System Status / Job List Display Time	R/W	R
Small Size Paper Tray	R/W	R

"ADF" → Auto Document Feeder

Depending on the machine type, the "ADF Original Table Elevation" setting might not be displayed.

"Small Size Paper Tray" → Envelope Feeder EF3000

Tray Paper Settings

Settings	Not Specified	Specified
Paper Tray Priority: Copier	R/W	R
Paper Tray Priority: Facsimile	R/W	R
Paper Tray Priority: Printer	R/W	R
Tray Paper Size: Tray 2-4	R/W	R
Printer Bypass Paper Size	R/W	R
Paper Type: Bypass Tray	R/W	R
Paper Type: Tray 1-4	R/W	R
Paper Type: LCT	R/W	R
Cover Sheet Tray	R/W	R
Slip Sheet Tray	R/W	R

"LCT" → Large Capacity Tray

Timer Settings

Settings	Not Specified	Specified
Auto Off Timer	R/W	R

Settings	Not Specified	Specified
Energy Saver Timer	R/W	R
Panel Off Timer	R/W	R
System Auto Reset Timer	R/W	R
Copier / Document Server Auto Reset Timer	R/W	R
Facsimile Auto Reset Timer	R/W	R
Printer Auto Reset Timer	R/W	R
Scanner Auto Reset Timer	R/W	R
Set Date	R/W	R
Set Time	R/W	R
Auto Logout Timer	R/W	R

Interface Settings

Settings	Not Specified	Specified
Print List	R/W	N/A

Network

Settings	Not Specified	Specified
Machine IPv4 Address	R/W	R
IPv4 Gateway Address	R/W	R
Machine IPv6 Address	R/W	R
IPv6 Gateway Address	R/W	R
IPv6 Stateless Address Autoconfiguration	R/W	R
DNS Configuration	R/W	R
DDNS Configuration	R/W	R

Settings	Not Specified	Specified
IPsec	R/W	R
Domain Name	R/W	R
WINS Configuration	R/W	R
Effective Protocol	R/W	R
NCP Delivery Protocol	R/W	R
NW Frame Type	R/W	R
SMB Computer Name	R/W	R
SMB Work Group	R/W	R
Ethernet Speed	R/W	R
IEEE 802.1X Authentication for Ethernet	R/W	R
Restore IEEE 802.1X Authentication to Defaults	R/W	N/A
LAN Type	R/W	R
Ping Command	R/W	R
Permit SNMPv3 Communication	R/W	R
Permit SSL / TLS Communication	R/W	R
Host Name	R/W	R
Machine Name	R/W	R

If you set "Machine IPv4 Address", "Machine IPv6 Address", "DNS Configuration", "Domain Name", or "WINS Configuration" to "Auto-Obtain (DHCP)", you can only display the settings.

Parallel Interface

Settings	Not Specified	Specified
Parallel Timing	R/W	R
Parallel Communication Speed	R/W	R
Selection Signal Status	R/W	R

Settings	Not Specified	Specified
Input Prime	R/W	R
Bidirectional Communication	R/W	R
Signal Control	R/W	R

Wireless LAN

Settings	Not Specified	Specified
Communication Mode	R/W	R
SSID Setting	R/W	R
Ad-hoc Channel	R/W	R
Security Method	R/W	R
Restore Factory Defaults	R/W	N/A

File Transfer

Settings	Not Specified	Specified
Delivery Option	R/W	R
Capture Server IPv4 Address	R/W	R
Fax RX File Transmission	R/W	R
SMTP Server	R/W	R
SMTP Authentication	R/W	R
POP before SMTP	R/W	R
Reception Protocol	R/W	R
POP3 / IMAP4 Settings	R/W	R
Administrator's E-mail Address	R/W	R
E-mail Communication Port	R/W	R

Settings	Not Specified	Specified
E-mail Reception Interval	R/W	R
Max. Reception E-mail Size	R/W	R
E-mail Storage in Server	R/W	R
Default User Name / Password (Send)	R/W	R
Program / Change / Delete E-mail Message	R/W	R/W
Auto Specify Sender Name	R/W	R
Fax E-mail Account	R/W	R
Scanner Resend Interval Time	R/W	R
Number of Scanner Resends	R/W	R

The settings made for "Primary Delivery Server IPv4 Address" and "Secondary Delivery Server IPv4 Address" in "Delivery Option" can only be displayed, not changed.

The passwords for "SMTP Authentication" and "Default User Name / Password (Send)" can be entered or changed but not displayed.

Administrator Tools

Settings	Not Specified	Specified
Address Book Management	R/W	R/W
Address Book: Program / Change / Delete Group	R/W	R/W
Address Book: Change Order	R/W	N/A
Print Address Book: Destination List	R/W	R/W
Address Book: Edit Title	R/W	N/A
Address Book: Switch Title	R/W	R
Back Up / Restore Address Book	R/W	N/A
Data Carry-over Setting for Address Book Auto-program	R/W	R
Display / Print Counter	R/W	R/W

Settings	Not Specified	Specified
Display / Clear / Print Counter per User	R/W	N/A
User Authentication Management	R/W	R
Enhanced Authentication Management	R/W	R
Administrator Authentication Management	R/W	N/A
Key Counter Management	R/W	R
External Charge Unit Management	R/W	R
Enhanced External Charge Unit Management	R/W	R
Extended Security	R/W	R
Auto Delete File in Document Server	R/W	R
Delete All Files in Document Server	R/W	N/A
Capture Priority	R/W	R
Capture: Delete All Unsent Files	R/W	N/A
Capture: Ownership	R/W	R
Capture: Public Priority	R/W	R
Capture: Owner Defaults	R/W	R
Program / Change / Delete LDAP Server	R/W	R
LDAP Search	R/W	R
Auto Off Setting	R/W	R
Energy Saver Level	R/W	R
Service Mode Lock	R/W	R
Auto Erase Memory Setting	R/W	R
Erase All Memory	R/W	R
Delete All Logs	R/W	N/A
Transfer Log Setting	R/W	N/A

Settings	Not Specified	Specified
Fixed USB Port	R/W	R
Program / Change / Delete Realm	R/W	R

Some settings under "Extended Security" are not allowed for general users to specify.

The password for "Program / Change / Delete LDAP Server" can be entered or changed but not displayed.

"Transfer Log Setting" can be changed only when it is set to [On].

Copier / Document Server Features

When administrator authentication is enabled, the administrator's configuration of Menu Protect determines which functions and settings are available to users.

User privileges are as follows:

- Abbreviations in the table columns

  R/W (Read and Write) = Both reading and modifying the setting are available.

  R (Read) = Reading only.

  N/A (Not Applicable) = Neither reading nor modifying the setting is available.

When "Menu Protect" is set to [Off], all the following settings can be viewed and modified.

Note

- The default for "Menu Protect" is [Level 2].
- Settings that are not in the list can only be viewed, regardless of the menu protect level setting.

General Features

Settings	Level 1	Level 2
Auto Image Density Priority	R	R
Original Type Priority	R	R
Original Photo Type Priority	R	R
Original Type Display	R	R
Paper Display	R	R
Original Orientation in Duplex Mode	R	R
Copy Orientation in Duplex Mode	R	R
Max. Copy Quantity	R	R
Auto Tray Switching	R	R
Alert Sound: Original left on Exposure Glass	R	R
Job End Call	R	R
Customize Function: Copier	R/W	R
Customize Function: Document Server Storage	R/W	R

Reproduction Ratio

Settings	Level 1	Level 2
Shortcut Reduce/Enlarge	R	R
Reproduction Ratio	R	R
Reduce/Enlarge Ratio Priority	R	R
Ratio for Create Margin	R	R

Edit

Settings	Level 1	Level 2
Front Margin: Left / Right	R	R
Back Margin: Left / Right	R	R
Front Margin: Top / Bottom	R	R
Back Margin: Top / Bottom	R	R
1 Sided → 2 Sided Auto Margin: T to T	R	R
1 Sided → 2 Sided Auto Margin: T to B	R	R
Erase Border Width	R	R
Erase Original Shadow in Combine	R/W	R
Erase Centre Width	R	R
Front Cover Copy in Combine	R/W	R
Copy Order in Combine	R/W	R
Orientation: Booklet, Magazine	R/W	R
Copy on Designating Page in Combine	R/W	R
Image Repeat Separation Line	R/W	R
Double Copies Separation Line	R/W	R
Separation Line in Combine	R/W	R

Stamp

Background Numbering

Settings	Level 1	Level 2
Size	R/W	R
Density	R/W	R
Stamp Colour	R	R

Preset Stamp

Settings	Level 1	Level 2
Stamp Language	R/W	R
Stamp Priority	R	R
Stamp Format: COPY	R/W	R
Stamp Format: URGENT	R/W	R
Stamp Format: PRIORITY	R/W	R
Stamp Format: For Your Info.	R/W	R
Stamp Format: PRELIMINARY	R/W	R
Stamp Format: For Internal Use Only	R/W	R
Stamp Format: CONFIDENTIAL	R/W	R
Stamp Format: DRAFT	R/W	R
Stamp Colour: COPY	R	R
Stamp Colour: URGENT	R	R
Stamp Colour: PRIORITY	R	R
Stamp Colour: For Your Info.	R	R
Stamp Colour: PRELIMINARY	R	R
Stamp Colour: For Internal Use Only	R	R
Stamp Colour: CONFIDENTIAL	R	R

Settings	Level 1	Level 2
Stamp Colour: DRAFT	R	R

User Stamp

Settings	Level 1	Level 2
Program / Delete Stamp	R/W	R
Stamp Format: 1	R/W	R
Stamp Format: 2	R/W	R
Stamp Format: 3	R/W	R
Stamp Format: 4	R/W	R
Stamp Colour: 1	R/W	R
Stamp Colour: 2	R/W	R
Stamp Colour: 3	R/W	R
Stamp Colour: 4	R/W	R

Date Stamp

Settings	Level 1	Level 2
Format	R	R
Font	R/W	R
Size	R/W	R
Superimpose	R/W	R
Stamp Colour	R	R
Stamp Setting	R/W	R

Page Numbering

Settings	Level 1	Level 2
Stamp Format	R	R

Settings	Level 1	Level 2
Font	R/W	R
Size	R/W	R
Duplex Back Page Stamping Position	R/W	R
Page Numbering in Combine	R/W	R
Stamp on Designating Slip Sheet	R/W	R
Stamp Position:P1,P2...	R/W	R
Stamp Position:1/5,2/5...	R/W	R
Stamp Position:-1-,-2-...	R/W	R
Stamp Position:P.1,P.2...	R/W	R
Stamp Position:1,2...	R/W	R
Stamp Position:1-1,1-2...	R/W	R
Superimpose	R/W	R
Stamp Colour	R	R
Page Numbering Initial Letter	R/W	R

If you select [Level 1] in "Stamp Position", you can only specify "Adjust Stamp Position".

Input / Output

Settings	Level 1	Level 2
Switch to Batch	R/W	R
SADF Auto Reset	R	R
Rotate Sort: Auto Paper Continue	R	R
Memory Full Auto Scan Restart	R	R
Letterhead Setting	R	R
Staple Position	R/W	R
Punch Type	R/W	R

Settings	Level 1	Level 2
Simplified Screen: Finishing Types	R/W	R

Adjust Colour Image

Settings	Level 1	Level 2
Background Density of ADS (Full Colour / Two-colour)	R/W	R
Colour Sensitivity	R/W	R
A.C.S. Sensitivity	R/W	R
A.C.S. Priority	R/W	R

Printer Functions

When administrator authentication is enabled, the administrator's configuration of Menu Protect determines which functions and settings are available to users.

User privileges are as follows:

- Abbreviations in the table columns

  R/W (Read and Write) = Both reading and modifying the setting are available.

  R (Read) = Reading only.

  N/A (Not Applicable) = Neither reading nor modifying the setting is available.

When "Menu Protect" is set to [Off], all the following settings can be viewed and modified.

Note

- The default for "Menu Protect" is [Level 2].
- Settings that are not in the list can only be viewed, regardless of the menu protect level setting.

Normal Printer Screen

Functions	Level 1	Level 2
Print Jobs	R/W	R/W
Spooling Job List	R/W	R/W
Print from Memory Storage Device	R/W	R/W

Printer Features

When administrator authentication is enabled, the administrator's configuration of Menu Protect determines which functions and settings are available to users.

User privileges are as follows:

- Abbreviations in the table columns

  R/W (Read and Write) = Both reading and modifying the setting are available.

  R (Read) = Reading only.

  N/A (Not Applicable) = Neither reading nor modifying the setting is available.

When "Menu Protect" is set to [Off], all the following settings can be viewed and modified.

Note

- The default for "Menu Protect" is [Level 2].
- Settings that are not in the list can only be viewed, regardless of the menu protect level setting.

List / Test Print

Settings	Level 1	Level 2
Multiple Lists	R/W	R/W
Configuration Page	R/W	R/W
Error Log	R/W	R/W
Menu List	R/W	R/W
PCL Configuration / Font Page	R/W	R/W
PS Configuration / Font Page	R/W	R/W
PDF Configuration / Font Page	R/W	R/W
Hex Dump	R/W	R/W

Maintenance

Settings	Level 1	Level 2
4 Colour Graphic Mode	R	R

System

Settings	Level 1	Level 2
Print Error Report	R	R
Auto Continue	R	R
Memory Overflow	R	R
Job Separation	R	R
Rotate by 180 Degrees	R	R
Auto Delete Temporary Print Jobs	R	R
Auto Delete Stored Print Jobs	R	R
Initial Print Job List	R	R
Print Compressed Data	R	R
Memory Usage	R	R
Duplex	R	R
Copies	R	R
Blank Page Print	R	R
Reserved Job Waiting Time	R	R
Printer Language	R	R
Sub Paper Size	R	R
Page Size	R/W	R
Letterhead Setting	R	R
Tray Setting Priority	R	R
Edge to Edge Print	R	R
Default Printer Language	R	R
Tray Switching	R	R
Extended Auto Tray Switching	R	R

Host Interface

Settings	Level 1	Level 2
I/O Buffer	R	R
I/O Timeout	R	R

PCL Menu

Settings	Level 1	Level 2
Orientation	R	R
Form Lines	R	R
Font Source	R	R
Font Number	R	R
Point Size	R	R
Font Pitch	R	R
Symbol Set	R	R
Courier Font	R	R
Extend A4 Width	R	R
Append CR to LF	R	R
Resolution	R	R

PS Menu

Settings	Level 1	Level 2
Job Timeout	R	R
Wait Timeout	R	R
Data Format	R	R
Resolution	R	R
Colour Setting	R	R
Colour Profile	R	R

Settings	Level 1	Level 2
Process Colour Model	R	R
Orientation Auto Detect	R	R

PDF Menu

Settings	Level 1	Level 2
Change PDF Password	R	R
Reverse Order Printing	R	R
Resolution	R	R
Colour Setting	R	R
Colour Profile	R	R
Process Colour Model	R	R
Orientation Auto Detect	R	R

Scanner Features

When administrator authentication is enabled, the administrator's configuration of Menu Protect determines which functions and settings are available to users.

User privileges are as follows:

- Abbreviations in the table columns

  R/W (Read and Write) = Both reading and modifying the setting are available.

  R (Read) = Reading only.

  N/A (Not Applicable) = Neither reading nor modifying the setting is available.

When "Menu Protect" is set to [Off], all the following settings can be viewed and modified.

Note

- The default for "Menu Protect" is [Level 2].
- Settings that are not in the list can only be viewed, regardless of the menu protect level setting.

General Settings

Settings	Level 1	Level 2
Switch Title	R	R
Update Delivery Server Destination List	R/W	R
Search Destination	R	R
PC Scan Command Standby Time	R	R
Destination List Display Priority 1	R	R
Destination List Display Priority 2	R	R
Print & Delete Scanner Journal	R	R
Print Scanner Journal	N/A	N/A
Delete Scanner Journal	N/A	N/A
Delete Recent Destinations	N/A	N/A

Scan Settings

Settings	Level 1	Level 2
A.C.S. Sensitivity Level	R	R

Settings	Level 1	Level 2
Wait Time for Next Orig.: Exposure Glass	R	R
Wait Time for Next Original(s): SADF	R	R
Background Density of ADS (Full Colour)	R	R
Blank Page Detect	R	R

Send Settings

Settings	Level 1	Level 2
Compression (Black & White)	R/W	R
Compression (Grey Scale / Full Colour)	R/W	R
Compression Method for High Compression PDF	R/W	R
High Compression PDF Level	R/W	R
Insert Additional E-mail Info	R/W	R
No. of Digits for Single Page Files	R/W	R
Stored File E-mail Method	R/W	R
Default E-mail Subject	R	R

Facsimile Features

When administrator authentication is specified, the administrator's configuration of Menu Protect determines which functions and settings are available to users. If user authentication is specified, functions and settings are available to authorized users only, who must log in to access them.

The following settings can be specified by someone who is not an administrator.

- Abbreviations in the table columns

  R/W (Read and Write) = Both reading and modifying the setting are available.

  R (Read) = Reading only.

  N/A (Not Applicable) = Neither reading nor modifying the setting is available.

When "Menu Protect" is set to [Off], all the following settings can be viewed and modified.

Note

- The default for "Menu Protect" is [Off].
- Settings that are not in the list can only be viewed, regardless of the menu protect level setting.

General Settings

Settings	Level 1	Level 2
Quick Operation key 1-3	R/W	R
Switch Title	R/W	R
Search Destination	R/W	R
Adjust Sound Volume	R/W	R
Box Setting	R	N/A
Box Setting: Print List	R/W	N/A
On Hook Mode Release Time	R/W	R
Delete Recent Destinations	N/A	N/A

Scan Settings

Settings	Level 1	Level 2
Program / Change / Delete Scan Size	R/W	R

Send Settings

Settings	Level 1	Level 2
Max. E-mail Size	R	R
Program / Change / Delete Standard Message	R	R
Memory File Transfer	N/A	N/A
Backup File TX Setting	R	R

Reception Settings

Settings	Level 1	Level 2
Switch Reception Mode	R	R
Program Special Sender	N/A	N/A
Program Special Sender: Print List	N/A	N/A
Forwarding	R	R
Reception File Setting	R	R
Stored Reception File User Setting	R	R
SMTP RX File Delivery Settings	R	R
2 Sided Print	R/W	R
Checkered Mark	R/W	R
Centre Mark	R/W	R
Print Reception Time	R/W	R
Reception File Print Quantity	R/W	R
Paper Tray	R/W	R
Specify Tray for Lines	R/W	R
Folder Transfer Result Report	R	R
Memory Lock Reception	R	R

Initial Settings

Settings	Level 1	Level 2
Parameter Setting	R	R
Parameter Setting: Print List	R/W	N/A
Program Closed Network Code	R	N/A
Program Memory Lock ID	R	N/A
Internet Fax Setting	R	R
Select Dial / Push Phone	R	R
Program Fax Information	R	R
Enable H.323	R	R
Enable SIP	R	R
H.323 Settings	R	R
SIP Settings	R	R
Program / Change / Delete Gateway	R	R
E-mail Setting	R	R
Folder Setting	R	R

Maintenance

When administrator authentication is enabled, the administrator's configuration of Available Settings determines which system settings are available to users. If user authentication is specified, no settings are accessible to unauthorized users or authorized users before logging in.

User privileges are as follows:

- Abbreviations in the table heads

  Not Specified = Authorized user when "Available Settings" have not been specified.

  Specified = Authorized user when "Available Settings" have been specified.

- Abbreviations in the table columns

  R/W (Read and Write) = Both reading and modifying the setting are available.

  R (Read) = Reading only.

  N/A (Not Applicable) = Neither reading nor modifying the setting is available.

Note

- Settings that are not in the list can only be viewed, regardless of whether "Available Settings" has been specified.

Settings	Not Specified	Specified
Auto Colour Calibration	R/W	N/A
Colour Registration	R/W	N/A
Plain Paper Setting	R/W	N/A

User Settings - Web Image Monitor Settings

This section displays the user settings that can be specified on Web Image Monitor when user authentication is specified. Settings that can be specified by the user vary according to the menu protect level and available settings specifications.

Device Settings

The settings available to the user depend on whether or not administrator authentication is enabled.

If administrator authentication is enabled, the settings available to the user depend on whether or not "Available Settings" has been specified.

User privileges are as follows:

- Abbreviations in the table heads

  Not Specified = Authorized user when "Available Settings" have not been specified.

  Specified = Authorized user when "Available Settings" have been specified.

- Abbreviations in the table columns

  R/W (Read and Write) = Both reading and modifying the setting are available.

  R (Read) = Reading only.

  N/A (Not Applicable) = Neither reading nor modifying the setting is available.

Note

- Settings that are not in the list can only be viewed, regardless of whether "Available Settings" has been specified.

Top Page

Settings	Not Specified	Specified
Reset Device	R/W	N/A

System

Settings	Not Specified	Specified
General Settings : Device Name	R/W	R
General Settings : Comment	R/W	R
General Settings : Location	R/W	R
General Settings : Spool Printing	R/W	R
Output Tray : Copier	R/W	R
Output Tray : Fax	R/W	R
Output Tray : Printer	R/W	R

Settings	Not Specified	Specified
Output Tray : Document Server	R/W	R
Paper Tray Priority : Copier	R/W	R
Paper Tray Priority : Fax	R/W	R
Paper Tray Priority : Printer	R/W	R
Cover Sheet Tray : Tray to set	R/W	R
Cover Sheet Tray : Apply Duplex	R/W	R
Cover Sheet Tray : Display Time	R/W	R
Slip Sheet Tray : Tray to set	R/W	R
Slip Sheet Tray : Apply Duplex	R/W	R
Slip Sheet Tray : Display Time	R/W	R

Paper

Settings	Not Specified	Specified
Tray 1 : Paper Type	R/W	R
Tray 1 : Paper Thickness	R/W	R
Tray 1: Apply Auto Paper Select	R/W	R
Tray 1: Apply Duplex	R/W	R
Tray 2: Paper Size	R/W	R
Tray 2: Custom Paper Size	R/W	R
Tray 2: Paper Type	R/W	R
Tray 2: Paper Thickness	R/W	R
Tray 2: Apply Auto Paper Select	R/W	R
Tray 2: Apply Duplex	R/W	R
Tray 3: Paper Size	R/W	R

Settings	Not Specified	Specified
Tray 3: Custom Paper Size	R/W	R
Tray 3: Paper Type	R/W	R
Tray 3: Paper Thickness	R/W	R
Tray 3: Apply Auto Paper Select	R/W	R
Tray 3: Apply Duplex	R/W	R
Tray 4: Paper Size	R/W	R
Tray 4: Custom Paper Size	R/W	R
Tray 4: Paper Type	R/W	R
Tray 4: Paper Thickness	R/W	R
Tray 4: Apply Auto Paper Select	R/W	R
Tray 4: Apply Duplex	R/W	R
Large Capacity Tray : Paper Type	R/W	R
Large Capacity Tray: Paper Thickness	R/W	R
Large Capacity Tray: Apply Auto Paper Select	R/W	R
Large Capacity Tray: Apply Duplex	R/W	R
Bypass Tray : Paper Size	R/W	R
Bypass Tray : Custom Paper Size	R/W	R
Bypass Tray : Paper Type	R/W	R
Bypass Tray : Paper Thickness	R/W	R
Bypass Tray : Apply Duplex	R/W	R

Date/Time

Settings	Not Specified	Specified
Set Date	R/W	R

Settings	Not Specified	Specified
Set Time	R/W	R
SNTP Server Name	R/W	R
SNTP Polling Interval	R/W	R
Time Zone	R/W	R

Timer

Settings	Not Specified	Specified
Auto Off Timer	R/W	R
Energy Saver Timer	R/W	R
Panel Off Timer	R/W	R
System Auto Reset Timer	R/W	R
Copier/Document Server Auto Reset Timer	R/W	R
Facsimile Auto Reset Timer	R/W	R
Scanner Auto Reset Timer	R/W	R
Printer Auto Reset Timer	R/W	R
Auto Logout Timer	R/W	R

Logs

Settings	Not Specified	Specified
Collect Job Logs	R/W	R
Job Log Collect Level	R/W	R
Collect Access Logs	R/W	R
Access Log Collect Level	R/W	R
Transfer Logs	R/W	R

Settings	Not Specified	Specified
Encrypt Logs	R/W	R
Classification Code	R/W	R
Delete All Logs	R/W	N/A

"Transfer Logs" can be changed only when it is set to [Active].

E-mail

Settings	Not Specified	Specified
Administrator E-mail Address	R/W	R
Signature	R/W	R
Reception Protocol	R/W	R
E-mail Reception Interval	R/W	R
Max. Reception E-mail Size	R/W	R
E-mail Storage in Server	R/W	R
SMTP Server Name	R/W	R
SMTP Port No.	R/W	R
SMTP Authentication	R/W	R
SMTP Auth. E-mail Address	R/W	R
SMTP Auth. User Name	R/W	N/A
SMTP Auth. Password	R/W	N/A
SMTP Auth. Encryption	R/W	R
POP before SMTP	R/W	R
POP E-mail Address	R/W	R
POP User Name	R/W	N/A
POP Password	R/W	N/A

Settings	Not Specified	Specified
Timeout setting after POP Auth.	R/W	R
POP3/IMAP4 Server Name	R/W	R
POP3/IMAP4 Encryption	R/W	R
POP3 Reception Port No.	R/W	R
IMAP4 Reception Port No.	R/W	R
Fax E-mail Address	R/W	R
Receive Fax E-mail	R/W	N/A
Fax E-mail User Name	R/W	N/A
Fax E-mail Password	R/W	N/A
E-mail Notification E-mail Address	R/W	R
Receive E-mail Notification	R/W	N/A
E-mail Notification User Name	R/W	N/A
E-mail Notification Password	R/W	N/A

The passwords for "SMTP Auth. Password" and "POP Password" can only be entered but not changed.

File Transfer

Settings	Not Specified	Specified
SMB User Name	R/W	N/A
SMB Password	R/W	N/A
FTP User Name	R/W	N/A
FTP Password	R/W	N/A
NCP User Name	R/W	N/A
NCP Password	R/W	N/A

The passwords for "SMB Password", "FTP Password", and "NCP Password" can be entered or changed but not displayed.

User Authentication Management

Settings	Not Specified	Specified
User Authentication Management	R/W	R
User Code Authentication - Printer Job Authentication Settings	R/W	R
User Code Authentication - User Code Authentication Settings	R/W	R
Basic Authentication - Printer Job Authentication Settings	R/W	R
Basic Authentication - Basic Authentication Settings	R/W	R
Windows Authentication - Printer Job Authentication Settings	R/W	R
Windows Authentication - Windows Authentication Settings	R/W	R
Windows Authentication - Group Settings for Windows Authentication	R/W	R
LDAP Authentication - Printer Job Authentication Settings	R/W	R
LDAP Authentication - LDAP Authentication Settings	R/W	R
Integration Server Authentication - Printer Job Authentication Settings	R/W	R
Integration Server Authentication - Integration Server Authentication Settings	R/W	R
Integration Server Authentication - Group Settings for Integration Server Authentication	R/W	R

LDAP Server

Settings	Not Specified	Specified
LDAP Search	R/W	N/A
Program/Change/Delete	R/W	N/A

Printer

If you have enabled administrator authentication, the menu protection setting determines which functions and settings are available.

User privileges are as follows:

- Abbreviations in the table columns

  R/W (Read and Write) = Both reading and modifying the setting are available.

  R (Read) = Reading only.

  N/A (Not Applicable) = Neither reading nor modifying the setting is available.

When "Menu Protect" is set to [Off], all the following settings can be viewed and modified.

Note

- The default for "Menu Protect" is [Level 2].
- Settings that are not in the list can only be viewed, regardless of the menu protect level setting.

Printer Basic Settings

System

Settings	Level 1	Level 2
Print Error Report	R	R
Auto Continue	R	R
Memory Overflow	R	R
Job Separation	R	R
Auto Delete Temporary Print Jobs	R	R
Auto Delete Stored Print Jobs	R	R
Initial Print Job List	R	R
Rotate by 180 Degrees	R	R
Print Compressed Data	R	R
Memory Usage	R	R
Duplex	R	R
Copies	R	R
Blank Page Print	R	R

Settings	Level 1	Level 2
Reserved Job Waiting Time	R	R
Printer Language	R	R
Sub Paper Size	R	R
Page Size	R/W	R
Letterhead Setting	R	R
Tray Setting Priority	R	R
Edge to Edge Print	R	R
Default Printer Language	R	R
Tray Switching	R	R
Extended Auto Tray Switching	R	R
Virtual Printer	R	R

Host Interface

Settings	Level 1	Level 2
I/O Buffer	R	R
I/O Timeout	R	R

PCL Menu

Settings	Level 1	Level 2
Orientation	R	R
Form Lines	R	R
Font Source	R	R
Font Number	R	R
Point Size	R	R
Font Pitch	R	R
Symbol Set	R	R

Settings	Level 1	Level 2
Courier Font	R	R
Extend A4 Width	R	R
Append CR to LF	R	R
Resolution	R	R

PS Menu

Settings	Level 1	Level 2
Job Timeout	R	R
Wait Timeout	R	R
Data Format	R	R
Resolution	R	R
Color Setting	R	R
Color Profile	R	R
Process Color Model	R	R
Orientation Auto Detect	R	R

PDF Menu

Settings	Level 1	Level 2
Reverse Order Printing	R	R
Resolution	R	R
Color Setting	R	R
Color Profile	R	R
Process Color Model	R	R
Orientation Auto Detect	R	R

Virtual Printer Settings

System

Settings	Level 1	Level 2
Print Error Report	R	R
Job Separation	R	R
Rotate by 180 Degrees	R	R
Memory Usage	R	R
Duplex	R	R
Copies	R	R
Blank Page Print	R	R
Sub Paper Size	R	R
Input Tray	R/W	R/W
Page Size	R/W	R
Paper Type	R/W	R/W
Output Tray	R/W	R/W
Letterhead Setting	R	R
Edge to Edge Print	R	R

PCL Menu

Settings	Level 1	Level 2
Orientation	R	R
Form Lines	R	R
Font Source	R	R
Font Number	R	R
Point Size	R	R
Font Pitch	R	R
Symbol Set	R	R
Courier Font	R	R

Settings	Level 1	Level 2
Extend A4 Width	R	R
Append CR to LF	R	R
Resolution	R	R

PS Menu

Settings	Level 1	Level 2
Job Timeout	R	R
Wait Timeout	R	R
Data Format	R	R
Resolution	R	R
Color Setting	R	R
Color Profile	R	R
Process Color Model	R	R
Orientation Auto Detect	R	R

PDF Menu

Settings	Level 1	Level 2
Reverse Order Printing	R	R
Resolution	R	R
Color Setting	R	R
Color Profile	R	R
Process Color Model	R	R
Orientation Auto Detect	R	R

RHPP Settings

Settings	Level 1	Level 2
After Errors Are Solved	R/W	R/W
When Errors Occur	R/W	R/W
RHPP Timeout	R/W	R/W
After Misfed Paper Is Removed	R/W	R/W

PDF Temporary Password

Settings	Level 1	Level 2
PDF Temporary Password	R/W	R/W
Confirm Password	R/W	R/W

PDF Fixed Password

Settings	Level 1	Level 2
Current PDF Fixed Password	N/A	N/A
New PDF Fixed Password	N/A	N/A
Confirm Password	N/A	N/A

Scanner

If you have enabled administrator authentication, the menu protection setting determines which functions and settings are available.

User privileges are as follows:

- Abbreviations in the table columns

  R/W (Read and Write) = Both reading and modifying the setting are available.

  R (Read) = Reading only.

  N/A (Not Applicable) = Neither reading nor modifying the setting is available.

When "Menu Protect" is set to [Off], all the following settings can be viewed and modified.

Note

- The default for "Menu Protect" is [Level 2].
- Settings that are not in the list can only be viewed, regardless of the menu protect level setting.

General Settings

Settings	Level 1	Level 2
Switch Title	R	R
Search Destination	R	R
PC Scan Command Standby Time	R	R
Destination List Display Priority 1	R	R
Destination List Display Priority 2	R	R
Print & Delete Scanner Journal	R	R

Scan Settings

Settings	Level 1	Level 2
A.C.S. Sensitivity Level	R	R
Wait Time for Next Original(s): Exposure Glass	R	R
Wait Time for Next Original(s): SADF	R	R
Background Density of ADS (Full Color)	R	R
Blank Page Detect	R	R

Send Settings

Settings	Level 1	Level 2
Compression (Black & White)	R/W	R
Compression (Gray Scale/Full Color)	R/W	R
High Compression PDF Level	R/W	R
Compression Method for High Compression PDF	R/W	R
Insert Additional E-mail Info	R/W	R
No. of Digits for Single Page Files	R/W	R
Stored File E-mail Method	R/W	R
Default E-mail Subject	R	R

Default Settings for Normal Screens on Device

Settings	Level 1	Level 2
Store File	R	R
Preview	R	R
Original Type	R	R
Resolution	R	R
Auto Density	R	R
Dropout Color	R	R
Dropout Color Range to Erase	R	R
Send File Type	R	R

Default Settings for Simplified Screens on Device

Settings	Level 1	Level 2
Original Type	R	R
Resolution	R	R
Send File Type	R	R

Fax

If you have specified administrator authentication, the available functions and settings depend on the menu protect setting.

The following settings can be specified by someone who is not an administrator.

- Abbreviations in the table columns

  R/W (Read and Write) = Both reading and modifying the setting are available.

  R (Read) = Reading only.

  N/A (Not Applicable) = Neither reading nor modifying the setting is available.

When "Menu Protect" is set to [Off], all the following settings can be viewed and modified.

Note

- The default for "Menu Protect" is [Level 2].
- Settings that are not in the list can only be viewed, regardless of the menu protect level setting.

Initial Settings

Settings	Level 1	Level 2
Closed Network Code	N/A	N/A
Internet Fax	N/A	N/A
Program Memory Lock ID	N/A	N/A
Fax Information: Fax Header	N/A	N/A
Fax Information: Own Name	N/A	N/A
Fax Information: Own Fax Number	N/A	N/A
Select Dial/Push Phone	N/A	N/A

Send / Reception Settings

Settings	Level 1	Level 2
Maximum E-mail Size	N/A	N/A
Switch Reception Mode	N/A	N/A
SMTP RX File Delivery Settings	N/A	N/A
2 Sided Print	R/W	N/A

Settings	Level 1	Level 2
Checkered Mark	R/W	N/A
Center Mark	R/W	N/A
Print Reception Time	R/W	N/A
Reception File Print Quantity	R/W	N/A
Paper Tray	R/W	N/A
Memory Lock Reception	N/A	N/A

IP-Fax Settings

Settings	Level 1	Level 2
Enable H.323	N/A	N/A
Enable IP-Fax Gatekeeper	N/A	N/A
Gatekeeper Address (Main)	N/A	N/A
Gatekeeper Address (Sub)	N/A	N/A
Own Fax No.	N/A	N/A
Enable SIP	N/A	N/A
Enable Server	N/A	N/A
User Name	N/A	N/A
Server IP Address: Proxy Server Addr. (Main)	N/A	N/A
Server IP Address: Proxy Server Address (Sub)	N/A	N/A
Server IP Address: Redirect Svr. Addr. (Main)	N/A	N/A
Server IP Address: Redirect Svr. Addr. (Sub)	N/A	N/A
Server IP Address: Registrar Address (Main)	N/A	N/A
Server IP Address: Registrar Address (Sub)	N/A	N/A
Digest Authentication	N/A	N/A

IP-Fax Gateway Settings

Settings	Level 1	Level 2
Prefix 1-50	N/A	N/A
Protocol 1-50	N/A	N/A
Gateway Address 1-50	N/A	N/A

Parameter Settings

Settings	Level 1	Level 2
Just Size Printing	N/A	N/A
Combine 2 Originals	N/A	N/A
Convert to PDF When Transferring to Folder	N/A	N/A
Journal	N/A	N/A
Immediate Transmission Result Report	N/A	N/A
Communication Result Report	N/A	N/A
Memory Storage Report	N/A	N/A
SEP Code RX Result Report	N/A	N/A
SEP Code RX Reserve Report	N/A	N/A
Confidential File Report	N/A	N/A
LAN-Fax Result Report	N/A	N/A
Inclusion of Part of Image	N/A	N/A
Error E-mail Notification	N/A	N/A
Display Network Errors	N/A	N/A
Journal Notification by E-mail	N/A	N/A
Response to RX Notice Request	N/A	N/A
Select Destination Type Priority	N/A	N/A

Interface

The settings available to the user depend on whether or not administrator authentication is enabled.

If administrator authentication is enabled, the settings available to the user depend on whether or not "Available Settings" has been specified.

User privileges are as follows:

- Abbreviations in the table heads

  Not Specified = Authorized user when "Available Settings" have not been specified.

  Specified = Authorized user when "Available Settings" have been specified.

- Abbreviations in the table columns

  R/W (Read and Write) = Both reading and modifying the setting are available.

  R (Read) = Reading only.

  N/A (Not Applicable) = Neither reading nor modifying the setting is available.

Note

- Settings that are not in the list can only be viewed, regardless of whether "Available Settings" has been specified.

Interface Settings

Settings	Not Specified	Specified
Network : LAN Type	R	N/A
Ethernet : Ethernet Security	R/W	R
Ethernet : Ethernet Speed	R/W	R
USB	R/W	R
PictBridge	R/W	R

Wireless LAN Settings

Settings	Not Specified	Specified
LAN Type	R/W	N/A
Communication Mode	R/W	R
SSID	R/W	R

Settings	Not Specified	Specified
Channel	R/W	N/A
Security Method	R/W	R
WEP Authentication	R/W	N/A
WEP Key Number	R/W	R
WEP Key	R/W	R
WPA Encryption Method	R/W	R
WPA Authentication Method	R/W	R
WPA-PSK/WPA2-PSK	R/W	R

Network

The settings available to the user depend on whether or not administrator authentication is enabled.

If administrator authentication is enabled, the settings available to the user depend on whether or not "Available Settings" has been specified.

User privileges are as follows:

- Abbreviations in the table heads

  Not Specified = Authorized user when "Available Settings" have not been specified.

  Specified = Authorized user when "Available Settings" have been specified.

- Abbreviations in the table columns

  R/W (Read and Write) = Both reading and modifying the setting are available.

  R (Read) = Reading only.

  N/A (Not Applicable) = Neither reading nor modifying the setting is available.

Note

- Settings that are not in the list can only be viewed, regardless of whether "Available Settings" has been specified.

IPv4

Settings	Not Specified	Specified
Host Name	R/W	R
DHCP	R/W	R
Domain Name	R/W	R
IPv4 Address	R/W	R
Subnet Mask	R/W	R
DDNS	R/W	R
WINS	R/W	R
Primary WINS Server	R/W	R
Secondary WINS Server	R/W	R
Scope ID	R/W	R
Default Gateway Address	R/W	R

Settings	Not Specified	Specified
DNS Server	R/W	R
LPR	R/W	R
RSH/RCP	R/W	R
DIPRINT	R/W	R
FTP	R/W	R
sftp	R/W	R
WSD (Device)	R/W	R
WSD (Printer)	R/W	R
WSD (Scanner)	R/W	R
IPP	R/W	R
WSD (Printer)/IPP Timeout	R/W	R
RHPP	R/W	R

IPv6

Settings	Not Specified	Specified
IPv6	R/W	R
Host Name	R/W	R
Domain Name	R/W	R
Stateless Address	R/W	R
Manual Configuration Address	R/W	R
DHCPv6-lite	R/W	R
DDNS	R/W	R
Default Gateway Address	R/W	R
DNS Server	R/W	R

Settings	Not Specified	Specified
LPR	R/W	R
RSH/RCP	R/W	R
DIPRINT	R/W	R
FTP	R/W	R
sftp	R/W	R
WSD (Device)	R/W	R
WSD (Printer)	R/W	R
WSD (Scanner)	R/W	R
IPP	R/W	R
WSD (Printer)/IPP Timeout	R/W	R
RHPP	R/W	R

NetWare

Settings	Not Specified	Specified
NetWare	R/W	R
Print Server Name	R/W	R
Logon Mode	R/W	R
File Server Name	R/W	R
NDS Tree	R/W	N/A
NDS Context Name	R/W	R
Operation Mode	R/W	R
Remote Printer No.	R/W	N/A
Job Timeout	R/W	N/A
Frame Type	R/W	R

Settings	Not Specified	Specified
Print Server Protocol	R/W	R
NCP Delivery Protocol	R/W	R

SMB

Settings	Not Specified	Specified
SMB	R/W	R
Workgroup Name	R/W	R
Computer Name	R/W	R
Comment	R/W	R
Notify Print Completion	R/W	R

Bonjour

Settings	Not Specified	Specified
Bonjour	R/W	R
Computer Name	R/W	R
Location	R/W	R
DIPRINT	R/W	R
LPR	R/W	R
IPP	R/W	R

Webpage

The settings available to the user depend on whether or not administrator authentication is enabled.

If administrator authentication is enabled, the settings available to the user depend on whether or not "Available Settings" has been specified.

User privileges are as follows:

- Abbreviations in the table heads

  Not Specified = Authorized user when "Available Settings" have not been specified.

  Specified = Authorized user when "Available Settings" have been specified.

- Abbreviations in the table columns

  R/W (Read and Write) = Both reading and modifying the setting are available.

  R (Read) = Reading only.

  N/A (Not Applicable) = Neither reading nor modifying the setting is available.

Note

- Settings that are not in the list can only be viewed, regardless of whether "Available Settings" has been specified.

Webpage

Settings	Not Specified	Specified
Language1	R/W	R
Language2	R/W	R
URL1	R/W	R
URL2	R/W	R
Set Help URL Target	R/W	R
WSD/UPnP Setting	R/W	R
Download Help File	R/W	R/W

Trademarks

Adobe, Acrobat, Acrobat Reader, PostScript, and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Apple, Bonjour, Macintosh, and Mac OS are trademarks of Apple Inc., registered in the U.S. and other countries.

LINUX® is the registered trademark of Linus Torvalds in the U.S. and other countries.

Microsoft®, Windows®, Windows Server®, Windows Vista®, and Outlook are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Monotype is a registered trademark of Monotype Imaging, Inc.

NetWare is a registered trademark of Novell, Inc.

PCL® is a registered trademark of Hewlett-Packard Company.

PictBridge is a trademark.

PowerPC® is a trademark of International Business Machines Corporation in the United States, other countries, or both.

RED HAT is a registered trademark of Red Hat, Inc.

Solaris is a trademark or registered trademark of Sun Microsystems, Inc. in the United States and other countries.

UPnP™ is a trademark of the UPnP™ Implementers Corporation.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights to those marks.

The proper names of the Windows operating systems are as follows:

- The product names of Windows 2000 are as follows:

  Microsoft® Windows® 2000 Professional

  Microsoft® Windows® 2000 Server

  Microsoft® Windows® 2000 Advanced Server
- The product names of Windows XP are as follows:

  Microsoft® Windows® XP Professional Edition

  Microsoft® Windows® XP Home Edition

  Microsoft® Windows® XP Media Center Edition

  Microsoft® Windows® XP Tablet PC Edition
- The product names of Windows Vista are as follows:

  Microsoft® Windows Vista® Ultimate

  Microsoft® Windows Vista® Business

  Microsoft® Windows Vista® Home Premium

Microsoft® Windows Vista® Home Basic

Microsoft® Windows Vista® Enterprise

- The product names of Windows 7 are as follows:

  Microsoft® Windows® 7 Home Premium

  Microsoft® Windows® 7 Professional

  Microsoft® Windows® 7 Ultimate

  Microsoft® Windows® 7 Enterprise

- The product names of Windows Server 2003 are as follows:

  Microsoft® Windows Server® 2003 Standard Edition

  Microsoft® Windows Server® 2003 Enterprise Edition

- The product names of Windows Server 2003 R2 are as follows:

  Microsoft® Windows Server® 2003 R2 Standard Edition

  Microsoft® Windows Server® 2003 R2 Enterprise Edition

- The product names of Windows Server 2008 are as follows:

  Microsoft® Windows Server® 2008 Standard

  Microsoft® Windows Server® 2008 Enterprise

- The product names of Windows 2008 R2 are as follows:

  Microsoft® Windows Server® 2008 R2 Standard

  Microsoft® Windows Server® 2008 R2 Enterprise

INDEX

A

Access Control....195
Access permission for stored files....101
Address Book access permission....125
Address Book privileges....317
Administrator....18, 25
Administrator authentication....18, 27, 29
Administrator privileges....29
Administrator registration....32
AH Protocol....222, 223
AH Protocol + ESP Protocol....222, 223
Authenticate Current Job....252
Authentication by IEEE802.1X....247
Authentication information to log in....52
Authentication using an external device....94
authfree....246
Auto Erase Memory....138
Auto logout....92
Available functions....154

B

Basic authentication....47

C

Change Firmware Structure....253
Copier / Document Server Features....330

D

Data encryption (Address Book)....126
Data encryption (hard disk)....129
Data overwrite....138
Device certificate creation....120, 213
Device certificate installation....64, 121, 214
Device Settings....348
Document Server file permissions....315
Driver Encryption Key....208, 250

E

E-mail encryption....116
Edit....315, 317
Edit / Delete....315, 317
Electronic signature....118
Enabling/disabling protocols....196
Encrypt Address Book....250
Encryption key....133
Encryption Key Auto Exchange Settings....224, 232
Encryption Key Manual Settings....224, 237
Enhance File Protection....251
Erase All Memory....142
Error code....269
Error message....267
ESP Protocol....222
Extended security functions....249

F

Facsimile Features....343
Fax....363
File administrator....26, 315
File administrator settings....313
File creator (owner)....18
Firmware update....14
Full Control....315, 317

H

Hard disk data encryption settings....129
How to read this manual....11

I

Important....10
Information for enhanced security....260
Integration Server authentication....75
Interface....366
Intermediate certificate....65, 122, 215
IP address....11
IPP authentication password....209
IPsec....222
IPsec settings....224
IPsec telnet setting commands....238

K

Kerberos authentication....54

L

LDAP authentication....67
Limitation on print volume per user....156
Locked Print....95
Log file management-Control panel....167
Log file management-Web Image Monitor....169

Log in (administrator).....35
Log information.....177
Log out (administrator).....36
Login.....18
Logout.....18

M

Machine administrator.....26
Machine administrator settings.....297
Maintenance.....346
Manuals for this machine.....8
Menu Protect.....147, 149

N

Network.....368
Network administrator.....26
Network administrator settings.....308
Network Security Level.....204
Notice.....10
NTLM authentication.....54

O

Operational issues.....285
Owner.....315

P

Password for stored files.....101
Password lockout function.....89
Password Policy.....252
Print volume use.....156
Printer.....355
Printer Features.....337
Printer Functions.....336
Printer job authentication.....82

R

Read-only.....315, 317
Registered user.....18, 317
Remote Service.....253
Restrict Adding of User Destinations (Fax).....113, 250
Restrict Adding of User Destinations (Scanner).....113, 250
Restrict Display of User Information.....251
Restrict Use of Destinations (Fax).....113, 250
Restrict Use of Destinations (Scanner).....113, 250
Restrict Use of Simple Encryption.....251

S

S/MIME.....116
Scanner.....361
Scanner Features.....341
Security configuration (enhanced).....14
Security configuration (standard).....14
Security enhancement.....17
Security for the fax function.....255
Security for the scanner function.....255
Security function cautions.....13
Security measures provided by this machine.....20
Self-signed certificate.....119, 212
Service Mode Lock.....257
Settings by SNMPv1, v2.....251
SNMPv3.....220
SSL (Secure Sockets Layer).....211
SSL / TLS configuration.....216
SSL / TLS encryption.....218
SSL for SMTP connections.....219
Supervisor.....18, 26, 291
Symbols.....11
System Settings.....322
System status check.....255

T

telnet.....246
Trademarks.....373
Transfer to Fax Receiver.....252
Transmitted passwords.....208
Type of administrator.....147

U

Update Firmware.....253
User.....18, 39
User administrator.....25, 317
User administrator settings.....295
User authentication.....18, 40, 41, 42, 85
User Code authentication.....43
User settings - Control panel settings.....321
User settings - Web Image Monitor settings.....347

W

Webpage.....372
Windows authentication.....54

MEMO

MEMO

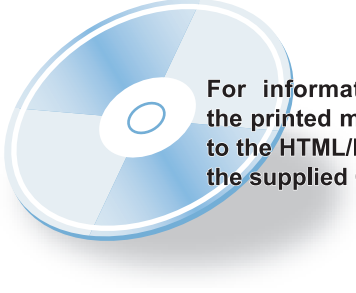
MEMO

© 2010

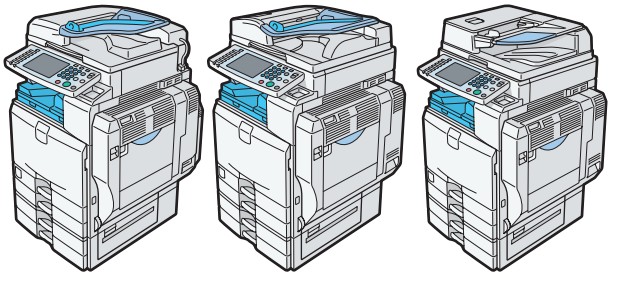
Operating Instructions Security Reference

C9130/C9135/C9145/C9145A/C9155/C9155A
C9130G/C9135G/C9145G/C9145AG/C9155G/C9155AG
LD630C/LD635C/LD645C/LD645CA/LD655C/LD655CA
LD630CG/LD635CG/LD645CG/LD645CAG/LD655CG/LD655CAG
Aficio™ MP C3001/C3501/C4501/C4501A/C5501/C5501A
Aficio™ MP C3001G/C3501G/C4501G/C4501AG/C5501G/C5501AG

Operating Instructions
Troubleshooting



For information not in the printed manual, refer to the HTML/PDF files on the supplied CD-ROM.



1 When the Machine Does Not Operate As Wanted
2 Troubleshooting When Using the Copy/Document Server Function
3 Troubleshooting When Using the Facsimile Function
4 Troubleshooting When Using the Printer Function
5 Troubleshooting When Using the Scanner Function
6 Clearing Misfeeds
7 Appendix

Read this manual carefully before you use this machine and keep it handy for future reference. For safe and correct use, be sure to read the Safety Information in "About This Machine" before using the machine.

Documentation for This Machine

About This Machine

Troubleshooting (This manual)

Copy and Document Server Reference

- Using the various copier functions
- Using the Document Server functions
- Changing the default settings of the copier and Document Server functions, and related information

Facsimile Reference

- Sending and receiving faxes
- Using the fax function through a computer
- Changing the default settings of the fax function, and related information

Printer Reference

- Installing the driver for the printer function
- Changing the default settings of the printer function, and related information

Scanner Reference

- Sending scan files
- Storing scan files
- Changing the default settings of the scanner function, and related information

Network and System Settings Reference

- Connecting to a network
- Registering addresses for fax/scanner functions
- Changing the default settings of the system, and related information

Security Reference

PostScript 3 Supplement

VM Card Extended Feature Settings Device Reference

VM Card Extended Feature Settings Web Reference

Quick Reference Copy Guide

Quick Reference Printer Guide

Quick Reference Fax Guide

Quick Reference Scanner Guide

App2Me Start Guide

TABLE OF CONTENTS

Documentation for This Machine....1
Manuals for This Machine....6
Notice....8
Important....8
How to Read This Manual....9
Symbols....9
Machine Types....9
Names of Major Items....10
Notes....10

1. When the Machine Does Not Operate As Wanted

Indicators....11
Panel Tone....12
Checking Machine Status and Settings....13
When an Indicator to the Right of a Function Key Is Lit....17
When You Have Problems Operating the Machine....19
When a Job Is Not Performed....25
When the Color Registration Shifts....28
Adjusting the Color Registration....28
When the Printed Color Differs From the Original Color....29
Auto Color Calibration....29
Returning to the Previous Setting....31

2. Troubleshooting When Using the Copy/Document Server Function

Messages Displayed When Using the Copy/Document Server Function....33
When You Cannot Make Clear Copies....38
When You Cannot Make Copies As Wanted....42
When Memory Is Full....49

3. Troubleshooting When Using the Facsimile Function

Adjusting the Volume....51
Messages Displayed When Using the Facsimile Function....53
When You Cannot Send or Receive Fax Messages As Wanted....64
When Memory Is Full....70
If an Error Report Is Printed....72
Turning Off the Main Power / In the Event of Power Failure....73

When an Error Occurs Using Internet Fax....74
Error Mail Notification....74
Error Report (E-mail)....74
Server-Generated Error E-mail....74

4. Troubleshooting When Using the Printer Function

Messages Displayed When Installing the Printer Driver....75
Windows 2000....75
Windows XP Professional or Windows Server 2003/2003 R2....75
Windows XP Home Edition....76
Windows Vista....76
Windows 7....77
Windows Server 2008....77
If USB Connection Fails....79
Messages Displayed When Using the Printer Function....80
Status Messages....80
Messages Displayed on the Control Panel When Using the Printer Function....81
Other Messages....84
When You Cannot Print....94
When the Data In Indicator Does Not Light Up or Flash....96
Other Printing Problems....99
When PictBridge Printing Does Not Work....109

5. Troubleshooting When Using the Scanner Function

Messages Displayed When Using the Scanner Function....111
Messages Displayed on the Control Panel When Using the Scanner Function....111
Messages Displayed on the Client Computer....121
When You Cannot Send Scanned Files....127
When Stored Files Cannot Be Accessed....127
When Stored Files Cannot Be Edited....127
When You Cannot Browse the Network to Send a Scan File....127
When the TWAIN Driver Cannot Be Started....128
When the Network Delivery Function Cannot Be Used....128
When S/MIME Cannot Be Used....128
When You Cannot Send Scan Files Using WSD....129

When Scanning Is Not Done As Expected....130

6. Clearing Misfeeds

Removing Jammed Paper....133
Locating Jammed Paper....133
When A is displayed....135
When B is displayed....135
When C is displayed....135
When D is displayed....137
When P is displayed (Type 1, 2)....138
When P is displayed (Type 3, 4 (models equipped with the ARDF))....139
When P1 is displayed (Type 3, 4 (models equipped with the one-pass duplex scanning ADF))....139
When P2 is displayed (Type 3, 4 (models equipped with the one-pass duplex scanning ADF))....140
When R is displayed in the case of Finisher SR 3050....140
When R1 - R5 is displayed in the case of Finisher SR 790....141
When R1 - R3 is displayed in the case of Booklet Finisher SR 3000....142
When R4 - R6 is displayed in the case of Booklet Finisher SR 3000....143
When R7 - R11 is displayed in the case of Booklet Finisher SR 3000....143
When R1 - R4 is displayed in the case of Booklet Finisher SR 3020....144
When R5 - R7 is displayed in the case of Booklet Finisher SR 3020....144
When R8 - R12 is displayed in the case of Booklet Finisher SR 3020....145
When R1 - R4 is displayed in the case of Finisher SR 3030....146
When R5 - R8 is displayed in the case of Finisher SR 3030....147
When U is displayed....148
When Y is displayed....148
When Y is displayed in the case of Large Capacity Tray....148
When Z is displayed....149
Removing Jammed Staples....150
Finisher SR 3050....150
Finisher SR 790....151
Booklet Finisher SR 3000....151
Booklet Finisher SR 3020....152
Booklet Finisher SR 3020 (Saddle Stitch)....153
Finisher SR 3030....154

Removing Punch Waste....156
Booklet Finisher SR 3000....156
Booklet Finisher SR 3020 and Finisher SR 3030....157

7. Appendix

Trademarks....159
INDEX....161

Manuals for This Machine

Read this manual carefully before you use this machine.

Refer to the manuals that are relevant to what you want to do with the machine.

Important

- **Media differ according to manual.**
- **The printed and electronic versions of a manual have the same contents.**
- **Adobe Acrobat Reader/Adobe Reader must be installed in order to view the manuals as PDF files.**
- **A Web browser must be installed in order to view the html manuals.**

About This Machine

Before using the machine, be sure to read the section of this manual entitled Safety Information.

This manual introduces the machine's various functions. It also explains the control panel, preparation procedures for using the machine, how to enter text, how to install the CD-ROMs provided, and how to replace paper, toner, staples, and other consumables.

Troubleshooting

Provides a guide for resolving common usage-related problems.

Copy and Document Server Reference

Explains Copier and Document Server functions and operations. Also refer to this manual for explanations on how to place originals.

Facsimile Reference

Explains Facsimile functions and operations.

Printer Reference

Explains Printer functions and operations.

Scanner Reference

Explains Scanner functions and operations.

Network and System Settings Reference

Explains how to connect the machine to a network, configure and operate the machine in a network environment, and use the software provided. Also explains how to change User Tools settings and how to register information in the Address Book.

Security Reference

This manual is for administrators of the machine. It explains security functions that you can use to prevent unauthorized use of the machine, data tampering, or information leakage. For enhanced security, we recommend that you first make the following settings:

- Install the Device Certificate.
- Enable SSL (Secure Sockets Layer) Encryption.

- Change the user name and password of the administrator using Web Image Monitor.

For details, see "Setting Up the Machine", Security Reference.

Be sure to read this manual when setting the enhanced security functions, or user and administrator authentication.

PostScript 3 Supplement

Explains how to set up and use PostScript 3.

VM Card Extended Feature Settings Device Reference

Explains how to set up the extended features settings with the machine.

VM Card Extended Feature Settings Web Reference

Explains how to set up the extended features settings using Web Image Monitor.

Other manuals

- UNIX Supplement
- Quick Reference Copy Guide
- Quick Reference Printer Guide
- Quick Reference Fax Guide
- Quick Reference Scanner Guide
- App2Me Start Guide

Note

- Manuals provided are specific to machine types.
- For "UNIX Supplement", please visit our Web site or consult an authorized dealer. This manual includes descriptions of functions and settings that might not be available on this machine.

Notice

Important

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

For good copy quality, the manufacturer recommends that you use genuine toner from the manufacturer.

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

How to Read This Manual

Symbols

This manual uses the following symbols:

Important

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

Note

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys on the machine's display or control panels.

Indicates instructions in book form.

Indicates instructions in sheet form.

Indicates instructions stored in a file on a provided CD-ROM.

Machine Types

This machine comes in several models which vary in copy/print speed.

Machine types for users of type 1 and 2

	Type 1	Type 2
Copy/print speed (Full Color)	30 sheets/minute (A4, $8^1/_2 \times 11$)	35 sheets/minute (A4, $8^1/_2 \times 11$)
Copy/print speed (B&W)	30 sheets/minute (A4, $8^1/_2 \times 11$)	35 sheets/minute (A4, $8^1/_2 \times 11$)

Machine types for users of type 3 and 4 *1

	Type 3	Type 4
Copy/print speed (Full Color)	45 sheets/minute (A4, $8^1/_2 \times 11$)	55 sheets/minute (A4, $8^1/_2 \times 11$)
Copy/print speed (B&W)	45 sheets/minute (A4, $8^1/_2 \times 11$)	55 sheets/minute (A4, $8^1/_2 \times 11$)

*1 Type 3 and 4 are equipped with the one-pass duplex scanning ADF as standard, or can be fitted with the optional ARDF or exposure glass cover.

Names of Major Items

Major items of this machine are referred to as follows in this manual:

- Auto Reverse Document Feeder → ARDF
- Auto Document Feeder → ADF (in this manual, "ADF" refers to the ARDF and the one-pass duplex scanning ADF)
- Large Capacity Tray → LCT
- Envelope Feeder EF3000 → Small size paper tray

Notes

Contents of this manual are subject to change without prior notice.

Colors on color keys or the color circle may differ slightly from the colors of actual copies.

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Depending on which country you are in, certain units may be optional. For details, please contact your local dealer.

1. When the Machine Does Not Operate As Wanted

This chapter describes basic troubleshooting procedures that are applicable to all functions of this machine.

Indicators

This section describes the indicators displayed when the machine requires the user to remove misfed paper, to add paper, or to perform other procedures.

Indicator	Status
: Paper Misfeed indicator	Appears when a paper misfeed occurs. See p.133 "Removing Jammed Paper".
: Original Misfeed indicator	Appears when an original misfeed occurs. See p.133 "Removing Jammed Paper".
: Load Paper indicator	Appears when paper runs out. See "Loading Paper", About This Machine.
: Add Toner indicator	Appears when toner runs out. See "Adding Toner", About This Machine.
: Add Staple indicator	Appears when staples run out. See "Adding Staples", About This Machine.
: Waste Toner Full indicator	Appears when the waste toner bottle is full. Contact your sales or service representative.
: Empty Hole Punch Receptacle indicator	Appears when the hole punch receptacle is full. See p.156 "Removing Punch Waste".
: Service Call indicator	Appears when the machine is malfunctioning or requires maintenance.
: Open Cover indicator	Appears when one or more covers of the machine are open.

Panel Tone

The following table describes the meaning of the various beep patterns that the machine produces to alert users about left originals and other machine conditions.

Beep pattern	Meaning	Causes
Single short beep	Panel/screen input accepted.	A control panel or screen key was pressed.
Short, then long beep	Panel/screen input rejected.	An invalid key was pressed on the control panel or screen, or the entered password was incorrect.
Single long beep	Job completed successfully.	A Copier/Document Server Features job has finished.
Two long beeps	Machine has warmed up.	After cooling or being switched on, the machine has fully warmed up and is ready for use.
Five long beeps	Soft alert	An auto reset was performed through the simplified display of the Copier/ Document Server function, the Facsimile function, or the Scanner function.
Five long beeps repeated four times.	Soft alert	An original has been left on the exposure glass or paper is empty.
Five short beeps repeated five times.	Strong alert	The machine requires user attention because paper has jammed, the toner needs replenishing, or other problems have occurred.

Note

- Users cannot mute the machine's beep alerts. When the machine beeps to alert users of a paper jam or toner request, if the machine's covers are opened and closed repeatedly within a short space of time, the beep alert might continue, even after normal status has resumed.
- You can select to enable or disable beep alerts. For details about Panel Key Sound, see "General Features", Network and System Settings Reference.

Checking Machine Status and Settings

You can check the machine's system status.

Maintenance Info

You can check the following items under [Maintenance Info]:

- [Remaining Toner]

  Displays the amount of remaining toner.

- [No Staples]

  Displays whether there are staples remaining or not.

- [Punch Receptacle Full]

  Displays whether the hole punch receptacle is full.

- [Paper Tray]

  Displays the paper type and size loaded into the paper tray.

- [Output Tray Full]

  Displays whether the output tray is overloaded.

- [Original Misfeed]

  Displays the state of and solutions for original misfeeds.

- [Paper Misfeed]

  Displays the state of and solutions for paper misfeeds.

- [Cover Open]

  Indicates whether one or more covers of the machine are open.

Data Storage

You can check the following items under [Data Storage]:

- [HDD Remaining Memory]

  Displays the amount of available hard disk memory.

- [HDD File(s)]

  Displays the total number of jobs stored on the hard disk.

- [Print Job(s)]

  Displays the number of jobs for "Hold Print Job(s):", "Stored Print Job(s):", "Locked Print Job(s):", and "Sample Print Job(s):".

- [Fax TX / RX File(s)]

  Displays the number of "Transmission Standby File(s):", "Memory Lock File(s):", "RX Print Standby File(s):", and other files stored on the hard disk.

- [Memory Erase Status]

Displays the state of the memory data.

Machine Address Info

You can check the following items under [Machine Address Info]:

- [Fax No.]

  Displays the machine's fax number.

- [H.323 Own Fax No.]

  Displays the machine's alias telephone number.

- [SIP User Name]

  Displays the machine's SIP user name.

- [Fax E-mail Account]

  Displays the machine's fax e-mail account.

- [Machine IPv4 Address]

  Displays the machine's IPv4 address.

- [Machine IPv6 Address]

  Displays the machine's IPv6 address.

Inquiry

You can check the following items under [Inquiry]:

- [Machine Repairs]

  Displays the machine number and contact number which are required for service.

- [Sales Representative]

  Displays the sales representative's telephone number.

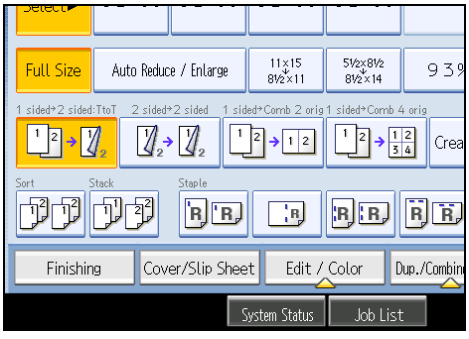
- [Supply Order]

  Displays the contact number for placing supply orders.

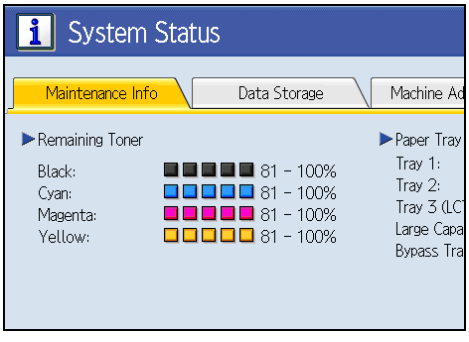
- [Supply Details]

  Displays the name of toner, staples, etc., used on the machine.

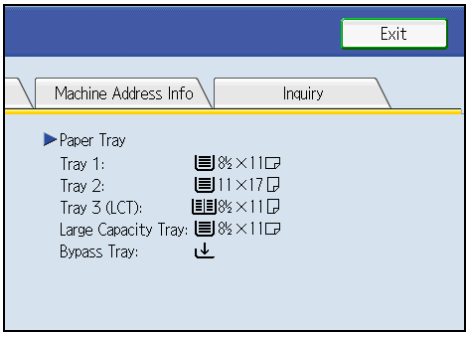
1. **On the control panel, press [System Status].**



2. **Press each tab, and then check the contents.**



3. **After checking the information, press [Exit].**



The previous screen returns.

Note

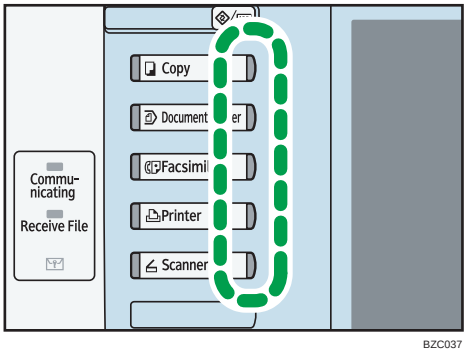
- [No Staples], [Punch Receptacle Full], [Output Tray Full], [Original Misfeed], [Paper Misfeed], and [Cover Open] appear on the [Maintenance Info] tab only when these errors occur.
- Depending on the security settings, the [Machine Address Info] tab might not be displayed.
- For details about how to locate and remove misfeeds, see "Removing Jammed Paper".

Reference

- p.133 "Removing Jammed Paper"

When an Indicator to the Right of a Function Key Is Lit

When an indicator to the right of a function key lights up, press the corresponding function key. Then, follow the instructions displayed on the control panel.



BZC037

If an error occurs in the function you are using, check the message that appears on the control panel, see "Messages Displayed" for the relevant function.

The following table explains problems that cause the indicator to light.

Problem	Causes	Solutions
Documents and reports do not print out.	The paper output tray is full.	Remove the prints from the tray.
Documents and reports do not print out.	There is no paper left.	Load paper. See "Loading Paper", About This Machine.
An error has occurred.	The function whose indicator is lit is defective.	Check the displayed message, and then take an appropriate action. See "Messages Displayed" of each chapter. You can use other functions normally.

Problem	Causes	Solutions
The machine is unable to connect to the network.	A network error has occurred.	• Check the displayed message, and then take an appropriate action. See "Messages Displayed" of each chapter. • Check that the machine is correctly connected to the network, and that the machine is correctly set. For details about how to connect the network, see "Interface Settings", Network and System Settings Reference. • Contact the network administrator. • If the indicator is still lit even after trying to solve the problem as described here, contact your service representative.

Reference

- p.33 "Messages Displayed When Using the Copy/Document Server Function"
- p.53 "Messages Displayed When Using the Facsimile Function"
- p.75 "Messages Displayed When Installing the Printer Driver"
- p.111 "Messages Displayed When Using the Scanner Function"

When You Have Problems Operating the Machine

This section describes common problems and messages. If other messages appear, follow the instructions displayed.

Problem	Causes	Solutions
Although the copier screen appears when the machine is turned on using the main power switch, it cannot be switched to another screen by pressing the [Printer] or [Scanner] key.	Functions other than the copier function are not yet ready.	Wait a little longer.
The machine has just been turned on and the User Tools screen is displayed, but the User Tools menu has items missing.	Functions other than the copier function are not yet ready. Time required varies by function. Functions appear in the User Tools menu when they become ready for use.	Wait a little longer.
The operation switch indicator continues blinking and does not turn off when pressed.	This occurs in the following cases: • The ADF is open. • The machine is communicating with external equipment. • The hard disk is active.	• Close the ADF. • Check if the machine is communicating with external equipment. • Wait a little longer.
The display is off.	The machine is in Energy Saver mode.	Press the [Energy Saver] key to cancel Energy Saver mode.
The display is off.	The operation switch is turned off.	Turn on the operation switch.
Nothing happens when the operation switch is turned on.	The main power switch is turned off.	Turn on the main power switch.
"Please wait." appears.	This message appears when you turn on the operation switch.	Wait for a while. If the machine does not get ready in two minutes, contact your service representative.

Problem	Causes	Solutions
"Please wait." appears.	This message appears when the machine is warming up.	• Wait for a while. If the machine does not get ready in two minutes, contact your service representative. • Wait until the message disappears. Do not turn off the main power switch while the message is showing.
"Please wait." appears.	This message appears when you change the toner cartridge.	Wait for a while. If the message does not disappear in two minutes, contact your service representative.
"Memory is full. Do you want to store scanned file?" appears.	The scanned originals exceed the number of sheets/pages that can be stored on the hard disk.	• Press [Yes] to store pages that have been scanned. Delete unnecessary files by pressing [Delete File]. • Press [No] if you are not storing pages that have been scanned. Delete unnecessary files by pressing [Delete File].
"Self checking..." appears.	The machine is performing image adjustment operations.	The machine may perform periodic maintenance during operations. The frequency and duration of maintenance depends on the humidity, temperature, and printing factors such as number of prints, paper size, and paper type. Wait for the machine to get ready.
The user code entry screen is displayed.	Users are restricted by User Code Authentication.	Enter the user code (up to eight digits), and then press [OK].
The Authentication screen appears.	Basic Authentication, Windows Authentication, LDAP Authentication or Integration Server Authentication is set.	Enter your login user name and user password. See "When the Authentication Screen is Displayed", About This Machine.
"Authentication has failed." appears.	The entered login user name or login password is not correct.	Ask the user administrator for the correct login user name and login password.

Problem	Causes	Solutions
"Authentication has failed." appears.	The machine cannot perform authentication.	Contact your administrator.
"You do not have the privileges to use this function." continues to be displayed even though you have entered a valid user name.	The logged in user name does not have permission for the selected function.	Contact your administrator about the permission for the required function.
An error message remains, even if misfed paper is removed.	• When a misfeed message appears, it remains until you open and close the cover as required. • Paper is still jammed in the tray.	Remove misfed paper, and then open and close the cover. See p.133 "Removing Jammed Paper".
Original images are printed on the reverse side of the paper.	You may have loaded the paper incorrectly.	Load paper correctly. Load paper into the paper tray or tray 3 (LCT) with the print side up. Load paper into the Large capacity tray (LCT), or bypass tray with the print side down.
Misfeeds occur frequently.	The tray's side or end fences may not be set properly.	• Remove misfed paper. See p.133 "Removing Jammed Paper". • Check that the side or end fences are set properly. Also, check that the side fences are locked. See "Changing the Paper Size", About This Machine.

Problem	Causes	Solutions
Misfeeds occur frequently.	Paper of undetectable size has been loaded.	• Remove misfed paper. See p.133 "Removing Jammed Paper". • If you load a paper size that is not selected automatically, you need to specify the paper size with the control panel. See "Changing to a Size That Is Not Automatically Detected", About This Machine.
Misfeeds occur frequently.	There is a foreign object on the finisher tray.	• Remove misfed paper. See p.133 "Removing Jammed Paper". • Do not place anything on the finisher tray. It may cause a paper jam.
Misfeeds occur frequently when printing on sheets loaded in internal tray 2.	Paper misfeeds can occur if the output tray is set to internal tray 2 and multiple A3 or 11 × 17 sheets begin to curl as they are output.	Raise the guide on internal tray 2, and then try printing the job again. For details about raising the guide, see "About the Guide on the Internal Tray 2 (Optional)", About This Machine.
Sheets are curled when they are output.	Certain types of A3 and 11 × 17 sheets can become curled when they are output.	Paper misfeeds can occur if the output tray is set to internal tray 2 and multiple A3 or 11 × 17 sheets begin to curl as they are output. If sheets are curled when they are output, raise the guide on internal tray 2. For details about raising the guide, see "About the Guide on the Internal Tray 2 (Optional)", About This Machine.
Cannot print in duplex mode.	"Apply Duplex" is set to [No] for "Paper Type".	Under "Paper Type" in [Tray Paper Settings], set "Apply Duplex" to [Yes]. For details, see "Tray Paper Settings", Network and System Settings Reference.

Problem	Causes	Solutions
Cannot print in duplex mode.	You have selected a paper type that cannot be used for duplex print.	In [Tray Paper Settings], select a paper type that can be used for duplex print. For details about the paper types that can be used, see "Duplex Copying", Copy and Document Server Reference.
"Following output tray is full. Remove paper." appears.	The output tray is full.	Remove paper from the output tray to resume printing. If paper is destined for the finisher shift tray, to prevent paper from falling off the tray press the [Clear/Stop] key to suspend printing, and then remove the paper. Press [Continue] on the display panel to resume printing.
"Turn main Power Switch off" appears.	The machine does not shut down normally when the main power switch is turned off, and then immediately turned on.	Turn off the machine. Wait for three seconds or more after shutting it down, and then turn it on again.
"Shutting down... Please wait. Main power will be turned off automatically." appears.	The shut down procedure has begun because the main power switch was turned off while the machine was in standby mode or performing an operation.	Follow the message that appears and wait until the machine has shut down. Do not turn on the main power switch while this message is displayed. If the main power switch has been turned on, follow the message that appears. For details about turning the main power switch on and off, see "Turning On/Off the Power", About This Machine.
An error has occurred when the Address Book is changed from the display panel or Web Image Monitor.	The Address Book cannot be changed while deleting the multiple stored documents.	Wait a while, and then retry the operation.

Problem	Causes	Solutions
Cannot use Web Image Monitor to print documents stored in Document Server.	When print volume limits are specified, users cannot print beyond their print volume limit. Print jobs selected by users who have reached their print volume limits will be canceled.	• For details about specifying print volume limits, contact your administrator. • To view the status of a print job, see [Print Job History]. In Web Image Monitor, [Print Job History] is under [Document Server] in [Job].
"Internal cooling fan is active." appears, and the fan is running. (Type 3 and 4 models only)	Large print runs will cause the machine's interior to heat up, triggering the cooling fan. The fan will automatically begin running when the print run reaches approximately 3,000 sheets of A4, or 1,000 sheets of A3.	The fan will run for about 30 minutes. The fan will emit noise, but this is normal and the machine will be operable while the fan is running.

Note

- If you cannot make copies as you want because of paper type, paper size, or paper capacity problems, use the recommended paper. See "Recommended Paper Sizes and Types", About This Machine.
- Using curled paper often causes misfeeds, soiled paper edges, or slipped positions while performing staple or stack printing. When using curled paper, take the stiffness out of the paper with your hands to straighten out the curl, or load the paper up side down. Also, lay paper on a flat surface to prevent paper from curling, and do not lean it against the wall.

Reference

- p.133 "Removing Jammed Paper"

When a Job Is Not Performed

If you are not able to carry out your job, it may be that the machine is being used by another function.

Wait until the current job is completed before trying again. In certain cases, you can carry out another job using a different function while the current job is being performed. Performing multiple functions simultaneously like this is called "Multi-accessing".

Combination Chart

Function Compatibility

The chart shows Function Compatibility when print priority is set to [Interleave]. For details about Print Priority, see "General Features", Network and System Settings Reference.

△: Simultaneous operations are possible.

●: Operation is enabled when the relevant function key is pressed and remote switching (of the scanner/external extension) is done.

○: Operation is enabled when the [Interrupt] key is pressed to interrupt the preceding operation.

→: Operation is performed automatically once the preceding operation ends.

×: The operation must be started once the preceding operation ends. (Simultaneous operations are not possible.)

Mode before you select \ Mode after you select		Copy			Interrupt Copying		Facsimile						Printer			Scanner		TWAIN	Document Server			DeskTop Binder		Web Document Server
								Transmission			Reception			Print											
		Operations for Copying	Stapling	Sort	Operations for Copying	Copying	Transmission Operation/Manual Reception Operation	Scanning an Original for Memory Transmission	Memory Transmission	Immediate Transmission	Memory Reception	Printing Received Data	Data Reception	Printing	Stapling	Operations for Scanning	Scanning	Scanning	Operations for Document Server	Scanning a Document to Store in Document Server	Printing from Document Server	Printing from Document Server	Sending a Facsimile from Document Server	Printing
Copy	Operations for Copying	×	×	×	○	○	●	●	△	●	△	△	△	△	△	●	●	●	●	●	●	△	△	△
	Stapling	△*1	→*1	→*1	○	○*5	●	●*2	△	●*2	△	△	△	△	→	●	●*2	●*2	●	●*2	△*4	△	△*4	△*4
	Sort	△*1	→*1	→*1	○	○	●	●*2	△	●*2	△	△	△	△	△	●	●*2	●*2	●	●*2	△	△	△	△
Interrupt Copying	Operations for Copying	○	○	○	×	×	×	×	△	×	△	△	△	△	△	×	×	×	×	×	×	△	△	△
	Copying	○	○	○	×	×	×	×	△	×	△	→	△	→	→	×	×	×	×	×	×	→	△	→
Facsimile	Transmission Operation/ Manual Reception Operation	●	●	●	○	○	×	×	△	×	△	△	△	△	△	●	●	●	●	●	●	△	△	△
	Transmission: Scanning an Original for Memory Transmission	×	×	×	×	×	×	×	△	×	△	△	△	△	△	×	×	×	×	×	×	△	△	△
	Transmission: Memory Transmission	△	△	△	△	△	△	△	△*3	△*3	△*3	△*7	△	△	△	△	△	△	△	△	△	△	→	△
	Transmission: Immediate Transmission	×	×	×	×	×	×	×	△*3	×	△*3	△	△	△	△	●	×	×	×	×	×	△	→	△
	Reception: Memory Reception	△	△	△	△	△	△	△	△*3	△*3	△*3	△*7	△	△	△	△	△	△	△	△	△	△	△	△
	Reception: Printing Received Data	△	△	△	△	△	△	△	△*7	△	△*7	×	△	△	△	△	△	△	△	△	△	△	△	△
Printer	Data Reception	△	△	△	△	△	△	△	△	△	△	△	→	→	→	△	△	△	△	△	△	△	△	△
	Print: Printing	△	△	△	○	○	△	△	△	△	△	△	△	→	→	△	△	△	△	△	△	△	△	△
	Print: Stapling	△	→	△	○	○*5	△	△	△	△	△	△	△	→	→	△	△	△	△	△	△*4	△*4	△	△*4
Scanner	Operations for Scanning	●	●	●	○	○	●	●	●	●	△	△	△	△	△	×	×	●	●	●	●	△	△	△
	Scanning	●	●*2	●*2	○*2	○*2	●	●*2	△	●*2	△	△	△	△	△	×	×	×	×	●	●	△	△	△
TWAIN	Scanning	×	×	×	×	×	×	×	×	×	△	△	△	△	△	×	×	×	×	×	×	△	△	△
Document Server	Operations for Document Server	●	●	●	○	○	●	●	△	●	△	△	△	△	△	●	●	●	×	×	×	△	△	△
	Scanning a Document to Store in Document Server	●	×	×	○	○	●	×	△	×	△	△	△	△	△	●	×	×	×	×	×	△	△	△
	Printing from Document Server	●	△	△	○	○	△*4	△	△	△	△	△	△	△	△	△	△	△	△*6	△*6	△*6	△	△	△
DeskTop Binder	Printing from Document Server	△	△	△	△	△	△*4	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
	Sending a Facsimile from Document Server	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	→	△
Web Document Server	Printing	△	△	△	△	△	△*4	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△

BHL002S

*1 Simultaneous operations are only possible after the preceding job documents are all scanned and [New Job] appears.

*2 You can scan a document after the preceding job documents are all scanned.

*3 Operation is possible when extra lines are added.

*4 During stapling, printing automatically starts after the current job.

*5 Stapling is not available.

*6 Simultaneous operation becomes possible after you press [New Job].

*7 During parallel reception, any subsequent job is suspended until the reception is completed.

Note

- Stapling cannot be used at the same time for multiple functions.

- If the machine is capable of executing multiple functions simultaneously, specify which function should have priority in "Print Priority". The default is "Display Mode". For details about Print Priority, see "General Features", Network and System Settings Reference.
- When Finisher is installed, you can specify the output tray where documents are delivered. For details about Output Tray Settings, see "General Features", Network and System Settings Reference.
- While printing is in progress, scanning a document using another function may take longer than usual.
- The following functions might not be given priority if you attempt to use them when [Print Priority] in [System Settings] is set to [Printer] and files stored in Document Server using the printer function are being printed. To give priority to these functions, set [Print Priority] to [Interleave].
    - Mail to Print
    - Printing from the printer driver
    - Direct printing from a removable memory device

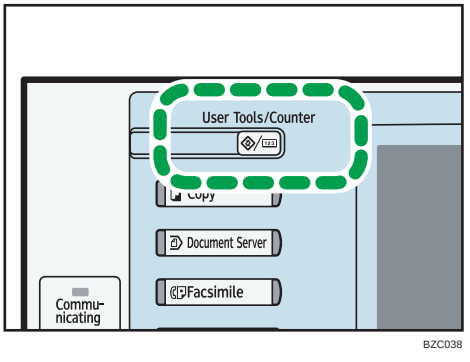
When the Color Registration Shifts

This section describes how to adjust the color registration and gradation by specifying the settings in [Maintenance].

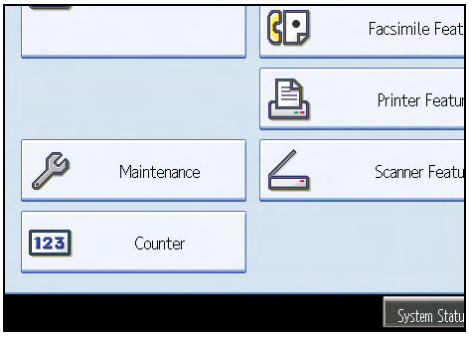
Adjusting the Color Registration

When the machine is moved or when printing repeatedly for some time, registration shifting might occur. By performing color registration adjustment, you can maintain optimum print results.

1. **Press the [User Tools / Counter] key.**



2. **Press [Maintenance].**



3. **Press [Color Registration].**
4. **Press [OK].**

   Auto color registration takes about 50 seconds. When it is completed, the display returns to the color registration menu.
5. **When you have made all the settings, press the [User Tools / Counter] key.**

   The initial display appears.

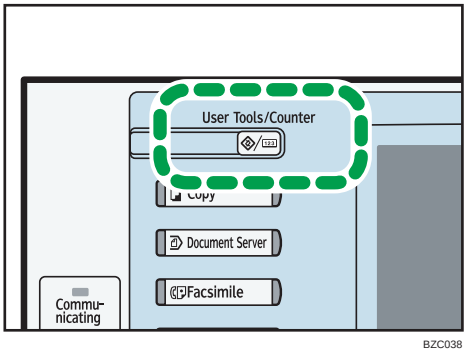
When the Printed Color Differs From the Original Color

If a certain color is strong or the color of the copy differs from the original, adjust the yellow, magenta, cyan and black balance.

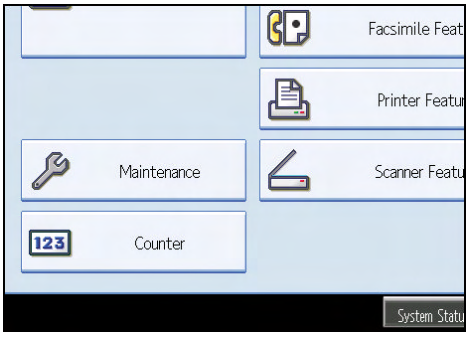
Auto Color Calibration

This section describes Auto Color Calibration.

1. **Press the [User Tools / Counter] key.**

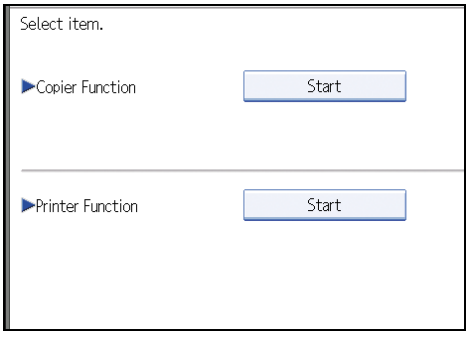


2. **Press [Maintenance].**



3. **Press [Auto Color Calibration].**
4. **Press [Start].**

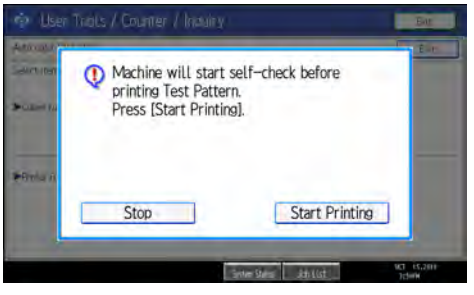
   When performing auto color calibration from the copy function, press [Start] under Copier Function.
   When performing auto color calibration from the printer function, press [Start] under Printer Function.



5. **Press [Start Printing].**

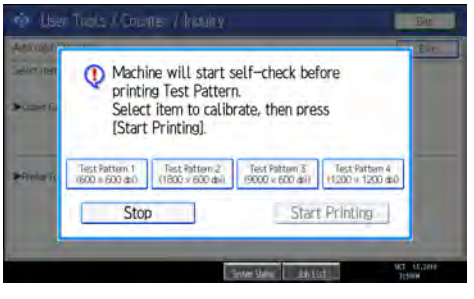
   A test pattern is printed.

   - Copier Function



   - Printer Function

     When performing auto color calibration from the printer function, select test patterns from [Test Pattern 1 (600 × 600 dpi)], [Test Pattern 2 (1800 × 600 dpi)], [Test Pattern 3 (9000 × 600 dpi)], or [Test Pattern 4 (1200 × 1200 dpi)], and then press [Start Printing].



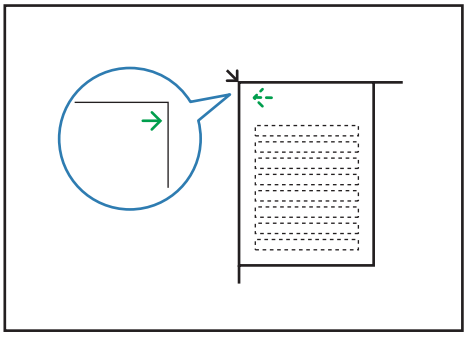
6. **Place the test pattern on the exposure glass, and then press [Start Scanning].**

   The image will be corrected after "Scanning...Please wait." disappears.

Note

- The test pattern will not be read if it is set into the ADF.
- The test pattern will be printed on an A4, $8^1/_2$ × 11 size page. If A4 is not available, A3 or B4 JIS (Japanese Industrial Standard) will be used. Make sure to check the paper set into the paper tray.

- Set the test pattern in the following way:



BAZ030S

- Make sure to set the test pattern on the exposure glass, and then two or three white sheets, same size as the test pattern, above the test pattern.

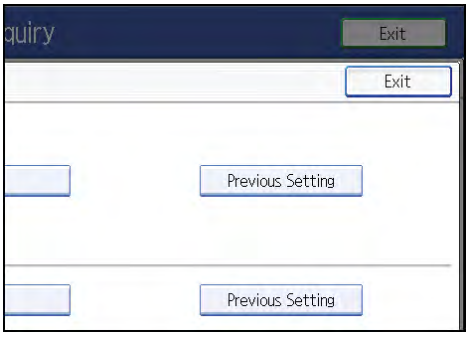
Returning to the Previous Setting

This section describes how to return to the previous setting of Auto Color Calibration.

"Previous Setting" means to return to the previous status before any changes.

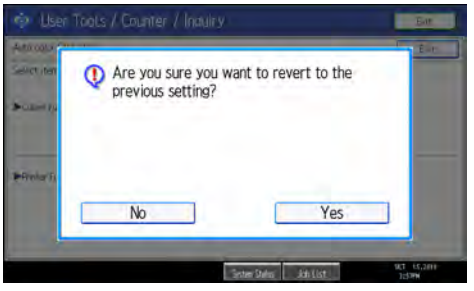
1. **Press [Previous Setting].**

   When returning the auto color calibration of the copy function, press [Previous Setting] of the Copier Function. If returning the auto color calibration of the printer function, press [Previous Setting] of the Printer Function.



2. **Press [Yes].**

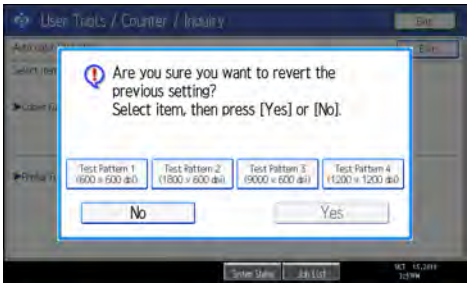
   - Copier Function



The settings return to the previous status.

- Printer Function

  When returning the auto color calibration from the printer function, select test patterns from [Test Pattern 1 (600 × 600 dpi)], [Test Pattern 2 (1800 × 600 dpi)], [Test Pattern 3 (9000 × 600 dpi)], or [Test Pattern 4 (1200 × 1200 dpi)], and then press [Yes].



The settings return to the previous status.

2. Troubleshooting When Using the Copy/Document Server Function

This chapter describes likely causes of and possible solutions for Copier and Document Server function problems.

Messages Displayed When Using the Copy/Document Server Function

This section describes the machine's main messages. If other messages appear, follow their instructions.

Important

- **If you cannot make copies as you want because of the paper type, paper size or paper capacity problems, use recommended paper. See "Recommended Paper Sizes and Types", About This Machine.**
- **For messages that are not listed here, see "When You Have Problems Operating the Machine".**

Message	Causes	Solutions
"Authentication has failed."	The entered login user name or login password is not correct.	Contact the user administrator.
"Authentication has failed."	The machine cannot perform authentication.	Contact your administrator.
"Cannot detect original size."	The original placed on the exposure glass is a non-standard size.	• Place the original on the exposure glass again. Face the original down. • If the machine cannot detect the size of the original, specify the size manually - do not use Auto Paper Select mode or the Auto Reduce/Enlarge function. See "Sizes Detectable with Auto Paper Select", Copy and Document Server Reference.

Message	Causes	Solutions
"Cannot detect original size."	Original is not placed, or the original placed on the exposure glass is a non-standard size.	• Place the original correctly. • Specify the paper size. • When placing an original directly on the exposure glass, the lifting/lowering action of the ADF triggers the automatic original size detection process. Lift the ADF by 30 degrees or more.
"Cannot punch this paper size."	The Punch function cannot be used with paper size selected.	Select a proper paper size. See "Specifications for Punch Unit (Finisher SR3030, Booklet Finisher SR3020) (Optional)", or "Specifications for Punch Unit (Booklet Finisher SR3000) (Optional)", About This Machine.
"Cannot staple paper of this size."	The Staple function cannot be used with paper size selected.	Select a proper paper size. See "Specifications for Finisher SR790 (1000-sheet) (Optional)", "Specifications for Finisher SR3030 (3000-sheet) (Optional)", "Specifications for Finisher SR3050 (500-sheet) (Optional)", "Specifications for Booklet Finisher SR3020 (2000-sheet-Booklet) (Optional)", or "Specifications for Booklet Finisher SR3000 (1000-sheet-Booklet) (Optional)", About This Machine.
"Check original orientation."	Original is not placed in a proper orientation.	Change the orientation of the original.
"Check paper size."	An irregular paper size is set.	If you press the [Start] key, the copy will start using the selected paper.
"Duplex is not available with this paper size."	A paper size not available in Duplex mode has been selected.	Select a proper paper size. See "Duplex Copying", Copy and Document Server Reference.

Message	Causes	Solutions
"Exceeded max. number of pages per file. Do you want to store the scanned pages as 1 file?"	The number of scanned pages exceeds the capacity per file of the Document Server.	Press [Store File] to store scanned pages as a file. Scanned data is stored as a file in the Document Server. If you do not want to store scanned pages, press [No]. Scanned data is deleted.
"Exceeded the maximum number of sheets that can be used. Copying will be stopped."	The number of pages the user is permitted to copy has been exceeded.	Contact your administrator.
"File being stored exceeded max. number of pages per file. Copying will be stopped."	The scanned originals have too many pages to store as one document.	Press [Exit], and then store again with an appropriate number of pages.
"Magazine or Booklet mode is not available due to mixed image mode."	You selected the "Magazine" or "Booklet" function for originals scanned using different functions, such as copy and printer.	Make sure originals for the "Magazine" or "Booklet" function are scanned using the same function.
"Magazine or Booklet mode is not available due to mixed color modes."	You selected the "Magazine" or "Booklet" function for originals stored using copier function with different color mode, such as full color mode and black & white mode.	Make sure originals for the "Magazine" or "Booklet" function are stored using the same color mode.
"Magazine or Booklet mode is not available due to mixed color modes."	You selected the "Magazine" or "Booklet" function for originals stored using printer function with different color mode, such as full color mode and black & white mode.	Make sure originals for the "Magazine" or "Booklet" function are stored using the same color mode. However, you can select the "Magazine" or "Booklet" function for a single original stored using printer function with different color mode.

Message	Causes	Solutions
"Maximum number of sets is n." (A figure is placed at n.)	The number of copies exceeds the maximum copy quantity.	You can change the maximum copy quantity from [Max. Copy Quantity] in [General Features] under [Copier / Document Server Features]. For details about Max. Copy Quantity, see "General Features", Copy and Document Server Reference.
"Original is being scanned by another function. Switch to the following function, then press the Stop key to cancel scanning or press the Start key to continue."	A function of the machine other than the Copier function is being used such as the Document Server function.	Cancel the job in progress. For example, press [Exit], and then press the [Document Server] key. Next, press the [Clear/Stop] key. When the message "The Clear / Stop key was pressed. Are you sure you want to stop scanning?" appears, press [Stop].
"Please wait."	The destination list is being updated from the network using Web Image Monitor.	Wait until the message disappears. Do not switch off the power while this message is displayed. Depending on the number of destinations to be updated, there may be some delay before you can resume operation. Operations are not possible while this message is displayed.
"Rotate Sort is not available with this paper size."	A size of paper for which Rotate Sort is not available is selected.	Select a proper paper size. See "Sort", Copy and Document Server Reference.
"Stapling capacity exceeded."	The number of sheets per set is over the staple capacity.	Check the stapler capacity. See "Specifications for Finisher SR790 (1000-sheet) (Optional)", "Specifications for Finisher SR3030 (3000-sheet) (Optional)", "Specifications for Finisher SR3050 (500-sheet) (Optional)", "Specifications for Booklet Finisher SR3020 (2000-sheet-Booklet) (Optional)", or "Specifications for Booklet Finisher SR3000 (1000-sheet-Booklet) (Optional)", About This Machine.

Message	Causes	Solutions
"The selected file(s) contained file(s) without access privileges. Only file(s) with access privileges will be deleted."	You have tried to delete files without the authority to do so.	Files can be deleted by the person who created the file. To delete a file which you are not authorized to delete, contact the person who created the file.
"You do not have the privileges to use this function."	The logged in user name does not have permission for the selected function.	Contact your administrator about permission for the required function.

Reference

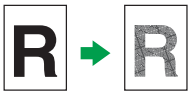
- p.19 "When You Have Problems Operating the Machine"

When You Cannot Make Clear Copies

This section describes likely causes of and possible solutions for unclear copies.

Problem	Causes	Solutions
Copies appear dirty.	Image density is too high.	Adjust the image density settings. See "Adjusting Copy Image Density", Copy and Document Server Reference.
Copies appear dirty.	Auto Image Density is not selected.	On the control panel, select [Auto Density].
The reverse side of an original image is copied.	Image density is too high.	Adjust the image density settings. See "Adjusting Copy Image Density", Copy and Document Server Reference.
The reverse side of an original image is copied.	Auto Image Density is not selected.	On the control panel, select [Auto Density].
The reverse side of an original image is copied.	The original is thin.	On the control panel, select [Auto Density], or adjust the image density settings. See "Adjusting Copy Image Density", Copy and Document Server Reference.
A shadow appears on copies if you use pasted originals.	Image density is too high.	• Adjust the image density settings. See "Adjusting Copy Image Density", Copy and Document Server Reference. • Change the orientation of the original. • Put mending tape on the pasted part.
The same copy area is dirty whenever making copies.	The exposure glass, scanning glass, ADF is dirty.	Clean them. See "Maintaining Your Machine", About This Machine.

Problem	Causes	Solutions
The same copy area is dirty whenever making copies.	• The original that has already been printed is scanned. • Original Type is set to [Text / Photo], and an original with text and photographs that can hardly be distinguished from each other is loaded.	On the control panel, press [Generation Copy], and then begin copying.
Copies are too light.	Image density is too light.	Adjust the image density settings. See "Adjusting Copy Image Density", Copy and Document Server Reference.
Copies are too light.	A light copy may result when you use damp or rough grain paper.	• Use recommended paper. For details about recommended paper, see "Recommended Paper Sizes and Types", About This Machine. • Use paper that has been stored in the recommended temperature and humidity conditions. For details about the proper way to store paper, see "Paper Storage", About This Machine.
Parts of images are not copied.	The original is not set correctly.	Set originals correctly. See "Placing Originals", Copy and Document Server Reference.
Parts of images are not copied.	The correct paper size is not selected.	Select the proper paper size.
Parts of images are not copied.	Even if you place originals on the exposure glass, or ADF correctly, margin of a few millimeters on all four sides of the original might not be copied.	Use "Create Margin" function to reduce the image of its original size. For details about missing image area, see "Create Margin", Copy and Document Server Reference.

Problem	Causes	Solutions
Images appear only partially colored.	The paper is damp.	Use paper that has been stored in the recommended temperature and humidity conditions. For details about the proper way to store it, see "Paper Storage", About This Machine.
Colored lines appear.	The exposure glass, scanning glass, or ADF is dirty.	Clean them. See "Maintaining Your Machine", About This Machine.
Black lines appear.	The exposure glass, scanning glass, or ADF is dirty.	Clean them. See "Maintaining Your Machine", About This Machine.
White lines appear.	The exposure glass, scanning glass, or ADF is dirty.	Clean them. See "Maintaining Your Machine", About This Machine.
White lines appear.	The dustproof glass is dirty.	Clean the dustproof glass. See "Cleaning the Dustproof Glass", About This Machine.
Copies are blank.	The original is not set correctly.	When using the exposure glass, face the originals down. When using the ADF, face them up.
A moire pattern is produced on copies. 	The original has a dot pattern image or many lines.	Place the original on the exposure glass at a slight angle.
Black spots appear on the copy of a photographic print.	Because of high humidity, the photographic print has stuck to the exposure glass.	Place the print on the exposure glass in either of the following ways: • Place an OHP transparency on the exposure glass, and then place the print on the OHP transparency. • Place the print on the exposure glass, and then place two or three sheets of white paper on it. Leave the ADF open when copying.
White stripes appear on the OHP.	Fragments of paper are stuck to the OHP.	Use a dry cloth to wipe any paper fragments off the back of the OHP.

Problem	Causes	Solutions
The image on the back side of duplex copies has mottled blank patches or is smudged.	Missing patches and smudges are caused by moisture leaking from the paper.	• Do not install the machine in areas that are susceptible to low temperatures. • Use paper that has been stored where temperature and humidity conditions meet the limitations we recommend. For details about the paper storage conditions we recommend, see "Paper Storage", About This Machine. • Install the Optional anti-humidity heater. For details about the anti-humidity heater, contact your service representative.

When You Cannot Make Copies As Wanted

This section describes likely causes of and possible solutions for unsatisfactory copy results.

Basic

Problem	Causes	Solutions
Misfeeds occur frequently.	The number of sheets loaded exceeds the capacity of the machine.	Load paper only as high as the upper limit markings on the side fences of the paper tray, or the markings on the paper guides of the bypass tray. Fan the sheets thoroughly before loading them.
Misfeeds occur frequently.	The paper tray's side fences are set too tightly.	Push the side fences lightly, and then reset it.
Misfeeds occur frequently.	The paper is damp.	Use paper that has been stored in the recommended temperature and humidity conditions. See "Paper Storage", About This Machine.
Misfeeds occur frequently.	The paper is too thick or too thin.	Use recommended paper. See "Recommended Paper Sizes and Types", About This Machine.
Misfeeds occur frequently.	The copy paper is wrinkled or has been folded/creased.	• Use recommended paper. For details about recommended paper, see "Recommended Paper Sizes and Types", About This Machine. • Use paper that has been stored in the recommended temperature and humidity conditions. For details about the proper way to store paper, see "Paper Storage", About This Machine.
Misfeeds occur frequently.	Printed paper is being used.	Do not load sheets that have already been copied or printed onto by another machine.

Problem	Causes	Solutions
Misfeeds occur frequently.	Sheets are sticking together.	Fan the sheets thoroughly before loading them. Alternatively, feed the sheets into the machine one at a time.
Copy paper becomes creased.	The paper is damp.	Use paper that has been stored in the recommended temperature and humidity conditions. See "Paper Storage", About This Machine.
Copy paper becomes creased.	The paper is too thin.	Use recommended paper. See "Recommended Paper Sizes and Types", About This Machine.
Copies are not stapled.	There are jammed staples in the stapler.	Remove jammed staples. See p.150 "Removing Jammed Staples".
Copies are not stapled.	Copy paper is curled.	Turn the copy paper over in the tray.
Copies are stapled as separate batches.	The number of copies is too great for the stapler to staple as a single batch.	Check the stapler capacity. See "Specifications for Finisher SR790 (1000-sheet) (Optional)", "Specifications for Finisher SR3030 (3000-sheet) (Optional)", "Specifications for Finisher SR3050 (500-sheet) (Optional)", "Specifications for Booklet Finisher SR3020 (2000-sheet-Booklet) (Optional)", or "Specifications for Booklet Finisher SR3000 (1000-sheet-Booklet) (Optional)", About This Machine.
Staples are wrongly positioned.	Originals are not set correctly.	Check the correct position to place the originals. For details about how to place the originals with stapling, see "Staple", Copy and Document Server Reference.
Paper does not output during printing with stapling.	When you stop printing while using the staple function, paper not stapled during printing may be left in the staple unit.	Press the [Clear Modes] key, and then cancel copy settings, including stapling.

Problem	Causes	Solutions
Saddle-stitched documents come apart and do not stack properly.	Certain types of paper are resistant to folding and open out after being folded and stitched.	Use recommended paper. See "Recommended Paper Sizes and Types", About This Machine.
You cannot combine several functions.	Selected functions cannot be used together.	Check the combination of functions, and then make the settings again. See "Function Compatibility", Copy and Document Server Reference.
When sorting, the pages are divided into two blocks.	The memory became full in the middle of sorting and the pages were delivered in two blocks.	In [Copier / Document Server Features], under [Input / Output], set [Memory Full Auto Scan Restart] to [Off].
The copy is grayed out or a text pattern appears in the background of the copy.	You have copied a copy-guarded document protected from unauthorized copying.	Check the document. For details about how to prevent unauthorized copying of the document, see "Preventing an Unauthorized Copy", About This Machine.
Images are skewed.	The side fences in the paper feed tray are not set properly.	Make sure the side fences are set properly. For details about how to set the side fences, see "Changing the Paper Size", About This Machine.
Images are skewed.	The paper is feeding in at a slant.	Load the paper correctly. See "Loading Paper", About This Machine.
Edges of sheets are creased.	The paper is damp.	Use paper that has been stored in the recommended temperature and humidity conditions. See "Paper Storage", About This Machine.
Edges of sheets are creased.	You are using non-recommended paper.	Use recommended paper. See "Recommended Paper Sizes and Types", About This Machine.
Sheets are feeding in together, resulting in jams.	Sheets are sticking together.	Fan the pages to loosen the paper before loading it. Alternatively, feed the paper one sheet at a time.

Problem	Causes	Solutions
"Add Staples" message appears and the Staple function cannot be used.	The staple cartridge is not set properly.	Make sure the staple cartridge is set properly.
Cannot print from the small size paper tray.	When [Small Size Paper Tray] is displayed in [System Settings], [Off] is specified for the tray in which the small size paper is set.	When [Small Size Paper Tray] is displayed in [System Settings], specify [On] for the tray in which the small size paper is set.
Cannot select the small size paper.	When [Small Size Paper Tray] is displayed in [System Settings], [Off] is specified for the tray in which the small size paper is set.	When [Small Size Paper Tray] is displayed in [System Settings], specify [On] for the tray in which the small size paper is set.

Edit

Problem	Causes	Solutions
In "Double Copies" mode, parts of the original image are not copied.	Combination of original and copy paper is not correct.	Specify the paper size again. For example, select A3 for A4 originals. See "Double Copies", Copy and Document Server Reference.
In "Erase Border", "Erase Center", or "Erase Center / Border" mode, parts of the original image are not copied.	You have entered a wide erased margin.	Make the margin width narrower. You can adjust it between 2 - 99 mm (0.1 - 3.9 inches).
In "Erase Border", "Erase Center", or "Erase Center / Border" mode, parts of the original image are not copied.	Originals are not scanned correctly.	Place the originals correctly.
In "Margin Adjustment" mode, parts of the original image are not copied.	• You set a wide erased margin. • There is a lack of margin space on the opposite side of the binding position.	Set a narrower margin with User Tools. You can set the width between 0 - 30 mm (0 - 1.2 inches).

Problem	Causes	Solutions
In "Image Repeat" mode, the original image is not copied repeatedly.	You selected copy paper the same size as the originals, or you did not select the proper reproduction ratio.	Select copy paper larger than the originals or select the proper reproduction ratio.

Stamp

Problem	Causes	Solutions
The stamp position is wrong.	The paper orientation is wrong.	Check the paper orientation and stamp position.
The stamp is not printed on the back side of sheets when duplex copying.	The back side stamp position is incorrect for the paper size.	Reset the back side stamp position. For details about Duplex Back Page Stamping Position, see "Copier and Document Server Features", Copy and Document Server Reference.

Combine

Problem	Causes	Solutions
Copies made with the "Booklet" or "Magazine" function cannot be folded into a book correctly.	You have selected a setting ("Open to Left" or "Open to Right") that does not match the orientation of originals.	In [Copier / Document Server Features], under [Edit], set [Orientation: Booklet, Magazine] properly.
When using "Combine", parts of the image are not copied.	You specified a reproduction ratio that does not match the sizes of the originals and copy paper.	When you specify a reproduction ratio using Manual Paper Select mode, make sure the ratio matches the originals and the copy paper. Select the correct reproduction ratio before using Combine mode. See "One-Sided Combine", "Two-Sided Combine", or "Auto Reduce / Enlarge", Copy and Document Server Reference.
Copies are not in correct order.	You placed the originals in the incorrect order.	When inserting a stack of originals into the ADF, the last page should be on the bottom. If you place an original on the exposure glass, start with the first page to be copied.

Duplex

Problem	Causes	Solutions
Cannot print in duplex mode.	You have loaded thick paper heavier than 169 g/m^2 (90 lb.).	Change the paper.
Cannot print in duplex mode.	"Apply Duplex" is set to [No] for "Paper Type".	In [Tray Paper Settings], under "Paper Type", set "Apply Duplex" to [Yes]. For details, see "Tray Paper Settings", Network and System Settings Reference.
Cannot print in duplex mode.	You have selected a paper type that cannot be used for duplex copying.	In [Tray Paper Settings], select a paper type that can be used for duplex print. For details about the paper types that can be used, see "Duplex Copying", Copy and Document Server Reference.
Copies are not in correct order.	You placed the originals in the incorrect order.	When inserting a stack of originals into the ADF, the last page should be on the bottom. If you place an original on the exposure glass, start with the first page to be copied.
When using "Duplex", copy is made top to bottom even though [Top to Top] is selected.	You placed the originals in the wrong orientation.	Place the original in the correct orientation. See "Duplex Copying", Copy and Document Server Reference.

Document Server

Problem	Causes	Solutions
Cannot access file.	The file is password protected.	Contact your administrator. To delete the files stored in the Document Server, select [Delete All Files in Document Server] under [Administrator Tools] in [System Settings]. As this will permanently delete every single file, make sure the Document Server does not contain any files you want to keep. For details about Delete All Files in Document Server, see "Administrator Tools", Network and System Settings Reference.
You cannot find out what is stored in a file.	You may not be able to ascertain the contents of a file simply from the file name.	You can switch the Select File screen between [List] and [Thumbnails] display to check the contents of the file. Check information other than the file name. • List display The file name, data of storage, and user name are shown. • Thumbnails display An image of the stored file appears. You can enlarge the image by pressing [Preview]. See "Checking the Details of a Stored Document", Copy and Document Server Reference.

Problem	Causes	Solutions
Memory frequently becomes full.	The Document Server memory is full.	Delete unnecessary files. On the file selection display, select unnecessary files, and then press [Delete File]. If this does not increase available memory, do the following. • Switch to the scanner screen, and then delete unnecessary files stored under the scanner function. • Switch to the printer screen, and then delete unnecessary files stored under Sample Print, Locked Print, Hold Print, or Stored Print.
"Cannot display preview of this page." appears, and you cannot check the thumbnail image.	The image data may have been corrupted.	Press [Exit] to display the preview screen without a thumbnail. If the selected document contains several pages, press [Switch] on the "Display Page" area to change the page, and then a preview of the next page will appear.

When Memory Is Full

This section describes likely causes of and possible solutions for problems related to full memory.

Message	Causes	Solutions
"Memory is full. nn originals have been scanned. Press [Print] to copy scanned originals. Do not remove remaining originals." "n" in the message represents a changeable number.	The scanned originals exceed the number of pages that can be stored in memory.	Press [Print] to copy scanned originals and cancel the scanning data. Press [Stop] to cancel the scanning data and not copy.
"Press [Continue] to scan and copy remaining originals."	The machine checked if the remaining originals should be copied, after the scanned originals were printed.	Remove all copies, and then press [Continue] to continue copying. Press [Stop] to stop copying.

Note

- If you set [Memory Full Auto Scan Restart] in [Input / Output] of User Tools to [On], even if the memory becomes full, the memory overflow message will not be displayed. The machine will make copies of the scanned originals first, and then automatically proceed to scan and to copy the remaining originals. In this case, the resulting sorted pages will not be sequential. For details about Memory Full Auto Scan Restart, see "Input / Output ", Copy and Document Server Reference.

3. Troubleshooting When Using the Facsimile Function

This chapter describes likely causes of and possible solutions for facsimile function problems.

Adjusting the Volume

This section describes how to adjust the volume.

You can change the volume of the following sounds that the machine makes.

On Hook Mode

Heard when [On Hook] is pressed.

At Transmission

Heard when "Immediate Transmission" is performed.

At Reception

Heard when the machine receives a document.

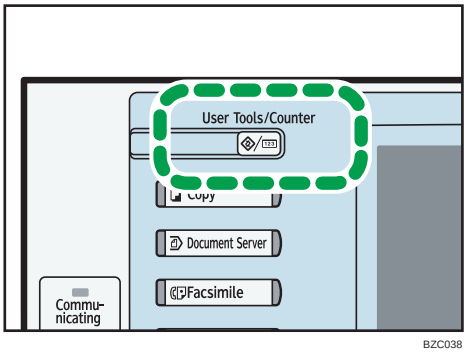
At Dialing

Heard after pressing the [Start] key, until the line connects to the destination.

At Printing

Heard when a received document is printed.

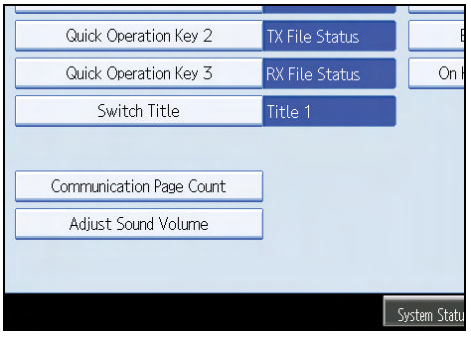
1. **Press the [User Tools / Counter] key.**



BZC038

2. **Press [Facsimile Features].**
3. **Check that [General Settings] screen appears.**

4. **Press [Adjust Sound Volume].**



5. **Press [Lower] or [Louder] to adjust the volume, and then press [OK].**

You can hear the actual volume by pressing [Check].

If you press [Cancel], the volume setting is canceled. The screen returns to that of step 4.

You can set the volume level to between 0 and 7.

6. **Press the [User Tools / Counter] key.**

The standby screen appears.

Note

- You can adjust the On Hook volume when you press [On Hook]. See "On Hook Dial", Facsimile Reference.

Messages Displayed When Using the Facsimile Function

This section describes the machine's main messages. If other messages appear, follow their instructions.

Message	Causes	Solutions
"Authentication has failed."	The entered login user name or login password is not correct.	Contact the user administrator.
"Authentication has failed."	The machine cannot perform authentication.	Contact your administrator.
"Cannot detect original size. Select scan size."	The machine failed to detect the size of the original.	On the control panel, under [Scan Size], specify the scan area in [Scan Settings], and then resend the document.
"Cannot find the specified path. Please check the settings."	The name of the computer or folder entered as the destination is wrong.	Check whether the computer name and the folder name for the destination are correct.
"Check whether there are any network problems." [13-10]	The alias telephone number you entered is already registered on the gatekeeper by another device.	• In [Facsimile Features], under [Initial Settings], select [H.323 Settings], and then check that the alias telephone number is correctly programmed. You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • Contact the network administrator.
"Check whether there are any network problems." [13-11]	Cannot access gatekeeper.	• In [Facsimile Features], under [Initial Settings], select [H.323 Settings], and then check that Gatekeeper Address is correctly programmed. You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • Contact the network administrator.

Message	Causes	Solutions
"Check whether there are any network problems." [13-17]	Registering of user name is rejected by SIP server.	• In [Facsimile Features], under [Initial Settings], select [SIP Settings], and then check that "SIP Server IP Address" and "SIP User Name" are correctly programmed. You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • Contact the network administrator.
"Check whether there are any network problems." [13-18]	Cannot access SIP server.	• In [Facsimile Features], under [Initial Settings], select [SIP Settings], and then check that "SIP Server IP Address" is correctly programmed. You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • Contact the network administrator.
"Check whether there are any network problems." [13-24]	The password registered for the SIP server is not the same as the password registered for this machine.	Contact your administrator.

Message	Causes	Solutions
"Check whether there are any network problems." [13-25]	In [Effective Protocol], the IP address is not enabled, or an incorrect IP address has been registered.	• In [System Settings], under [Interface Settings], select [Effective Protocol], and then check that "IPv4" is programmed to "Active". You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • In [System Settings], under [Interface Settings], select [Machine IPv4 Address], and then check that the IP address is correctly programmed. You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • Contact your administrator.
"Check whether there are any network problems." [13-26]	The "Effective Protocol" and "SIP Server IP Address" settings are different, or an incorrect IP address has been registered.	• In [System Settings], under [Interface Settings], check that the IP address is correctly programmed. You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • Contact your administrator.

Message	Causes	Solutions
"Check whether there are any network problems." [14-01]	The DNS server, SMTP server, or folder specified for transfer to was not found, or the destination for Internet Fax around (not through) the SMTP server could not be found.	• In [System Settings], under [Interface Settings], check that the DNS server is correctly programmed. You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • In [System Settings], under [File Transfer], select [SMTP Server], and then check that "Server Name" or "Port No." is correctly programmed. You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • Check that the folder for transfer is correctly specified. • Check that the computer in which the folder for transfer is specified is correctly operated. • Check that the LAN cable is correctly connected to the machine. • Contact the network administrator of the destinations. • Contact the network administrator.

Message	Causes	Solutions
"Check whether there are any network problems." [14-09]	E-mail transmission was refused by SMTP authentication, POP before SMTP authentication, or login authentication of the computer in which the folder for transfer is specified.	• In [System Settings], under [File Transfer], select [SMTP Authentication], [POP before SMTP], or [Fax E-mail Account], and then check that "User Name" and "Password" are correctly programmed. You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • Check that the user ID and password for the computer in which the folder for forwarding is specified are correctly programmed. • Check that the folder for forwarding is correctly specified. • Check that the computer in which the folder for forwarding is specified is correctly operated. • Contact the network administrator.
"Check whether there are any network problems." [14-33]	Neither the machine's nor the administrator's e-mail address is registered.	• In [System Settings], under [File Transfer], select [Fax E-mail Account], and then check that "E-mail Address" is correctly programmed. You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • Contact the network administrator.

Message	Causes	Solutions
"Check whether there are any network problems." [15-01]	No POP3/IMAP4 server address is programmed.	• In [System Settings], under [File Transfer], select [POP3 / IMAP4 Settings], and then check that "Server Name" is correctly programmed. You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • Contact the network administrator.
"Check whether there are any network problems." [15-02]	Cannot log in to the POP3/ IMAP4 server.	• In [System Settings], under [File Transfer], select [Fax E-mail Account], and then check that "User Name" and "Password" are correctly programmed. You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • Contact the network administrator.
"Check whether there are any network problems." [15-03]	No machine e-mail address is programmed.	• In [System Settings], under [File Transfer], check that the machine e-mail address is correctly programmed. You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • Contact the network administrator.

Message	Causes	Solutions
"Check whether there are any network problems." [15-11]	Cannot find the DNS server or POP3/IMAP4 server.	• In [System Settings], under [Interface Settings], check that the IP address of the DNS Server is correctly programmed. You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • In [System Settings], under [File Transfer], select [POP3 / IMAP4 Settings], and then check that "Server Name" is correctly programmed. You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • In [System Settings], under [File Transfer], select [E-mail Communication Port], and then check that the port number of the POP3/IMAP4 server is correctly programmed. You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • Check that the LAN cable is correctly connected to the machine. • In [System Settings], under [File Transfer], select [Reception Protocol], and then check that the reception protocol is correctly programmed. You can also use the Web Image Monitor. See Web Image Monitor Help. • Contact the network administrator.

Message	Causes	Solutions
"Check whether there are any network problems." [15-12]	Cannot log in to the POP3/ IMAP4 server.	• In [System Settings], under [File Transfer], select [Fax E-mail Account], and then check that "User Name" and "Password" are correctly programmed. You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • In [System Settings], under [File Transfer], check that the user name and password for POP before SMTP authentication are correctly programmed. You can also use the Web Image Monitor for confirmation. See Web Image Monitor Help. • Contact the network administrator.
"Connection with LDAP server has failed. Check the server status."	A network error has occurred and connection has failed.	• Try the operation once more. If the message is still shown, the network may be crowded. • In [System Settings], under [Administrator Tools], check the settings of LDAP server. For details, see "Programming the LDAP server", Network and System Settings Reference.
"Error occurred, and transmission was cancelled."	• Original jammed during Immediate Transmission. • A problem occurred in the machine, or noise occurred on the telephone line.	Press [Exit], and then send the documents again.
"Exceeded max. No. of display search results. Max.: n" (A figure is placed at n.)	The number of search results has exceeded the maximum number of items that can be displayed.	Search again after changing the search conditions.

Message	Causes	Solutions
"Exceeded time limit for LDAP server search. Check the server status."	A network error has occurred and connection has failed.	• Try the operation once more. If the message is still shown, the network may be crowded. • In [System Settings], under [Administrator Tools], check the settings of LDAP server. For details, see "Programming the LDAP server", Network and System Settings Reference.
"Functional problem occurred. Stopped processing."	The main power switch was turned off while the machine was receiving a document by Internet Fax.	Even if you turn the main power switch back on immediately, depending on the mail server, the machine might not be able to resume reception of the Internet Fax if the timeout period has not expired. Wait until the mail server's timeout period has expired, and then resume reception of the Internet Fax. For details, contact your network administrator.
"Functional problems with facsimile. Data will be initialized."	There is a problem with the fax.	Record the code number shown on the screen, and then contact your service representative. Other functions can be used.
"LDAP server authentication has failed. Check the settings."	A network error has occurred and connection has failed.	Make settings correctly for the user name and the password for LDAP server authentication.
"Original is being scanned by another function. Switch to the following function, then press the Stop key to cancel scanning or press the Start key to continue."	A function of the machine other than the Facsimile function is being used such as the Document Server function.	Before sending a file by fax, cancel the job in progress. For example, press [Exit], and then press the [Document Server] key. Next, press the [Clear/ Stop] key. When the message "The Clear / Stop key was pressed. Are you sure you want to stop scanning?" appears, press [Stop].
"Put original back, check it and press the Start key."	Original jammed during Memory Transmission.	Press [Exit], and then send the documents again.

Message	Causes	Solutions
"Remove the paper from Internal Tray 1."	Internal Tray 1 is full.	Remove the paper. If the other tray is also full, the tray name shown on the screen changes. Remove paper from the tray indicated on the display.
"Some invalid destination(s) contained. Do you want to select only valid destination (s)?"	The specified group contains fax destinations, e-mail destinations, and/or folder destinations, either of which are incompatible with the specified transmission method.	In the message that appears at each transmission, press [Select].
"Some page(s) are near blank. To cancel, press the Stop key."	The first page of the document is almost blank.	The original's blank side might have been scanned. Be sure to place your originals correctly. For details about determining the cause of blank pages, see "Detecting Blank Sheet", Facsimile Reference.
"Some page(s) are near blank."	The first page of the document is almost blank.	The original's blank side might have been scanned. Be sure to place your originals correctly. For details about determining the cause of blank pages, see "Detecting Blank Sheet", Facsimile Reference.
"The selected file(s) contained file(s) without access privileges. Only file (s) with access privileges will be deleted."	You tried to delete a document for which you do not have permission to delete.	Only the administrator can delete this document. Contact your administrator if you want to delete a document for which you do not have permission to delete.
"Updating the destination list... Please wait. Specified destination(s) or sender's name has been cleared."	The destination list is being updated from the network using Web Image Monitor.	Wait until the message disappears. Do not switch off the power while this message is displayed. Depending on the number of destinations to be updated, there may be some delay before you can resume operation. Operation is not possible while this message is displayed.

Message	Causes	Solutions
"You do not have the privileges to use this function."	The logged in user name does not have permission for the selected function.	Contact your administrator about the permission for the required function.

Note

- If "Check whether there are any network problems." appears, the machine is not correctly connected to the network or the settings of the machine are not correct. If you do not need to connect to a network, you can specify the setting so this message is not displayed, and then the [Facsimile] key no longer lights. For details about how to do this, see "Parameter Settings", Facsimile Reference. If you reconnect the machine to the network, be sure to set "Display" by configuring the appropriate User Parameter.
- If the paper tray runs out of paper, "There is no paper. Load paper." appears on the screen, asking you to add paper. If there is paper left in the other trays, you can receive documents as usual, even if the message appears on the screen. You can turn this function on or off with "Parameter Settings". For details about how to do this, see "Parameter Settings", Facsimile Reference.

When You Cannot Send or Receive Fax Messages As Wanted

This section describes likely causes of and possible solutions for transmission and reception-related problems.

Transmission/Reception

Problem	Causes	Solutions
Both transmission and reception are impossible.	The modular cord may be disconnected.	Make sure the modular cord is correctly connected. See "Connecting the Machine to a Telephone Line and Telephone", Network and System Settings Reference.

Transmission

Problem	Causes	Solutions
Document appears blank at the other end.	The original was placed upside down.	When the original is placed directly on the exposure glass, the side to be scanned must face down. When the original is inserted into the ADF, the side to be scanned must face up.
Printed or sent images are spotty.	The exposure glass, scanning glass, or ADF is dirty.	Clean them. See "Maintaining Your Machine", About This Machine. Make sure ink or correction fluid is dry before placing originals.
Reception is possible, but transmission is impossible.	There are regions and telephone exchanges where a dial tone can not be detected.	Turn the dial tone detection off in User Parameters. For details about how to do this, see "Parameter Settings", Facsimile Reference.
Transmission failed due to "maximum e-mail size" error.	If the e-mail size specified on the machine is too large, the Internet Fax document cannot be sent.	In [Facsimile Features], under [Send Settings], set [Max. E-mail Size] to [Off], or set the maximum e-mail size to a larger value. Then, resend the document.

Problem	Causes	Solutions
When using On Hook Dial or Manual Dial, "Receivg." appears and transmission is not allowed.	If the machine fails to detect the size of the original when the [Start] key is pressed, it performs a receiving operation.	Press [Scan Size] in [Scan Settings], select the scan area, and then resend the document. If you use On Hook Dial or Manual Dial frequently, it is recommended that you set "Receive documents by pressing the [Start] key when originals are not set." to "Off" in User Parameters. If this is set to "Off", when using Manual Dial you cannot receive by pressing the [Start] key. For details about how to do this, see "Parameter Settings", Facsimile Reference.
LAN-Fax Driver does not work.	The entered login user name, login password, or driver encryption key is incorrect.	Check your login user name, login password, or driver encryption key, and then enter them correctly. Contact your administrator.
LAN-Fax Driver does not work.	A high security level is set by the extended security function.	Contact your administrator.
Although a group specification was set for the following, reception was not possible. Receiving Station of Information Box, Forwarding, Forwarding of Special Sender, Reception Report e-mail, E-mail TX Results, routing e-mail received via SMTP.	The number of specified destinations exceeds the maximum number that can be specified as a group.	A maximum of 500 parties can be specified for a group. Check if there are more than the specified numbers registered in the Address Book. If a group was registered in another group or specified as Receiving Stations 1 to 5 for the Transfer Box, transmission is canceled but an error message does not appear.

Reception

Problem	Causes	Solutions
The machine failed to print received fax documents.	If this happened when the Receiving File indicator was lit, low paper may have caused printing to stop.	• Load paper into the tray. • Add toner. For details about Substitute Reception, see "Substitute Reception", Facsimile Reference.
The machine failed to print received fax documents.	In [Facsimile Features], under [Reception Settings], [Store] has been selected for [Reception File Setting].	Print the fax documents using a Web browser or the Print Stored RX File function. See "Printing Received and Stored Documents" and "Viewing, Printing, and Deleting Received Fax Documents Using Web Image Monitor", Facsimile Reference.
The machine failed to print received fax documents.	The paper has run out.	Load paper into the tray. See "Changing the Paper Size", About This Machine.
While pressing [Manual E-mail RX], "Cannot receive E-mails currently." appears and e-mail cannot be received.	The machine is receiving an on-demand e-mail message (e-mail inquiry from the administrator).	After the e-mail is received, press [Manual E-mail RX], and then try again.

Printing

Problem	Causes	Solutions
Print is slanted.	The tray's side fences might not be locked.	Make sure the side fences are locked. See "Loading Paper", About This Machine.
Print is slanted.	The paper is fed at a slant.	Load the paper correctly. See "Loading Paper", About This Machine.
Misfeeds occur frequently.	The number of feeding into the paper tray exceeds the capacity of the machine.	Load paper only as high as the upper limit markings on the side fences of the paper tray, or the markings on the paper guides of the bypass tray.
Misfeeds occur frequently.	The paper tray's side fences are set too tightly.	Push the side fences lightly, and then reset it.

Problem	Causes	Solutions
Misfeeds occur frequently.	The paper is damp.	• Use recommended paper. For details about recommended paper, see "Recommended Paper Sizes and Types", About This Machine. • Use paper that has been stored in the recommended temperature and humidity conditions. For details about the proper way to store paper, see "Paper Storage", About This Machine.
Misfeeds occur frequently.	The paper is too thick or too thin.	Use recommended paper. See "Recommended Paper Sizes and Types", About This Machine.
Misfeeds occur frequently.	The paper is wrinkled or has been folded/creased.	Use recommended paper only and be sure its storage environment meets the recommended temperature and humidity conditions. For details about recommended paper and the proper way to store it, see "Recommended Paper Sizes and Types" and "Paper Storage", About This Machine.
Misfeeds occur frequently.	Printed paper is being used.	Do not load sheets that have already been copied or printed onto by another machine.
Misfeeds occur frequently.	Sheets are sticking together.	Fan the sheets thoroughly before loading them. Alternatively, feed the sheets into the machine one at a time.
Sheets are feeding in together, resulting in jams.	The pages are sticking together.	Fan the sheets thoroughly before loading them. Alternatively, feed the sheets into the machine one at a time.
Copy paper becomes creased.	Printed paper is being used.	Do not load sheets that have already been copied or printed onto by another machine.

Problem	Causes	Solutions
Copy paper becomes creased.	The paper is damp.	Use paper that has been stored in the recommended temperature and humidity conditions. See "Paper Storage", About This Machine.
Copy paper becomes creased.	The paper is too thin.	Use recommended paper. See "Recommended Paper Sizes and Types", About This Machine.
Edges of sheets are creased.	The paper is damp.	Use paper that has been stored in the recommended temperature and humidity conditions. See "Paper Storage", About This Machine.
Edges of sheets are creased.	You are using non-recommended paper.	Use recommended paper. See "Recommended Paper Sizes and Types", About This Machine.
Images are only partially printed.	The paper is damp.	Use paper that has been stored in the recommended temperature and humidity conditions. See "Paper Storage", About This Machine.
Black lines appear on the print produced at the destination.	The exposure glass, scanning glass, or ADF is dirty.	Clean them. See "Maintaining Your Machine", About This Machine.
Background of received images appears dirty. Images from the back of the page appear.	Image density is too high.	Adjust the scan density settings. For details about how to change the density, see "Density (Contrast)", Facsimile Reference.
Received image is too light.	When using moist, rough, or processed paper, areas of print may not be fully reproduced.	Use recommended paper. See "Recommended Paper Sizes and Types", About This Machine.
Received image is too light.	The image density has been set too low.	Increase the scanning density. For details about how to change the density, see "Density (Contrast)", Facsimile Reference.

Problem	Causes	Solutions
Received image is too light.	The original of the transmitted fax was printed on paper that is too thin.	Ask the sender to reprint the original on thicker paper, and then fax it again.
The image on the back side of duplex copies has mottled blank patches or is smudged.	Missing patches and smudges are caused by moisture leaking from the paper.	• Do not install the machine in areas that are susceptible to low temperature. • Use paper that has been stored where temperature and humidity conditions meet the limitations we recommend. For details about the paper storage conditions we recommend, see "Paper Storage", About This Machine. • Install the Optional anti-humidity heater. For details about the anti-humidity heater, contact your service representative.
Cannot print from the small size paper tray.	When [Small Size Paper Tray] is displayed in [System Settings], [Off] is specified for the tray in which the small size paper is set.	When [Small Size Paper Tray] is displayed in [System Settings], specify [On] for the tray in which the small size paper is set.
Cannot select the small size paper.	When [Small Size Paper Tray] is displayed in [System Settings], [Off] is specified for the tray in which the small size paper is set.	When [Small Size Paper Tray] is displayed in [System Settings], specify [On] for the tray in which the small size paper is set.

Others

Problem	Causes	Solutions
All fax documents stored in memory have been lost. Those documents include ones stored through Memory Transmission/Reception, Memory Lock, or Substitute Reception.	When about one hour passes after power to the machine is turned off, all fax documents stored in memory are lost.	If any documents have been lost for this reason, a Power Failure Report is automatically printed when the machine is turned on. If fax documents stored for Memory Transmission have been lost, check the destinations and resend the documents. If fax documents received through Memory, Memory Lock or Substitute Reception have been lost, ask the senders to resend the documents. See p.73 "Turning Off the Main Power / In the Event of Power Failure".
When a correct password is entered, you cannot print documents that appear in the Personal box or Information box, or transmit / print out stored documents.	Documents are locked by a security function if incorrect passwords are entered a certain number of times.	Contact your administrator.
[Prg. Dest.] or [Manual Entry] does not appear.	This function is made unavailable by the enhanced security function.	Contact your administrator.
The following functions are not available: Forwarding, Store File in the Information Box, routing e-mail received via SMTP.	This function is made unavailable by the enhanced security function.	Contact your administrator.
Cannot print JPEG format files with the Mail to Print function.	Only JFIF files are printable. (JFIF is a JPEG subformat.)	Make sure the files you are trying to print are in JFIF subformat.

When Memory Is Full

This section describes likely causes of and possible solutions for problems related to full memory.

Message	Causes	Solutions
"Memory is full. Cannot scan more. Transmission will be stopped."	The memory is full.	If you press [Exit], the machine returns to standby mode and starts transmitting the stored pages. Check the pages that have not been sent using the Communication Result Report, and then resend those pages.

If an Error Report Is Printed

An Error Report is printed if a document cannot be successfully sent or received.

Possible causes include a problem with the machine or noise on the telephone line. If an error occurs during transmission, resend the original. If an error occurs during reception, ask the sender to resend the document.

Important

- If an error happens frequently, contact your service representative.
- The "Page" column gives the total number of pages. The "Page not sent" or "Page not received" column gives the number of pages not sent or received successfully.
- You can display destinations by configuring the appropriate User Parameter. For details about how to do this, see "Parameter Settings", Facsimile Reference.
- You can display sender names by configuring the appropriate User Parameter. For details about how to do this, see "Parameter Settings", Facsimile Reference.

Turning Off the Main Power / In the Event of Power Failure

The following notes concern power failure and turning off the machine.

⚠CAUTION

- When disconnecting the power cord from the wall outlet, always pull the plug, not the cord. Pulling the cord can damage the power cord. Use of damaged power cords could result in fire or electric shock.

Important

- **Do not turn off the main power switch while the power indicator is lit or blinking. If you do, the hard disk and memory may be damaged and failure could result.**
- **Turn off the main power switch before pulling out the plug. If you pull out the plug with the switch on, the hard disk and memory may be damaged and failure could result.**
- **Make sure 100% is shown on the display before you unplug the machine. If a lower value is shown, some data is currently present in memory.**
- **Right after a power failure, the internal battery needs to be sufficiently recharged to guard against future data loss. Keep the machine plugged in and the main power switch on for about 24 hours after the power loss.**

Even if the main power switch is turned off, the contents of the machine memory (for example, programmed numbers) will not be lost. However, if power is lost for about one hour because the main power switch is turned off, there is a power cut, or the power cable is removed, contents of the Fax memory are lost. Lost items will include any fax documents stored in memory using Memory Transmission/Reception, or Memory Lock.

If a file was deleted from memory, a Power Failure Report is automatically printed as soon as the power is restored.

This report can be used to identify lost files. If a document stored for Memory Transmission was lost, resend it. If a document received by Memory Reception or Substitute Reception was lost, ask the sender to resend it.

When an Error Occurs Using Internet Fax

This section describes reports that the machine sends if an Internet Fax error occurs.

Error Mail Notification

The machine sends the Error Mail Notification to the sender when it is unable to successfully receive a particular e-mail message. A "cc" of this notification is also sent to the administrator's e-mail address when one is specified.

Important

- **If an incoming Internet Fax from another party bypasses the SMTP server, even if reception is not successful, an Error Mail Notification is not sent to the sender.**

Note

- You can select to send Error Mail Notification by configuring the appropriate User Parameter. For details about how to do this, see "Parameter Settings", Facsimile Reference.
- If Error Mail Notification cannot be sent, the Error Report (E-mail) is printed by the machine.
- If an error occurs when an e-mail is received via SMTP, the SMTP server sends an error e-mail to the originator of the document.

Error Report (E-mail)

The Error Report (E-mail) is printed by the machine when it is unable to send an Error Mail Notification.

Server-Generated Error E-mail

The transmitting server sends this error e-mail to the originator of e-mail that cannot be transmitted successfully (due to reasons such as specifying an incorrect e-mail address).

Important

- **If an Internet Fax transmission bypasses the SMTP server, even if transmission is not successful, an error e-mail is not sent from the server.**

Note

- After a server-generated error e-mail is printed, the first page of the sent document is printed.

4. Troubleshooting When Using the Printer Function

This chapter describes likely causes of and possible solutions for printer function problems.

Messages Displayed When Installing the Printer Driver

This section describes what to do if a message appears when installing the printer driver.

Message number 58 or 34 indicates that the printer driver cannot be installed using Auto Run. Install the printer driver using [Add Printer] or [Install Printer].

Message number 58 appears if there is a newer version of the printer driver already installed.

Windows 2000

This section describes the procedure under Windows 2000.

1. **On the [Start] menu, point to [Settings], and then click [Printers].**
2. **Double-click the Add Printer icon.**
3. **Follow the instructions in Add Printer Wizard.**

   If the printer driver is on a CD-ROM, the location of the driver is "\DRIVERS\(PCL5C or PS)\XP_VISTA\(language)\DISK1" or "\DRIVERS\PCL6\XP_VISTA\MUI\DISK1". If the installer starts, click [Cancel] to quit.
4. **Specify a port.**

Note

- Available ports vary according to your Windows operating system or the type of interface. For details, see "Confirming the Connection Method", Printer Reference.
- The PCL6 printer driver is installed in the language of your operating system.

Windows XP Professional or Windows Server 2003/2003 R2

This section describes the procedure under Windows XP Professional or Windows Server 2003/2003 R2.

1. **On the [start] menu, click [Printers and Faxes].**
2. **Click [Add a printer].**

3. **Follow the instructions in Add Printer Wizard.**

   If the printer driver is on a CD-ROM, the location of the driver is "\DRIVERS\(PCL5C or PS)\XP_VISTA\(language)\DISK1" or "\DRIVERS\PCL6\XP_VISTA\MUI\DISK1". If the installer starts, click [Cancel] to quit.

4. **Specify a port.**

Note

- Available ports vary according to your Windows operating system or the type of interface. For details, see "Confirming the Connection Method", Printer Reference.
- The PCL6 printer driver is installed in the language of your operating system.

4

Windows XP Home Edition

This section describes the procedure under Windows XP Home Edition.

1. **On the [start] menu, click [Control Panel].**
2. **Click [Printers and Other Hardware].**
3. **Click [Printers and Faxes].**
4. **Click [Add a printer].**
5. **Follow the instructions in Add Printer Wizard.**

   If the printer driver is on a CD-ROM, the location of the driver is "\DRIVERS\(PCL5C or PS)\XP_VISTA\(language)\DISK1" or "\DRIVERS\PCL6\XP_VISTA\MUI\DISK1". If the installer starts, click [Cancel] to quit.

6. **Specify a port.**

Note

- Available ports vary according to your Windows operating system or the type of interface. For details, see "Confirming the Connection Method", Printer Reference.
- The PCL6 printer driver is installed in the language of your operating system.

Windows Vista

This section describes the procedure under Windows Vista.

1. **On the Start menu, click [Control Panel].**
2. **Click [Hardware and Sound].**
3. **Click [Printers].**
4. **Click [Add a printer].**

5. **Follow the instructions in Add Printer Wizard.**

   If the printer driver is on a CD-ROM, the location of the driver is "\DRIVERS\(PCL5C or PS)\XP_VISTA\(language)\DISK1" or "\DRIVERS\PCL6\XP_VISTA\MUI\DISK1". If the installer starts, click [Cancel] to quit.

6. **Specify a port.**

Note

- Available ports vary according to your Windows operating system or the type of interface. For details, see "Confirming the Connection Method", Printer Reference.
- The PCL6 printer driver is installed in the language of your operating system.

Windows 7

This section describes the procedure under Windows 7.

1. **On the Start menu, click [Control Panel].**
2. **Click [Hardware and Sound].**
3. **Click [Devices and Printers].**
4. **Click [Add a printer].**
5. **Follow the instructions in Add Printer Wizard.**

   If the printer driver is on a CD-ROM, the location of the driver is "\DRIVERS\(PCL5C or PS)\XP_VISTA\(language)\DISK1" or "\DRIVERS\PCL6\XP_VISTA\MUI\DISK1". If the installer starts, click [Cancel] to quit.

6. **Specify a port.**

Note

- Available ports vary according to your Windows operating system or the type of interface. For details, see "Confirming the Connection Method", Printer Reference.
- The PCL6 printer driver is installed in the language of your operating system.

Windows Server 2008

This section describes the procedure under Windows Server 2008.

1. **On the [Start] menu, click [Control Panel].**
2. **Click [Hardware and Sound].**
3. **Click [Printers].**
4. **Click [Add a printer].**

5. **Follow the instructions in Add Printer Wizard.**

   If the printer driver is on a CD-ROM, the location of the driver is "\DRIVERS\(PCL5C or PS)\XP_VISTA\(language)\DISK1" or "\DRIVERS\PCL6\XP_VISTA\MUI\DISK1". If the installer starts, click [Cancel] to quit.

6. **Specify a port.**

Note

- Available ports vary according to your Windows operating system or the type of interface. For details, see "Confirming the Connection Method", Printer Reference.
- The PCL6 printer driver is installed in the language of your operating system.

If USB Connection Fails

This section describes how to troubleshoot a problem related to USB connections.

Problem	Causes	Solutions
The machine is not automatically recognized.	The USB cable is not connected properly.	Disconnect the USB cable, and then turn off the main power switch. Turn on the main power switch again. When the machine has fully booted up, reconnect the USB cable.
Windows has already configured the USB settings.	Check whether the computer has identified the machine as an unsupported device.	Open Windows' Device Manager, and then, under [Universal Serial Bus controllers], remove any conflicting devices. Conflicting devices have a [!] or [?] icon by them. Take care not to accidentally remove required devices. For details, see Windows Help.
The machine does not recognize the USB connection even when a USB cable is inserted.	If the USB cable is connected while the machine is off, the machine might not recognize the USB connection.	Press the operation switch, and then disconnect the USB cable. When the machine has returned to the ready condition, reconnect the USB cable.

Messages Displayed When Using the Printer Function

This section describes the principal messages that appear on the display panel, error logs or reports. If other messages appear, follow their instructions.

Status Messages

This section describes the machine status messages.

Message	Status
"Hex Dump Mode"	In Hex Dump mode, the machine receives data in hexadecimal format. Turn off the main power switch after printing, and then turn it back on.
"Job Suspended..."	Printing was temporarily stopped by SmartDeviceMonitor for Client. You can resume printing via [My Job List] in SmartDeviceMonitor for Client, or via the Web Image Monitor. To resume printing via Web Image Monitor, check with your system administrator first.
"Offline"	The machine is offline. To start printing, switch the machine online by pressing [↦Online].
"Please wait."	This message might appear for a second or two while the machine is preparing, performing initial adjustments, or adding toner. Wait a while.
"Printing..."	The machine is printing. Wait a while.
"Ready"	This is the default ready message. The machine is ready for use. No action is required.
"Resetting job..."	The machine is resetting the print job. Wait until "Ready" appears on the display panel.
"Setting change..."	The machine is changing settings. You cannot use the control panel while this message is displayed. Wait a while.
"Waiting for print data..."	The machine is waiting for the next data to print. Wait a while.

Messages Displayed on the Control Panel When Using the Printer Function

This section describes likely causes of and possible solutions for the error messages that appear on the control panel.

Note

- Before turning the main power switch off, see "Turning On/Off the Power", About This Machine.

Message	Causes	Solutions
"Authentication has failed."	The entered login user name or login password is not correct.	Ask the user administrator for the correct login user name and login password.
"Authentication has failed."	The machine cannot perform authentication.	Contact your administrator.
"Cannot connect with the wireless card. Turn the main power switch off, then check the card."	• The wireless LAN board was not inserted when the machine was turned on. • The wireless LAN board was pulled out after the machine was turned on. • The settings are not updated although the unit is detected.	Turn off the main power switch, and then check the wireless LAN board is inserted correctly. And then, turn on the main power switch again. If the message appears again, call your service representative.
"Hardware Problem: Ethernet"	An error has occurred in the Ethernet interface.	Turn off the main power switch, and then back on again. If the message appears again, contact your service representative.
"Hardware Problem: HDD"	An error has occurred in the hard disk.	Turn off the main power switch, and then back on again. If the message appears again, contact your service representative.
"Hardware Problem: Parallel I/F"	An error has occurred in the IEEE 1284 interface board.	Turn off the main power switch, and then back on again. If the message appears again, contact your service representative.

Message	Causes	Solutions
"Hardware Problem: USB"	An error has occurred in the USB interface.	Turn off the main power switch, and then back on again. If the message appears again, contact your service representative.
"Hardware Problem: Wireless Board"	Access to the wireless board in which the wireless LAN board is inserted is possible, but an error was detected.	Turn off the main power switch, and then check the wireless board is inserted correctly. And then, turn on the main power switch again. If the message appears again, contact your service representative.
"Hardware Problem: Wireless Card"	• The installed wireless LAN card is not compatible with this machine. • An error has occurred in the wireless LAN card.	Turn off the main power switch, and then check the wireless card. And then, turn on the main power switch again. If the message appears again, contact your service representative.
"Load following paper in n. To cancel job, press [Job Reset]." (A figure is placed at n.)	The printer driver settings are incorrect or the tray does not contain paper of the size selected in the printer driver.	Check that the printer driver settings are correct, and then load paper of the size selected in the printer driver into the input tray. For details about how to change the paper size, see "Changing the Paper Size", About This Machine.
"Paper size and type are mismatched. Select another tray from the following and press [Continue]. To cancel job, press [Job Reset]. Paper size and type can also be changed in User Tool."	The printer driver settings are incorrect or the tray does not contain paper of the size or type selected in the printer driver.	Check that the printer driver settings are correct, and then load paper of the size selected in the printer driver into the input tray. For details about how to change the paper size, see "Changing the Paper Size", About This Machine.
"Paper size of n is mismatched. Select another tray from the following and press [Continue].Paper type can also be changed in User Tools." (A tray name is placed at n.)	• The size of the paper in the tray does not match the paper size specified in the printer driver. • You have printed on small size paper from a tray that is not specified as the small size tray.	• Select a tray containing paper that is the same size as the specified paper size. • When [Small Size Paper Tray] is displayed in [System Settings], specify [On] for the tray in which the small size paper is set.

Message	Causes	Solutions
"Problem: Printer Font Error"	An error has occurred in the font settings.	Contact your service representative.
"The selected file(s) contained file(s) without access privileges. Only file(s) with access privileges will be deleted."	You have tried to delete files without the authority to do so.	Files can be deleted by the person who created the file. To delete a file which you are not authorized to delete, contact the person who created the file.
"The same paper tray cannot be set for the main sheets and slip sheets ([Designate]). Check the setting."	The tray selected for other pages is the same as the one for slip sheets.	Reset the job. Be sure the tray you select for slip sheets is not providing paper for other pages.
"Updating the destination list... Please wait. Specified destination(s) or sender's name has been cleared."	The destination list is being updated from the network using Web Image Monitor.	Wait until the message disappears. Do not switch off the power while this message is displayed. Depending on the number of destinations to be updated, there may be some delay before you can resume operation. Operations are not possible while this message is displayed.
"You do not have the privileges to use this function."	The logged in user name does not have permission for the selected function.	Contact your administrator about the permission for the required function.

Messages during Direct print from a removable memory device

Message	Causes	Solutions
"Cannot display files from the selected memory device."	The memory device used cannot be recognized.	For details about the recommended memory devices for the Direct printing function from removable memory devices, contact your sales or service representative. The USB flash memory that features password protection or other security features may not work normally.

Message	Causes	Solutions
"More than one file cannot be selected with this file type."	A non-JPEG file has been selected.	Multiple non-JPEG files cannot be selected at one time in the Direct printing function from removable memory devices. Select files separately.
"The size of the selected file(s) is too large."	The size of the selected TIFF file or the total size of the selected JPEG files exceeds 1 GB.	Files or groups of files larger than 1 GB cannot be printed. • When the total size of the multiple files that are selected exceeds 1 GB, select files separately. • Print by using a function other than the Direct printing function from removable memory devices.

Other Messages

This section describes likely causes of and possible solutions for the error messages that are printed on the error logs or reports.

Message	Causes	Solutions
"84: Error"	There is no work area available for image processing.	• In [Printer Features], under [System], set [Memory Usage] to [Font Priority]. • Decrease the number of files sent to the machine.
"85: Error"	The specified graphics library is unavailable.	Check that the data is valid.
"86: Error"	Parameters of the control code are invalid.	Check the print settings.
"91: Error"	Printing was canceled by the auto job cancel function due to a command error.	Check that the data is valid.

Message	Causes	Solutions
"92: Error"	Printing was canceled because [Job Reset] or the [Clear/Stop] key was selected on the machine's control panel.	Perform the print operation again if necessary.
"98: Error"	The machine could not access Hard disk correctly.	Turn off the main power switch, and then back on again. If the message appears frequently, contact your service representative.
"Address Book is currently in use by another function. Authentication has failed."	The machine currently cannot perform authentication because the Address Book is being used by another function.	Wait a while, and then retry the operation.
"Auto-registration of user information has failed."	Automatic registration of information for LDAP Authentication or Windows Authentication failed because the Address Book is full.	Contact your administrator.
"Cannot store data of this size."	The paper size exceeded the capacity of the Document Server.	Reduce the paper size of the file that you want to send to a size that the Document Server can store. Custom size files can be sent but not stored afterward.
"Classification Code is incorrect."	The classification code has not been entered, or the classification code has been entered incorrectly.	Enter the correct classification code.
"Classification Code is incorrect."	The classification code is not supported with the printer driver.	Select Optional for classification code. For details about how to specify classification code settings, see "Configuring Classification Codes", Printer Reference.

Message	Causes	Solutions
"Collate has been cancelled."	Collate was canceled.	Turn off the main power switch, and then back on again. If the message appears again, contact your sales or service representative.
"Command Error"	An RPCS command error occurred.	Check using the following procedure: • Check if the communication between the computer and the machine is working correctly. • Check if the correct printer driver is being used. • Check if the machine's memory size is set correctly in the printer driver. • Check that the printer driver is the most up-to-date version available.
"Compressed Data Error."	The printer detected corrupt compressed data.	• Check the connection between the computer and the printer. • Check that the program you used to compress the data is functioning correctly.
"Data storage error."	You tried to print a Sample Print, Locked Print, Hold Print, or Stored Print file, or to store a file in the Document Server when the hard disk was malfunctioning.	Contact your service representative.
"Document Server is not available to use. Cannot store."	You cannot use the Document Server function.	Contact your administrator.

Message	Causes	Solutions
"Duplex has been cancelled."	Duplex printing was canceled.	• Select the proper paper size for the duplex function. See "Specifications for the Main Unit", About This Machine. • In [Tray Paper Settings], under "Paper Type", set "Apply Duplex" to [Yes] for the paper tray that can be used for duplex print. For details, see "Tray Paper Settings", Network and System Settings Reference.
"Error has occurred."	A syntax error, etc., occurred.	Check that the PDF file is valid.
"Exceeded max. capacity of Document Server. Cannot store."	The hard disk became full after a file was stored.	Delete some of the files stored in the Document Server or reduce the size that you want to send.
"Exceeded max. number of files of Document Server. Cannot store."	The maximum file capacity of the Document Server was exceeded.	Delete some of the files stored in the Document Server.
"Exceeded max. number of files to print for temporary / stored jobs."	While printing a Sample Print, Locked Print, Hold Print, or Stored Print file, the maximum file capacity was exceeded.	Delete unneeded files stored in the machine.
"Exceeded max. number of pages of Document Server. Cannot store."	The maximum page capacity of the Document Server was exceeded.	Delete some of the files stored in the Document Server or reduce the number of pages that you want to send.
"Exceeded max. number of pages to print for temporary / stored jobs."	While printing a Sample Print, Locked Print, Hold Print, or Stored Print file, the maximum page capacity was exceeded.	Delete unneeded files stored in the machine. Reduce the number of pages to print.
"Exceeded max. pages. Collate is incomplete."	The number of pages exceeds the maximum number of sheets that you can use Collate with.	Reduce the number of pages to print.

Message	Causes	Solutions
"Exceeded the maximum unit count for Print Volume Use. The job has been cancelled."	The number of pages the user is permitted to print has been exceeded.	Contact your administrator.
"Failed to obtain file system."	PDF direct printing could not be performed because the file system could not be obtained.	Turn off the main power switch, and then back on again. If the message appears again, contact your service representative.
"File system is full."	PDF file does not print out because the capacity of the file system is full.	Delete all unnecessary files from the hard disk, or decrease the file size sent to the machine.
"HDD is full."	The hard disk became full while printing a Sample Print, Locked Print, Hold Print, or Stored Print file.	Delete unneeded files stored in the machine. Alternatively, reduce the data size of the Sample Print, Locked Print, Hold Print, or Stored Print file.
"HDD is full."	When printing with the PostScript 3 printer driver, the hard disk capacity for fonts and forms has been exceeded.	Delete unneeded forms or fonts registered in the machine.
"I/O buffer overflow."	An input buffer overflow occurred.	• In [Printer Features], under [System], set [Memory Usage] to [Font Priority]. • In [Printer Features], under [Host Interface], select [I/O Buffer], and then set the maximum buffer size to a larger value. • Reduce the number of files being sent to the machine.

Message	Causes	Solutions
"Information for user authentication is already registered for another user."	The user name for LDAP or Integration Server authentication was already registered in a different server with a different ID, and a duplication of the user name occurred due to a switching of domains (servers), etc..	Contact your administrator.
"Insufficient Memory"	A memory allocation error occurred.	**PCL 5c** On the printer driver's [Print Quality] tab, select a lower resolution in the "Resolution" area. **PCL 6** • On the printer driver's [Detailed Settings] tab, click [Print Quality] in the "Menu:", and then select a lower resolution in the "Resolution:" list. • On the printer driver's [Detailed Settings] tab, click [Print Quality] in the "Menu:", and then select [Raster] in the "Raster/Vector:" list. In some cases, it will take a long time to complete a print job. **PostScript 3** On the printer driver's [Detailed Settings] tab, click [Print Quality] in the "Menu:", and then select a lower resolution in the "Resolutions:" list.
"Memory Retrieval Error"	A memory allocation error occurred.	Turn off the main power switch, and then back on again. If the message appears again, replace the RAM.

Message	Causes	Solutions
"No response from the server. Authentication has failed."	A timeout occurred while connecting to the server for LDAP authentication or Windows Authentication.	Check the status of the server.
"Output tray has been changed."	The output tray was changed because the paper size of the specified output tray is limited.	Specify the proper output tray.
"Print overrun."	Images were discarded while printing.	**PCL 5c** On the printer driver's [Print Quality] tab, select a lower resolution in the "Resolution" area. **PCL 6** On the printer driver's [Detailed Settings] tab, click [Print Quality] in the "Menu:", and then select a lower resolution in the "Resolution:" list. **PostScript 3** On the printer driver's [Detailed Settings] tab, click [Print Quality] in the "Menu:", and then select a lower resolution in the "Resolutions:" list.
"Printing privileges have not been set for this document."	The PDF document you have tried to print has no privileges to print.	Contact the owner of the document.
"Punch has been cancelled."	Punch printing was canceled.	Check the paper orientation, print orientation, and then punch position. Certain settings can produce print results that might not be as expected.
"Receiving data failed."	Data reception was aborted.	Resend the data.
"Selected ppr. size is not supported. Job was cancelled."	Job reset is automatically performed if the specified paper size is incorrect.	Specify the correct paper size, and then print the file again.

Message	Causes	Solutions
"Sending data failed."	The machine received a command to stop transmission from the printer driver.	Check if the computer is working correctly.
"Staple has been cancelled."	Stapling printing was canceled.	Check the paper orientation, paper quantity, print orientation, and staple position. Certain settings can produce print results that might not be as expected.
"The entered password is incorrect."	The password of the encrypted PDF file has been entered incorrectly.	Enter the correct password.
"The print job has been cancelled because capture file(s) could not be stored: Exceeded max. memory."	The hard disk became full after a file was stored.	Delete the files stored in the Document Server or reduce the file size to be sent.
"The print job has been cancelled because capture file(s) could not be stored: Exceeded max. number of files."	The maximum file capacity of the Document Server was exceeded.	Delete the files stored in the Document Server.
"The print job has been cancelled because capture file(s) could not be stored: Exceeded max. number of pages per file."	The maximum page capacity of the Document Server was exceeded.	Delete some of the files stored in the Document Server or reduce the number of pages that you want to send.
"You do not have a privilege to use this function. This job has been cancelled."	The entered login user name or login password is not correct.	Check that the user name and password are correct.
"You do not have a privilege to use this function. This job has been cancelled."	The logged in user is not allowed to use the selected function.	Contact your administrator.

Message	Causes	Solutions
"You do not have a privilege to use this function. This operation has been cancelled."	The logged in user does not have the privileges to register programs or change the paper tray settings.	Contact your administrator.

Messages during Direct print from a removable memory device

Message	Causes	Solutions
"99: Error"	This data cannot be printed. The specified data is either corrupt or not supported by the Direct printing function from removable memory devices.	Check that the data is valid. For details about the kinds of data supported by the Direct printing function from removable memory devices, see "Direct Printing from a Removable Memory Device", Printer Reference.
"File system is full."	The size of the selected PDF file exceeds 500 MB.	PDF files larger than 500 MB cannot be printed. • Reduce the size of the file to less than 500 MB, and then print the file again. • Print by using a function other than the Direct printing function from removable memory devices.

If printing does not start, contact your service representative.

Note

- The contents of errors may be printed on the Configuration Page. Check the Configuration Page in conjunction with the error log. For details about how to print the Configuration Page, see "List / Test Print", Printer Reference.

Checking the Error Log

If files could not be stored due to printing errors, identify the cause of the errors by checking the error log on the control panel.

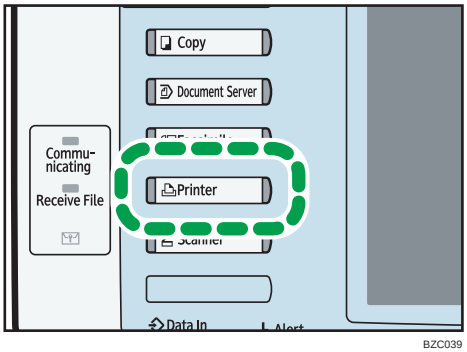
Important

- **The most recent 30 errors are stored in the error log. If a new error is added when there are 30 errors already stored, the oldest error is deleted. However, if the earliest error is a Sample Print, Locked**

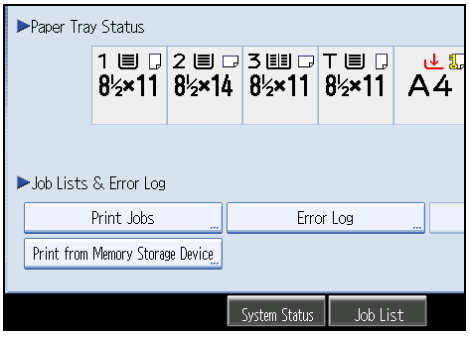
Print, Hold Print, or Stored Print error, it is not deleted. The error is stored separately until the number of errors reaches 30.

- If the main power switch is turned off, the log is deleted.
- You cannot view [Error Log] on the simplified display.

1. Press the [Printer] key to display the printer screen.



2. Press [Error Log].



An error log list appears.

3. Press the desired job list, and then press [Details].

A detailed error log appears.

When You Cannot Print

This section describes what to do if printing does not start even after performing a printing operation.

Problem	Causes	Solutions
Printing does not start.	The power is off.	Check the cable is securely plugged into the power outlet and the machine. Turn on the main power switch.
Printing does not start.	The machine is set to "Offline".	Press [↦Online].
Printing does not start.	The cause is displayed on the screen of the control panel.	Check the error message or warning status on the display panel, and then take the required action.
Printing does not start.	The interface cable is not connected correctly.	Connect the interface cable securely. If it has a fastener, fasten that securely as well. See "Connecting to the Interface", Network and System Settings Reference.
Printing does not start.	The correct interface cable is not being used.	The type of interface cable you should use depends on the computer. Be sure to use the correct one. If the cable is damaged or worn, replace it. See "Connecting to the Interface", Network and System Settings Reference.
Printing does not start.	The interface cable was connected after the machine was switched on.	Connect the interface cable before turning on the main power switch.
Printing does not start.	If the machine is using wireless LAN, failure to print might result from a weak wireless signal.	In [System Settings], under [Interface Settings], select [Wireless LAN], and then press [Wireless LAN Signal] to check signal status. If signal quality is poor, move the machine to a location where radio waves can pass or remove objects that might cause interference. (You can check signal status only when using wireless LAN in the infrastructure mode.)

Problem	Causes	Solutions
Printing does not start.	If the machine is using wireless LAN, SSID settings are incorrect.	Check using the machine's display panel that the SSID is correctly set. See "Wireless LAN", Network and System Settings Reference.
Printing does not start.	If the machine is using wireless LAN, the receiver's MAC address may be preventing communication with the access point.	Check access point settings when in the infrastructure mode. Depending on the access point, client access may be limited by MAC address. Also, check there are no problems in transmission between access point and wired clients, and between access point and wireless clients.
Printing does not start.	The login user name, login password, or driver encryption key is invalid.	Check the login user name, login password, or driver encryption key.
Printing does not start.	Advanced encryption has been set using the Extended Security function.	Check the settings of the Extended Security function with the administrator.
Data In indicator does not light up or flash.	If the Data In indicator does not light up or flash even after the print job starts, the machine has not received the data.	• When the machine is connected to a computer via a cable, check the computer print port settings are correct. For details, see p.96 "When the Data In Indicator Does Not Light Up or Flash". • When it is networked with a computer, contact your administrator.
[List / Test Print] is disabled.	A mechanical error might have occurred.	Contact your service representative.

Problem	Causes	Solutions
Printing does not start when using the extended wireless LAN in Ad-hoc mode.	The correct Communication mode is not set.	• Turn off the main power switch, and then back on again. See "Turning On/Off the Power", About This Machine. • In [System Settings], under [Interface Settings], select [Wireless LAN], and then set [Communication Mode] to [802.11 Ad-hoc Mode] and [Security Method] to [Off]. Then at the other side, set [SSID Setting] and [Ad-hoc Channel] to the same values.

If printing does not start, contact your service representative.

When the Data In Indicator Does Not Light Up or Flash

When the Data In indicator does not light up or flash after starting a print job, data is not being sent to the machine.

When the machine is connected to the computer using the interface cable

This section describes how to check the print port when the Data In indicator does not light up or blink.

Check if the print port setting is correct. When it is connected using a parallel interface, connect it to LPT1 or LPT2.

For Windows 2000

1. Click the [Start] button, point to [Settings], and then click [Printers].
2. Click the icon of the machine. On the [File] menu, click [Properties].
3. Click the [Ports] tab.
4. In the [Print to the following port(s)] list, confirm the correct port is selected.

For Windows XP Professional or Windows Server 2003/2003 R2

1. Click the [start] button, and then click [Printers and Faxes].
2. Click the icon of the machine. On the [File] menu, click [Properties].
3. Click the [Ports] tab.
4. In the [Print to the following port(s)] list, confirm the correct port is selected.

For Windows XP Home Edition

1. Click the [start] button, and then click [Control Panel].
2. Click [Printers and Other Hardware].
3. Click [Printers and Faxes].
4. Click the icon of the machine. On the [File] menu, click [Properties].
5. Click the [Ports] tab.
6. In the [Print to the following port(s)] list, confirm the correct port is selected.

For Windows Vista

1. Click the Start button, and then click [Control Panel].
2. Click [Hardware and Sound].
3. Click [Printers].
4. Click the icon of the machine. On the [Organize] menu, click [Properties].
5. Click the [Ports] tab.
6. In the [Print to the following port(s)] list, confirm the correct port is selected.

For Windows 7

1. Click the Start button, and then click [Control Panel].
2. Click [Hardware and Sound].
3. Click [Devices and Printers].
4. Right click the icon of the machine. On the context menu, click [Printer properties].
5. Click the [Ports] tab.
6. In the [Print to the following port(s)] list, confirm the correct port is selected.

For Windows Server 2008

1. Click the [Start] button, and then click [Control Panel].
2. Click [Hardware and Sound].
3. Click [Printers].
4. Click the icon of the machine. On the [Organize] menu, click [Properties].
5. Click the [Ports] tab.
6. In the [Print to the following port(s)] list, confirm the correct port is selected.

For Windows Server 2008 R2

1. Click the [Start] button, and then click [Control Panel].
2. Click [Hardware].
3. Click [Devices and Printers].
4. Right click the icon of the machine. On the context menu, click [Printer properties].

5. Click the [Ports] tab.
6. In the [Print to the following port(s)] list, confirm the correct port is selected.

Network connection

Contact the network administrator.

Other Printing Problems

This section describes likely causes of and possible solutions for problems that can occur when printing from a computer.

When you cannot print clearly

Problem	Causes	Solutions
The printed image is smudged.	Settings for thick paper have not been made when printing on thick paper in the bypass tray.	**PCL 5c** On the printer driver's [Paper] tab, select [Bypass Tray] in the "Input Tray:" list. Then in the "Type:" list, select [Thick 1 (106 to 169 g/m2)] - [Thick 4 (257 to 300 g/m2)]. **PCL 6** On the printer driver's [Detailed Settings] tab, click [Paper] in the "Menu:", and then select [Bypass Tray] in the "Input Tray:" list. Then in the "Paper Type:" list, select [Thick 1 (106 to 169 g/m2)] - [Thick 4 (257 to 300 g/m2)]. **PostScript 3** On the printer driver's [Detailed Settings] tab, click [Paper] in the "Menu:", and then select [Bypass Tray] in the "Paper Source:" list. Then in the "Media Type:" list, select [Thick 1 (106 - 169 g/m2)] - [Thick 4 (257 - 300 g/m2)].
The printed image is faded over the entire page.	The paper is damp.	Use paper that has been stored in the recommended temperature and humidity conditions. See "Paper Storage", About This Machine.
The printed image is faded over the entire page.	The paper is unsuitable.	Use recommended paper. Printing on coarse or treated paper might result in faint print image. See "Recommended Paper Sizes and Types", About This Machine.

Problem	Causes	Solutions
Images smudge when rubbed. (Toner is not fixed.)	The specified paper type and the paper that is actually loaded might be different. For example, thick paper might be loaded but not specified as the paper type.	**PCL 5c** On the printer driver's [Paper] tab, select a proper paper type in the [Type:] box. **PCL 6** On the printer driver's [Detailed Settings] tab, click [Paper] in the "Menu:", and then select a proper paper type in the "Paper Type:" list. **PostScript 3** On the printer driver's [Detailed Settings] tab, click [Paper] in the "Menu:", and then select a proper paper type in the "Media Type:" list.
The printed image is different from the image on the computer's display.	Printing will be performed by the machine's graphic processing function.	**Only when using PCL 6** On the printer driver's [Detailed Settings] tab, click [Print Quality] in the "Menu:", and then select [Raster] in the "Raster/Vector:" list.
When printing graphics, the output and the screen are different.	If the printer driver is configured to use the graphics command, the graphics command from the machine is used to print.	If you want to print accurately, set the printer driver to print without using the graphics command. See the printer driver Help.
White lines appear.	The dustproof glass is dirty.	Clean the dustproof glass. See "Cleaning the Dustproof Glass", About This Machine.
Lines of garbled or unwanted alphanumeric characters appear.	An incorrect printer language might have been selected.	Select the correct printer driver, and then print the file again.

Problem	Causes	Solutions
Images are cut off, or excess is printed.	You may be using paper smaller than the size selected in the application.	Use the same size paper as that selected in the application. If you cannot load paper of the correct size, use the reduction function to reduce the image, and then print. See the printer driver Help.
Photo images are coarse.	Some applications print at lower resolution.	Use the application's settings to specify a higher resolution.
A solid line is printed as a dashed line or appears blurred.	Dither patterns do not match.	**PCL 5c** On the printer driver's [Print Quality] tab, check "Manual" box in "Color" area. Then click [Advanced...], change the "Dithering:" setting. **PCL 6** On the Printer driver's [Detailed Settings] tab, click [Print Quality] in the "Menu:", and then click [Details...] under "Color Option:". Then change the "Dithering:" setting. **PostScript 3** On the Printer driver's [Detailed Settings] tab, click [Print Quality] in the "Menu:", and then change the "Dithering" setting.

Problem	Causes	Solutions
Fine lines are fuzzy, of inconsistent thickness or color, or do not appear.	Super fine lines have been specified in the application, or a color that is too light has been specified for the lines.	**PCL 5c** On the printer driver's [Print Quality] tab, check "Manual" box in "Color" area. Then click [Advanced...], change the "Dithering:" setting. **PCL 6** On the Printer driver's [Detailed Settings] tab, click [Print Quality] in the "Menu:", and then click [Details...] under "Color Option:". Then change the "Dithering:" setting. **PostScript 3** On the Printer driver's [Detailed Settings] tab, click [Print Quality] in the "Menu:", and then change the "Dithering" setting. If the problem continues after you change the dithering settings, use the settings of the application in which the image was created to change the color and thickness of the lines.
Images appear only partially colored.	The paper is damp.	Use paper that has been stored in the recommended temperature and humidity condition. See "Paper Storage", About This Machine.

When paper is not fed properly

Problem	Causes	Solutions
Paper is not fed from the selected tray.	When you are using a Windows operating system, printer driver settings override those settings using the display panel.	**PCL 5c** On the printer driver's [Paper] tab, select the desired input tray in the "Input Tray" list. **PCL 6** On the Printer driver's [Detailed Settings] tab, click [Paper] in the "Menu:", select the desired input tray in the "Input Tray:" list. **PostScript 3** On the Printer driver's [Detailed Settings] tab, click [Paper] in the "Menu:", select the desired input tray in the "Paper Source:" list.
Images are printed at a slant.	The tray's side fences might not be locked.	Check that the side fences are locked. See "Changing the Paper Size", About This Machine.
Images are printed at a slant.	The paper is feeding in at a slant.	Load the paper correctly. See "Loading Paper", About This Machine.
Misfeeds occur frequently.	The number of sheets loaded exceeds the capacity of the machine.	Load paper only as high as the upper limit markings on the side fences of the paper tray, or the markings on the paper guides of the bypass tray.
Misfeeds occur frequently.	The paper tray's side fences are set too tightly.	Push the side fences lightly, and then reset them.
Misfeeds occur frequently.	The paper is damp.	Use paper that has been stored in the recommended temperature and humidity conditions. See "Paper Storage", About This Machine.
Misfeeds occur frequently.	The paper is too thick or too thin.	Use recommended paper. See "Recommended Paper Sizes and Types", About This Machine.

Problem	Causes	Solutions
Misfeeds occur frequently.	The paper is wrinkled or has been folded/creased.	• Use recommended paper. For details about recommended paper, see "Recommended Paper Sizes and Types", About This Machine. • Use paper that has been stored in the recommended temperature and humidity conditions. For details about the proper way to store paper, see "Paper Storage", About This Machine.
Misfeeds occur frequently.	Printed paper is being used.	Do not load sheets that have already been copied or printed onto by another machine.
Misfeeds occur frequently.	Sheets are sticking together.	Fan the sheets thoroughly before loading them. Alternatively, feed the sheets into the machine one at a time.
Sheets are feeding in together, resulting in jams.	Sheets are sticking together.	Fan the sheets thoroughly before loading them. Alternatively, feed the sheets into the machine one at a time.
Copy paper becomes creased.	The paper is damp.	Use paper that has been stored in the recommended temperature and humidity conditions. See "Paper Storage", About This Machine.
Copy paper becomes creased.	The paper is too thin.	Use recommended paper. See "Recommended Paper Sizes and Types", About This Machine.
Edges of sheets are creased.	The paper is damp.	Use paper that has been stored in the recommended temperature and humidity conditions. See "Paper Storage", About This Machine.
Edges of sheets are creased.	You are using non-recommended paper.	Use recommended paper. See "Recommended Paper Sizes and Types", About This Machine.

Problem	Causes	Solutions
Duplex printing is malfunctioning.	You have loaded thick paper heavier than 169 g/m^2 (90 lb.).	Change the paper.
Duplex printing is malfunctioning.	"Apply Duplex" is set to [No] for "Paper Type".	In [Tray Paper Settings], under "Paper Type" set "Apply Duplex" to [Yes]. For details, see "Tray Paper Settings", Network and System Settings Reference .
Duplex printing is malfunctioning.	You have selected a paper type that cannot be used for duplex print.	In [Tray Paper Settings], select a paper type that can be used for duplex print. For details about the paper types that can be used, see "Duplex Copying", Copy and Document Server Reference .
The image on the back side of duplex copies has mottled blank patches or is smudged.	Missing patches and smudges are caused by moisture leaking from the paper.	• Do not install the machine in areas that are susceptible to low temperature. • Use paper that has been stored where temperature and humidity conditions meet the limitations we recommend. For details about the paper storage conditions we recommend, see "Paper Storage", About This Machine .
White stripes appear on the OHP.	Fragments of paper are stuck to the OHP.	Use a dry cloth to wipe any paper fragments off the back of the OHP.
Cannot print from the small size paper tray.	When [Small Size Paper Tray] is displayed in [System Settings], [Off] is specified for the tray in which the small size paper is set.	When [Small Size Paper Tray] is displayed in [System Settings], specify [On] for the tray in which the small size paper is set.

Other printing problems

Problem	Causes	Solutions
It takes a long time to complete a print job.	"Sleep mode" might be set.	The machine requires time to warm up if it has been in "Sleep mode". In [System Settings], under [Timer Settings], select [Auto Off Timer], and then specify "Sleep mode".
It takes a long time to complete a print job.	Photographs and other data intensive pages take a long time for the machine to process, so simply wait when printing such data.	If the Data In indicator is blinking, data has been received by the printer. Wait for a moment. Changing the following settings with the printer driver may help speed up printing: **PCL 6** On the printer driver's [Detailed Settings] tab, click [Print Quality] in the "Menu:", and then select a lower resolution in the "Resolution:" list. **PostScript 3** On the printer driver's [Detailed Settings] tab, click [Print Quality] in the "Menu:", and then select a lower resolution in the "Resolutions:" list.
Images are printed in the wrong orientation.	The feed orientation you selected and the feed orientation selected in the printer driver's option setup might not be the same.	Set the machine's feed orientation and the printer driver's feed orientation accordingly. See the printer driver Help.
When using Windows 2000/XP/Vista/7, and Windows Server 2003/2003 R2/2008/2008 R2, optional components connected to the machine are not recognized.	Bidirectional communication is not working.	Set up optional devices on the Properties of the printer. See the printer driver Help.

Problem	Causes	Solutions
When using Windows 2000/XP/Vista/7, and Windows Server 2003/2003 R2/2008/2008 R2, combined printing, booklet printing, or Auto Reduce / Enlarge printing does not come out as expected.	The correct application or printer driver settings are not made.	Make sure the application's paper size and orientation settings match those of the printer driver. If a different paper size and orientation are set, select the same size and orientation.
A print instruction was issued from the computer, but printing did not start.	User Authentication may have been set.	Contact your administrator.
Color originals are printed in black and white.	No color print settings are made on the printer driver.	**PCL 5c** On the printer driver's [Setup] tab, select [Color] in the "Color/ Black and White:" list. **PCL 6** On the printer driver's [Detailed Settings] tab, click [Basic] in the "Menu:", and then select [Color] in the "Color/ Black and White:" list. **PostScript 3** On the printer driver's [Detailed Settings] tab, click [Basic] in the "Menu:", and then select [Color] in the "Color Mode" list.
The print job is not canceled even when the machine is switched to offline status.	Even when the machine is offline, printing is performed when [Job Acceptance Priority] has been set in [Parallel Interface] in the [Interface Settings] in the System Settings menu.	Change the setting of Signal Control to Printer priority. See "Interface Settings", Network and System Settings Reference .

Problem	Causes	Solutions
PDF files do not print out/ cannot perform PDF direct print.	PDF files are password-protected.	To print password-protected PDF files, enter the password in the [PDF Menu] or on Web Image Monitor. For details, see "PDF Menu", Printer Reference, or Web Image Monitor Help.
PDF files do not print out/ cannot perform PDF direct print.	PDF files cannot be printed if they are print-disabled in PDF file security setting.	Change the PDF file security setting.
PDF direct print produces strange or malformed characters.	Fonts were not embedded.	Embed fonts in the PDF file you want to print, and then print.
"Resetting job..." appears and printing is suspended.	Memory is insufficient.	In [Printer Features], under [System], select [Memory Usage] to [Font Priority].

If the problem cannot be solved, contact your service representative.

When PictBridge Printing Does Not Work

This section describes likely causes of and possible solutions for problems that can occur when using PictBridge printing.

Problem	Causes	Solutions
PictBridge is not available.	There is a problem with the USB connection or the PictBridge settings.	Use the following procedure to check the connection and settings: 1. Disconnect, and then reconnect the USB cable. 2. Check the PictBridge settings are enabled. 3. Disconnect the USB cable, and then turn off the machine. Turn the machine back on. When the machine has fully booted up, reconnect the USB cable.
When two or more digital cameras are connected, the second and subsequent cameras are not recognized.	You have connected multiple digital cameras.	Connect one digital camera only. Do not connect multiple cameras.
Printing is disabled.	The number of originals exceeds the maximum number of pages that can be printed at a time.	The maximum specifiable print quantity at a time is 999. Respecify the quantity to 999 or less, and then retry printing.
Printing is disabled.	There is no paper of the specified size remaining.	There is no paper of the specified size remaining. If you have to use paper that is not of the specified size, perform Form Feed. To cancel printing, perform Job Cancel.

5. Troubleshooting When Using the Scanner Function

This chapter describes likely causes of and possible solutions for scanner function problems.

Messages Displayed When Using the Scanner Function

This section describes the principal messages that appear on the display panel and the client computer. If other messages appear, follow their instructions.

Messages Displayed on the Control Panel When Using the Scanner Function

This section describes likely causes of and possible solutions for the error messages that appear on the control panel. If a message not described here appears, act according to the message.

Message	Causes	Solutions
"Authentication has failed."	The entered login user name or login password is not correct.	Contact the user administrator.
"Authentication has failed."	The machine cannot perform authentication.	Contact your administrator.
"Authentication with the destination has failed. Check settings. To check the current status, press [Scanned Files Status]."	The entered user name or password was invalid.	• Check that the user name and password are correct. • Check that the ID and password for the destination folder are correct. • A password of 128 or more characters may not be recognized.
"Cannot communicate with PC. Contact the administrator."	WSD (Device) protocol or WSD (Scanner) protocol is disabled.	Contact your administrator.

Message	Causes	Solutions
"Cannot detect original size. Select scan size."	The original placed on the exposure glass is a nonstandard size.	• Place the original correctly. • Specify the scan size. • When placing an original directly on the exposure glass, the lifting/lowering action of the ADF triggers the automatic original size detection process. Lift the ADF by 30 degrees or more.
"Cannot find the specified path. Please check the settings."	The destination computer name or folder name is invalid.	Check whether the computer name and the folder name for the destination are correct.
"Cannot find the specified path. Please check the settings."	An antivirus program or a firewall is preventing the machine connecting to your computer.	• Antivirus programs and firewalls can prevent client computers from establishing connection with this machine. • To prevent an antivirus application blocking the connection, register the facsimile program in the antivirus program's exclusion list. For details about the procedure for excluding a program, see your antivirus application's Help. • To prevent a firewall blocking the connection, register the machine's IP address in the firewall's IP address exclusion settings. For details about the procedure for excluding an IP address, see your firewall's Help.
"Cannot start scanning because communication was failed."	Scan Profile is not set on the client computer.	Set Scan Profile. For details about how to do this, see "Changing a Scan Profile", Scanner Reference.

Message	Causes	Solutions
"Cannot start scanning because communication was failed."	The [Take no action] setting has been selected on the client computer, forcing the client computer to remain inactive when it receives scan data.	Open scanner properties, click the [Events] tab, and then select [Start this program] as the computer's response on receipt of scan data. For details, see your operating system's Help.
"Cannot start scanning. Check the setting(s) on the PC."	The Scan Profile might be incorrectly configured.	Check the Scan Profile configuration.
"Cannot write on the memory storage device. Check the memory storage device and machine settings."	The memory device is faulty, or the file name contains a character that cannot be used.	• Check to see if the memory device is defective. • Check the memory device. It might be unformatted, or its format might be incompatible with this machine. • Check the file name set at the time of scanning. For details about the characters that can be used in file names, see "Specifying the File Name", Scanner Reference.
"Cannot write on the memory storage device because remaining free space is insufficient."	The memory device is full and scan data cannot be saved. Even if the memory device appears to have sufficient free space, data might not be saved if the maximum number of files that can be saved is exceeded.	• Replace the memory device. • If the document is scanned as single-page or divided multiple pages, data already written to the memory device is saved as is. Replace the memory device, and then press [Retry] to save the remaining data, or press [Cancel] to redo the scan.
"Cannot write on the memory storage device because the device is write-protected."	The memory device is write-protected.	Unlock the write-protection on the memory device.
"Captured file exceeded max. number of pages per file. Cannot send the scanned data."	The maximum number of pages per file has been exceeded.	Reduce the number of pages in the transmitted file, and then resend the file. See "Storage function", Scanner Reference.

Message	Causes	Solutions
"Connection with LDAP server has failed. Check the server status."	A network error has occurred and connection has failed. Try the operation once more.	• Try the operation once more. If the message is still shown, the network may be crowded. • In [System Settings], under [Administrator Tools], check the settings of LDAP server. For details, see "Programming the LDAP server", Network and System Settings Reference.
"Could not send the data because the PC timed out before it was sent."	A time out occurred when using WSD Scanner. Time outs occur when too much time passes between scanning an original and sending its data. The followings are likely causes of time outs: • Too many originals per set. • Misfed originals. • Transmission of other jobs.	• Reduce the number of originals, and then scan again. • Remove any misfed original, and then scan again. • Use Scanner Journal to check there are no jobs awaiting transmission, and then scan again.
"Destinations to which encrypted files will be sent contain users without certificates or with invalid certificates. Check the destinations."	The destination's S/MIME certificates are invalid or cannot be found.	Contact your administrator.
"Destinations to which encrypted files will be sent contain users that could not be verified by the certificates. Check the destinations."	S/MIME certificates are valid, but the Certificate Authority could not be found for the destination.	Contact your administrator.
"Entered user code is not correct. Please re-enter."	You have entered an incorrect user code.	Check the authentication settings, and then enter a correct user code.

Message	Causes	Solutions
"Exceeded max. E-mail size. Sending E-mail has been cancelled. Check [Max. E-mail Size] in Scanner Features."	The file size per page has reached the maximum e-mail size specified in [Scanner Features].	• In [Scanner Features], under [Send Settings], increase the size of [Max. E-mail Size]. • In [Scanner Features], under [Send Settings], set [Divide & Send E-mail] to [Yes (per Page)] or [Yes (per Max. Size)].
"Exceeded max. No. of results to display. Max.: n" (A figure is placed at n.)	Search results have exceeded the max. displayable number.	Search again after changing the search conditions.
"Exceeded max. data capacity. Check scanning resolution, then press Start key again."	The scanned data exceeded maximum data capacity.	Specify the scan size and resolution again. Note that it may not be possible to scan very large originals at a high resolution. See "Relationship between Resolution and Scan Size", Scanner Reference.
"Exceeded max. data capacity. Check the scanning resolution, then reset original (s)."	The scanned original exceeded maximum data capacity.	Specify the scan size and resolution again. Note that it may not be possible to scan very large originals at a high resolution. See "Relationship between Resolution and Scan Size", Scanner Reference.
"Exceeded max. number of alphanumeric characters for the path."	The maximum number of specifiable alphanumeric characters in a path has been exceeded.	The maximum number of characters which can be entered for the path is 256. Check the number of characters you entered, and then enter the path again.
"Exceeded max. number of alphanumeric characters."	The maximum enterable number of alphanumeric characters has been exceeded.	Check the maximum number of characters which can be entered, and then enter it again. See "Values of Various Set Items for Transmission/ Storage/Delivery Function", Scanner Reference.
"Exceeded max. number of files which can be sent at the same time. Reduce the number of the selected files."	The number of files exceeded the maximum number possible.	Reduce the number of files, and then send them again.

Message	Causes	Solutions
"Exceeded max. number of files which can be used in Document Server at the same time."	The maximum number of files that can be stored in the Document Server has been exceeded.	Check the files stored by the other functions, and then delete unneeded files. For details about how to delete files, see "Deleting a Stored Document", Copy and Document Server Reference.
"Exceeded max. number of pages per file. Do you want to store the scanned pages as 1 file?"	The file being stored has exceeded the maximum number of pages for one file.	Specify whether to store the data or not. Scan the pages that were not scanned, and then store them as a new file. See "Storing Files Using the Scanner Function", Scanner Reference.
"Exceeded max. number of standby files. Try again after the current file is sent."	The maximum number of standby files was exceeded.	There are 100 files waiting in the sending queue for e-mail, Scan to Folder, or delivery functions. Wait until files have been sent.
"Exceeded max. number of stored files. Cannot send the scanned data as capturing files is unavailable."	Too many files are waiting to be delivered.	Try again after they have been delivered.
"Exceeded max. page capacity per file. Press [Send] to send the scanned data, or press [Cancel] to delete."	The number of scanned pages exceeded maximum page capacity.	Select whether to send the data so far.
"Exceeded max. page capacity per file. Press [Write] to write the scanned data to the memory storage device, or press [Cancel] to delete."	The scan could not be completed because the maximum number of pages that can be scanned by this machine was exceeded during writing to the Memory device.	Reduce the number of documents to be written to the memory device, and then try again.
"Exceeded maximum number of file to store. Delete all unnecessary files."	Too many files are waiting to be delivered.	Please try again after they have been delivered.

Message	Causes	Solutions
"Exceeded time limit for LDAP server search. Check the server status."	A network error has occurred and connection has failed.	• Try the operation once more. If the message is still shown, the network may be crowded. • In [System Settings], under [Administrator Tools], check the settings of LDAP server. For details, see "Programming the LDAP server", Network and System Settings Reference.
"Invalid certificates or no S/MIME certificates were found."	The destination's S/MIME certificates are invalid or cannot be found.	Contact your administrator.
"LDAP server authentication has failed. Check the settings."	The user name and password differ from those set for LDAP Authentication.	In [System Settings], under [Administrator Tools], check the settings of LDAP server. For details, see "Programming the LDAP server", Network and System Settings Reference.
"Memory is full. Cannot scan. The scanned data will be deleted."	Because of insufficient hard disk space, the first page could not be scanned.	Try one of the following measures: • Wait for a while, and then retry the scan operation. • Reduce the scan area or scanning resolution. See "Scan Settings" of Various Scan Settings, Scanner Reference. • Delete unneeded stored files. See "Deleting a Stored File", Scanner Reference.
"Memory is full. Do you want to store scanned file?"	Because there is not enough free hard disk space in the machine for storing in the Document Server, only some of the pages could be scanned.	Specify whether to use the data or not.

Message	Causes	Solutions
"Memory is full. Press [Write] to write the current scanned data to the memory storage device, or press [Cancel] to delete."	The scan could not be completed because there was insufficient hard disk memory at the time of saving to the memory device.	Select whether or not to save the scanned document to the memory device.
"Memory is full. Scanning has been cancelled. Press [Send] to send the scanned data, or press [Cancel] to delete."	Because there is not enough free hard disk space in the machine for delivering or sending by e-mail while storing in the Document Server, only some of the pages could be scanned.	Specify whether to use the data or not.
"Memory storage device not detected. Insert the device."	There is no memory device inserted.	Insert a memory device, or check to see whether the memory device is properly inserted in the media slot.
"No paper. Load paper of one of the following sizes."	No paper is set in the specified paper tray.	Load paper of the sizes listed in the message. See "Loading Paper", About This Machine.
"Now loading WSD... Please wait."	WSD scanner function is being prepared.	Wait a while.
"Only one memory storage device can be used in one time. Please remove all other memory storage devices to resume writing."	Only one memory device can be connected at a time.	Insert one memory device only in the media slot.
"Original is being scanned by another function. Switch to the following function, then press the Stop key to cancel scanning or press the Start key to continue."	A function of the machine other than the Scanner function is being used such as the Copier function.	Cancel the job in progress. For example, press [Exit], and then press the [Copy] key. Next, press the [Clear/ Stop] key. When the message "The Clear / Stop key was pressed. Are you sure you want to stop scanning?" appears, press [Stop].
"Output buffer is full. Sending the data has been cancelled. Please try again later."	Too many jobs are in standby state, and sending was canceled.	Retry sending after sending jobs in standby state completes.

Message	Causes	Solutions
"SMTP authentication E-mail address and Administrator E-mail address mismatch."	The SMTP authentication e-mail address and the administrator's e-mail address do not match.	Contact your administrator.
"Scanner journal is full. Please check Scanner Features."	"Print & Delete Scanner Journal" in [Scanner Features] is set to [Do not Print: Disable Send], and Scanner Journal is full.	Print or delete Scanner Journal. For details, see "General Settings", Scanner Reference.
"Selected file is currently in use. File name cannot be changed."	You cannot change the name of a file whose status is "Waiting..." or that is being edited with DeskTopBinder.	Cancel transmission ("Waiting..." status cleared) or the DeskTopBinder setting, and then change the file name.
"Selected file is currently in use. Password cannot be changed."	You cannot change the password of a file whose status is "Waiting..." or that is being edited with DeskTopBinder.	Cancel transmission ("Waiting..." status cleared) or the DeskTopBinder setting, and then change the password.
"Selected file is currently in use. User name cannot be changed."	You cannot change the sender's name whose status is "Waiting..." or that is being edited with DeskTopBinder.	Cancel transmission ("Waiting..." status cleared) or the DeskTopBinder setting, and then change the user name.
"Sending the data has failed. The data will be resent later."	A network error has occurred and a file was not sent correctly.	Wait until sending is retried automatically after the preset interval. If sending fails again, contact the network administrator.
"Some invalid destination(s) contained. Do you want to select only valid destination (s)?"	The specified group contains e-mail destinations and Scan to Folder destinations, either of which are incompatible with the specified transmission method.	In the message that appears at each transmission, press [Select].

Message	Causes	Solutions
"Some of selected files are currently in use. They could not be deleted."	You cannot delete a file which is waiting to be transmitted ("Waiting..." status displayed) or whose information is being changed with DeskTopBinder.	Cancel transmission ("Waiting..." status cleared) or the DeskTopBinder setting, and then delete the file.
"Some page(s) are near blank. To cancel, press the Stop key."	The first page of the document is almost blank.	The original's blank side might have been scanned. Be sure to place your originals correctly.
"The entered file name contains invalid character(s). Enter the file name again using any of the following 1 byte characters. " 0 to 9 ", " A to Z ", " a to z ", " . - _""	The file name contains a character that cannot be used.	Check the file name set at the time of scanning. For details about characters that can be used in file names, see "Specifying the File Name", Scanner Reference.
"The selected file(s) contained file(s) without access privileges. Only file(s) with access privileges will be deleted."	You have tried to delete files without the authority to do so.	The files can be deleted by the file administrator. To delete a file which you are not authorized to delete, contact your administrator.
"Transmission has failed. Insufficient memory in the destination hard disk. To check the current status, press [Scanned Files Status]."	Transmission has failed. There was not enough free space on the hard disk of the SMTP server, FTP server, or client computer at the destination.	Allocate sufficient space.
"Transmission has failed. To check the current status, press [Scanned Files Status]."	While a file was being sent, a network error occurred and the file could not be sent correctly.	If the same message appears again after scanning again, the cause could be a mixed network, or else network settings were changed during WSD scanner transmission. Check with your system administrator.
"Updating the destination list has failed. Try again?"	A network error has occurred.	Check whether the server is connected.

Message	Causes	Solutions
"Updating the destination list... Please wait. Specified destination(s) or sender's name has been cleared."	A specified destination or sender's name was cleared when the destination list in the delivery server was updated.	Specify the destination or sender's name again.
"Updating the destination list... Please wait. Specified destination(s) or sender's name has been cleared."	The destination list is being updated from the network using Web Image Monitor.	Wait until the message disappears. Do not switch off the power while this message is displayed. Depending on the number of destinations to be updated, there may be some delay before you can resume operation. Operations are not possible while this message is displayed.
"You do not have the privileges to use this function."	The logged in user name does not have permission for the selected function.	Contact your administrator about the permission for the required function.
"Contains invalid character (s). Please re-enter."	The file name contains a character that cannot be used.	Check the file name specified at the time of scanning. The file name specified in the Sending Scan Files to Folders function cannot contain the following characters: \ / : * ? " < > | The file name cannot start or end with a period ".".

Messages Displayed on the Client Computer

This section describes likely causes of and possible solutions for the main error messages displayed on the client computer when using the TWAIN driver. If a message not described here appears, act according to the message.

Message	Causes	Solutions
"Any of Login User Name, Login Password or Driver Encryption Key is incorrect."	The entered login user name, password, or driver encryption key was invalid.	• Check the login user name, login password, and driver encryption key. • Permission to use this function has not been granted. Contact your administrator.
"Call Service" "Please call your service representative."	An unrecoverable error has occurred in the machine.	Contact your service representative.
"Cannot add any more scanning mode."	The maximum number of registerable scan modes has been exceeded.	The maximum number of modes that can be stored is 100. Delete unneeded modes.
"Cannot connect to the scanner. Check the network Access Mask settings in User Tools."	An access mask is set.	Contact the network or scanner administrator.
"Cannot detect the paper size of the original. Specify the scanning size."	The set original was misaligned.	• Place the original correctly. • Specify the scan size. • When placing an original directly on the exposure glass, the lifting/lowering action of the ADF triggers the automatic original size detection process. Lift the ADF by 30 degrees or more.
"Cannot find "XXX" scanner used for the previous scan. "YYY" will be used instead." ("XXX" and "YYY" indicate scanner names.)	The main power switch of the previously used scanner is not set to "On".	Check whether the main power switch of the scanner used for the previous scan is turned on.

Message	Causes	Solutions
"Cannot find "XXX" scanner used for the previous scan. "YYY" will be used instead." ("XXX" and "YYY" indicate scanner names.)	The machine is not connected to the network correctly.	• Check that the previously used scanner is connected to the network correctly. • Cancel the Personal Firewall of the client computer. For details, see Windows Help. • Use an application such as telnet to make sure SNMPv1 or SNMPv2 is set as the machine's protocol. See "Remote Maintenance Using telnet", Network and System Settings Reference. • Select the scanner used for the previous scan.
"Cannot specify any more scanning area."	The maximum number of registerable scan areas has been exceeded.	The maximum number of scanning areas that can be stored is 100. Delete unneeded scanning areas.
"Clear Misfeed(s) in ADF."	A paper misfeed has occurred inside the ADF.	Remove jammed originals, and then insert them again. For details, see p.133 "Removing Jammed Paper". • Check whether the originals are suitable to be scanned by the machine.
"Communication error has occurred on the network."	A communication error has occurred on the network.	Check whether the client computer can use the TCP/IP protocol.
"Error has occurred in the scanner driver."	An error has occurred in the driver.	• Check whether the network cable is connected correctly to the client computer. • Check whether the Ethernet board of the client computer is recognized correctly by Windows. • Check whether the client computer can use the TCP/IP protocol.

Message	Causes	Solutions
"Error has occurred in the scanner."	The application-specified scan conditions have exceeded the setting range of the machine.	• Check whether the scanning settings made with the application exceed the setting range of the machine. • Disable the client computer's own firewall. For details, see Windows Help.
"Fatal error has occurred in the scanner."	An unrecoverable error has occurred on the machine.	An unrecoverable error has occurred in the machine. Contact your service representative.
"Insufficient memory. Close all other applications, then restart scanning."	Memory is insufficient.	• Close all the unnecessary applications running on the client computer. • Uninstall the TWAIN driver, and then reinstall it after restarting the computer.
"Insufficient memory. Reduce the scanning area."	Scanner memory is insufficient.	• Reset the scan size. • Lower the resolution. • Set with no compression. See TWAIN driver Help. The problem may be due to the following cause: • Scanning cannot be performed if large values are set for brightness when using halftone or high resolution. See "Relationship between Resolution and Scan Size", Scanner Reference.
"Invalid Winsock version. Please use version 1.1 or higher."	You are using an invalid version of Winsock.	Install the operating system of the computer or copy Winsock from the operating system CD-ROM.
"No User Code is registered. Consult your system administrator."	Access is restricted with user codes.	Contact your administrator of the machine.

Message	Causes	Solutions
"No response from the scanner."	The machine or client computer is not connected to the network correctly.	Check whether the machine or client computer is connected to the network correctly.
"No response from the scanner."	The network is crowded.	Wait for a while, and then try to reconnect.
"Scanner is in use for other function. Please wait."	A function of the machine other than the Scanner function is being used such as the Copier function.	• Wait for a while, and then reconnect. • Cancel the job in progress. For example, press [Exit], and then press the [Copy] key. Next, press the [Clear/Stop] key. When the message "The Clear / Stop key was pressed. Are you sure you want to stop scanning?" appears, press [Stop].
"Scanner is not available on the specified device."	The TWAIN scanner function cannot be used on this machine.	Contact your service representative.
"Scanner is not available. Check the scanner connection status."	The machine's main power switch is off.	Turn on the main power switch.
"Scanner is not available. Check the scanner connection status."	The machine is not connected to the network correctly.	• Check whether the machine is connected to the network correctly. • Deselect the personal firewall function of the client computer. For details, see Windows Help. • Use an application such as telnet to make sure SNMPv1 or SNMPv2 is set as the machine's protocol. See "Remote Maintenance Using telnet", Network and System Settings Reference.
"Scanner is not ready. Check the scanner and the options."	The ADF cover is open.	Check whether the ADF cover is closed.

Message	Causes	Solutions
"The name is already in use. Check the registered names."	You tried to register a name that is already in use.	Use another name.

When You Cannot Send Scanned Files

This section describes likely causes of and solutions for problems related to network delivery and sending e-mail.

When Stored Files Cannot Be Accessed

This section describes likely causes of and possible solutions for job access-related problems.

Problem	Causes	Solutions
The stored file is locked and is not accessible.	The file, which is password protected, is locked because the password was incorrectly entered ten times.	Contact your administrator.

When Stored Files Cannot Be Edited

This section describes likely causes of and possible solutions for stored files being unable to be edited.

Problem	Causes	Solutions
Stored files cannot be deleted. File names and passwords cannot be changed. Files cannot be redelivered.	Limits have been imposed using the available extended security function.	Contact your administrator.

When You Cannot Browse the Network to Send a Scan File

This section describes likely causes of and possible solutions for the network browsing failing to operate when files are sent.

Problem	Causes	Solutions
The network cannot be browsed when specifying the destination folder.	The following machine settings may not be correct: • IP address • Subnet Mask	Check the settings. See "Interface Settings", Network and System Settings Reference.

When the TWAIN Driver Cannot Be Started

This section describes likely causes of and possible solutions for the TWAIN driver-related problems.

Problem	Causes	Solutions
The Scanner Properties dialog box cannot be displayed.	Advanced encryption has been specified in the extended security setting.	For details about the extended security setting, contact your administrator.

When the Network Delivery Function Cannot Be Used

This section describes likely causes of and possible solutions for the network delivery function problems.

Problem	Causes	Solutions
Cannot use the network delivery function.	The delivery software may be an old version or a security setting may be specified.	Contact your administrator.
Cannot use the network delivery function.	The network delivery function setting is not correct.	Specify it correctly. See "Network Settings Required to Use the Network Delivery Scanner", Network and System Settings Reference.

When S/MIME Cannot Be Used

This section describes likely causes of and possible solutions for S/MIME-related problems.

Problem	Causes	Solutions
If several destinations are selected for the broadcasting sequence, the data is sent over twice.	Encrypted e-mails are sent to the destinations for which S/MIME authentication is set, and plain text e-mails are sent to the destinations for which S/MIME authentication is not set.	Make sure S/MIME-authentication destinations are separate from plain text destinations. Contact your administrator. For details about destination settings.

Problem	Causes	Solutions
When putting a signature on an e-mail using S/MIME, an e-mail address for "Sender" is not set for "From".	When S/MIME is applied, the administrator appears in the "From" field, and the sender appears in the "Reply-to" field.	Contact your administrator.

Note

- Using S/MIME makes e-mail larger than when not using S/MIME.

When You Cannot Send Scan Files Using WSD

This section describes likely causes of and possible solutions for sending scan files using WSD.

Problem	Causes	Solutions
The WSD scanner function cannot be used.	Scan Profile is not set on the client computer.	Set Scan Profile. For details about how to do this, see "Changing a Scan Profile", Scanner Reference.
The WSD scanner function cannot be used.	The [Take no action] setting has been selected on the client computer, forcing the client computer to remain inactive when it receives scan data.	Open scanner Properties, click the [Events] tab, and then select [Start this program] as the computer's response on receipt of scan data. For details, see your operating system's Help.

When Scanning Is Not Done As Expected

This section describes causes and remedies when scan results are not as expected.

Problem	Causes	Solutions
The scanned image is dirty.	The exposure glass, scanning glass, or ADF is dirty.	Clean them. See "Maintaining Your Machine", About This Machine.
The image is distorted or out of position.	The original was moved during scanning.	Do not move the original during scanning.
The image is distorted or out of position.	The original was not pressed flat against the exposure glass.	Make sure the original is pressed flat against the exposure glass.
The scanned image is upside down.	The original was placed upside down.	Place the original in the correct orientation. See "Setting of Original Feed Type", Scanner Reference.
No image results from scanning.	The original was placed with the front and back reversed.	When the original is placed directly on the exposure glass, the side to be scanned must face down. When the original is inserted into the ADF, the side to be scanned must face up.
Images are scanned in rotated.	If you set the original with its top edge backward and save full color/gray scale images as a TIFF or JPEG file, they are scanned in rotated.	When placing an original directly on the exposure glass, align its top edge flush against the left side of the exposure glass. When inserting a stack of originals into the ADF, insert them top edge leading in. For details, see "Setting of Original Feed Type", Scanner Reference.

Problem	Causes	Solutions
The scanned image contains white spaces.	• If you scan originals using functions other than the network TWAIN scanner function, certain paper size and resolution settings may produce scanned images that are larger than the specified size because of margins being added to the sides. • If the File Format Converter (optional) is installed, the margins may become wider.	Scanning at a higher resolution may reduce the margins.
The scanned image is grayed out or a text pattern appears in the background.	You have scanned a copy guarded document protected from unauthorized copying.	Check the document. For details about how to prevent unauthorized copying of the document, see "Preventing an Unauthorized Copy", About This Machine.
After an original is scanned, the following settings are canceled: Destination, Sender, E-mail text, Subject, and File name	To prevent the scanned data being sent to the wrong destination, this machine has a function that cancels the settings once the scanned data is sent.	Contact your sales or service representative for details about how to prevent the settings being automatically reset after the scanned data is sent.

6. Clearing Misfeeds

This chapter describes what to do when paper or originals misfeed (become jammed inside the machine).

Removing Jammed Paper

This section describes how to locate and remove jammed paper.

⚠CAUTION

- The inside of the machine could be very hot. Do not touch the parts with a label indicating the "hot surface." Otherwise, an injury might occur.

⚠CAUTION

- Some of this machine's internal components get very hot. For this reason, take care when removing misfed paper. Not doing so could result in burns.

⚠CAUTION

- Keep your hands clear of the booklet finisher tray when removing misfed paper, pulling out or pushing in the finisher's staple unit. You can trap and injure your fingers if you do not.

Important

- **When clearing misfeeds, do not turn off the operation switch. If you do, your copy settings will be lost.**
- **To prevent misfeeds, do not leave any torn scraps of paper inside the machine.**
- **Contact your service representative if misfeeds occur frequently.**
- **If the error message remains displayed even after you remove misfed paper, open and close the front cover.**

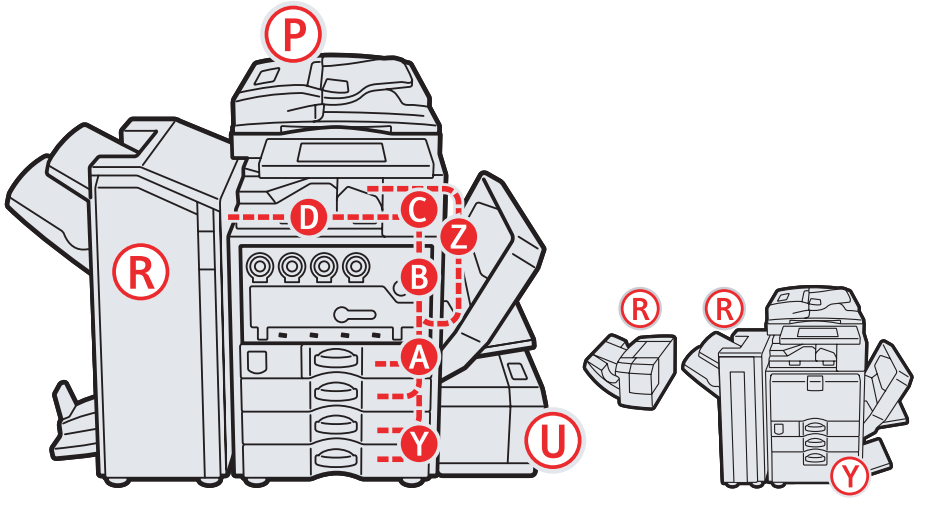
Note

- Inside the finisher, or inside the front cover, there is a sticker explaining how to remove misfed paper.
- If a detailed removal instruction appears on the right of the screen, follow it.
- You can also use the procedure indicated in [System Status] to remove jammed paper.

Locating Jammed Paper

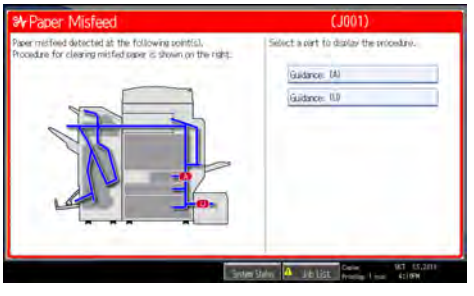
If a misfeed happens, remove the misfed paper or original following the procedures stated on the sticker inside the finisher or front cover.

A misfeed has occurred in the place corresponding to the letter displayed on the control panel.

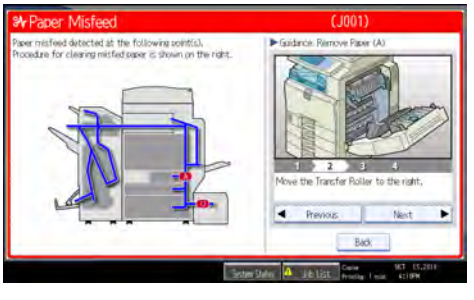


BHK010S

1. **Press the key of the section from where you want to remove the jammed paper.**



2. **After each step is complete, press [Next]. To go back to the previous step, press [Previous].**

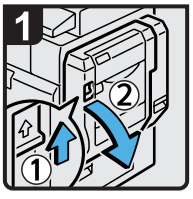


3. **When all jammed paper is removed, restore the machine to the original state.**

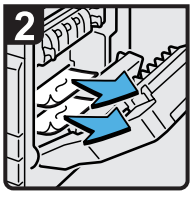
Note

- More than one misfeed may be indicated. When this happens, check all the areas indicated.
- If there is no misfed paper in the first area you check, see the other areas that are indicated.

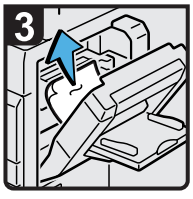
When A is displayed



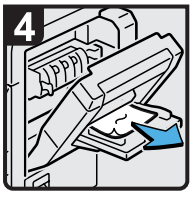
- Push up the lever, and then open the duplex unit.



- Remove misfed paper.



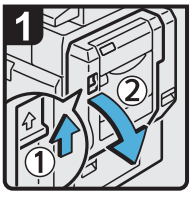
- When using the bypass tray, remove misfed paper from the inside of the tray.



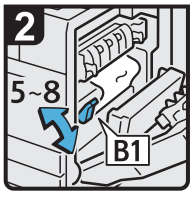
- Remove misfed paper from the outside of the bypass tray.
- Close the duplex unit.

BZC002

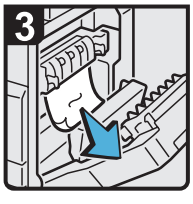
When B is displayed



- Push up the lever, and then open the duplex unit.



- Move lever B1 up and down five to eight times.



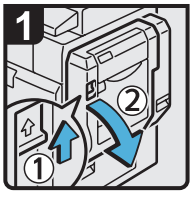
- Remove misfed paper.
- Close the duplex unit.

BZC003

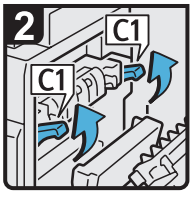
When C is displayed

Important

- When removing jammed sheets, take care to touch only those areas explicitly indicated in the manual.
- Do not remove the fusing unit. Doing so will result in loss of print quality.
- To remedy paper that has not been fed into the fixing section correctly, remove the jammed paper through the underside of the fusing unit. If the jammed paper cannot be removed through the underside of the fusing unit, remove it from the top.

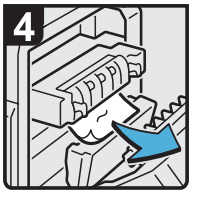


- Push up the lever, and then open the duplex unit.



- Raise lever C1.

- Pull lever C2, and then pull out the fusing unit.



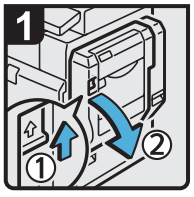
- Remove misfed paper.

- Lift lever C3, and then remove misfed paper.
- Return the fusing unit to its original position.
- Lower lever C1.

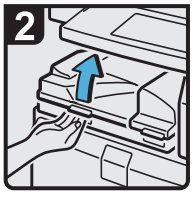
- Remove misfed paper from any internal tray.
- Close the duplex unit.

BZC004

When D is displayed



- Push up the lever, and then open the duplex unit.



- Open the bridge unit cover (left).

- Remove misfed paper.

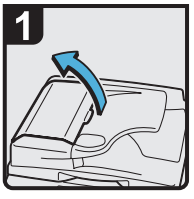
- Close the bridge unit cover (left).

- If you cannot remove misfed paper, open the bridge unit cover (right).

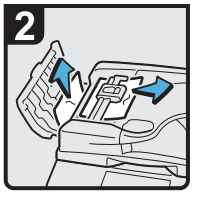
- Remove misfed paper.
- Close the bridge unit cover (right) and duplex unit.

BZC005

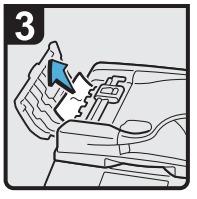
When P is displayed (Type 1, 2)



- Open the ADF cover.

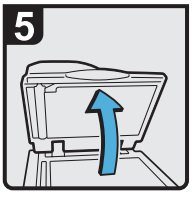


- Remove the misfed original.

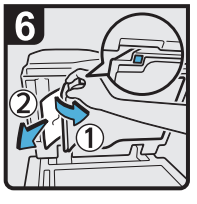


- Remove the misfed original.

- If you cannot remove any misfed original, open the ADF tray, and then remove the misfed original.
- Close the ADF tray.



- Close the ADF cover.
- Lift the ADF.

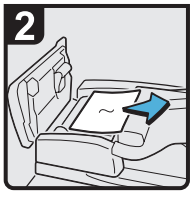


- Pull the lever in the upper left corner, and then remove the misfed original.
- Lower the ADF.

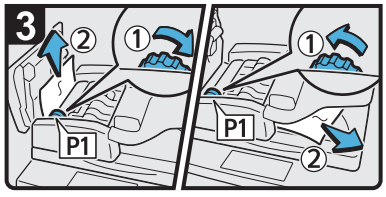
BZC006

When P is displayed (Type 3, 4 (models equipped with the ARDF))

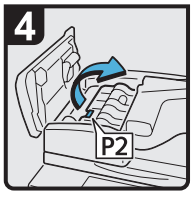
- Open the ADF cover.



- Remove the misfed original.

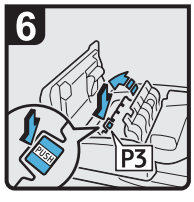


- Turn knob P1, and then remove the misfed original.



- If you cannot remove the misfed original, open the cover P2.

- Remove the misfed original.



- If you cannot remove the misfed original, open the cover P3.

- Remove the misfed original.
- Close the cover P3, P2, and the ADF cover.
- Lift and lower the ADF.

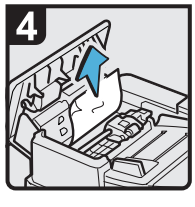
BZC007

When P1 is displayed (Type 3, 4 (models equipped with the one-pass duplex scanning ADF))

- Open the ADF cover.

- Raise the paper feed roller.

- Remove misfed original(s).
- Return the paper feed roller to its original position.

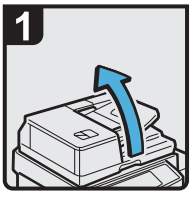


- Remove misfed original(s).
- Close the ADF cover.

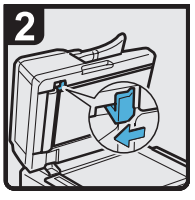
BZC042

6

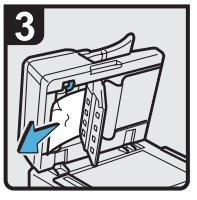
When P2 is displayed (Type 3, 4 (models equipped with the one-pass duplex scanning ADF))



- Lift the ADF.



- Slide the lever to the left, and then open the cover.

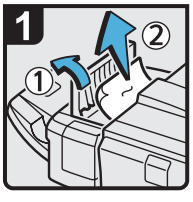


- Remove misfed original(s).

- Push the center at the left side of the cover to close it.
- Lower the ADF.

BZC044

When R is displayed in the case of Finisher SR 3050

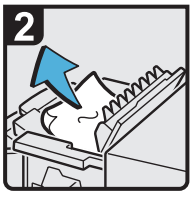


- Open the finisher upper cover.
- Remove misfed paper.
- Close the finisher upper cover.

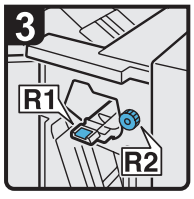
BZC008

When R1 - R5 is displayed in the case of Finisher SR 790

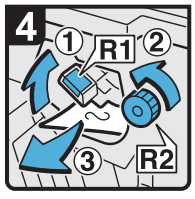
- Open the finisher upper cover.



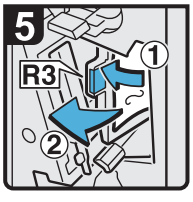
- Remove misfed paper, and then close the finisher upper cover.



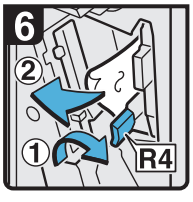
- Open the finisher front cover.



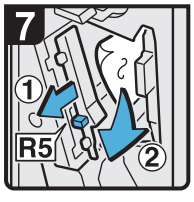
- Raise lever R1, and then turn knob R2 counterclockwise.
- Remove misfed paper.



- If you cannot remove misfed paper, open lever R3 to the left, and then remove misfed paper.



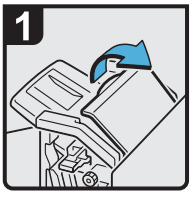
- Pull lever R4 to the right, and then remove misfed paper.
- Return lever R4 to its original position.



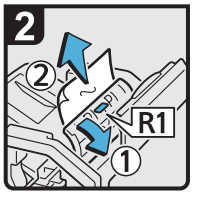
- Pull lever R5 and remove misfed paper.
- Close the finisher front cover.

BZC009

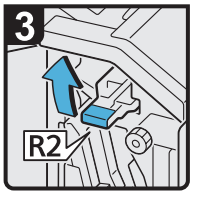
When R1 - R3 is displayed in the case of Booklet Finisher SR 3000



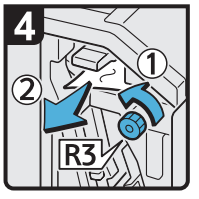
- Open the finisher front cover and upper cover.



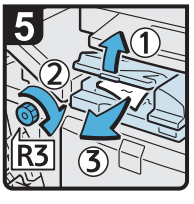
- Raise panel R1, and then remove misfed paper.
- Return panel R1 to its original position, and then close the finisher upper cover.



- Raise lever R2.



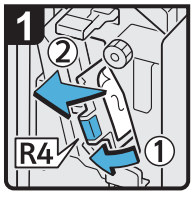
- Turn knob R3 counterclockwise to remove misfed paper.



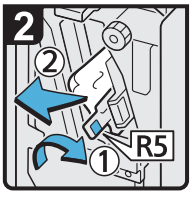
- Open the bridge unit cover(left), and then turn knob R3 clockwise.
- Remove misfed paper.
- Return lever R2 to its original position.
- Close the bridge unit cover(left) and the finisher front cover.

BZC010

When R4 - R6 is displayed in the case of Booklet Finisher SR 3000



- Open the finisher front cover.
- Pull lever R4 to the left, and then remove misfed paper.
- Return lever R4 to its original position.

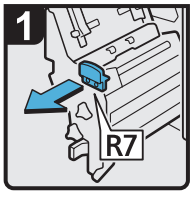


- Pull lever R5 to the right, and then remove misfed paper.
- Return lever R5 to its original position.

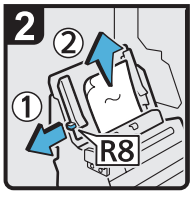
- Pull lever R6, and then remove misfed paper.
- Return lever R6 to its original position.
- Close the finisher front cover.

BZC011

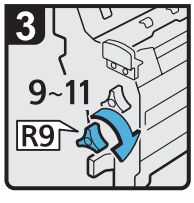
When R7 - R11 is displayed in the case of Booklet Finisher SR 3000



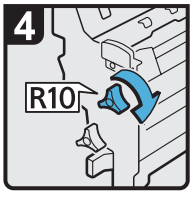
- Open the finisher front cover.
- Pull out the staple unit.



- Pull lever R8, and then remove misfed paper.



- Turn knob R9 nine to eleven times clockwise.

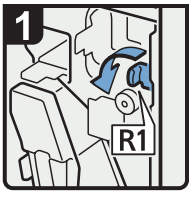


- Turn knob R10 clockwise.

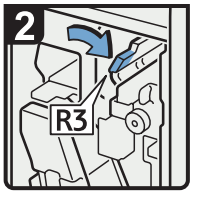
- Pull lever R11 to the left, and then remove misfed paper.
- Return lever R11 to its original position.
- Return the staple unit to its original position.
- Close the finisher front cover.

BZC012

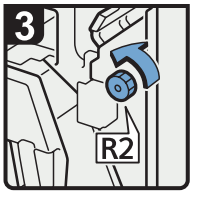
When R1 - R4 is displayed in the case of Booklet Finisher SR 3020



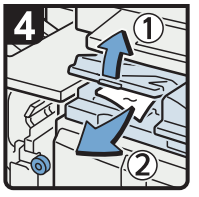
- Open the finisher front cover.
- Pull lever R1 to the left.



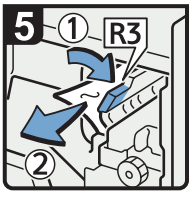
- Raise lever R3 to the right.



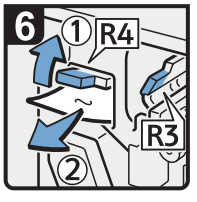
- Turn knob R2 counterclockwise.



- Open the bridge unit cover (left), and then remove misfed paper.
- Close the bridge unit cover (left).
- Return lever R3 to its original position.



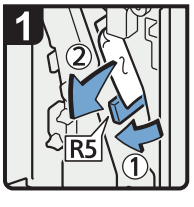
- If you cannot remove misfed paper, raise lever R3 to the right, and then remove it.
- Return lever R3 to its original position.



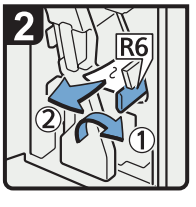
- Raise lever R4, and then remove misfed paper.
- Return lever R4 to its original position.
- Close the finisher front cover.

BZC013

When R5 - R7 is displayed in the case of Booklet Finisher SR 3020



- Open the finisher front cover.
- Lower lever R5, and then remove misfed paper.
- Return lever R5 to its original position.



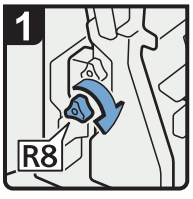
- If you cannot remove misfed paper, raise lever R6, and then remove it.
- Return lever R6 to its original position.

- Raise lever R3 to the right.

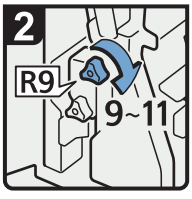
- Raise lever R7, and then remove misfed paper.
- Return lever R3 to its original position.
- Close the finisher front cover.

BZC014

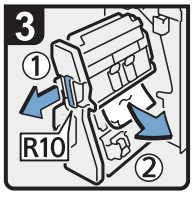
When R8 - R12 is displayed in the case of Booklet Finisher SR 3020



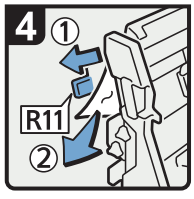
- Open the finisher front cover.
- Turn lower knob R8 clockwise.



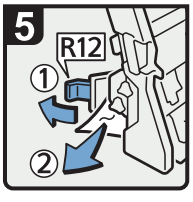
- Turn upper knob R9 nine to eleven times clockwise.



- Pull handle R10, and then pull out the staple unit.
- Remove misfed paper.



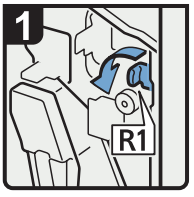
- If you cannot remove misfed paper, pull lever R11, and then remove it.
- Return lever R11 to its original position.



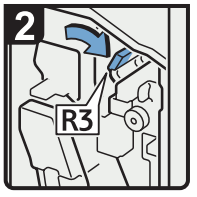
- If you cannot remove misfed paper, pull lever R12, and then remove it.
- Return lever R12 to its original position.
- Return the staple unit to its original position, and then close the finisher front cover.

BZC015

When R1 - R4 is displayed in the case of Finisher SR 3030

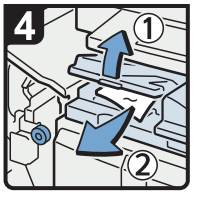


- Open the finisher front cover.
- Pull lever R1 to the left.

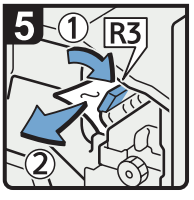


- Raise lever R3 to the right.

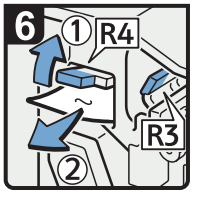
- Turn knob R2 counterclockwise.



- Open the bridge unit cover (left), and then remove misfed paper.
- Close the bridge unit cover (left).
- Return lever R3 and R1 to their original positions.



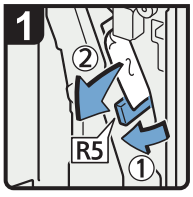
- If you cannot remove misfed paper, raise lever R3 to the right, and then remove it.
- Return lever R3 to its original position.



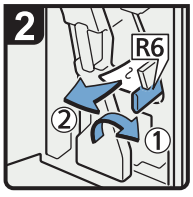
- Raise lever R4, and then remove misfed paper.
- Return lever R4 to its original position.
- Close the finisher front cover.

BZC016

When R5 - R8 is displayed in the case of Finisher SR 3030

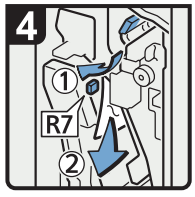


- Open the finisher front cover.
- Lower lever R5, and then remove misfed paper.
- Return lever R5 to its original position.

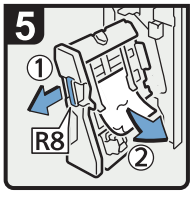


- If you cannot remove misfed paper, raise lever R6, and then remove it.
- Return lever R6 to its original position.

- Raise lever R3 to the right.



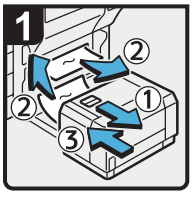
- Raise lever R7, and then remove misfed paper.
- Return lever R3 to its original position.



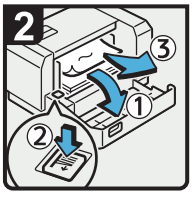
- Pull handle R8, and then pull out the staple unit.
- Remove misfed paper.
- Return the staple unit to its original position, and then close the finisher front cover.

BZC017

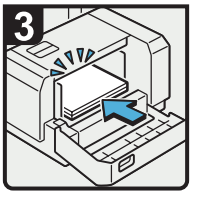
When U is displayed



- Slide the LCT to the right.
- Remove misfed paper from the machine or the LCT.
- Return the LCT to its original position.



- Open the LCT right cover.
- Press the [Down] key to move down the bottom plate.
- Remove misfed paper.

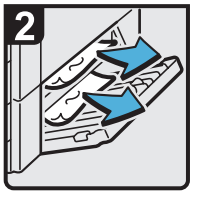


- Load paper correctly, and then close the LCT right cover.

BZC018

When Y is displayed

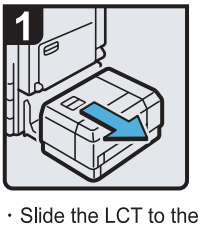
- Open the lower right cover.



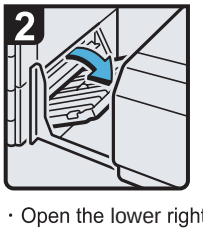
- Remove misfed paper.
- Close the lower right cover.

BZC019

When Y is displayed in the case of Large Capacity Tray



- Slide the LCT to the right.

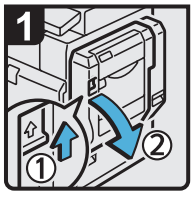


- Open the lower right cover.

- Remove misfed paper.
- Close the lower right cover, and then return the LCT to its original position.

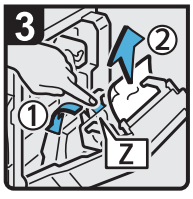
BZC020

When Z is displayed



- Push up the lever, and then open the duplex unit.

- Remove misfed paper.



- If you cannot remove misfed paper, hold down Z.
- Remove misfed paper.

- If you cannot remove misfed paper, close the duplex unit, and then open the upper right cover.
- Remove misfed paper, and then close the upper right cover.

BZC021

Removing Jammed Staples

This section describes how to remove jammed staples.

⚠CAUTION

- Keep your hands clear of the booklet finisher tray when removing misfed paper, pulling out or pushing in the finisher's staple unit. You can trap and injure your fingers if you do not.

Important

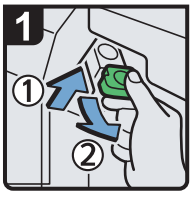
- **Curled paper may cause staples to jam. To avoid this, turn paper over in the tray.**
- **When the finisher is installed, after removing jammed staples, staples will not be ejected the first few times you try to use the stapler.**

Note

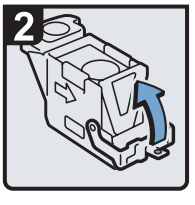
- Remove the jammed staples according to the finisher type. Check the type if you are unsure. For details about type of finisher, see "Appendix", About This Machine.

Finisher SR 3050

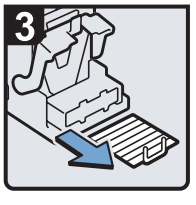
This section describes how to remove jammed staples from Finisher SR 3050.



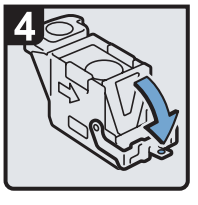
- Open the finisher front cover.
- Hold the lever, and then pull out the cartridge gently.



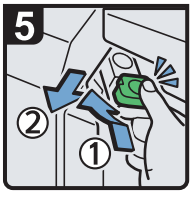
- Open the face plate of the cartridge.



- Remove jammed staples.



- Pull down the face plate of the cartridge until it clicks.



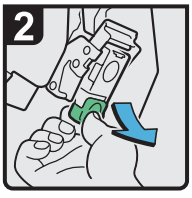
- Hold the lever while pushing in the cartridge until it clicks.
- Close the finisher front cover.

BZC027

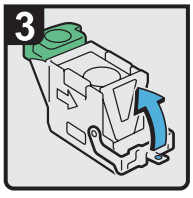
Finisher SR 790

This section describes how to remove jammed staples from Finisher SR 790.

- Open the finisher front cover, and then pull out the staple unit.

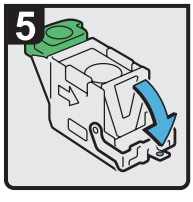


- Hold the lever while gently pulling out the cartridge.

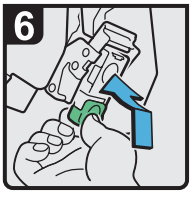


- Open the face plate of the cartridge.

- Remove jammed staples.



- Pull down the face plate of the cartridge until it clicks.

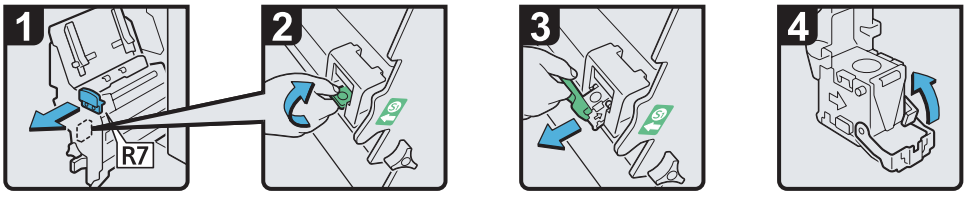


- Hold the lever, and then push in the cartridge until it clicks.
- Return the staple unit to its original position, and then close the finisher front cover.

BZC022

Booklet Finisher SR 3000

This section describes how to remove jammed staples from Booklet Finisher SR 3000.

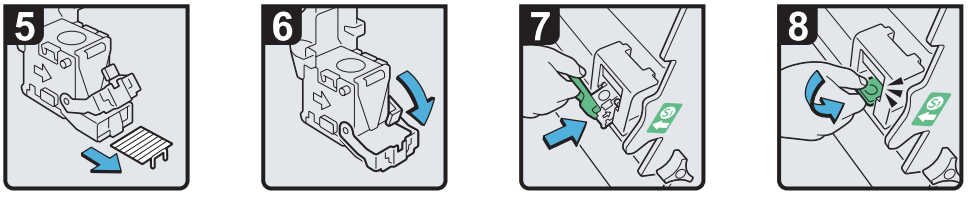


- Open the finisher front cover.
- Pull out the staple unit.

- Hold the lever, and then pull it up.

- Pull out the cartridge gently.

- Open the face plate of the cartridge.



- Remove jammed staples.

- Pull down the face plate of the cartridge until it clicks.

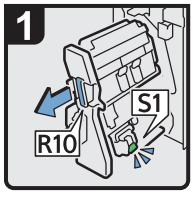
- Push in the cartridge gently.

- Hold the lever, and hold it down until it clicks.
- Return the staple unit to its original position, and then close the finisher front cover.

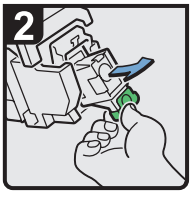
BZC023

Booklet Finisher SR 3020

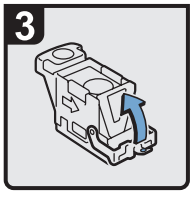
This section describes how to remove jammed staples from Booklet Finisher SR 3020.



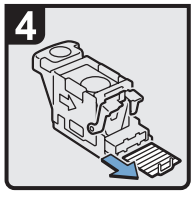
- Open the finisher front cover.
- Pull out the staple unit.



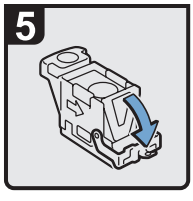
- Pull out the cartridge gently.



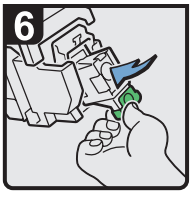
- Open the face plate of the cartridge.



- Remove jammed staples.



- Pull down the face plate until it clicks.

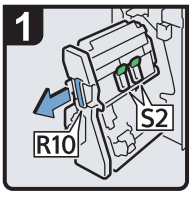


- Pull down the cartridge until it clicks.
- Return the staple unit to its original position, and then close the finisher front cover.

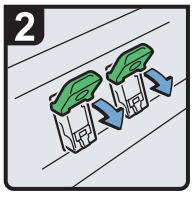
BZC024

Booklet Finisher SR 3020 (Saddle Stitch)

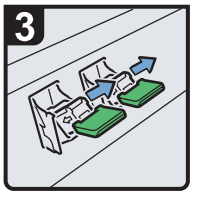
This section describes how to remove jammed staples from Booklet Finisher SR 3020 (Saddle Stitch).



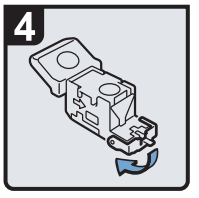
- Open the finisher front cover.
- Pull out the staple unit.



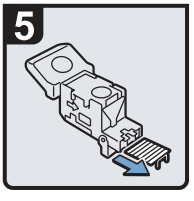
- Pull lever S2.



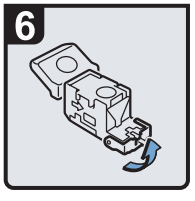
- Pull out the cartridge gently.



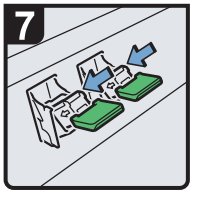
- Open the face plate of the cartridge.



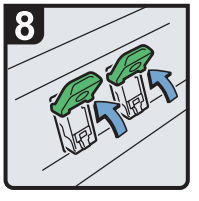
- Remove jammed staples.



- Pull the face plate until it clicks.



- Push down the cartridge until it clicks.

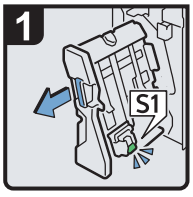


- Return lever S2 to its original position.
- Return the staple unit to its original position, and then close the finisher front cover.

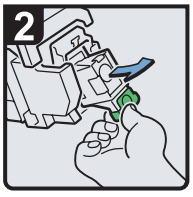
BZC025

Finisher SR 3030

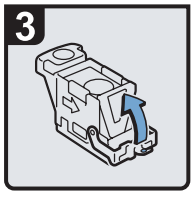
This section describes how to remove jammed staples from Finisher SR 3030.



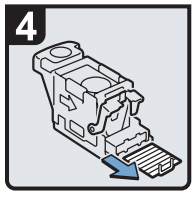
- Open the finisher front cover.
- Pull out the staple unit.



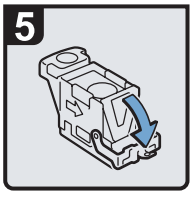
- Pull out the cartridge gently.



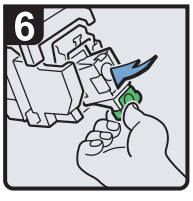
- Open the face plate of the cartridge.



- Remove jammed staples.



- Pull down the face plate until it clicks.



- Pull down the cartridge until it clicks.
- Return the staple unit to its original position, and then close the finisher front cover.

BZC026

Removing Punch Waste

This section describes how to remove punch waste.

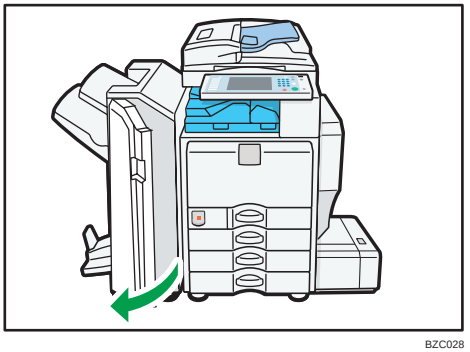
Note

- While "Hole Punch Receptacle is full." is displayed, you cannot use the Punch function.
- "Hole Punch Receptacle is full." is displayed until the punch waste box is reinstalled.
- If the message is still displayed, reinstall the punch waste box.

Booklet Finisher SR 3000

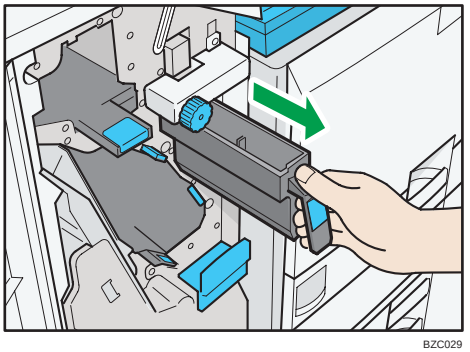
This section describes how to remove punch waste from Booklet Finisher SR 3000.

1. **Open the finisher front cover.**



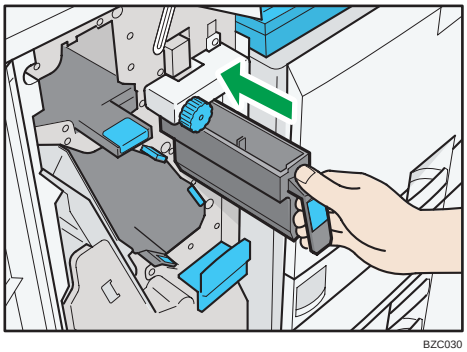
BZC028

2. **Pull out the punch waste box carefully, and then remove punch waste.**



BZC029

3. **Reinstall the punch waste box.**



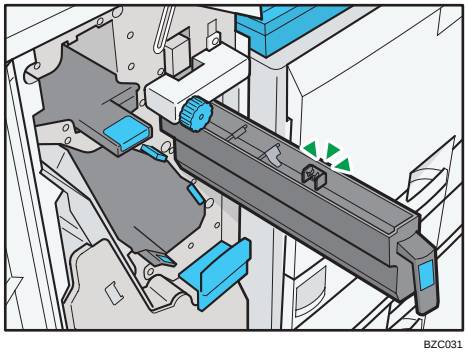
BZC030

4. **Close the finisher front cover.**

"Hole Punch Receptacle is full." disappears.

Note

- The message "Hole Punch Receptacle is full." may appear even when the punch waste box is not yet full. If this happens, the position of the punch waste box (indicated by the arrow as shown) may be blocked by punch waste. Remove punch waste.

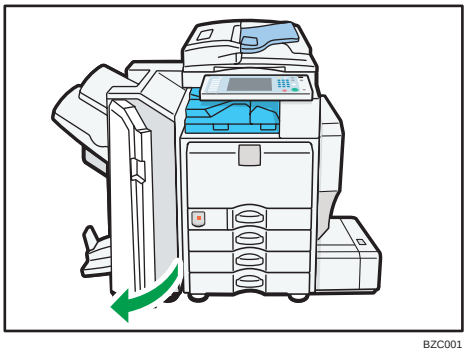


BZC031

Booklet Finisher SR 3020 and Finisher SR 3030

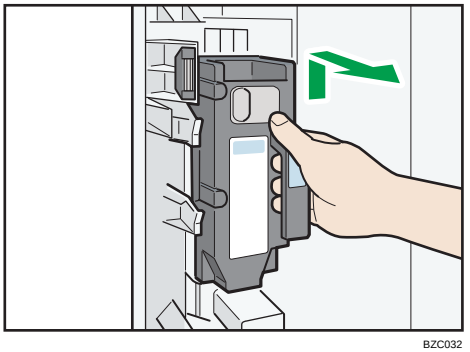
This section describes how to remove punch waste from Booklet Finisher SR 3020 and Finisher SR 3030.

1. **Open the finisher front cover.**



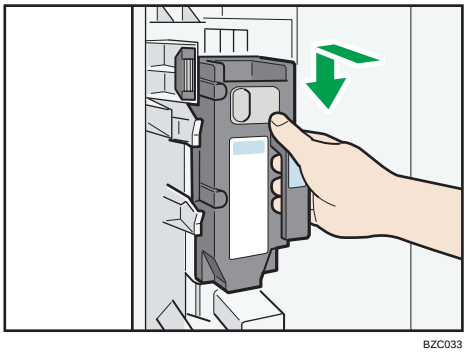
BZC001

2. **Pull out the punch waste box carefully, and then remove punch waste.**



BZC032

3. **Reinstall the punch waste box.**



BZC033

4. **Close the finisher front cover.**

"Hole Punch Receptacle is full." disappears.

7. Appendix

Trademarks

Adobe, Acrobat, Acrobat Reader, PostScript and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

PCL® is a registered trademark of Hewlett-Packard Company.

UNIX is a registered trademark in the United States and other countries, licensed exclusively through X/Open Company Limited.

Microsoft®, Windows®, Windows Server®, and Windows Vista® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights to those marks.

The proper names of the Windows operating systems are as follows:

- The product names of Windows 2000 are as follows:

  Microsoft® Windows® 2000 Professional

  Microsoft® Windows® 2000 Server

  Microsoft® Windows® 2000 Advanced Server
- The product names of Windows XP are as follows:

  Microsoft® Windows® XP Professional

  Microsoft® Windows® XP Home Edition

  Microsoft® Windows® XP Media Center Edition

  Microsoft® Windows® XP Tablet PC Edition
- The product names of Windows Vista are as follows:

  Microsoft® Windows Vista® Ultimate

  Microsoft® Windows Vista® Business

  Microsoft® Windows Vista® Home Premium

  Microsoft® Windows Vista® Home Basic

  Microsoft® Windows Vista® Enterprise
- The product names of Windows 7 are as follows:

  Microsoft® Windows® 7 Home Premium

  Microsoft® Windows® 7 Professional

  Microsoft® Windows® 7 Ultimate

  Microsoft® Windows® 7 Enterprise

- The product names of Windows Server 2003 are as follows:
  Microsoft® Windows Server® 2003 Standard Edition
  Microsoft® Windows Server® 2003 Enterprise Edition
- The product names of Windows Server 2003 R2 are as follows:
  Microsoft® Windows Server® 2003 R2 Standard Edition
  Microsoft® Windows Server® 2003 R2 Enterprise Edition
- The product names of Windows Server 2008 are as follows:
  Microsoft® Windows Server® 2008 Standard
  Microsoft® Windows Server® 2008 Enterprise
- The product names of Windows Server 2008 R2 are as follows:
  Microsoft® Windows Server® 2008 R2 Standard
  Microsoft® Windows Server® 2008 R2 Enterprise

INDEX

A

Adjusting the color registration....28
Adjusting the volume....51
Auto color calibration....29

B

Booklet Finisher SR 3000....151, 156
Booklet Finisher SR 3020....152, 157
Booklet Finisher SR 3020 (Saddle Stitch)....153

C

Cannot browse the network to send a scan file....127
Cannot make clear copies....38
Cannot make copies as wanted....42
Cannot print....94
Cannot send or receive fax messages as wanted....64
Cannot send scanned files....127
Checking machine status and settings....13
Checking the error log....92
Clearing misfeeds....133
Color registration....28
Combine....42
Control panel....81, 111
Copy function....33

D

Data storage....13
Document Server....42
Document Server function....33
Duplex....42

E

Edit....42
Error log....92
Error mail notification....74
Error occurs using Internet Fax....74
Error report (e-mail)....74

F

Facsimile function....53
Finisher SR 3030....154, 157
Finisher SR 3050....150
Finisher SR 790....151

H

How to read this manual....9

I

If an error report is printed....72
If USB connection fails....79
In the event of power failure....73
Indicators....11
Inquiry....13

J

Job is not performed....25

L

Locating jammed paper....133

M

Machine address info....13
Machine types....9
Maintenance info....13
Manuals for this machine....6
Memory is full....49
Messages displayed....33, 53, 80, 111
Messages displayed on the client computer....121
Messages displayed on the control panel when using the printer function....81
Messages displayed on the control panel when using the scanner function....111
Messages displayed when installing the printer driver....75
Multi-accessing....25

N

Names of major items....10
Network connection....96
Network delivery function cannot be used....128
Notes....10
Notice....8

O

Other messages....84
Other printing problems....99

P

Panel tone....12

PictBridge....109
Printer function....80
Printing....64
Problems operating the machine....19

R

Reception....64
Removing jammed paper....133
Removing jammed staples....150
Removing punch waste....156

S

Scanner function....111
Scanning is not done as expected....130
Server-Generated error e-mail....74
Stamp....42
Status messages....80
Stored files cannot be accessed....127
Stored files cannot be edited....127
Symbols....9

T

Trademarks....159
Transmission....64
Transmission/Reception....64
Turning off the main power....73
TWAIN....121
TWAIN driver cannot be started....128

W

When A is displayed....135
When an indicator to the right of a function key is lit....17
When B is displayed....135
When C is displayed....135
When D is displayed....137
When memory is full....70
When P is displayed (Type 1, 2)....138
When P is displayed (Type 3, 4 (models equipped with the ARDF))....139
When P1 is displayed (Type 3, 4 (models equipped with the one-pass duplex scanning ADF))....139
When P2 is displayed (Type 3, 4 (models equipped with the one-pass duplex scanning ADF))....140
When paper is not fed properly....99
When PictBridge printing does not work....109
When R is displayed in the case of Finisher SR 3050....140
When R1 - R3 is displayed in the case of Booklet Finisher SR 3000....142
When R1 - R4 is displayed in the case of Booklet Finisher SR 3020....144
When R1 - R4 is displayed in the case of Finisher SR 3030....146
When R1 - R5 is displayed in the case of Finisher SR 790....141
When R4 - R6 is displayed in the case of Booklet Finisher SR 3000....143
When R5 - R7 is displayed in the case of Booklet Finisher SR 3020....144
When R5 - R8 is displayed in the case of Finisher SR 3030....147
When R7 - R11 is displayed in the case of Booklet Finisher SR 3000....143
When R8 - R12 is displayed in the case of Booklet Finisher SR 3020....145
When S/MIME cannot be used....128
When the data in indicator does not light up or flash....96
When the machine is connected to the computer using the interface cable....96
When U is displayed....148
When Y is displayed....148
When Y is displayed in the case of Large Capacity Tray....148
When you cannot print clearly....99
When you cannot send scan files using WSD....129
When Z is displayed....149
Windows 2000....75
Windows 7....77
Windows Server 2003....75
Windows Server 2003 R2....75
Windows Server 2008....77
Windows Vista....76
Windows XP Home Edition....76
Windows XP Professional....75

MEMO

MEMO

© 2010

Operating Instructions Troubleshooting

Unicode Font Package for SAP®

Operating Instructions

1 Unicode Font Package for SAP®

2 Uploading / Checking Fonts

3 Using Downloader V2.0

4 Appendix

Read this manual carefully before you use this product and keep it handy for future reference.

Introduction

This manual contains detailed instructions and notes on the operation and use of this machine. For your safety and benefit, read this manual carefully before using the machine. Keep this manual in a handy place for quick reference.

Important

Contents of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

Notes

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Trademarks

Microsoft, Windows, Windows Server are registered trademarks or trademarks of Microsoft Corporation, in the United States and other countries.

Monotype and WorldType are trademarks of Monotype Imaging, Inc. registered in the United States Patent and Trademark Office and may be registered in certain jurisdictions.

Andale is a trademark of The Monotype Corporation registered in the U.S. Patent & Trademark Office and may be registered in certain jurisdictions.

SAP® is the trademark or registered trademark of SAP AG in Germany and in several other countries.

PostScript® is registered trademarks of Adobe Systems Incorporated.

PCL® is registered trademark of Hewlett-Packard Company.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights to those marks.

The product names of the Windows operating systems are as follows:

- The product names of Windows® 2000 are as follows:
  Microsoft® Windows® 2000 Professional
  Microsoft® Windows® 2000 Server
- The product names of Windows® XP are as follows:
  Microsoft® Windows® XP Home Edition
  Microsoft® Windows® XP Professional
- The product names of Windows Server ™ 2003 are as follows:
  Microsoft® Windows Server™ 2003 Standard Edition
  Microsoft® Windows Server™ 2003 Enterprise Edition
  Microsoft® Windows Server™ 2003 Web Edition

Copyright

Andale is a copyright of Monotype Imaging, Inc. 1998 - 2010.

Downloader V2.0 is a copyright of RICOH COMPANY, LTD. 2010.

How to Read This Manual

Symbols

This manual uses the following symbols:

⚠ WARNING:

Indicates important safety notes.

Ignoring these notes could result in serious injury or death. Be sure to read these notes. They can be found in the "Safety Information" section of About This Machine.

⚠ CAUTION:

Indicates important safety notes.

Ignoring these notes could result in moderate or minor injury, or damage to the machine or to property. Be sure to read these notes. They can be found in the "Safety Information" section of About This Machine.

Important

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

Preparation

This symbol indicates information or preparations required prior to operating.

Note

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

Limitation

This symbol indicates numerical limits, functions that cannot be used together, or conditions in which a particular function cannot be used.

Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys that appear on the machine's display panel.

[ ]

Indicates the names of keys on the machine's control panel.

TABLE OF CONTENTS

How to Read This Manual ..... **i**
Symbols i

1. Unicode Font Package for SAP®

Overview **1**
CD-ROM Components **2**

2. Uploading / Checking Fonts

Uploading Fonts **3**
Checking Uploaded Fonts **4**
Checking Fonts Using Downloader V2.0 4
Checking Fonts Using a SAP Script Sample 4
Checking Fonts Using a PCL Sample File 5

3. Using Downloader V2.0

System Requirements **7**
Main Downloader V2.0 Dialog Boxes **8**
The **[Downloader V2.0]** Dialog Box 8
The **[Resource File List]** Dialog Box 10
Main Downloader V2.0 Functions **12**
Uploading Fonts to a Printer 12
Exporting Fonts 13
Deleting Fonts 14
Other Downloader V2.0 Functions **15**
Outputting Font Lists 15

4. Appendix

FTP Transmission **17**
Error Messages **18**

INDEX **19**

1. Unicode Font Package for SAP®

Overview

Monotype Andale WorldType Font includes four types of fonts that contain about 50,000 characters for Unicode V3.0.

Uploading Monotype Andale WorldType Font to printers allows you to print characters from various languages using SAP systems.

Note

❒ A SAP Device Type is required to print documents from SAP systems. You can obtain the SAP Device Type from our website.

Reference

For details about uploading fonts, see p.12 “Uploading Fonts to a Printer”.

For details about how to configure the Device Type, see the manual supplied with the Device Type.

CD-ROM Components

The CD-ROM includes the following files:

Folder/File name		Description
DownloaderV2.0.exe	—	Downloader V2.0
SAMPLE	ZAUSAMPLE.ITF	SAP script sample file
	ZAUSAMPLE.PRN	PCL sample file
FONT	ANMNLJ.ttf	True Type font data for Japanese
	ANMNLK.ttf	True Type font data for Korean
	ANMNLS.ttf	True Type font data for Simplified Chinese
	ANMNLT.ttf	True Type font data for Traditional Chinese
OperatingInstructions.pdf	—	PDF Manual
Readme.txt	—	Readme text file

2. Uploading / Checking Fonts

Uploading Fonts

Upload Monotype Andale WorldType Font from the CD-ROM to a printer.

Start Downloader V2.0, and then upload one of the following files:

- ANMNLJ.ttf
- ANMNLK.ttf
- ANMNLS.ttf
- ANMNLT.ttf

Note

❒ To print multiple languages, such as Japanese and Korean, upload the font files required for those languages.

Reference

For details about uploading fonts, see p.12 “Uploading Fonts to a Printer”.

Checking Uploaded Fonts

Check the fonts have downloaded properly.

Checking Fonts Using Downloader V2.0

❖ **File List Monitor**
Start Downloader V2.0, and then check the font files you have uploaded appear in **[File List Monitor]**.

❖ **Print a font list**
Start Downloader V2.0, print a PCL font list, and then check the fonts you have uploaded appear in the list.

Reference

For details about File List Monitor, see p.8 “Main Downloader V2.0 Dialog Boxes”.

For details about how to print font lists, see p.15 “Other Downloader V2.0 Functions”.

Checking Fonts Using a SAP Script Sample

Use a SAP script sample to check the fonts have uploaded properly.

To check fonts, print ZAUSAMPLE.ITF supplied on the CD-ROM.

Reference

For details about CD-ROM components, see p.2 “CD-ROM Components”.

1. **Log on to the SAP system.**
2. **Run transaction SO10.**
3. **Enter the name of an existing document, and then click [Change].**
4. **On the main menu, point to [Text], and then click [Save as...].**
5. **Specify the new name, and then click [Save].**
6. **Delete all lines.**
   Press F2 to mark the beginning of the file. Press F2 again to mark the end of the file. On the main menu, point to **[Edit]**, point to **[Selected area]**, and then click **[Delete]**.
7. **On the main menu, point to [Text], and then click [Upload...].**
8. **Select [ITF] as the file format.**
9. **Specify the path to the source file, and then click [OK].**

Checking Fonts Using a PCL Sample File

Use a PCL sample file to check the fonts have uploaded properly.

To check fonts, print ZAUSAMPLE.PRN supplied on the CD-ROM.

1. **Open the command prompt, and then log on to the printer using an FTP command.**
2. **Change the remote directory to the directory where the file will be transferred to.**
3. **Using the "lcd" command, change the local directory to the directory where the file will be transferred from.**
4. **Enter binary mode.**
5. **Transfer the file using the "put" command. File transfer can takes several minutes.**

3. Using Downloader V2.0

Downloader V2.0 allows you to upload fonts to a printer and print documents from Unicode-supporting SAP systems.

Furthermore, using Downloader V2.0, you can delete uploaded fonts from the printer or download them to the computer. You can also monitor the directory information on a printer's hard disk or Secure Digital card (SD card) from the computer and check which fonts are uploaded.

Note

❒ Downloader V2.0 uses English as its display language.

System Requirements

Downloader V2.0 requires the following environment:

❖ **Operating System**

- Windows 2000 Professional
- Windows 2000 Server
- Windows XP Professional
- Windows XP Home Edition
- Windows Server 2003 Standard Edition
- Windows Server 2003 Enterprise Edition
- Windows Server 2003 Web Edition

❖ **Network Protocol**

- TCP/IP

❖ **Port**

- 9100 (printer connection)

❖ **Supported Printers**

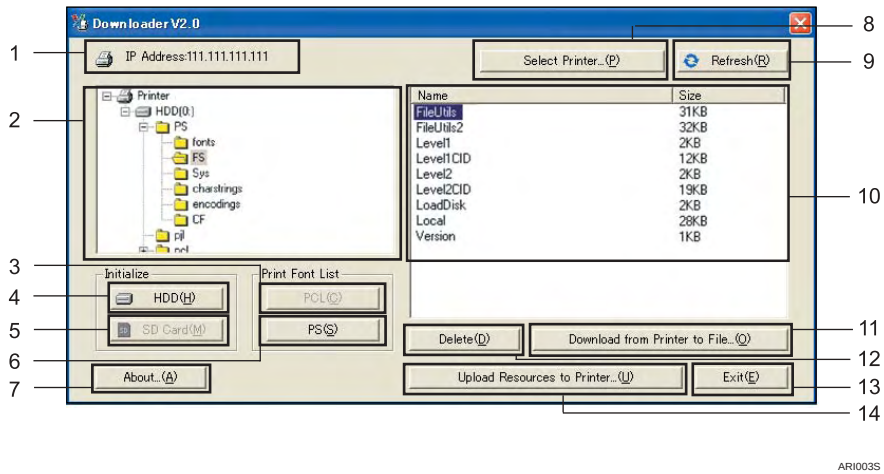
For details about printers Downloader V2.0 supports, contact your local dealer or sales representative.

Main Downloader V2.0 Dialog Boxes

This section explains the two main dialog boxes that appear when you use Downloader V2.0 functions.

The [Downloader V2.0] Dialog Box

The **[Downloader V2.0]** dialog box appears first when you start Downloader V2.0. Use this dialog box to perform the main Downloader V2.0 operations.



ARI003S

1. IP Address / Host Name

Displays the IP address or host name of the currently connected printer.

2. Directory Monitor

Displays a tree that containing the directory information of the currently connected printer.

3. Print Font List [PCL]

Click to print a list of the PCL fonts in the currently connected printer. For details, see p.15 “Outputting Font Lists”.

4. Initialize [HDD]

Click to initialize fonts on the hard disk of the currently connected printer.

Important

❒ The initialization function deletes all font and macro files on the selected hard disk. Note that font and macro files in formats not supported by Downloader V2.0 are also deleted.

5. Initialize [SD Card]

Click to initialize fonts on the SD card of the currently connected printer.

Important

❒ The initialization function deletes all font and macro files on the selected SD card. Note that font and macro files in formats not supported by Downloader V2.0 are also deleted.

6. Print Font List [PS]

Click to print a list of the PostScript fonts in the currently connected printer. For details, see p.15 "Outputting Font Lists".

7. [About...]

Click to display the Downloader V2.0 version and copyright information in another dialog box.

8. [Select Printer...]

Click to specify the printer you want to connect to or change the currently connected printer.

9. [Refresh]

Click to update the directory information on the hard disk of the currently connected printer.

10. File List Monitor

Displays details about the folder selected in **[Directory Monitor]**.

11. [Download from Printer to File...]

Click to download a file selected in **[File List Monitor]** to the computer.

Limitation

❒ Large files might not download correctly. In this case, change the timeout interval to use when the printer is expecting data from the network. For details, see Network Guide supplied with the printer.

12. [Delete]

Click to delete a file selected in **[File List Monitor]**. For details, see p.14 "Deleting Fonts".

13. [Exit]

Click to close Downloader V2.0.

14. [Upload Resources to Printer...]

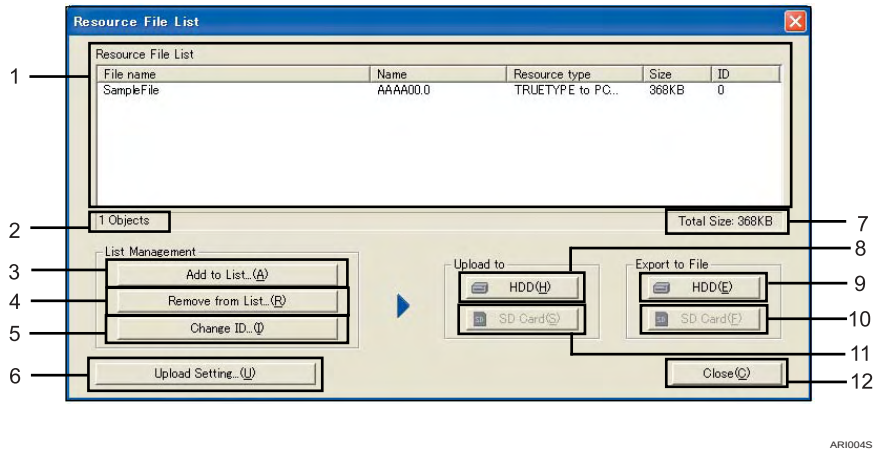
Click to display the **[Resource File List]** dialog box where you can make settings for fonts and upload them to the currently connected printer. For details, see p.10 "The [Resource File List] Dialog Box" and p.12 "Uploading Fonts to a Printer".

Note

❒ You cannot use the functions described in 4, 5, 6, and 11 with Unicode Font Package for SAP®.

The [Resource File List] Dialog Box

Select font files in the **[Resource File List]** dialog box to upload them to a printer. You can also delete font files from **[Resource File List]**, or change a selected file's ID.



1. Resource File List

Displays font files added using **[Add to List...]**.

2. Object

Displays the number of files displayed in **[Resource File List]**.

3. [Add to List...]

Click to select files you want to add to **[Resource File List]**.

4. [Remove from List...]

Click to delete files selected in **[Resource File List]**.

5. [Change ID...]

Click to change the ID of a file selected in **[Resource File List]**.

Limitation

❒ Specify an ID in the range of 0 to 32767 .

6. [Upload Setting...]

Click to make optional settings for uploading fonts to a printer.

7. Total Size

Displays the total size of all files displayed in **[Resource File List]**.

8. Upload to [HDD]

Click to upload all files displayed in **[Resource File List]** to a printer's hard disk.

9. Export to File [HDD]

Click to export all files displayed in **[Resource File List]** to the computer's hard disk.

10. Export to File [SD Card]

Click to export all files displayed in **[Resource File List]** to the computer's SD card.

Limitation

❒ PostScript font files cannot be exported to SD cards.

11. Upload to [SD Card]

Click to upload all files displayed in **[Resource File List]** to a printer's SD card.

12. [Close]

Click to close the **[Resource File List]** dialog box.

Limitation

❒ PostScript font files cannot be uploaded to SD cards.

Note

❒ You cannot use the functions described in 10 and 11 with Unicode Font Package for SAP®.

Main Downloader V2.0 Functions

This section explains operating procedures for Downloader V2.0 functions.

Uploading Fonts to a Printer

Use the following procedure to upload a font file from the computer to a printer.

1. **Double-click [DownloaderV2.0.exe].**
   Downloader V2.0 starts and the **[Downloader V2.0]** dialog box appears.
2. **Click [Select Printer...].**
   The **[Select Printer]** dialog box appears.
3. **Enter the IP address or host name of the printer you want to upload a font file to, and then click [OK].**
   The **[Downloader V2.0]** dialog box reappears.
4. **Click [Uploaded Resource...].**
   The **[Resource File List]** dialog box appears.
5. **Click [Add to List...].**
   The **[Add to]** dialog box appears.
6. **Select the file you want to upload, and then click [Add].**
   The **[Resource File List]** dialog box reappears, and the selected file appears in **[Resource File List]**.

   Note
   - ❒ You can select the format of the file you want to upload in the **[Files of Type:]** list.
   - ❒ To delete files from **[Resource File List]**, in **[Resource File List]**, select the files you want to delete, and then click **[Remove from List..]**.
7. **In the [Upload to] area, click [HDD]. In the dialog box that appears, click [OK].**
   The file added to **[Resource File List]** starts uploading.

   Note
   - ❒ Upload the file again if the connection is interrupted or an error occurs while uploading.
8. **Click [Close].**
   The **[Downloader V2.0]** dialog box reappears.

Exporting Fonts

Use the following procedure to export a font file.

Note

❒ Exported font files can be sent to other printers via FTP.

❒ If you create a batch file for sending an exported font file via FTP, the font can be uploaded to multiple same-model printers at the same time.

Reference

For details about the FTP commands, see p.17 “FTP Transmission”.

1. **Double-click [DownloaderV2.0.exe].**

   Downloader V2.0 starts and the **[Downloader V2.0]** dialog box appears.

2. **Click [Select Printer...].**

   The **[Select Printer]** dialog box appears.

3. **Enter the IP address or host name of the printer you want to export a font file from, and then click [OK].**

   The **[Downloader V2.0]** dialog box reappears.

4. **Click [Upload Resources to Printer...].**

   The **[Resource File List]** dialog box appears.

5. **Click [Add to List...].**

   The **[Add to]** dialog box appears.

6. **Select the file you want to export, and then click [Add].**

   The **[Resource File List]** dialog box reappears, and the selected file appears in **[Resource File List]**.

   Note

   ❒ You can select the format of the file you want to export in the **[Files of Type:]** list.

   ❒ To delete files from **[Resource File List]**, in **[Resource File List]**, select the files you want to delete, and then click **[Remove from List..]**.

7. **In the [Export to File] area, click [HDD]. In the dialog box that appears, click [OK].**

   The file added to **[Resource File List]** starts exporting.

   Note

   ❒ Export the file again if the connection is interrupted or an error occurs while exporting.

8. **Click [Close].**

   The **[Downloader V2.0]** dialog box reappears.

Deleting Fonts

Use the following procedure to delete a font file from a printer.

1. **Double-click [DownloaderV2.0.exe].**
   Downloader V2.0 starts and the **[Downloader V2.0]** dialog box appears.
2. **Click [Select Printer...].**
   The **[Select Printer]** dialog box appears.
3. **Enter the IP address or host name of the printer whose font file you want to delete, and then click [OK].**
   The **[Downloader V2.0]** dialog box reappears.
4. **From the directory tree displayed in [Directory Monitor], select the folder that includes the file you want to delete.**
   Files in the selected folder appear in **[File List Monitor]**.
5. **Select the file you want to delete.**
6. **Click [Delete]. In the dialog box that appears, click [OK].**
   The selected file is deleted and the **[Downloader V2.0]** dialog box reappears.

Other Downloader V2.0 Functions

Outputting Font Lists

Use the following procedure to print a list of PCL fonts uploaded to a printer.

1. **Double-click [DownloaderV2.0.exe].**
   Downloader V2.0 starts and the **[Downloader V2.0]** dialog box appears.
2. **Click [Select Printer...].**
   The **[Select Printer]** dialog box appears.
3. **Enter the IP address or host name of the printer whose PCL font list you want to print, and then click [OK].**
   The **[Downloader V2.0]** dialog box reappears.
4. **In the [Print Font List] area, click [PCL].**
   The selected printer's PCL font list starts printing out.

FTP Transmission

If you create a batch file for sending an exported font file via FTP, the font can be uploaded to multiple same-model printers at the same time.

The following procedure describes sample FTP commands:

1. **Open the command prompt, and then log on to the printer using an FTP command.**
2. **Change the remote directory to the directory where the file will be transferred to.**
3. **Using the "lcd" command, change the local directory to the directory where the file will be transferred from.**
4. **Enter binary mode.**
5. **Export the file using the "put" command. File transfer can takes several minutes.**

Error Messages

Message	Solutions
Cannot connect to the network.	Check the network environment.
Cannot print.	
Cannot refresh.	
Cannot initialize.	
Cannot delete.	
Windows sockets initialization failed.	
Cannot download.	Check the file size. Large files might not upload correctly. In this case, change the timeout interval to use when the printer is expecting data from the network. For details, see Network Guide supplied with the printer.
File format is not supported.	Select a file whose format is supported. Files whose formats are not supported might cause Downloader V2.0 to fail.
Cannot add files to the list, because maximum no. of files to be shown in the list has been reached.	Specify an ID in the range of 0 to 32767 .
No input for an ID number.	
File path is too long.	Folder paths must not exceed 64 bytes. Save the file in a folder whose path does not exceed 64 bytes.
The number already exists.	Specify an ID in the range of 0 to 32767 . In **[Resource File List]**, you cannot specify a number that already exists.
IP Address entered is invalid.	Enter a correct IP address.
No input for a host name.	Enter the printer's host name.
It includes an invalid character(s).	Spaces and characters other than "-", "_", and "." cannot be used. "-" or "_" entered after a host name is also invalid.
Host name is too long.	Enter a host name using up to 63 characters.
The file is not found.	Check the file storage location.
Not all the files have been uploaded properly.	Check the network environment and upload the files again.

INDEX

C

CD-ROM components, 2
Checking fonts
    using a PCL sample file, 5
    using a SAP Script Sample, 4
    using Downloader V2.0, 4

D

Dialog boxes, 8

E

Error messages, 18

F

Font
    deleting, 14
    exporting, 13
    outputting font lists, 15
    uploading, 12
FTP transmission, 17

S

System requirements, 7

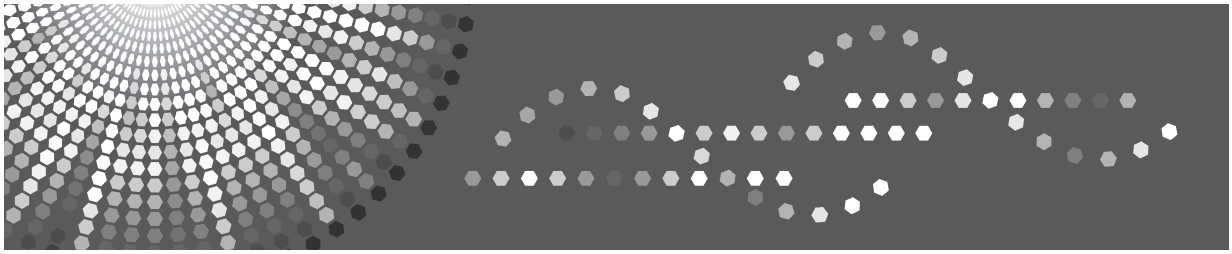
U

Unicode Font Package for SAP, 1
Uploading fonts, 3
Using Downloader V2.0, 7

Copyright © 2006-2010

Unicode Font Package for SAP® Operating Instructions

EN US B869-8650A



IPDS Printing Configuration Guide

1 Getting Started
2 InfoPrint Manager for Windows
3 Configuring System i for an IPDS Printer
4 Configuring z/OS to Print IPDS Files
5 InfoPrint Manager for AIX
6 Handling Network Problems
7 Appendix

Read this manual carefully before you use this product and keep it handy for future reference.

Introduction

This manual contains detailed instructions and notes on the operation and use of this machine. For your safety and benefit, read this manual carefully before using the machine. Keep this manual in a handy place for quick reference.

Important

Contents of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

Trademarks

Adobe, Acrobat Reader, PostScript and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

AFP/ADVANCED FUNCTION PRINTING, InfoPrint, IPDS and Intelligent Printer Data Stream are trademarks of Ricoh Co., Ltd.

AIX®, IBM®, OS/390®, OS/400®, System i and z/OS® are trademarks of International Business Machines Corporation in the United States, other countries, or both.

PCL® is a registered trademark of Hewlett-Packard Company.

Windows® is either registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights to those marks.

TABLE OF CONTENTS

Manuals for the IPDS card **3**
How to Read This Manual **4**
Symbols 4

1. Getting Started

Book at a Glance **5**
Server-to-Printer Attachments Described in this Book **6**
Configuration Checklist **7**
Default Parameter Values **8**

2. InfoPrint Manager for Windows

Requirements - InfoPrint Manager for Windows **9**
Configuration Checklist - InfoPrint Manager for Windows **10**
Choosing an InfoPrint Manager Destination Type 10

3. Configuring System i for an IPDS Printer

Requirements - System i **13**
Printing AFP, IPDS, PDF, PCL, and PostScript Files **14**
Configuration Checklist - System i **15**
Configuring a System i TCP/IP Interface **16**
Configuring the System i Interface with ADDTCPIFC 16
Configuring a TCP/IP Host Table Entry 17
Configuring TCP/IP Keep Alive **18**
Configuring PSF/400 for IPDS **19**
Configuring PSF with CRTDEVPRT 19
Configuring PSF/400 with CRTPSFCFG 21
Verifying the IPDS Configuration on System i **22**
Sharing the PSF/400 Printer on the Network **23**
Sharing the printer with other non-IPDS host systems using MID 23
Sharing the printer with other IPDS host systems 24
Resolving System i Problems **26**
Printer Cannot be PINGed 26
If PSF/400 Terminates When Initialized 26
Spooled Print File Remains in PND Status 26
Spooled Files Disappear Without Printing 27
Data is Being Clipped 27
Printer Powered Off While Writer is Active 27

4. Configuring z/OS to Print IPDS Files

Requirements - z/OS **29**
Configuration Checklist - z/OS **30**
Configuring PSF to Print IPDS Files **31**
Data Requirements 31
Configuration Procedure 31

Verifying a TCP/IP-Attached Printer on z/OS 36
Starting a TCP/IP-attached Printer 36
Stopping a TCP/IP-attached Printer 36
Resolving IPDS Printing Problems 37
Sharing the Network Printers on z/OS 38
Sharing the printer with other IPDS host systems, without MID JES Spool Printer Sharing 38
Handling z/OS Connectivity Problems 40
Ping is Not Successful 40
Ping is Successful 40

5. InfoPrint Manager for AIX

Requirements - InfoPrint Manager for AIX 41
Configuration Checklist - InfoPrint Manager for AIX 42
Defining Printers to InfoPrint Manager 43
Configuring Network Printers as PSF TCP/IP-Attached Printer 43
Adding an AIX Printer 44

6. Handling Network Problems

Introduction 47
Network Setup 47
Hardware Problems 47
Connectivity Problems 48
Ethernet Connectivity Problems 48
Formatting Problems 50

7. Appendix

Sharing the Printer with IPDS host systems (PSF/400 or z/OS) 51

INDEX 52

Manuals for the IPDS card

Refer to the manuals that are relevant to what you want to do with the IPDS card.

Important

❒ Adobe Acrobat Reader/Adobe Reader must be installed in order to view the manuals as PDF files.

❖ **IPDS Supplement (IPDS.pdf)**
Explains about how to configure the IPDS card for the machine, and about items selectable from the Web browser.

❖ **IPDS Printing Configuration Guide (IPDS_CONF.pdf) *English Only**
Explains about environment necessary for connecting the mainframe to the machine, and performing IPDS printing.

❖ **IPDS Technical Reference (IPDS_TEC.pdf) *English Only**
Explains about commands necessary for IPDS printing.

Note

❒ For details about the necessary environment, and installation of the IPDS card and machine, consult your sales or service representative. For details about necessary environment and operation of the mainframe, consult IBM.

How to Read This Manual

Symbols

This manual uses the following symbols:

Important

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

Note

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys that appear on the machine's display panel.

1. Getting Started

Book at a Glance

This book is designed to help you configure the Ethernet Attachment for your printer.

Server-to-Printer Attachments Described in this Book

This book describes the server-to-printer attachments described in the following table. Direct attachment of multiple machines to the printer, without the use of a print server, is also described for Windows systems.

Server Environment	Server-to-Printer Protocol	Data streams
AIX	TCP/IP	IPDS
System i	TCP/IP	IPDS
z/OS	TCP/IP	IPDS
Windows	TCP/IP	IPDS

Note

❒ To print IPDS, you will need to install InfoPrint Manager for AIX, InfoPrint Manager for Windows, PSF for z/OS or PSF for i5/OS and OS/400 on the host.

❒ IPDS must use the TCP/IP protocol.

Configuration Checklist

The information in this chapter applies to all users.

1. **Write down the NIC MAC address. The Ethernet MAC address is on the printer controller. If you are using TCP/IP, see the manual explaining the network functions provided by the supplier.**
2. **Power off the printer and connect the NIC to the LAN cable.**
3. **Power on the printer. Verify the connection to the LAN cable.**
4. **Configure your environment. Refer to one of the chapters in the following list.**

❖ **Windows**

Reference
p.9 “InfoPrint Manager for Windows”

❖ **System i**

Reference
p.13 “Configuring System i for an IPDS Printer”

❖ **z/OS**

Reference
p.29 “Configuring z/OS to Print IPDS Files”

❖ **AIX**

Reference
p.41 “InfoPrint Manager for AIX”

Default Parameter Values

The following lists the default parameter values and other information for a NIC.

Parameter/Limit	Values	Affected Area
LPD port	TCP port 515	LPR printing
Raw port for printing	TCP port 2501 TCP port 9100	AIX System i
IPDS port	TCP port 5001	PSF for z/OS PSF for i5/OS and OS/400 InfoPrint Manager

2. InfoPrint Manager for Windows

Requirements - InfoPrint Manager for Windows

This machine supports the following version of InfoPrint Manager for Windows.

- InfoPrint Manager for Windows V2.2 or later.

Note

❒ When you install the InfoPrint Manager server software, you automatically install the InfoPrint Manager Administration GUI and the InfoPrint Manager Operations GUI on the same system. You can also install either the InfoPrint Manager Administration GUI or the InfoPrint Manager Operations GUI on remote systems. The InfoPrint Manager Operations GUI provides a subset of the functions available in the InfoPrint Manager Administration GUI. This subset includes operator tasks.

Configuration Checklist - InfoPrint Manager for Windows

Use this chapter to configure InfoPrint Manager to print using your printer.

1. **If you have not already done so, install InfoPrint Manager.**
2. **Decide which type of destination you want to define in InfoPrint Manager for this printer. See p.10 "Choosing an InfoPrint Manager Destination Type".**
3. **Define the printer to InfoPrint Manager. See p.11 "Adding a PSF TCP/IP Printer".**
4. **Verify the configuration by submitting a print job.**

Choosing an InfoPrint Manager Destination Type

InfoPrint Manager provides various Destination Support Systems (DSSs). The type that is most appropriate for your environment is based on what data stream you want to print (IPDS, PCL, or PostScript). Use the following table to determine what type to use.

Data Stream From Application	Data Stream To Printer	InfoPrint Manager Destination
IPDS, PCL, PS, ASCII, line data, DBCS ASCII, PDF, AFP	IPDS	PSF TCP/IP Printer

Adding a PSF TCP/IP Printer

Create a PSF TCP/IP destination to define a printer that receives IPDS jobs using the TCP/IP protocol.

1 Complete the following worksheet:

Wizard Prompt	Description	Value
Name	The name for the actual destination object (8 character limit). **Note** ❒ This name is case-sensitive.	
Server	The InfoPrint Manager server that controls this actual destination.	
TCP/IP address	The dotted-decimal IP address used to access this printer.	
TCP/IP port	The port used by the printer for communication. (Typically, port 5001 is used.)	
Logical destination	The logical destination that directs jobs to this actual destination. **Note** ❒ This name is case-sensitive.	__ Default __ Other:
Logical destination's server	The server that contains the logical destination. **Note** ❒ This name is case-sensitive.	
Queue	The queue for the target printer (actual destination). **Note** ❒ This name is case-sensitive.	__ Default __ Other:

2 Launch the InfoPrint Manager Administration GUI.

3 On the menu bar, select [Printer] -> [Create] -> [PSF] -> [TCP/IP] to start the Create Printer Wizard.

4 **Provide the worksheet information to the wizard. For assistance, refer to the InfoPrint Manager Administration GUI online help.**

5 **If you did not enable the printer with the Create Printer Wizard, use the InfoPrint Manager Administration GUI to enable it.**

3. Configuring System i for an IPDS Printer

Requirements - System i

This machine supports the following version of PSF for i5/OS and OS/400 (PSF/400).

- PSF for i5/OS and OS/400 (PSF/400) V5.4 or later.

Note

❒ We recommend that you use the latest System i package and related software.

Printing AFP, IPDS, PDF, PCL, and PostScript Files

Use this chapter to configure the printer on System i as an IPDS printer.

The printer configured as IPDS will print only IPDS files. With the InfoPrint Server for System i, PostScript, PDF, and PCL data streams can be transformed to AFP and printed to the printer as IPDS.

- AFP files are transformed directly by Print Services Facility (PSF/400 – an integrated feature of OS/400), which then sends the transformed file to the printer.
- SCS files are transformed into IPDS by one of two conversion paths. The path recommended by IBM – a straight SCS to device-independent IPDS transform – is controlled by setting the IPDSPASTHR parameter to YES (see step 1 on p.21 “Configuring PSF/400 with CRTPSFCFG”). Setting IPDSPASTHR to YES provides the best performance because IPDS files are sent directly to the printer with no transform. If your SCS file requires any AFP processing, PSF/400 will automatically provide the requisite conversion.

Configuration Checklist - System i

- Authority Level Required
  All of the following configuration steps carried out on the System i may require "create" or "change" authority.

1 Make sure the printer is set up. See p.7 "Configuration Checklist".

2 Using the printer's control panel or Web Image Monitor, set up the printer for IPDS by setting the parameters and values shown in the following table.

Menu	Item	Setting
IPDS	Emulation Mode	Native
IPDS	Font Substitution	Off

3 Set TCP/IP addresses for the printer, such as an IP address, gateway address, or subnet mask. See the manual explaining the network functions provided by the supplier.

4 If the printer and System i are not on the same LAN segment, verify that there is a route defined in the TCP/IP route list on the System i. If necessary, use the ADDTCPRTE command on the System i to create a route definition.

5 Create or verify the existence of a System i TCP/IP interface for Token Ring or Ethernet. See p.16 "Configuring a System i TCP/IP Interface".

6 Configure System i with p.19 "Configuring PSF/400 for IPDS".

7 Vary the printer ON using the VFYCFG command.

8 Verify that TCP/IP has been started using the STRTCP command.

9 Test your configuration. See p.22 "Verifying the IPDS Configuration on System i".

10 To share the printer on the network, verify that the necessary parameters have been set correctly. See p.23 "Sharing the PSF/400 Printer on the Network".

Reference

If you have problems, refer to p.26 "Resolving System i Problems".

Configuring a System i TCP/IP Interface

Important

❒ Do not enter the IP address of the printer or set the System i interface address to be the same as the printer IP address. Also, do not add the printer to the System i TCP/IP interface list.

Configuring the System i Interface with ADDTCPIFC

ADDTCPIFC is used to add a TCP/IP interface to System i. This step configures the System i for attachment to a TCP/IP network.

1 At the System i command line, enter a command in the form:

```
ADDTCPIFC INTNETADR('9.99.15.188') LIND(ETHLAN) SUBNET-
MASK('255.255.255.0')
```

2 A completed screen should look like the following:

```
System:   BLDD60
Internet address . . . . . :   9.99.15.188
Subnet mask  . . . . . :   255.255.255.0
Line description . . . . . :   ETHLAN
Line type  . . . . . :   *ELAN
Interface status . . . . . :   Inactive
Type of service  . . . . . :   *NORMAL
Maximum transmission unit  . . . . . :   *LIND
Automatic start  . . . . . :   *YES
```

3 The following parameters are required:

- Internet Address
  Internet address of the System i Ethernet LAN adapter.

  Note

  ❒ Do not enter the IP address of the printer.
- Subnet Mask
  The subnet mask for this System i TCP/IP interface (for example, 255.255.255.0).
- Line description
  The name assigned to the System i line description. Each System i LAN adapter will have its own line description.

Configuring a TCP/IP Host Table Entry

Although optional, we recommend that you create a TCP/IP host table entry. Add the System i name and the IP address of the LAN adapter to the "Host Table Entries". Also, add the hostname and IP address of the printer to the list. You can access the host table entries function by using the CFGTCP command, then selecting option 10 from the menu.

You can also add entries to your host table for both the hostname and the fully qualified network name for your system. The entry should match what you configured for host and domain name. For example, if your hostname is "RCHASM03" and your domain name is "RCHLAND.IBM.COM ", your fully qualified network name is "RCHASM03.RCHLAND.IBM.COM". In your host entry table, enter both RCHASM03 and RCHASM03.RCHLAND.IBM.COM.

Configuring TCP/IP Keep Alive

Although optional, we recommend that you set the TCP/IP Keep-Alive time to 1 minute. This is the minimum value that can be set; the default is 120 minutes (2 hours). Setting the value to 1 minute causes System i to detect a lost printer connection faster.

To change the keep alive time, enter the command CHGTCPA. Change the first entry as shown below:

```
TCP keep alive . . . . . 1
```


Note

❒ Please note that changing the TCP/IP Keep-Alive time changes all the System i settings.

Configuring PSF/400 for IPDS

To configure IPDS on System i, you use the following commands:
CRTDEVPRT
CRTPSFCFG (Optional)

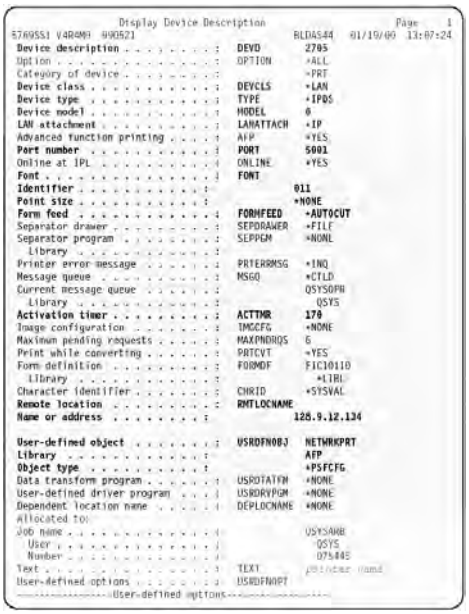
Configuring PSF with CRTDEVPRT

This section describes how to set up a device description on System i.

1 At the System i command line, enter a command in the form:

```
CRTDEVPRT DEVD(2705) DEVCLS(*LAN) TYPE(*IPDS) MODEL(0)
LANATTACH(*IP) AFP(*YES) PORT(5001) FONT(11) FORM-
FEED(*AUTOCUT)
RMTLOCNAME('128.9.12.134') USRDFNOBJ(AFP/NETWRKPRT *PS-
FCFG)
TEXT('printer name')
```

2 A completed screen looks like this:



3 Enter values for the following parameters:

- Device Description (DEVD)
  The device description or name.
- Device Class(DEVCLS)
  Specify *LAN.
- Device Type (TYPE)
  Specify *IPDS.
- Device Model (MODEL)
  Specify 0.
- LAN attachment (LANATTACH)
  Specify *IP.
- Port Number (PORT)
  Specify 5001, which is the printer's default port number. Use Web Image Monitor to set or view the IPDS port number.
- Font (FONT)
  Enter an appropriate value.
- Form Feed (FORMFEED)
  Specify *AUTOCUT.
- Activation timer (ACTTMR)
  This value specifies the number of seconds that PSF/400 waits for a printer to respond to an activation request. If only one system will be using the printer, use the default value (170 seconds). If more than one system will be using the printer, specify *NOMAX, which will cause PSF/400 to wait indefinitely for a response to an activation request.
- Remote Location (RMTLOCNAME)
  Enter the IP address or hostname of the printer.
- User-Defined Object (USRDFNOBJ)
  To use a PSF configuration object, specify its name and library here. The object type must be *PSFCFG. A single PSF configuration object may be referenced by multiple device descriptions, if required.

Configuring PSF/400 with CRTPSFCFG

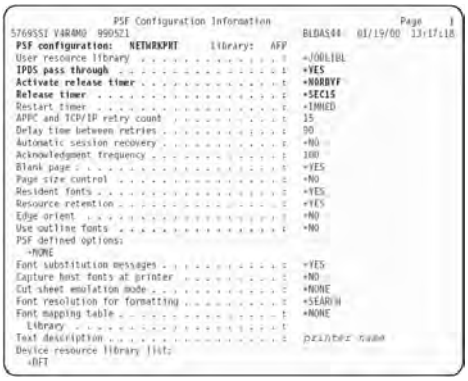
The PSF configuration object created with this command is used by PSF/400 when printing IPDS files only if the object is specified with the USRDFNOBJ parameter in the printer device description.

To configure System i for IPDS printing:

1 At the System i command line, enter a command in the form:

```
CRTPSFCFG  PSFCFG(AFP/NETWRKPRT)  IPDSPASTHR(*YES)
RLSTMR(*SEC15)  TEXT('printer name')
```

2 A completed screen looks like this:



3 The following parameters are recommended:

- PSF configuration (PSFCFG)
  The name used for this PSF configuration object. The name must match the user-defined object name (USRDFNOBJ) in the printer DEVD.
- IPDS pass through (IPDSPASTHR)
  To print SCS and IPDS files (which do not use AFP functions) with minimal processing, specify *YES. PSF/400 transforms SCS into IPDS before printing.
- Activate release timer (ACTRLSTMR)
  Specifies the point at which the release timer (RLSTMR) is activated. Set to *NORDYF.
- Release timer (RLSTMR)
  Specifies the amount of time to wait before a session or dialog is released, without terminating the writer. The ACTRLSTMR parameter specifies when this timer is to be activated. Verify that the IPDS TIMEOUT value on the printer is "0" or "OFF". Set the System i parameter to *SEC15.
  This releases the printer to service other jobs from other ports, 15 seconds after the last IPDS job has printed.

Verifying the IPDS Configuration on System i

To test IPDS printing, do the following:

1. **Vary on the line description if it is not already on.**
   ```
   VRYCFG CFGOBJ (line) CFGTYPE (*LIN) STATUS(*ON)
   ```

2. **To start TCP/IP, enter:**
   ```
   STRTCP
   ```

3. **Verify that the System i TCP/IP interface is active. Use the command:**
   ```
   WRKTCPSTS
   ```
   and then select option 1.

4. **Turn the printer on and wait until the printer's control panel displays READY.**

5. **To verify that the printer is connected to System i, ping the printer from a System i workstation with one of the following commands:**
   ```
   PING ip_address'
   ```
   or
   ```
   PING hostname
   ```
   where ip_address is the TCP/IP address of the remote system printer, and hostname is the hostname you defined for the printer, if any.

6. **If pings are successful, vary on the printer device description with the command:**
   ```
   VRYCFG (printer-device) CFGTYPE(*DEV) STATUS(*ON)
   ```
   If the pings are not successful, see p.26 "Printer Cannot be PINGed".

7. **To use PSF/400 to send an IPDS file to the printer, enter:**
   ```
   STRPRTWTR DEV (printer device)
   ```
   If you have problems printing, do the following:
   - Print a network configuration page, see the manual explaining the network functions provided by the supplier.
   - Verify that the IPDS port number matches the port number in the device description.

   If you are still unable to print IPDS files, contact your service or sales representative.

Sharing the PSF/400 Printer on the Network

To support printer sharing, the printer automatically switches among all logical ports. Basically, the printer prints one job at a time, and chooses the next job from the highest priority port. If the client does not end a job, then the printer applies the timeout value set for the print port.

To change the "time out" value, update the timeout value on Web Image Monitor for the appropriate port.

See p.51 "Sharing the Printer with IPDS host systems (PSF/400 or z/OS)", for a description of concepts associated with sharing an IPDS printer between multiple host systems.

Sharing the printer with other non-IPDS host systems using MID

Configure the System i to use MID (Managed IPDS Dialog) in order for the printer to be shared between the IPDS System i system and other non-IPDS systems, such as desktop PCs. The following PSF configuration parameters must be set on the System i in order for it to support MID requests from the printer.

Here is a System i example with MID Enabled:

```
PSF configuration:
User resource library.....:  *JOBLIBL
IPDS pass through ........:  *NO
+
Activate release timer....:  *PRTNORDYF
Release timer.............:  *SEC15
Restart timer.............:  *IMMED
APPC and TCP/IP retry count.....: 15
Delay time between retries.....: 90
Auto Session Recovery.....: *YES
Acknowledge Fequency.....: 100
Blank page.....: *YES
Page size control.....: *NO
Resident fonts.....: *YES
Resource retention.....: *YES
Edge orient.....: *NO
Use outline fonts.....: *NO
Remote Location:

Text description.....:
Device resource library list .....:  (List of names)
```

Sharing the printer with other IPDS host systems

Configure the System i without MID in order for the printer to be shared between multiple IPDS host systems. This configuration can also be used for sharing the printer with desktop PCs. The following PSF configuration does not grant MID requests from the printer.

Here is a System i example without MID:

```
Activate release timer.: *NORDYF
DISCINTV=25,
     Release timer.................: *SEC15
     Restart timer.................: *IMMED
```


To set up PSF/400 for shared printing without MID, set the following parameters:

Where Set	Parameter	Recommended Value	Description
CRTPSFCFG CHGPSFCFG	ACTRLSTMR	*NORDYF	Specifies the point at which the release timer (RLSTMR) is activated. Set to *NORDYF. This means that the release timer is activated when there are no spooled files in the printer's output queue with a status of RDY and the last page of the last spooled file processed has printed. *NORDYF is used so that all files with a status of RDY are printed before releasing the session (which does not terminate the writer, however).
CRTPSFCFG CHGPSFCFG	RLSTMR	*SEC15	Specifies the amount of time to wait before a session or dialog is released without terminating the writer. The ACTRLSTMR parameter specifies when this timer is to be activated. Set the parameter to a value at least equal to the TIMEOUT value on the printer. We recommend *SEC15.

Where Set	Parameter	Recommended Value	Description
CRTDEVPRT CHGDEVPRT	ACTTMR	*NOMAX	The value specifies the number of seconds that PSF/400 will wait for a printer to respond to an activation request. If only one system will be using the printer, use the default value (170 seconds). If more than one system will be using the printer, set the value to *NOMAX, which will cause PSF/400 to wait indefinitely for a response to an activation request.

Resolving System i Problems

Use this section to resolve problems configuring System i on TCP/IP networks.

Printer Cannot be PINGed

If you have problems pinging the printer:

- Verify the configuration of System i, including the printer and any intervening devices such as routers and bridges.
- Verify that the System i line description is varied on and the printer is turned on and displays a status of READY.
- Verify that the System i TCP/IP interface is active.

If PSF/400 Terminates When Initialized

If PSF/400 terminates when you initialize it for IPDS printing and issues message PQT3603, check for the following error codes.

- 10 means an incorrect RMTLOCNAME has been specified for the printer.
- 15 means that PSF/400 timed out waiting for the printer's response. You should check the value you entered for Activation Timer when using CRTDEVPRT.
- Codes 20-39 indicate a general communications failure. Make sure all of the components in your network are operational, such as routers.
- Codes 40-59 indicate a logic error between PSF and the printer control unit.

Spooled Print File Remains in PND Status

Check the output queue with the command:

```
WRKOUTQ OUTQ (queuename)
```

This typically indicates that PSF/400 is waiting for a response from the printer. This can be verified by displaying the QSPL subsystem, WRKACTJOB SBS (QSPL). If the status of the PDJ job for the printer is SELW, then PSF/400 is waiting for a response from the printer. Make sure that the printer is online and in READY status and that all network connections (for example, routers) between the System i and the printer are active.

Spooled Files Disappear Without Printing

To resolve this problem:

- Check that the correct printer queue name and correct IP address have been used.
- Ping the IP address. If the ping is successful, disconnect the network cable from the printer/print server, and ping the address again. If the ping is still successful, there is another printer with that IP address on the network.

Data is Being Clipped

To resolve this problem, you may want to set the PSC (Page Size Control) parameter to *YES in the CRTPSFCFG command.

Printer Powered Off While Writer is Active

The printer should not be powered off while the PSF writer is active. If this happens, you must stop and then restart the writer.

Optionally, you may specify *YES for Automatic session recovery in the PSF configuration object. When *YES is specified and the printer connection is lost (whether caused by accidentally powering off the printer or an unexpected network problem), PSF/400 will attempt to reconnect to the printer and resume printing at the last known point. You may have pages reprinted if the connection can be established. You can control the reprinting of pages by adjusting the value for the acknowledgment frequency parameter in the PSF configuration object.

4. Configuring z/OS to Print IPDS Files

Requirements - z/OS

This machine supports the following version of PSF for z/OS.

- PSF for z/OS V4.1.0 or later.

Note

❒ To obtain the PTFs associated with these APARs, contact your service or sales representative.

Configuration Checklist - z/OS

Use this chapter to configure z/OS to print IPDS files on your network printer.

- Authority Level Required
  All of the following configuration steps carried out on z/OS require appropriate RACF authority.

1 Using the printer's control panel, set up the printer for IPDS by setting the parameters and values shown in the following table.

Menu	Item	Setting
IPDS	Emulation Mode	Native
IPDS	Font Substitution	Off

2 Set TCP/IP addresses for the printer, such as an IP address, gateway address, or subnet mask. See the manual explaining the network functions provided by the supplier.

3 Configure the host environment. See p.31 "Configuring PSF to Print IPDS Files".

4 Verify the configuration. See p.36 "Verifying a TCP/IP-Attached Printer on z/OS".

Reference

If you want to share the printer, do the procedure in p.38 "Sharing the Network Printers on z/OS".

If you have problems, refer to p.40 "Handling z/OS Connectivity Problems".

Configuring PSF to Print IPDS Files

Data Requirements

You need the IP address of the printer.

Configuration Procedure

Configuring PSF to print IPDS files includes the following steps:

1. **Define the z/OS communications control unit to z/OS. See p.31 "Define the Communications Control Unit to z/OS".**
2. **Modify the TCP/IP profile on your z/OS system, if necessary. See p.32 "Modify the TCP/IP Profile in z/OS".**
3. **Ping the printer. See p.33 "Verify the Printer Connection".**
4. **Define the printer as a writer-controlled printer to JES. See p.33 "Define the Printer to JES".**
5. **Define the printer to PSF with a PRINTDEV statement, including the IP address. See p.34 "Define the Printer to PSF".**

Note

- ❒ This section does not provide all the information you need to install and configure TCP/IP on your z/OS system.
- ❒ The routing of information is determined on the basis of the IP address, and is performed by IP gateways. After the network is configured correctly, the z/OS host communicates directly with the TCP/IP-attached printer.

Define the Communications Control Unit to z/OS

If you have not already done so, use a hardware configuration definition (HCD) to define the communications control unit for the z/OS host, such as the 3172 or the 3745 control unit, to z/OS.

Modify the TCP/IP Profile in z/OS

The TCP/IP profile contains system configuration statements used to initialize the TCP/IP address space. The following statements in the TCP/IP profile; however, this example is not a complete profile.

Note

❒ If you change any of the values in the TCP/IP profile, restart TCP/IP to pick up the changes.

Sample Parameters in the TCP/IP Profile.

4

This example is not a complete TCP/IP profile.

The statements require special considerations when you are printing from PSF on TCP/IP-attached printers:

- TCPIPCONFIG
  The TCPIPCONFIG statement defines the interval between keep-alive transmissions. PSF relies on TCP to detect when a connection with a TCP/IP-attached printer or an i-data 7913 IPDS™ Printer LAN Attachment is no longer usable. When no data has been exchanged between PSF and its connection partner, TCP sends keep-alive probes to the connection partner periodically. These periodic probes, called keep-alive transmissions, enable TCP to discover when a connection is no longer usable even if the connection partner is abruptly powered off or is no longer accessible through the network.
  The frequency of keep-alive transmissions is controlled by the INTERVAL parameter on the TCPIPCONFIG statement. The frequency applies to all TCP applications that direct TCP to send keep-alive transmissions. The default frequency is after about two hours of inactivity.
  For printing on TCP/IP-attached printers, we recommend that you specify a shorter interval than the default, such as 1 minute, for the interval between keep-alive transmissions.
  Also, if any target host requires that the keep-alive packet contain data, specify SENDGARBAGE TRUE. For example:

  `TCPIPCONFIG INTERVAL 1 SENDGARBAGE FALSE GATEWAY`

- GATEWAY
  The GATEWAY statement defines a static route to the printer.

Verify the Printer Connection

To verify that z/OS can establish a connection with the TCP/IP-attached printer, ping the printer from the z/OS system.

From a TSO session, enter the following command:

```
TSO PING ip_address
```

In a TSO session, enter the following command from the Interactive System Productivity Facility (ISPF) command menu.

```
ping ip_address
```

- ip_address
  Specifies the IP address or host name of the printer.
  Here are examples of a successful ping and an unsuccessful ping.
  Successful ping:

  ```
  EZA0458I Ping V3R1: Pinging host 9.99.12.33 (Use ATTN to interrupt.)
  EZA0463I PING: Ping #1 response took 0.084 seconds. Successes so far = 1.
  ```

  Unsuccessful ping:

  ```
  EZA0458I Ping V3R1: Pinging host 9.99.12.33 (Use ATTN to interrupt.) EZA0464I PING: Ping #1 timed out
  ```

Note

❒ If you have problems pinging a printer, see p.40 “Handling z/OS Connectivity Problems”.

Define the Printer to JES

When a TCP/IP-attached printer is to be used with JES, it must be defined for spool printing mode with JES2 parameter.

- JES2 Printer Definitions:
  The following example shows the JES2 printer definition initialization member, located in the system PARMLIB.

  ```
  FSS(FSS1),PROC=PSFPROC,HASPFSSM=HASPFSSM
  PRT1  FSS=FSS1,MODE=FSS,PRMODE=(LINE,PAGE,SOSI1),
  CLASS=C,UCS=0,SEP=YES,SEPDS=NO,CKPTPAGE=100,
  START=NO,MARK=YES,TRKCELL=YES
  ```

- JES3 Printer Definitions:
  The following shows an example of a JES3 printer definition. This example is not executable, but it is intended to help the JES3 systems programmer define the printer to the OS/390 host.

  ```
  FSSDEF,TYPE=WTR,FSSNAME=FSS1,PNAME=PSFPROC,
  SYSTEM=SYS1,TERM=NO DEVICE,JNAME=PRT1,
  JUNIT=(,SYS1,,OFF),FSSNAME=FSS1,
  MODE=FSS,PM=(LINE,PAGE,SOSI1),CHARS=(YES,GT12),DTYPE=PRTAF
  P1 CARRIAGE=(YES,A868),CKPNTPG=100,HEADER=YES,WC=(C)
  ```

Define the Printer to PSF

Each TCP/IP-attached printer must be defined to PSF with a PRINTDEV statement in the PSF startup procedure.

The following proc shows a sample procedure, PSFPROC that you can modify to suit your installation. The PRINTDEV statement shows the required IPADDR keyword.

No network printer-specific writer procedure is currently supplied. You can, however, copy the APSWPROT sample from the APAR medium and modify it for the network printers.

```
//PSFPROC PROC
//*************** IBM NETWORK PRINTERS WRITER PROCEDURE *************
//*
//*01* MODULE-NAME = PSFPROC
//*
//*01* DESCRIPTIVE-NAME = START PROCEDURE FOR PSF:
//*           TCP/IP ATTACHED IBM NETWORK PRINTERS
//*
//*01* NOTES = THE FULL NAME OF THE DEFAULT PAGEDEF IS
//*              P1A06462.
//*           THE FULL NAME OF THE DEFAULT FORMDEF IS
//*              F1A10110.
//*           THE FULL NAMES OF THE DEFAULT FONTS ARE
//*             X0GF10, X0GS10, X0TU10, AND X0GU10.
//*           THE FULL NAME OF THE SEPARATOR PAGE PAGEDEF IS
//*              P1V06483.
//*           THE FULL NAME OF THE SEPARATOR PAGE FONT IS
//*             X0GT15.
//*
//*
//*01* CHANGE-ACTIVITY :
//*
//*=== END OF SPECIFICATIONS ===*/
//STEP1   EXEC  PGM=APSPPIEP,REGION=4096K,TIME=1440,PARM='...,TCPIP' */
//JOBHDR OUTPUT PAGEDEF=V06483,     /* JOB SEPARATOR PAGEDEF        */
//       FORMDEF=A10110,CHARS=GT15  /* JOB SEPARATOR FORMDEF        */
//JOBTLR OUTPUT PAGEDEF=V06483,     /* JOB SEPARATOR PAGEDEF        */
//       FORMDEF=A10110,CHARS=GT15  /* JOB SEPARATOR FORMDEF        */
//DSHDR  OUTPUT PAGEDEF=V06483,     /* DS  SEPARATOR PAGEDEF        */
//       FORMDEF=A10110,CHARS=GT15  /* DS  SEPARATOR FORMDEF        */
//MSGDS  OUTPUT PAGEDEF=A06462,     /* MESSAGE DATASET PAGEDEF      */
//       FORMDEF=A10110             /* MESSAGE DATASET FORMDEF      */
//PSEG01   DD   DSN=SYS1.PSEGLIB,   /* SYSTEM PAGE SEGMENTS         */
//         DISP=SHR
//OLAY01   DD   DSN=SYS1.OVERLIB,   /* SYSTEM MEDIUM OVERLAYS       */
//         DISP=SHR                 /*                              */
//PDEF01   DD   DSN=SYS1.PDEFLIB,   /* SYSTEM PAGEDEFS              */
//         DISP=SHR
//FDEF01   DD   DSN=SYS1.FDEFLIB,   /* SYSTEM FORMDEFS              */
//         DISP=SHR


//* ************************************************************ */
//*              PRINTDEV                                        */
//* ************************************************************ */
//PRT1     CNTL
//PRT1      PRINTDEV FONTDD=*.FONT300,/* 300 PEL FONT LIBRARY DD    */
//          OVLYDD=*.OLAY01,          /* OVERLAY  LIBRARY DD        */
//          PSEGDD=*.PSEG01,          /* SEGMENT  LIBRARY DD        */
//          PDEFDD=*.PDEF01,          /* PAGEDEF  LIBRARY DD        */
//          FDEFDD=*.FDEF01,          /* FORMDEF  LIBRARY DD        */
//          JOBHDR=*.JOBHDR,          /* JOB HEADER SEPARATOR       */
//*                                   /*   OUTPUT                   */
//          JOBTRLR=*.JOBTLR,         /* JOB TRAILER SEPARATOR      */
//*                                   /*   OUTPUT                   */
//          DSHDR=*.DSHDR,            /* DATA SET HEADER            */
//*                                   /*   SEPARATOR                */
//          MESSAGE=*.MSGDS,          /* MESSAGE DATA SET OUTPUT    */
//          PAGEDEF=A06462,           /* DEVICE PAGEDEF DEFAULT     */
//          FORMDEF=A10110,           /* DEVICE FORMDEF DEFAULT     */
//          CHARS=(GF10,              /* DEVICE                     */
//          GS10,TU10,GU10),          /* DEFAULT FONT SET           */
//          PIMSG=YES,                /* ACCUMULATE DATA SET        */
//*                                   /*   MESSAGES                 */
//          DATACK=BLOCK,             /* REPORT ALL DATA-CHECK      */
//*                                   /*   ERRORS                   */
//          TRACE=YES,                /* CREATE INTERNAL TRACE      */
//          FAILURE=WCONNECT,         /* PSF ACTION ON PRINTER      */
//*                                   /*   FAILURE                  */
//          TIMEOUT=REDRIVE,          /* PSF ACTION ON TIMEOUT      */
//          MGMTMODE=OUTAVAIL,        /* PRINTER MANAGEMENT MODE    */
//          DISCINTV=15,              /* DISCONNECT INTERVAL IN     */
//                                    /*   SECONDS                  */
//          IPADDR='xxx.xxx.xxx.xxx' /* IP ADDRESS FOR TCP/IP       */
//PRT1      ENDCNTL
```

Note

❒ To specify a TCP/IP address space name other than the default, TCPIP, code the following exec statement in the writer procedure:

```
//STEP01 EXEC PGM=APSPPIEP,
REGION=4096K,PARM=(,,,,tcpip_name)
```

❒ where tcpip_name is the name of the TCP/IP address space. If this parameter is not coded, PSF uses the default name, "TCPIP".

❒ The IP address is the only required parameter. Other parameters may be set to facilitate printer sharing as described in p.38 "Sharing the Network Printers on z/OS".

- IPADDR
  Specifies the IP address for the printer NIC, in dotted-decimal notation. The hostname can be specified in place of the dotted-decimal address.

Verifying a TCP/IP-Attached Printer on z/OS

To operate a TCP/IP-attached printer, you use JES operator commands.

Starting a TCP/IP-attached Printer

To start a TCP/IP-attached printer, do the following:

1. **Start TCP/IP.**
2. **Power on the printer.**
3. **Start the printer FSA.**
   - On JES2, the command is:
     `$Sprinter-name`
   - On JES3, the command is:
     `*CALL WTR,OUT=printer-name`

Stopping a TCP/IP-attached Printer

You can stop a TCP/IP-attached printer in several ways:

1. **The preferred method is to first stop the PSF FSA for the printer by entering the following command from the z/OS operator panel:**

   JES2:

   `$Pprinter-name`

   JES3:

   `*VARY,printer-name,OFF`
   `*CANCEL,printer-name`

   where printer-name specifies the name of the printer FSA.

2. **Then you can turn off power to the printer.**
   - To end the PSF FSA for the printer, use the JES commands. If you are unable to purge or cancel the printer by use of the JES commands, enter the following command:

   `MODIFY FSSname,FORCE,printer-name`

Resolving IPDS Printing Problems

If you have problems printing, do the following:

- Print a network configuration page, see the manual explaining the network functions provided by the supplier.
- Verify that the port number specified for the IPDS port matches either the port number specified in the Port number parameter in the printer inventory, or the port number specified in the PORT parameter in the PRINTDEV statement under the PSF start procedure. You can use Web Image Monitor to view or change the IPDS port number.

Sharing the Network Printers on z/OS

See p.51 “Sharing the Printer with IPDS host systems (PSF/400 or z/OS)” for a description of concepts associated with sharing an IPDS printer between multiple host systems.

The printer may be shared with PSF in one of two ways:

- Sharing the printer with other non-IPDS host systems using MID and the JES Spool.
- Sharing the printer with other IPDS host systems, without MID. This method also shares the printer with non-IPDS host systems.

Sharing the printer with other IPDS host systems, without MID JES Spool Printer Sharing

JES spool printer sharing is valid for TCP/IP attached network printers. A session with the printer is maintained while there is output on the JES spool and the printer is available. When there is no more output on the spool and the disconnect interval expires, PSF ends the session with the printer. This allows any other IPDS host, such as System i to share this printer. PSF attempts to restart the session when there is more work on the spool for the printer. After the session is restarted, PSF must reload the resources required for the print jobs. When using this method of network printer sharing, PSF cannot determine if another printer driver is active.

You can request this method of network printer sharing by specifying the following parameters in the PSF Startup Proc.

```
MGMTMODE=OUTAVAIL
FAILURE=WCONNECT
TIMEOUT=REDRIVE
DISCINTV=nn
```

- MGMTMODE
  Set this parameter to “OUTAVAIL”. “OUTAVAIL” requests that PSF start a communications session with the printer only when output is available on the JES spool.
- FAILURE
  Specifies the action PSF is to take after a printer failure or a TCP/IP network failure. If FAILURE=WCONNECT and the printer is connected to another host when PSF attempts to establish a connection on TCP/IP, PSF continuously retries (up to the limit specified by CONNINTV) until the printer becomes available. If FAILURE=STOP, PSF must be restarted by an operator command.

- TIMEOUT
  Specifies the action that PSF is to take after a timeout when no output is available on JES. The DISCINTV parameter specifies the timeout interval. TIMEOUT=REDRIVE requests that PSF redrive the printer FSA using the value of the MGMTMODE parameter. TIMEOUT=STOP requests that PSF stop the printer FSA, which can then be restarted only by an operator command.
- DISCINTV
  Specifies the disconnect interval in seconds. The value can range from zero to 86400. We suggest you set the value to "15". When no output is available from JES for this time period, PSF ends the session with the network printer. If the value is set to zero, PSF does not end the session because of lack of output, and other IPDS hosts will not be able to share the printer.

Handling z/OS Connectivity Problems

If you encounter problems when pinging a network printer from z/OS, here is how to resolve them.

Ping is Not Successful

If the ping is not successful, verify the following:

- The printer is powered on.
- The IP address is unique in the TCP/IP network.

If the IP address of the printer is not unique, see your network administrator to resolve the IP address problem.

If problems remain, consult your TCP/IP network administrator about a possible network problem.

Ping is Successful

A successful ping usually indicates that the z/OS system can communicate with the printer; however, you might receive a successful ping even though the IP address of the TCP/IP-attached printer is a duplicate of another IP address.

If PSF is unable to establish a network connection with the TCP/IP-attached printer or if PSF output for this printer prints elsewhere, follow these steps to determine whether the IP address of the printer is unique:

1. **Turn the printer off.**
2. **Wait at least 5 minutes for TCP/IP to clear the Address Resolution Protocol (ARP) tables. (If your installation specified a longer interval on the ARPAGE configuration statement in the TCP/IP profile, you may need to wait longer.)**
3. **Enter the ping command again from the z/OS system.**

Note

❒ If you receive a successful response to the ping command, there is a duplicate IP address. Consult your TCP/IP network administrator.

5. InfoPrint Manager for AIX

Requirements - InfoPrint Manager for AIX

This machine supports the following version of InfoPrint Manager for AIX.

- InfoPrint Manager for AIX V4.2 or later.

Configuration Checklist - InfoPrint Manager for AIX

1. **Set TCP/IP addresses for the printer, such as an IP address, gateway address, or subnet mask. See the manual explaining the network functions provided by the supplier.**
2. **Define the printer to InfoPrint Manager as described in the next section, p.43 “Defining Printers to InfoPrint Manager”.**

Defining Printers to InfoPrint Manager

The configuration procedure to use depends on what data stream you want to send:

- To send IPDS to the printer, configure InfoPrint Manager for a PSF TCP/IP-attached printer. See p.43 “Configuring Network Printers as PSF TCP/IP-Attached Printer”.

Configuring Network Printers as PSF TCP/IP-Attached Printer

Create a PSF TCP/IP destination to define a printer that receives IPDS jobs using the TCP/IP protocol.

1 Complete the following work sheet:

Wizard Prompt	Description	Value
Name	The name for the actual destination object (8 character limit). **Note** ❒ This name is case-sensitive.	
Server	The InfoPrint Manager server that controls this actual destination.	
Model	The printer model, for example InfoPrint2090.	
TCP/IP address	The dotted-decimal IP address used to access this printer.	
TCP/IP port	The port used by the printer for communication. (Typically, port 5001 is used.)	
Logical destination	The logical destination that directs jobs to this actual destination. **Note** ❒ This name is case-sensitive.	__ Default __ Other:
Logical destination’s server	The server that contains the logical destination. **Note** ❒ This name is case-sensitive.	
Queue	The queue for the target printer (actual destination). **Note** ❒ This name is case-sensitive.	__ Default __ Other:

2 On the menu bar, select Printer–> Create–> PSF– TCP/IP to start the Create Printer Wizard.

3 Provide the worksheet information to the wizard. For assistance, refer to the InfoPrint Manager Administration GUI online help.

4 If you did not enable the printer with the Create Printer Wizard, use the InfoPrint Manager Administration GUI to enable it.

Adding an AIX Printer

Create an AIX printer to represent a printer that will accept the data stream that comes out of the printer driver without transforming it. For example, to send the output of a PostScript driver to a PostScript printer.

Wizard Prompt	Description	Value
Name	The name for the actual destination object (8 character limit). **Note** ❒ This name is case-sensitive.	
Server	The server that controls this actual destination. The server name is the same as the name of the host system where the server is installed. **Note** ❒ This name is case-sensitive.	
Model	Select the printer model from the pull-down list in the InfoPrint Manager Administration GUI. If the printer you are working with is not in the pull-down list, enter the name as it appears on the printer.	
SNMP TCP/IP address	The dotted-decimal IP address used to access this printer. This value is used only for SNMP printers.	
Device	The name of the printer	Specify the printer queue name that was created beforehand with AIX.
Printer Command	The command that InfoPrint Manager issues to send a job to this printer.	uusr/lib/lpd/pio/etc/pioibmnpm <the value you listed for server above> or SNMPTC/IP address

Wizard Prompt	Description	Value
Data stream	The data stream expected by the printer (for example, PCL5 or PPDS).	
Logical destination	The logical destination that directs jobs to this actual destination. **Note** ❒ The name is case-sensitive.	__ Default __ Other:
Logical destination's server	The server that contains the logical destination. **Note** ❒ The name is case-sensitive.	
Queue	The queue for the target printer (actual destination). **Note** ❒ The name is case-sensitive.	__ Default __ Other:

To create this type of printer, use the Create Printer Wizard in the InfoPrint Administration GUI. On the menu bar, click **[Printers]**-> **[Create]**-> **[AIX]**. Referring to the work sheet above, provide the information as prompted by the wizard. For assistance, refer to the online help.

If you did not enable the printer with the Create Printer Wizard, use the InfoPrint Manager Administration GUI to enable it.

6. Handling Network Problems

Introduction

Use this chapter as a guide for finding and resolving printer and NIC printing problems on TCP/IP networks.

The following types of problems are described here:

- Hardware
- Connectivity
- Formatting
- Printing

Network Setup

Before doing anything else to try to resolve problems, you should verify that you have entered the correct configuration data.

Reference

For details about network configuration, see the manual explaining the network functions provided by the supplier.

Hardware Problems

When printing problems occur, the first task is to check the physical condition of the printer and related hardware.

Hardware Problems Introduction

The hardware is where diagnosis of printer problems begins. The hardware includes the following elements:

- The printer itself
- The physical connection of the hardware to the network
- The cabling system
- The network interface

Resolving Hardware Problems

To determine whether a problem is a hardware problem or not, check the following:

- Verify that power is going to the printer by checking the printer's control panel.
- Verify that the printer is connected to the network.
- Verify that the printer is Ready.

Connectivity Problems

The network/transport level of a network provides the capability of routing packets from one device to another device on the network or to a different network on an internetwork system.

If you have trouble connecting with the network, refer to the following:

- Verify that there is no duplicate IP address on the network by:
  - Disconnecting the printer from the network.
  - Using the Ping command to try to communicate with the IP address of the printer.
- Connect the printer to the network and ping the printer to verify that there is a connection to the network.
- Printing problems may occur if the subnet mask has not been set correctly. Verify that the subnet mask is correct either by printing a network configuration page or checking with the network administrator.
- A related problem is that the gateway address may be incorrect. Verify the gateway address from the network configuration page.
- Verify that the printer is configured to accept print jobs from your client system by checking the "Accept IP Jobs From" heading in the IP section on the network configuration page. The IP addresses from which jobs are accepted can be set on **[Access Control]** in Web Image Monitor.

Ethernet Connectivity Problems

The Ethernet adapter supports Auto-negotiation and fixed settings for speed and duplex. The IEEE standard does not provide the ability to auto-detect the speed or duplex settings of the connected partner (a hub or switch) in a number of configurations. In these cases, the following conditions may occur:

- The Link light falsely appears on the printer adapter. No communication is established.
- The Link light appears and communication is established, but communication may be very slow due to collisions or lost packets.

The table below identifies various printer and switch or hub configuration settings. OK indicates that a good Link is established and normal communications should occur. These are the only supported configurations. NG indicates that a Link is established, but a speed or duplex mismatch occurs. The mismatched configuration cannot be detected by the printer. Communications may or may not work. If communications appear to work, data transfers may be slow due to collisions and lost packets. These configurations are particularly bad because they cannot be detected by either partner. Administrators must be aware of these situations and avoid these configurations. The cells marked as "No Connection" are detectable invalid configurations and no link is established.

Printer Setting	Ethernet Switch or Hub Setting				
	Auto	**10 HD**	**10 FD**	**100 HD**	**100 FD**
Auto Select	OK (100 Full) (1000 Full)	OK (10 Half)	NG (10 Half / Full) duplex mismatch	OK (100 Half)	NG (100 Half / Full) duplex mismatch
10Mbps Half Duplex	OK (10 Half)	OK (10 Half)	NG (10 Half / Full) duplex mismatch	NG, Link light is false. Speed mismatch, no communication	NG, Link light is false. Speed mismatch, no communication
10Mbps Full Duplex	OK (10 Full)	NG (10 Full / Half) duplex mismatch	OK (10 Full)	NG, Link light is false. Speed mismatch, no communication	NG, Link light is false. Speed mismatch, no communication
100Mbps Half Duplex	OK (100 Half)	No connection	No connection	OK (100 Half)	NG (100 Half / Full) duplex mismatch
100Mbps Full Duplex	OK (100 Full)	No connection	No connection	NG (100 Full / Half) duplex mismatch	OK (100 Full)

Note

❒ To run the 10/100/1000 Ethernet Adapter at 1000 MB/sec, you must select the Auto/Auto setting.

Formatting Problems

One possible problem is the value of the Personality item for the TCP/IP port. The Personality value is set for each TCP/IP port using the Data stream item on Web Image Monitor. The possible values are **[Auto]** (default value), **[PCL]**, and **[PS]**. If the Personality value is set to **[PCL]** or **[PS]**, all data coming in through this port will be interpreted as that data stream (for example, PostScript data received when the Personality value is set to **[PCL]** will not print correctly). Ensure that the Personality value is set to **[Auto]** if more than one data stream will be received through this port.

Sharing the Printer with IPDS host systems (PSF/400 or z/OS)

- The printer accepts jobs from multiple logical ports (such as TCP/IP LPR, Port 2501, or IPDS). The printer automatically chooses the next job to print from the highest priority port that has a job ready to print. The printer chooses the next job when the client closes the port that was used for the previous job. If the client does not close the port, the printer automatically closes it after a period of time called the timeout interval. For details, see the Web Image Monitor Help.
- Unlike PostScript and PCL, the IPDS data stream is tightly controlled by the host system. For proper operation when printing IPDS, the host system must terminate the TCP/IP connection. Host system output writers post an error if the printer closes the port. Therefore, for printing IPDS, the printer must be configured for an infinite timeout, and the host system is configured to close the connection after the output queue is empty for some period of time.
- The drawback of this method is that the IPDS host system must retransmit downloaded PSF resources each time a new connection with the printer is established. This issue can be corrected by using a feature called MID (Managed IPDS Dialog). MID allows the TCP/IP connection to remain active and it allows the printer to retain the IPDS resources while freeing the printer to process PostScript and PCL jobs from other ports. Only z/OS and the System i host systems support MID. (It is not supported by AIX or InfoPrint Manager).
- For more information, see p.23 “Sharing the printer with other non-IPDS host systems using MID” for z/OS.
- MID is a negotiated sequence between the printer and the host system. The printer requests the suspension of IPDS activity. At an appropriate time the host system grants the request. When suspended, the IPDS TCP/IP connection between the host and the printer remains open, and the downloaded IPDS resources are retained by the printer. When the printer receives the grant it is free to process PostScript and PCL jobs from other ports. IPDS activity resumes when the host system has another IPDS job to print.
- The MID feature should not be used if multiple IPDS host systems send jobs to the same printer because the first IPDS host system that gains access to the printer will block the other IPDS host systems from obtaining an IPDS TCP/IP connection to the printer.

INDEX

A

ADDTCPIFC, 16

C

CFGTCP, 17
Checklist
- *InfoPrint Manager for AIX*, 42
- *InfoPrint Manager for Windows*, 10
- *Installation*, 7
- *OS/390*, 30
- *System i*, 15

CHGTCPA, 18
Configuring
- *PSF/400*, 19
- *System i*, 16
- *z/OS*, 31

CRTDEVPRT, 19
CRTPSFCFG, 21

D

Default Parameter Values, 8

H

How to Read This Manual, 4

M

MID, 51

R

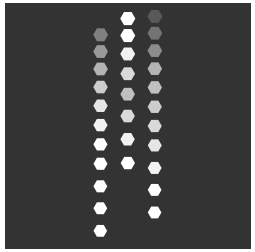
Requirement
- *InfoPrint Manager for AIX*, 41
- *InfoPrint Manager for Windows*, 9
- *OS/390*, 29
- *System i*, 13

V

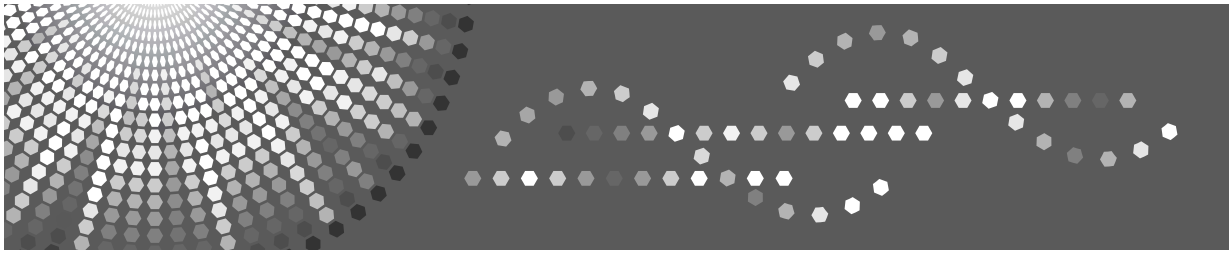
Verifying
- *PSF/400*, 22
- *System i*, 22
- *z/OS*, 36

Copyright © 2010

IPDS Printing Configuration Guide



EN GB
EN US
EN AU
D088-7808



IPDS Supplement

1 Getting Started

2 Using Web Image Monitor

3 Accessing User Tools

4 Appendix

Read this manual carefully before you use this product and keep it handy for future reference.

Introduction

This manual contains detailed instructions and notes on the operation and use of this machine. For your safety and benefit, read this manual carefully before using the machine. Keep this manual in a handy place for quick reference.

Important

Contents of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

Trademarks

Adobe, Acrobat Reader, PostScript and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

AFP/ADVANCED FUNCTION PRINTING, IPDS and Intelligent Printer Data Stream are trademarks of Ricoh Co., Ltd.

IBM® is a trademark of International Business Machines Corporation in the United States, other countries, or both.

PCL® is a registered trademark of Hewlett-Packard Company.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights to those marks.

TABLE OF CONTENTS

Manuals for the IPDS card **1**
How to Read This Manual **2**
Symbols 2

1. Getting Started

About IPDS **3**

2. Using Web Image Monitor

List of the Setting Items **5**
Configuration 5

3. Accessing User Tools

User Tools Settings **7**

4. Appendix

Precautions **19**
About AFP/IPDS Fonts 19
Limitations 19

INDEX **20**

Manuals for the IPDS card

Refer to the manuals that are relevant to what you want to do with the IPDS card.

Important

❒ Adobe Acrobat Reader/Adobe Reader must be installed in order to view the manuals as PDF files.

❖ **IPDS Supplement (IPDS.pdf)**
Explains about how to configure the IPDS card for the machine, and about items selectable from the Web browser.

❖ **IPDS Printing Configuration Guide (IPDS_CONF.pdf) *English Only**
Explains about environment necessary for connecting the mainframe to the machine, and performing IPDS printing.

❖ **IPDS Technical Reference (IPDS_TEC.pdf) *English Only**
Explains about commands necessary for IPDS printing.

Note

❒ For details about the necessary environment, and installation of the IPDS card and machine, consult your sales or service representative. For details about necessary environment and operation of the mainframe, consult IBM.

How to Read This Manual

Symbols

This manual uses the following symbols:

Important

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

Note

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys that appear on the machine's display panel.

【 】

Indicates the names of keys on the machine's control panel.

About IPDS

IPDS (Intelligent Printer Data Stream) is a page printing format for IBM mainframe and client computers. This machine can perform IPDS printing if the IPDS card is installed.

2. Using Web Image Monitor

List of the Setting Items

If you install the IPDS card to the machine, following Web Image Monitor items can be viewed or modified depending on the selected mode on the Web browser.

Select one of the following modes to log on Web Image Monitor:

- User mode: logged on as a user
- Administrator mode: logged on as an administrator

Note

❒ IPDS cannot use the delete reservation function of Web Image Monitor. After you login to administrator mode in Web Image Monitor, even if you select a currently printing IPDS job at the Current/Waiting Jobs and then click **[Delete Reservation]**, nothing happens.

❒ For details about Web Image Monitor, see the manual explaining the network functions provided by the supplier or Web Image Monitor Help.

Configuration

Printer

Menu	User mode	Administrator mode
Basic Settings	Read	Read/Modify
IPDS Form List	Read	Read/Modify
Reset IPDS Fonts	None	Read/Modify

Note

❒ "IPDS Menu" will appear in Basic Settings.

Network

Menu	User mode	Administrator mode
IPv4	Read	Read/Modify

Note

❒ "IPDS" and "IPDS Port Number" will be displayed.

Security

Menu	User mode	Administrator mode
Network Security	None	Read/Modify

Note

❒ "IPDS" will be displayed.

User Tools Settings

When the IPDS card is installed, IPDS print settings become available and will appear on the control panel.

❖ List/Test Print

- IPDS Font List
  Prints a list of IPDS-supported fonts.

Note

❒ The layout of the IPDS Font List produced by the test print is fixed to A4 or $8^1/_2$" × 11" (letter) size. We recommend you load A4 or $8^1/_2$" × 11" (letter) size paper (plain or recycled) in one of the paper trays.

❒ For details about printing lists, see the manual explaining how to print lists provided by the supplier.

❖ Maintenance

- Reset IPDS Fonts
  Use this page to delete all IPDS captured fonts.

Note

❒ Only the Machine Administrator can reset IPDS fonts.

❖ IPDS Menu

Menu Item	Description
Tray Form	Specifies an IPDS form for each paper tray. • Tray 1 • Tray 2 • Tray 3 • Tray 4 • LCT • Bypass Tray For each paper tray, select the form you want to allocate to it.
Emulation Mode	Specifies the emulation mode. • Native (Default) • 4028
Print Mode	Specifies the print mode. • Standard • Enhanced (Default)

Menu Item	Description
Default Code Page	Specifies the default code page. The default value is"037". 037 : US, Canada, Netherlands, Portugal 038 : US English ASCII 260 : Canadian French 273 : Austrian/German 274 : Belgium 276 : Canadian French 277 : Danish/Norwegian 278 : Finnish/Swedish 280 : Italian 281 : Japanese 284 : Spanish 285 : UK English 286 : Austrian/German (alternate) 287 : Danish/Norwegian (alternate) 288 : Finnish/Swedish (alternate) 290 : Japanese/Katakana 297 : French 420 : Arabic 423 : Greek 424 : Hebrew 500 : Belgium, Switzerland/International 870 : Latin 2 Multilingual 871 : Icelandic 875 : Greek 880 : Cyrillic 892 : OCR - A 893 : OCR - B 905 : Turkish 1025 : Cyrillic 1026 : Turkish

Menu Item	Description
Default Code Page	The following code pages include the Euro character: • 1140 : US, Canada, Netherlands, Brazil, Portugal • 1141 : Austrian/German • 1142 : Danish/Norwegian • 1143 : Finnish/Swedish • 1144 : Italian • 1145 : Spanish • 1146 : UK English • 1147 : French • 1148 : Belgium, Switzerland/International • 1149 : Icelandic
Default FGID	Specifies the default FGID (Font Typeface Global Identifier), which identifies the printer's default resident font. The default FGID is 416 (Courier Roman Medium 10). To display a list of the fonts and FGIDs that the printer supports, print out the list of IPDS resident fonts. For details about printing lists, see the manual explaining how to print lists provided by the supplier. 3 : OCR B 11 : Courier 10 12 : Prestige Pica 18 : Courier Italic 10 19 : OCR A 46 : Courier Bold 10 85 : Courier 12 86 : Prestige Elite 92 : Courier Italic 12 111 : Prestige Elite Bold 112 : Prestige Elite Italic 159 : Boldface 164 : Prestige PSM Roman Medium 203 : Gothic Text 221 : Prestige 15 223 : Courier 15 254 : Courier.17 ss 256 : Prestige 17 281 : Letter Gothic 283 : Gothic Text 290 : Gothic Text

Menu Item	Description
Default FGID	304 : Katakana Gothic 305 : OCR A 306 : OCR B 318 : Prestige Bold 319 : Prestige Italic 400 : Letter Gothic 404 : Letter Gothic Bold 416 : Courier Roman Medium 10 420 : Courier Roman Bold 424 : Courier Italic Medium 428 : Courier Italic Bold 432 : Prestige 2304 : Helvetica Roman Medium 2305 : Helvetica Roman Bold 2306 : Helvetica Italic Medium 2307 : Helvetica Italic Bold 2308 : Times New Roman Medium 2309 : Times New Roman Bold 2310 : Times New Roman Italic Medium 2311 : Times New Roman Italic Bold 5687 : Times Roman 5707 : Times Roman Bold 5815 : Times Roman Italic 5835 : Times Roman Bold Italic 20224 : Boldface
Characters Per Inch	Specifies the number of characters per inch (pitch) for the default font. Valid values are 5.0 to 30.0 in units of one tenth of an inch. The default value is 10.0.
Valid Printable Area Check	Turns valid printable area checking on or off. • On (Default) The printer checks for pixels that fall outside the intersection of the logical and physical pages. If there are pixels outside the area and error reporting has been set using the "IPDS Exception Handling Control" command, the printer reports an error to the host. • Off The printer does not report pixels outside the valid printable area.

Menu Item	Description
Page	Specifies how data is positioned on the page. • Whole (Default) IPDS whole page. The printer does not move or compress the page. This is the preferred method; all page positioning and formatting is done at the application level on the host. The **[Print]**, **[Comp1]**, and **[Comp2]** commands may alter the appearance of the page, or may not be compatible with earlier products (for example, 3116, 3916), especially if these options are used in combination with duplex and other IPDS Menu page format adjustments. The **[Print]**, [**Comp1]**, and **[Comp2]** commands are included to allow line printer jobs to fit onto pages where "Edge to Edge" printing is not possible; we do not recommend you use them to create new applications. • Comp1 This command uses the “Print Page” command as its base, and compresses the spacing between text lines generated by the “IPDS Begin Line” command. Its primary purpose is to compress “Begin Line” command text data onto pages that have unprintable borders. • Comp2 This command uses the “Print Page” command as its base, and compresses “IPDS Begin Line” command text (see Comp1) and the data of the following vertical text positioning commands: “Absolute Move Baseline”, “Relative Move Baseline”, “Draw B Axis Rule”, and “Draw I Axis Rule”. **Note** ❒ Alignment problems can occur if you select **[Comp1]** or **[Comp2]**, and print jobs that mix text with images, graphics, or bar codes. Problems can occur if text positioning commands are used to move across text or into non-text (image, graphic, or bar code) areas. Both **[Comp1]** and **[Comp2]** reduce the line spacing of text only and have no effect on non-text data. To minimize alignment problems, select **[Comp1]**, because “Begin Line” commands are not normally used to move across or into non-text areas. If, however, the application you want to compress does not use the “Begin Line” command, select **[Comp2]**.

Menu Item	Description
Page	• Print IPDS print page. If the page origin is within the unprintable area, the origin of the page is moved to the inside edge of the nearest unprintable area border. If the origin violates the unprintable area on two edges, it is moved to the nearest inside corner of the unprintable area. If the origin violates only one edge of the unprintable area, the origin is adjusted to avoid that area only. If a location adjustment is made, the printed page is shifted in the direction of the adjustment. There is no compression, so data on the opposite edge may be pushed off the page. **Note** ❒ For the "Print" command to function, the **[Edge to Edge]** setting must be set to **[Off]**. Any data placed in this unprintable area is lost. Also, **[Print]** will not function on media overlays (overlays that are part of the base page, not the overlays included in the variable print data).
Edge to Edge	Turns "Edge to Edge" printing on or off. • On The printer allows printing up to the physical page size. • Off (Default) The printer maintains a border of 2 mm (0.078 in) on the leading edge, but prints to all other page borders. **Note** ❒ To prevent toner from accumulating inside the printer, we recommend leaving **[Edge to Edge]** set to **[Off]** for IPDS, and setting it to **[On]** only when necessary. ❒ The "Edge to Edge" IPDS Menu item affects IPDS data only. When using IPDS, the "Edge to Edge" setting on System menu will be invalid.
Font Substitution	Turns font substitution on or off. • On If a job requests a font that is not loaded on the printer, the printer uses a substitute font. • Off (Default) If a job requests a font that is not loaded on the printer, the printer generates an IPDS NACK (Negative Acknowledgement) message and the host holds the job.

Menu Item	Description
Caching	Specifies whether or not to use caching for repeated overlays. • On The printer uses caching, which provides better performance for jobs with repeated overlays, but uses more memory. • Off (Default) The printer does not use caching, which requires less memory but provides less performance for jobs with repeated overlays. **Note** ❒ Overlay caching is recommended for repeated overlays. Overlay caching does not improve performance with non-overlay IPDS data or overlays that are used only once or infrequently.
Font Capture	Sets Font Capture processing: • On (Default) The printer saves downloaded font resources on its hard disk drive for use beyond the duration of the current power cycle. The IPDS host must provide the "Activate Resource" command with the correct resource identifiers before downloading the font resource to be captured. • Off The printer stores downloaded font resources for the duration of one power cycle only.

Menu Item	Description
Resolution	Specifies the resolution reported to the host in the "IPDS XOA-OPC" command for raster coded fonts and IM1 image support. The **[Resolution]** menu item also helps determine whether or not a printer-resident raster font is used. For example, 240 dpi raster fonts are activated at the **[240 dpi]** setting, not at **[300 dpi]** or **[600 dpi]**. The **[Resolution]** setting does not affect outline fonts, nor does it determine which raster fonts can be downloaded to the printer as temporary activation fonts. • Auto Reports to the host that the printer supports raster fonts of any dpi value and IM1 images. "Resident" or "Captured" raster fonts of other resolutions are not activated unless a matching "Font Resolution" and "Metric Technology Triplet" is provided with the activation request. • 240 dpi Reports to the host that the printer supports 240 dpi raster fonts and IM1 images. "Resident" or "Captured" raster fonts of other resolutions are not activated unless a matching "Font Resolution" and "Metric Technology Triplet" is provided with the activation request. • 300 dpi (Default) Reports to the host that the printer supports 300 dpi raster fonts and IM1 images. "Resident" or "Captured" raster fonts of other resolutions are not activated unless a matching "Font Resolution" and "Metric Technology Triplet" is provided with the activation request. • 600 dpi Reports to the host that the printer supports 600 dpi raster fonts and IM1 images. "Resident" or "Captured" raster fonts of other resolutions are not activated unless a matching "Font Resolution" and "Metric Technology Triplet" is provided with the activation request. **Note** ❒ If you select **[Standard]** for the **[Print Mode]** setting, the resolution changes to **[300 dpi]**. ❒ To set the IPDS resolution to **[240 dpi]**, **[600 dpi]**, or **[Auto]**, you must first set **[Print Mode]** to **[Enhanced]**. Enhanced print mode produces optimal print quality, but can slow down the printing of complex jobs.

Menu Item	Description
Graphic Character String	Specifies the Graphic Character String (Graphic Character Sizing) processing method. • Auto (Default) Applies the value specified by the **[Emulation Mode]** item (**[Native]** or **[4028]**). • Character Scale Applies 4028 IPDS Emulation. Prints graphics and text characters by scaling the characters in a currently activated font. Character cell size is defined in the GOCA data stream. Not available for DBCS. • Font Activation Applies Native IPDS Emulation. Prints graphics and text characters using a currently activated font at the font's activation size, without scaling. GOCA data stream Character cell size information is ignored.
Bar Code	Specifies the barcode level protocol. • Auto (Default) Applies the value specified by the **[Emulation Mode]** item (**[Native]** or **[4028]**). • 4028 Applies 4028 IPDS Emulation. • Native Applies Native IPDS Emulation.
Box Draw	Specifies the Box Draw processing. • On Uses special outline fonts to draw Symbol Set box characters. Select **[On]** to fill gaps caused by special raster fonts that contain extended length box characters (as found in older applications, for example). • Off (Default) Uses Symbol Set outline font characters to draw boxes as the font-defined characters.
Color Simulation	Allows you to select how color specification controls are processed on a monochromatic printer. • Fidelity (Default) The printer accepts all color specification controls and simulates unique colors with shades of gray. • Legacy The printer accepts all color specification controls, but performs only limited color simulation using black.

Menu Item	Description
Text Color Simulation	Specifies how text color specification controls are processed on a monochrome laser printer. • On (Default) The printer accepts all text color specification controls and simulates the unique colors with shades of gray. • Off The printer accepts all text color specification controls, but performs only limited color simulation using black. **Note** ❒ This menu item is available only if **[Color Simulation]** mode is set to **[Fidelity]**.
Suppress Staple Count Nacks	Selects whether or not to notify the user when stapling errors occur. • On • Off (Default)
Suppress Punch Nacks	Selects whether or not to notify the user when punching errors occur. • On • Off (Default)

Tray Mapping	Maps the media source (input tray) to an ID the host uses for the media source.
	• Tray 1
	  • Auto (Default)
	  • IPDS Tray
	• Tray 2
	  • Auto (Default)
	  • IPDS Tray
	• Tray 3
	  • Auto (Default)
	  • IPDS Tray
	• Tray 4
	  • Auto (Default)
	  • IPDS Tray
	• LCT
	  • Auto (Default)
	  • IPDS Tray
	• Bypass Tray
	  • Auto (Default)
	  • IPDS Tray
	Note
	❒ If **[IPDS Tray]** is selected, enter the tray parameter replacement value for each paper tray, using up to 254 digits.

Menu Item	Description
Corner Staple Angle	Selects **[Vertical]** or **[Slant]** for the angle of stapling. • Vertical (Default) Staples vertically. • Slant Staples diagonally.
Offset	Specifies whether or not the output is offset (jogged). • On (Default) Output is offset (jogged) when requested by the job. • Off Output is never offset (jogged).
Default Punch Pattern	Specifies the default number of holes to punch if the punch unit provides a selection (for example, two or four holes).

Note

❒ **[Suppress Staple Count Nacks]** and **[Corner Staple Angle]** appears if the optional staple unit is installed.

❒ **[Suppress Punch Nacks]** and **[Default Punch Pattern]** appears if the optional punch unit is installed.

❒ **[Tray Form]** and **[Tray Mapping]** appear differently depending on the options installed.

❒ **[Tray Form]** allocates the form specified using Web Image Monitor's **[IPDS Form List]** to the installed tray. For details about IPDS Form List, see the Web Image Monitor Help.

❒ Tray commands of **[Tray Form]** differ depending on the machine you want to use. For details about selectable tray commands, see "Load Copy Control", IPDS Technical Reference.

❒ For details about the control panel settings, see the manual explaining how to specify the control panel settings, provided by the supplier.

4. Appendix

Precautions

About AFP/IPDS Fonts

The AFP/IPDS Single Byte Character Set (SBCS) font is stored on the hard disk drive.

Limitations

IPDS jobs cannot be stored on the document server.

PCL fonts are not accessible via AFP/IPDS, nor can PCL access AFP/IPDS fonts.

PostScript fonts are not accessible via AFP/IPDS, nor can PostScript access AFP/IPDS fonts.

The mainframe or host computer will not be notified of errors that happen before this machine establishes connection with them.

INDEX

A

AFP fonts, 19

H

How to Read This Manual, 2

I

IPDS, 3
IPDS fonts, 19
IPDS Menu, 7

L

Limitations, 19
List/Test Print, 7

M

Maintenance, 7

N

Network, 5

P

Precautions, 19
Printer, 5

S

Security, 6

U

User Tools Settings, 7

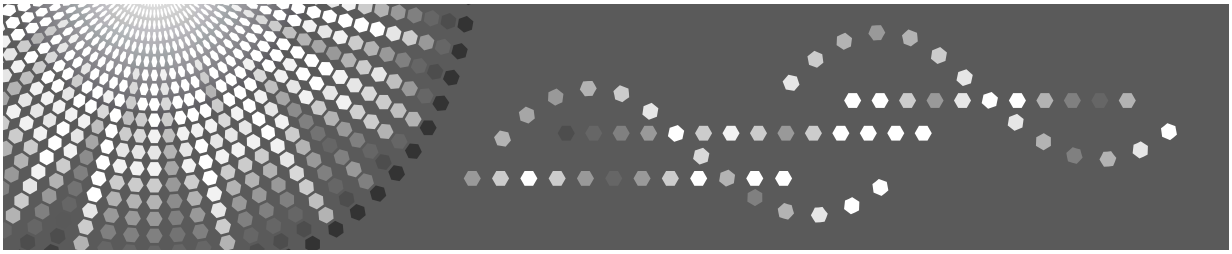
W

Web Image Monitor, 5

Copyright © 2010

IPDS Supplement

EN (GB)
EN (US)
EN (AU) D088-7807



IPDS Technical Reference

1 IPDS Overview
2 Summary of IPDS Commands
3 Device Control Command Set
4 Presentation Text Command Set
5 IM Image Command Set
6 IO Image Command Set
7 Graphics Command Set
8 Bar Code Command Set
9 Overlay Command Set
10 Page Segment Command Set
11 Object Container Command Set
12 Loaded Font Command Set
13 Exception Reporting, Sense Data, and Recovery
14 Code Page and Font Identification
15 Fonts

Read this manual carefully before you use this product and keep it handy for future reference.

Introduction

This manual contains detailed instructions and notes on the operation and use of this machine. For your safety and benefit, read this manual carefully before using the machine. Keep this manual in a handy place for quick reference.

Important

Contents of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

Trademarks

Adobe, Acrobat Reader, PostScript and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

AFP/ADVANCED FUNCTION PRINTING, InfoPrint, IPDS and Intelligent Printer Data Stream are trademarks of Ricoh Co., Ltd.

AIX®, Application System/400®, AS/400®, IBM®, OS/400®, Print Services Facility, PS/2®, and PSF are trademarks of International Business Machines Corporation in the United States, other countries, or both.

PCL® is a registered trademark of Hewlett-Packard Company.

Windows® is either registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights to those marks.

TABLE OF CONTENTS

Manuals for the IPDS card **1**
How to Read This Manual **2**
Symbols 2
About This Book **3**
Audience 3
Terminology 3
About IPDS **4**
Capabilities of IPDS **5**
Printing a Letter **6**
Using Overlays **8**
Using Page Segments **9**
Using Images and Graphics **10**
IM and IO Images 10
Graphics 10
Using Bar Codes **11**
Printing in Duplex Mode **12**

1. IPDS Overview

About the IPDS Feature **13**
IPDS Operating States **14**
Home State 14
Overlay State 14
Font State 14
IPDS Command Format **15**
Reserved Bytes 17
Flag Byte 17
Correlation ID (CID) 17
Error Processing 18
Page and Copy Counters 20
Data Types **21**
Text 21
Image 21
Graphics 22
Bar Code 22
Coordinate System **23**
Xm, Ym Coordinate System (Medium Presentation Space) 23
Xp, Yp Coordinate System (Logical Page Presentation Space) 23
I, B Coordinates System (Text) 24
Other Text Positioning Terms 24
Notation Conventions 25
Color Simulation **26**
Simulation Modes Supported 26
Color Simulation Processes and Algorithms 27
Logical Page and Object Area Coloring 29
Presentation Space Reset Mixing 31

2. Summary of IPDS Commands

IPDS Initialization Defaults **33**
Page Printer Initialization Sequence **36**

3. Device Control Command Set

About Device Control Command Set **37**
Acknowledgement Reply **38**
Activate Resource **41**
Resource ID example with RIDF = GRID 44
Resource ID example with RIDF = MVS Host Unalterable Remote Font Environment 45
Resource ID example with RIDF = Coded Font 46
Resource ID example with RIDF = Object-OID 47
Resource ID example with RIDF = Data-object font 47
Begin Page **48**
Deactivate Font **49**
End **51**
End Page **52**
Load Copy Control **53**
Media Source and Destination Support Matrices 60
Load Font Equivalence **66**
Logical Page Descriptor **69**
Logical Page Position **73**
Presentation Fidelity Control **74**
Text Fidelity Control 75
Finishing Fidelity Control 75
Sense Type and Model **76**
Execute Order Any State (XOA) **89**
XOA Mark Form 89
XOA Exception Handling Control 89
XOA Request Resource List 90
XOA Alternate Offset Stacker (AOS) 93
Execute Order Home State (XOH) **96**
XOH Obtain Printer Characteristics 96
Printable Area Self-Defining Field 96
XOH Select Input Media Source 121
XOH Set Media Origin 126
XOH Set Media Size 127
XOH Page Counter Control 127
XOH Define Group Boundary 128
XOH Specify Group Operation 135

4. Presentation Text Command Set

Presentation Text Commands **137**
Load Equivalence 137
Write Text 138
Temporary Baseline Move 150

5. IM Image Command Set

IM Image Commands 153
Write Image Control 154
Write Image 157

6. IO Image Command Set

IO Image Commands 159
Write Image Control 2 160
Image Output Control 161
Image Data Descriptor 163
Write Image 2 164

7. Graphics Command Set

Graphics Commands 169
Write Graphics Control 170
Write Graphics 176
Write Graphics Defaults 176
Begin Segment Introducer 177
Set Process Color 184
Drawing Order Summary 186

8. Bar Code Command Set

Bar Code Commands 189
Write Bar Code Control 190
Bar Code Area Position 190
Bar Code Output Control 191
Bar Code Data Descriptor 193
Write Bar Code 204

9. Overlay Command Set

Overlay Function Set Commands 205

10.Page Segment Command Set

Page Segment Function Set Commands 207

11.Object Container Command Set

Object Container Function Set Commands 209

12.Loaded Font Command Set

Loaded Font Function Set Commands 211
Load Code Page 211
Load Code Page Control 212
Load Font 213
Load Font Character Set Control 215
Load Font Control 216
Load Font Index 219

13.Exception Reporting, Sense Data, and Recovery

About Exception Reporting, Sense Data, and Recovery 221
General Reply Rules 221
Exception-Handling Control (EHC) 223
Classes of Data Stream Exceptions 224
Sense Byte Information 224
Exception-Reporting Codes 227
TCP/IP Sense Data 230
IPDS Exceptions Reported 230
Page Counter Adjustments 244
Page and Copy Counter Adjustments for Data-Stream Exceptions 247

14.Code Page and Font Identification

About Code Page and Font Identification 251
RRL RT'06' Code Page (CPGID) 251
RRL RT'12' Specific Code Pages (GCSGID/CPGID) 251
RRL RT'11' Graphic Character Sets (GCSGID SUB/SUPERSETS) 251
RRL RT'07' Font Character Sets (GCSGID/FGID/FW) 252
RRL RT'01'/'03'/'10' RIDF'03' (GCSGID/CPGID/FGID/FW = GRID) 253

15.Fonts

IBM Font Structure 255
Coded Font 255
Character Set 256
Code Page 257
Operating System/400 Terms 259
Font Terms 259
Font and Code Page Selection 261
Resident IPDS Fonts 262
Resident Font Activation Methods 262
IBM Core Interchange Resident Scalable Font Set (IPDS only) 263
IBM Core Interchange Resident Code Page Set 271
4028 Compatibility Resident Font Set 277
4028 Compatibility Resident Code Page Set 279
IBM Coordinated Font Set (IPDS) 280
IBM Coordinated Font Set Code Page Set 282
IPDS Default Font 283
Factory Setting 283
Selectable IPDS Default Font 284
Selectable Code Pages 285
Selectable Fonts 286
4028 Selectable Fonts 287
Selectable Font Widths 288
IPDS Bar Code Printing 289
IPDS Font Bolding 289

INDEX 290

Manuals for the IPDS card

Refer to the manuals that are relevant to what you want to do with the IPDS card.

Important

❒ Adobe Acrobat Reader/Adobe Reader must be installed in order to view the manuals as PDF files.

❖ **IPDS Supplement (IPDS.pdf)**
Explains about how to configure the IPDS card for the machine, and about items selectable from the Web browser.

❖ **IPDS Printing Configuration Guide (IPDS_CONF.pdf) *English Only**
Explains about environment necessary for connecting the mainframe to the machine, and performing IPDS printing.

❖ **IPDS Technical Reference (IPDS_TEC.pdf) *English Only**
Explains about commands necessary for IPDS printing.

Note

❒ For details about the necessary environment, and installation of the IPDS card and machine, consult your sales or service representative. For details about necessary environment and operation of the mainframe, consult IBM.

How to Read This Manual

Symbols

This manual uses the following symbols:

Important

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

Note

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys that appear on the machine's display panel.

About This Book

This book provides technical reference information about how printers support the IPDS data stream.

Audience

This publication is intended for the system programmers, application programmers, and systems engineers who are familiar with data streams and are writing or modifying programs to operate your printer with the IPDS data stream.

Terminology

Paper Input and Output Receptacles

Input receptacles are called trays. Output receptacles are called stackers or bins.

Related Publications

This book refers to the following:

- PostScript Language Reference Manual, second edition, by Adobe Systems, Inc.
- PCL 5 Printer Language Technical Reference Manual by Hewlett-Packard Company
- PCL 5 Comparison Guide by Hewlett-Packard Company
- Printer Job Language Technical Reference Manual by Hewlett-Packard Company

Note

❒ For details on the IPDS Architecture, see the Intelligent Printer Data Stream Reference, S544-3417.

About IPDS

This chapter introduces the Intelligent Printer Data Stream (IPDS) and describes some of the capabilities of IPDS.

IPDS lets you print pages containing an unlimited mix of different types of data: high-quality text, images, vector graphics, and bar codes.

You can send IPDS data to printers attached to the IBM Application System/400 (AS/400) intelligent work stations, local area networks, IBM 3270-family controllers, Ethernet, and spooled systems. In some of these environments, you can create applications to directly control IPDS printers such as this printer. For more information about IPDS as a component of printing subsystems, refer to Intelligent Printer Data Stream Reference.

IBM provides a variety of host software products with components that generate IPDS commands for this printer or other IPDS printers. These software products vary in their use of IPDS functions. Some of the software products available are:

- OS/400 Version 5.4 or later
- Graphical Data Display Manager (GDDM) Version 2.3 or later
- Print Service Facility (PSF for z/OS) Version 4.1.0or later
- Print Service Facility (PSF for i5/OS and OS/400) Version 5.4or later
- InfoPrint Manager for AIX Version 4.2 or later
- InfoPrint Manager for Windows Version 2.2 or later
- InfoPrint Process Director for Linux Version 1.3.1 or later
- InfoPrint Process Director for AIX Version 1.3.1 or later

Note

❒ The capabilities of the printer depend on the host software and the IPDS functions that the software enables.

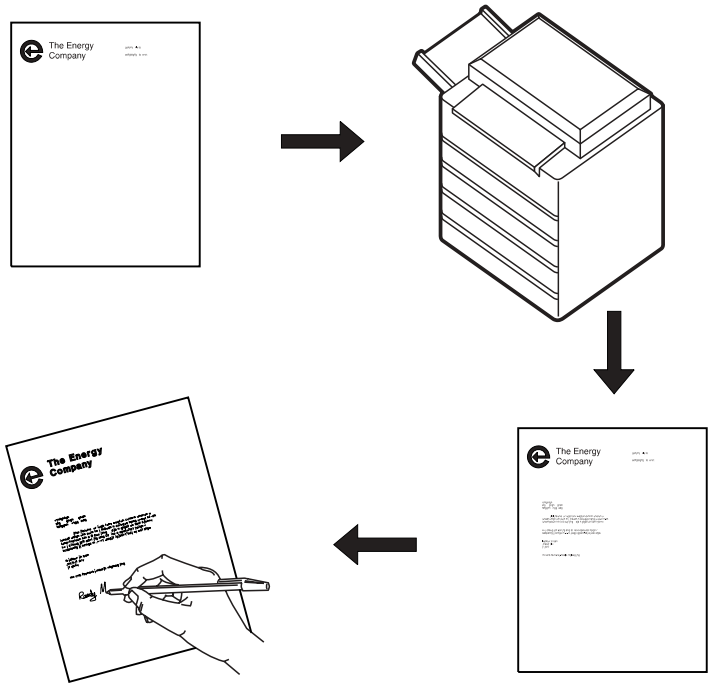
Capabilities of IPDS

A printer controlled by IPDS has a number of advantages over conventional printers. With IPDS you can:

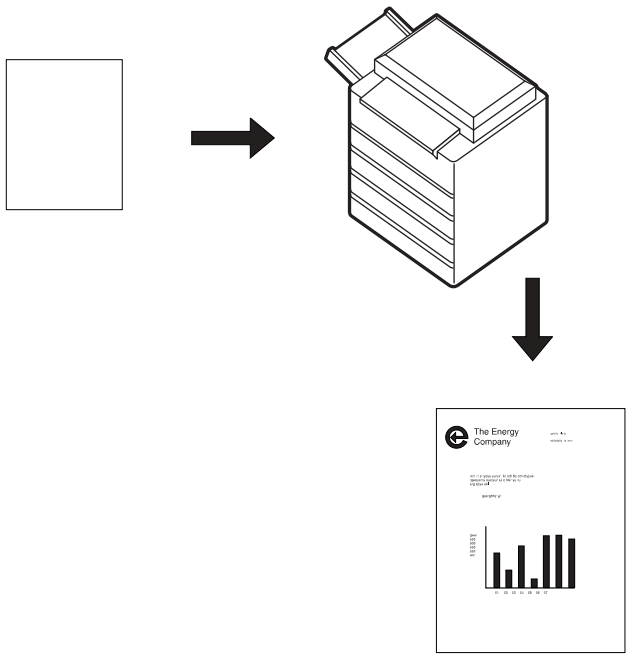
- Use the printer's all-points-addressable printing to print text, graphics, images, or bar codes at any point on a page or that is within the printers printable area.
- Print text in a variety of type styles and switch fonts within a printed page.
- Use both images and vector graphics (explained later in this chapter) to print line drawings, pie charts, bar charts, graphics, logos, tables, and signatures.
- Combine text with images and graphics on the same page (creating what is known as a composite document).
- Electronically store and later print forms and letterheads that are always printed in the same predetermined type style.
- Electronically store and later print text where the type style printed is the same as that used in the rest of the text.
- Print any of 16 different kinds of bar codes in many sizes and with a number of variations.
- Print either portrait (upright, letter orientation) or landscape (printing "on the side", with the page wider than it is tall).
- Print on either one side or both sides of the paper (with duplex option).

Printing a Letter

IPDS lets you print a letter in just one step. In conventional printing, you must load letterhead paper into your printer, print the text of your letter, and then manually sign the letter.



Using IPDS, you can temporarily store your letterhead and signature in the printer's memory and then merge the letterhead, text, and signature with additional data to form a complete letter. You can also include graphics, such as a line chart or bar chart, in your letter, creating a composite document.



An IPDS-driven printer offers flexibility. For example, you can highlight a list of items by printing the list in a different type style from the rest of the text; or you can print your letterhead in one font and your text in another font.

You can electronically store your letterhead so it is always printed in the same type style. This printing concept is discussed in p.8 "Using Overlays".

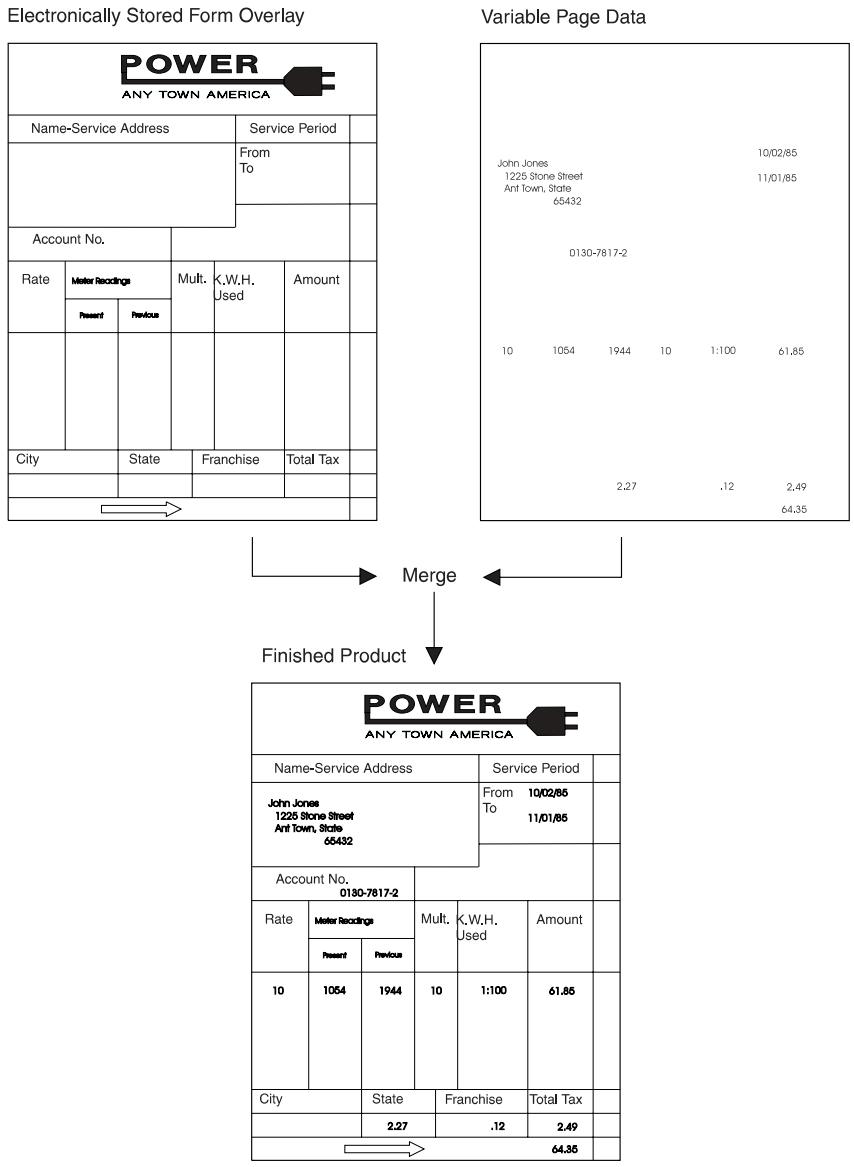
You can store your printed signature block so it is printed in the type style used in the rest of the letter or memo. That way the signature block's type style matches the letter in which it appears, no matter how many different fonts you use for different kinds of letters. This printing concept is discussed in p.9 "Using Page Segments".

You can include bar charts or line graphs in your letter. Such graphic material can be generated through either the Image function or the Graphics function. See p.10 "Using Images and Graphics".

Using Overlays

Overlays are stored constructs (text, graphics, images, and bar codes), often in complex configurations, with all the instructions needed to print. An overlay always prints in the type style used when it was stored and can be positioned anywhere on the page.

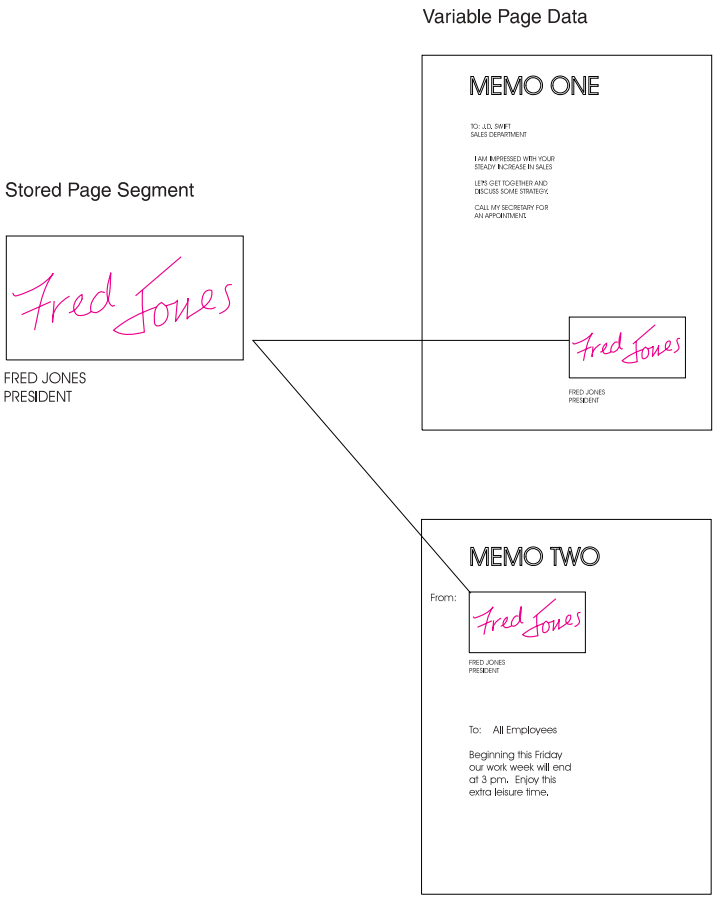
Overlays are useful for letterheads and for forms, as shown below.



Using Page Segments

Page segments are similar to overlays, except that the construct is stored without specific instructions for type styles and position on the page. Page segments are printed in the type style in use at print time. You can place a page segment anywhere on the page.

One way to use a page segment is as text under a signature, as shown below.



Using Images and Graphics

Graphic material - charts, engineering drawings, and line drawings - can be sent to the printer as IM Images, IO Images, or Graphics. In all-points-addressable printing by the printer, a page can consist of 300 points per inch, 7.8 million printable points, each one of which is individually addressable. These addressable points are called picture elements or pixels.

IM and IO Images

Images are figures on the page created by explicitly specifying each pixel in the figure. There is one bit of image data per pixel, so a large quantity of data is needed to create an image.

IM images are uncompressed raster data images. A raster pattern is composed of a series of pixels arranged in scan lines.

IO images are compressed or uncompressed raster data images. Compression generally reduces the amount of data sent to the printer and should significantly save transmission time. IO images may be arbitrarily scaled and corrected for resolution differences between the scanner and the printer.

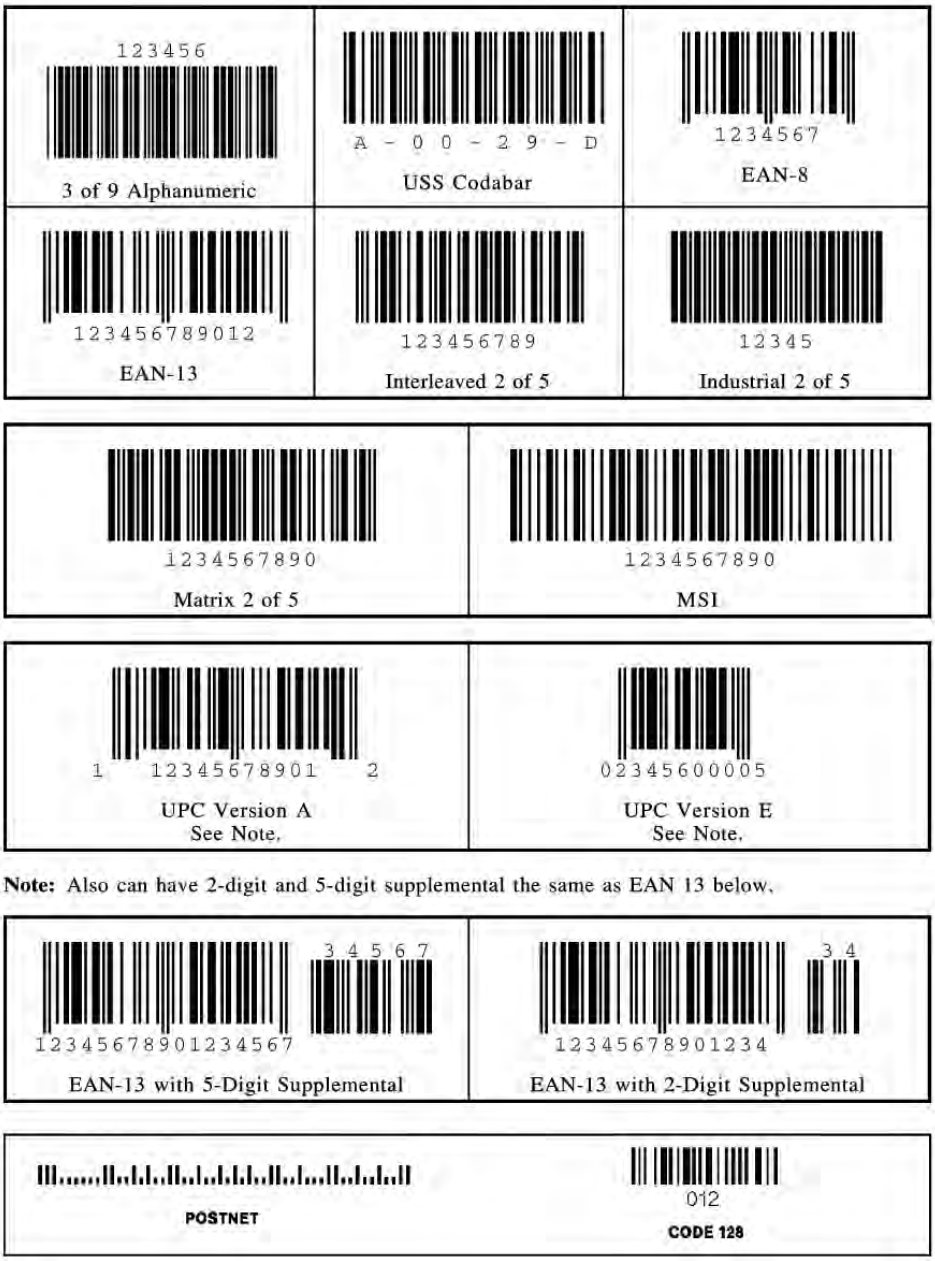
Graphics

Graphics are line drawings created from separate lines, arcs, and markers. With vector graphics, only control information such as the end points of a line are sent to the printer. This process lets you create complex figures with a minimum of data.

For details on graphics commands, see IBM Data Stream and Object Architectures Graphics Object Content Architecture (GOCA) Reference, SC31-6804. For details on IO image commands, see IBM Data Stream and Object Architectures Image Object Content Architecture (IOCA) Reference, SC31-6805.

Using Bar Codes

Bar code data is encoded information that is recognized by optical scanning devices. The printer can print the bar code types as shown below in many sizes and variations, such as with or without the human-readable characters.



Printing in Duplex Mode

The printer can print on one or both sides of the paper. All of the printer's IPDS capabilities are provided in either mode.

Duplex printing is controlled through the IPDS Load Copy Control (LCC) command.

About the IPDS Feature

The Intelligent Printer Data Stream (IPDS) is a structured field data stream designed to manage and control All Points Addressable (APA) printers. APA is a printing concept that allows users to position text, images, graphics, and overlays at any defined point on a printed page.

IPDS allows both data and commands to be streamed to the printer via channels, controllers or any type of networking link which supports the transparent transmission of data to print processes that are resident in the device.

Commands within the data stream also allow the "Host" process to control the media handling capabilities of the device, select source drawers, jog output and other operations dealing with paper. In addition, the commands provide the means for managing the down-loading of fonts and other stored resources such as overlays and page segments that are required at presentation time to construct the printed page. Finally, the commands provide the means for returning error information and performing recovery actions. The source IPDS architecture document is the Intelligent Printer Data Stream Reference.

The machine supports the following IPDS Architecture command sets.

- Device Control (DC1)
- Text (TX1 with PTOCA PT1, PT2 and PT3)
- IM Image (IM1 with IMD1)
- IO Image (IO1 with IOCA FS10 + 8-bit Grayscale via halftoning), FS11, FS40, FS42 and FS45)
- Graphics (GR1 with GOCA DR/2V0)
- Page Segments (PS1)
- Object Container (OC1)
- Overlay (OL1)
- Loaded Font (LF1 and LF3)
- Bar Code (BC1 with BCD1)

IPDS Operating States

If the host sends a command inappropriate for the printer state, the printer returns an error code identifying the error and follows Exception Handling Control processing.

Home State

The following actions can force the printer to home state, regardless of the current state of the printer:

① The Set Home State (SHS) command

② The Execute Order Anystate--Discard Buffered Data (XOA/DBD) command

③ The printer's transmission of a NACK to the host

④ The Arctic link-level Clear command

⑤ Any non-IPDS print order in NDS (New Display System)

⑥ An NDS Reset order

⑦ An NDS System Status Available No Mode order

All these actions will also force the printer to an IPDS command boundary if it is not already on one. To interpret SHS or XOA/DBD, the printer and the host must already be in agreement as to where the IPDS command boundaries are.

Deactivation of fonts with the DF command occurs in Home State.

Overlay State

Overlays can be nested to a depth of 6 as indicated in the STM Overlay Command-Set Vector, see p.205 "Overlay Command Set".

Font State

An operating state for downloading single-byte Coded Font patterns, Font Character Sets, and Code Pages.

IPDS Command Format

All IPDS commands are encoded in the following patterns:

Data Area	Value	Description	Error Code
Bytes 0-1	X'0005' X'7FFF'	LENGTH	X'0202..02'
Bytes 2-3		COMMAND	X'8001..00'
	X'D601'	Manage IPDS Dialog	
	X'D603'	No Operation	
	X'D60F'	Load Font Index	
	X'D619'	Load Font Character Set Control	
	X'D61A'	Load Code Page Control	
	X'D61B'	Load Code Page	
	X'D61D'	Load Equivalence	
	X'D61F'	Load Font Control	
	X'D62D'	Write Text	
	X'D62E'	Activate Resource	
	X'D62F'	Load Font	
	X'D633'	Execute Order Anystate	
	X'D634'	Presentation Fidelity Control	
	X'D63C'	Write Object Container Control	
	X'D63D'	Write Image Control	
	X'D63E'	Write Image Control 2	
	X'D63F'	Load Font Equivalence	
	X'D64C'	Write Object Container	
	X'D64D'	Write Image	
	X'D64E'	Write Image 2	
	X'D64F'	Deactivate Font	
	X'D65B'	Deactivate Data-Object-Font Component	
	X'D65C'	Deactivate Data Object Resource	
	X'D65D'	End	
	X'D65F'	Begin Page Segment	
	X'D66C'	Data Object Resource Equivalence	
	X'D66D'	Logical Page Position	
	X'D66F'	Deactivate Page Segment	
	X'D67C'	Include Data Object	

Data Area	Value	Description	Error Code
Bytes 2-3	X'D67D'	Include Overlay	
	X'D67F'	Include Page Segment	
	X'D680'	Write Bar Code Control	
	X'D681'	Write Bar Code	
	X'D684'	Write Graphics Control	
	X'D685'	Write Graphics	
	X'D68F'	Execute Order Homestate	
	X'D697'	Set Home State	
	X'D69F'	Load Copy Control	
	X'D6AF'	Begin Page	
	X'D6BF'	End Page	
	X'D6CF'	Logical Page Descriptor	
	X'D6DF'	Begin Overlay	
	X'D6E4'	Sense Type and Model	
	X'D6EF'	Deactivate Overlay	
Byte 4		FLAGS (Active when Bit value = 1)	X'0204..02'
	Bit 0 0/1	Acknowledgement Required (ARQ)	
	Bit 1 0/1	Correlation Number Present	
	Bit 2 0/1	Acknowledgement Continuation	
	Bit 3-6 000	Reserved	
	Bit 7 0/1	Persistent NACK (DSC non-SNA ONLY, otherwise Reserved)	
Bytes 5-6	X'0000'-X'FFFF'	CORRELATION ID	
Byte 7		DATA - The specific operands, parameters and/or data fields as appropriate for the given command.	

Reserved Bytes

Throughout the command descriptions in the following chapters, some data fields, bytes, and bits are specified as reserved.

When the description for a reserved field, byte, or bit specifies “should be zero,” the printer does not check the contents of the bytes or bits. The reserved data should be set to zero, because they could be defined in future changes to the printer. However, non zero values do not cause an error and are ignored by the printer.

When the description for a reserved field, byte, or bit specifies it “must be zero,” the printer checks the contents of the bytes or bits and will return error status to the host if the field contains a non zero value.

Flag Byte

Bit 7 is the Persistent NACK bit for 3270 Non-SNA DSC (Data Stream Compatibility) Mode NACKs. This bit has no meaning in other attachment environments. Valid values for the Acknowledge Reply Flag byte are described in the Intelligent Printer Data Stream Reference.

Correlation ID (CID)

The correlation ID (CID) is an identifier of a specific instance of an IPDS command. It is used to correlate errors with the command that generated them.

It is not possible to correlate all errors with particular IPDS commands. Mechanism errors (for example, out of paper position checks and unpopulated character positions in resident fonts) are never correlated.

Therefore, it is possible for some NACKs to be returned without correlation numbers even if all downstream commands had correlation numbers.

Error Processing

The machine supports Page Continuation Action error processing. See Intelligent Printer Data Stream Reference for details.

The printer stops if there is a probability that it is not parsing commands correctly. This means that, regardless of the setting of the Exception Handling Control (EHC) the printer will stop processing, send a NACK, and enter home state immediately if one of the following conditions occurs:

① The command length is less than 5 (No correlation number present).

② The command length is less than 7 (Correlation number present).

③ The command length is greater than 32767.

④ The command does not have X'D6' as the first byte of the command code.

⑤ The command does have X'D6' as the first byte but is otherwise unrecognized.

⑥ A resource download is interrupted, resulting in a purge of the partial resource object.

The maximum numbers of queued asynchronous and synchronous errors are as followed.

- One for ARCTIC and NDS DSC mode
- Seven for NDS LU1 mode
- Seven for TCP/IP mode

Intervention required and equipment check exception types will be reported for NDS and TCP/IP interface type.

Exception Highlight Support

If a position exception occurs and the "position-check highlight" flag (XOA-EHC byte 2, bit 6) is on (B'1'), or if a Page Continuation Action (PCA) is taken for a position check, the approximate location of each unique occurrence of the position check will be highlighted with a Print-Error-Marker (PEM). Other exceptions detected in page state, or a derivative of page state, or when printing a medium overlay, which have a PCA defined, are also indicated by a PEM when the PCA is taken.

A PEM is a distinguishing mark which is placed in close proximity to the area on the page where the exception has occurred.

- The PEM for Position Check processing is a solid rectangular mark, placed in close proximity to the area on the page where the exception occurred. For the exception detected, the associated code (08C100) will be located at the top of the logical page, starting in the left hand corner.
- The PEM for PCA processing is a hollow rectangular mark enclosing a +, placed in close proximity to the area on the page where the exception has occurred, if the location can be accurately specified. For the exception detected, the associated code (040B00) will be located at the top of the logical page, starting in the left hand corner.
- Multiple exception code highlighting is limited to only the codes that will fit across the top of the logical page (10).
- PEM Size: 600 Pixel (80 by 80)

If error exception handling is set to allow printing of an undefined character, the undefined character will appear as:

- A Space if it is unprintable.
- The Character itself if printable.

Page and Copy Counters

Page and Copy Counter information is reported using the 18-byte counter format described in Intelligent Printer Data Stream Reference, section "Acknowledge Reply". The following counters are supported:

- Received Page
- Committed Page
- Committed Copy
- Operator Viewing Page
- Operator Viewing Copy
- Jam Recovery Page
- Jam Recovery Copy
- Stacked Page
- Stacked Copy

For Action Code 22, counters are adjusted as follows:

- Received Page - Actual Received Count
- Committed Page - Mapped to Stacked Page
- Committed Copy - Mapped to Stacked Copy
- Operator Viewing Page Counter - Mapped to Stacked Page Counter
- Operator Viewing Copy Counter - Mapped to Stacked Copy Counter
- Jam Recovery Page Counter - Mapped to Stacked Page Counter
- Jam Recovery Copy Counter - Mapped to Stacked Copy Counter
- Stacked Page Counter - Last value
- Stacked Copy Counter - Last Value

Data Types

The machine supports four different types of data that may be used to create an output page. These are: text, graphics, images, and bar codes. The printed page can include any combination of these data types.

Blocks of graphics, bar code or image data are presented as a single unit to the printer. The printer enters the appropriate " Block" State (graphics block, image block, bar code block) to create the entire data group for that block of data.

Page segments and Overlays are any combinations of text, graphics, bar codes and images. The printer can store these segments and overlays for later use as the page is created.

Text

Presentation Text is the data type used to present lines of character information on a logical page.

The information to be presented is represented as a string of graphic character IDs and X'2B' control sequences that are sent to the printer in the Write Text command (See p.138 "Write Text"). The initial conditions governing the presentation of the data are established via control parameters that are sent to the printer in the Logical Page Description command (See p.69 "Logical Page Descriptor").

The source architecture document for Text is Presentation Text Object Content Architecture Reference.

Image

Image is the data type used to present rectangular arrays of raster data in an Image block area on a page.

This data may have been created originally by a scanning process or generated by a computer program. The machine supports the IM Image Function Set (See p.153 "IM Image Command Set"). and the IO Image Function Set (See p.159 "IO Image Command Set").

The IM Image Function Set has a syntax and functional content that is based on AFPDS image arrays and cells. The IO Image Function Set has a syntax and functional content based on the IOCA architecture for image data (See Image Object Content Architecture Reference).

The raster data to be presented is represented as a sequence of scan lines 'm' lines deep by 'n' picture elements (pixels) wide. In IO image data, there may be more than one bit per pixel if the image data is grayscale encoded. The format of the data and the recording algorithms used to encode the image array are sent to the printer as control parameters of the Write Image Control 2 command that prepares the printer for processing image data. The data itself is sent in the Write Image 2 command.

Graphics

Graphics is the data type used to present line art picture drawings in a graphics block area on a page.

The information to be presented is represented by a sequence of primitive drawing orders that are used by the device to construct arcs, lines, fillets, character strings, markers and other elements that define the drawing. These primitive orders, in turn, are grouped into one or more drawing segments that are executed to present the picture.

The Write Graphics Control command (See p.169 “Graphics Command Set”) is sent to the printer to establish the clipping window control parameters and initial drawing conditions to be used in presenting the picture data. The picture segments are sent to the printer as data in zero or more Write Graphics commands of the architecture.

The graphics drawing orders are summarized in p.177 “Drawing Orders”. The source architecture document for graphics data is the Graphics Object Content Architecture Reference.

Bar Code

Bar Code is the data type used to present machine-scannable bar code symbols in a bar code block area on a page.

The Write Bar Code Control command (See p.189 “Bar Code Command Set”) is sent to the printer to establish the bar code pattern parameters to be used in presentation. Data for the bar code symbols is sent to the printer in zero or more Write Bar Code commands.

Coordinate System

Xm, Ym Coordinate System (Medium Presentation Space)

The Xm, Ym coordinate system is the medium presentation space coordinate system. The origin of this system (Xm=0, Ym=0) can be set by the IPDS XOH Set Media Origin command to any of the four corners of the media. If this command is not sent to the printer the origin is the top-left corner (viewed from the center). In this case, positive Xm values begin at the origin and increase along the top edge from left to right. Positive Ym values begin at the origin and increase along the left side from top to bottom. Top is defined as the short edge which leads into the printer. See Intelligent Printer Data Stream Reference for a description of the Xm, Ym Coordinate System and default media origin for envelopes.

Xp, Yp Coordinate System (Logical Page Presentation Space)

Identifying the Size of the Logical Page or Overlay

The size of the logical page or overlay presentation space is set during a printer initialization using the p.33 “IPDS Initialization Defaults” or by the host program when it sends a Logical Page Descriptor command.

Overlays are logical pages and are handled as such by the printer with the following special considerations:

① Overlays are positioned in relationship to the logical page presentation space origin (Xp=0, Yp=0) when they are merged with the Include Overlay command.

② Overlays are positioned in relationship to the origin of the medium presentation space (Xm=0, Ym=0) when they are merged with the Merge Overlay keyword in a copy control record.

I, B Coordinates System (Text)

The +I and +B directions for the logical page or overlay are specified in degrees of rotation in relationship to the +Xp direction on the logical page.

The printer sets the +I and +B directions during the initialization through the p.33 “IPDS Initialization Defaults”. The host program can change the +I and +B directions through the Logical Page Descriptor command (See Intelligent Printer Data Stream Reference).

The host program can also change the +I and +B directions as it builds a page or overlay through text controls in the print data sent by a Write Text command (See p.138 “Write Text”).

Note

❒ Setting the orientations of the +I and +B axes also implicitly sets their origins as one of the four corners of the logical page or overlay.

Other Text Positioning Terms

Some other terms that relate to text positioning and fonts include:

Text Orientation

The combination of the inline sequence direction (the direction which characters are added to a line) and the baseline sequence direction (the direction which lines are added to a page or overlay) identify the text orientation for a page. The inline sequence direction can be 0, 90, 180 or 270 degrees. The machine supports baseline sequence directions that are always rotated plus or minus 90 degrees from the inline sequence direction. Therefore, there are eight text orientations for printing pages or overlays.

Printing Baseline

An imaginary line that extends across the page or overlay in the positive inline sequence direction (+I), between pixels, and beginning from the baseline sequence printing coordinate (Bc). (Sometimes shown as baseline as in the font terms baseline offset and baseline extent.)

In languages with a right to left or left to right reading order (for example, English), the printing baseline is the imaginary line on which the main body of the character appears to rest. Descenders (the "tails" of lower case g, j, p, q, and y characters) usually extend below the printing baseline.

In languages with a top to bottom reading order (for example, Kanji), the printing baseline is an imaginary vertical line that passes through the center of the character.

Each font index record contains a Font Inline Sequence field. The field value specifies a relationship between the inline sequence direction and the font rotation (the character pattern rotation for the font). The printer uses the font index record to identify how to place characters on the printing baseline for a page or overlay. The characters are placed in the combination of the inline sequence direction (the printing direction) and the font rotation.

The Baseline Offset value is another field in the font index record. This value locates the printing baseline relationship to a specified character box reference edge.

Notation Conventions

Some field values (or ranges of values) are specified assuming a unit of measure of 14400 L-units per 10 inches (5670 L-units per 10 centimeters). To determine supported values for a unit of measure of 2400 L-units per 10 inches (945 L-units per 10 centimeters) use the following steps.

① Convert the specified value from hex (2's complement) to decimal.

② Divide the + or - decimal number by 6.

③ Round to the nearest integer.

④ Convert the + or - decimal value back to hex (2's complement).

For example, if the specified value is X'8000' the following steps would be performed.

① 8000(H) = -32768(D)

② -32768/6 = -5461.333

③ -5461(D) = EAAB(H)

Color Simulation

This printer provides "limited color simulation" by either simulating with generated grayscales or substituting "black" in special cases.

- Data objects whose colors are simulated with "grayscale":
  - PTOCA (characters, underscores, overscores, text rules)
  - GOCA (characters, lines, arcs, image, solid-area fill, pattern fill)
  - IM1/IOCA (bi-level image)
  - Object Areas (Pages, Overlays, BCOCA and IOCA)
- Data objects whose colors are simulated with "black":
  - GOCA Markers
  - BCOCA Bar Code Symbols and HRI
- Full Color Image is not supported on this printer since the transformation to grayscale would be very costly from a performance perspective. Host utilities are available to convert full color images to bi-level images for printing on monochrome printers.
- Grayscale Image (8 bits/pixel) is supported on this printer, however for very large images unacceptable performance degradation may result, due to the dithering process to produce bi-level image.

Simulation Modes Supported

There are two color simulation modes that may be supported:

- Legacy Mode (Substituting "black" or Pattern Creation)
- Fidelity Mode (Simulation with Grayscale)

The machine supports both the Legacy Mode and the Fidelity Mode of color simulation.

The Legacy Mode is provided to support customer legacy applications where simulation with grayscale would produce unacceptable results. There are console configuration menus to allow customers to select what level of color simulation best meets their needs. There are also console configuration menus to allow customers to select whether or not Color PTOCA (text) Objects should be simulated with grayscale or rendered with black. Rendering all PTOCA objects with black may be desirable, especially when small fonts are utilized.

Color Simulation Processes and Algorithms

To allow printing of documents containing color specifications, the specified colors in the document should be simulated in a consistent and predictable manner.

Color simulation occurs independently at the object level.

- Named Colors
  Convert Named Color to RGB Process Color using the following table.

This table defines the valid color values used to specify named colors in PTOCA, GOCA, BCOCA, IOCA and IM objects. The table also specifies the RGB values for each named color, assuming that each component is specified with 8 bits and that the component intensity range 0 to 1 is mapped to the binary value range 0 to 255. For a definition of the supported colors for individual objects refer to the appropriate OCA specifications, since some objects only support a subset of the colors.

Value	Named Color	Red (R)	Green (G)	Blue (B)
X'0000' or X'FF00'	Printer Default (Black)	0	0	0
X'0001' or X'FF01'	Blue	0	0	255
X'0002' or X'FF02'	Red	255	0	0
X'0003' or X'FF03'	Pink (magenta)	255	0	255
X'0004' or X'FF04'	Green	0	255	
X'0005' or X'FF05'	Turquoise (cyan)	0	255	255
X'0006' or X'FF06'	Yellow	255	255	0
X'0007'	White	255	255	255
X'0008'	Black	0	0	0
X'0009'	Dark Blue	0	0	170
X'000A	Orange	255	128	0
X'000B'	Purple	170	0	170
X'000C'	Dark Green	0	146	0
X'000D'	Dark Turquoise	0	146	170
X'000E'	Mustard	196	160	32
X'000F'	Gray	131	131	131
X'0010'	Brown	144	48	0
X'FF07'	Printer Default (Black)	0	0	0
X'FF08'	Color of Medium (Reset)			

– Simulate RGB Process Color with Grayscale

- Full-process Colors. To maintain output consistency across different printer families, process colors to be simulated are converted to grayscale intensities based on color "luminance" (Y). A luminance of 0 is defined to be black and a luminance of 1 is defined to be white. CIE luminance (Y) is derived using the following "architected" equations:

  ❖ **RGB Color Space:**

  ```
  Where Y=0 is black, Y=1 is white
  Y = 0.212(R) + 0.701(G) + 0.087(B)
  assuming 0 R,G,B 1
  ```

  Where R, G and B represent the non-gamma-corrected (linear) red, green and blue components.

  ❖ **CIELab Color Space:**

  CIELab space is the exception where the current implementation directly utilizes Lightness (L).

  ```
  L = L
  assuming 0 L 100
  ```

  ❖ **CMYK Color Space:**

  ```
  Where Y=0 is black, Y=1 is white
  Y = 1 - min(1,(0.212C+0.701M+0.087Y+K))
  assuming 0 C,M,Y,K 1
  ```

  Where the function min (a,b) selects the smaller of (a,b).

- Highlight Colors

Color Mapping Tables (CMT) are not supported, therefore mapping to process color is not provided.

- Highlight colors are mapped to black with the % coverage applied to produce a gray level.

Logical Page and Object Area Coloring

Color Specification

The Color Specification triplet is used to specify the foreground color of the logical page or object area before any object data is placed on the logical page or object area.

Data Area	Value	Description	Error Code
Byte 0	X'0E'-X'10'	TRIPLET LENGTH	X'020E..01'
Byte 1	X'4E'	COLOR SPECIFICATION TRIPLET	
Byte 2	X'00'	RESERVED	
Byte 3		COLOR SPACE (Note 1)	X'020E..02'
	X'01'	RGB - Limited Simulated Color Support	
	X'04'	CMYK - Limited Simulated Color Support	
	X'06'	Highlight - Limited Simulated Color Support	
	X'08'	CIELAB - Limited Simulated Color Support	
	X'40'	Standard OCA - Limited Simulated Color Support	
Bytes 4-7	X'00000000'	RESERVED	
Byte 8		1ST COLOR COMPONENT BITS	X'020E..05'
	X'01' - X'08'	(RGB, CMYK, CIELAB)	
	X'10'	(Standard OCA, Highlight)	
Byte 9		2ND COLOR COMPONENT BITS	X'020E..05'
	X'00' - X'08'	(RGB, CMYK, Highlight, CIELAB)	
Byte 10		3RD COLOR COMPONENT BITS	X'020E..05'
	X'00' - X'08'	(RGB, CMYK, CIELAB)	
Byte 11		4TH COLOR COMPONENT BITS	X'020E..05'
	X'00' - X'08'	(CMYK)	
Bytes 12-15		COLOR VALUE	X'020E..03'
		RGB Color Space	X'020E..04'
	X'nn'	Red Intensity	
	X'nn'	Green Intensity	
	X'nn'	Blue Intensity	
		CMYK Color Space	

Data Area	Value	Description	Error Code
Bytes 12-15	X'nn'	Cyan Intensity	
	X'nn'	Magenta Intensity	
	X'nn'	Yellow Intensity	
	X'nn'	Black Intensity	
		Highlight Color Space	
	X'nnnn'	Highlight Color Number	
	X'nn'	Percent Coverage	
	X'nn'	Percent Shading	
		CIELAB Color Space	
	X'nn'	Luminance (L)	
	X'nn'	Chrominance Difference (a)	
	X'nn'	Chrominance Difference (b)	
		Standard OCA Color Space	
	X'0000' or X'FF00'	Printer Default (Black)	
	X'0001' or X'FF01'	Blue	
	X'0002' or X'FF02'	Red	
	X'0003' or X'FF03'	Pink	
	X'0004' or X'FF04'	Green	
	X'0005' or X'FF05'	Turquoise	
	X'0006' or X'FF06'	Yellow	
	X'0007'	White - Color of Medium (Reset)	
	X'0008'	Black	
	X'0009'	Dark Blue	
	X'000A'	Orange	
	X'000B'	Purple	
	X'000C'	Dark Green	
	X'000D'	Dark Turquoise	
	X'000E'	Mustard	
	X'000F'	Gray	
	X'0010'	Brown	
	X'FF07'	Printer Default (Black)	
	X'FF08'	Color of Medium (Reset)	

Presentation Space Reset Mixing

The Presentation Space Reset Mixing triplet is used to specify whether or not a logical page or object area is reset to the color of medium before any object data is placed on the logical page or object area.

Data Area	Value	Description	Error Code
Byte 0	X'03'	TRIPLET LENGTH	X'020E..01'
Byte 1	X'70'	PRESENTATION SPACE RESET MIXING TRIPLET	
Byte 2	Bit 0 0	MIXING FLAGS Do not reset to color of the logical page to color of medium.	
	Bit 0 1	Reset to color of the logical page to color of medium.	
	Bits 1-7 0000000	Reserved	

2. Summary of IPDS Commands

IPDS Initialization Defaults

This chapter lists the IPDS commands that can be used with the printer. For more information about how to use these commands, see the Intelligent Printer Data Stream Reference.

Printer commands listed on the following pages are the valid values as identified in Intelligent Printer Data Stream Reference unless otherwise noted. Where the IPDS architecture allows choices, those choices are indicated.

When you set the printer power switch to the On (|) position, various IPDS data stream parameters are set to their initialization default values. These values are used for control parameters when:

- The command stream specifies that the printer default should be used,
- No explicit values are specified in the command stream sent to the printer, or
- Previously transmitted values are lost and initial machine settings are reestablished at POR time.

These values remain in effect until overridden by specific data stream commands from the host application program. The following list of values remain in effect until explicitly overridden by the following IPDS commands:

- Load Copy Control
- Load Font Equivalence
- Logical Page Descriptor
- Logical Page Position
- XOA Exception Handling Control
- XOH Select Input Media Source
- XOH Set Media Origin
- XOH Set Media Size
- Text Control Sequences (STO, SIM, SIA, SBI, SCFL, STC, DIR, and DBR)

The following table shows the initialization defaults:

Description	Default Value
L-Units Base Value	X'00' (10 inches)
L-Units per Base	X'3840' (14400 per 10 inches)
Input Media Source	Determined by the printer's control panel, Forms Device Setting
Media Origin	X'00' (top-left)
Width of the Physical Page	Derived from X-Extent of Medium Presentation Space
Length of the Physical Page	Derived from Y-Extent of Medium Presentation Space
Width of the Logical Page in L-Units (X p-Extent)	Derived from X-Extent of Medium Presentation Space
Length of the Logical Page in L-Units (Y p-Extent)	Derived from Y-Extent of Medium Presentation Space
Ordered Data Flags	X'00' (Unordered page, block, and text flags)
Inline Sequence	X'0000' (0 degrees)
Baseline Sequence	X'2D00' (90 degrees)
Initial I Print Coordinate	X'0000'
Initial B Print Coordinate	X'00C0' (192 L-Units below the logical page origin) **Note** ❒ Text printing on the first line requires the Current B Text Position to be large enough to accommodate the height of the current font.
Xm-Coordinate page origin	X'000000' Logical page X-displacement from the physical page origin (0 in)
Ym-Coordinate page origin	X'000000' Logical page Y-displacement from the physical page origin (0 in)
Initial Inline Margin in L-Units	X'0000'
Inter-character Adjustment	X'0000'
Baseline Increment	X'00F0' (240 L-Units)
Text Color	Black
Code Page ID	From configuration settings
Font Type	Font selection from configuration settings. **Note** ❒ The default font may be changed to another font which supports the selected Code Page. For printer generated bar codes with human readable information (HRI), the default font is OCR-B (UPC and EAN bar code types) or OCR-A (other bar code types with HRI).

Description	Default Value
Exception Handling Control	X'C10101' Report undefined characters, position checks, and all other exceptions. Do not take Alternate Exception Action. Terminate, print page, and go to home state. No highlighting of position checks.
Number of Copy Groups	X'01'
X-Extent of Medium Presentation Space	Determined by Configuration
Y-Extent of Medium Presentation Space	Determined by Configuration
X Coordinate (logical page origin)	X'0000'
Y Coordinate (logical page origin)	X'0000'
Xp-Extent of Logical Page	Derived from X-Extent of Medium Presentation Space
Yp-Extent of Logical Page	Derived from Y-Extent of Medium Presentation Space
Code Page Global ID (CPGID)	Determined by Configuration
Font Global ID (FGID)	Determined by Configuration
Font Width (FW)	Determined by Configuration
Copy Group Definition Length	X'04' (The default copy group definition is four bytes long.)
Number of Identical Copies	X'01' (The printer prints one copy of each page.)
Keyword Entry	X'C100' (The printer prints simplex, no text suppression, no overlays.)

Page Printer Initialization Sequence

Before printing begins, the host may determine characteristics of the printer and its resources and may specify certain parameters related to subsequent printing. Following is a typical sequence of initialization commands.

- Sense Type and Model (STM) with ARQ
- XOH Obtain Printer Characteristics (OPC) with ARQ
- Set Home State (SHS)
- Logical Page Descriptor (LPD)
- Logical Page Position (LPP)
- Load Copy Control (LCC)
- Load Font Equivalence (LFE) with ARQ

3. Device Control Command Set

About Device Control Command Set

Device Control commands control basic device operations, error reporting and recovery, and the construction of logical pages on the physical medium.

Before the host program sends the Begin Page command to begin defining a page to be printed, it should establish the printing environment in which the page is to be printed.

The following Device Control commands are described in this section:

- p.38 “Acknowledgement Reply”
- p.41 “Activate Resource”
- p.48 “Begin Page”
- p.49 “Deactivate Font”
- p.51 “End”
- p.52 “End Page”
- p.53 “Load Copy Control”
- p.66 “Load Font Equivalence”
- p.69 “Logical Page Descriptor”
- p.73 “Logical Page Position”
- p.74 “Presentation Fidelity Control”
- p.76 “Sense Type and Model”
- p.89 “Execute Order Any State (XOA)”
- p.89 “XOA Mark Form”
- p.89 “XOA Exception Handling Control”
- p.96 “Execute Order Home State (XOH)”
- p.96 “XOH Obtain Printer Characteristics”
- p.121 “XOH Select Input Media Source”
- p.126 “XOH Set Media Origin”
- p.127 “XOH Set Media Size”
- p.127 “XOH Page Counter Control”
- p.128 “XOH Define Group Boundary”
- p.135 “XOH Specify Group Operation”
- p.263 “XOA-RRL Replies for Font Character Sets”

Acknowledgement Reply

The Acknowledge Reply returns device status, sense data, and other information the host program requests. The printer sends an acknowledgement when it finds either of the following:

- A datastream or device error that requires the printer to return a negative acknowledgement (NACK).
- The Acknowledgement Required (ARQ) flag bit in the command the printer receives is set to 1.

The Acknowledge Reply is returned to the host in the standard IPDS command format although it goes from the printer to the host. See Intelligent Printer Data Stream Reference for details.

The following table lists Bit Codes for IPDS command stream flags for Acknowledge Reply.

Bit Code	Meaning
Bit 0	Reserved
Bit 1	Correlation Number Present
Bit 2	Acknowledgement Continuation
Bits 3-6	Reserved
Bit 7	The Persistent NACK bit is for Non-SNA DSC Mode NACKs only. This bit has no meaning in other attachment environments.

Note

❒ When a command is received with Bit 1 set, the Acknowledge Reply will be returned with this bit set, indicating that a two byte "Correlation Number" follows.

❒ The Correlation Number, a two byte identifier, is returned if available for:

- Synchronous NACKs
- Response to information request commands
- Acknowledgement requested (Flag byte bit 0 = 1)

❒ The Special Data area of the Acknowledgement Reply contains:

- Error sense bytes when reporting an exception
- Response to the following information request commands:
  - Sense Type and Model
  - XOH Obtain Printer Characteristics
  - XOA Request Resource List

Data Area	Value	Description	Error Code
Byte 0		ACKNOWLEDGEMENT TYPE: A one byte field that identifies the type of acknowledgement record and contents (if any) of the Special Data area.	
	X'40'	None	
	X'41'	Sense Type and Model	
	X'44'	Request Resource List	
	X'46'	Obtain Printer Characteristics	
	X'C0'	Sense Bytes	
Bytes 1-2	X'0000' - X'FFFF'	Received Page Counter* *Incremented when the End Page processing is completed.	
Bytes 3-4	X'0000'-X'FFFF'	Committed Page Counter* *Incremented by the number of pages on a sheet when the last copy of the sheet is stacked.	
Bytes 5-6	X'0000'-X'FFFF'	Committed Copy Counter* *Incremented by the number of pages on a sheet when the sheet is stacked.	
Bytes 7-8	X'0000'-X'FFFF'	Operator Viewing Page Counter* *Incremented by the number of pages on a sheet when the last copy of the sheet is stacked.	
Bytes 9-10	X'0000'-X'FFFF'	Operator Viewing Copy Counter* *Incremented by the number of pages on a sheet when the sheet is stacked.	
Bytes 11-12	X'0000'-X'FFFF'	Jam Recovery Page Counter* *Incremented by the number of pages on a sheet when the last copy of the sheet is stacked.	
Bytes 13-14	X'0000'-X'FFFF'	Jam Recovery Copy Counter* *Incremented by the number of pages on a sheet when the sheet is stacked.	
Bytes 15-16	X'0000'-X'FFFF'	Stacked Page Counter* *Incremented by the number of pages on a sheet when the last copy of the sheet is stacked.	
Bytes 17-18	X'0000'-X'FFFF'	Stacked Copy Counter* *Incremented by the number of pages on a sheet when the sheet is stacked.	

Data Area	Value	Description	Error Code
Bytes 19-n		SPECIAL DATA AREA: This area contains zero or more bytes of additional data as requested by the host program defined by the Acknowledgement Type.	

Activate Resource

This command maps a 6-byte Host Assigned Resource ID (HAID/FIS/Section) to a resident Resource ID of the format specified in the Resource ID Format parameter (Byte 6). The Resource ID formats which are supported may be determined using the XOH OPC command (See p.96 "XOH Obtain Printer Characteristics").

An AR mapping (HAID to Resource ID mapping) remains in effect until:

- an XOH Erase Residual Font Data command or Deactivate Font (See p.49 "Deactivate Font") command is received (the mapping is removed and font deactivated)
- the printer performs an IML (the mapping is removed)

If a Deactivate Font command is received for a single byte font, the font identified by the HAID is deactivated (made unavailable for use by the host), but all other current font mappings remain in effect until one of the actions described in the preceding paragraph occurs. If a Deactivate Font command is received which specifies all single byte fonts, all font mappings are removed as those fonts are deactivated.

The maximum of Activate Resource ID mappings that may be received is limited only by the available memory.

Note

❒ IPDS architecture describes the mapping and activation of resident resources as two conceptually separate processes. The printer, however, implements mapping and activation as one inseparable process. Un-map and de-activate are also inseparable operations. Thus, a Deactivate Font command directed at a mapped and activated resident font, both un-maps and de-activates the specified font(s).

Data Area	Value	Description	Error Code
Bytes 0-1		ENTRY LENGTH	X'028F..01'
	X'0002'	Null entry	
	X'000C'	Specifying without an equivalence	
	X'000E'	Valid for RT=X'06' with RIDF=X'03'	
	X'000E'-008D'	Valid for RT=X'42' with RIDF=X'09'	
	X'0010'	Valid for RT=X'06' or X'07' with RIDF=X'03'	
	X'0012'	Valid for RT=X'41' with RIDF=X'0A'	
	X'0014'	Valid for RT=X'01', X'08', X'09', X'10' with RIDF=X'03'	
	X'001E'	Valid for RT=X'01', X'08', X'09', X'10' with RIDF=X'07'	
	X'00B8'	Valid for RT=X'01' or X'08' with RIDF=X'06'	
Byte 2		RESOURCE TYPE (RT)	X'028F..01'
	X'01'	Single byte LF1 coded font	
	X'03'	Double-byte LF1–type coded font sections	
	X'06'	Code Page	
	X'07'	Font Character Set	
	X'08'	Single byte font index	
	X'09'	Double-byte LF1–type coded font section indexes	
	X'10'	Coded Font	
	X'40'	Data object resource	
	X'41'	Data-object font	
	X'42'	Data-object font component	
Bytes 3-4	X'0001'-X'7EFF'	HOST ASSIGNED ID	X'028F..01'
Byte 5	X'41'-X'FE'	Ignored for RT=X'01', X'06', X'07', X'08' and X'10'	
Byte 6		RESOURCE ID FORMAT (RIDF)	X'028F..01'
	X'03'	IBM Registered Global Resource ID parts	
	X'06'	MVS host unalterable remote font environment	
	X'07'	Coded font	
	X'09'	Object-OID	
	X'0A'	Data-object font	

Data Area	Value	Description	Error Code
Bytes 7-8		FONT INLINE SEQUENCE	X'028F..01'
	X'0000'	0 degrees	
	X'2D00'	90 degrees	
	X'5A00'	180 degrees	
	X'8700'	270 degrees **Note** ❒ That the Font Inline Sequence is ignored for RT=X'06' and X'07'. For outline fonts with RT=X'10', FIS is used to select the character metrics for a specific writing mode.	
Bytes 9-10	X'0000'	Reserved	
Byte 11		RESOURCE CLASS FLAGS	
	Bit 0 0/1	Public/Private (Resource Capture)	
	Bit 1 0	Retired	
	Bit 2 0/1	Ignored (Reset)	
	Bit 3 0/1	AR NACK Enabled	
	Bit 4 0/1	Outline Font Substitution	
	Bits 5-7 0	Reserved	
Bytes 12-n		RESOURCE ID and triplets	X'028F..01'

Note

❒ Zero or more additional entries, analogous to bytes 0 - n above.

Resource ID example with RIDF = GRID

Data Area	Value	Description	Error Code
Bytes 12-13		GRAPHIC CHARACTER SET GLOBAL ID	X'028F..02'
	X'0000'	No value supplied	
	X'0001' - X'FFFE'	GCSGID	
	X'FFFF'	All characters with assigned code points in the associated code page	
Bytes 14-15		CODE PAGE GLOBAL ID	X'028F..02'
	X'0000'	No value supplied	
	X'0001' - X'FFFE'	CPGID	
	X'FFFF'	Default Code Page (Configuration Settings)	
Bytes 16-17		FONT GLOBAL ID	X'028F..02'
	X'0000'	No value supplied	
	X'0001' - X'FFFE'	FGID	
	X'FFFF'	Default FGID (Configuration Settings)	
Bytes 18-19		FONT WIDTH	X'028F..02'
	X'0000'	No value supplied	
	X'0001' - X'FFFE'	FW	
	X'FFFF'	Default FW (Configuration Settings)	

Resource ID example with RIDF = MVS Host Unalterable Remote Font Environment

Data Area	Value	Description	Error Code
Bytes 12-13		CRC	
Bytes 14-21		Ignored (MVS Host System ID)	
Bytes 22-27		Ignored (VOLSER of Host library)	
Bytes 28-71		Ignored (DSNAME of Host library)	
Bytes 72-77		Date Stamp	
Bytes 78-85		Time Stamp	
Bytes 86-93		Ignored (Host Library Member Name)	
Bytes 94-95		GRAPHIC CHARACTER SET GLOBAL ID	X'028F..02'
	X'0000'	No value supplied	
	X'0001' - X'FFFE'	GCSGID	
	X'FFFF'	All characters with assigned code points in the associated code page	
Bytes 96-97		CODE PAGE GLOBAL ID	X'028F..02'
	X'0000'	No value supplied	
	X'0001' - X'FFFE'	CPGID	
	X'FFFF'	Default Code Page (Configuration Settings)	
Bytes 98-99		CRC	
Bytes 100-107		Ignored (MVS Host System ID)	
Bytes 108-113		Ignored (VOLSER of Host library)	
Bytes 114-157		Ignored (DSNAME of Host library)	
Bytes 158-163		Date Stamp	
Bytes 164-171		Time Stamp	
Bytes 172-179		Ignored (Host Library Member Name)	
Bytes 180-181		FONT GLOBAL ID	X'028F..02'
	X'0000'	No value supplied	
	X'0001' - X'FFFE'	FGID	
	X'FFFF'	Default FGID (Configuration Settings)	
Bytes 182-183		FONT WIDTH	X'028F..02'
	X'0000'	No value supplied	
	X'0001' - X'FFFE'	FW	
	X'FFFF'	Default FW (Configuration Settings)	

Resource ID example with RIDF = Coded Font

Data Area	Value	Description	Error Code
Bytes 12-13		FONT CHARACTER SET HAID	
	X'0000'	No value supplied	
	X'0001' - X'7FFF'	FCS HAID	
Bytes 14-15		CODE PAGE HAID	
	X'0000'	No value supplied	
	X'0001' - X'7FFF'	CP HAID	
Bytes 16-17		GRAPHIC CHARACTER SET GLOBAL ID	
	X'0000'	No value supplied	
	X'0001' - X'FFFE'	GCSGID	
	X'FFFF'	All characters with assigned code points	
Bytes 18-19		CODE PAGE GLOBAL ID	
	X'0000'	No value supplied	
	X'0001' - X'FFFE'	CPGID	
	X'FFFF'	Default Code Page (Configuration Settings)	
Bytes 20-21		FONT GLOBAL ID	
	X'0000'	No value supplied	
	X'0001' - X'FFFE'	FGID	
	X'FFFF'	Default FGID (Configuration Settings)	
Bytes 22-23		FONT WIDTH	
	X'0000'	No value supplied	
	X'0001' - X'FFFE'	FW	
	X'FFFF'	Default FW (Configuration Settings)	
Byte 24		PATTERN TECHNOLOGY ID	
	X'00'	No value supplied	
	X'1E'	Composite technology	
	X'1F'	Adobe Type-1 PFB	
Byte 25		Reserved	
Bytes 26-27		VERTICAL SCALE FACTOR	
	X'0000'	No value supplied	
	X'0001' - X'7FFF'	VSF in 1440th of an inch	

Data Area	Value	Description	Error Code
Bytes 28-29		HORIZONTAL SCALE FACTOR	
	X'0000'	No value supplied	
	X'0001' - X'7FFF'	HSF in 1440th of an inch	

Resource ID example with RIDF = Object-OID

Data Area	Value	Description	Error Code
Byte 12		IDENTIFIER	
	X'06'	Short Form OID	
Byte 13		OID LENGTH	
	X'00' - X'7F'		
Bytes 2 to end		Unique OID	
	Any Value		

Resource ID example with RIDF = Data-object font

Data Area	Value	Description	Error Code
Bytes 12-13		Base Font HAID	
	X'0001' - X'7EFF'	TrueType/OpenType font or TrueType/OpenType collection	
Bytes 14-15		CODE PAGE HAID	
	X'0000'	No Value supplied	
	X'0001' - X'7EFF'	CP HAID	
Bytes 16-17		TTC Font Index	
	X'0000' - X'FFFF'	Font Identifier	
Bytes 2 to end		Triplets (One or more of the following triplets)	
	X'02'	Fully Qualified Name triplet	
	X'50'	Encoded Scheme ID triplet	
	X'8B'	Data-Object Font Descriptor triplet	
	X'8D'	Linked Font triplet	

Begin Page

This command is only valid in home state and causes the printer to enter page state. See the Intelligent Printer Data Stream Reference for details.

Note

❒ At Begin Page processing time a test for media source and destination compatibility will be performed. If it is determined that the processing of this page with the media source and media destination specified is incompatible an exception X'0237..04' will be reported.

Deactivate Font

The Deactivate Font command carries one to six bytes of data used by the host to deactivate one or more coded fonts, coded font indexes, font character sets, or code pages.

Data Area	Value	Description	Error Code
Byte 0		DEACTIVATION TYPE	X'0217..02'
	X'11'	Deactivate one single-byte LF1 Coded Font and related indexes	X'02C5..01' X'02C6..01'
	X'12'	Deactivate one single-byte font index	
	X'1E'	Deactivate all single-byte LF1 Coded Fonts and all indexes	
	X'1F'	Deactivate all single-byte LF1 Coded Fonts and all indexes (same as above)	
	X'20'	Deactivate double-byte LF1 Coded Font section and related indexes	
	X'21'	Deactivate double-byte LF1 Coded Font section, all higher sections and all related indexes	
	X'22'	Deactivate a font index for a double-byte Coded Font section	
	X'2F'	Deactivate all double-byte LF1 Coded Fonts and all related indexes	
	X'30'	Deactivate one Code Page	
	X'3F'	Deactivate all Code Pages	
	X'40'	Deactivate one Font Character Set	
	X'4F'	Deactivate all Font Character Sets	
	X'50'	Deactivate one LF1 or LF3 Coded Font	
	X'51'	Deactivate one LF1 or LF3 Coded Font and all associated components	
	X'5D'	Deactivate all resident Coded Fonts and all associated components	
	X'5E'	Deactivate all Coded Fonts	
	X'5F'	Deactivate all Coded Fonts and all associated components	
	X'60'	Deactivate a data-object font	
	X'6E'	Deactivate all data-object fonts	

Data Area	Value	Description	Error Code
Bytes 1-2	X'0001' - X'7EFF'	HOST ASSIGNED ID (Deactivation Types X'11', X'12', X'20', X'21', X'22', X'30', X'40', X'50' and X'51')	X'0214..02' X'0215..02' X'02C5..01' X'02C6..01'
Byte 3		SECTION ID	
	X'00'	Single-byte font	
	X'41' - X'FD'	Double-byte font (Deactivation types X'20', X'21' and X'22')	
Bytes 4-5		FONT INLINE SEQUENCE	X'0240..02'
		(Deactivation Type X'12' and X'22')	
	X'0000'	0 degrees	
	X'2D00'	90 degrees	
	X'5A00'	180 degrees	
	X'8700'	270 degrees	

End

The End command is the ending control for a series of Write Image, Write Image 2, Write Graphics, Write Bar Code, Load Code Page, or Load Font commands. This command marks either the end of an image object, a graphics object, a bar code object, or the end of a downloaded font sequence. See the Intelligent Printer Data Stream Reference, S544-3417, for more details.

End Page

The End Page (EP) command causes the printer to return to home state from page state, page segment state, or overlay state and thus marks the end of a page, a page segment, or an overlay. The EP command is an implicit command to schedule that page for printing if the command is being used to exit page state; all data for that page is available to the printer. Zero or more data bytes can be transmitted but are ignored. See the Intelligent Printer Data Stream Reference, S544-3417, for more details.

Load Copy Control

A copy control record 2 to 32760 bytes long specifies how the printer is to modify and print logical pages in one or more copy subgroup definitions. Each copy subgroup definition can be from 2 to 254 bytes long (divisible by 2). The maximum number of key-words that the host program can specify in a copy subgroup definition is:

- X'80nn' specify 1 time
- X'90nn' specify 1 time
- X'91nn' specify 1 time
- X'C1nn' specify 1 time
- X'C2nn' specify 1 time
- X'D1nn' specify 1 to 126 times
- X'E1nn' specify 1 to 126 times
- X'E4nn' specify 1 to 63 times
- X'E5nn' specify 1 to 63 times

Note

❒ Actual tray capacity is determined by media weight.

❒ The machine supports media source tray numbering. Media source values in the LCC support tables represent the default settings when the printer is initially installed. The printer's control panel menu mode is provided to allow customers to specify the source tray numbers to meet requirements of legacy applications. Example: customer might want to address the Manual Tray as tray 4 instead of the tray 100 (default).

❒ For the tray in which "envelope" has been specified as the paper type, the tray values of the tray ID are (in ascending for each respective tray that is installed) as follows: X'8040', X'8041', etc. If a different paper type is specified for the tray, the tray values of the tray ID are (in ascending for each respective tray that is installed) as follows: X'8000', X'8001', etc. In regards to the bypass tray and default tray, even if you specify "envelope" as the paper type, the tray value will not be changed.

❒ To ascertain which machine type your model corresponds to, see "Machine Types", About This Machine or Safety Information.

Data Area	Value	Description	Error Code
Byte 0	X'02' - X'FE'	COPY SUBGROUP DEFINITION LENGTH	
Byte 1	X'01' - X'FF'	NUMBER OF IDENTICAL COPIES	X'0231..01'
Bytes 2-n		COPY MODIFICATION KEY-WORDS	X'0232..01'
		Media Source (Reference Notes)	
	X'8000'	Tray 1	X'02C2..02'
	X'8001'	Tray 2	X'02C8..01'
		Tray 3* (Machine type: Type 1 or Type 2)	
	X'8002'	Tray 1 +Tray 2 + Tray 3 + Bypass tray	
	X'8001'	Tray 1 + Small size paper tray 2 + Tray 3 + Bypass tray	
	X'8002'	Tray 1 + Tray 2 + Tray 3 + Tray 4 + Bypass tray	
	X'8001'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + Bypass tray	
	X'8002'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + Bypass tray	
	X'8001'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + Bypass tray	
	X'8002'	Tray 1 + Tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray	
	X'8001'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray	
	X'8002'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'8001'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray	
		Tray 3* (Machine type: Type 3 or Type 4)	
	X'8002'	Tray 1 +Tray 2 + Tray 3 + Tray 4 + Bypass tray	
	X'8001'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + Bypass tray	
	X'8002'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + Bypass tray	
	X'8001'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + Bypass tray	

Data Area	Value	Description	Error Code
Bytes 2-n	X'8002'	Tray 1 + Tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray	
	X'8001'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray	
	X'8002'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'8001'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray	
		Tray 3 (LCT)*	
	X'8002'	Tray 1 + Tray 2 + Tray3 (LCT) + Bypass tray	
	X'8001'	Tray 1 + Small size paper tray 2 + Tray3 (LCT) + Bypass tray	
	X'8002'	Tray 1 + Tray 2 + Tray3 (LCT) + LCT + Bypass tray	
	X'8001'	Tray 1 + Small size paper tray 2 + Tray3 (LCT) + LCT + Bypass tray	
		Tray 4*	
	X'8003'	Tray 1 + Tray 2 + Tray 3 + Tray 4 + Bypass tray	
	X'8002'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + Bypass tray	
	X'8002'	Tray 1 + Tray 2 + Small size paper tray 3 + Tray 4 + Bypass tray	
	X'8001'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + Bypass tray	
	X'8003'	Tray 1 + Tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray	
	X'8002'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray	
	X'8002'	Tray 1 + Tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray	
	X'8001'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray	
	X'8040'	Small size paper tray 2	
		Small size paper tray 3*(Machine type: Type 1 or Type 2)	
	X'8040'	Tray 1 + Tray 2 + Small size paper tray 3 + Bypass tray	

Data Area	Value	Description	Error Code
Bytes 2-n	X'8041'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Bypass tray	
	X'8040'	Tray 1 + Tray 2 + Small size paper tray 3 +Tray 4 + Bypass tray	
	X'8041'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + Bypass tray	
	X'8040'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + Bypass tray	
	X'8041'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + Bypass tray	
	X'8040'	Tray 1 + Tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray	
	X'8041'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray	
	X'8040'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'8041'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray	
		Small size paper tray 3*(Machine type: Type 3 or Type 4)	
	X'8040'	Tray 1 + Tray 2 + Small size paper tray 3 + Tray 4 + Bypass tray	
	X'8041'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + Bypass tray	
	X'8040'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + Bypass tray	
	X'8041'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + Bypass tray	
	X'8040'	Tray 1 + Tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray	
	X'8041'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray	
	X'8040'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray	

Data Area	Value	Description	Error Code
Bytes 2-n	X'8041'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray	
		Small size paper tray 4*	
	X'8040'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + Bypass tray	
	X'8041'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + Bypass tray	
	X'8041'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + Bypass tray	
	X'8042'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + Bypass tray	
	X'8040'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'8041'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'8041'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'8042'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray	
		LCT*	
	X'8003'	Tray 1 + Tray 2 + Tray3 (LCT) + LCT + Bypass tray	
	X'8002'	Tray 1 + Small size paper tray 2 + Tray3 (LCT) + LCT + Bypass tray	
	X'8004'	Tray 1 + Tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray	
	X'8003'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray	
	X'8003'	Tray 1 + Tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray	
	X'8003'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'8002'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray	

Data Area	Value	Description	Error Code
Bytes 2-n	X'8002'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'8002'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'8001'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'8063'	Bypass tray	
	X'80FF'	Default Tray	
		Media Destination (Byte Pairs)	
	X'9101'	Internal shift tray	
	X'9101'	Finisher shift tray	X'0237..04'
	X'9102'	External tray	
	X'9102'	Finisher upper tray	X'02C1..01'
	X'9103'	Finisher booklet tray	X'02C3..01'
		Internal tray 1*(Machine type: Type 1 or Type 2)	
	X'9101'	Internal tray 1	
	X'9101'	Internal tray 1 + Internal tray 2(1 bin tray)	
	X'9101'	Internal tray 1 + External tray	
	X'9101'	Internal tray 1 + External tray + Internal tray 2(1 bin tray)	
	X'9102'	Internal tray 1 + Finisher SR3050	
	X'9102'	Internal tray 1 + Finisher SR3050 + Internal tray 2(1 bin tray)	
	X'9103'	Internal tray 1 + Finisher SR790	
	X'9103'	Internal tray 1 + Finisher SR790 + Internal tray 2(1 bin tray)	
	X'9104'	Internal tray 1 + Booklet Finisher SR3000	
	X'9104'	Internal tray 1 + Booklet Finisher SR3000 + Internal tray 2(1 bin tray)	
		Internal tray 1*(Machine type: Type 3 or Type 4)	
	X'9101'	Internal tray 1	
	X'9101'	Internal tray 1 + Internal tray 2(1 bin tray)	
	X'9101'	Internal tray 1 + External tray	

Data Area	Value	Description	Error Code
Bytes 2-n	X'9101'	Internal tray 1 + External tray + Internal tray 2(1 bin tray)	
	X'9103'	Internal tray 1 + Finisher SR3030	
	X'9103'	Internal tray 1 + Finisher SR3030 + Internal tray 2(1 bin tray)	
	X'9103'	Internal tray 1 + Finisher SR790	
	X'9103'	Internal tray 1 + Finisher SR790 + Internal tray 2(1 bin tray)	
	X'9104'	Internal tray 1 + Booklet Finisher SR3020	
	X'9104'	Internal tray 1 + Booklet Finisher SR3020 + Internal tray 2(1 bin tray)	
		Internal tray 2 (1 bin tray)* (Machine type: Type 1 or Type 2)	
	X'9102'	Internal tray 2 (1 bin tray) + Internal tray 1	
	X'9102'	Internal tray 2 (1 bin tray) + Internal shift tray	
	X'9103'	Internal tray 2 (1 bin tray) + Internal tray 1 + External tray	
	X'9103'	Internal tray 2 (1 bin tray) + Internal tray 1 + Finisher SR3050	
	X'9104'	Internal tray 2 (1 bin tray) + Internal tray 1 + Finisher SR790	
	X'9105'	Internal tray 2 (1 bin tray) + Internal tray 1 + Finisher SR3000	
		Internal tray 2 (1 bin tray)* (Machine type: Type 3 or Type 4)	
	X'9102'	Internal tray 2 (1 bin tray) + Internal tray 1	
	X'9102'	Internal tray 2 (1 bin tray) + Internal shift tray	
	X'9103'	Internal tray 2 (1 bin tray) + Internal tray 1 + External tray	
	X'9104'	Internal tray 2 (1 bin tray) + Finisher SR3030 + Internal tray 1	
	X'9104'	Internal tray 2 (1 bin tray) + Finisher SR790 + Internal tray 1	
	X'9105'	Internal tray 2 (1 bin tray) + Finisher SR3020 + Internal tray 1	

* Available values vary depending on the installed option.

Media Source and Destination Support Matrices

The following tables are provided to document Media Source and Destination support. This information is provided to ensure better overall understanding of the media handling characteristics. For more details on the actual X and Y media extents see p.96 “Printable Area Self-Defining Field”.

❖ Media Source and Destination Support Matrices

A = Tray 1 / Capacity: 550
B = Tray 2 / Capacity: 550
C = Small size paper tray 2 / Capacity: 550
D = Tray 3 / Capacity: 550
E = Tray 3 (LCT) / Capacity: 1000 + 1000
F = Small size paper tray 3 / Capacity: 550
G = Tray 4 / Capacity: 550
H = Small size paper tray 4 / Capacity: 550
I = Bypass tray / Capacity: 100
J = LCT / Capacity: 1200

❍ = Duplex SEF / ▲ = Duplex LEF / ● = SEF / △ = LEF

	A	B	C	D	E	F	G	H	I	J
A3 (297×420mm)		❍		❍			❍		❍	
A4 (210×297mm)	▲	❍ ▲	❍	❍ ▲	▲	❍	❍ ▲	❍	❍ ▲	▲
A5 (210×148mm)	▲	▲	❍ ▲	▲		❍ ▲	▲	❍ ▲	❍ ▲	
A6 (105×148mm)			❍			❍		❍	❍	
B4 (257×364mm)		❍		❍			❍		❍	
B5 (182×257mm)	▲	❍ ▲	❍	❍ ▲		❍	❍ ▲	❍	❍ ▲	▲
B6 (128×182mm)			❍			❍		❍	❍	
DLT (11×17in.)		❍		❍			❍		❍	
Legal (8.5×14in.)		❍		❍			❍		❍	
Foolscap (8.5×13in.)		❍		❍			❍		❍	
Letter (8.5×11in.)	▲	❍ ▲	❍	❍ ▲	▲	❍	❍ ▲	❍	❍ ▲	▲

	A	B	C	D	E	F	G	H	I	J
GovernmentLG (8.25×14in.)		❍		❍			❍		❍	
Folio (8.25×13in.)		❍		❍			❍		❍	
F/GL (8×13in.)		❍		❍			❍		❍	
Eng Quatro (8×10in.)		❍		❍			❍		❍	
Exective (7.25×10.5in.)		❍ ▲	❍	❍ ▲		❍	❍ ▲	❍	❍ ▲	
HalfLetter (5.5×8.5in.)			●			●		●	●	
Com10 (4.125×9.5in.)		△	●	△		●	△	●	● △	
Monarch (3.875×7.5in.)			● △			● △		● △	● △	
C5 (162×229mm)		△	●	△		●	△	●	● △	
C6 (114×162mm)			● △			● △		● △	● △	
DL Env (110×220mm)			● △			● △		● △	● △	
8kai (267×390mm)		❍		❍			❍		❍	
16kai (195×267mm)		❍ △		❍ △			❍ △		❍ △	
12×18in.									●	
11×15in.		❍		❍			❍		❍	
10×14in.		❍		❍			❍		❍	
Custom Sizes		*1	*2	*1		*2	*1	*2	*3	

*1 182.0×148.0 mm to 297.0×432.0 mm
*2 100.0×148.0 mm to 220.0×432.0 mm
*3 90.0×148.0 mm to 305.0×600.0 mm

- Duplexing of Custom Paper (variable paper size) is enabled, however some small sizes may jam or exhibit registration problems due to print engine limitations.
- The post-fuse inserter is a feature on this machine. It is not possible to print on inserter sheets since the sheets are picked after the EP process fusing stage. No NACKs will be reported if an attempt is made to print on an insert, however normal data stream and position checks will be detected and the appropriate NACKs will be reported. It is recommended that for post-fuse inserter sheets that the applications send pages with no print data (ie. BP, EP).
- The machine can be configured with one or two finisher units:
  - Finisher SR5000 - a 3000-sheet capacity shift bin and a 500-sheet capacity proof bin.
  - Booklet Finisher SR5020 - 5-sheet, 30-copy capacity depending on the number of sheets per booklet.

A = Internal tray 1 Capacity: 500

B = Internal tray 2 (1 bin tray) Capacity: 125

C = Internal shift tray Capacity: 250

D = External tray Capacity: Internal tray 1: 250, External tray 1: 100

E = Finisher SR790 Capacity: Finisher upper tray: 250, Finisher shift tray: 1000

F = Booklet Finisher SR3020 Capacity: Finisher upper tray: 250, Finisher shift tray: 2000, Finisher booklet tray: 150

G = Finisher SR3030 Capacity: Finisher upper tray: 250, Finisher shift tray: 3000

H = Finisher SR3050 Capacity: Finisher shift tray: 500

I = Finisher SR3000 Capacity: Finisher upper tray: 100, Finisher shift tray: 1000, Finisher booklet tray: 100

Y = Yes / N = No / FUT = Finisher upper tray / FST = Finisher shift tray / FBT= Finisher booklet tray

	A	B	C	D	E	F	G	H	I
A3 (297×420 mm) SEF	Y	Y	Y	Y	Y	Y	Y	Y	Y
A4 (210×297 mm) SEF	Y	Y	Y	Y	Y	Y	Y	Y	Y
A4 (210×297 mm) LEF	Y	Y	Y	Y	Y	FUT: Y FST: Y FBT: N	Y	Y	FUT: Y FST: Y FBT: N

	A	B	C	D	E	F	G	H	I
A5 (210×148 mm) SEF/LEF	Y	Y	Y	Y	Y	FUT: Y FST: Y FBT: N	Y	Y	FUT: Y FST: Y FBT: N
A6 (105×148 mm) SEF	Y	Y	Y	Y	FUT: Y FST: N	FUT: Y FST: Y FBT: N	Y	Y	FUT: Y FST: Y FBT: N
B4 (257×364 mm) SEF	Y	Y	Y	Y	Y	Y	Y	Y	Y
B5 (182×257 mm) SEF	Y	Y	Y	Y	Y	Y	Y	Y	Y
B5 (182×257 mm) LEF	Y	Y	Y	Y	Y	FUT: Y FST: Y FBT: N	Y	Y	FUT: Y FST: Y FBT: N
B6 (128×182 mm) SEF	Y	Y	Y	Y	FUT: Y FST: N	FUT: Y FST: Y FBT: N	Y	Y	FUT: Y FST: Y FBT: N
DLT (11×17in.) SEF	Y	Y	Y	Y	Y	Y	Y	Y	Y
Legal (8.5×14in.) SEF	Y	Y	Y	Y	Y	Y	Y	Y	Y
Foolscap (8.5×13 in.) SEF	Y	Y	Y	Y	Y	FUT: Y FST: Y FBT: N	Y	Y	FUT: Y FST: Y FBT: N
Letter (8.5×11 in.) SEF	Y	Y	Y	Y	Y	Y	Y	Y	Y
Letter (8.5×11 in.) LEF	Y	Y	Y	Y	Y	FUT: Y FST: Y FBT: N	Y	Y	FUT: Y FST: Y FBT: N

	A	B	C	D	E	F	G	H	I
Govern-mentLG (8.25×14 in.) SEF	Y	Y	Y	Y	Y	FUT: Y FST: Y FBT: N	Y	Y	FUT: Y FST: Y FBT: N
Folio (8.25×13 in.) SEF	Y	Y	Y	Y	Y	FUT: Y FST: Y FBT: N	Y	Y	FUT: Y FST: Y FBT: N
F/GL (8×13in.) SEF	Y	Y	Y	Y	Y	FUT: Y FST: Y FBT: N	Y	Y	FUT: Y FST: Y FBT: N
Eng Quatro (8×10in.) SEF	Y	Y	Y	Y	Y	FUT: Y FST: Y FBT: N	Y	Y	FUT: Y FST: Y FBT: N
Exective (7.25× 10.5in.) SEF/LEF	Y	Y	Y	Y	Y	FUT: Y FST: Y FBT: N	Y	Y	FUT: Y FST: Y FBT: N
HalfLetter (5.5× 8.5in.) SEF	Y	Y	Y	Y	Y	FUT: Y FST: Y FBT: N	Y	Y	FUT: Y FST: Y FBT: N
Com10 (4.125× 9.5in.) SEF	Y	N	Y	Y	N	N	N	N	N
Com10 (4.125× 9.5in.) LEF	Y	N	Y	Y	N	FUT: N FST: Y FBT: N	FUT: N FST: Y	N	N
Monarch (3.875× 7.5in.) SEF	Y	N	Y	Y	N	N	N	N	N
Monarch (3.875× 7.5in.) LEF	Y	N	Y	Y	N	FUT: N FST: Y FBT: N	FUT: N FST: Y	N	N
C5 (162×229 mm) SEF	Y	N	Y	Y	N	N	N	N	N

	A	B	C	D	E	F	G	H	I
C5 (162×229 mm) LEF	Y	N	Y	Y	N	FUT: N FST: Y FBT: N	FUT: N FST: Y	N	N
C6 (114×162 mm) SEF	Y	N	Y	Y	N	N	N	N	N
C6 (114×162 mm) LEF	Y	N	Y	Y	N	FUT: N FST: Y FBT: N	FUT: N FST: Y	N	N
DL Env (110×220 mm) SEF	Y	N	Y	Y	N	N	N	N	N
DL Env (110×220 mm) LEF	Y	N	Y	Y	N	FUT: N FST: Y FBT: N	FUT: N FST: Y	N	N
8kai (267×390 mm) SEF	Y	Y	Y	Y	Y	FUT: Y FST: Y FBT: N	Y	Y	FUT: Y FST: Y FBT: N
16kai (195×267 mm) SEF/LEF	Y	Y	Y	Y	Y	FUT: Y FST: Y FBT: N	Y	Y	FUT: Y FST: Y FBT: N
12×18in.	Y	N	Y	Y	Y	Y	Y	Y	FUT: Y FST: Y FBT: N
11×15in.	Y	Y	Y	Y	Y	FUT: Y FST: Y FBT: N	Y	Y	FUT: Y FST: Y FBT: N
10×14in.	Y	Y	Y	Y	Y	FUT: Y FST: Y FBT: N	Y	Y	FUT: Y FST: Y FBT: N
Custom Sizes	*1	*2	*1	*1	FUT: *3	FUT: *4 FST: *4	FUT: *4 FST: *4	*3	FUT: *3 FST: *3

*1 90.0×148.0 mm to 305.0×600.0 mm
*2 93.0×148.0 mm to 297.0×432.0 mm
*3 100.0×148.0 mm to 305.0×460.0 mm
*4 100.0×148.0 mm to 305.0×600.0 mm

Load Font Equivalence

The font equivalence record is a list of 0 to 254 font equivalence entries (each entry is 16 bytes). The font equivalence record permits the host program to equate a Local-Font ID (specified in text control p.144 “Set Coded Font Local”, graphics order p.256 “Character Set” or p.193 “Bar Code Data Descriptor”, p.190 “Write Bar Code Control”) with:

- Font Host Assigned ID (HAID)
- The Font Inline Sequence or character rotation table to be used when processing characters
- Global Resource ID (GRID) for resident fonts. The GRID is made up of the following components:
  - GCSGID Graphic Character Set Global ID
  - CPGID Code Page Global ID
  - FGID Font Global ID
  - FW Font width in 1/1440 inch units

If a GRID is specified in bytes 5-12, the entry is requesting the activation of a coded font and assigning a HAID to it. The printer uses the information provided in the GRID to locate the component parts of the coded font. First, the GCSGID and FGID values are used to find the font character set, and GCSGID and CPGID are used to find the code page. In some cases, the printer will locate the code page using just the CPGID value. If the character set and code page are not found in the above manner, information in the GRID will be used together with the Font Inline Sequence value (Bytes 3-4) to locate a single-byte fully described font and font index.

The set of supported GCSGID/CPGID/FGID/FW (GRID) combinations is described in p.251 “Code Page and Font Identification” and is available to the host PSF by means of the XOA-RRL command. For typographic and scalable fonts, a Font Width (FW) must be specified in order to uniquely select a point size, unless FW=0 or X’FFFF’, in which case the printer's control panel [Characters Per Inch] setting is used ([Characters Per Inch] on the IPDS Menu).

Exception X’021D..02’ is reported back if a non-zero GRID is requested with parts that are not supported in the printer, except in the case of GCSGID subset substitution or LFE Bold Attribute substitution.

For outline coded fonts, the FW value is used to derive a scale factor as follows:

- For typographic and proportionally spaced fonts, both horizontal and vertical scale factors are 3 (FW).
- For fixed pitch, uniform character increment fonts, both horizontal and vertical scale factors are derived using the following algorithm (fractions are truncated):

  V_Scale = H_Scale = 1000 [*1] FW/SPACE

  In this case SPACE is the value of the Space Character increment in relative units.

[*1] 4028-type font substitution is provided as the printer's control panel feature. It is independent of the device emulation mode setting (native or 4028). Default is No Font Substitution.

Data Area	Value	Description	Error Code
Byte 0	X'00' - X'FE'	LOCAL-FONT ID	X'0219..02'
	X'FF'	Reserved	X'0218..02'
Bytes 1-2	X'0001' - X'7EFF'	FONT HOST ASSIGNED ID	X'0218..02'
			X'021F..02'
Bytes 3-4		FONT INLINE SEQUENCE	X'0247..02'
	X'0000'	0 degrees	
	X'2D00'	90 degrees	
	X'5A00'	180 degrees	
	X'8700'	270 degrees	
Bytes 5-6		GCSGID	
	X'0000'	No value assigned (Note 2)	
	X'0001' - X'FFFE'	Graphic Character Set Global ID	
	X'FFFF'	All characters with assigned code points in the associated code page	
Bytes 7-8		CPGID	X'021D..02'
	X'0000'	No value assigned (Note 2)	
	X'0001' - X'FFFE'	Code Page Global ID	
	X'FFFF'	Printer Default (Configuration Setting)	
Bytes 9-10		FGID	X'021D..02'
	X'0000'	No value assigned (Note 2)	
	X'0001' - X'FFFE'	Font Global ID	
	X'FFFF'	Printer Default (Configuration Setting)	
Bytes 11-12		FW	
	X'0000'	No value assigned (Note 2)	
	X'0001' - X'7FFF'	Font Width (Ignored for Fixed Pitch Fonts)	
	X'FFFF'	Printer Default as specified by Configuration Settings	
Byte 13	X'00'	Reserved	

Data Area	Value	Description	Error Code
Byte 14		FONT ATTRIBUTES (Note 3)	
	Bit 0 0/1	Ignored (Symbol Sets)	
	Bits 1-2 00	Reserved	
	Bit 3 0/1	Ignored (Double High)	
	Bit 4 0/1	Ignored (Italics)	
	Bit 5 0/1	Ignored (Double Strike)	
	Bit 6 0/1	Bold = 1	
	Bit 7 0/1	Ignored (Double Wide)	
Byte 15	X'00'	Reserved	
Bytes 16-n		Additional LFE ENTRIES	X'023A..02'

Note

❒ For LF1 coded fonts, FIS specifies the font index table for character rotation. For LF3 coded fonts, FIS is used to select the metrics for a specific writing mode.

❒ Global Resource IDs (bytes 5-12) apply to printer resident fonts only. If these fields are all X'0000', then an activation is not done. If GCSGID and/or FW are 0 or X'FFFF':

- CPGID (non-zero) defines the CPGID/GCSGID
- FGID (non-zero) defines the FGID/FW (Non-Typographic)
- FGID (non-zero) and the printer's control panel CPI defines the FGID/FW (Typographic)

❒ When the chosen font and attribute combination is restricted by a licensing agreement the font attributes may be executed by substitution or other means. If an appropriate font is not available, the attribute may not occur. Also, with font substitution, the available characteristics may change. Combinations of attributes may not be available. Font attributes will not be applied to host downloaded fonts.

Logical Page Descriptor

Before the printer can present a page of data it must know the following:

- The units in which distances have been measured
- The boundaries of the logical page
- Initialization values for control parameters (Margins, Line spacing...)

The controls established in a Logical Page Descriptor command remain in effect until the next Logical Page Descriptor is received unless superseded by explicit controls in other commands (See p.138 "Write Text"). In any case, the latest LPD control values are restored with each Begin Page or Begin Overlay command.

The LPD command is valid with 24, 28, 34, 36, 38, 40, 41 or 43 bytes. The printer accepts the LPD command using any of these valid lengths.

Data Area	Value	Description	Error Code
Byte 0		UNIT-BASE (Measurement Units)	X'0264..02'
	X'00'	10 in.	
	X'01'	10 centimeters	
Byte 1		Reserved	
Bytes 2-3		Xp AND I L-units PER UNIT-BASE	X'0260..02'
	X'3840'	14400 L-units per 10 in.	
	X'1626'	5670 L-units per 10 centimeters	
	X'0960'	2400 L-units per 10 in.	
	X'03B1'	945 L-units per 10 centimeters	
Bytes 4-5		Yp AND B L-units PER UNIT-BASE	X'0261..02'
	X'3840'	14400 L-units per 10 in.	
	X'1626'	5670 L-units per 10 centimeters	
	X'0960'	2400 L-units per 10 in.	
	X'03B1'	945 L-Units per 10 centimeters	
Byte 6		Reserved	
Bytes 7-9	X'000001' - X'007FFF'	Xp-EXTENT OF LOGICAL PAGE (Width) See p.25 "Notation Conventions"	X'0262..02'
Byte 10		Reserved	
Bytes 11-13	X'000001' - X'007FFF'	Yp-EXTENT OF LOGICAL PAGE (Height) See p.25 "Notation Conventions"	X'0263..02'
Byte 14		Reserved	
Byte 15		Ignored (Ordered Data)	
Bytes 16-23		Reserved	

Data Area	Value	Description	Error Code
Bytes 24-25		I-AXIS ORIENTATION	X'0268..02'
	X'0000'	0 degrees	
	X'2D00'	90 degrees	
	X'5A00'	180 degrees	
	X'8700'	270 degrees	
	X'FFFF'	Printer Default	
Bytes 26-27		B-AXIS ORIENTATION	X'0269..02'
	X'0000'	0 degrees	
	X'2D00'	90 degrees	
	X'5A00'	180 degrees	
	X'8700'	270 degrees	
	X'FFFF'	Printer Default	
		Note ❒ See p.149 "Set Text Orientation" for valid combinations of I-axis and B-axis orientations.	
Bytes 28-29	X'0000' - X'7FFF'	INITIAL I PRINT COORDINATE See p.25 "Notation Conventions"	X'026A..02'
Bytes 30-31	X'0000' - X'7FFF'	INITIAL B PRINT COORDINATE See p.25 "Notation Conventions"	X'026B..02'
Bytes 32-33	X'0000' - X'7FFF'	INLINE MARGIN	X'0210..01'
		See p.25 "Notation Conventions"	
	X'FFFF'	Printer Default	
Bytes 34-35	X'0000' - X'7FFF'	INTERCHARACTER ADJUSTMENT (+)	X'0212..01'
		See p.25 "Notation Conventions"	
	X'FFFF'	Printer Default	
Bytes 36-37		Reserved	
Bytes 38-39	X'0000' - X'7FFF'	BASELINE INCREMENT	X'0211..01'
		See p.25 "Notation Conventions"	
	X'FFFF'	Printer Default	
Byte 40	X'00' - X'FE'	LOCAL FONT ID	
	X'FF'	Printer Default	

Data Area	Value	Description	Error Code
Bytes 41-42		TEXT COLOR	X'0258..03'
	X'0000' or X'FF00'	Printer Default (Black)	
	X'0001' or X'FF01'	Blue - Limited Simulated Color Support	
	X'0002' or X'FF02'	Red - Limited Simulated Color Support	
	X'0003' or X'FF03'	Pink - Limited Simulated Color Support	
	X'0004' or X'FF04'	Green - Limited Simulated Color Support	
	X'0005' or X'FF05'	Turquoise - Limited Simulated Color Support	
	X'0006' or X'FF06'	Yellow - Limited Simulated Color Support	
	X'0008'	Black	
	X'0010'	Brown - Limited Simulated Color Support	
	X'FF07'	Printer Default (Black)	
	X'FF08'	Color of Medium (Reset)	
	X'FFFF'	Printer Default (Black)	

Data Area	Value	Description	Error Code
Bytes 43-end		LPD Triplets • Color Specification Triplet. This optional triplet can be placed at the end of the LPD command to specify the foreground color of the object area, before any object data is placed on the object area. Any number of LPD triplets can be received, they are processed in the order received and the resulting color of the object area depends on the last instance of the triplet received. See p.29 "Color Specification" for details. • Presentation Space Reset Mixing Triplet. This optional triplet can be placed at the end of the LPD command to specify whether or not an object area is reset to the color of medium before any object data is placed on the object area. Any number of LPD triplets can be received, they are processed in the order received and the resulting color of the object area depends on the last instance of the triplet received. See p.31 "Presentation Space Reset Mixing" for details.	

Logical Page Position

This command defines the position on the physical sheet of paper where the logical page is to be placed.

Data Area	Value	Description	Error Code
Byte 0	X'00'	RESERVED	
Bytes 1-3	X'FF8000' - X'007FFF'	Xm OFFSET of the LOGICAL PAGE ORIGIN in L-Units See p.25 "Notation Conventions".	X'02A4..01' X'02AD..01'
Byte 4		PAGE PLACEMENT	
	X'00'	Default placement	
	X'10'	Partition 1, front side	
	X'11'	Partition 1, back side	
	X'20'	Partition 2, front side	
	X'21'	Partition 2, back side	
	X'30'	Partition 3, front side	
	X'31'	Partition 3, back side	
	X'40'	Partition 4, front side	
	X'41'	Partition 4, back side	
Bytes 5-7	X'FF8000' - X'007FFF'	Ym OFFSET of the LOGICAL PAGE ORIGIN in L-Units See p.25 "Notation Conventions".	X'02A5..01' X'02AD..01'
Bytes 8-9		PAGE ORIENTATION	
	X'0000'	0 degrees	
	X'2D00'	90 degrees	
	X'5A00'	180 degrees	
	X'8700'	270 degrees	
		Note ❒ Explicit placement is supported.	

Presentation Fidelity Control

The Presentation Fidelity Control (PFC) command is only valid in home state and specifies the fidelity requirements for certain presentation functions. The desired fidelity for each supported presentation function can be specified with a triplet on the PFC command. The activate flag can be used to reset all fidelity controls to their default settings before activating the settings specified in the PFC triplets. A PFC command with no triplets and with the activate flag set to B'0' resets all fidelity controls to their default settings.

Data Area	Value	Description	Error Code
Byte 0	X'00'	RESERVED	
Byte 1		FLAGS	
	Bit 0	ACTIVATE	
	0	Reset to default fidelity controls and activate PFC triplets	
	1	Just activate PFC triplets	
	Bits 1-7	Reserved	
	00000000000000		
Bytes 2-3	X'0000'	Reserved	
Bytes 4-n		Triplets (Zero or more optional PFC triplets)	X'0254..05'
		X'86' Text Fidelity Control	
		X'88' Finishing Fidelity Control	

Text Fidelity Control

The Text Fidelity triplet specifies the exception continuation and reporting rules when an unrecognized or unsupported text control sequence is encountered.

Data Area	Value	Description	Error Code
Byte 0	X'07'	LENGTH	X'0254..51'
Byte 1	X'86'	Text Fidelity Triplet ID	
Byte 2		CONTINUE	X'0254..52'
	X'01'	Stop on Exception ID X'0200..01'	
	X'02'	Continue Processing Write Text Data	
Byte 3	X'00'	Reserved	
Byte 4		REPORT	X'0254..53'
	X'01'	Report X'0200..01' Exception	
	X'02'	Do Not Report X'0200..01' Exception	
Bytes 5-6	X'0000'	Reserved	

Finishing Fidelity Control

The Finishing Fidelity triplet specifies the exception continuation and reporting rules for finishing exceptions. This fidelity control applies when a request for a specific finishing operation cannot be satisfied.

Data Area	Value	Description	Error Code
Byte 0	X'07'	LENGTH	X'0254..51'
Byte 1	X'86'	Text Fidelity Triplet ID	
Byte 2		CONTINUE	X'0254..52'
	X'01'	Stop at first finishing exception	
	X'02'	Continue without the finishing operation	
Byte 3	X'00'	Reserved	
Byte 4		REPORT	X'0254..53'
	X'01'	Report Finishing Exceptions	
	X'02'	Do Not Report Finishing Exceptions	
Bytes 5-6	X'0000'	Reserved	

Sense Type and Model

Causes the printer to place into the Special Data Area of the Acknowledge Reply (See p.38 "Acknowledgement Reply") a record containing type and model information and the functions the printer supports.

This command is effectively a NOP if the ARQ bit is NOT ON in the command header.

❖ Sense Type and Model

Special Data Area	Value	Description
Byte 0	X'FF'	Convention
Bytes 1-2		Product Code
	X'2707'	Aficio MP C3001/C3501/C4501/C4501A/C5501/C5501A C9130/C9135/C9145/C9145A/C9155/C9155A MP C3001/C3501/C4501/C4501A/C5501/C5501A LD630C/LD635C/LD645C/LD645CA/LD655C/LD655CA
	X'4028'	4028 Emulation (4028)
Byte 3		Model
	X'01'	Aficio MP C3001/C4501 C9130/C9145 MP C3001/C4501 LD630C/LD645C
	X'02'	Aficio MP C3501/C5501 C9135/C9155 MP C3501/C5501 LD635C/LD655C
	X'03'	Aficio MP C4501A C9145A MP C4501A LD645CA
	X'04'	Aficio MP C5501A C9155A MP C5501A LD655CA
	X'00'	4028 Emulation (Simplex)
	X'12'	4028 Emulation (Duplex)
Bytes 4-5	X'0000'	Reserved

Note

❒ To ascertain which machine type your model corresponds to, see "Machine Types", About This Machine or Safety Information.

❖ Device-Control Command Set

Special Data Area	Value	Description
Bytes 0-1	X'nnnn'	VECTOR LENGTH
Bytes 2-3	X'C4C3'	DEVICE CONTROL Command-Set ID
Bytes 4-5	X'FF10'	DC1 Subset ID
Bytes 6-7	X'6001'	MULTIPLE COPY and COPY-SUBGROUP support in LCC
Bytes 8-9	X'6002'	Media-source-selection support in LCC
Bytes 10-11	X'6003'	Media-destination-selection support in LCC
Bytes 12-13	X'6101'	Explicit Page Placement and Orientation Support
Bytes 14-15	X'6201'	LOGICAL PAGE AND OBJECT AREA COLORING support
Bytes 16-17	X'7001'	MANAGE IPDS DIALOG (MID) Command support
Bytes 18-19	X'702E'	ACTIVATE RESOURCE Command support
Bytes 20-21	X'7034'	PRINT FIDELITY Command support
Bytes 22-23	X'8008'	XOA Order MARK FORM
Bytes 24-25	X'800A'	XOA Order ALTERNATE OFFSET STACKER
Bytes 26-27	X'80F2'	XOA Order DISCARD BUFFERED DATA
Bytes 28-29	X'80F4'	XOA Order REQUEST RESOURCE LIST
Bytes 30-31	X'80F6'	XOA Order EXCEPTION HANDLING CONTROL
Bytes 32-33	X'80F8'	XOA Order PRINT QUALITY CONTROL
Bytes 34-35	X'9001'	XOH Order PRINT BUFFERED DATA
Bytes 36-37	X'9003'	XOH Order SPECIFY GROUP OPERATION
Bytes 38-39	X'9004'	XOH Order DEFINE GROUP BOUNDARY
Bytes 40-41	X'9005'	XOH Order ERASE RESIDUAL PRINT DATA
Bytes 42-43	X'9007'	XOH Order ERASE RESIDUAL FONT DATA
Bytes 44-45	X'900D'	XOH Order STACK RECEIVED PAGES
Bytes 46-47	X'9013'	XOH Order EJECT to FRONT FACING
Bytes 48-49	X'9015'	XOH Order SELECT INPUT MEDIA SOURCE
Bytes 50-51	X'9016'	XOH Order SET MEDIA ORIGIN

Special Data Area	Value	Description
Bytes 52-53	X'9017'	XOH Order SET MEDIA SIZE
Bytes 54-55	X'90F3'	XOH Order OBTAIN PRINTER CHARACTERISTICS
Bytes 56-57	X'90F5'	XOH Order PAGE COUNTERS CONTROL
Bytes 58-59	X'F001'	END PERSISTENT NACK Without Leaving IPDS
Bytes 60-61	X'F200'	OBJECT DATE AND TIME STAMP TRIPLETS SUPPORTED
Bytes 62-63	X'F201'	ACTIVATION (AR) FAILED NACK SUPPORTED
Bytes 64-65	X'F202'	Font resolution and metric technology triplets supported
Bytes 66-67	X'F203'	Metric adjustment triplets supported in AR commands
Bytes 68-69	X'F204'	Data-object font support
Bytes 70-71	X'F601'	Position check highlighting support in XOA EHC
Bytes 72-73	X'F602'	Independent exception page print in XOA-EHC **Note** ❒ Independent Exception Page Print is only present in Native mode, not 4028 Emulation mode.
Bytes 74-75	X'F701' or X'F801' or X'F704' or X'F804'	SIMPLEX 1-UP supported in LCC SIMPLEX and DUPLEX 1-UP supported in LCC SIMPLEX 4-UP supported in LCC SIMPLEX and DUPLEX 4-UP supported in LCC
Bytes 76-77	X'FF01'	POSITION EXCEPTION SENSE FORMAT [*1]

[*1] Independent Exception Page Print is only supported in Native mode.

❖ Presentation Text Command Set

Special Data Area	Value	Description
Bytes 0-1	X'000C'	VECTOR LENGTH
Bytes 2-3	X'D7E3'	PRESENTATION TEXT Command Set - TX1 Subset
Bytes 4-5	X'FF20' X'FF30'	PT2 Data PT3 Data
Bytes 6-7	X'1001'	UNORDERED TEXT
Bytes 8-9	X'4022'	COLOR of MEDIUM SUPPORTED LIMITED SIMULATED COLOR SUPPORTED **Note** ❒ See p.26 "Color Simulation" for color simulation details and product support specifics.
Bytes 10-11	X'50FF'	8 TEXT ORIENTATIONS supported

❖ IM Image Command Set

Special Data Area	Value	Description
Bytes 0-1	X'000C'	VECTOR LENGTH
Bytes 2-3	X'C9D4'	IM IMAGE Command Set - IM1 Subset
Bytes 4-5	X'FF10'	IMD1 Data
Bytes 6-7	X'1001'	UNORDERED IMAGE BLOCKS
Bytes 8-9	X'4022'	COLOR of MEDIUM SUPPORTED LIMITED SIMULATED COLOR SUPPORTED **Note** ❒ See p.26 "Color Simulation" for color simulation details and product support specifics.
Bytes 10-11	X'A004'	ALL 4 ORIENTATIONS Supported

❖ IO Image Command Set (IOCA FS10)

Special Data Area	Value	Description
Bytes 0-1	X'001E'	VECTOR LENGTH
Bytes 2-3	X'C9D6'	IO Image Command Set
Bytes 4-5	X'FF10'	IO/1 Level
Bytes 6-7	X'1001'	Unordered Image Blocks
Bytes 8-9	X'1202'	IO Image Objects Downloaded Resources in Home State
Bytes 10-11	X'4022'	COLOR of MEDIUM SUPPORTED LIMITED SIMULATED COLOR SUPPORTED **Note** ❒ See p.26 "Color Simulation" for color simulation details and product support specifics.
Bytes 12-13	X'5001'	MMR Compression algorithm supported
Bytes 14-15	X'5003'	Uncompressed Image supported
Bytes 16-17	X'5006'	RL4 Compression supported
Bytes 18-19	X'5081'	G3 Facsimile Coding Scheme (CCITT G3MR)
Bytes 20-21	X'5082'	G4 Facsimile Coding Scheme (CCITT G4MMR)
Bytes 22-23	X'5101'	Bit ordering supported
Bytes 24-25	X'5505'	Multiple Image Content Supported
Bytes 26-27	X'A004'	All four orientations supported
Bytes 28-29	X'F300'	Replicate and Trim mapping supported

Note

❒ The Replicate and Trim Mapping Control Option is not supported when IPDS Print Mode = STD (Standard 300 dpi).

❖ IO Image Command Set (IOCA FS11)

Special Data Area	Value	Description
Bytes 0-1	X'0028'	VECTOR LENGTH
Bytes 2-3	X'C9D6'	IO Image Command Set
Bytes 4-5	X'FF11'	IO/1 Level
Bytes 6-7	X'1001'	Unordered Image Blocks
Bytes 8-9	X'1202'	IO Image Objects Downloaded Resources in Home State
Bytes 10-11	X'4003'	COLOR of MEDIUM SUPPORTED MULTIPLE-COLOR SUPPORTED
Bytes 12-13	X'4020'	LIMITED SIMULATED COLOR SUPPORTED
Bytes 14-15	X'4022'	COLOR of MEDIUM SUPPORTED LIMITED SIMULATED COLOR SUPPORTED **Note** ❒ See p.26 "Color Simulation" for color simulation details and product support specifics.
Bytes 16-17	X'4401'	Extended IOCA Bi-level Image Color supported
Bytes 18-19	X'5001'	MMR Compression algorithm supported
Bytes 20-21	X'5003'	Uncompressed Image supported
Bytes 22-23	X'5008'	ABIC Compression supported
Bytes 24-25	X'500A'	Concatenated ABIC
Bytes 26-27	X'5082'	G4 Facsimile Coding Scheme (CCITT G4MMR)
Bytes 28-29	X'5083'	ISO/ITU-TSS JPEG supported
Bytes 30-31	X'5101'	Bit ordering supported
Bytes 32-33	X'5204'	Unpadded RIDIC Recording Algorithm supported
Bytes 34-35	X'5505'	Multiple Image Content supported
Bytes 36-37	X'A004'	All four orientations supported
Bytes 38-39	X'F301'	Scale-to-fill mapping supported

❖ IO Image Command Set (IOCA FS40)

Special Data Area	Value	Description
Bytes 0-1	X'0028'	VECTOR LENGTH
Bytes 2-3	X'C9D6'	IO Image Command Set
Bytes 4-5	X'FF40'	IO/1 Level
Bytes 6-7	X'1001'	Unordered Image Blocks
Bytes 8-9	X'1202'	IO Image Objects Downloaded Resources in Home State
Bytes 10-11	X'4003'	COLOR of MEDIUM SUPPORTED MULTIPLE-COLOR SUPPORTED
Bytes 12-13	X'4020'	LIMITED SIMULATED COLOR SUPPORTED
Bytes 14-15	X'4022'	COLOR of MEDIUM SUPPORTED LIMITED SIMULATED COLOR SUPPORTED **Note** ❒ p.26 "Color Simulation" for color simulation details and product support specifics.
Bytes 16-17	X'4401'	Extended IOCA Bi-level Image Color supported
Bytes 18-19	X'5001'	MMR Compression algorithm supported
Bytes 20-21	X'5003'	Uncompressed Image supported
Bytes 22-23	X'5008'	ABIC Compression supported
Bytes 24-25	X'5080'	G3 Facsimile Coding Scheme (CCITT G3MH)
Bytes 26-27	X'5081'	G3 Facsimile Coding Scheme (CCITT G3MR)
Bytes 28-29	X'5082'	G4 Facsimile Coding Scheme (CCITT G4MMR)
Bytes 30-31	X'5101'	Bit ordering supported
Bytes 32-33	X'5204'	Unpadded RIDIC Recording Algorithm supported
Bytes 34-35	X'5505'	Multiple image Content supported
Bytes 36-37	X'A004'	All four orientations supported
Bytes 38-39	X'F301'	Scale-to-fill mapping supported

❖ IO Image Command Set (IOCS FS42)

Special Data Area	Value	Description
Bytes 0-1	X'0024'	VECTOR LENGTH
Bytes 2-3	X'C9D6'	IO Image Command Set
Bytes 4-5	X'FF42'	IO/1 Level
Bytes 6-7	X'1001'	Unordered Image Blocks
Bytes 8-9	X'1202'	IO Image Objects Downloaded Resources in Home State
Bytes 10-11	X'4003'	COLOR of MEDIUM SUPPORTED MULTIPLE-COLOR SUPPORTED
Bytes 12-13	X'4020'	LIMITED SIMULATED COLOR SUPPORTED **Note** ❒ See p.26 "Color Simulation" for color simulation details and product support specifics.
Bytes 14-15	X'4401'	Extended IOCA Bi-level Image Color SDF supported
Bytes 16-17	X'5001'	MMR Compression algorithm supported
Bytes 18-19	X'5003'	Uncompressed Image supported
Bytes 20-21	X'5008'	ABIC Compression supported
Bytes 22-23	X'5020'	Solid Fill Rectangle
Bytes 24-25	X'5082'	G4 Facsimile Coding Scheme (CCITT G4MMR)
Bytes 26-27	X'5101'	Bit ordering supported
Bytes 28-29	X'5204'	Unpadded RIDIC Recording Algorithm supported
Bytes 30-31	X'5505'	Multiple image content supported
Bytes 32-33	X'A004'	All four orientations supported
Bytes 34-35	X'F301'	Scale-to-fill mapping supported

❖ IO Image Command Set (IOCA FS45)

Special Data Area	Value	Description
Bytes 0-1	X'001C'	VECTOR LENGTH
Bytes 2-3	X'C9D6'	IO Image Command Set
Bytes 4-5	X'FF45'	IO/1 Level
Bytes 6-7	X'1001'	Unordered Image Blocks
Bytes 8-9	X'1202'	IO Image Objects Downloaded Resources in Home State
Bytes 10-11	X'4003'	COLOR of MEDIUM SUPPORTED MULTIPLE-COLOR SUPPORTED
Bytes 12-13	X'4020'	LIMITED SIMULATED COLOR SUPPORTED
Bytes 14-15	X'4022'	COLOR of MEDIUM SUPPORTED LIMITED SIMULATED COLOR SUPPORTED **Note** ❒ p.26 "Color Simulation" for color simulation details and product support specifics.
Bytes 16-17	X'4401'	Extended IOCA Bi-level Image Color supported
Bytes 18-19	X'5020'	Solid Fill Rectangle supported
Bytes 20-21	X'5101'	Bit ordering supported
Bytes 22-23	X'5505'	Multiple image Content supported
Bytes 24-25	X'A004'	All four orientations supported
Bytes 26-27	X'F301'	Scale-to-fill mapping supported

❖ Graphics Command Set

Special Data Area	Value	Description
Bytes 0-1	X'0012'	VECTOR LENGTH
Bytes 2-3	X'E5C7'	GRAPHICS Command Set - GR1 Subset
Bytes 4-5	X'FF20'	DR/2V0 Data
Bytes 6-7	X'1001'	UNORDERED GRAPHICS BLOCKS
Bytes 8-9	X'4022'	COLOR of MEDIUM SUPPORTED LIMITED SIMULATED COLOR SUPPORTED **Note** ❒ See p.26 "Color Simulation" for color simulation details and product support specifics.
Bytes 10-11	X'4100'	Set Process Color Supported
Bytes 12-13	X'4101'	GOCA Box Drawing Supported
Bytes 14-15	X'4102'	Partial Arc Drawing Supported
Bytes 16-17	X'4106'	Set Fractional Line Width Supported
Bytes 18-19	X'A004'	All 4 orientations supported

❖ Page Segment Command Set

Special Data Area	Value	Description
Bytes 0-1	X'0008'	VECTOR LENGTH
Bytes 2-3	X'D7E2'	PAGE SEGMENT Command Set
Bytes 4-5	X'FF10'	PS1 Subset
Bytes 6-7	X'1101'	EXTENDED PAGE SEGMENT SUPPORT (32K)

❖ Overlay Command Set

Special Data Area	Value	Description
Bytes 0-1	X'000A'	VECTOR LENGTH
Bytes 2-3	X'D6D3'	OVERLAY Command Set
Bytes 4-5	X'FF10'	OL1 Subset
Bytes 6-7	X'1102'	EXTENDED OVERLAY SUPPORT (32K)
Bytes 8-9	X'1506'	OVERLAY NESTING = 6 Levels

❖ Loaded Font Command Set (LF1) - Single Byte

Special Data Area	Value	Description
Bytes 0-1	X'0010'	VECTOR LENGTH
Bytes 2-3	X'C3C6'	LOADED FONT Command Set
Bytes 4-5	X'FF10'	LF1 subset - fully described font + font index
Bytes 6-7	X'A004'	4 CHARACTER ROTATIONS (LFI command)
Bytes 8-9	X'B002'	LFI UNDERSCORE Width and Position USED
Bytes 10-11	X'C005'	BOUNDED BOX RASTER FONT TECHNOLOGY
Bytes 12-13	X'C100'	FIXED METRICS
Bytes 14-15	X'C101'	RELATIVE METRICS

❖ Loaded Font Command Set (LF1) - Double Byte

Special Data Area	Value	Description
Bytes 0-1	X'0012'	VECTOR LENGTH
Bytes 2-3	X'C3C6'	LOADED FONT Command Set
Bytes 4-5	X'FF10'	LF1 subset - fully described font + font index
Bytes 6-7	X'A004'	4 CHARACTER ROTATIONS (LFI command)
Bytes 8-9	X'B001'	Double-Byte coded fonts supported
Bytes 10-11	X'B002'	LFI UNDERSCORE Width and Position USED
Bytes 12-13	X'C005'	BOUNDED BOX RASTER FONT TECHNOLOGY
Bytes 14-15	X'C100'	FIXED METRICS
Bytes 16-17	X'C101'	RELATIVE METRICS

❖ Loaded Font Command Set (LF3) - Single Byte

Special Data Area	Value	Description
Bytes 0-1	X'0012'	VECTOR LENGTH
Bytes 2-3	X'C3C6'	LOADED FONT Command Set
Bytes 4-5	X'FF30'	LF3 subset - code page + font character set
Bytes 6-7	X'A004'	4 CHARACTER ROTATIONS (LFI command)
Bytes 8-9	X'B002'	LFI UNDERSCORE Width and Position USED
Bytes 10-11	X'B003'	GRID PARTS REQUIRED IN LFC, LFCSC and LCPC COMMANDS
Bytes 12-13	X'B004'	Default Character Parameters in LCPC Supported
Bytes 14-15	X'C01F'	ADOBE TYPE-1 PFB OUTLINE FONT TECHNOLOGY
Bytes 16-17	X'C101'	RELATIVE METRICS

❖ Loaded Font Command Set (LF3) - Double Byte

Special Data Area	Value	Description
Bytes 0-1	X'0016'	VECTOR LENGTH
Bytes 2-3	X'C3C6'	LOADED FONT Command Set
Bytes 4-5	X'FF30'	LF3 subset - code page + font character set
Bytes 6-7	X'A004'	4 CHARACTER ROTATIONS (LFI command)
Bytes 8-9	X'B001'	Double-Byte coded fonts supported
Bytes 10-11	X'B002'	LFI UNDERSCORE Width and Position USED
Bytes 12-13	X'B003'	GRID PARTS REQUIRED IN LFC, LFCSC and LCPC COMMANDS
Bytes 14-15	X'B004'	Default Character Parameters in LCPC Supported
Bytes 16-17	X'C01E'	CID-keyed OUTLINE FONT TECHNOLOGY
Bytes 18-19	X'C01F'	ADOBE TYPE-1 PFB OUTLINE FONT TECHNOLOGY
Bytes 20-21	X'C101'	RELATIVE METRICS

❖ Bar Code Command Set

Special Data Area	Value	Description
Bytes 0-1	X'000C'	VECTOR LENGTH
Bytes 2-3	X'C2C3'	BAR CODE Command Set - BC1 Subset
Bytes 4-5	X'FF10'	BCD1 Data
Bytes 6-7	X'1001'	UNORDERED BAR CODE BLOCKS
Bytes 8-9	X'4022'	COLOR of MEDIUM SUPPORTED LIMITED SIMULATED COLOR SUPPORTED **Note** ❒ See p.26 "Color Simulation" for color simulation details and product support specifics.
Bytes 10-11	X'A004'	All four orientations supported

Note

❒ See p.197 "Bar Code Type and Modifier Description and Values" for a list of supported Bar Code Types.

❖ Object Container Command Set

Special Data Area	Value	Description
Bytes 0-1	X'000A'	VECTOR LENGTH
Bytes 2-3	X'D6C3'	Object Container Command set - OC1 Subset
Bytes 4-5	X'0000'	No levels defined
Bytes 6-7	X'1201'	Data-object resource support
Bytes 8-9	X'F301'	Scale-to-fill mapping supported

Execute Order Any State (XOA)

This command identifies a set of subcommands which take effect immediately, regardless of the current printer operating state.

Each Execute Order Any state command consists of a two-byte order code followed by zero or more bytes of parameters.

XOA Mark Form

The MF order causes the printer to place two rectangular blocks of job separation marks on the current or the next sheet. One block is printed on the leading edge of the sheet and one block is printed on the trailing edge of the sheet.

If the MF order is included in a page that is part of a Load Copy Control copy group (See p.53 "Load Copy Control") all the copies of the page will have a job separator mark included.

Data Area	Value	Description	Error Code
Bytes 0-1	X'0800'	MARK FORM	

XOA Exception Handling Control

The Exception-Handling Control command allows the host to control how the printer reports and processes exceptions. A data-stream exception exists when the printer detects an invalid or unsupported command, control, or parameter value.

Data Area	Value	Description	Error Code
Bytes 0-1	X'F600'	EXCEPTION HANDLING CONTROL (EHC)	
Byte 2		EXCEPTION REPORTING	
	Bit 0: 0	Do not Report Undefined Character Check	
	Bit 0: 1	Report Undefined Character Check	
	Bit 1: 0	Do not Report Page Position Check	
	Bit 1: 1	Report Page Position Check	
	Bits 2-5: 00	Reserved	
	Bit 6: 0	Do not Highlight Position Checks	
	Bit 6: 1	Highlight Position Checks (08C1..00 and 0411..00)	
	Bit 7: 0	Do not Report All other Exceptions with AEA's	
	Bit 7: 1	Report All other Exceptions with AEA's	

Data Area	Value	Description	Error Code
Byte 3		ALTERNATE EXCEPTION ACTIONS	
	Bits 0-6: 0	Reserved	
	Bit 7: 0	Take AEA (if defined)	
	Bit 7: 1	Don't take AEA	
Byte 4		EXCEPTION PRESENTATION PROCESSING	
	Bits 0-5: 0	Reserved	
	Bit 6: 0	No Page Continuation	
	Bit 6: 1	Page Continuation Action (Independent Exception Page Print Supported)	
		Discard Page	
	Bit 7: 0	Print to point of Exception	
	Bit 7: 1	(Process limits may apply)	
		Note ❒ Independent Exception Page Print is only present in Native mode, not 4028 Emulation mode.	

XOA Request Resource List

This order causes the Resource List (See "Resource List Reply") to be placed in the Special Data Area of the Acknowledge Reply (See p.38 "Acknowledgement Reply") requested with this order. If the ARQ flag was not set for this XOA subcommand, it is treated as a NOP.

A Resource List Reply may consist of multiple entries. If the Resource List Reply contains an entry that does not fit in the space available in the Special Data Area of Acknowledge Reply, the printer will follow either the acknowledge continuation method or the RRL-continuation method, depending on the host, as described in Intelligent Printer Data Stream Reference.

Data Area	Value	Description	Error Code
Bytes 0-1	X'F400'	REQUEST RESOURCE LIST (RRL)	
Byte 2		QUERY TYPE	X'0291..02'
	X'05'	Resource Activation Status	
	X'00' or X'FF'	General Resource Status	
Bytes 3-4	X'0000'-X'FFFF'	ENTRY CONTINUATION Indicator	
Byte 5	X'03'-X'xx'	ENTRY LENGTH **Note** ❒ Multiple-entry queries are not supported. Byte 5 indicates the length of the command.	X'0291..02'

Data Area	Value	Description	Error Code
Byte 6		RESOURCE TYPE	X'0291..02'
	X'01'	Single Byte Coded Fonts	
	X'02'	Double-byte LF1–type Coded Fonts	
	X'03'	Double-byte LF1–type Coded Font Sections	
	X'04'	Page Segments	
	X'05'	Overlays	
	X'06'	Device Version Code Pages	
	X'07'	Font Character Sets	
	X'08'	Single-byte coded-font indexes	
	X'09'	Double-byte LF1–type Coded Font Section Indexes	
	X'10'	Coded Fonts (treated as RT 01)	
	X'11'	Graphic Character Sets supported in a font character set	
	X'12'	Specific Code Pages	
	X'41'	Data-object font	
	X'42'	Data-object font component	
	X'FF'	All Resources	
Byte 7		RESOURCE ID FORMAT	X'0291..02'
	X'00'	Host-Assigned Resource ID	
	X'03'	IBM Registered Global Resource ID parts	
	X'09'	Object-OID	
Bytes 8-n		RESOURCE IDENTIFIER	

- Multiple-entry queries are not supported. Byte 5 indicates the length of the command.
- If the entire resource list does not fit in the Special Data area of the Acknowledge Reply, continuation is necessary. The printer indicates continuation using the acknowledgement continuation bit in the flag byte of the Acknowledge Reply. If the host requests Acknowledgement continuation by sending a command with ARQ bit and the Continuation bit set, the printer will complete the RRL reply using Acknowledgement continuation. If the host requests RRL continuation (by sending an RRL command with non-zero value in bytes 3 and 4) the printer will use conventional RRL continuation to finish the reply. If the host requests both RRL and ACK continuation, the printer will default to RRL continuation.
- Bytes 8 and 9 are ignored when the resource type is ALL.

- Exception ID 0291..02 in bytes 6 and 7 are for invalid values. If either value is unsupported, then the query is not understood and the reply is a single entry that sets the resource type to zero, echoes other values, and sets the resource size to zero (not present).

❖ Resource List Reply

Data Area	Value	Description	Error Code
Byte 0	X'FF	UNORDERED LIST	
Byte 1	X'01'	END of LIST	
	X'04' - X'nn'	LENGTH of this ENTRY	
Byte 2		RESOURCE TYPE	
	X'00'	Resource Size=0. The queried Resource Type,ID Format, or ID is unknown, unsupported, or inconsistent	
	X'01'	Single Byte Coded Font	
	X'02'	Double Byte Coded Fonts	
	X'03'	Double Byte Coded-font Sections	
	X'04'	Page Segment	
	X'05'	Overlay	
	X'06'	Device Version Code Pages	
	X'07'	Font Character Sets	
	X'08'	Single Byte Coded Font Index	
	X'09'	Double Byte Coded-font Section Indexes	
	X'11'	Graphic Character Sets supported in a font character set	
	X'12'	Specific Code Pages	
	X'41'	Data-object font	
	X'42'	Data-object font component	
	X'FF'	All Resources	
Byte 3		RESOURCE ID FORMAT	
	X'00'	Host-Assigned Resource ID	
	X'03'	IBM Registered Global Resource ID parts	
Byte 4		RESOURCE SIZE Indicator	
	X'00'	Resource not present	
	X'01'	Resource present	
Bytes 5-6	X'xxxx'	Resource ID	

- Bytes 2-6 repeat for each resource type.
- A query for a HARID that maps to a GCSGID/CPGID/FGID/FW combination which is not supported in the current configuration will result in a negative response (Reply Byte 4 = 0).
- See p.251 “Code Page and Font Identification” for a description of the supported GCSGID/CPGID/FGID/FW combinations.

XOA Alternate Offset Stacker (AOS)

The AOS order command signals the printer to jog the current sheet. If copies of the current sheet are stacked in more than one media destination, the jogging will occur in each selected media destination, if the media destination supports offset stacking.

Data Area	Value	Description	Error Code
Bytes 0-1	X’0A00’	Alternate Offset Stacker	

❖ Media Jogging Support Matrices

A = Internal shift tray
B = Finisher SR790: Finisher shift tray
C = Booklet Finisher SR3020: Finisher shift tray
D = Finisher SR3030: Finisher shift tray
E = Finisher SR3050: Finisher shift tray
F = Finisher SR3000: Finisher shift tray

Y = Yes / N = No

	A	B	C	D	E	F
A3(297×420mm) SEF	Y	Y	Y	Y	Y	Y
A4(210×297mm) SEF/LEF	Y	Y	Y	Y	Y	Y
A5(210×148mm) SEF/LEF	Y	Y	Y	Y	N	Y
A6(105×148mm) SEF	Y	N	N	N	N	N
B4(257×364mm) SEF	Y	Y	Y	Y	Y	Y
B5(182×257mm) SEF/LEF	Y	Y	Y	Y	Y	Y

	A	B	C	D	E	F
B6 (128×182mm) SEF	Y	N	N	N	N	N
DLT (11×17in.) SEF	Y	Y	Y	Y	Y	Y
Legal (8.5×14in.) SEF	Y	Y	Y	Y	Y	Y
Foolscap (8.5×13in.) SEF	Y	Y	Y	Y	Y	Y
Letter (8.5×11in.) SEF/LEF	Y	Y	Y	Y	Y	Y
Govern-mentLG (8.25×14in.) SEF	Y	Y	Y	Y	Y	Y
Folio (8.25×13in.) SEF	Y	Y	Y	Y	Y	Y
F/GL (8×13in.) SEF	Y	Y	Y	Y	Y	Y
Eng Quatro (8×10in.) SEF	Y	Y	Y	Y	Y	Y
Exective (7.25×10.5in.) SEF/LEF	Y	Y	Y	Y	Y	Y
HalfLetter (5.5×8.5in.) SEF	Y	Y	N	N	N	Y
Com10 (4.125×9.5in.) SEF	Y	N	N	N	N	N
Com10 (4.125×9.5in.) LEF	Y	N	N	N	N	N
Monarch (3.875×7.5in.) SEF	Y	N	N	N	N	N

	A	B	C	D	E	F
Monarch (3.875×7.5in.) LEF	Y	N	N	N	N	N
C5 (162×229mm) SEF	Y	N	N	N	N	N
C5 (162×229mm) LEF	Y	N	N	N	N	N
C6 (114×162mm) SEF	Y	N	N	N	N	N
C6 (114×162mm) LEF	Y	N	N	N	N	N
DL Env (110×220mm) SEF	Y	N	N	N	N	N
DL Env (110×220mm) LEF	Y	N	N	N	N	N
8kai (267×390mm) SEF	Y	Y	Y	Y	Y	Y
16kai (195×267mm) SEF/LEF	Y	Y	Y	Y	Y	Y
12×18in. SEF	Y	Y	Y	Y	N	Y
11×15in. SEF	Y	Y	Y	Y	Y	Y
10×14in. SEF	Y	Y	Y	Y	Y	Y
Custom Sizes	90.0×1148.0mm to 305.0×600.0mm		148.0×148.0mm to 305.0×600.0mm	148.0×148.0mm to 305.0×600.0mm	182.0×148.0mm to 297.0×460.0mm	148.0×148.0mm to 305.0×460.0mm

Execute Order Home State (XOH)

Each Execute Order Homestate command consists of a two-byte order code followed by zero or more bytes of parameters.

XOH Obtain Printer Characteristics

This order causes a set of self-defined fields describing printer characteristics to be placed in the Special Data Area of the requested Acknowledge Reply and is identified with an acknowledgement type of X'46'. If the ARQ flag was not set on the XOH command containing this order, then this order is equivalent to a No Operation.

Data Area	Value	Description	Error Code
Bytes 0-1	X'F300'	OPC Order Code	

Printable Area Self-Defining Field

- The printer provides two modes that determine the specification of the Xm Offset, Ym Offset, Xm Extent and Ym Extent of the Printable Area.
  - Restricted (No Print Border) (Guaranteed Print Legibility) (Default)
  - Unrestricted (Edge-to-Edge Addressability)
- The Xm Extent and Ym Extent of the Printable Area parameters documented in the following table are representative of the standard printer source media configuration. These extents can be modified as a result of receiving a XOH-SMO command, as described in p.126 "XOH Set Media Origin".
- Actual tray capacities are determined media weight. The capacities in the following table are the maximum allowable.
- The machine supports media source tray numbering. Media source values in the printer's control panel OPC support tables represent the default settings when the printer is initially installed. An the menu mode is provided to allow customers to specify the source tray numbers to meet requirements of legacy applications. Example: customer might want to address the Manual Tray as tray 4 instead of the tray 100 (default).

Note

❒ For the tray in which "envelope" has been specified as the paper type, the tray values of the tray ID are (in ascending for each respective tray that is installed) as follows: X'8040', X'8041', etc. If a different paper type is specified for the tray, the tray values of the tray ID are (in ascending for each respective tray that is installed) as follows: X'8000', X'8001', etc. In regards to the bypass tray and default tray, even if you specify "envelope" as the paper type, the tray value will not be changed.

❒ To ascertain which machine type your model corresponds to, see "Machine Types", About This Machine or Safety Information.

Special Data Area	Value	Description
Bytes 0-1		LENGTH of this Self-Defining Field
	X′0018′ or	Machine with NO Media OID
	X′0024′ or	Machine with Single Media OID
	X′0025′ or	Machine with Double Media OID
	X′0026′ or	Machine with Triple Media OID
	X′0027′ or	Machine with Quadruple Media OID
	X′nnnn′	Machine with Media Name
Bytes 2-3	X′0001′	PRINTABLE AREA Self-Defining Field ID
Byte 4		INPUT MEDIA SOURCE (See Notes)
	X′00′	Tray 1
	X′01′	Tray 2
		Tray 3* (Machine type: Type 1 or Type 2)
	X'02'	Tray 1 + Tray 2 + Tray 3 + Bypass tray
	X'01'	Tray 1 + Small size paper tray 2 + Tray 3 + Bypass tray
	X'02'	Tray 1 + Tray 2 + Tray 3 +Tray 4+ Bypass tray
	X'01'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + Bypass tray
	X'02'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + Bypass tray
	X'01'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + Bypass tray
	X'02'	Tray 1 + Tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray
	X'01'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray
	X'02'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray
	X'01'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray
		Tray 3* (Machine type: Type 3 or Type 4)
	X'02'	Tray 1 +Tray 2 + Tray 3 + Tray 4 + Bypass tray
	X'01'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + Bypass tray
	X'02'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + Bypass tray

Special Data Area	Value	Description
Byte 4	X'01'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + Bypass tray
	X'02'	Tray 1 + Tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray
	X'01'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray
	X'02'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray
	X'01'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray
		Tray 3 (LCT)*
	X'02'	Tray 1 + Tray 2 + Tray3 (LCT) + Bypass tray
	X'01'	Tray 1 + Small size paper tray 2 + Tray3 (LCT) + Bypass tray
	X'02'	Tray 1 + Tray 2 + Tray3 (LCT) + LCT + Bypass tray
	X'01'	Tray 1 + Small size paper tray 2 + Tray3 (LCT) + LCT + Bypass tray
		Tray 4*
	X'03'	Tray 1 + Tray 2 + Tray 3 + Tray 4 + Bypass tray
	X'02'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + Bypass tray
	X'02'	Tray 1 + Tray 2 + Small size paper tray 3 + Tray 4 + Bypass tray
	X'01'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + Bypass tray
	X'03'	Tray 1 + Tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray
	X'02'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray
	X'02'	Tray 1 + Tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray
	X'01'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray
	X'40'	Small size paper tray 2
		Small size paper tray 3*(Machine type: Type 1 or Type 2)
	X'40'	Tray 1 + Tray 2 + Small size paper tray 3 + Bypass tray

Special Data Area	Value	Description
Byte 4	X'41'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Bypass tray
	X'40'	Tray 1 + Tray 2 + Small size paper tray 3 +Tray 4 + Bypass tray
	X'41'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + Bypass tray
	X'40'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + Bypass tray
	X'41'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + Bypass tray
	X'40'	Tray 1 + Tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray
	X'41'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray
	X'40'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray
	X'41'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray
		Small size paper tray 3*(Machine type: Type 3 or Type 4)
	X'40'	Tray 1 + Tray 2 + Small size paper tray 3 + Tray 4 + Bypass tray
	X'41'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + Bypass tray
	X'40'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + Bypass tray
	X'41'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + Bypass tray
	X'40'	Tray 1 + Tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray
	X'41'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray
	X'40'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray
	X'41'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray

Special Data Area	Value	Description
Byte 4		Small size paper tray 4*
	X'40'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + Bypass tray
	X'41'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + Bypass tray
	X'41'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + Bypass tray
	X'42'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + Bypass tray
	X'40'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray
	X'41'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray
	X'41'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray
	X'42'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray
		LCT*
	X'03'	Tray 1 + Tray 2 + Tray3 (LCT) + LCT + Bypass tray
	X'02'	Tray 1 + Small size paper tray 2 + Tray3 (LCT) + LCT + Bypass tray
	X'04'	Tray 1 + Tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray
	X'03'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray
	X'03'	Tray 1 + Tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray
	X'03'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray
	X'02'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray
	X'02'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray
	X'02'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray

Special Data Area	Value	Description
Byte 4	X'01'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray
	X’63’	Bypass tray
	X’FF’	Default Tray
Byte 5	X’00’	Reserved
Byte 6	X’00’	UNIT BASE 10 in.
Byte 7	X’00’	Reserved
Bytes 8-9	X’3840’	L-units per UNIT BASE
Bytes 10-11	X’0001’ - X’xxxx’	WIDTH of the Medium Presentation Space in L-units (determined by configuration)
Bytes 12-13	X’0001’ - X’xxxx’	LENGTH of the Medium Presentation Space in L-units (determined by configuration)
Bytes 14-15		Xm OFFSET of the Printable Area in L-Units
	X’00E3’	Restricted (4mm)
	X’0000’	Unrestricted (0mm)
Bytes 16-17		Ym OFFSET of the Printable Area in L-units
	X’00E3’	Restricted (4mm)
	X’0000’	Unrestricted (0mm)
		Note ❒ For A4 media there is special processing with respect to reporting the Xm OFFSET and subsequentially the Xm EXTENT of the printable area. The 4028 printer used an offset of 3.386 mm for A4 paper (short edge) instead of 4 mm. This was done as a customer satisfaction issue to allow a printable area 8 in. wide.

Special Data Area	Value	Description
Bytes 18-19 (Restricted: No Print Border)		Xm EXTENT of the Printable Area in L-units
		Paper
	X′1D2A′	Statement (5.185 in.)
	X′2702′	Executive (6.935 in.)
	X′2B3A′	8in. × 10in. (7.685 in.)
	X′2E0A′	Letter (8.185 in.)
	X′30DA′	Letter Tabstock (8.685 in.)
	X′2B3A′	8in. × 13in. (7.685 in.)
	X′2CA2′	8.25in. × 13in. (7.935 in.)
	X′2E0A′	8.5 × 13 in. (8.185 in.)
	X′2E0A′	Legal (8.185 in.)
	X′367A′	10in. × 14in. (9.685 in.)
	X′367A′	10in. × 15in. (9.685 in.)
	X′3C1A′	11in. × 14in. (10.685 in.)
	X′3C1A′	11in. × 15in. (10.685 in.)
	X′3C1A′	Ledger (10.685 in.)
	X′41BA′	12in. × 18in. (11.685 in.)
	X′157B′	A6 (97 mm)
	X′1A93′	B6 (120 mm)
	X′1F1D′	A5 (140.5 mm)
	X′23E0′	170 × 210mm (162 mm)
	X′2689′	182 × 210mm (174 mm)
	X′2CBC′	210 × 340mm (202 mm)
	X′2688′	B5 (JIS) (174 mm)
	X′2CBC′	A4 (202 mm)
	X′2F86′	A4 Tabstock (214.6 mm)
	X′3724′	B4 (ISO) (249 mm)
	X′395C′	8 Kai (259 mm)
	X′296A′	16 Kai (187 mm)
	X′4000′	A3 (289 mm)
	X′145F′ - X′474F′	Custom (92 mm to 322 mm)
		Transparencies/Labels
	X′2E0A′	Letter (8.185 in.)
	X′2CBC′	A4 (202 mm)

Special Data Area	Value	Description
Bytes 18-19 (Unrestricted: Edge-to-Edge Addressability)		Xm EXTENT of the Printable Area in L-units
		Paper
	X'1EF0'	Statement (5.5 in.)
	X'28C8'	Executive (7.25 in.)
	X'2D00'	8in. × 10in. (8 in.)
	X'2FD0'	Letter (8.5 in.)
	X'32A0'	Letter Tabstock (9 in.)
	X'2D00'	8in. × 13in. (8 in.)
	X'2E68'	8.25in. × 13in. (8.25 in.)
	X'2FD0'	8.5in. × 13in. (8.5 in.)
	X'2FD0'	Legal (8.5 in.)
	X'3840'	10in. × 14in. (10 in.)
	X'3840'	10in. × 15in. (10 in.)
	X'3DE0'	11in. × 14in. (11 in.)
	X'3DE0'	11in. × 15in. (11 in.)
	X'3DE0'	Ledger (11 in.)
	X'4380'	12in. × 18in. (12 in.)
	X'1741'	A6 (105 mm)
	X'1C59'	B6 (128 mm)
	X'20E3'	A5 (148.5 mm)
	X'25A6'	170 × 210mm (170 mm)
	X'284E'	182 × 210mm (182 mm)
	X'2E82'	210 × 340mm (210 mm)
	X'284E'	B5 (JIS) (182 mm)
	X'2E82'	A4 (210 mm)
	X'314C'	A4 Tabstock (222.6 mm)
	X'38EA'	B4 (ISO) (257 mm)
	X'3B21'	8 Kai (267 mm)
	X'2B30'	16 Kai (195 mm)
	X'41C6'	A3 (297 mm)
	X'1625' - X'4914'	Custom (100 mm to 330 mm)
		Transparencies/Labels
	X'2FD0'	Letter (8.5 in.)
	X'2E82'	A4 (210 mm)

Special Data Area	Value	Description
Bytes 20-21 (Restricted: No Print Border)		Ym EXTENT of the Printable Area in L-units
		Paper
	X'2E0A'	Statement (8.185 in.)
	X'394A'	Executive (10.185 in.)
	X'367A'	8in. × 10in. (9.685 in.)
	X'394A'	8in. × 10.5in. (10.185 in.)
	X'3C1A'	Letter (10.685 in.)
	X'3C1A'	Letter Tabstock (10.685 in.)
	X'475A'	8in. × 13in. (12.685 in.)
	X'475A'	8.25in. × 13in. (12.685 in.)
	X'475A'	8.5in. × 13in. (12.685 in.)
	X'4CFA'	Legal (13.685 in.)
	X'4CFA'	10in. × 14in. (13.685 in.)
	X'529A'	10in. × 15in. (14.685 in.)
	X'4CFA'	11in. × 14in. (13.685 in.)
	X'529A'	11in. × 15in. (14.685 in.)
	X'5DDA'	Ledger (16.685 in.)
	X'637A'	12in. × 18in. (17.685 in.)
	X'1F1D'	A6 (140.5 mm)
	X'2689'	B6 (174 mm)
	X'2CBC'	A5 (202 mm)
	X'2CBC'	170 × 210mm (202 mm)
	X'2CBC'	182 × 210mm (202 mm)
	X'4986'	210 × 340mm (332 mm)
	X'3724'	B5 (JIS) (249 mm)
	X'4000'	A4 (289 mm)
	X'4000'	A4 Tabstock (289 mm)
	X'4ED6'	B4 (ISO) (356 mm)
	X'5499'	8 Kai (382 mm)
	X'395C'	16 Kai (259 mm)
	X'5B3D'	A3 (412 mm)
	X'1D02 - 63A8'	Custom (131 mm to 450 mm)
		Transparencies/Labels
	X'3C1A'	Letter (10.685 in.)
	X'4000'	A4 (289 mm)

Special Data Area	Value	Description
Bytes 20-21(Unrestricted: Edge-to-Edge Addressability)		Ym EXTENT of the Printable Area in L-units
		Paper
	X'2FD0'	Statement (8.5 in.)
	X'3B10'	Executive (10.5 in.)
	X'3840'	8in. × 10in. (10 in.)
	X'3DE0'	Letter (11 in.)
	X'3DE0'	Letter Tabstock (11 in.)
	X'4920'	8in. × 13in. (13 in.)
	X'4920'	8.25in. × 13in. (13 in.)
	X'4920'	8.5in. × 13in. (13 in.)
	X'4EC0'	Legal (14 in.)
	X'4EC0'	10in. × 14in. (14 in.)
	X'5460'	10in. × 15in. (15 in.)
	X'4EC0'	11in. × 14in. (14 in.)
	X'5460'	11in. × 15in. (15 in.)
	X'5FA0'	Ledger (17 in.)
	X'20C7'	12in. × 18in. (18 in.)
	X'20E3'	A6 (148.5 mm)
	X'284E'	B6 (182 mm)
	X'2E82'	A5 (210 mm)
	X'2E82'	170 × 210mm (210 mm)
	X'2E82'	182 × 210mm (210 mm)
	X'4B4C'	210 × 340mm (340 mm)
	X'38EA'	B5 (JIS) (257 mm)
	X'41C6'	A4 (297 mm)
	X'41C6'	A4 Tabstock (297 mm)
	X'509C'	B4 (ISO) (364 mm)
	X'565F'	8 Kai (390 mm)
	X'3B21'	16 Kai (267 mm)
	X'5D03'	A3 (420 mm)
	X'1EC8 - 656D'	Custom (139 mm to 458 mm)
		Transparencies/Labels
	X'3DE0'	Letter (11 in.)
	X'41C6'	A4 (297 mm)

Special Data Area	Value	Description
Bytes 22-23		INPUT MEDIA SOURCE CHARACTERISTICS
	Bit 0: 0/1	0 = No Duplex; 1 = Duplex
	Bits 1-2: 10	10 = Cut Sheet Media
	Bit 3: 1	0 = Tray Not Available; 1 = Tray Available
	Bit 4: 0	0 = Reserved
	Bit 5: 0/1	0 = No Envelopes; 1 = Auto or Manual Envelope Feature
	Bit 6: 0/1	0 = Auto Media Feed; 1 = Manual Media Feed
	Bit 7: 0	0 = No Computer Output on Microfilm (COM)
	Bit 8: 0	0 = No Carrier Strips (Ignored for Cut Sheet Media)
	Bit 9: 0/1	0 = Not an Inserter Bin; 1 = Inserter Bin
	Bits 10-15:all 0	Reserved
Bytes 24-25		Input Media ID LENGTH (Note 3)
	X'000C' or	Machine with Single OID byte
	X'000D' or	Machine with Double OID byte
	X'000E' or	Machine with Triple OID byte
	X'000F'	Machine with Quadruple OID byte
Byte 26		INPUT MEDIA ID Type
	X'10'	MO:DCA Input Media Type OID
Byte 27	X'06'	OID Encoding
Byte 28		OID LENGTH
	X'07' or	Machine with Single OID byte
	X'08' or	Machine with Double OID bytes
	X'09' or	Machine with Triple OID bytes
	X'0A'	Machine with Quadruple OID bytes
Bytes 29-34	X'2B1200040301'	Input Media ID (Common Part)
Bytes 35-36		Input Media ID (Media Specific Part)
		Paper
	X'45'	Statement (69)
	X'41'	Executive (65)
	X'8120'	8in. × 10in. (160)
	X'32'	Letter (50)

Special Data Area	Value	Description
Bytes 35-36	X'33'	Letter Colored (51)
	X'34'	Letter Transparent (52)
	X'8111'	Letter Tabstock (9×11) (145)
	No OID Returned	8in. × 13in.
	No OID Returned	8.25in. × 13in.
	X'3F'	8.5in. × 13in. (63)
	X'3C'	Legal (60)
	X'3D'	Legal Colored (61)
	No OID Returned	10in. × 14in.
	No OID Returned	10in. × 15in.
	No OID Returned	11in. × 14in.
	No OID Returned	11in. × 15in.
	X'43'	Ledger (67)
	X'9B'	12in. × 18in. (155)
	No OID Returned	A6
	No OID Returned	B6
	X'14'	A5 (20)
	X'15'	A5 Colored (21)
	No OID Returned	170 × 210mm
	No OID Returned	182 × 210mm
	No OID Returned	210 × 340mm
	X'2B'	B5 (JIS) (43)
	X'00'	A4 (0)
	X'01'	A4 Colored (1)
	X'02'	A4 Transparent (2)
	X'07'	A4 Tabstock (7)
	X'1E'	B4 (ISO) (30)
	X'1F'	B4 Colored (ISO) (31)
	No OID Returned	8 Kai
	No OID Returned	16 Kai
	X'0A'	A3 (10)
	X'0B'	A3 Colored (11)
	No OID Returned	Custom
Bytes 37-38	X'0004' - X'0013'	Input Media ID LENGTH (Note 4)

Special Data Area	Value	Description
Byte 39		Input Media ID TYPE
	X'00'	User Defined Name
Bytes 40-end		Input Media ID (Form Name)
	X'4C6574746572'(ie. Letter)	(1 to 16 Byte Form Name)

- In the OPC Acknowledge Reply, the Printable Area SDF repeats for every installed Media Source. Therefore, since printers are capable of supporting multiple installed input trays, multiple Printable Area SDF's may be returned in a single XOH-OPC Acknowledge Reply.
- The Input Media Source Characteristics (Bit 0), of the Printable Area SDF indicates the duplex ability of a given media source. See "Media Source and Destination Support Matrices", for specific details on media duplex ability.
- Input Media ID type X'06' - Media OID is only returned if a particular media has a registered MO:DCA Media Type OID.
- Input Media ID type X'00' - User Defined Name is only returned if the user defines a Form, assigns a Form Name to the Form and associates that Form with a given Input Media Source tray.

Image and Coded Font Resolution Self-Defining Field

Special Data Area	Value	Description
Bytes 0-1	X'000A'	LENGTH of this Self-Defining Field
Bytes 2-3	X'0003'	IMAGE and CODED FONT RESOLUTION Self-Defining Field
Byte 4	X'00'	UNIT BASE 10 inches
Byte 5		FONT RESOLUTIONS
	X'00'	Resolution Acceptance Mode (Only value in bytes 6-9)
	X'FF'	Resolution Independence Mode (Bytes 6-9 specify highest resolution) (240 DPI or 300 DPI or 600 DPI)
Bytes 6-7		X PIXELS per Unit Base
	X'0960'	2400 pixels/10 inches
	X'0BB8'	3000 pixels/10 inches
	X'1770'	6000 pixels/10 inches
Bytes 8-9		Y PIXELS per Unit Base
	X'0960'	2400 pixels/10 inches
	X'0BB8'	3000 pixels/10 inches
	X'1770'	6000 pixels/10 inches

- Value for byte 5 is controlled by the [Resolution] setting in the IPDS menu. Byte 5 will indicate Resolution Acceptance mode X'00' if the IPDS Resolution setting is 240, 300 or 600 DPI. Byte 5 will indicate Resolution Independence mode X'FF' if the IPDS Resolution setting is Auto.
- Values for bytes 6-9 are controlled by the setting of byte 5 (Font Resolutions). If byte 5 indicates Resolution Acceptance mode X'00', bytes 6-9 reflect the [Resolution] setting in the IPDS menu. If byte 5 indicates Resolution Independence mode X'FF', bytes 6-9 reflect the [Print Mode] setting in the IPDS menu. Note that the resolutions specified also apply to GOCA image if the image resolution specified in the GDD command is X'0000', indicating that no explicit GOCA image resolution was specified.
- If the [Print Mode] = STD (Standard 300 DPI), then the [Resolution] setting is ignored. Byte 5 will indicate Resolution Acceptance mode X'00' and bytes 6-9 will reflect the IPDS Print Mode setting (300 DPI).
- For the printer to specify IPDS Resolution support of 240, 600, or AUTO, the IPDS Print Mode must be set to Enhanced (PRINT MODE = ENH on the IPDS Menu). In enhanced print mode, complex (full page) image jobs may not yield optimal print performance due to the increased print fidelity required to accurately render 240 and 600 DPI print objects.

Storage Pools Self-Defining Field - Single Byte

Special Data Area	Value	Description
Bytes 0-1	X'0033'	VECTOR LENGTH
Bytes 2-3	X'0004'	STORAGE POOLS Self-Defining Field
Byte 4	X'2F'	LENGTH of each Storage Pool Self-Defining Field
Byte 5	X'01'	Triplet ID
Byte 6	X'00'	STORAGE POOL ID
Bytes 7-10	X'nnnnnnnn'	Storage pool varies based on installed memory and features
Bytes 11-14	X'00000000'	Reserved
Bytes 15-16	X'0011'	PAGE GRAPHICS Data
Bytes 17-18	X'0012'	PAGE IMAGE Data
Bytes 19-20	X'0013'	PAGE TEXT Data
Bytes 21-22	X'0014'	PAGE BAR CODE Data
Bytes 23-24	X'0021'	OVERLAY GRAPHICS Data
Bytes 25-26	X'0022'	OVERLAY IMAGE Data
Bytes 27-28	X'0023'	OVERLAY TEXT Data
Bytes 29-30	X'0024'	OVERLAY BAR CODE Data
Bytes 31-32	X'0031'	PAGE SEGMENT GRAPHICS Data
Bytes 33-34	X'0032'	PAGE SEGMENT IMAGE Data

Special Data Area	Value	Description
Bytes 35-36	X'0033'	PAGE SEGMENT TEXT Data
Bytes 37-38	X'0034'	PAGE SEGMENT BAR CODE Data
Bytes 39-40	X'0040'	Single-Byte CODED FONT Index Tables
Bytes 41-42	X'0041'	Single-Byte CODED FONT Descriptors
Bytes 43-44	X'0042'	Single-Byte CODED FONT Patterns
Bytes 45-46	X'0050'	CODE PAGES
Bytes 47-48	X'0060'	FONT CHARACTER SETS
Bytes 49-50	X'0070'	CODED FONTS

Storage Pools Self-Defining Field - Double Byte

Special Data Area	Value	Description
Bytes 0-1	X'0039'	VECTOR LENGTH
Bytes 2-3	X'0004'	STORAGE POOLS Self-Defining Field
Byte 4	X'35'	LENGTH of each Storage Pool Self-Defining Field
Byte 5	X'01'	Triplet ID
Byte 6	X'00'	STORAGE POOL ID
Bytes 7-10	X'nnnnnnnn'	Storage pool varies based on installed memory and features
Bytes 11-14	X'00000000'	Reserved
Bytes 15-16	X'0011'	PAGE GRAPHICS Data
Bytes 17-18	X'0012'	PAGE IMAGE Data
Bytes 19-20	X'0013'	PAGE TEXT Data
Bytes 21-22	X'0014'	PAGE BAR CODE Data
Bytes 23-24	X'0021'	OVERLAY GRAPHICS Data
Bytes 25-26	X'0022'	OVERLAY IMAGE Data
Bytes 27-28	X'0023'	OVERLAY TEXT Data
Bytes 29-30	X'0024'	OVERLAY BAR CODE Data
Bytes 31-32	X'0031'	PAGE SEGMENT GRAPHICS Data
Bytes 33-34	X'0032'	PAGE SEGMENT IMAGE Data
Bytes 35-36	X'0033'	PAGE SEGMENT TEXT Data
Bytes 37-38	X'0034'	PAGE SEGMENT BAR CODE Data
Bytes 39-40	X'0040'	Single-Byte CODED FONT Index Tables
Bytes 41-42	X'0041'	Single-Byte CODED FONT Descriptors
Bytes 43-44	X'0042'	Single-Byte CODED FONT Patterns
Bytes 45-46	X'0048'	Double-Byte CODED FONT Index Tables

Special Data Area	Value	Description
Bytes 47-48	X'0049'	Double-Byte CODED FONT Descriptors
Bytes 49-50	X'004A'	Double-Byte CODED FONT Patterns
Bytes 51-52	X'0050'	CODE PAGES
Bytes 53-54	X'0060'	FONT CHARACTER SETS
Bytes 55-56	X'0070'	CODED FONTS

Color Support Self-Defining Field

Special Data Area	Value	Description
Bytes 0-1	X'0006'	LENGTH of this Self-Defining Field
Bytes 2-3	X'0005'	COLOR SUPPORT Self-Defining Field
Bytes 4-5	X'0008'	BLACK

Installed Features Self-Defining Field

Since printers are capable of supporting multiple features, multiple configuration combinations are possible. All installable features are described below.

Special Data Area	Value	Description
Bytes 0-1	X'000A'	LENGTH of this Self Defining Field
Bytes 2-3	X'0006'	INSTALLED FEATURES Self Defining Field
Bytes 4-5	X'0100'	DUPLEX
Bytes 6-7	X'0300'	CUT SHEET Output
Bytes 8-9	X'0600'	OFFSET STACKER
Bytes 10-11	X'0800'	MICR (If MICR Enabled)

Available Features Self-Defining Field

Since printers are capable of supporting multiple features, multiple configuration combinations are possible. All available features are described below.

Special Data Area	Value	Description
Bytes 0-1	X'000A'	LENGTH of this Self Defining Field
Bytes 2-3	X'0007'	AVAILABLE FEATURES Self Defining Field
Bytes 4-5	X'0100'	DUPLEX
Bytes 6-7	X'0300'	CUT SHEET Output
Bytes 8-9	X'0600'	OFFSET STACKER
Bytes 10-11	X'0800'	MICR (If MICR Enabled)

RRL Resource Type and ID Format Self-Defining Field - Single Byte

Special Data Area	Value	Description
Bytes 0-1	X'002C'	VECTOR LENGTH
Bytes 2-3	X'000A'	RRL RESOURCE TYPE Self **Note** ❒ RRL query combinations that receive a non-zero Resource Type reply (See p.90 "XOA Request Resource List")
Bytes 4-5	X'0100'	Single-Byte Coded Fonts as Host Assigned Resource ID
Bytes 6-7	X'0103'	Single-Byte Coded Fonts as IBM Global Resource ID
Bytes 8-9	X'0400'	Page Segments as Host Assigned Resource ID
Bytes 10-11	X'0500'	Overlays as Host Assigned Resource ID
Bytes 12-13	X'0600'	Device Version Code Pages as Host Assigned Resource ID
Bytes 14-15	X'0603'	Device Version Code Pages as IBM Global Resource ID
Bytes 16-17	X'0700'	Font Character Set as Host Assigned Resource ID
Bytes 18-19	X'0703'	Font Character Set as IBM Global Resource ID
Bytes 20-21	X'0800'	Single-Byte Coded Font Index as Host Assigned Resource ID
Bytes 22-23	X'1000'	Coded Fonts as Host Assigned Resource ID
Bytes 24-25	X'1003'	Coded Fonts as IBM Global Resource ID
Bytes 26-27	X'1103'	Graphic Character Sets/Subsets as IBM Global Resource ID
Bytes 28-29	X'1200'	Specific Code Pages as Host Assigned Resource ID
Bytes 30-31	X'1203'	Specific Code Pages as IBM Global Resource ID
Bytes 32-33	X'4000'	Data object resource as Host Assigned Resource ID
Bytes 34-35	X'4009'	Data object resource with Object-OID Format
Bytes 36-37	X'4100'	Data-object Font as Host Assigned Resource ID
Bytes 38-39	X'4200'	Data-object Font Components as Host Assigned Resource ID

Special Data Area	Value	Description
Bytes 40-41	X'4209'	Data-object Font Components with Object-OID Format
Bytes 42-43	X'FF00'	All Resources as Host Assigned Resource ID

RRL Resource Type and ID Format Self-Defining Field - Double Byte

Special Data Area	Value	Description
Bytes 0-1	X'0034'	VECTOR LENGTH
Bytes 2-3	X'000A'	RRL RESOURCE TYPE Self **Note** ❒ RRL query combinations that receive a non-zero Resource Type reply (See p.90 "XOA Request Resource List")
Bytes 4-5	X'0100'	Single-Byte Coded Fonts as Host Assigned Resource ID
Bytes 6-7	X'0103'	Single-Byte Coded Fonts as IBM Global Resource ID
Bytes 8-9	X'0200'	Double-Byte Coded LF1 Fonts as Host Assigned Resource ID
Bytes 10-11	X'0203'	Double-Byte Coded LF1 Fonts as IBM Global Resource ID
Bytes 12-13	X'0300'	Double-Byte Coded LF1 Font Sect as Host Assigned Resource ID
Bytes 14-15	X'0400'	Page Segments as Host Assigned Resource ID
Bytes 16-17	X'0500'	Overlays as Host Assigned Resource ID
Bytes 18-19	X'0600	Device Version Code Pages as Host Assigned Resource ID
Bytes 20-21	X'0603'	Device Version Code Pages as IBM Global Resource ID
Bytes 22-23	X'0700'	Font Character Set as Host Assigned Resource ID
Bytes 24-25	X'0703'	Font Character Set as IBM Global Resource ID
Bytes 26-27	X'0800'	Single-Byte Coded Font Index as Host Assigned Resource ID
Bytes 28-29	X'0900'	Double-Byte Coded Font Sect Index as Host Assigned Resource ID
Bytes 30-31	X'1000'	Coded Fonts as Host Assigned Resource ID
Bytes 32-33	X'1003'	Coded Fonts as IBM Global Resource ID

Special Data Area	Value	Description
Bytes 34-35	X'1103'	Graphic Character Sets/Subsets as IBM Global Resource ID
Bytes 36-37	X'1200'	Specific Code Pages as Host Assigned Resource ID
Bytes 38-39	X'1203'	Specific Code Pages as IBM Global Resource ID
Bytes 40-41	X'4000'	Data object resource as Host Assigned Resource ID
Bytes 42-43	X'4009'	Data object resource with Object-OID Format
Bytes 44-45	X'4100'	Data-object Font as Host Assigned Resource ID
Bytes 46-47	X'4200'	Data-object Font Components as Host Assigned Resource ID
Bytes 48-49	X'4209'	Data-object Font Components with Object-OID Format
Bytes 50-51	X'FF00'	All Resources as Host Assigned Resource ID

Activate Resource RT and ID Format Self-Defining Field - Single Byte

Special Data Area	Value	Description
Bytes 0-1	X'001A'	VECTOR LENGTH
Bytes 2-3	X'000B'	RRL RESOURCE TYPE Self **Note** ❒ RRL query combinations that receive a non-zero Resource Type reply (See p.90 "XOA Request Resource List")
Bytes 4-5	X'0103'	Single-Byte Coded LF1 Fonts with IBM Global Resource IDs
Bytes 6-7	X'0106'	Single-Byte Coded LF1 Fonts with MVS Host Unalterable Remote Font Environment
Bytes 8-9	X'0603'	Code Pages with IBM Global Resource IDs
Bytes 10-11	X'0703'	Font Character Sets with IBM Global Resource IDs
Bytes 12-13	X'0803'	Single-Byte Coded LF1 Font Index as IBM Global Resource ID
Bytes 14-15	X'0806'	Single-Byte Coded LF1 Fonts Index as MVS Host Unalterable
Bytes 16-17	X'1003'	Single-Byte/Double-Byte Coded Fonts with IBM Global Resource IDs

Special Data Area	Value	Description
Bytes 18-19	X'1007'	Single-Byte/Double-Byte Coded Fonts with Coded Font Format
Bytes 20-21	X'4009'	Data object resource with Object-OID Format
Bytes 22-23	X'410A'	Data-object Font with Data-object Font Format
Bytes 24-25	X'4209'	Data-object Font Components with Object-OID Format

Activate Resource RT and ID Format Self-Defining Field - Double Byte

Special Data Area	Value	Description
Bytes 0-1	X'0022'	VECTOR LENGTH
Bytes 2-3	X'000B'	RRL RESOURCE TYPE Self **Note** ❒ RRL query combinations that receive a non-zero Resource Type reply (See p.90 "XOA Request Resource List")
Bytes 4-5	X'0103'	Single-Byte Coded LF1 Fonts with IBM Global Resource IDs
Bytes 6-7	X'0106'	Single-Byte Coded LF1 Fonts with MVS Host Unalterable Remote Font Environment
Bytes 8-9	X'0303'	Double-Byte Coded LF1 Font Secs with IBM Global Resource IDs
Bytes 10-11	X'0306'	Double-Byte Coded LF1 Font Secs with MVS Host Unalterable Remote Font Environment
Bytes 12-13	X'0603'	Code Pages with IBM Global Resource IDs
Bytes 14-15	X'0703'	Font Character Sets with IBM Global Resource IDs
Bytes 16-17	X'0803'	Single-Byte Coded LF1 Fonts Index as IBM Global Resource ID
Bytes 18-19	X'0806'	Single-Byte Coded LF1 Font Index as MVS Host Unalterable
Bytes 20-21	X'0903'	Double-Byte Coded LF1 Font Secs Index with IBM Global Resource ID
Bytes 22-23	X'0906'	Double-Byte Coded LF1 Font Secs with MVS Host Unalterable RMTFE
Bytes 24-25	X'1003'	Single-Byte/Double-Byte Coded Fonts with IBM Global Resource IDs
Bytes 26-27	X'1007'	Single-Byte/Double-Byte Coded Fonts with Coded Font Format

Special Data Area	Value	Description
Bytes 28-29	X'4009'	Data object resource with Object-OID Format
Bytes 30-31	X'410A'	Data-object Font with Data-object Font Format
Bytes 32-33	X'4209'	Data-object Font Components with Object-OID Format

Bar Code Type Self-Defining Field ID

Special Data Area	Value	Description
Bytes 0-1	X'0013'	VECTOR LENGTH
Bytes 2-3	X'000E'	BAR CODE TYPE Self Defining Field
Byte 4	X'0D'	CODABAR Modifier Byte Options X'01' and X'02'
Byte 5	X'11'	CODE 128 Modifier Byte Option X'02'
Byte 6	X'18'	POSTNET Modifier Byte Options X'00' - X'03'
Byte 7	X'1A'	RM4SCC Modifier Byte Option X'00'
Byte 8	X'1B'	Japan Postal Bar code Modifier Byte Options X'00' and '01'
Byte 9	X'1C'	Data Matrix 2D Bar Code Modifier Byte Option X'00'
Byte 10	X'1D'	MaxiCode 2D Bar Code Modifier Byte Option X'00'
Byte 11	X'1E'	PDF417 2D Bar Code Modifier Byte Options X'00' and X'01'
Byte 12	X'1F'	Australia Post Bar Code Modifier Byte Options X'01' - X'08'
Byte 13	X'9A'	Rm4scc Modifier byte option X'01'
Byte 14	X'20'	QR Code 2D Bar Code Modifier Byte Option X'02'
Byte 15	X'21'	Code 93 Modifier Byte Option X'00'
Byte 16	X'91'	Code 128 Modifier Byte Option X'03'
Byte 17	X'98'	POSTNET (PLANET) Modifier Byte Option X'04'
Byte 18	X'22'	USPS Four-State Bar Code Modifier Byte Options X'00' through X'03'

Note

❒ See p.197 "Bar Code Type and Modifier Description and Values" for all Bar-Codes supported.

Media-Destinations Self-Defining Field ID

Special Data Area	Value	Description
Bytes 0-1	X'000A'	LENGTH of this Self Defining Field
Bytes 2-3	X'0010'	Media-Destinations self-defining ID
Bytes 4-5	X'nnnn'	Default media-destination ID (Determined by Configuration)
Bytes 6-9		RANGES OF MEDIA DESTINATION IDs
	X'9101'	Finisher Shift Tray
	X'9101'	Internal shift tray
	X'9102'	Finisher Upper Tray
	X'9102'	External tray
	X'9103'	Finisher Booklet Tray
		Internal tray 1*(Machine type: Type 1 or Type 2)
	X'9101'	Internal tray 1
	X'9101'	Internal tray 1 + Internal tray 2(1 bin tray)
	X'9101'	Internal tray 1 + External tray
	X'9101'	Internal tray 1 + External tray + Internal tray 2(1 bin tray)
	X'9102'	Internal tray 1 + Finisher SR3050
	X'9102'	Internal tray 1 + Finisher SR3050 + Internal tray 2(1 bin tray)
	X'9103'	Internal tray 1 + Finisher SR790
	X'9103'	Internal tray 1 + Finisher SR790 + Internal tray 2(1 bin tray)
	X'9104'	Internal tray 1 + Booklet Finisher SR3000
	X'9104'	Internal tray 1 + Booklet Finisher SR3000 + Internal tray 2(1 bin tray)
		Internal tray 1*(Machine type: Type 3 or Type 4)
	X'9101'	Internal tray 1
	X'9101'	Internal tray 1 + Internal tray 2(1 bin tray)
	X'9101'	Internal tray 1 + External tray
	X'9102'	Internal tray 1 + External tray + Internal tray 2(1 bin tray)
	X'9103'	Internal tray 1 + Finisher SR3030
	X'9103'	Internal tray 1 + Finisher SR3030 + Internal tray 2(1 bin tray)
	X'9103'	Internal tray 1 + Finisher SR790

Special Data Area	Value	Description
Bytes 6-9	X'9103'	Internal tray 1 + Finisher SR790 + Internal tray 2(1 bin tray)
	X'9104'	Internal tray 1 + Booklet Finisher SR3020
	X'9104'	Internal tray 1 + Booklet Finisher SR3020 + Internal tray 2(1 bin tray)

* Available values vary depending on the installed option.

Note

❒ To ascertain which machine type your model corresponds to, see "Machine Types", About This Machine or Safety Information.

Supported Group Operations Self-Defining Field ID

Special Data Area	Value	Description
Bytes 0-1	X'0006'	LENGTH of this Self-Defining Field
Bytes 2-3	X'0012'	SUPPORTED GROUP OPERATIONS Self-Defining Field
Byte 4	X'01'	Keep group together as a print unit
Byte 5	X'04'	Finish

Product Identifier Self-Defining Field ID

Special Data Area	Value	Description
Bytes 0-1	X'0053'	LENGTH of this Self Defining Field
Bytes 2-3	X'0013'	PRODUCT IDENTIFIER Self Defining Field ID
Byte 4	X'38'	LENGTH of Self Defining Product ID Parameter
Bytes 5-6	X'0001'	UNIQUE PRODUCT IDENTIFIER Parameter ID
Bytes 7-12		DEVICE TYPE
	X'F0F0F3F0F0F1'	Aficio MP C3001 MP C3001 LD630C
	X'F0F0F3F5F0F1'	Aficio MP C3501 MP C3501 LD635C
	X'F0F0F4F5F0F1'	Aficio MP C4501/C4501A MP C4501/MP C4501A LD645C/LD645CA

Special Data Area	Value	Description
Bytes 7-12	X'F0F0F5F5F0F1'	Aficio MP C5501/C5501A MP C5501/MP C5501A LD655C/LD655CA
	X'F0F0F9F1F3F0'	C9130
	X'F0F0F9F1F3F5'	C9135
	X'F0F0F9F1F4F5'	C9145/C9145A
	X'F0F0F9F1F5F5'	C9155/C9155A
Bytes 13-15	X'F0F0F0'	DEVICE MODEL Aficio MP C3001/C3501/C4501/C4501A/C5501/C5501A C9130/C9135/C9145/C9145A/C9155/C9155A MP C3001/C3501/C4501/C4501A/C5501/C5501A LD630C/LD635C/LD645C/LD645CA/LD655C/LD655CA
Bytes 16-18	X'DCC9C8' (RIH)	MANUFACTURER
Bytes 19-20	X'0000'	PLANT
Bytes 21-32	X'F0F0F0F0F0F0F2F9F6F5F3F8' (ie. 296538)	SEQUENCE NUMBER (Serial number) (EBCDIC) (12 bytes)
Bytes 33-34	X'0000'	TAG
Bytes 35-43	X'F0F0F0F0F44BF5F3F0' (4.530)	IPDS CODE LEVEL (EBCDIC) (9 bytes)
Bytes 44-59	X'F0F0F0F0F0F0F0F0F0F0F0F0F14BF2F12' (1.21)	CONTROLLER CODE LEVEL (EBCDIC) (16 bytes)
Byte 60	X'17'	LENGTH of Self Defining Product ID Parameter
Bytes 61-62	X'0003'	PRINTER NAME Parameter ID
Bytes 63-82	X'nnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnn'	PRINTER NAME

Note

❒ To ascertain which machine type your model corresponds to, see "Machine Types", About This Machine or Safety Information.

Object Container Type Support Self-Defining Field ID

Special Data Area	Value	Description
Bytes 0-1	X'00A8'	LENGTH of this Self Defining Field
Bytes 2-3	X'0014'	Object Container Type Support Self Defining Field
Byte 4	X'42'	Type Record Length
Byte 5	X'01'	Type - Page or Overlay State
Bytes 6-21	X'06072b1200040101160000 0000000000'	Graphics Interchange Format (GIF)
Bytes 22–37	X'06072b12000401012F0000 0000000000'	IOCA Tile Resource
Bytes 38-53	X'06072b1200040101170000 0000000000'	JPEG File Interchange Format (JFIF)
Bytes 54-69	X'06072b12000401010E000 0 0000000000'	Tag Image File Format (TIFF)
Byte 70	X'62'	Type Record Length
Byte 71	X'02'	Type - Home state
Bytes 72-87	X'06072b1200040101160000 0000000000'	Graphics Interchange Format (GIF)
Bytes 88–103	X'06072b12000401012F0000 0000000000'	IOCA Tile Resource
Bytes 104-119	X'06072b1200040101170000 0000000000'	JPEG File Interchange Format (JFIF)
Bytes 120-135	X'06072b12000401010E000 0 0000000000'	Tag Image File Format (TIFF)
Bytes 136–151	X'06072b1200040101350000 0000000000'	TrueType/OpenType Collection
Bytes 152-167	X'06072b1200040101330000 0000000000'	TrueType/OpenType Font

Finishing Operations Self-Defining Field ID

Special Data Area	Value	Description
Bytes 0-1	X'0008'	LENGTH of this Self Defining Field
Bytes 2-3	X'0018'	FINISHING OPERATIONS Self Defining Field
Byte 4	X'01'	Corner Staple
Byte 5	X'12'	Saddle Stitch (In)
Byte 6	X'03'	Edge Stitch
Byte 7	X'0A'	Punch

PFC Triplets Supported Self Defining Field ID

Special Data Area	Value	Description
Bytes 0-1	X'0006'	LENGTH of this Self Defining Field
Bytes 2-3	X'0016'	PFC Triplets Supported Self Defining Field
Byte 4	X'86'	Text Fidelity Triplet
Byte 5	X'88'	Finishing Fidelity Triplet

XOH Select Input Media Source

This order selects the input media source and, indirectly, the input media, for subsequent physical sheets.

The set of valid values differs according to which forms module configuration is installed and selected by the operator. Since printers are capable of supporting multiple installed input bins, multiple configuration combinations are possible. All input media sources are described below.

When the number of installed input bins changes, the printer is POR'd and initial machine settings are established. When the bin configuration changes exception X'0101..00' is reported to the host.

- Actual tray capacities are determined by media weight. The capacities indicated in the table are the maximum allowable.
- The machine supports media source tray numbering. Media source values in the SIMS support tables represent the default settings when the printer is initially installed. For this machine, the printer's control panel menu mode is provided to allow customers to specify the source tray numbers to meet requirements of legacy applications.

Note

❒ For the tray in which "envelope" has been specified as the paper type, the tray values of the tray ID are (in ascending for each respective tray that is installed) as follows: X'8040', X'8041', etc. If a different paper type is specified for the tray, the tray values of the tray ID are (in ascending for each respective tray that is installed) as follows: X'8000', X'8001', etc. In regards to the bypass tray and default tray, even if you specify "envelope" as the paper type, the tray value will not be changed.

❒ To ascertain which machine type your model corresponds to, see "Machine Types", About This Machine or Safety Information.

Data Area	Value	Description	Error Code
Bytes 0-1	X'1500'	SELECT INPUT MEDIA SOURCE	
Byte 2		INPUT MEDIA SOURCE (Reference Notes Below)	X'02C8..01'
	X'00'	Tray 1	
	X'01'	Tray 2	
		Tray 3* (Machine type: Type 1 or Type 2)	
	X'02'	Tray 1 + Tray 2 + Tray 3 + Bypass tray	
	X'01'	Tray 1 + Small size paper tray 2 + Tray 3 + Bypass tray	
	X'02'	Tray 1 + Tray 2 + Tray 3 +Tray 4+ Bypass tray	
	X'01'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + Bypass tray	
	X'02'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + Bypass tray	
	X'01'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + Bypass tray	
	X'02'	Tray 1 + Tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray	
	X'01'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray	
	X'02'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'01'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray	
		Tray 3* (Machine type: Type 3 or Type 4)	
	X'02'	Tray 1 +Tray 2 + Tray 3 + Tray 4 + Bypass tray	
	X'01'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + Bypass tray	
	X'02'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + Bypass tray	
	X'01'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + Bypass tray	

Data Area	Value	Description	Error Code
Byte 2	X'02'	Tray 1 + Tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray	
	X'01'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray	
	X'02'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'01'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray	
		Tray 3 (LCT)*	
	X'02'	Tray 1 + Tray 2 + Tray3 (LCT) + By-pass tray	
	X'01'	Tray 1 + Small size paper tray 2 + Tray3 (LCT) + Bypass tray	
	X'02'	Tray 1 + Tray 2 + Tray3 (LCT) + LCT + Bypass tray	
	X'01'	Tray 1 + Small size paper tray 2 + Tray3 (LCT) + LCT + Bypass tray	
		Tray 4*	
	X'03'	Tray 1 + Tray 2 + Tray 3 + Tray 4 + Bypass tray	
	X'02'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + Bypass tray	
	X'02'	Tray 1 + Tray 2 + Small size paper tray 3 + Tray 4 + Bypass tray	
	X'01'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + Bypass tray	
	X'03'	Tray 1 + Tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray	
	X'02'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray	
	X'02'	Tray 1 + Tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray	
	X'01'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray	
	X'40'	Small size paper tray 2	
		Small size paper tray 3*(Machine type: Type 1 or Type 2)	
	X'40'	Tray 1 + Tray 2 + Small size paper tray 3 + Bypass tray	

Data Area	Value	Description	Error Code
Byte 2	X'41'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Bypass tray	
	X'40'	Tray 1 + Tray 2 + Small size paper tray 3 +Tray 4 + Bypass tray	
	X'41'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + Bypass tray	
	X'40'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + Bypass tray	
	X'41'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + Bypass tray	
	X'40'	Tray 1 + Tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray	
	X'41'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray	
	X'40'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'41'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray	
		Small size paper tray 3*(Machine type: Type 3 or Type 4)	
	X'40'	Tray 1 + Tray 2 + Small size paper tray 3 + Tray 4 + Bypass tray	
	X'41'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + Bypass tray	
	X'40'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + Bypass tray	
	X'41'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + Bypass tray	
	X'40'	Tray 1 + Tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray	
	X'41'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray	
	X'40'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray	

Data Area	Value	Description	Error Code
Byte 2	X'41'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray	
		Small size paper tray 4*	
	X'40'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + Bypass tray	
	X'41'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + Bypass tray	
	X'41'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + Bypass tray	
	X'42'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + Bypass tray	
	X'40'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'41'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'41'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'42'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray	
		LCT*	
	X'03'	Tray 1 + Tray 2 + Tray3 (LCT) + LCT + Bypass tray	
	X'02'	Tray 1 + Small size paper tray 2 + Tray3 (LCT) + LCT + Bypass tray	
	X'04'	Tray 1 + Tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray	
	X'03'	Tray 1 + Small size paper tray 2 + Tray 3 + Tray 4 + LCT + Bypass tray	
	X'03'	Tray 1 + Tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray	
	X'03'	Tray 1 + Tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'02'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Tray 4 + LCT + Bypass tray	

Data Area	Value	Description	Error Code
Byte 2	X'02'	Tray 1 + Tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'02'	Tray 1 + Small size paper tray 2 + Tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'01'	Tray 1 + Small size paper tray 2 + Small size paper tray 3 + Small size paper tray 4 + LCT + Bypass tray	
	X'63'	Bypass tray	
	X'FF'	Default Tray	

XOH Set Media Origin

The XOH Set Media Origin (SMO) command specifies the origin of the media. This order takes effect on the next-received page. The media origin will not change until either another XOH-SMO command is processed or the printer is reinitialized.

Data Area	Value	Description	Error Code
Bytes 0-1	X'1600'	SET MEDIA ORIGIN	
Byte 2		MEDIA ORIGIN	X'026F..02'
	X'00'	Top-left corner	
	X'01'	Top-right corner (Bottom-left corner if back side of duplex sheet)	
	X'02'	Bottom-right corner	
	X'03'	Bottom-left corner (Top-right corner if back side of duplex sheet)	

XOH Set Media Size

This order specifies SIZE of the physical medium.

Data Area	Value	Description	Error Code
Bytes 0-1	X'1700'		
Byte 2		UNIT BASE (Measurement Units)	X'0274..02'
	X'00'	10 in.	
	X'01'	10 centimeters	
Bytes 3-4		L-Units per UNIT BASE	X'0270..02'
	X'3840'	14400 L-Units/10 inches	
	X'1626'	5670 L-Units/10 centimeters	
	X'0960'	2400 L-Units/10 inches	
	X'03B1'	945 L-Units/10 centimeters	
Bytes 5-6	X'0001' - X'7FFF'	Xm EXTENT of MEDIUM	X'0272..02'
		See p.25 "Notation Conventions"	
	X'FFFF'	Printer Default (Printer's control panel setting or Tray sensors)	
Bytes 7-8	X'0001' - X'7FFF'	Ym EXTENT of MEDIUM	X'0273..02'
		See p.25 "Notation Conventions"	
	X'FFFF'	Printer Default (Printer's control panel setting or Tray sensors)	

XOH Page Counter Control

The XOH Page Counter Control (PCC) command provides a counter synchronization function that should only be used to recover from an exception or after a XOA Discard Buffer Data command.

Data Area	Value	Description	Error Code
Bytes 0-1	X'F500'	OPC Order Code	
Byte 2	X'00'	Do Nothing (default)	
	X'01'	Synchronize Counters	

XOH Define Group Boundary

This order initiates or terminates a grouping of pages. When a grouping of pages is initiated the page that next increments the received page counter is the first sheet in the designated group.

Data Area	Value	Description	Error Code
Bytes 0-1	X'0400'	Define Group Boundary	X'018F..00' X'0277..01' X'0278..01' X'027A..01' X'027B..01'
Byte 2	X'00' X'01'	Initiate Group Terminate Group	
Byte 3	X'00' - X'FF'	Group Level	
Bytes 4-end of command	See specific triplet description.	X'00' Group ID triplet X'6E' Group information triplet X'85' Finishing Operation triplet	 X'027C..01' X'027C..02'

Group ID Triplet

The Group ID triplet specifies host specific print-data formats for print job identification. The printer utilizes this information to provide IPDS print job identification on the printer console display.

Data Area	Value	Description	Error Code
Byte 0	X'02'-X'FF'	LENGTH	X'027A..01' X'027B..02'
Byte 1	X'01'	Group ID Triplet	
Byte 2	 X'01' X'02' X'03' X'06' X'13'	HOST FORMAT MVS and VSE print-data VM print-data OS/400 print-data (4 char spool file #) AIX and NT print-data OS/400 print-data (6 char spool file #)	
Bytes 4-11	 X'C2E4C4C7C5 E3F0F1' (i.e. BUDGET01)	MVS and VSE ID DATA Job Name (EBCDIC) (8 bytes)	

Data Area	Value	Description	Error Code
Bytes 4-11		VM ID DATA	
	X'C2E4C4C7C5 E3F0F1' (i.e. BUDGET01)	Filename (EBCDIC) (8 bytes)	
Bytes 23-32		OS/400 ID DATA	
	X'C2E4C4C7C5 E3F2F0F0F1'(i.e. BUDGET2000)	Filename (EBCDIC) (10 bytes)	
Bytes 3-End		AIX and NT ID DATA	
	X'444550544255 44474554323030 30' (i.e. DEPTBUDGET2 000)	Name (ASCII) (1-251 bytes)	

Group Information Triplet

The Group Information is accepted, although no specific processing will occur.

Finishing Operation Triplet

The Finishing Operation triplet specifies a specific finishing operation to be applied to a collection of sheets.

Data Area	Value	Description	Error Code
Byte 0	X'09'	LENGTH	X'027A..01' X'027B..01'
Byte 1	X'85'	Finishing Triplet ID	
Byte 2		OPERATION TYPE	X'027C..03'
	X'01'	Corner Staple	X'027C..09'
	X'03'	Edge Stitch	
	X'0A'	Punch	
	X'12'	Saddle Stitch In	
Bytes 3-4	X'0000'	Reserved	
Byte 5		REFERENCE CORNER	X'027C..04'
	X'01'	Top-right corner (SEF only)	
	X'02'	Top-left corner	
	X'03'	Bottom-left corner	
	X'FF'	Device default corner (top left corner)	

Data Area	Value	Description	Error Code
Byte 5		REFERENCE EDGE	
	X'02'	Top edge (SEF only)	
	X'03'	Left edge (LEF only)	
	X'FF'	Device default edge (top edge-SEF, left edge-LEF)	
Byte 6		FINISHING OPERATION COUNT	X'027C..05'
	X'00'	Device Default Number, Default Position	X'027C..07'
	X'02'	Punch 2 Holes, Default Position or Edge Stitch 2 Staples, Default Position	
	X'03'	Punch 3 Holes, Default Position	
	X'04'	Punch 4 Holes, Default Position	
Bytes 7-8		FINISHING OPERATION AXIS OFFSET	X'027C..06'
	X'FFFF'	Device Default Axis Offset	

❖ **Paper Finishing (Staple, Punch, and Booklet) Support:**

A = Finisher SR790
B = Booklet Finisher SR3020
C = Finisher SR3030
D = Finisher SR3050
E = Finisher SR3000

S = Staple / P = Punch / B = Booklet / Y=Yes / N=No

	A	B			C		D	E		
	S	S	P	B	S	P	S	S	P	B
A3 (297× 420mm) SEF	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
A4 (210× 297mm) SEF	Y	Y	Y *1	Y	Y	Y *1	Y	Y	Y *1	Y
A4 (210× 297mm) LEF	Y	Y	Y	N	Y	Y	Y	Y	Y	N

	A	B			C		D	E		
	S	S	P	B	S	P	S	S	P	B
A5 (210× 148mm) SEF/ LEF	N	N	Y *1	N	N	Y *1	N	N	Y *1	N
A6 (105× 148mm) SEF	N	N	N	N	N	N	N	N	N	N
B4 (257× 364mm) SEF	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
B5 (182× 257mm) SEF	Y	Y	Y *1	Y	Y	Y *1	Y	Y	Y *1	Y
B5 (182× 257mm) LEF	Y	Y	Y	N	Y	Y	Y	Y	Y	N
B6 (128× 182mm) SEF	N	N	N	N	N	N	N	N	N	N
DLT (11× 17in.) SEF	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Legal (8.5× 14in.) SEF	Y	Y	Y *1	Y	Y	Y *1	Y	Y	Y *1	Y
Fools-cap (8.5× 13in.) SEF	Y	Y	Y *1	N	Y	Y *1	Y	Y	Y *1	N
Letter (8.5× 11in.) SEF	Y	Y	Y *1	Y	Y	Y *1	Y	Y	Y *1	Y

	A	B			C		D	E		
	S	S	P	B	S	P	S	S	P	B
Letter (8.5×11 in.) LEF	Y	Y	Y	N	Y	Y	Y	Y	Y	N
GovernmentLG (8.25×14in.) SEF	Y	Y	Y *1	N	Y	Y *1	Y	Y	Y *1	N
Folio (8.25×13in.) SEF	Y	Y	Y *1	N	Y	Y *1	Y	Y	Y *1	N
F/GL (8×13in.) SEF	Y	Y	Y *1	N	Y	Y *1	Y	Y	Y *1	N
Eng Quatro (8×10in.) SEF	Y	Y	Y *1	N	Y	Y *1	Y	Y	Y *1	N
Executive (7.25×10.5in.) SEF	Y	Y		N	Y		Y	Y		N
Executive (7.25×10.5in.) LEF	Y	Y	Y	N	Y	Y	Y	Y	Y	N
HalfLetter (5.5×8.5 in.) SEF	N	N		N	N		N	N		N
Com10 (4.125×9.5in.) SEF/LEF	N	N	N	N	N	N	N	N	N	N

	A	B			C		D	E		
	S	S	P	B	S	P	S	S	P	B
Monarch (3.875×7.5in.) SEF/LEF	N	N	N	N	N	N	N	N	N	N
C5 (162×229mm) SEF/LEF	N	N	N	N	N	N	N	N	N	N
C6 (114×162mm) SEF/LEF	N	N	N	N	N	N	N	N	N	N
DL Env (110×220mm) SEF/LEF	N	N	N	N	N	N	N	N	N	N
8kai (267×390mm) SEF	Y	Y	Y	N	Y	Y	Y	Y	Y	N
16kai (195×267mm) SEF	Y	Y	Y *1	N	Y	Y *1	Y	Y	Y *1	N
16kai (195×267mm) LEF	Y	Y	Y	N	Y	Y	Y	Y	Y	N
12×18in. SEF	Y	Y	N	Y	Y	N	N	N	N	N
11×15in. SEF	Y	Y	Y	N	Y	Y	Y	Y	Y	N
10×14in. SEF	Y	Y	Y *2	N	Y	Y *2	Y	Y	Y *2	N

*1 Not supported on 3 hole punch (inch version) or 4 hole punch except for Northren Europe type (metric version) finisher.

*2 Not supported on 3 hole punch (inch version) or 4 hole punch except for Northren Europe type (metric version) finisher.

Note

- ❒ The paper finishing functions are not supported on custom size paper.
- ❒ The printer must know about the finishing operation before the first page of a group is received. The printer will ignore finishing operation triplets on the XOH DGB command that terminates the group.
- ❒ The media jog and staple functions are mutually exclusive. If both are specified the staple request takes precedence.
- ❒ A single sheet cannot be stapled or stitched. If a job specifies only one sheet for stapling or stitching, it will not occur and a X'027C..02' Nack is reported to the host. Web Image Monitor menu parameter is provided to allow provided to allow customers to inhibit the report of this Nack to meet requirements of legacy applications.
- ❒ The capacity of the finishers are determined by the physical finisher installed. If a job specifies more sheets for stapling or stitching than the installed finisher can accommodate, a X'027C..02' Nack is reported to the host. Web Image Monitor parameter is provided to allow customers to inhibit the report of this Nack to meet requirements of legacy applications.
- ❒ Stapled or stitched job groups may contain mixed media sizes in the following combinations only: Letter-SEF, Legal-SEF, Folio-SEF
- ❒ Mixing of simplex and duplex groups in the finisher accumulator is supported. Therefore, it is possible to staple or stitch mixed simplex/duplex groups in a print job.
- ❒ The printer can be equipped with a Punch unit to punch 2, 3 or 4 holes. The printer punch unit can dynamically switch between 2/3 or 2/4 hole punching (depending on what unit is installed) If an unsupported punch count is specified, punching will not occur and a X'027C..05' Nack is reported to the host. Web Image Monitor menu parameter is provided to allow customers to inhibit the report of this Nack to meet requirements of legacy applications.

XOH Specify Group Operation

This order indicates to an attached printer, pre-processor, or post-processor that the specified processing option is to be performed upon subsequent boundary groups of the group level identified in this command.

Data Area	Value	Description	Error Code
Bytes 0-1	X'0300'	Define Group Boundary	
Byte 2	X'00'-X'FF'	Operation Identifier	
	X'01'	Keep group together as a print unit	
	X'04'	Finish	
Byte 3	X'00'-X'FF'	Group Level	

Note

❒ For SGO Identifier (Byte 2), X'01' and X'04' are the only supported operations. All other identifiers are accepted, although no specific processing will occur.

Presentation Text Commands

Name	Command	Sub-command	Where to Look
Load Equivalence	X'D61D'		p.137 "Load Equivalence"
Write Text	X'D62D'		p.138 "Write Text"

Load Equivalence

This command permits text-suppression values imbedded in text data stored within the printer to be referenced externally using different values. For example, the Internal Suppression value of X'02' may be referenced externally on a Load Copy Control as a X'06' provided that an appropriate Load Equivalence command was previously received.

If more than 127 LE entries are specified, exception X'0202..02' is reported.

Data Area	Value	Description	Error Code
Bytes 0-1	X'0100'	MAPPING TYPE Suppression Mapping	X'02C6..02'
Bytes 2-3	X'0001' - X'00FF'	INTERNAL VALUE from BS..ES Pair	X'02C1..02' X'02C8..02'
Bytes 4-5	X'0001' - X'007F'	EXTERNAL VALUE from LCC	X'02C8..02'
Bytes 6-509		Zero or more additional entries analogous to Bytes 2-5	

Write Text

In this Write Text description, references made to pages also apply to overlays and page segments.

The print data is a string of 1-byte code points. To determine the character raster pattern, the printer uses the code point to identify the character metrics obtained from:

- Load Font Index (See p.219 “Load Font Index”)
- Load Font Control (See p.216 “Load Font Control”)
- Font Local ID (See p.66 “Load Font Equivalence”)
- Resident Font Data

When the printer processes a Begin Page, it uses the values from the existing Logical Page Descriptor (See p.69 “Logical Page Descriptor”) or Initialization Default (See p.33 “IPDS Initialization Defaults”) until it processes one of the following text control sequences:

- Draw B-Axis Rule
- Draw I-Axis Rule
- Set Baseline Increment
- Set Coded Font Local
- Set Extended Text Color
- Set Inline Margin
- Set Intercharacter Adjustment
- Set Text Color
- Set Text Orientation
- Set Variable Space Character Increment
- Temporary Baseline Move

The text control sequence value supersedes the Logical Page Descriptor or Initialization Default value and it remains in effect until it is changed by another text control sequence, or End Page is received.

For a complete description of the following text control sequences see the Presentation Text Object Content Architecture Reference and the Intelligent Printer Data Stream Reference.

Absolute Move Baseline

Absolute Move Baseline Control Sequence moves the baseline coordinate relative to the I-axis of the Presentation Text Space.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Sequence	
Byte 2	X'04'	LENGTH	X'021E..01'
Byte 3		ABSOLUTE MOVE BASELINE	
	X'D2'	Unchained	
	X'D3'	Chained	
Bytes 4-5	X'0000' - X'7FFF'	DISPLACEMENT (Bc) See p.25 "Notation Conventions"	X'0213..01'

Absolute Move Inline

Absolute Move Inline Control Sequence moves an inline coordinate position relative to the B-axis of the Presentation Text Space.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Escape Sequence	
Byte 2	X'04'	LENGTH	X'021E..01'
Byte 3		ABSOLUTE MOVE INLINE	
	X'C6'	Unchained	
	X'C7'	Chained	
Bytes 4-5	X'0000' - X'7FFF'	DISPLACEMENT (Ic) See p.25 "Notation Conventions"	X'0214..01'

Begin Line

Begin Line Control Sequence begins a new line.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Escape Sequence	
Byte 2	X'02'	LENGTH	X'021E..01'
Byte 3		BEGIN LINE	
	X'D8'	Unchained	
	X'D9'	Chained	

Begin Suppression

Begin Suppression Control Sequence marks the beginning of a string of presentation text that may be suppressed from the visible output.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Escape Sequence	
Byte 2	X'03'	LENGTH	X'021E..01'
Byte 3		BEGIN SUPPRESSION	
	X'F2'	Unchained	
	X'F3'	Chained	
Byte 4	X'01' - X'FF'	SUPPRESSION ID	X'0298..01'

Draw B-Axis Rule

Draw B-axis Rule Control Sequence draws a rule in the b-direction.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Escape Sequence	
Byte 2	X'04' or X'07'	LENGTH	X'021E..01'
Byte 3		DRAW B-AXIS RULE	
	X'E6'	Unchained	
	X'E7'	Chained	
Bytes 4-5	X'8000' - X'7FFF'	LENGTH (Bl) See p.25 "Notation Conventions"	
Bytes 6-7		WIDTH (Bw)	
	X'8000' - X'7FFF'	Printer Default 24/1440 inch	
	X'FFFF'		
Byte 8		IGNORED	

Draw I-Axis Rule

Draw I-axis Rule Control Sequence draws a rule in the i-direction.

Table 70. Draw I-Axis Rule

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Escape Sequence	
Byte 2	X'04' or X'07'	LENGTH	X'021E..01'
Byte 3	 X'E4' X'E5'	DRAW I-AXIS RULE Unchained Chained	
Bytes 4-5	X'8000' - X'7FFF'	LENGTH (Il) See p.25 "Notation Conventions"	
Bytes 6-7	 X'8000' - X'7FFF' X'FFFF'	WIDTH (Iw) Printer Default 24/1440 inch	
Byte 8		IGNORED	

End Suppression

End Suppression Control Sequence marks the end of a string of presentation text that may be suppressed from the visible output.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Escape Sequence	
Byte 2	X'03'	LENGTH	X'021E..01'
Byte 3	 X'F4' X'F5'	END SUPPRESSION Unchained Chained	
Byte 4	X'01' - X'FF'	SUPPRESSION ID	X'0202..01' X'0204..01' X'0298..01'

No Operation

No Operation Control Sequence has no effect on presentation.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Escape Sequence	
Byte 2	X'02' - X'FF'	LENGTH	X'021E..01'
Byte 3		NO OPERATION	
	X'F8'	Unchained	
	X'F9'	Chained	
Bytes 4-255		DATA (Ignored)	

Overstrike

The Overstrike control identifies text that is to be overstruck with a specified character.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Escape Sequence	
Byte 2	X'05'	LENGTH	X'021E..01'
Byte 3		OVERSTRIKE	
	X'72'	Unchained	
	X'73'	Chained	
Byte 4		BYPASS IDENTIFIERS	
	Bits 0-3	Reserved	
	Bit 4: 0	Overstrike white space from RMI	
	Bit 4: 1	Bypass white space from RMI	
	Bit 5: 0	Overstrike white space from AMI	
	Bit 5: 1	Bypass white space from AMI	
	Bit 6: 0	Overstrike white space from Space or Variable Space Character	
	Bit 6: 1	Bypass white space from Space or Variable Space Character	
	Bit 7: 0	BYPASS Treat Bits 0-6 according to their set values	
	Bit 7: 1	NO BYPASS Treat Bits 0-6 as if their values are set to zero	
Byte 5		IGNORED	
Byte 6	X'00' - X'FF'	OVERSTRIKE CHARACTER	

Relative Move Baseline

Relative Move Baseline Control Sequence moves a baseline coordinate relative to the current baseline coordinate position.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Escape Sequence	
Byte 2	X'04'	LENGTH	X'021E..01'
Byte 3		RELATIVE MOVE BASELINE	
	X'D4'	Unchained	
	X'D5'	Chained	
Bytes 4-5	X'8000' - X'7FFF'	INCREMENT (Br) See p.25 "Notation Conventions"	

Relative Move Inline

Relative Move Inline Control Sequence moves the inline coordinate of the presentation position relative to the current inline position.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Sequence	
Byte 2	X'04'	LENGTH	X'021E..01'
Byte 3		RELATIVE MOVE INLINE	
	X'C8'	Unchained	
	X'C9'	Chained	
Bytes 4-5	X'8000' - X'7FFF'	INCREMENT (Ir) See p.25 "Notation Conventions"	

Repeat String

Repeat String Control Sequence contains a string of coded graphic characters that is repeated on the current line.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Sequence	
Byte 2	X'04' - X'FF'	LENGTH	X'021E..01'
Byte 3		REPEAT STRING	
	X'EE'	Unchained	
	X'EF'	Chained	
Bytes 4-5	X'0000' - X'7FFF'	REPEAT LENGTH (RL)	X0219..01'
Bytes 6-n		REPEAT DATA	X021F..01'

Set Baseline Increment

Set Baseline Increment Control Sequence specifies the distance to be added to the current baseline coordinate when a Begin Line control sequence is executed.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Sequence	
Byte 2	X'04'	LENGTH	X'021E..01'
Byte 3		SET BASELINE INCREMENT	
	X'D0'	Unchained	
	X'D1'	Chained	
Bytes 4-5	X'8000' - X'7FFF'	INCREMENT (Bi)	
		See p.25 "Notation Conventions"	
	X'FFFF'	Use LPD value. If no LPD is received, use printer default	

Set Coded Font Local

Set Coded Font Local Control Sequence specifies the character attributes to be used and invokes a coded font.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Sequence	
Byte 2	X'03'	LENGTH	X'021E..01'
Byte 3		SET CODED FONT LOCAL	
	X'F0'	Unchained	
	X'F1'	Chained	
Byte 4		LOCAL FONT ID	
	X'01' - X'FE'	Use LPD value. If no LPD is received, use printer default	X'0218..02'
	X'FF'		X'023F..02'

Set Extended Text Color

The Set Extended Text Color control specifies the color value and defines the color space and encoding for that value. The specified color value is applied to foreground areas of the presentation text space. Foreground areas consist of the following:

- The stroked and filled areas of solid text characters, including overstrike characters. With hollow characters, only the stroked portion of the character is considered foreground.
- The stroked area of a rule.
- The stroked area of an underscore.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Sequence	
Byte 2	X'14' - X'16'	LENGTH	X'021E..01'
Byte 3		SET EXTENDED TEXT COLOR	
	X'80'	Unchained	
	X'81'	Chained	
Byte 4	X'00'	RESERVED	
Byte 5		COLOR SPACE	X'020E..02'
	X'01'	RGB - Limited Simulated Color Support	
	X'04'	CMYK - Limited Simulated Color Support	
	X'06'	HCS - Limited Simulated Color Support	
	X'08'	CIELAB - Limited Simulated Color Support	
	X'40'	Standard OCA - Limited Simulated Color Support	
Bytes 6-9	X'00000000'	RESERVED	
Byte 10		1ST COLOR COMPONENT BITS	X'020E..05'
	X'01' - X'08'	(RGB, CMYK, CIELAB)	
	X'10'	(Standard OCA, Highlight)	
Byte 11		2ND COLOR COMPONENT BITS	X'020E..06'
	X'00' - X'08'	(RGB, CMYK, Highlight, CIELAB)	
Byte 12		3RD COLOR COMPONENT BITS	X'020E..07'
	X'00' - X'08'	(RGB, CMYK, CIELAB)	
Byte 13		4TH COLOR COMPONENT BITS	X'020E..08'
	X'00' - X'08'	(CMYK)	

Data Area	Value	Description	Error Code
Bytes 14-17		COLOR VALUE	X'020E..03'
		RGB Color Space	X'020E..04'
	X'nn'	Red Intensity	
	X'nn'	Green Intensity	
	X'nn'	Blue Intensity	
		CMYK Color Space	
	X'nn'	Cyan Intensity	
	X'nn'	Magenta Intensity	
	X'nn'	Yellow Intensity	
	X'nn'	Black Intensity	
		Highlight Color Space	
	X'nnnn'	Highlight Color Number	
	X'nn'	Percent Coverage	
	X'nn'	Percent Shading	
		CIELAB Color Space	
	X'nn'	Luminance (L)	
	X'nn'	Chrominance Difference (a)	
	X'nn'	Chrominance Difference (b)	
		Standard OCA Color Space	
	X'0000' or X'FF00'	Printer Default (Black)	
	X'0001' or X'FF01'	Blue	
	X'0002' or X'FF02	Red	
	X'0003' or X'FF03'	Pink	
	X'0004' or X'FF04'	Green	
	X'0005' or X'FF05'	Turquoise	
	X'0006' or X'FF06'	Yellow	
	X'0007'	White - Color of Medium (Reset)	
	X'0008'	Black	
	X'0010'	Brown	
	X'FF07'	Printer Default (Black)	
	X'FF08'	Color of Medium (Reset)	

Set Inline Margin

Set Inline Margin Control Sequence specifies position of an inline margin.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Sequence	
Byte 2	X'04'	LENGTH	X'021E..01'
Byte 3		SET INLINE MARGIN	
	X'C0'	Unchained	
	X'C1'	Chained	
Bytes 4-5	X'0000' - X'7FFF'	DISPLACEMENT (Ia)	X'0210..01'
		See p.25 "Notation Conventions"	
	X'FFFF'	Use LPD value. If no LPD is received, use printer default	

Set Intercharacter Adjustment

Set Intercharacter Adjustment Control Sequence specifies additional increment or decrement between graphic characters.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Sequence	
Byte 2	X'04' or X'05'	LENGTH	X'021E..01'
Byte 3		SET INTERCHARACTER ADJUSTMENT	
	X'C2'	Unchained	
	X'C3'	Chained	
Bytes 4-5	X'0000' - X'7FFF'	ADJUSTMENT (ica)	X'0212..01'
		See p.25 "Notation Conventions"	
	X'FFFF'	Use LPD value. If no LPD is received, use printer default	
Byte 6		DIRECTION	X'0212..01'
	X'00'	Increment Direction	
	X'01'	Decrement Direction	
	X'FF'	Same as X'00'	

Set Text Color

The Set Text Color control specifies the foreground color attribute that selects the color for subsequent text characters.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Sequence	
Byte 2	X'04' or X'05'	LENGTH	X'021E..01'
Byte 3		SET TEXT COLOR	
	X'74'	Unchained	
	X'75'	Chained	
Bytes 4-5		COLOR	X'0258..03'
	X'0000' or X'FF00'	Printer Default (Black)	
	X'0001' or X'FF01'	Blue - Limited Simulated Color Support	
	X'0002' or X'FF02'	Red - Limited Simulated Color Support	
	X'0003' or X'FF03'	Pink - Limited Simulated Color Support	
	X'0004' or X'FF04'	Green - Limited Simulated Color Support	
	X'0005' or X'FF05'	Turquoise - Limited Simulated Color Support	
	X'0006' or X'FF06'	Yellow - Limited Simulated Color Support	
	X'0007'	White - Color of Medium (Reset)	
	X'0008'	Black	
	X'0010'	Brown - Limited Simulated Color Support	
	X'FF07'	Printer Default (Black)	
	X'FF08'	Color of Medium (Reset)	
	X'FFFF'	Use LPD color value	
		Note ❒ See p.26 "Color Simulation" for color simulation details and product support specifics.	
Byte 6	X'00' - X'01'	PRECISION	X'0258..03'
	X'FF'	Same as X'00'	

Set Text Orientation

Set Text Orientation Control Sequence establishes i-direction and b-direction for the following presentation text.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Sequence	
Byte 2	X'06'	LENGTH	X'021E..01'
Byte 3		SET TEXT ORIENTATION	
	X'F6'	Unchained	
	X'F7'	Chained	
Bytes 4-5		I-AXIS ORIENTATION	X'020F..01'
	X'0000'	0 degrees (+X direction)	
	X'2D00'	90 degrees (+Y direction)	
	X'5A00'	180 degrees (-X direction)	
	X'8700'	270 degrees (-Y direction)	
	X'FFFF'	Use LPD value. If no LPD is received, use printer default	
Byte 6		B-AXIS ORIENTATION	X'020F..01'
	X'0000'	0 degrees (+X direction)	
	X'2D00'	90 degrees (+Y direction)	
	X'5A00'	180 degrees (-X direction)	
	X'8700'	270 degrees (-Y direction)	
	X'FFFF''	Use LPD value. If no LPD is received, use printer default	

The permitted combinations are those where the difference between the I-axis orientation and the B-axis orientation are 90 degrees.

```
INLINE-DIRECTION BASELINE-DIRECTION
0 deg. rotation 90 deg. rotation
0 deg. rotation 270 deg. rotation
90 deg. rotation 180 deg. rotation
90 deg. rotation 0 deg. rotation
180 deg. rotation 270 deg. rotation
180 deg. rotation 90 deg. rotation
270 deg. rotation 180 deg. rotation
270 deg. rotation 0 deg. rotation
```

Set Variable Space Character Increment

Set Variable Space Character Increment Control Sequence specifies the increment of a Variable Space Character.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Sequence	
Byte 2	X'04'	LENGTH	X'021E..01'
Byte 3		SET VARIABLE SPACE CHARACTER INCREMENT	
	X'C4'	Unchained	
	X'C5'	Chained	
Bytes 4-5	X'0000' - X'7FFF'	INCREMENT (vsi)	X'0217..01'
		See p.25 "Notation Conventions"	
	X'FFFF'	Default Variable Space Increment for Current Font	

Temporary Baseline Move

The Temporary Baseline Move Control Sequence is used to change the position of the sequential baseline without change to the established baseline.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Sequence	
Byte 2	X'03' or X'06'	LENGTH	X'021E..01'
Byte 3		TEMPORARY MOVE BASELINE	
	X'78'	Unchained	
	X'79'	Chained	
Byte 4		DIRECTION	X'0298..03'
	X'00'	Baseline is Unchanged	
	X'01'	Return to Established Baseline	
	X'02'	Shift Baseline away from I-axis (Subscript)	
	X'03'	Shift Baseline toward I-axis (Superscript)	
	X'FF'	Same as X'00'	

Data Area	Value	Description	Error Code
Byte 5		PRECISION	X'0298..03
	X'00'	Accurate placement and character representation is required using the current font.	
	X'01'	A substitute font with characteristics identical to the current font may be used to simulate baseline shift (superscript/subscript). The printer accepts this value but treats it as X'00'.	
	X'FF'	Same as X'00'	
Bytes 6-7	X'0000' - X'7FFF'	TEMPORARY BASELINE INCREMENT	X'0298..03'
		See p.25 "Notation Conventions"	
	X'FFFF'	Half the current baseline increment	

Transparent Data

Transparent Data Control Sequence contains a sequence of coded characters that are presented without a scan for embedded control sequences.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Sequence	
Byte 2	X'02' - X'FF'	LENGTH	X'021E..01'
Byte 3		TRANSPARENT DATA	
	X'DA'	Unchained	
	X'DB'	Chained	
Bytes 4-255		CHARACTER STRING	

Underscore

The Underscore control sequence identifies text that is to be underscored.

Data Area	Value	Description	Error Code
Bytes 0-1	X'2BD3'	TEXT CONTROL Sequence	
Byte 2	X'03'	LENGTH	X'021E..01'
Byte 3		UNDERSCORE	
	X'76'	Unchained	
	X'77'	Chained	
Byte 4		BYPASS IDENTIFIERS	
	Bits 0-3	Reserved	
	Bit 4: 0	Underscore white space from Relative Move Inline	
	Bit 4: 1	Bypass white space from Relative Move Inline	
	Bit 5: 0	Underscore white space from Absolute Move Inline	
	Bit 5: 1	Bypass white space from Absolute Move Inline	
	Bit 6: 0	Underscore white space from Space or Variable Space Character	
	Bit 6: 1	Bypass white space from Space or Variable Space Character	
	Bit 7: 0	BYPASS Treat Bits 0-6 according to their set values	
	Bit 7: 1	NO BYPASS Treat Bits 0-6 as if their values are set to zero	
	X'FF'	NO BYPASS in EFFECT	

5. IM Image Command Set

IM Image Commands

Name	Command	Sub-command	Where to Look
Write Image Control	X'D63D'		p.154 "Write Image Control"
Write Image	X'D64D'		p.157 "Write Image"

Write Image Control

The Write Image Control command is the first command in the sequence to send raster image data to the printer. The command contains fields to define the input, scale, and image placement parameters. Several Write Image Control commands may be required to a complete raster image.

Data Area	Value	Description	Error Code
Bytes 0-1	X'0001' - X'7FFF'	Pixels per scan line in the output image	X'0242..01' X'0243..01'
Bytes 2-3	X'0001' - X'7FFF'	Number of scan lines in the output image	X'0244..01' X'0245..01'
Bytes 4-5	X'0001' - X'7FFF'	Pixels per scan line in the input image	X'0242..01' X'0243..01'
Bytes 6-7	X'0001' - X'7FFF'	Number of scan lines in the input image	X'0244..01' X'0245..01'
Byte 8	X'00'	Uncompressed input image	X'0246..01'
Byte 9	X'00'	One bit per pixel in the input image format	X'0246..01'
Byte 10		PIXEL MAGNIFICATION FACTOR	X'0247..01'
	X'01'	No Magnification Factor	
	X'02'	Magnification Factor of 2	
Byte 11		SCAN LINE MAGNIFICATION FACTOR	X'0247..01'
	X'01'	No Magnification Factor	
	X'02'	Magnification Factor of 2	
Bytes 12-13		SCAN LINE DIRECTION	X'0248..01'
	X'0000'	0 degrees	
	X'2D00'	90 degrees	
	X'5A00'	180 degrees	
	X'8700'	270 degrees	
Bytes 14-15		SCAN LINE SEQUENCE DIRECTION	X'0249..01'
	X'0000'	0 degrees	
	X'2D00'	90 degrees	
	X'5A00'	180 degrees	
	X'8700'	270 degrees	

Data Area	Value	Description	Error Code
Byte 16		REFERENCE COORDINATE SYSTEM	X'024A..01'
	X'00'	Absolute I, Absolute B	
	X'20'	Absolute I, Relative B	
	X'40'	Relative I, Absolute B	
	X'60'	Relative I, Relative B	
	X'A0'	Xp, Yp	
Bytes 17-19	X'FF8000' - X'007FFF'	Xp, I or I offset coordinate of the IM image block origin	X'024A..01'
Byte 20	X'00'	Reserved	
Bytes 21-23	X'FF8000' - X'007FFF'	Yp, B or B offset coordinate of the IM image block origin	X'024A..01'
Bytes 24-25		IMAGE COLOR (Named Color)	X'0253..01'
	X'0000' or X'FF00'	Printer Default (Black)	
	X'0001' or X'FF01'	Blue - Limited Simulated Color Support	
	X'0002' or X'FF02'	Red - Limited Simulated Color Support	
	X'0003' or X'FF03'	Pink - Limited Simulated Color Support	
	X'0004' or X'FF04'	Green - Limited Simulated Color Support	
	X'0005' or X'FF05'	Turquoise - Limited Simulated Color Support	
	X'0006' or X'FF06'	Yellow - Limited Simulated Color Support	
	X'0007'	White - Color of Medium (Reset)	
	X'0008'	Black	
	X'0009'	Dark Blue - Limited Simulated Color Support	
	X'000A'	Orange - Limited Simulated Color Support	
	X'000B'	Purple - Limited Simulated Color Support	
	X'000C'	Dark Green - Limited Simulated Color Support	
	X'000D'	Dark Turquoise - Limited Simulated Color Support	
	X'000E'	Mustard - Limited Simulated Color Support	

Data Area	Value	Description	Error Code
Bytes 24-25	X'000F'	Gray - Limited Simulated Color Support	
	X'0010'	Brown - Limited Simulated Color Support	
	X'FF07'	Printer Default (Black)	
	X'FF08'	Color of Medium (Reset)	
		Note ❒ See p.26 "Color Simulation" for color simulation details and product support specifics.	

Write Image

The data is a binary representation of the raster image. In the binary data, a 1-bit represents a colored pixel and a 0-bit represents a pixel left unchanged in the page map. In other words, if a pixel is set black by another block on the page (for example, text), it will not be reset to white if it is written with a 0-bit in the image block. Several Write Image commands may be required to a complete raster image.

An error occurs if the host program sends the End command and the total number of bytes of image data is a different number than specified in the image control record.

Data Area	Value	Description	Error Code
Bytes 0-End		Binary RASTER IMAGE	X'026A..01' X'026B..01' X'0264..01'

IO Image Commands

Name	Command	Sub-command	Where to Look
Write Image Control 2	X'D63E'		p.160 "Write Image Control 2"
Image Area Position		X'AC6B'	p.160 "Image Area Position"
Image Output Control		X'A66B'	p.161 "Image Output Control"
Image Data Descriptor		X'A6FB'	p.163 "Image Data Descriptor"
Write Image 2	X'D64E'		p.164 "Write Image 2"
Begin Segment		X'70'	p.164 "Begin Segment"
Begin Image Content		X'91'	p.165 "Begin Image Content"
Image Size Parameter		X'94'	p.165 "Image Size Parameter"
Image Encoding Parameter		X'95'	p.166 "Image Encoding Parameter"
Image Data Element Size Parameter		X'96'	p.166 "Image Data Element Size Parameter"
Image Look-up Table ID Parameter		X'97'	p.167 "Image Look-up Table ID Parameter"
Image Data		X'FE92'	p.167 "Image Data"
End Image Content		X'93'	p.167 "End Image Content"
End Segment		X'71'	p.167 "End Segment"

Write Image Control 2

The Write Image Control 2 data consists of three consecutive structured fields:

- Image Area Position Control (IAP)
- Image Output Control (IOC)
- Image Data Descriptor (IDD)

The Write Image Control 2 command and the command sequence that follows defines the image presentation block area on the current page. The parameters of this command define the size, placement and orientation of the image block and establish the parameters required to interpret the image segments.

Positive acknowledgement of image commands in Overlay State or Page Segment State means that the command or command sequence has been accepted for processing, but does not imply that its parameters have been checked in any way.

Image Area Position

This data structured field specifies the position and orientation of the image output area relative to a reference coordinate system. It is a REQUIRED data field in the Write Image Control 2 command.

Data Area	Value	Description	Error Code
Bytes 0-1	X'000B' - X'xxxx'	LENGTH of Image Area Position	X'0202..05'
Bytes 2-3	X'AC6B'	STRUCTURED FIELD ID	X'020B..05'
Bytes 4-5	X'8000' - X'7FFF'	Image Object Area Origin Xp, I, or I-offset Coordinate Position See p.25 "Notation Conventions"	
Bytes 6-7	X'8000 - X'7FFF'	Image Object Area Origin Yp, B, or B-offset Coordinate Position See p.25 "Notation Conventions"	
Bytes 8-9		ORIENTATION OF IMAGE BLOCK	X'0203..05'
	X'0000'	0 degrees	
	X'2D00'	90 degrees	
	X'5A00'	180 degrees	
	X'8700'	270 degrees	
Byte 10		COORDINATE REFERENCE SYSTEM	X'0204..05'
	X'00'	Absolute I, absolute B	
	X'20'	Absolute I, relative B	
	X'40'	Relative I, absolute B	
	X'60'	Relative I, relative B	
	X'A0'	Page Xp, Yp	

Data Area	Value	Description	Error Code
Bytes 11-n		Ignored	

Image Output Control

This data structured field specifies the mapping option for the image object. It is an ELECTIVE data field in the Write Image Control 2 command. If this field is omitted, the printer will use the following default values:

Mapping option = X'30' (Position and Trim)

X, Y Offset = 0.

X, Y Extent = Image Presentation Space extent defined by the Image Data Descriptor structured field.

Data Area	Value	Description	Error Code
Bytes 0-1	X'0010' - X'xxxx'	LENGTH of Image Output Control	X'0202..05'
Bytes 2-3	X'A66B'	Structured Field ID	X'020B..05'
Byte 4		UNIT BASE (Measurement Units)	X'0205..05'
	X'00'	10 Inches	
	X'01'	10 Centimeters	
Bytes 5-6	X'0001'-X'7FFF'	L-units per UNIT BASE	X'0206..05'
Bytes 7-8	X'0001'-X'7FFF'	X extent of IO image block in L-units for Page, Overlay and Page Segment (See p.25 "Notation Conventions")	X'0207..05'
	X'FFFF'	Use Load Page Descriptor Value	
Bytes 9-10	X'0001'-X'7FFF'	Y extent of IO image block in L-units for Page, Overlay and Page (See p.25 "Notation Conventions")	X'0207..05'
	X'FFFF'	Use Load Page Descriptor Value	
Byte 11		MAPPING CONTROL OPTION	X'0208..05'
	X'10'	Scale to fit	
	X'20'	Center and trim	
	X'30'	Position and trim	
	X'41'	Point to pixel	
	X'42'	Point to pixel with double dot	
	X'50'	Replicate and Trim	
Bytes 12-13	X'8000'-X'7FFF'	X OFFSET L-units	X'0209..05'
		See p.25 "Notation Conventions"	
Bytes 14-15	X'8000'-X'7FFF'	Y OFFSET L-units	X'0209..05'
		See p.25 "Notation Conventions"	

Data Area	Value	Description	Error Code
Bytes 16-n		IOC Triplets • Color Specification Triplet. This optional triplet can be placed at the end of the IOC command to specify the foreground color of the object area, before any object data is placed on the object area. Any number of IOC triplets can be received, they are processed in the order received and the resulting color of the object area depends on the last instance of the triplet received. See p.29 "Color Specification" for details. • Presentation Space Reset Mixing Triplet. This optional triplet can be placed at the end of the IOC command to specify whether or not an object area is reset to the color of medium before any object data is placed on the object area. Any number of IOC triplets can be received, they are processed in the order received and the resulting color of the object area depends on the last instance of the triplet received. See p.31 "Presentation Space Reset Mixing" for details.	

Note

❒ The Replicate and Trim Mapping Control option is supported only when the IPDS Menu PRINT MODE item is set to ENH (Enhanced 600 dpi).

Image Data Descriptor

This is a REQUIRED data structured field in the Write Image Control 2 command. It specifies parameters that define the image presentation space size and resolution.

Data Area	Value	Description	Error Code
Bytes 0-1	X'000F' - X'xxxx'	LENGTH of Image Data Descriptor	X'0202..05'
Bytes 2-3	X'A6FB'	STRUCTURED FIELD ID	X'020B..05'
Bytes 4-5	X'0000'	Reserved	
Byte 6		UNIT BASE (Measurement Units)	X'0205..05'
	X'00'	10 Inches	
	X'01'	10 Centimeters	
Bytes 7-8	X'0001'-X'7FFF'	X image points per unit base	X'0206..05'
Bytes 9-10	X'0001'-X'7FFF'	Y image points per unit base	X'0206..05'
Bytes 11-12	X'0001'-X'7FFF'	X EXTENT of image presentation space (in image points)	X'0207..05'
		See p.25 "Notation Conventions"	
Bytes 13-14	X'0001'-X'7FFF'	Y EXTENT of image presentation space (in image points)	X'0207..05'
		See p.25 "Notation Conventions"	
Bytes 15-end of IDD		IOCA SDFs	
Byte 0	X'F4'	Set Extended Bilevel Image Color SDF	
	X'F6'	Set Bilevel Image Color SDF *1	
Byte 1	X'04'	LENGTH	
Byte 2	X'00'	AREA	
Byte 3	X'00'	Reserved	
Bytes 4-5		Named Color	
	X'0000' or X'FF00'	Printer Default (Black)	
	X'0001' or X'FF01'	Blue - Limited Simulated Color Support	
	X'0002' or X'FF02'	Red - Limited Simulated Color Support	
	X'0003' or X'FF03'	Pink - Limited Simulated Color Support	
	X'0004' or X'FF04'	Green - Limited Simulated Color Support	
	X'0005' or X'FF05'	Turquoise - Limited Simulated Color Support	

Data Area	Value	Description	Error Code
Bytes 4-5	X'0006' or X'FF06'	Yellow - Limited Simulated Color Support	
	X'0007'	White - Color of Medium (Reset)	
	X'0008'	Black	
	X'0009'	Dark Blue - Limited Simulated Color Support	
	X'000A'	Orange - Limited Simulated Color Support	
	X'000B'	Purple - Limited Simulated Color Support	
	X'000C'	Dark Green - Limited Simulated Color Support	
	X'000D'	Dark Turquoise - Limited Simulated Color Support	
	X'000E'	Mustard - Limited Simulated Color Support	
	X'000F'	Gray - Limited Simulated Color Support	
	X'0010'	Brown - Limited Simulated Color Support	
	X'FF07'	Printer Default (Black)	
	X'FF08'	Color of Medium (Reset)	

*1 Refer to the Intelligent Printer Data Stream Reference and the Image Object Content Architecture Reference for specifics on the Set Bilevel Image Color SDF format.

Write Image 2

The image segment is processed as it is received by the printer and is not retained or stored as a named image segment.

Write Image 2 command carries the IO image data within a hierarchical sequence of self-defining fields. See the Intelligent Printer Data Stream Reference and the Image Object Content Architecture Reference.

Begin Segment

Data Area	Value	Description	Error Code
Byte 0	X'70'	Begin Segment	X'0570..0F'
Byte 1	X'00'-X'FF'	Length	

Begin Image Content

Data Area	Value	Description	Error Code
Byte 0	X'91'	Begin Image Content	X'0591..0F'
Byte 1	X'01'-X'FF'	Length	X'0500..03'
Byte 2	X'FF'	Format Specification	X'0500..04'

Image Size Parameter

The Image Size Parameter specifies the size of the image defined within the image segment. Mapping of the image into the image presentation space (See p.163 "Image Data Descriptor") is on a 1 image point to 1 image point basis (one image point of an IO-Image segment is mapped to one image point of the image presentation space).

Data Area	Value	Description	Error Code
Byte 0	X'94'	IMAGE SIZE	X'0594..0F'
Byte 1	X'09'-X'FF'	LENGTH of the following bytes	X'0500..03'
Byte 2		UNIT BASE (Measurement Units)	
	X'00'	10 Inches	
	X'01'	10 Centimeters	
	X'02'	Logical (resolution ratio)	
Bytes 3-4	X'0000' - X'7FFF'	X image points per unit base	
Bytes 5-6	X'0000' - X'7FFF'	Y image points per unit base	
Bytes 7-8	X'0000'-X'7FFF'	X extent of the image in image points	X'0500..04' X'0594..11' X'0595..11' X'05A9..02'
Bytes 9-10	X'0000'-X'7FFF'	Y extent of the image in image points	X'0500..04' X'05A9..02'

Image Encoding Parameter

Data Area	Value	Description	Error Code
Byte 0	X'95'	IMAGE ENCODING	X'0595..0F'
Byte 1	X'02'-X'FF'	LENGTH of the following bytes	X'0500..03'
Byte 2		COMPRESSION ALGORITHM	X'0595..10'
	X'01'	IBM MMR compression	X'0595..11'
	X'03'	No compression	
	X'06'	RL4 compression	
	X'08'	ABIC (Bilevel Q-Coder)	
	X'80'	G3 MH (CCITT T.4 facsimile 1-D)	
	X'81'	G3 MR (CCITT T.4 G3 facsimile 2-D)	
	X'82'	G4 MMR (CCITT T.6 G4 facsimile 2-D)	
Byte 3		RECORDING ALGORITHM	X'0595..10'
	X'01'	RIDIC (Recording Image Data Inline Code) Unpadded RIDIC	
Byte 4		BIT ORDER within each image data byte	
	X'00'	Left-to-Right	
	X'01'	Right-to-Left	

Image Data Element Size Parameter

Data Area	Value	Description	Error Code
Byte 0	X'96'	IMAGE DATA ELEMENT SIZE	X'0596..0F'
Byte 1	X'01'-X'FF'	LENGTH of the following bytes	X'0500..03'
Byte 2		NUMBER of BITS per PIXEL	X'0596..10'
	X'01'	1 bit per pixel	X'0500..04'
	X'08'	8 bits per pixel	X'0596..11'

If 1 is specified, the image is binary, with 1-bit representing black pixels and 0-bit representing pixels unchanged in the page map. If the image is uncompressed, each raster scan in the image data must be padded so that it is an integral number of bytes.

If 8 is specified, the image is gray scale. Each image byte is considered to be a value 0 to 255, where 0 is maximum black, 255 is no black at all, and the values in between are shades of gray.

The printer implements 8 bit per pixel images by halftoning. Halftoning significantly degrades image detail. For that reason, resolutions of gray scale data greater than 120 pixels per inch are not recommended except for draft printing purposes.

If 8 is specified, the Image Compression, if specified with the Image Encoding command, must be uncompressed. This error is detected when the first Image Data command is received.

Image Look-up Table ID Parameter

Data Area	Value	Description	Error Code
Byte 0	X'97'	Image Look-up Table ID Parameter	X'0597..0F'
Byte 1	X'01'-X'FF'	LENGTH of the following bytes	X'0500..03'
Byte 2	X'00'	Look up table ID	X'0597..10'

Image Data

Data Area	Value	Description	Error Code
Bytes 0-1	X'FE92'	Image Data	X'0592..0F'
Bytes 2-3	X'0001'-X'FFFF'	Length	X'0500..03'' X'0594..01'
Bytes 4-end	X'x...x'	Image Data	X'0597..10'

End Image Content

Data Area	Value	Description	Error Code
Byte 0	X'93'	End Image Content	X'0593..0F'
Byte 1	X'00'-X'FF'	Length	

End Segment

Data Area	Value	Description	Error Code
Byte 0	X'71'	End Segment	X'0571..0F'
Byte 1	X'00'-X'FF'	Length	

Graphics Commands

The base reference for graphic drawing orders is the Graphics Object Content Architecture Reference.

Name	Command	Sub-command	Where to Look
Write Graphics Control	X'D684'		Graphics Area Position p.170 "Write Graphics Control"
Graphics Area Position		X'AC6B'	p.170 "Graphics Area Position"
Graphics Output Control		X'A66B'	p.171 "Graphics Output Control"
Graphics Data Descriptor		X'A6BB'	p.173 "Graphics Data Descriptor"
Write Graphics	X'D685'		p.170 "Write Graphics Control"
Begin Segment Introducer		X'70'	p.177 "Begin Segment Introducer"

Write Graphics Control

Graphics Area Position

Data Area	Value	Description	Error Code
Bytes 0-1	X'000B'-X'xxxx'	LENGTH of Graphics Area Position	X'0202..05'
Bytes 2-3	X'AC6B'	Structured Field ID.	X'020B..05'
Bytes 4-5	X'8000'-X'7FFF'	GRAPHICS BLOCK ORIGIN Xp, I, or I-offset Coordinate Position. See p.25 "Notation Conventions"	
Bytes 6-7	X'8000'-X'7FFF'	GRAPHICS BLOCK ORIGIN Yp, B, or B-offset Coordinate Position. See p.25 "Notation Conventions"	
Bytes 8-9		ORIENTATION of Graphic Block	X'0203..05'
	X'0000'	0 degrees	
	X'2D00'	90 degrees	
	X'5A00'	180 degrees	
	X'8700'	270 degrees	
Byte 10		COORDINATE REFERENCE SYSTEM	X'0204..05'
	X'00'	Absolute I, Absolute B	
	X'20'	Absolute I, Relative B	
	X'40'	Relative I, Absolute B	
	X'60'	Relative I, Relative B	
	X'A0'	Page Xp, Yp	
Bytes 11-n		Ignored	

Graphics Output Control

Data Area	Value	Description	Error Code
Bytes 0-1	X'0010'-X'xxxx'	LENGTH of Graphics Output Control (GOC)	X'0202..05'
Bytes 2-3	X'A66B'	STRUCTURED FIELD ID	X'020B..05'
Byte 4		UNIT BASE (Measurement Units)	X'0205..05'
	X'00'	10 Inches	
	X'01'	10 Centimeters	
Bytes 5-6	X'0001' - X'7FFF'	L-Units per UNIT BASE	X'0206..05'
Bytes 7-8	X'0001' - X'7FFF'	X EXTENT of GRAPHICS BLOCK in L-units See p.25 "Notation Conventions"	X'0207..05'
	X'FFFF'	Use Load Page Descriptor Value	
Bytes 9-10	X'0001' - X'7FFF'	Y EXTENT of GRAPHICS BLOCK in L-units See p.25 "Notation Conventions"	X'0207..05'
	X'FFFF'	Use Load Page Descriptor Value	
Byte 11		MAPPING Control Option	X'0208..05'
	X'10'	Scale to Fit	
	X'20'	Center and Trim	
	X'30'	Position and Trim	
Bytes 12-13	X'8000' - X'7FFF'	X OFFSET L-units. See p.25 "Notation Conventions"	X'0209..05'
Bytes 14-15	X'8000' - X'7FFF'	Y OFFSET L-units. See p.25 "Notation Conventions"	X'0209..05'

Data Area	Value	Description	Error Code
Bytes 16-n		GOC Triplets • Color Specification Triplet. This optional triplet can be placed at the end of the GOC command to specify the foreground color of the object area, before any object data is placed on the object area. Any number of GOC triplets can be received, they are processed in the order received and the resulting color of the object area depends on the last instance of the triplet received. See p.29 "Color Specification" for details. • Presentation Space Reset Mixing Triplet. This optional triplet can be placed at the end of the GOC command to specify whether or not an object area is reset to the color of medium before any object data is placed on the object area. Any number of GOC triplets can be received, they are processed in the order received and the resulting color of the object area depends on the last instance of the triplet received. See p.31 "Presentation Space Reset Mixing" .	

Note

❒ The Graphics Output Control Self Defining Field is optional and may be omitted from the WGC command. If the GOC is omitted, the printer uses the following:

- Mapping Control Option X'30' (Position and Trim)
- X Offset = 0
- Y Offset = 0
- Graphics Block size equals the Graphics Presentation Space Window size which is defined in the Graphics Data Descriptor (GDD) Self Defining Field (See p.173 "Graphics Data Descriptor").

Graphics Data Descriptor

Data Area	Value	Description	Error Code
Bytes 0-1	X'001C'-X'xxxx'	LENGTH of Graphics Data Descriptor (GDD)	X'0202..05'
Bytes 2-3	X'A6BB'	STRUCTURED FIELD ID	X'020B..05'
Byte 4	 X'00' X'01'	UNIT BASE (Measurement Units) 10 Inches 10 Centimeters	X'0205..05'
Byte 5	X'00'	Reserved	
Bytes 6-7	X'0001' - X'7FFF'	Xg UNITS per UNIT BASE	X'0206..05'
Bytes 8-9	X'0001' - X'7FFF'	Yg UNITS per UNIT BASE Yg = Xg	X'0206..05'
Bytes 10-13	X'00000000'	Reserved	
Bytes 14-15	X'8000'-X'7FFF'	Xg LEFT LIMIT of Graphic Presentation Space Window. See p.25 "Notation Conventions"	
Bytes 16-17	X'8000'-X'7FFF'	Xg RIGHT LIMIT of Graphic Presentation Space Window. See p.25 "Notation Conventions"	
Bytes 18-19	X'8000'-X'7FFF'	Yg TOP LIMIT of Graphic Presentation Space Window. See p.25 "Notation Conventions"	
Bytes 20-21	X'8000'-X'7FFF'	Yg BOTTOM LIMIT of Graphic Presentation Space Window. See p.25 "Notation Conventions"	
Bytes 22-27	X'000000000000'	Reserved	
Bytes 28-n		INITIAL GRAPHICS DEFAULTS. See "GDD Initial Graphics Defaults Self Describing Instructions"	

If the image resolution specified in the GDD is X'0000' (indicating that no explicit resolution is specified), then the resolution used is the resolution specified in the OPC's Image and Coded Font Resolution Self-Defining Field.

❖ GDD Initial Graphics Defaults Self Describing Instructions

Data Area	Value	Description	Error Code
Byte 0	X'21'	SET CURRENT DEFAULTS	X'0300..21'
Byte 1	X'04'-X'FF'	LENGTH of Data	X'0300..03'
Byte 2		SET Byte	X'0300..02'
	X'00'	Drawing Attributes	
	X'01'	Line Attributes	
	X'02'	Character Attributes	
	X'03'	Marker Attributes	
	X'04'	Pattern Attributes	
	X'0B'	Arc Parameters	
Bytes 3-4		MASK Bytes. See p.175 "Graphics Drawing Order Defaults and Masks"	X'0300..03'
Byte 5		DEFAULT Byte	X'0300..02'
	X'0F'	Use Standard Default	X'0300..03'
	X'8F'	Use the following Data Bytes	
Bytes 6-n		Data bytes	X'0300..21'

7

Note

❒ See p.177 "Drawing Orders" for valid drawing order defaults.

❖ Graphics Drawing Order Defaults and Masks

Set Byte	Mask Bit	Description
X'00'		DRAWING ATTRIBUTES
	0	Color (Named Color)
	1	Foreground Mix
	2	Background Mix
	3-15	Reserved
X'01'		LINE ATTRIBUTES
	0	Line Type
	1	Line Width
	2-15	Reserved
X'02'		CHARACTER ATTRIBUTES
	0	Angle X, Y
	1	Character Cell Size CW, CH
	2	Direction
	3	Precision
	4	Character Set
	5	Shear X, Y
	6-15	Reserved
X'03'		MARKER ATTRIBUTES
	0-2	Reserved
	3	Precision
	4	Marker Set
	5-6	Reserved
	7	Marker Symbol
	8-15	Reserved
X'04'		PATTERN ATTRIBUTES
	0-6	Reserved
	7	Pattern Symbol
	8-15	Reserved
X'0B'		ARC PARAMETERS
	0	P Value
	1	R Value
	2	Q Value
	3	S Value
	4-15	Reserved

Write Graphics

Write Graphics Defaults

The following defaults will be used if not previously defined by p.175 “Graphics Drawing Order Defaults and Masks”. The current value of an attribute is taken into account when the drawing order is received.

Description	Value
Color	Black
Line Type	Solid
Line Width	Normal (4 pixel)
Character Cell	10 CPI
Character Set	Courier 10
Character Angle	No Rotation
Character Direction	Left to Right
Marker Symbol	Cross
Pattern Symbol	Solid Shading
Current Position	X,Y = 0,0
Arc Parameters	P=Q=1; R=S=0
Foreground Mix	Overpaint
Background Mix	Leave Alone
Character Precision	Character Precision
Marker Precision	Character Precision
Marker Symbol Set	Resident Set in Printer

Begin Segment Introducer

Data Area	Value	Description	Error Code
Byte 0	X'70'	BEGIN SEGMENT code	
Byte 1	X'0C'	LENGTH of the following parameters	X'0370..C1'
Bytes 2-5		SEGMENT ID (Ignored)	
Byte 6	X'00'	Reserved	
Byte 7		FLAGS	X'0370..01'
	Bits 0-2: 00	Reserved	X'0370..82'
	Bit 3: 0/1	No Prolog (0); Prolog (1)	
	Bit 4: 0	Reserved	
	Bits 5-6: 00/11	New Segment (reinitialize graphics defaults)/Append Segment (do not reinitialize defaults)	
	Bit 7: 0	Reserved	
Bytes 8-9	X'0000'-X'FFFF'	Length of this segment (SEGLEN)	
Bytes 10-13	X'00000000'	Reserved	
Bytes 14-n		See p.177 "Drawing Orders"	

Drawing Orders

The machine supports all DR2 Drawing Orders and valid data values as defined in the Intelligent Printer Data Stream Reference. The following are those Drawing Orders which define specific data values.

❖ Set Background Mix:

Data Area	Value	Description	Error Code
Byte 0	X'0D'	Order code	
Byte 1		BACKGROUND MIX ATTRIBUTE	X'0300..04'
	X'00'	Drawing default	X'0300..0E'
	X'05'	Leave Alone	

❖ Set Character Angle:

Data Area	Value	Description	Error Code
Byte 0	X′34′	Order code	
Byte 1	X′04′	Length	X′0300..03′
Bytes 2-3	X′8000′ - X′7FFF′	Xg COORDINATE	X′0334..00′
Bytes 4-5	X′8000′ - X′7FFF′	Yg COORDINATE	X′0334..00′

- If Xg = 0 and Yg = 0 then the character angle is 0 degrees (default)
- If Xg > 0 and Yg = 0 then the character angle is 0 degrees
- If Xg = 0 and Yg > 0 then the character angle is 90 degrees
- If Xg < 0 and Yg = 0 then the character angle is 180 degrees
- If Xg = 0 and Yg < 0 then the character angle is 270 degrees

Note

❒ Exception X′0334..00′ applies when both Xg and Yg are non-zero values.

❖ Set Character Precision:

Data Area	Value	Description	Error Code
Byte 0	X′39′	Order code	
Byte 1		PRECISION TYPE	X′0300..04′
	X′00′	Current default	X′0300..0E′
	X′01′	String Precision	
	X′02′	Character Precision	

❖ Set Character Set:

Data Area	Value	Description	Error Code
Byte 0	X′38′	Order code	
Byte 1		LOCAL CHARACTER SET ID	X′03C3..00′
	X′00′	Current default	
	X′01′ - X′FE′	Local ID for Character Set	
	X′FF′	Printer Default	

❖ Set Color:

Data Area	Value	Description	Error Code
Byte 0	X'0A'	Order code	
Byte 1		COLOR	X'0300..04'
	X'00'	Printer Default (Black)	
	X'01'	Blue - Limited Simulated Color Support	
	X'02'	Red - Limited Simulated Color Support	
	X'03'	Pink - Limited Simulated Color Support	
	X'04'	Green - Limited Simulated Color Support	
	X'05'	Turquoise - Limited Simulated Color Support	
	X'06'	Yellow - Limited Simulated Color Support	
	X'07'	Black	
	X'08'	Color of Medium (Reset)	
		Note ❒ See p.26 "Color Simulation" for color simulation details and product support specifics.	

❖ Set Extended Color:

Data Area	Value	Description	Error Code
Byte 0	X'26'	Order code	
Byte 1	X'02'	Length	X'0300..03'
Bytes 2-3		EXTENDED COLOR	X'0300..04'
	X'0000' or X'FF00'	Printer Default (Black)	
	X'0001' or X'FF01'	Blue - Limited Simulated Color Support	
	X'0002' or X'FF02'	Red - Limited Simulated Color Support	
	X'0003' or X'FF03'	Pink - Limited Simulated Color Support	
	X'0004' or X'FF04'	Green - Limited Simulated Color Support	
	X'0005' or X'FF05'	Turquoise - Limited Simulated Color Support	
	X'0006' or X'FF06'	Yellow - Limited Simulated Color Support	
	X'0007'	White - Color of Medium (Reset)	
	X'0008'	Black	
	X'0009'	Dark Blue - Limited Simulated Color Support	
	X'000A'	Orange - Limited Simulated Color Support	
	X'000B'	Purple - Limited Simulated Color Support	
	X'000C'	Dark Green - Limited Simulated Color Support	
	X'000D'	Dark Turquoise - Limited Simulated Color Support	
	X'000E'	Mustard - Limited Simulated Color Support	
	X'000F'	Gray - Limited Simulated Color Support	
	X'0010'	Brown - Limited Simulated Color Support	
	X'FF07'	Printer Default (Black)	
	X'FF08'	Color of Medium (Reset)	
		Note ❒ See p.26 "Color Simulation" for color simulation details and product support specifics.	

❖ Set Line Type:

Data Area	Value	Description	Error Code
Byte 0	X'18'	Order code	
Byte 1		LINE TYPE	X'0300..04'
	X'00'	Current default	X'0300..0E'
	X'01'	Dotted Line	
	X'02'	Short Dashed Line	
	X'03'	Dashed and Dotted Line	
	X'04'	Double Dotted Line	
	X'05'	Long Dashed Line	
	X'06'	Dashed Double Dotted Line	
	X'07'	Solid Line	
	X'08'	Invisible Line	

❖ Set Fractional Line Width (4028 Emulation Mode):

Data Area	Value	Description	Error Code
Byte 0	X'11'	Order code	
Byte 1	X'02'	Length	X'0300..03'
Bytes 2-3		FRACTIONAL LINE WIDTH	X'0300..04'
	X'0000'	Current default	X'0300..0E'
	X'0001' - X'00FF'	2 Pixels Wide	
	X'0100' - X'017F'	4 Pixels Wide	
	X'0180' - X'01FF'	6 Pixels Wide	
	X'0200' - X'0F7F'	G8-60 Pixels Wide	
	X'0F80' - X'FFFF'	62 Pixels Wide	

❖ Set Fractional Line Width (Native Mode):

Data Area	Value	Description	Error Code
Byte 0	X'11'	Order code	
Byte 1	X'02'	Length	X'0300..03'
Bytes 2-3		FRACTIONAL LINE WIDTH	X'0300..04'
	X'0000'	Current default	X'0300..0E'
	X'0001' - X'007F'	1 Pixel Wide	
	X'0080' - X'00BF'	2 Pixels Wide	
	X'00C0' - X'00FF'	3 Pixels Wide	
	X'0100' - X'013F'	4 Pixels Wide	
	X'013F' - X'017F'	5 Pixels Wide	
	X'0180' - X'01BF'	6 Pixels Wide	
	X'01C0' - X'01FF'	7 Pixels Wide	
	X'0200' - X'0F7F'	8-60 Pixels Wide	
	X'0F80' - X'FFFF'	62 Pixels Wide	

❖ Set Line Width:

Data Area	Value	Description	Error Code
Byte 0	X'19'	Order code	
Byte 1		LINE WIDTH	X'0300..04'
	X'00'	Current default	X'0300..0E'
	X'01' - X'0F'	2-58 Pixels Wide (4 pixels increments)	
	X'10' - X'FF'	62 Pixels Wide	

❖ Set Marker Precision:

Data Area	Value	Description	Error Code
Byte 0	X'3B'	Order code	
Byte 1		MARKER PRECISION	X'0300..04'
	X'00'	Drawing default	X'0300..0E'
	X'01'	Character Precision	
	X'02'	Stroke Precision	

❖ Set Mix:

Data Area	Value	Description	Error Code
Byte 0	X'0C'	Order code	
Byte 1		MIX ATTRIBUTE	X'0300..04'
	X'00'	Drawing default	X'0300..0E'
	X'02'	Overpaint	

❖ Set Pattern Set:

Data Area	Value	Description	Error Code
Byte 0	X'08'	Order code	
Byte 1	X'00'	PATTERN SET ID	X'0368..03'

❖ Set Pattern Symbol:

Data Area	Value	Description	Error Code
Byte 0	X'28'	Order code	
Byte 1		PATTERN SYMBOL ID	X'0368..04'
	X'00'	Use Current default	
	X'01' - X'08'	Decreasing Density	
	X'09'	Vertical Lines	
	X'0A'	Horizontal Lines	
	X'0B'	Diagonal Lines 1 (Bot L/Top R)	
	X'0C'	Diagonal Lines 2 (Bot L/Top R)	
	X'0D'	Diagonal Lines 1 (Top L/Bot R)	
	X'0E'	Diagonal Lines 2 (Top L/Bot R)	
	X'0F'	No Shading	
	X'10'	Solid Shading	
	X'40'	Blank	

Set Process Color

The Set Process Color control specifies a process color, highlights color or named color that sets the following color attributes to the same value:

- Character color
- Image color
- Line color
- Marker color
- Pattern color

Data Area	Value	Description	Error Code
Byte 0	X'B2'	Order Code	
Byte 1	X'12' - X'14'	LENGTH	X'0300..03'
Byte 2	X'00'	RESERVED	
Byte 3		COLOR SPACE	X'020E..02'
	X'01'	RGB - Limited Simulated Color Support	
	X'04'	CMYK - Limited Simulated Color Support	
	X'06'	HCS - Limited Simulated Color Support	
	X'08'	CIELAB - Limited Simulated Color Support	
	X'40'	Standard OCA - Limited Simulated Color Support	
Bytes 4-7	X'00000000'	RESERVED	
Byte 8		1ST COLOR COMPONENT BITS	X'020E..05'
	X'01' - X'08'	(RGB, CMYK, CIELAB)	
	X'10'	Standard OCA Color Space	
Byte 9		2ND COLOR COMPONENT BITS	X'020E..05'
	X'00' - X'08'	(RGB, CMYK, Highlight, CIELAB)	
Byte 10		3RD COLOR COMPONENT BITS	X'020E..05'
	X'00' - X'08'	(RGB, CMYK, CIELAB)	
Byte 11		4TH COLOR COMPONENT BITS	X'020E..05'
	X'00' - X'08'	(CMYK)	

Data Area	Value	Description	Error Code
Bytes 12-15		COLOR VALUE	X'020E..03'
		RGB Color Space	X'020E..04'
	X'nn'	Red Intensity	
	X'nn'	Green Intensity	
	X'nn'	Blue Intensity	
		CMYK Color Space	
	X'nn'	Cyan Intensity	
	X'nn'	Magenta Intensity	
	X'nn'	Yellow Intensity	
	X'nn'	Black Intensity	
		Highlight Color Space	
	X'nnnn'	Highlight Color Number	
	X'nn'	Percent Coverage	
	X'nn'	Percent Shading	
		CIELAB Color Space	
	X'nn'	Luminance (L)	
	X'nn'	Chrominance Difference (a)	
	X'nn'	Chrominance Difference (b)	
		Standard OCA Color Space	
	X'0000' or X'FF00'	Printer Default (Black)	
	X'0001' or X'FF01'	Blue	
	X'0002' or X'FF02'	Red	
	X'0003' or X'FF03'	Pink	
	X'0004' or X'FF04'	Green	
	X'0005' or X'FF05'	Turquoise	
	X'0006' or X'FF06'	Yellow	
	X'0007'	White - Color of Medium (Reset)	
	X'0008'	Black	
	X'0010'	Brown	
	X'FF07'	Printer Default (Black)	
	X'FF08'	Color of Medium (Reset)	

Drawing Order Summary

Zero or more drawing orders follow each Begin Segment Introducer. These drawing orders either specify graphics to be printed or assign drawing attributes.

Given below is a list of the supported drawing orders. Please refer to the AFP GOCA Reference, S544-5498, for complete descriptions of all GOCA drawing orders.

Code	Drawing Order
X'68'	Begin Area
X'D1'	Begin Image
X'91'	Begin Image at Current Position
X'C0'	Box
X'80'	Box at Current Position
X'C3'	Character String
X'83'	Character String at Current Position
X'01'	Comment
X'60'	End Area
X'93'	End Image
X'3E'	End Prolog
X'71'	End Segment (treated like a No Operation command)
X'C5'	Fillet
X'85'	Fillet at Current Position
X'C7'	Full Arc
X'87'	Full Arc at Current Position
X'92'	Image Data
X'C1'	Line
X'81'	Line at Current Position
X'C2'	Marker
X'82'	Marker at Current Position
X'00'	No Operation
X'E1'	Relative Line
X'E3'	Partial Arc
X'A3'	Partial Arc at Current Position
X'A1'	Relative Line at Current Position
X'04'	Segment Characteristics (treated like a No Operation command)
X'22'	Set Arc Parameters

Code	Drawing Order
X'OD'	Set Background Mix
X'34'	Set Character Angle
X'33'	Set Character Cell
X'3A'	Set Character Direction
X'39'	Set Character Precision
X'38'	Set Character Set
X'35'	Set Character Shear
X'0A'	Set Color
X'21'	Set Current Position
X'26'	Set Extended Color
X'11'	Set Fractional Line Width
X'18'	Set Line Type
X'19'	Set Line Width
X'37'	Set Marker Cell
X'3B'	Set Marker Precision
X'3C'	Set Marker Set
X'29'	Set Marker Symbol
X'0C'	Set Mix
X'08'	Set Pattern Set
X'28'	Set Pattern Symbol
X'43'	Set Pick Identifier (treated like a No Operation command)
X'B2'	Set Process Color

8. Bar Code Command Set

The base reference for Bar Code commands is the Bar Code Object Content Architecture Reference.

Bar Code Commands

Name	Command	Sub-command	Where to Look
Write Bar Code Control	X'D680'		p.190 "Write Bar Code Control"
Bar Code Area Position		X'AC6B'	p.190 "Bar Code Area Position"
Bar Code Output Control		X'A66B'	p.191 "Bar Code Output Control"
Bar Code Data Descriptor		X'A6EB'	p.193 "Bar Code Data Descriptor"
Write Bar Code	X'D681'		p.204 "Write Bar Code"

Write Bar Code Control

Bar Code Area Position

Data Area	Value	Description	Error Code
Bytes 0-1	X'000B'-X'xxxx'	LENGTH of Bar Code Area Position (BCAP)	X'0202..05'
Bytes 2-3	X'AC6B'	STRUCTURED FIELD ID	X'020B..05'
Bytes 4-5	X'8000'-X'7FFF'	Bar Code BLOCK ORIGIN Xp, I, or I-OFFSET coordinate position (in 1440ths)	X'0411..00'
Bytes 6-7	X'8000'-X'7FFF'	Bar Code BLOCK ORIGIN Yp, B, or B-OFFSET coordinate position (in 1440ths)	X'0411..00'
Bytes 8-9	 X'0000' X'2D00' X'5A00' X'8700'	ORIENTATION OF Bar Code BLOCK 0 degrees 90 degrees 180 degrees 270 degrees	X'0203..05'
Byte 10	 X'00' X'20' X'40' X'60' X'A0'	COORDINATE REFERENCE SYSTEM Absolute I, Absolute B Absolute I, Relative B Relative I, Absolute B Relative I, Relative B Page Xp, Yp	X'0204..05'
Bytes 11-n :c		Ignored	

Bar Code Output Control

Data Area	Value	Description	Error Code
Bytes 0-1	X'0010'-X'xxxx'	LENGTH of Bar Code Output Control (BCOC)	X'0202..05'
Bytes 2-3	X'A66B'	STRUCTURED FIELD ID	X'020B..05'
Byte 4		UNIT BASE (Measurement Units)	X'0205..05'
	X'00'	10 Inches	
	X'01'	10 Centimeters	
Bytes 5-6	X'0001' - X'7FFF'	L-Units per UNIT BASE	X'0206..05'
Bytes 7-8	X'0001' - X'7FFF'	X EXTENT of Bar Code BLOCK in L-units See p.25 "Notation Conventions"	X'0207..05'
	X'FFFF'	Use Load Page Descriptor Value	
Bytes 9-10	X'0001' - X'7FFF'	Y EXTENT of Bar Code BLOCK in L-units See p.25 "Notation Conventions"	X'0207..05'
	X'FFFF'	Use Load Page Descriptor Value	
Byte 11	X'30'	MAPPING CONTROL OPTION (Position)	X'0208..05'
Bytes 12-13	X'8000' - X'7FFF'	X OFFSET L-units See p.25 "Notation Conventions"	X'0209..05'
Bytes 14-15	X'8000' - X'7FFF'	Y OFFSET L-units See p.25 "Notation Conventions"	X'0209..05'

Data Area	Value	Description	Error Code
Bytes 16-n		Triplets • Color Specification Triplet. This optional triplet can be placed at the end of the BCOC command to specify the foreground color of the object area, before any object data is placed on the object area. Any number of BCOC triplets can be received, they are processed in the order received and the resulting color of the object area depends on the last instance of the triplet received. See p.29 "Color Specification" for details. • Presentation Space Reset Mixing Triplet. This optional triplet can be placed at the end of the BCOC command to specify whether or not an object area is reset to the color of medium before any object data is placed on the object area. Any number of BCOC triplets can be received, they are processed in the order received and the resulting color of the object area depends on the last instance of the triplet received. See p.31 "Presentation Space Reset Mixing" for details.	

Bar Code Data Descriptor

Data Area	Value	Description	Error Code
Bytes 0-1	X'001B'-X'xxxx'	LENGTH of Bar Code Data Descriptor (BCDD)	X'0202..05'
Bytes 2-3	X'A6EB'	STRUCTURED FIELD ID	X'020B..05'
Byte 4	 X'00' X'01'	UNIT BASE (Measurement Units) 10 Inches 10 Centimeters	X'0205..05'
Byte 5	X'00'	Reserved	
Bytes 6-7	X'0001' - X'7FFF'	Xbc Units per UNIT BASE	X'0206..05'
Bytes 8-9	X'0001' - X'7FFF'	Ybc Units per UNIT BASE	X'0206..05'
Bytes 10-11	X'0001' - X'7FFF' X'FFFF'	X EXTENT of Bar Code Presentation Space in L-units. See p.25 "Notation Conventions" Use BCOC X EXTENT	X'0207..05'
Bytes 12-13	X'0001' - X'7FFF' X'FFFF'	Y EXTENT of Bar Code Presentation Space in L-units. See p.25 "Notation Conventions" Use BCOC Y EXTENT	X'0207..05'
Bytes 14-15	X'0000'	Reserved	
Byte 16		BAR CODE TYPE See p.197 "Bar Code Type and Modifier Description and Values"	X'0403..00'
Byte 17		BAR CODE MODIFIER See p.197 "Bar Code Type and Modifier Description and Values"	X'040B..00'
Byte 18	X'01' - X'FE' X'FF'	FONT LOCAL ID Default Font Local ID (Note 1)	X'0404..00'

Data Area	Value	Description	Error Code
Bytes 19-20		COLOR (Named Color)	X'0405..00'
	X'0000' or X'FF00'	Printer Default (Black)	
	X'0001' or X'FF01'	Blue - Limited Simulated Color Support	
	X'0002' or X'FF02'	Red - Limited Simulated Color Support	
	X'0003' or X'FF03'	Pink - Limited Simulated Color Support	
	X'0004' or X'FF04'	Green - Limited Simulated Color Support	
	X'0005' or X'FF05'	Turquoise - Limited Simulated Color Support	
	X'0006' or X'FF06'	Yellow - Limited Simulated Color Support	
	X'0007'	White - Color of Medium (Reset) Black	
	X'0008'	Dark Blue - Limited Simulated Color Support	
	X'0009'	Orange - Limited Simulated Color Support	
	X'000A'	Purple - Limited Simulated Color Support	
	X'000B'	Dark Green - Limited Simulated Color Support	
	X'000C'	Dark Turquoise - Limited Simulated Color Support	
	X'000D'	Mustard - Limited Simulated Color Support	
	X'000E'	Gray - Limited Simulated Color Support	
	X'000F'	Brown - Limited Simulated Color Support	
	X'0010'	Printer Default (Black)	
	X'FF07'	Color of Medium (Reset)	
	X'FF08'	Printer Default (Black)	
	X'FFFF'		

Data Area	Value	Description	Error Code
Byte 21		UNIT MODULE WIDTH	X'0406..00'
	X'07' - X'36'	Printer Default	
	X'FF'	Range and Printer Default are specified by Bar Code Type in Byte 16 (especially 2D bar codes)	
Bytes 22-23	X'0001' - X'7FFF'	ELEMENT HEIGHT in L-units See p.25 "Notation Conventions"	X'0407..00'
	X'FFFF'	Printer Default as specified by Bar Code Type in Byte 16	
Byte 24	X'01'-X'FF'	Height multiplier	X'0408..00'
Bytes 25-26		WIDE-TO-NARROW RATIO (WE I NE)	X'0409..00'
	X'0000'	Not Applicable Note 2	
	X'0002'	2: 1	
	X'0003'	3: 1	
	X'0014' to X'001E'	2.0: 1 - 3.0: 1	
	X'00C8' to X'012C'	2.00: 1 - 3.00: 1	
	X'FFFF'	Printer Default as specified by Bar Code Type (Byte 16)	
Bytes 27-end		Ignored	

- The Font Local ID specified in BCDD Byte 18 should be OCR-A, OCR-B or Code 128 dependent on the Bar Code Type specified in BCDD Byte 16. The default Font Local ID and Bar Code Type relationships are as follows:

OCR-A	OCR-B
Code 128	UPC-A
Code 3 of 9	UPC-E
MSI	UPC 2-Digit Add-on
2 of 5 Industrial	UPC 5-Digit Add-on
2 of 5 Matrix	EAN-8
2 of 5	EAN-13
Interleaved	EAN 2-Digit Add-on
Codabar	EAN 5-Digit Add-on

- Wide-to-Narrow Ratio (BCDD Bytes 25-26) is only valid for the following Bar Code Types:
  X'01' 3 of 9
  X'02' MSI
  X'0A' 2 of 5 Industrial
  X'0B' 2 of 5 Matrix
  X'0C' Interleaved 2 of 5
  X'0D' Codabar
- Default wide-to-narrow ratio for Codabar, Code 3 of 9, and the 2 of 5 types is dictated by the lowest unit module width that results in a readable bar code. The default wide-to-narrow ratio for MSI is 2:1 unless it can't be printed with the selected unit module width.

Bar Code Type and Modifier Description and Values

Bar Code Type (Byte 16)	Bar Code Description	Unit Module Width Default (mils)	Unit Module Width Range (mils)	Element Height Default (mils)	Element Height Range (mils)	Wide-to-Narrow Ratio
X′01′	3 of 9 Code AIM USS-39	14	7-54	234	234-14000	7.3
X′02′	MSI	14	7-54	300	300-14000	
X′03′	UPC/ CGPC Version A	14	7-54	1020	250-14000	
X′05′	UPC/ CGPC Version E	14	7-54	1020	250-14000	
X′06′	UPC 2 Character Supplemental (Periodicals)	14	7-54	1020	250-14000	
X′07′	UPC 5 Character Supplemental (Paperbacks)	14	7-54	1020	250-14000	
X′08′	EAN-8 (JAN Short)	14	7-54	840	250-14000	
X′09′	EAN-13 (JAN Standard)	14	7-54	1020	250-14000	
X′0A′	Industrial 2 of 5	14	7-54	234	234-14000	8:02
X′0B′	Matrix 2 of 5	14	7-54	234	234-14000	4:02
X′0C′	Interleaved 2 of 5 AIM USS-I 2/5	14	7-54	234	234-14000	3:02
X′0D′	Codabar 2 of 7 Code AIM USS-Codabar	14	7-54	234	234-14000	4:02
X′11′	Code 128 AIM USS-128	14	7-54	250	250-14000	

Bar Code Type (Byte 16)	Bar Code Description	Unit Module Width Default (mils)	Unit Module Width Range (mils)	Element Height Default (mils)	Element Height Range (mils)	Wide-to-Narrow Ratio
X′16′	EAN 2 Digit Add-on	14	7-54	1020	250-14000	
X′17′	EAN 5 Digit Add-on	14	7-54	1020	250-14000	
X′18′	POSTNET (Include PLANET)	14	7-54	1000	250-14000	
X′1A′	RM4SCC Royal Mail (Inc. Dutch KIX)	14	7-54	1000	250-14000	
X′1B′	Japan Postal	14	7-54	1000	250-14000	
X′1C′	Data Matrix 2D	21	12-254	21	12-254	
X′1D′	MaxiCode 2D					
X′1E′	PDF417 2D	14	7-254	15% of width or 0.2 in.	4*width - 524287	
X′1F′	Australia Post	14	7-54	1000	250-14000	
X′20′	QR Code 2D	14	7-254	21	12-254	
X′21′	Code 93	14	7-54	234	234-14000	7:03
X′22′	USPS Four- State	14	7-54	1000	250-14000	

❖ Bar Code Type and Modifier Description and Values

Byte 16 Value	Bar Code Type	Byte 17 Value	Description
X'01'	3 of 9 Code, AIM USS-39	X'01'	Print Bar Code with no Printer-Generated Check Character.
		X'02'	Generate Check Character and Print with Bar Code.
X'02'	MSI	X'01'	Print Bar Code with no Printer-Generated Check Character.
		X'02'	Print Bar Code with IBM Modulus 10 Check Digit Generated by Printer and Put at End of Data.
		X'03'	First check digit IBM Modulus 10.
		X'04'	First check digit NCR Modulus 11. Check digit equals remainder. Check digit of 10 equals error.
		X'05'	First check digit IBM Modulus 11. Check digit equals remainder. Check digit of 10 equals error.
		X'06'	First check digit NCR Modulus 11. Check digit equals 11 minus remainder. Check digit of 10 equals zero.
		X'07'	First check digit IBM Modulus 11. Check digit equals 11 minus remainder. Check digit of 10 equals error.
		X'08'	First check digit NCR Modulus 11. Check digit equals 11 minus remainder. Check digit of 10 equals error.
		X'09'	First check digit IBM Modulus 11. Check digit equals 11 minus remainder. Check digit of 10 equals error.
X'03'	UPC/CGPC Version A	X'00'	Generate check digit and Print standard symbol.
X'05'	UPC/CGPC Version E	X'00'	Print bar code. Six digits are encoded.
X'06'	UPC 2-Character Supplemental (Periodicals)	X'00'	Print the 2 supplemental digits (bar/space pattern and HRI).
X'07'	UPC 5-Character Supplemental (Paperbacks)	X'00'	Print the 5 supplemental digits (bar/space pattern and HRI).
X'08'	EAN-8 (JAN Short)	X'00'	Print bar code symbol. Input variable data is 7 digits (2 flag and 5 article ID digits).

Byte 16 Value	Bar Code Type	Byte 17 Value	Description
X'09'	EAN-13 (JAN Standard)	X'00'	Print bar code symbol. Input variable data is 12 digits (2 flag and 10 article ID digits).
X'0A'	2 of 5 Industrial	X'01'	Print bar code with no printer-generated check character.
		X'02'	Generate check character and print with bar code.
X'0B'	2 of 5 Matrix	X'01'	Print bar code with no printer-generated check character.
		X'02'	Generate check character and print with bar code.
X'0C'	Interleaved 2 of 5, AIM USS-I 2/5	X'01'	Print bar code with no printer-generated check character.
		X'02'	Generate check character and print with bar code.
X'0D'	Codabar, 2 of 7 Code, AIM USS-Codabar	X'01'	Print bar code with no printer-generated check character.
		X'02'	Generate check character and print with bar code (Check character appears in HRI).
X'11'	Code 128, AIM USS-128	X'02'	Generate check character and print with bar code.
		X'03'	Generate check character and print with bar code that supports UCC/EAN 128.
X'16'	EAN 2 Digit Add-on	X'00'	Print the 2 digit add-on (bar/space pattern and HRI).
X'17'	EAN 5 Digit Add-on	X'00'	Print the 5 digit add-on (bar/space pattern and HRI).

Byte 16 Value	Bar Code Type	Byte 17 Value	Description
X'18'	POSTNET		USPS Specification
		X'00'	Print 5 digit POSTNET 'Zip Code' bar code with leading frame bar and trailing correction digit and frame.
		X'01'	Print 9 digit POSTNET 'Zip + 4' bar code with leading frame bar and trailing correction digit and frame.
		X'02'	Print 11 digit POSTNET 'ABC' bar code with leading frame bar and trailing correction digit and frame.
		X'03'	Print variable length data POSTNET bar code with leading frame bar and trailing correction digit and frame. Data length checking is not performed with modifier X'03'.
		X'04'	Print PLANET bar code symbology.
X'1A'	RM4SCC (Royal Mail 4 State Customer Code)	X'00'	Variable Length Data. Printer will generate Start bit, Checksum Character and Stop bit. Checksum algorithm is performed on the data characters only. User is responsible for 2 mm quiet zone (all around) and proper sequencing of the Postal Code data (including International Prefix, Outward Code, Inward Code and Delivery Point Suffix).
X'1A'	RM4SCC (Dutch KIX Postal Bar Code)	X'01'	Present a RM4SCC bar code symbol with NO Start bit, NO Checksum Character and NO Stop bit. Checksum algorithm is performed on the data characters only. User is responsible for 2 mm quiet zone (all around) and proper sequencing of the Postal Code data (including International Prefix, Outward Code, Inward Code and Delivery Point Suffix).
X'1B'	Japan Postal Bar Code	X'00'	Present a Japan Postal Bar Code symbol with a generated start character, checksum character and stop character.
		X'01'	Present a Japan Postal Bar Code symbol directly from the bar code data.
X'1C'	Data Matrix 2D	X'00'	Present a Data Matrix Bar Code symbol.
X'1D'	MaxiCode 2D	X'00'	Present a MaxiCode Bar Code symbol.

Byte 16 Value	Bar Code Type	Byte 17 Value	Description
X'1E'	PDF417 2D	X'00'	Present a "full" PDF417 Bar Code symbol.
		X'01'	Present a "truncated" PDF417 Bar Code symbol.
X'1F'	Australia Post	X'01'	Standard Customer Bar Code (Format Code 11) - An 8 digit number representing the Sorting Code.
		X'02'	Customer Bar Code 2 using Table N (Format Code 59) An 8 digit number representing the Sorting Code, followed by up to 8 numeric digits representing the Customer Information.
		X'03'	Customer Bar Code 2 using Table C (Format Code 59) An 8 digit number representing the Sorting Code, followed by up to 5 characters (A-Z, a-z, 0-9, space, #) representing the Customer Information.
		X'04'	Customer Bar Code 2 using proprietary encoding (Format Code 59) - An 8 digit number representing the Sorting Code, followed by up to 16 numeric digits (0-3) representing the Customer Information. Each of the 16 digits specify one of the 4 types of bar code.
		X'05'	Customer Bar Code 3 using Table N (Format Code 62) An 8 digit number representing the Sorting Code, followed by up to 15 numeric digits representing the Customer Information.
		X'06'	Customer Bar Code 3 using Table C (Format Code 62) An 8 digit number representing the Sorting Code, followed by up to 10 characters (A-Z, a-z, 0-9, space, #) representing the Customer Information.
		X'07'	Customer Bar Code 3 using proprietary encoding (Format Code 62) - An 8 digit number representing the Sorting Code, followed by up to 31 numeric digits (0-3) representing the Customer Information. Each of the 31 digits specify one of the 4 types of bar code.
		X'08'	Reply Paid Bar Code (Format Code 45) - An 8 digit number representing the Sorting Code.

Byte 16 Value	Bar Code Type	Byte 17 Value	Description
X'20'	QR Code 2D	X'02'	Present a model 2 QR Code bar code symbol.
X'21'	Code 93	X'02'	Present a Code 93 bar code symbol.
X'22'	USPS Four State		USPS Specification
		X'00'	Present a USPS Four-State bar code symbol with no Routing ZIP Code. The input data for this bar code symbol must be 20 numeric digits.
		X'01'	Present a USPS Four-State bar code symbol with a 5-digit Routing ZIP Code. The input data for this bar code symbol must be 25 numeric digits. The valid values for the Routing Zip Code are 00000-99999.
		X'02'	Present a USPS Four-State bar code symbol with a 9-digit Routing ZIP Code. The input data for this bar code symbol must be 29 numeric digits. The valid values for the Routing Zip Code are 000000000-999999999.
		X'03'	Present a USPS Four-State bar code symbol with an 11 digit Routing ZIP Code. The input data for this bar code symbol must be 31 numeric digits. The valid values for the Routing Zip Code are 00000000000-99999999999.

Write Bar Code

Data Area	Value	Description	Error Code
Byte 0		FLAGS	
	Bit 0 0 1	HRI PRINTING (Not supported for postal bar code types) Print HRI No HRI	X'0410..00'
	Bits 1-2 00 01 10	HRI LOCATION Printer Default (Below symbol) Below symbol (Except UPC/EAN with 2 or 5 digit add-on) Above symbol (UPC/EAN with 2 or 5 digit add-on only)	
	Bit 3 0 1	START/STOP HRI for 3 of 9 Code (Asterisk) Do not print HRI for 3 of 9 Start/Stop pattern Print HRI for 3 of 9 Start/Stop pattern	
	Bit 4	CODE PAGE TYPE (Ignore)	
	Bit 5 0 1	BAR CODE SUPPRESSION Present the bar code symbol Suppress presentation of the bar code symbol	
	Bit 6		
	Bit 7		
Bytes 1-2	X'0001' - X'7FFF'	X COORDINATE of the symbol ORIGIN See p.25 "Notation Conventions"	X'040A..00'
Bytes 3-4	X'0001' - X'7FFF'	Y COORDINATE of the symbol ORIGIN See p.25 "Notation Conventions"	X'040A..00'
Bytes 5-End		DATA to be bar encoded	X'040C..00'

Overlay Function Set Commands

Name	Command	Sub-command	Where to Look
Begin Overlay	X'D6DF'		Intelligent Printer Data Stream Reference
Deactivate Overlay	X'D6EF'		Intelligent Printer Data Stream Reference
Include Overlay	X'D67D'		Intelligent Printer Data Stream Reference

Note

❒ The machine does not support Secure Overlay (value X'01' in byte 2 of Include Overlay is not supported).

❒ See p.25 "Notation Conventions" regarding the notation convention for Include Overlay bytes 3-5 and 7-9.

10. Page Segment Command Set

Page Segment Function Set Commands

Name	Command	Sub-command	Where to Look
Begin Page Segment	X'D65F'		Intelligent Printer Data Stream Reference
Deactivate Page Segment	X'D66F'		Intelligent Printer Data Stream Reference
Include Page Segment	X'D67F'		Intelligent Printer Data Stream Reference

11. Object Container Command Set

Object Container Function Set Commands

Name	Command	Sub-command	Where to Look
Write Object Container Control	X'D63C'		Intelligent Printer Data Stream Reference
Write Object Container	X'D64C'		Intelligent Printer Data Stream Reference
Deactivate Data-Object-Font	X'D65B'		Intelligent Printer Data Stream Reference
Deactivate Data-Object-Resource	X'D65C'		Intelligent Printer Data Stream Reference
Data-Object-Resource Equivalence	X'D66C'		Intelligent Printer Data Stream Reference
Include Data-Object	X'D67C'		Intelligent Printer Data Stream Reference

Note

❒ For specific details on the Object Container Command Set, see the Intelligent Printer Data Stream Reference, S544-3417.

12. Loaded Font Command Set

Loaded Font Function Set Commands

Name	Command	Sub-command	Where to Look
Load Code Page	X'D61B'		p.211 "Load Code Page"
Load Code Page Control	X'D61A'		p.212 "Load Code Page Control"
Load Font	X'D62F'		p.213 "Load Font"
Load Font Character Set Control	X'D619'		p.215 "Load Font Character Set Control"
Load Font Control	X'D61F'		p.216 "Load Font Control"
Load Font Index	X'D60F'		p.219 "Load Font Index"

Load Code Page

This command assigns each code point of a code page to a specific Graphic Character Global ID (GCGID). One or more Load Code Page (LCP) commands follow the Load Code Page Control command.

A sequence of LCP commands are used to transmit the entire code page. This sequence is initiated by the first LCP command that contains data and terminates with an End command. Entries may be split across LCP commands on any byte boundary and are restricted in size by the standard IPDS 32767 byte command length limit.

Data Area	Value	Description	Error Code
Bytes 0-7	(8 Bytes)	GRAPHIC CHARACTER GLOBAL ID	
Byte 8	Bit 0: 0/1 Bit 1: 0/1 Bit 2: 0/1 Bits 3-7	PROCESSING FLAGS Defined/Undefined Defined/Undefined Incrementing/Nonincrementing Reserved	
Bytes 9-n		CODE POINT	X'02B0..07'

Load Code Page Control

This command describes a code page resource which will be used to carry code page data. The Load Code Page Control (LCPC) command is followed by one or more Load Code Page (LCP) commands that specify the code page data.

The LCPC command is valid only in Home State and causes a transition to Code Page State. Code Page State ends when the printer receives the End command following receipt of at least one LCP command.

Data Area	Value	Description	Error Code
Bytes 0-1	X'0001' - X'7EFF'	CODE PAGE HOST ASSIGNED ID	X'02B0..00' X'02B0..01'
Bytes 2-3		ENCODING SCHEME	X'02B0..02'
	Bits 0-3: 0000	Reserved	
		Number of Bytes	
	Bits 4-7: 0001	Fixed Single-byte	
	Bits 4-7: 0010	Fixed Double-byte	
	Bits 8-15: 00000000	Reserved	
Bytes 4-7	X'0000000A'- X'FFFFFFFF'	BYTE COUNT for subsequent LCP commands	X'02B0..04' X'02B0..05'
Bytes 8-9	X'0000'	Reserved	
Bytes 10-n		VARIABLE SPACE CODE POINT	
	X'nn'	SBCS	
	X'nnnn'	DBCS	
Bytes n+1 to n+2		GCSGID	
	X'0000'	No Value Supplied	
	X'0001' - X'FFFE'	Specific GCSGID	
	X'FFFF'	Use Default	
Bytes n+3 to n+4		CPGID	
	X'0001' - X'FFFE'	Specific CPGID	
Bytes n+5 to n+12	X'nnnnnnnnnnnnnnnn'	GCGID Default GCGID	
Bytes n+13		GCGID PROCESSING FLAGS	
	Bit 0: 0	Defined	
	Bit 0: 1	Undefined	
	Bit 1: 0	Printing	
	Bit 1: 1	Nonprinting	
	Bit 2: 0	Incrementing	
	Bit 2: 1	Nonincrementing	

Data Area	Value	Description	Error Code
Bytes n+13	Bit 3: 0 Bit 4: 0 Bit 4: 1 Bit 5 - 7: 0000	Reserved Retired Retired Reserved	

Note

- ❒ If the code point specified in VARIABLE SPACE CODE POINT is not contained in the associated font character set, the printer will use a character increment of 333 relative units for typographic and proportionally spaced fonts and 600 relative units for fixed pitch, uniform character increment fonts.
- ❒ GCSGID/CPGID will be used for CMAP matching (DBCS), in all other instances they will be ignored.

Load Font

LF1 Format

When downloading a fully described font (LF1 format), the Load Font (LF) carries a series of character raster pattern bit strings. Consecutive Load Font commands are supported for downloading the LF1 font character patterns.

Data Area	Value	Description	Error Code
Bytes 0-n	Any Value in conformance with LFC Font Byte Count	FONT DATA in LF1 FORMAT (Character Patterns)	X'022E..02' X'0232..02'

LF3 Format

When downloading a font character set (LF3 format), the LF consists of a character ID map followed by zero or more (technology specific) Adobe Type-1 PFB objects. Consecutive LF commands are supported for downloading the LF3 font data.

12

❖ Character ID Map

Data Area	Value	Description	Error Code
Byte 0	X'02'	IBM CHARACTER ID FORMAT (IBM Registered EBCDIC GCGID)	
Byte 1	X'03' X'04'	TECHNOLOGY SPECIFIC CHARACTER ID FORMAT Font-specific ASCII Character name used with Type-1 PFB fonts ASCII numeric Glyph ID (used with Adobe Composite fonts) ASCII numeric Glyph ID (used with Adobe Composite fonts)	
Zero of more entries in the following format			
Bytes +0-7		IBM CHARACTER ID (GCGID)	X'02B1..04'
Bytes +8-11		OFFSET into the following list of Adobe Type-1 Character ID entries (each GCGID maps to exactly one Adobe Type-1 Character ID)	
Zero or more Adobe Type-1 Character ID entries in the following			
Byte ++0	X'02'-X'80'	LENGTH of Adobe Type-1 Character ID entry (including this field)	X'02B1..03'
Bytes +1-n		ADOBE Type-1 CHARACTER ID	

❖ Technology Specific Font Objects

The technology specific LF3 font object supported is a form of Adobe Type-1 PFB file. Each PFB object contains the following information.

Data Area	Value	Description	Error Code
Bytes 0-3	X'0000000A' - X'FFFFFFFF'	LENGTH of Adobe Type-1 PFB file (including this field)	X'02B1..08'
Bytes 4-7		CHECKSUM	X'02B1..09'
Bytes 8-9	X'0002' - X'FFFF'	LENGTH of Adobe PFB object NAME	X'02B1..0A
Bytes 10-n		Adobe PFB Object NAME	
Bytes (n+1)-z		OBJECT DATA for Adobe Type-1 PFB fonts (PFB file)	

Load Font Character Set Control

This command provides control information for each font character set that the host downloads to the printer. The command is only used for LF-3 type coded fonts. The LFCSC command is followed by one or more Load Font commands that contain the actual font character set information. This command is valid only in home state and causes a transition to font state. Font state ends when the printer receives the End command following receipt of at least one LF command.

Data Area	Value	Description	Error Code
Bytes 0-1	X'0001' - X'7EFF'	FONT CHARACTER SET HAID	X'02B0..0A' X'02B0..0B'
Bytes 2-3	X'0000'	Reserved	
Byte 4	 X'1F'	PATTERN TECHNOLOGY ID Type 1 PFB	
Byte 5	X'00'	Adobe PFB Object NAME	
Byte 6	 Bit 0: 0/1 Bit 1: 0/1 Bits 2-7: 000000	INTENDED USE FLAGS Not intended for MICR printing/Intended for MICR printing (If MICR Installed) This is NOT a FCS extension/This IS a FCS extension Reserved	 X'02B2..04' X'02B2..01' X'02B2..02'
Bytes 7-10	X'00000002' - X'FFFFFFFF'	NUMBER of BYTES in the LOAD FONT COMMANDS	X'022E..02' X'0232..02' X'02B0..0E'
Bytes 11-14	X'00000002' - X'FFFFFFFF'	NUMBER of BYTES in the CHARACTER ID MAP	X'02B0..0F'
Bytes 15-16	X'nnnn'	NUMBER of GCGIDs in the CHARACTER ID MAP	
Bytes 17-18	 X'0000' X'0001' - X'FFFE' X'FFFF'	GCSGID No Value Supplied Specific GCSGID Use Default	
Bytes 19-20	 X'0001' - X'FFFE'	FGID Specific FGID	

Load Font Control

This command is 40 + (8 × n) bytes long, where n (4090 max) is the number of font characters that have associated raster patterns. The command contains font id, overall font characteristics, and the information needed to parse the font raster patterns. There is only one Load Font Control command for each font or font section. This command can only be issued in Home State and causes a transition to Font State.

Data Area	Value	Description	Error Code
Bytes 0-1	X'0001'-X'7EFF'	FONT HOST ASSIGNED ID	X'0218..02' X'0239..02'
Byte 2		SECTION ID	X'0243..02'
	X'00'	Single-byte fonts	
	X'41'-X'FE'	Double-byte font sections	
Byte 3	X'00'	Reserved (Font-index Format)	X'0221..02'
Byte 4	X'05'	Pattern Data Format (bounded box)	X'0222..02'
Byte 5		FONT TYPE BITS	X'0223..02'
	Bits 0-1: 00	Reserved	
	Bits 2-3: 01/10	FONT TYPE: Single-byte/Double-byte	
	Bits 4-5: 00	Reserved	
	Bit 6: 1/0	CHARACTER BOX SIZE: Uniform size (see bytes 6-7)/Individual size (see bytes 40-End)	
	Bit 7: 0	Reserved	
Bytes 6-7	X'0001' - X'7FFF'	UNIFORM or MAXIMUM CHARACTER BOX X SIZE	X'0226..02'
Bytes 8-9	X'0001' - X'7FFF'	UNIFORM or MAXIMUM CHARACTER BOX Y SIZE	X'0227..02'
Byte 10		UNIT BASE for L-units	X'021B..02'
	X'00'	Ten in. (fixed metric technology)	
	X'02'	Relative units (relative metric technology)	
Byte 11	X'00'	Reserved	
Bytes 12-13		L-units per UNIT BASE in the X direction	X'022A..02'
		Byte 10 = X'02'	
	X'03E8'	1000	
		Byte 10 = X'00'	
	X'0960'	2400 (240 DPI)	
	X'0BB8'	3000 (300 DPI)	
	X'1770'	6000 (600 DPI)	

Data Area	Value	Description	Error Code
Bytes 14-15		L-units per UNIT BASE in the Y direction	X'022B..02'
		Byte 10 = X'02'	
	X'03E8'	1000	
		Byte 10 = X'00'	
	X'0960'	2400 (240 DPI)	
	X'0BB8'	3000 (300 DPI)	
	X'1770'	6000 (600 DPI)	
Bytes 16-17	X'0000'	Reserved	
Bytes 18-20	X'000001' - X'7FFFFF'	FONT BYTE COUNT	X'021C..02'
Byte 21		CHARACTER DATA ALIGNMENT	X'022D..02'
	X'01'	Starting address 1 byte aligned	
	X'04'	Starting address 4 byte aligned	
	X'08'	Starting address 8 byte aligned	
Bytes 22-23	X'nnnn'	GCSGID (ignored)	
Bytes 24-25	X'nnnn'	CPGID (ignored)	
Byte 26		UNIT BASE for PIXEL-Units	X'0287..02'
	X'00'	Ten in.	
Byte 27	X'00'	Reserved	
Bytes 28-29		PIXEL-Units per UNIT BASE in the X direction (only applicable if byte 10 = x'02')	X'0288..02'
	X'0960'	2400 Units per 10 in. (240 dpi)	
	X'0BB8'	3000 Units per 10 in. (300 dpi)	
	X'1770'	6000 Units per 10 in. (600 dpi)	
Bytes 30-31		PIXEL-Units per UNIT BASE in the Y direction (only applicable if byte 10 = x'02')	X'0289..02'
	X'0960'	2400 Units per 10 in. (240 dpi)	
	X'0BB8'	3000 Units per 10 in. (300 dpi)	
	X'1770'	6000 Units per 10 in. (600 dpi)	
Bytes 32-33	X'0001' - X'7FFF'	RELATIVE METRIC MULTIPLYING FACTOR	X'028A..02'
Bytes 34-35	X'nnnn'	FGID (ignored)	
Byte 36		STAGEABILITY	X'0220..02'
	X'01'	Font is not stageable (retired)	

Data Area	Value	Description	Error Code
Byte 37	Bit 0: 0/1 Bits 1-7: 0000000	INTENDED USE FLAGS: Not intended for MICR printing/Intended for MICR printing (If MICR Installed) Reserved	
Bytes 38-39	X'nnnn'	Font width (ignored)	
Bytes 40-n		Zero or more CHARACTER PATTERN DESCRIPTORS in the following format	
+ 0-1 bytes	X'0000' - X'7FFF'	CHARACTER BOX X SIZE	X'0226..02'
+ 2-3 bytes	X'0000' - X'7FFF'	CHARACTER BOX Y SIZE	X'0227..02'
+ 4-7 bytes	X'00000000' - X'007FFFFE'	CHARACTER PATTERN ADDRESS	X'023E..02'

Load Font Index

This command is 32 + (256 × 16) (the (256 × 16) byte field is not always required) bytes long. It contains general information needed to print the patterns and a description of the characteristics of each of the 256 possible code points. Each font can have from one to four associated font indices.

Each index is loaded by a separate Load Font Index command. This command can only be issued in Home State.

Data Area	Value	Description	Error Code
Bytes 0-1	X'0001'-X'7EFF'	FONT HOST ASSIGNED ID (HAID)	X'0218..02'
Byte 2		SECTION ID	X'0243..02'
	X'00'	Single byte	
	X'41'-X'FE'	Double-byte section	
Byte 3		FLAGS	
	Bit 0: 0/1	VARIABLE SPACE: Disabled/Enabled	
	Bits 1-7: 0000000	Reserved	
Bytes 4-5		FONT INLINE SEQUENCE	X'0240..02'
	X'0000'	0 degrees	X'0246..02'
	X'2D00'	90 degrees	
	X'5A00'	180 degrees	
	X'8700'	270 degrees	
Bytes 6-7	X'0000'	Reserved	
Bytes 8-9	X'8000' - X'7FFF'	UNIFORM or MAXIMUM BASELINE OFFSET	X'023C..02'
Bytes 10-11	X'8000' - X'7FFF'	UNIFORM or MAXIMUM CHARACTER INCREMENT	X'023C..02'
Bytes 12-13	X'0000'	Reserved	
Bytes 14-15	X'0000' - X'7FFF'	MAXIMUM BASELINE EXTENT	
Byte 16		ORIENTATION FLAGS	
	Bits 0-4: 00000	Reserved	
	Bit 5: 1/0	UNIFORM A-SPACE: Bytes 18, 19 specify uniform value/Bytes 18, 19 specify minimum value A-space for each character is in the character index entry	
	Bit 6: 1/0	UNIFORM BASELINE OFFSET: Bytes 8, 9 specify uniform baseline offset/Bytes 8, 9 specify minimum baseline offset (Baseline offset for each character is in the character index entry)	

Data Area	Value	Description	Error Code
Byte 16	Bit 7: 1/0	UNIFORM CHARACTER INCREMENT: Bytes 10, 11 specify uniform character increment/Bytes 10, 11 specify minimum character increment (Character increment for each character is in the character index entry)	
Byte 17	X'00'	Reserved	
Bytes 18-19	X'8000' - X'7FFF'	UNIFORM or MINIMUM A-SPACE	X'023C..02'
Bytes 20-21	X'0000' - X'FFFF'		
Bytes 22-23	X'8000' - X'7FFF'		
Bytes 24-25		RECOMMENDED UNDERSCORE WIDTH	X'023C..02'
	X'0000'	No recommendation	
	X'0001' - X'7FFF'	Underscore width in L-units	
Bytes 26-27	X'8000' - X'7FFF'	RECOMMENDED UNDERSCORE POSITION (L-units)	
Bytes 28-31	X'00000000'	Reserved	
Bytes 32-4127			
+ 0-1 bytes		CHARACTER FLAGS	
	X'0000'	Defined, printing, incrementing	
	X'2000'	Defined, printing, non-incrementing	
	X'4000'	Defined, non-printing, incrementing	
	X'6000'	Defined, non-printing, non-incrementing	
	X'8000'	Undefined, printing, incrementing	
	X'A000'	Undefined, printing, non-incrementing	
	X'C000'	Undefined, non-printing, incrementing	X'023C..02'
	X'E000'	Undefined, non-printing, non-incrementing	X'023C..02'
+ 2-3 bytes	X'0000' - X'xxxx'	PATTERN INDEX	
+ 4-5 bytes	X'8000' - X'7FFF'	CHARACTER INCREMENT	
+ 6-7 bytes	X'8000' - X'7FFF'	A-SPACE	X'023C..02'
+ 8-13 bytes	X'000000000000'	Reserved	
+ 14-15 bytes	X'8000' - X'7FFF'	BASELINE OFFSET	

13. Exception Reporting, Sense Data, and Recovery

About Exception Reporting, Sense Data, and Recovery

This chapter supplies information about Acknowledge Reply, which the IPDS uses for exception reporting.

The chapter begins with general information followed by tables of the exception-reporting codes for the printer. The tables contain details about the specific exceptions. The chapter concludes with a section on printer counter adjustments.

Note

❒ When you have questions about codes from the printer, use this chapter instead of the exception-reporting chapter in the Intelligent Printer Data Stream Reference. Although the two chapters are similar, this chapter contains only those exception codes that the printer returns.

General Reply Rules

IPDS uses the Acknowledge Reply command to return both positive and negative replies to the host.

Positive messages are Acknowledge Replies. The negative messages (exception messages) are NACKs and are sent as sense-byte information in the special data area. For more information about Acknowledge Replies, see p.37 “Device Control Command Set”.

The following general rules apply to printer replies:

- The printer reports a data-stream exception with a NACK. Only one exception can be returned in each NACK.
- The printer sends an ACK or a NACK in response to an Acknowledgement Required (ARQ) flag. If there is an exception, the printer sends a NACK without receiving an ARQ.
- If the printer receives a command requesting an acknowledgement, it expects the host to wait for the acknowledgement before sending more commands.

- Any data received after an exception is reported is discarded until all queued NACKs have been either sent to the host or cleared by an appropriate link-level command.
  An exception on a command can be reported before receiving the entire command data. When an Alternate Exception Action (AEA) or Page Continuation Action (PCA) is not to be taken, the next data received should be part of a new command. Otherwise, an 8001..00 exception may result. The printer might not discard the remaining bytes in a command with an error when reported. Therefore, the next data received should be the start of a new command. As a result, begin the host data re-transmission only after a synchronizing command (such as XOH Print Buffered Data or XOA Discard Buffered Data) is successfully acknowledged.
  A terminating condition causes the first NACK to be reported. The next NACK is reported when the next five bytes of data are received. This is usually an IPDS command header. Reporting a NACK discards all data currently received. The process of receiving five bytes and sending a NACK repeats until the NACK queue is exhausted or cleared by the appropriate link-level command.
- An ACK indicates that the data stream was checked and that commands were transformed into the printer's internal command language, with the following exceptions:
  – Asynchronous-position exceptions and undefined character exceptions are not detected until print time.
  – The data stream is not checked when IPDS is being saved for future use, as in overlays and page segments, and when more than one copy group is specified in a Load Copy Control (LCC) command.
  An exception in an overlay or page segment is reported synchronously with the End Page (EP) command on the page it is used. An exception in a saved copy group is reported synchronously after the EP command; that is, in the next command after the EP.
- The XOA Exception-Handling Control (EHC) order tells the printer how to handle exceptions. More information about the EHC order follows.

Exception-Handling Control (EHC)

The EHC order lets you control the three exception-handling functions listed below. Brief descriptions of the functions follow this listing.

- Exception Reporting. You can record three types of exception conditions and related exception information and have them reported at specified times using NACKs.
- Alternate Exception Actions (AEA). You can specify whether the printer is to take Alternate Exception Actions (AEAs), which prescribe actions to take when the printer is given an IPDS command or parameters it does not support.
- Exception-Presentation Processing. The exception-presentation processing function has two parts:
  - Page Continuation Actions (PCA). You can specify whether to end or continue processing a page that has an exception.
  - Exception Page Print. You can specify whether the printer is to print or discard a page that was terminated.

Exception Reporting

Use the exception-reporting bits in the Exception-Handling Control (EHC) record to control the recording and reporting of three classes of exceptions:

- Undefined characters
- Position exceptions
- All other exceptions that have AEAs.

When you instruct the printer to record a given class of exception, it always records exceptions that fit in that class. If you instruct the printer not to record a given class of exception, the printer still records such exceptions if the printer was told not to take the AEA.

Classes of Data Stream Exceptions

All printer data stream exceptions are returned in 24 bytes of detailed sense information in the special data area of the NACK. The exception-code identifier consists of three bytes: 0, 1, and 19. Byte 0 specifies the exception class; bytes 1 and 19 identify the particular exception.

The six classes of data-stream exceptions are:

- Command Reject
- Intervention Required
- Equipment Check
- Data Check
- Specification Check
  - IO Images
  - Bar Codes
  - Graphics
  - General
- Conditions Requiring Host Notification.

See p.228 “Exception Classes” for more information.

Sense Byte Information

The following list gives details of the information in each sense byte.

Byte(s)	Description
0	Defines the exception class for the specific exception. It is the first byte of each 3-byte exception ID.
1	Together with sense byte 19, byte 1 defines the specific exception within an exception class. It is the second byte of each 3-byte exception ID.
2	Contains exception-recovery action codes that specify the required actions for the exception conditions. For more information, see p.225 “Action Codes in Sense Byte 2”.
3	Reserved

Byte(s)	Description
4 through 18	Describe the specific cause in three separate formats: • Format 0 Provides details about all data stream exceptions other than data check positioning exceptions. • Format 2 Provides details about device exceptions, including intervention-required exceptions, equipment-check exceptions, and conditions requiring host notification. • Format 7 Provides details about data check positioning exceptions. **Reference** For more information about formats, see p.226 “Formats 0, 1, and 2 for Sense Bytes 4-18 and 20-23”.
19	Together with sense byte 1, byte 19 defines the specific exception within an exception class. It is the third byte of each 3-byte exception ID.
20 through 23	Contain additional information about the state of the printer when it senses an exception.

Action Codes in Sense Byte 2

The action codes in sense byte 2 classify the exception to assist host-exception recovery and allow printing to continue. The action codes listed are the only ones returned by the printer.

Action Code (in hex)	Exception-Recovery Action
01 Data Stream Exception	A syntax error exists in the IPDS data stream. The specific recovery actions depend on the specific exception (sense bytes 0, 1, and 19 in the tables of printer exception codes) and host support requirements. Data stream exceptions occur on the page or resource just before the received page counter.
08 Paper Jam	The printer detects a paper jam. Retransmit all pages and associated resources (overlays, page segments, and fonts) that have not passed the printer-defined jam recovery point.
09 Data-Related Print Exception	A sheet cannot be printed because of something within the data stream. The data might be too complex, too dense, or the media source selected might be incompatible with the media destination selected. The printer has discarded all buffered pages and modified the page and copy counters.
0C Resource Storage Exception	The printer cannot accept a page or resource (overlay, page segment, or font) because the storage area is full. Delete all resources not necessary to continue printing and retransmit the page in progress. If this action fails, the recovery action depends on host-support requirements.
15 Cancel	The printer operator requests that the current job be canceled. Cancel the job containing the page at the host-defined canceling point.

Action Code (in hex)	Exception-Recovery Action
1A Re-drive Buffered Pages	The printer may not be in Ready State, may need paper or toner, or may have a full exit tray. Take the appropriate recovery action for the exception code and retransmit all pages and associated resources that have not been committed for printing.
1D Printer Characteristics Changed	At least one of the printer characteristics that is reported in the reply to an XOH OPC command has changed. The host should issue an XOH OPC command to obtain the new printer characteristics.
1E Asynchronous Out-of-Storage Exception	A resource or a page that is not currently being received at the Received Page ID caused an out-of-storage exception. The printer has discarded all buffered pages and reset the page and copy counters. The page on which this exception was discovered will not print. The host must issue an XOH PBD to ensure that the page and copy counters are accurately adjusted. After the XOH PBD has returned an ACK, the page in error is the page just before the Committed Page Counter. Cancel the printed data containing the page just before the Committed Page ID.
22 Printer Communications Inoperative	A printer condition exists from which the printer cannot recover without operator intervention. End the communication and the session.

Formats 0, 1, and 2 for Sense Bytes 4-18 and 20-23

Sense bytes 4 through 18 and 20 through 23 describe the cause of each exception condition. (Sense byte 19 is byte 3 of the exception code.) These descriptions are presented in three separate formats, which are explained below.

❖ Format 0

Format 0 provides detailed information for all data stream exceptions except data check positioning exceptions. This format applies to all data check, specification-check, and command-reject exceptions, except for exceptions X'08C1..00', X'020A..05', and X'0411..00'.

Byte	Description
4	Data exception, X'DE'
5	Format Identifier, X'00'
6,7	Count of occurrences of the exception (the printer provides an approximate count of occurrences of some exceptions)
8,9	ID of overlay that has an exception
10,11	ID of page segment that has an exception
12,13	Command in process when exception found
14,15	Object Identifier (other than overlay or page segment that has an exception, such as a font exception)
16,17	Identifies a part within an object that has the exception, such as " font"
18	Reserved
20-23	Page Identifier for the page that has the exception

❖ Format 1

Format 1 provides detailed information for both data check positioning exceptions. This format applies only to data check exceptions X'08C1..00', X'020A..05', and X'0411..00'.

Byte	Description
4	Data exception, X'DE'
5	Format Identifier, X'01'
6, 7	Count of occurrences of the exception (the printer provides an approximate count of occurrences of some exceptions)
8, 18	Reserved
20-23	Page Identifier for the page that has the exception

❖ Format 2

Format 2 provides detailed information for all device exceptions. This format applies to all intervention-required and equipment-check exceptions and for conditions requiring host notification.

Byte	Description
4	System Reference Code, X'BF'
5	Format Identifier, X'02'
6-23	Format Identifier, X'02'

Exception-Reporting Codes

The following tables describe all printer exception codes that are returned to the host in the special data area of a NACK.

Each exception code is identified by three bytes: byte 0, byte 1, and byte 19. The first table lists the names of the exception classes which are returned in byte 0. The subsequent tables give detailed information about each of the groups listed in the first table.

Note

❒ The printer provides an approximate count of occurrences of some exceptions.

Exception Classes

Sense Byte 0	Exception Class and Description
X'80'	Command Reject—the printer cannot recognize a received command.
X'50'	Equipment Check with Intervention Required—the printer detects a condition caused by hardware failure or hardware limitations, and manual intervention at the printer is required.
X'40'	Intervention Required—the printer detects a condition that requires manual intervention, such as “out of paper”.
X'20'	Reserved
X'10'	Equipment Check—the printer detects an equipment malfunction or hardware error.
X'08'	Data Check—the printer detects a position exception or an undefined character exception.
X'05'	Specification Check - IO Images—the printer detects an invalid or unsupported data value in an IO image command.
X'04'	Specification Check - Bar Codes—the printer detects an invalid or unsupported data value in a bar code command.
X'03'	Specification Check - Graphics—the printer detects an invalid or unsupported data value in a graphics command.
X'02'	Specification Check - General—the printer detects an invalid or unsupported data value in a received command.
X'01'	Conditions Requiring Host Notification—the printer detects a condition that requires action by the host.

Tables of Printer Exception Codes

The following tables list specific exception classes and are arranged in three columns. The first column lists the 3-byte ID given in sense bytes 0, 1, and 19. The second column gives a description of each exception. The third column lists the action code given in sense byte 2.

Typically, when an exception has a defined AEA, the PCA is the AEA. Also, no PCA is taken when the command is received in Home state or Font state.

In each table, the exceptions are listed in ascending numeric order.

Note

❒ The term architecturally valid refers to the range of values permitted by the IPDS architecture. An "invalid" value denotes one outside the range defined by the architecture. "Supported" values are those that the printer accepts. Therefore, "unsupported" values may be valid by architecture but not in the printer implementation.

- The machine supports 24 Byte Sense data (See p.76 "Sense Type and Model").
- The machine supports AEA and PCA error processing. See Intelligent Printer Data Stream Reference for details on Sense byte information and error processing.

❒ The maximum number of queued asynchronous and synchronous errors is 1 for Twinax and Coax DSC mode and 7 for Coax LU1 mode and TCP/IP mode.

❒ The cause of the exception and the Alternate Exception Action (AEA) are the same as specified in Intelligent Printer Data Stream Reference unless otherwise noted.

TCP/IP Sense Data

Intervention Required Sense Data

Exception ID	Description	Action Code
X'4000..00'	Printer not ready	3
X'4001..00'	Out of paper	3
X'4002..00'	Output bin full	3
X'4004..00'	Out of toner	3
X'4031..00'	Paper Length Check	3
X'4033..00'	Paper Width Check	3
X'407C..00'	Out of Staples	3
X'407C..01'	Staple jam	3
X'407C..03'	Punch waste bin full	3
X'40E6..00'	Cover open	3

IPDS Exceptions Reported

Command Reject Exceptions

Exception ID	Description	Action Code
X'8001..00'	Invalid IPDS command code	01
X'8002..00'	Invalid IPDS command sequence	01
X'8004..00'	Data received after ARQ	01
X'80E0..00'	Invalid IPDS command length	01

Equipment Check with Intervention Required

Exception ID	Description	Action Code
50F8..00	Media Source X'nn' is not available (has been disabled).	01

Intervention Required Exceptions

Exception ID	Description	Action Code
X'4000..00'	Printer is not ready: • The printer is in a not-ready state. • Alternate Exception Action: none. • Page Continuation Action: none.	1A
X'4001..00'	Printer is out of paper: • The printer is out of paper, and paper was not added within specified amount of time. • Alternate Exception Action: none. • Page Continuation Action: none.	1A
X'4002..00'	The printer's exit tray is full: • The printer's exit tray is full and it was not emptied within a specified amount of time. • Alternate Exception Action: none. • Page Continuation Action: none.	1A
X'4004..00'	Printer is out of toner: • The printer is out of toner, and toner was not added within a specified amount of time. • Alternate Exception Action: none. • Page Continuation Action: none.	1A
X'4031..00'	Paper Length Check • The printer has detected a paper-length check, and it has not been corrected by the operator after a specified amount of time. • Alternate Exception Action: none. • Page Continuation Action: none.	1A
X'4033..00'	Paper Width Check • The printer has detected a paper-width check, and it has not been corrected by the operator after a specified amount of time. • Alternate Exception Action: none. • Page Continuation Action: none.	1A
X'407C..00'	Out of Staples	1A
X'407C..01'	Staple jam	08
X'407C..03'	Punch waste bin full	1A
X'40E5..00'	Paper jam recovery needed: • A paper jam has occurred and has not been cleared within a specified amount of time. Any lost pages must be resent. • Alternate Exception Action: none. • Page Continuation Action: none.	08

Exception ID	Description	Action Code
X'40E6..00'	Cover open	03
X'40E8..nn'	Supported but not installed media source ID	1A

Equipment Check Exceptions

Exception	Description	Action Code
X'10F1..00'	Permanent hardware exception: • A permanent hardware failure exists. • The microcode detected either a logic exception from which the printer could not recover or a condition that should not have occurred. • Alternate Exception Action: none. • Page Continuation Action: none.	22

Data Check Exceptions

Exception ID	Description	Action Code
X'0821..00'	Undefined character	01
X'0860..00'	Numeric representation precision check	01
X'08C1..00'	Numeric representation precision check	01

IO-Image Specification Exceptions

Exception ID	Description	Action Code
X'0500..01'	Invalid or unsupported IO Image SDF code	01
X'0500..03'	Invalid or unsupported IO Image SDF	01
X'0500..04'	Invalid IO Image SDF value	01
X'0570..0F'	IO Image Begin Segment out of sequence	01
X'0571..0F'	IO Image End Segment out of sequence	01
X'0591..0F'	IO Image Begin Image Content out of sequence	01
X'0592..0F'	IO Image Data SDF out of sequence	01
X'0593..0F'	IO Image End Image Content out of sequence	01
X'0594..01'	Inconsistent Image Size Parameter value and Image data	01
X'0594..0F'	IO Image Size Parameter missing or out of sequence	01
X'0594..11'	IO Image Size cannot be determined	01
X'0595..0F'	IO Image Encoding Parameter out of sequence	01
X'0595..10'	IO Image Encoding Parameter unsupported value	01
X'0595..11'	IO Image Decompression error	01
X'0596..0F'	IO Image Data Element Size Parameter out of sequence	01
X'0596..10'	IO Image Data Element Size Parameter unsupported value	01
X'0596..11'	IO Image Data Element Size Parameter and Image Encoding Parameter inconsistent	01
X'0597..0F'	IO Image Look Up Table ID Parameter out of sequence	01
X'0597..10'	IO Image Look Up Table ID Parameter unsupported value	01
X'05A9..02'	IO Image data outside the Image Presentation Space	01

Bar Code Specification Exceptions

Exception ID	Description	Action Code
X'0403..00'	Invalid or unsupported bar code type	01
X'0404..00'	Unsupported local-font ID or font not available	01
X'0405..00'	Invalid or unsupported bar code color	01
X'0406..00'	Invalid or unsupported module width	01
X'0407..00'	Invalid or unsupported element height	01
X'0408..00'	Invalid or unsupported height multiplier	01
X'0409..00'	Invalid or unsupported wide-to-narrow ratio	01
X'040A..00'	Invalid or unsupported symbol origin	01
X'040B..00'	Invalid or unsupported bar code modifier	01
X'040C..00'	Invalid or unsupported bar code data length	01
X'040E..00'	Check-digit calculation exception	01
X'040F..00'	Unsupported 2D bar code size	01
X'040F..01'	Invalid structured append sequence indicator	01
X'040F..02'	Structured append sequence indicator too large	01
X'040F..03'	Mismatched structured append information	01
X'040F..04'	Invalid number of structured append symbols	01
X'040F..05'	Invalid symbol mode value	01
X'040F..06'	Invalid data symbol characters per row value	01
X'040F..07'	Invalid desired number of row values	01
X'040F..08'	Too much data for a PDF417 bar code	01
X'040F..09'	Invalid security level value	01
X'040F..0A'	Incompatible combination of Data Matrix parameters	01
X'040F..0B'	Invalid structured append file identification value	01
X'040F..0C'	Invalid Macro PDF417 Control Block length value	01
X'040F..0D'	Invalid Macro PDF417 Control Block data	01
X'040F..0E'	Invalid QR Code EBCDIC Code Page value	01
X'040F..0F'	Invalid QR Code Version value	01
X'040F..10'	Invalid QR Code Error Correction-level value	01
X'040F..11'	Incompatible combination of QR Code Special-function flags	01
X'0410..00'	Invalid or unsupported human-readable interpretation location	01
X'0411..00'	Attempt to print portion of symbol outside block or VPA	01

Graphics Specification Exceptions

Exception ID	Description	Action Code
X'0300..01'	Unallocated or unsupported graphics order or command code	01
X'0300..02'	Reserved byte exception or invalid attribute set	01
X'0300..03'	Incorrect drawing order length	01
X'0300..04'	Invalid attribute value	01
X'0300..08'	Truncated order exception	01
X'0300..0C'	Segment prolog exception	01
X'0300..0E'	Unsupported attribute value	01
X'0300..21'	Invalid or unsupported default	01
X'0334..00'	Character angle value not supported	01
X'033E..00'	Invalid End Prolog	01
X'0360..00'	Area bracket exception	01
X'0368..00'	Begin Area received incorrectly	01
X'0368..01'	Area truncated exception	01
X'0368..02'	Supported order invalid in area	01
X'0368..03'	Pattern Symbol Set not supported	01
X'0368..04'	Undefined pattern symbol	01
X'0370..01'	Unsupported Begin Segment Introducer segment flag	01
X'0370..82'	Invalid Begin Segment Introducer segment flag	01
X'0370..C1'	Invalid Begin Segment Introducer length	01
X'0370..C5'	Insufficient Segment Data	01
X'0392..00'	Graphics image order sequence exception	01
X'0392..01'	Image data discrepancy	01
X'0393..00'	Graphics image bracket exception	01
X'0393..01'	Incorrect number of Image Data drawing orders	01
X'03C2..00'	Marker Symbol Set not supported	01
X'03C2..01'	Undefined marker code	01
X'03C3..00'	Font not available	01
X'03C3..01'	Undefined graphics character code	01
X'03C6..01'	Arc drawing check	01
X'03D1..00'	Truncated graphics image exception	01
X'03D1..01'	Invalid order in graphics image	01
X'03D1..02'	Graphics image format not supported	01

Exception ID	Description	Action Code
X'03D1..03'	Image width greater than maximum supported	01
X'03D1..04'	Image height greater than maximum supported	01
X'03E1..00'	Relative line outside coordinate space	01

General Specification Exceptions

Exception ID	Description	Action Code
X'0200..01'	Embedded Control Sequence Code Exception	01
X'0202..01'	End Suppression (ESU) text-control exception	01
X'0202..02'	Invalid or unsupported IPDS command length	01
X'0202..05'	Invalid data self-defining-field length	01
X'0203..02'	IPDS Command Header Length too small	01
X'0203..05'	Invalid or unsupported block orientation	01
X'0204..01'	EP command encountered	01
X'0204..02'	Invalid use of Acknowledgement Continuation Bit	01
X'0204..05'	Invalid or unsupported area-position reference system	01
X'0205..01'	Invalid spanning sequence	01
X'0205..05'	Invalid or unsupported self-defining-field unit base	01
X'0206..01'	Invalid Begin Suppression (BSU)	01
X'0206..05'	Invalid or unsupported self-defining field L-units	01
X'0207..05'	Invalid or unsupported self-defining-field extents or Graphic Window values inconsistent	01
X'0208..05'	Invalid or unsupported mapping option	01
X'0209..05'	Invalid or unsupported axis offsets	01
X'020B..05'	Invalid self-defining-field identifier	01
X'020E..02'	Invalid or unsupported Color Space	01
X'020E..03'	Invalid or unsupported Color value	01
X'020E..05'	Invalid or unsupported number of bits for a color component	01
X'020F..01'	Invalid or unsupported Set Text Orientation (STO)	01
X'0210..01'	Invalid or unsupported Set Inline Margin (SIM)	01
X'0211..01'	Invalid or unsupported Set Baseline increment (SBI)	01

Exception ID	Description	Action Code
X'0212..01'	Invalid or unsupported inter-character adjustment	01
X'0213..01'	Invalid or unsupported Absolute Move Baseline (AMB)	01
X'0214..01'	Invalid or unsupported Absolute Move Inline (AMI)	01
X'0214..02'	The font resource to be deactivated is not found	01
X'0215..01'	Invalid or unsupported Relative Move Inline (RMI)	01
X'0215..02'	Invalid or unsupported DF command font or font-section ID	01
X'0216..01'	Invalid or unsupported Relative Move Baseline (RMB)	01
X'0217..01'	Invalid or unsupported Set Variable-Space Increment (SVI)	01
X'0217..02'	Invalid or unsupported DF command deletion type	01
X'0218..02'	Invalid, unsupported, or unavailable font ID	01
X'0219..01'	Invalid or Unsupported value for Repeat String (RPS) repeat length	01
X'0219..02'	Multiple occurrences of the same LFE font-equivalence number	01
X'021A..01'	Repeat String (RPS) or Transparent Data (TRN) exception	01
X'021B..01'	Repeat String (RPS) target-string length exception	01
X'021B..02'	Invalid or unsupported Load Font Control unit base for L-units	01
X'021C..01'	Invalid escape sequence	01
X'021C..02'	Invalid LFC command byte-count value	01
X'021D..02'	Invalid or unsupported the Load Font Equivalence global font ID	01
X'021E..01'	Invalid WT text-control length	01
X'021F..01'	Repeat String (RPS) length exception	01
X'021F..02'	Mismatch of LFE command font Host-Assigned IDs	01
X'0220..02'	Invalid Load Font Control (Byte 36 value)	01
X'0221..02'	Invalid or unsupported Load Font Control font-index format	01
X'0222..02'	Invalid or unsupported Load Font Control data pattern format	01

Exception ID	Description	Action Code
X'0223..02'	Invalid or unsupported Load Font Control font-type bits	01
X'0226..02'	Invalid or unsupported LSS or LFC X-box size	01
X'0227..02'	Invalid or unsupported LSS or LFC Y-box size	01
X'022A..02'	Invalid or unsupported Load Font Control L-Units per unit base in the X-direction	01
X'022B..02'	Invalid or unsupported Load Font Control L-Units per unit base in the Y-direction	01
X'022D..02'	Invalid or unsupported Load Font Control character-data alignment	01
X'022E..02'	Insufficient font data received	01
X'0231..01'	Invalid or unsupported Load Copy Control number of copies	01
X'0232..01'	Invalid or unsupported Load Copy Control Keyword in copy-group entry	01
X'0232..02'	Excess font data received	01
X'0234..01'	Invalid or unsupported Load Copy Control entry-byte count	01
X'0236..01'	Invalid or unsupported Load Copy Control simplex/duplex parameter	01
X'0237..01'	Invalid or Unsupported LCC N-up Parameter	01
X'0237..03'	Invalid or Unsupported LCC Media Destination Parameter	01
X'0237..04'	Incompatible Media Source and Media Destination	09
X'0237..05'	Mixture of Media Source or Destination IDs in a duplex copy-subgroup pair	01
X'0238..01'	Maximum supported number of Overlays per LCC copy-group exceeded	01
X'0239..01'	Maximum supported number of Suppressions per LCC copy-group exceeded	01
X'0239..02'	Load Font Control font Host-Assigned ID already assigned	01
X'023A..02'	Maximum number of Fonts allowed by printer exceeded	01
X'023C..02'	Invalid or unsupported value within Load Font Index command	01
X'023E..02'	Invalid Load Font Control character-pattern address	01
X'023F..02'	STO-SCFL-LFE mismatch	01
X'0240..02'	Invalid or unsupported value for Font Inline Sequence	01

Exception ID	Description	Action Code
X'0242..01'	WIC pixel count is less than the minimum required	01
X'0243..01'	WIC command pixel count is greater than the maximum supported value	01
X'0243..02'	Invalid double-byte font-section identifier	01
X'0244..01'	WIC command scan count is less than the minimum required	01
X'0245..01'	WIC command scan count is greater than the maximum supported value	01
X'0246..01'	Invalid WIC source image format	01
X'0246..02'	Invalid parameter for the Load Font Index command	01
X'0247..01'	Invalid or unsupported Write Image Control magnification factor	01
X'0247..02'	Invalid or unsupported Load Font Equivalence font-inline sequence	01
X'0248..01'	Invalid or unsupported Write Image Control scan-line direction	01
X'0249..01'	Invalid scan-line-sequence direction in the WIC command	01
X'024A..01'	Invalid or unsupported Write Image Control image block location	01
X'0253..01'	Invalid or unsupported Write Image Control image color	01
X'0254..41'	Invalid Finishing Fidelity Triplet Length	01
X'0254..42'	Invalid Finishing Fidelity Triplet Continue value	01
X'0254..43'	Invalid Finishing Fidelity Triplet Report value	01
X'0254..51'	Invalid Text Fidelity Triplet Length	01
X'0254..52'	Invalid Text Fidelity Triplet Continue value	01
X'0254..53'	Invalid Text Fidelity Triplet Report value	01
X'0258..03'	Invalid or unsupported text color	01
X'0260..02'	Invalid or unsupported Load Page Descriptor Xp and I L-units per unit base	01
X'0261..02'	Invalid L-Units (Yp) Value in the LPD command	01
X'0262..02'	Invalid or unsupported Load Page Descriptor Xp-extent	01
X'0263..02'	Invalid or unsupported Load Page Descriptor Yp-extent	01

Exception ID	Description	Action Code
X'0264..02'	Invalid or unsupported Load Page Descriptor unit base	01
X'0268..02'	Invalid or unsupported Load page Descriptor	01
X'0269..02'	Invalid baseline-sequence direction in the LPD command	01
X'026A..01'	Insufficient source image data	01
X'026A..02'	Invalid or unsupported LPD initial I print co-ordinate	01
X'026B..01'	Excess source image data received	01
X'026B..02'	Invalid or unsupported LPD initial B print co-ordinate	01
X'026F..02'	Invalid XOH-SMO Media Origin	01
X'0270..02'	Invalid or unsupported XOH Set Media Size L-units per unit base	01
X'0272..02'	Invalid or unsupported XOH Set Media Size Xm-extent	01
X'0273..02'	Invalid or unsupported XOH Set Media Size Ym-extent	01
X'0274..02'	Invalid or unsupported XOH Set Media Size unit base	01
X'0277..01'	Group Termination Exception	01
X'027A..01'	Invalid triplet length value in a group triplet	01
X'027B..01'	Incorrect number of triplet data bytes in a group triplet	01
X'027C..01'	Incompatible finishing operations	01
X'027C..02'	Too many or too few sheets for a finishing operation	01
X'027C..03'	Invalid or unsupported finishing operation type	01
X'027C..04'	Invalid or unsupported finishing operation reference corner and edge	01
X'027C..05'	Unsupported finishing operation count	01
X'027C..06'	Invalid or unsupported finishing operation axis offset	01
X'027C..07'	Invalid or unsupported number of finishing positions	01
X'027C..09'	Finishing operation incompatible with physical media or media destination	06
X'027C..0A'	Incompatible media destination change in a group to be finished	06
X'0280..02'	Invalid or unsupported rule width	06

Exception ID	Description	Action Code
X'0282..02'	Invalid or unsupported rule length	01
X'0285..01'	Invalid or unsupported Delete Overlay command overlay ID	01
X'0287..02'	Invalid or unsupported Load Font Control unit base for Pixel-units	01
X'0288..02'	Invalid or unsupported Load Font Control Pixel-units per unit base in the X-direction	01
X'0289..02'	Invalid or unsupported Load Font Control Pixel-units per unit base in the Y-direction	01
X'028A..01'	Invalid or unsupported Delete Page Segment command page segment Host-Assigned ID	01
X'028A..02'	Invalid or unsupported Load Font Control Relative-Metric Multiplying Factor	01
X'028F..01'	Invalid or unsupported AR command parameter values	01
X'028F..02'	AR activation command failed	01
X'028F..03'	Invalid Resource ID triplet length	01
X'028F..04'	Invalid or unsupported resolution or metric-technology value	01
X'028F..10'	Invalid or unsupported value in a Metric Adjustment triplet	01
X'028F..11'	Baseline adjustment value too large or too small	01
X'0290..01'	Invalid or unsupported Overlay ID	01
X'0291..01'	BO overlay ID already loaded	01
X'0291..02'	Invalid or unsupported XOA Request Resource list entry	01
X'0292..01'	Overlay ID not loaded	01
X'0293..01'	Recursive overlay invocation	01
X'0294..01'	Invalid or unsupported page segment Host-Assigned ID	01
X'0295..01'	Page segment Host-Assigned ID already loaded	01
X'0295..02'	Invalid or unsupported XOH Page Counters Control page-counter update	01
X'0296..01'	Page segment Host-Assigned ID not loaded	01
X'0297..01'	Overlay nesting limit exceeded	01
X'0298..01'	Invalid or unsupported suppression number	01
X'0298..03'	Invalid or unsupported Temporary Baseline Move text control	01
X'029A..01'	Invalid overstrike character increment	01

Exception ID	Description	Action Code
X'02A4..01'	Page boundary in the X-direction cannot be presented by the printer	01
X'02A5..01'	Page boundary in the Y-direction cannot be presented by the printer	01
X'02AC..01'	Insufficient Main Storage to print the Sheet	09
X'02AD..01'	Invalid or unsupported Load Page Position command	01
X'02AE..01'	Invalid or unsupported parameter in an IO command	01
X'02AF..01'	Insufficient storage to print the sheet	0C
X'02AF..01'	Asynchronous Insufficient storage to print the sheet	1E
X'02B0..00'	LCPC Code Page HAID already in use	01
X'02B0..01'	Invalid LCPC Code Page HAID	01
X'02B0..02'	Invalid or Unsupported LCPC Encoding Scheme	01
X'02B0..04'	Too much or too little code page data	01
X'02B0..05'	Invalid or Unsupported LCPC Byte count	01
X'02B0..07'	Code points out of order in LCP command	01
X'02B0..0A'	LFCSC HAID already assigned	01
X'02B0..0B'	Invalid LFCSC HAID	01
X'02B0..0C'	Invalid or Unsupported LFCSC pattern technology ID	01
X'02B0..0E'	Invalid or Unsupported LFCSC Byte count	01
X'02B0..0F'	Invalid or Unsupported LFCSC Map size	01
X'02B1..01'	Invalid or Unsupported LF Character ID format	01
X'02B1..02'	Invalid LF technology specific ID offset	01
X'02B1..03'	Invalid LF technology specific ID length	01
X'02B1..04'	GCGIDs out of order in a Font Character Set	01
X'02B1..08'	Invalid LF technology specific object length	01
X'02B1..09'	LF checksum mismatch	01
X'02B1..0A'	Invalid Name Length in LF3 technology specific object	01
X'02B1..0B'	Invalid data within a LF3 technology specific object	01
X'02B2..01'	Parent character set not activated	01
X'02B2..02'	Font character set extension not valid with pattern technology	01

Exception ID	Description	Action Code
X'02B2..03'	Mismatched character ID format in a LF command	01
X'02B2..04'	Mismatched MICR printing flag in a LFCSC command	01
X'02C0..01'	Mixture of Xm-axis duplex and Ym-axis duplex copy groups	01
X'02C0..02'	Mixture of N-up copy subgroups in a LCC command	01
X'02C0..03'	More than one N-up keyword specified in a copy subgroup	01
X'02C0..04'	Duplexing and N-up not supported together	01
X'02C0..05'	N-up partitioning not supported with envelope media	01
X'02C1..01'	Maximum number of simplex or duplex keywords in an LCC command	01
X'02C1..02'	Internal value not unique in an LE command	01
X'02C2..01'	Odd number of duplex copy groups in an LCC command	01
X'02C2..02'	More than one Media Source or Destination Keyword specified in a copy subgroup	01
X'02C3..01'	Mixture of simplex and duplex parameters in an LCC command	01
X'02C4..01'	Unequal copy counts in an LCC command	01
X'02C5..01'	Unable to delete resource (needed on duplex side)	01
X'02C5..02'	Physical media not compatible with duplex printing	01
X'02C6..01'	Unable to deactivate a component of an activated coded font	01
X'02C6..02'	Invalid mapping type in an LE command	01
X'02C8..01'	An unsupported Input Media Source ID was specified	01
X'02C8..02'	Invalid or unsupported internal value or external value in an Load Equivalence command	01
X'02FF..02'	Exceptions detected but not queued	01

Host Notification Exceptions

Exception ID	Description	Action Code
X'0100..00'	Normal Printer Restart (Printer IMLed or IPDS Dialog Resources Deleted)	0D
X'0101..00'	Media Size or Input Media Source ID Changed	1D
X'0180..00'	Request to end IPDS Dialog	05
X'018F..00'	Error Printer Restart (Printer IMLed)	0D
X'01E4..00'	Cancel Key Pressed	15

Page Counter Adjustments

To identify which page or pages to send to the printer after an exception occurs, the host program must determine the position of the sheets in the paper path.

Count fields in the ACK command identify the state of a virtual paper path that includes a count of the number of pages received, the number of pages past the jam-recovery point, and the number of pages stacked.

The printer tracks the following:

- Received Page Counter
- Committed Page Counter
- Committed Copy Counter
- Stacked Page Counter
- Stacked Copy Counter

All other counters are mapped to the Stacked Page Counter (for pages) and the Stacked Copy Counter (for copies).

The following rules define how the counters are updated:

- After power is switched on, all counter values equal X'0000'.
- When a counter containing X'FFFF' increments, the counter wraps to X'0000'.
- The counters are updated as shown in the following table as each condition is detected.
- The Copy Counters are incremented when more than one copy of a page is printed. When all copies have passed a station, the Copy Counter is then reset to zero and the Page Counter is incremented.

The Copy Counters are not reset to zero during exception recovery.

Condition (in hex)	Counters	Counter Adjustments
Action Codes 08 22	Received Page Counter Committed Page Counter Committed Copy Counter Operator Viewing Page Counter Operator Viewing Copy Counter Jam Recovery Page Counter Jam Recovery Copy Counter Stacked Page Counter Stacked Copy Counter	Set to Jam Recovery Page Counter Set to Jam Recovery Page Counter Set to Jam Recovery Page Counter Set to Jam Recovery Page Counter Set to Jam Recovery Page Counter No change No change Set to Jam Recovery Page Counter Set to Jam Recovery Copy Counter
Action Codes 15 1A 1D	Received Page Counter Committed Page Counter Committed Copy Counter Operator Viewing Page Counter Operator Viewing Copy Counter Jam Recovery Page Counter Jam Recovery Copy Counter Stacked Page Counter Stacked Copy Counter	Set to Committed Page Counter No change No change No change No change No change No change No change No change
Action Code 0C	Received Page Counter Committed Page Counter Committed Copy Counter Operator Viewing Page Counter Operator Viewing Copy Counter Jam Recovery Page Counter Jam Recovery Copy Counter Stacked Page Counter Stacked Copy Counter	No change No change No change No change No change No change No change No change No change
Action Code 01	Received Page Counter Committed Page Counter Committed Copy Counter Operator Viewing Page Counter Operator Viewing Copy Counter Jam Recovery Page Counter Jam Recovery Copy Counter Stacked Page Counter Stacked Copy Counter	No change No change No change No change No change No change No change No change No change

Condition (in hex)	Counters	Counter Adjustments
Action Code 1E	Received Page Counter	Set to Committed Page Counter
	Committed Page Counter	No change
	Committed Copy Counter	No change
	Operator Viewing Page Counter	No change
	Operator Viewing Copy Counter	No change
	Jam Recovery Page Counter	No change
	Jam Recovery Copy Counter	No change
	Stacked Page Counter	No change
	Stacked Copy Counter	No change
All other action codes	Received Page Counter	No change
	Committed Page Counter	No change
	Committed Copy Counter	No change
	Operator Viewing Page Counter	No change
	Operator Viewing Copy Counter	No change
	Jam Recovery Page Counter	No change
	Jam Recovery Copy Counter	No change
	Stacked Page Counter	No change
	Stacked Copy Counter	No change
Command XOA - Discard Buffered Data	Received Page Counter	Set to Committed Page Counter
	Committed Page Counter	No change
	Committed Copy Counter	No change
	Operator Viewing Page Counter	No change
	Operator Viewing Copy Counter	No change
	Jam Recovery Page Counter	No change
	Jam Recovery Copy Counter	No change
	Stacked Page Counter	No change
	Stacked Copy Counter	No change
Normal Counter Wrap (on a Per-Counter Basis)	Received Page Counter	Reset to 0
	Committed Page Counter	Reset to 0
	Committed Copy Counter	Reset to 0
	Operator Viewing Page Counter	Reset to 0
	Operator Viewing Copy Counter	Reset to 0
	Jam Recovery Page Counter	Reset to 0
	Jam Recovery Copy Counter	Reset to 0
	Stacked Page Counter	Reset to 0
	Stacked Copy Counter	Reset to 0

Condition (in hex)	Counters	Counter Adjustments
Command XOH - Page Counters Control	Received Page Counter Committed Page Counter Committed Copy Counter Operator Viewing Page Counter Operator Viewing Copy Counter Jam Recovery Page Counter Jam Recovery Copy Counter Stacked Page Counter Stacked Copy Counter	For details about XOH PCC command, see p.37 "Device Control Command Set".

Note

❒ Should not be incremented for page in error (that is, any partial page is discarded).

❒ The Received Page Counter should be incremented if a partial or complete page is printed.

❒ For Action Code X'1E', the host should issue an XOH Print Buffered Data command with the ARQ bit on and a unique correlation ID (to ensure that the Acknowledge Reply matches the Print Buffer Data [PBD] command) to cause the Committed Page/Copy Counter to reflect the page in error.

Page and Copy Counter Adjustments for Data-Stream Exceptions

The following are counter adjustments for simplex copy groups.

Condition (in hex)	Counters	Counter Adjustments
Action Code 01 and the page is printed	Received Page Counter	Does not reflect the page in which the error occurs.
	Committed Page Counter	No change
	Committed Copy Counter	Reflects any committed copies resulting from prior error-free copy groups.
	Operator Viewing Page Counter	No change
	Operator Viewing Copy Counter	No change
	Jam Recovery Page Counter	No change
	Jam Recovery Copy Counter	No change
	Stacked Page Counter	No change
	Stacked Copy Counter	No change

Condition (in hex)	Counters	Counter Adjustments
Action Code 01 and the page is not printed	Received Page Counter	Reflects the page in which the error occurs, only if the error occurred on the last copy group.
	Committed Page Counter	No change
	Committed Copy Counter	Reflects any committed copies resulting from prior error-free copy groups or from the copy group in error.
	Operator Viewing Page Counter	No change
	Operator Viewing Copy Counter	No change
	Jam Recovery Page Counter	No change
	Jam Recovery Copy Counter	No change
	Stacked Page Counter	No change
	Stacked Copy Counter	No change

The following are counter adjustments for duplex copy groups.

Condition (in hex)	Counters	Counter Adjustments
Action Code 01 on the front side and the page is printed	Received Page Counter	Reflects the page in which the error occurs (the front side) only if the error occurred on the other in a copy group other than the first copy group.
	Committed Page Counter	No change
	Committed Copy Counter	Reflects any committed copies resulting from prior error-free copy group pairs.
	Operator Viewing Page Counter	No change
	Operator Viewing Copy Counter	No change
	Jam Recovery Page Counter	No change
	Jam Recovery Copy Counter	No change
	Stacked Page Counter	No change
	Stacked Copy Counter	No change

Condition (in hex)	Counters	Counter Adjustments
Action Code 01 on back side and the page is not printed	Received Page Counter	Does not reflect the page in the error occurs (the back side) it does reflect the front side.
	Committed Page Counter	No change
	Committed Copy Counter	Reflects any committed copies resulting from prior error-free copy group pairs.
	Operator Viewing Page Counter	No change
	Operator Viewing Copy Counter	No change
	Jam Recovery Page Counter	No change
	Jam Recovery Copy Counter	No change
	Stacked Page Counter	No change
	Stacked Copy Counter	No change
Action Code 01 on the front side and the page is not printed	Received Page Counter	Reflects the page in which the error occurs (front side).
	Committed Page Counter	No change
	Committed Copy Counter	Reflects any committed copies resulting from prior error-free copy group pairs.
	Operator Viewing Page Counter	No change
	Operator Viewing Copy Counter	No change
	Jam Recovery Page Counter	No change
	Jam Recovery Copy Counter	No change
	Stacked Page Counter	No change
	Stacked Copy Counter	No change
Action Code 01 on the back side and the page is printed	Received Page Counter	Reflects the page in which the error occurs (back side) only if the error occurred on the last copy group. Reflects front side.
	Committed Page Counter	No change
	Committed Copy Counter	Reflects any committed copies resulting from prior error-free copy group pairs or from the copy group in error.
	Operator Viewing Page Counter	No change
	Operator Viewing Copy Counter	No change
	Jam Recovery Page Counter	No change
	Jam Recovery Copy Counter	No change
	Stacked Page Counter	No change
	Stacked Copy Counter	No change

14. Code Page and Font Identification

About Code Page and Font Identification

The machine supports both raster and outline technology fonts: Single and Double byte. The resident single-byte LF1 "raster" fonts are generated using outline font technology (IBM AFP Font Collection): the IBM Core Interchange Font Set, the IBM Coordinated Font Set and the 4028 Compatibility Font Set.

The valid combinations of GCSGID/CPGID, GCSGID/FGID/FW, or GCSGID/CPGID/FGID/FW are too numerous to list here. They can be obtained by the host using the Any state command p.90 "XOA Request Resource List" with the appropriate Resource Type and RIDF.

They can also be determined by using the information under p.262 "Resident IPDS Fonts" with the criteria described in the following sections:

Note

- The machine supports Download and Capture of Font Resources. There is Date/Time stamp information to help identify versions of font resources. p.262 "Resident IPDS Fonts" includes the Date/Time stamps for the resident fonts.
- The machine will report DBCS raster font (and any captured raster fonts) using the RRL command when the IPDS Resolution (op panel) setting is Independence Mode. If the IPDS Resolution (op panel) setting is an Acceptance Mode, only those raster fonts with resolutions that match the current Acceptance mode resolution setting (240 or 300 or 600 DPI), will be reported via RRL.

RRL RT'06' Code Page (CPGID)

Values are listed in p.271 "IBM Core Interchange Resident Code Page Set", p.279 "4028 Compatibility Resident Code Page Set", and p.282 "IBM Coordinated Font Set Code Page Set", and will be reported via XOA-RRL RT 06 RIDF 03.

RRL RT'12' Specific Code Pages (GCSGID/CPGID)

Valid combinations are listed in p.271 "IBM Core Interchange Resident Code Page Set", p.279 "4028 Compatibility Resident Code Page Set", and p.282 "IBM Coordinated Font Set Code Page Set", and will be reported via XOA-RRL RT 12 RIDF 03.

RRL RT'11' Graphic Character Sets (GCSGID SUB/SUPERSETS)

Valid combinations are listed in p.282 "GCSGID Subsets for the Strategic Font Set 2" and will be reported via XOA-RRL RT 11 RIDF 03.

RRL RT'07' Font Character Sets (GCSGID/FGID/FW)

- Valid combinations for the IBM Core Interchange Set are listed in p.264 "IBM Core Interchange Resident Scalable Font Set", and will be reported via XOA-RRL RT 07 RIDF 03.
  - Scalable Font Width (FW) will be reported as 0 to the host PSF. This indicates that any width/scale-factor is valid.
  - p.270 "GCSGID Subsets for IBM Core Interchange Fonts" shows the subset GCSGIDs for each of the listed superset GCSGIDs in p.264 "IBM Core Interchange Resident Scalable Font Set". These subset GCSGIDs are valid combinations for the associated superset GCSGIDs in the GCSGID/FGID/FW, but will not be added to the RRL 0703 response unless required by the host PSF's.
- Valid combinations for the IBM Coordinated Set are listed in p.280 "Resident PSC Strategic Scalable Font Set 2" and will be reported via XOA-RRL RT 07 RIDF 03.
  - Scalable Font Width (FW) will be reported as 0 to the host PSF. This indicates that any width/scale-factor is valid.
  - p.282 "GCSGID Subsets for the Strategic Font Set 2" shows the subset GCSGIDs for each of the listed superset GCSGIDs in p.280 "Resident PSC Strategic Scalable Font Set 2". These subset GCSGIDs are valid combination entries for the associated superset GCSGIDs in the GCSGID/FGID/FW, but will not be added to the RRL 0703 response unless required by the host PSF's.
- Valid combinations for the 4028 Compatibility Set require p.277 "4028 Compatibility Resident Font Set" (FGID/FW) and p.279 "4028 Compatibility Resident Code Page Set" (GCSGID), and will be reported via XOA-RRL RT 07 RIDF 03.
  - The FW's for these fonts are non-zero, because they represent fixed-width fonts.
  - The Alternate FGIDs are valid values for GCSGID/FGID/FW combinations.
  - Native Mode - These fonts (which are representing 4028 raster fonts) don't have a GCSGID of their own, so the GCSGID used is from the associated Code Pages (CPGIDs).
    The GCSGIDs are obtained by finding the Code Page(s) in p.279 "4028 Compatibility Resident Code Page Set" that matches the Code Page(s) listed for a given FGID/FW entry in p.277 "4028 Compatibility Resident Font Set". The GCSGID for each of the Code Pages listed with an FGID is a valid combination entry.
    Since these fonts don't have a superset GCSGID, there is no subset condition. So each of these unique GCSGID/FGID/FW combinations will be added to the XOA-RRL 0703 report to the host PSF.
  - 4028 Emulation Mode - These fonts (which are representing 4028 raster fonts) don't have a GCSGID of their own, so the GCSGID used is 0.

RRL RT'01'/'03'/'10' RIDF'03' (GCSGID/CPGID/FGID/FW = GRID)

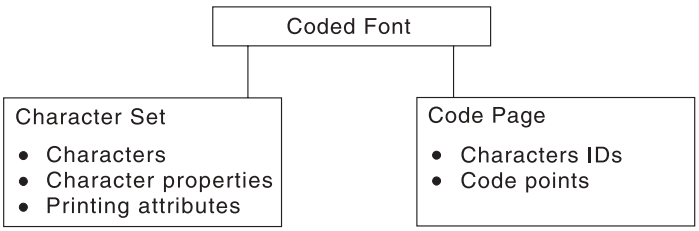
- Valid combinations for the IBM Core Interchange Set require p.264 "IBM Core Interchange Resident Scalable Font Set" (superset GCSGID/FGID/FW), p.270 "GCSGID Subsets for IBM Core Interchange Fonts" (GCSGID subsets) and p.271 "IBM Core Interchange Resident Code Page Set" (GCSGID/CPGID), and will be reported via XOA-RRL RT 01 RIDF 03 (also RT 10 RIDF 03). In all GRIDs, the GCSGID chosen will belong to the Code Page, as this is almost always the subset of the outline font GCSGID.
  - Scalable Font Width (FW) will be reported as 0 to the host PSF. This indicates that any width/scale-factor is valid.
  - CPGIDs and GCSGIDs are listed in p.271 "IBM Core Interchange Resident Code Page Set". For each pair, determine which FGIDs in p.264 "IBM Core Interchange Resident Scalable Font Set" can combine with them. This is done by finding the superset GCSGID in p.270 "GCSGID Subsets for IBM Core Interchange Fonts" which contains the p.271 "IBM Core Interchange Resident Code Page Set" GCSGID as a subset. An example is that there would be 51 GRID combinations for the Times New Roman Medium font...FGID is always 2308, FW is always 0, and there are 51 unique CPGID/GCSGID pairs in Table p.271 "IBM Core Interchange Resident Code Page Set" which are subsets of the superset GCSGID 1269.
- Valid combinations for the IBM Coordinated Set require p.280 "Resident PSC Strategic Scalable Font Set 2" (superset GCSGID/FGID/FW), p.282 "GCSGID Subsets for the Strategic Font Set 2" (GCSGID subsets) and p.271 "IBM Core Interchange Resident Code Page Set" and p.282 "IBM Coordinated Font Set Code Page Set" (GCSGID/CPGID), and will be reported via XOA-RRL RT 01 RIDF 03 (also RT 10 RIDF 03). In all GRIDs, the GCSGID chosen will belong to the Code Page, as this is almost always the subset of the outline font GCSGID.
  - Scalable Font Width (FW) will be reported as 0 to the host PSF. This indicates that any width/scale-factor is valid.
  - CPGIDs and GCSGIDs are listed in p.271 "IBM Core Interchange Resident Code Page Set" and p.282 "IBM Coordinated Font Set Code Page Set". For each pair, determine which FGIDs in p.280 "Resident PSC Strategic Scalable Font Set 2" can combine with them. This is done by finding the superset GCSGID in p.282 "GCSGID Subsets for the Strategic Font Set 2" which contains the p.271 "IBM Core Interchange Resident Code Page Set" GCSGID as a subset. An example is that there would be 41 GRID combinations for the Letter Gothic font...FGID is always 400, FW is always 0, and there are 41 unique CPGID/GCSGID pairs in p.271 "IBM Core Interchange Resident Code Page Set" and p.282 "IBM Coordinated Font Set Code Page Set". which are subsets of the superset GCSGID 2039.

- Valid combinations for the 4028 Compatibility Set require p.277 “4028 Compatibility Resident Font Set” (FGID/FW) and p.279 “4028 Compatibility Resident Code Page Set” (GCSGID/CPGID), and will be reported via XOA-RRL RT 01 RIDF 03. In all GRIDs, the GCSGID chosen will belong to the Code Page, as this is almost always the subset of the outline font GCSGID.
  - The FW’s for these fonts are non-zero, because they represent fixed-width fonts.
  - The Alternate FGIDs are valid values for FGID/FW combinations.
  - The GCSGID/CPGID pairs for each font are obtained by finding the Code Page(s) in p.279 “4028 Compatibility Resident Code Page Set” that match the Code Page(s) listed for a given FGID/FW pair in p.277 “4028 Compatibility Resident Font Set”.

IBM Font Structure

In IBM AFP terminology, a font has three components. They are:

- Coded font
- Character set
- Code page



Note

❒ These terms have different meanings in Operating System/400 (OS/400). See p.259 “Operating System/400 Terms” for what these terms mean in OS/400.

Coded Font

In IBM font structure, a coded font translates your request for type (for example, text you previously entered at a computer terminal) into characters for printing. A coded font consists of two parts:

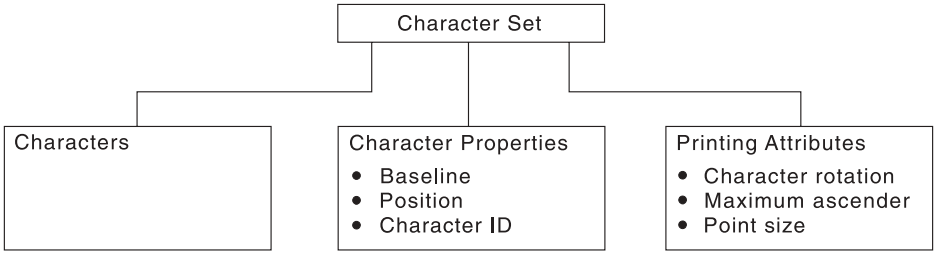
- References to specific character sets
- References to specific code pages

A character must be included in the specified character set and listed on the specified code page before it can be printed.

A coded font associates a specific code page with a specific character set. A coded font contains one code-page and one character-set pair.

Character Set

In IBM font structure, a character set corresponds to the definition of a font; it contains the characters of a single type family, typeface, and type size. In addition, a character set specifies character properties and printing attributes.



❖ Characters

Characters are the letters, numerals, punctuation marks, or other symbols of a font.

❖ Character properties

Character properties detail how a character is positioned relative to the characters around it. Some character properties include the following:

- The baseline of a character, showing its general alignment
- The dimensions of space in which the character is printed
- The position of the character within that space
- The identifier of the character (the character ID)

One of the character properties is the character ID (or graphic character ID). Each character is assigned a character ID; for example, the character A (uppercase A) is assigned the character ID LA020000.

The purpose of a character ID is to distinguish the character from similar characters. For example, the following characters look similar; however, they are different and are assigned different character IDs:

Minus sign (-): Character ID SA000000
Hyphen (-): Character ID SP100000
Em dash (—): Character ID SM900000

For a list of character IDs and the graphic character each represents, refer to "ABOUT TYPE: IBM's Technical Reference for Core Interchange Digitized Type".

❖ Printing attributes

The printing attributes define how the character set will be printed. Some printing attributes include rotation of characters, maximum ascender, and point size.

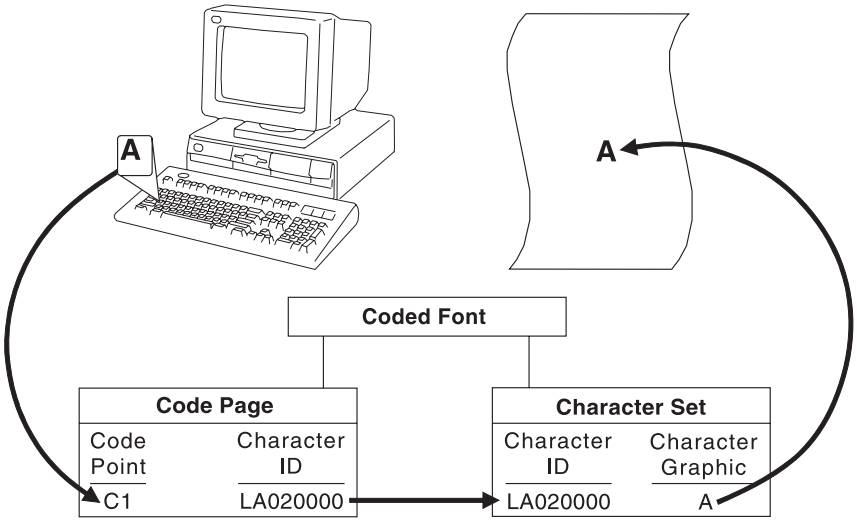
Code Page

A code page is a set of symbols that can be printed by your printer. These symbols can be letters, numbers, or graphic elements such as lines or patterns. The symbols may be grouped to be specific to a country, language, or special symbol set. By supporting different code pages, the printer can support different language requirements.

No particular typeface is assumed for any particular code page. The typeface is defined as a font by the assignment of size, weight, and posture.

Character IDs and Code Points

In IBM font structure, a code page maps each character of text to the characters in a character set. The following figure shows how a code page maps text to the characters in a character set. As you enter your text at a computer terminal, each keyboard character is translated into a code point. When the text is printed, each code point is matched to a character ID on the code page you specified. The character ID then is matched to the image (raster pattern) of the character in the character set you specified. The image in the character set is the image that is printed in your text. To be a valid code page for a particular character set, all character IDs in the code page must be included in that character set.



Every code page has 256 positions, or code points, that represent potential characters. Each of the code points is normally identified by its bit configuration in hexadecimal, with two hex characters per byte. The range of values is hex 00 through hex FF, or 256 values. The code page determines which character prints for each of the printable code points.

A character ID is an 8-byte standard identifier for a character regardless of its type family. For example, all uppercase "A" have the same character ID (LA020000). Character IDs also are called graphic character identifiers (GCIDs).

Binary: 11000001

Decimal: 193

Hexadecimal: C1

The following figure shows an example of a part of a code page. When the printer receives hexadecimal code point C1 for the code page shown (code page 00037 Version 1), it prints an uppercase A (character ID LA020000). Baselines for each character on the example code page show the general alignment of characters.

Different Code Pages

Code pages accommodate various national languages by using characters and special symbols appropriate to the language. Code pages can have identical character IDs assigned to different code points.

For example, the character i (lowercase e accent acute, character ID LE110000) has the following code point assignment in two different code pages:

- Hexadecimal code point 51 in code page 00037 Version 1
- Hexadecimal code point 5A in code page 00280 Version 1

Operating System/400 Terms

Table 158 lists the IBM AFP font terminology and describes how it is used with the OS/400 printing interfaces.

AFP Term	OS/400 AFP Implementation	OS/400 Print File Term
Coded font	*FNTRSC object with CDEFNT attribute	Coded font
Character set	*FNTRSC object with FNTCHRSET attribute	Font
Code page	*FNTRSC object with CDEPAG attribute	Character ID (CHRID)

Note

❒ This is not the character ID that identifies individual characters within an AFP character set. This is a control object that identifies a code page by two numbers representing a character set ID and a code page ID.

Font Terms

A font is a complete set of characters in a particular typeface, type size, and code page.

The following terms help define a font:

❖ **Character Set**
A set of numeric, alphabetic, or graphic characters with their assigned code points.

❖ **Code Page**
A table of alphanumeric characters and graphic characters each of which is assigned a 1-byte value (a code point). These values define which characters will print.

❖ **Code Page Global ID (CPGID)**
Identifies a specific set of code points assigned to a specific list of graphic character IDs.

❖ **Font Global ID (FGID)**
Specifies a value for selecting a font. IBM fonts have a preassigned FGID value.

❖ **Graphic Character Set Global ID (GCSGID)**
Identifies the list of graphic character IDs included in the code page.

❖ Spacing

Also called font width or escapement. Spacing is the distance from the start of a character to the start of the next character. Font spacing can be defined by spacing type:

- Fixed-pitch fonts – All characters in a fixed-pitch font have the same spacing, which is specified as the number of characters per inch.
- Typographic fonts – Typographic fonts are identified as Typo.

Most documents are easier to read if the widths of the characters vary, that is, if a W is printed wider than an I. Typographic fonts have this variability. These fonts are sized by height, not width.

Seventy-two points equals approximately one inch. Therefore, a 10-point font is 10/72 inch high.

Type height includes some white space above and below the printed character for adequate minimum spacing between the lines of type.

Text is most readable when character spacing ranges from 8 to 12 points. For example, the text in this document is 10 point.

Note

❒ For typographic fonts, it is recommended that the first and last print positions on each line be left blank.

- Proportionally spaced machine (PSM) fonts – Proportionally spaced machine fonts are identified by PSM or PS. PSM fonts are a compromise between the variability of typographic sizes and the simple uniformity of fixed pitch. With PSM fonts, the widths of the characters vary. For example, a lowercase "i" has a different width than an uppercase W. However, a specific character in one font will be the same width in another font. For example, a W in one PSM font is the same width as the W in every other PSM font. Therefore, it is possible to have only one character-width table that applies to every PSM font.

❖ Posture

Refers to a character's incline, or tilt. Roman posture is upright. Italic posture is inclined to the right.

❖ Type Size

Also called point size. Specifies the overall height of the font, measured in printer's points. A point is 1/72 inch. For example, a 12-point font is 1/6 inch high.

❖ Typeface

Also called type style. Specifies the shape and design of each letter of the alphabet. A complete alphabet of letter designs makes up one typeface.

❖ Weight

Refers to the thickness of the strokes that make up the characters of a font, as in a bold font weight.

Font and Code Page Selection

Printers with an IPDS feature receive IPDS commands to specify fonts. The IPDS command set can select any font or code page supported by the printer. See the printer User's Guide for a list of the IPDS fonts supported. However, host software may restrict the actual fonts or code pages that can be selected. This includes typographic and nontypographic fonts in all pitches, point sizes, and widths. The information provided to the printer to select a font is called a GRID (Global Resource Identifier). The GRID consists of the following (See p.259 "Font Terms" for a description of these terms):

- FGID (Font Global Identifier)
- GCSGID (Graphic Character Set Global Identifier)
- CPGID (Code Page Global Identifier)
- Font Width

For typographic fonts with the same FGID, specify the FONT WIDTH parameter to the printer. The printer needs the font width parameter to identify the font in order to specify the point size. The FONT WIDTH parameter is described in detail in the IPDS section.

You can select the code page and code page version from a configuration setting. Refer to your printer's User's Guide for instructions on changing code page and code page version configuration settings. Some system software does not allow you to change code pages by software and uses the printer default code page for printing. The printer factory default character set is 0697 and the code page is 00037 version 1.

This may require you to change the printer code page to match the system software.

Note

❒ When using an application that does not allow selection of font width, use the alternate FGID when available to access typographic fonts.

Resident IPDS Fonts

Printer will support outline fonts from both the IBM Core Interchange Font Set and the IBM Coordinated Font Set as resident fonts. In addition, selections of these fonts are grouped into the 4028 Compatibility Font set. This set is used to represent the 4028 base internal raster fonts for limited compatibility. The font technologies used in the printer are:

```
IBM Core Interchange - Type 1 Outlines
IBM Coordinated - Type 1 Outlines
4028 Compatibility - Type 1 Outlines
3820 ROM Font Compatibility - Raster
```


Resident Font Activation Methods

Fonts resident within the Printer may be activated using the following IPDS commands. Note that some fonts have restrictions on allowable font activation methods.

Load Font Equivalence

The Load Font Equivalence (LFE) command maps font local identifiers, specified within text, graphics or bar code data, to font Host Assigned IDs (HAIDs) and Global Resource IDs (GRIDs).

If the GRID specified in the LFE command matches a GRID contained in the printer, the font is activated.

Activate Resource (Load Resource Equivalence)

The Activate Resource (AR) command (previously known as Load Resource Equivalence) maps Host Assigned IDs to global names of another format. The format for the global name is identified by a resource type and resource ID combination.

If the Printer has a resource that matches the global name in the AR command, that resource is activated.

The following combinations of Resource Type and Resource ID Format are supported by the Printer.

Resource Type	RT Hex	Resource ID Format	RIDF Hex
Single Byte Coded Raster Font	X'01'	IBM GRID	X'03'
Single Byte Coded Raster Font	X'01'	MVS Host Unalterable	X'06'
Double Byte Coded Font Section	X'03'	IBM GRID	X'03'
Double Byte Coded Font Section	X'03'	MVS Host Unalterable	X'06'

Resource Type	RT Hex	Resource ID Format	RIDF Hex
Code Page	X'06'	IBM GRID	X'03'
Font Character Set	X'07'	IBM GRID	X'03'
Single Byte Coded Font Index	X'08'	IBM GRID	X'03'
Single Byte Coded Font Index	X'08'	MVS Host Unalterable	X'06'
Double Byte Coded Font Index	X'09'	IBM GRID	X'03'
Double Byte Coded Font Index	X'09'	MVS Host Unalterable	X'06'
Coded Font	X'10'	IBM GRID	X'03'
Coded Font	X'10'	Coded Font Format	X'07'

IBM Core Interchange Resident Scalable Font Set (IPDS only)

The IBM Core Interchange fonts as shown in Table 159 will be supported as resident fonts in the following language groups:

- Latin 1/2/3/4/5
- Symbols
- Arabic
- Cyrillic Greek
- Hebrew
- Thai
- Lao
- Katakana

p.264 "IBM Core Interchange Resident Scalable Font Set" lists the typefaces resident in the Printer and includes the valid FGID and code pages for each font. The Date Stamp on the character sets with GCSGIDs of 1269, 1275, 1300, 1264, and 1265 is 94350, and the Time Stamp used is 00:00:00.00. The Date Stamp on the character sets with a GCSGID of 1355 is 98152 and the Time Stamp used is 00:00:00.00. The Date Stamp used on the remaining character sets is 02185, and the Time Stamp used is 00:00:01.00.

p.270 "GCSGID Subsets" provides a mapping of the valid subsets of the GCSGIDs listed for the IBM Core Interchange fonts.

XOA-RRL Replies for Font Character Sets

The resident set as shown in Table 159 will support a font character set of any valid font width when queried as an individual font character set.

When queried for a list of font character sets, the resident character sets will be reported with a font width of zero. A font width of zero indicates that the font is scalable.

Valid combinations of the CPGIDs, GCSGIDs, FGIDs and Font Widths for the resident fonts are defined in p.251 "Code Page and Font Identification".

❖ IBM Core Interchange Resident Scalable Font Set

Typeface	FGID	GCSGID	Font Width	Code Pages
Latin 1/2/3/4/5 with Euro and Vietnamese				
Times New Roman Medium	2308	1503	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Times New Roman Bold	2309	1503	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Times New Roman Italic Medium	2310	1503	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Times New Roman Italic Bold	2311	1503	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Helvetica Roman Medium	2304	1503	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Helvetica Roman Bold	2305	1503	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Helvetica Italic Medium	2306	1503	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Helvetica Italic Bold	2307	1503	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Courier Roman Medium	416	1503	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Courier Roman Bold	420	1503	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Courier Italic Medium	424	1503	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Courier Italic Bold	428	1503	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Symbols with Euro				
Times New Roman Medium	2308	1191	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Times New Roman Bold	2309	1191	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".

Typeface	FGID	GCSGID	Font Width	Code Pages
Helvetica Roman Medium	2304	1191	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Helvetica Roman Bold	2305	1191	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Courier Roman Medium	416	1191	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Courier Roman Bold	420	1191	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
APL2				
APL2	307	1364	Scalable	293, 310, 910
APL2 Bold	322	1364	Scalable	293, 310, 910
Cyrillic Greek with Euro				
Times New Roman Medium	2308	1504	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Times New Roman Bold	2309	1504	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Times New Roman Italic Medium	2310	1504	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Times New Roman Italic Bold	2311	1504	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Helvetica Roman Medium	2304	1504	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Helvetica Roman Bold	2305	1504	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Helvetica Italic Medium	2306	1504	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Helvetica Italic Bold	2307	1504	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Courier Roman Medium	416	1504	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.

Typeface	FGID	GCSGID	Font Width	Code Pages
Courier Roman Bold	420	1504	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Courier Italic Medium	424	1504	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Courier Italic Bold	428	1504	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Arabic with Euro				
ITC Boutros Setting Medium	2308	1506	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
ITC Boutros Setting Bold	2309	1506	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
ITC Boutros Setting Italic Medium	2310	1506	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
ITC Boutros Setting Italic Bold	2311	1506	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
ITC Boutros Modern Rokaa Medium	2304	1506	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
ITC Boutros Modern Rokaa Bold	2305	1506	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
ITC Boutros Modern Rokaa Italic Medium	2306	1506	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
ITC Boutros Modern Rokaa Italic Bold	2307	1506	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Boutros Typing Medium	416	1506	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Boutros Typing Bold	420	1506	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Boutros Typing Italic Medium	424	1506	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Boutros Typing Italic Bold	428	1506	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.

Typeface	FGID	GCSGID	Font Width	Code Pages
Hebrew with Euro				
Narkissim Medium	2308	1362	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Narkissim Bold	2309	1362	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Narkissim Italic Medium	2310	1362	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Narkissim Italic Bold	2311	1362	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Narkiss Tam Medium	2304	1362	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Narkiss Tam Bold	2305	1362	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Narkiss Tam Italic Medium	2306	1362	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Narkiss Tam Italic Bold	2307	1362	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Shalom Medium	416	1362	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Shalom Bold	420	1362	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Shalom Italic Medium	424	1362	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Shalom Italic Bold	428	1362	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Thai				
Burirum Medium	2308	1505	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".
Burirum Bold	2309	1505	Scalable	See p.271 "IBM Core Interchange Resident Code Page Set".

Typeface	FGID	GCSGID	Font Width	Code Pages
Burirum Italic Medium	2310	1505	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Burirum Italic Bold	2311	1505	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Thonburi Medium	2304	1505	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Thonburi Bold	2305	1505	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Thonburi Italic Medium	2306	1505	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Thonburi Italic Bold	2307	1505	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Courier Thai Medium	416	1505	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Courier Thai Bold	420	1505	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Courier Thai Italic Medium	424	1505	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Courier Thai Italic Bold	428	1505	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Lao				
Kaewfah Medium	2308	1341	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Kaewfah Bold	2309	1341	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Kaewfah Italic Medium	2310	1341	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Kaewfah Italic Bold	2311	1341	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Pusuwan Medium	2304	1341	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.

Typeface	FGID	GCSGID	Font Width	Code Pages
Pusuwan Bold	2305	1341	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Pusuwan Italic Medium	2306	1341	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Pusuwan Italic Bold	2307	1341	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Courier Lao Medium	416	1341	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Courier Lao Bold	420	1341	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Courier Lao Italic Medium	424	1341	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Courier Lao Italic Bold	428	1341	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Katakana				
Katakana Gothic	304	1306	Scalable	290, 897, 1027, 1041, 1139

GCSGID Subsets

The following table provides a mapping of the valid subsets of the GCSGIDs listed for the IBM Core Interchange fonts.

❖ GCSGID Subsets for IBM Core Interchange Fonts

GCSGID	Valid GCSGID Subsets
1269	0101, 0103, 0119, 0251, 0265, 0269, 0273, 0277, 0281, 0285, 0288, 0289, 0293, 0297, 0301, 0305, 0309, 0313, 0317, 0321, 0325, 0329, 0337, 0341, 0611, 0697, 0919, 0959, 0965, 0980, 0982, 0983, 0987, 0990, 0991, 0993, 0995, 1111, 1132, 1133, 1145, 1146, 1149, 1152, 1166, 1167, 1174, 1188, 1189, 1198, 1220, 1232, 1233, 1237, 1256, 1258, 1259, 1260, 1261, 1268, 1286, 1301, 1302, 2039
1355	1269, 2041
2041	0695, 0988, 1243, 1353, 1412, 2039
1275	0340, 0630, 0909, 1191, 1257
1264	0235, 0994, 1154, 1162, 1177, 1244
1265	0941, 0687, 0986, 0992, 1147, 1199, 1217, 1218
1300	0218, 0925, 0960, 0981, 0985, 0996, 0998, 1150, 1190, 1231, 1235, 1249, 1251, 1276, 1401
1279	1102, 1395, 1396
1304	380, 963, 1113
1306	332, 1122, 1164, 1172, 1187
1364	1304, 1330, 1340
1362	1265, 1356, 1357, 1358, 1360
1502	969
1503	1305, 1336, 1346, 1347, 1355, 1375, 1377, 1378, 1380, 1391, 1392, 1393, 1394, 1397, 1410, 1414, 1418, 1421
1504	1300, 1331, 1338, 1371, 1373, 1381, 1383, 1385, 1387, 1388, 1390, 1411, 1413, 1441
1505	1279
1506	1264, 1461, 1463, 1464, 1465

IBM Core Interchange Resident Code Page Set

The following lists the code pages used with the IBM Core Interchange Resident Fonts. Not all code Pages apply to each font; this is determined by the character set. Please correlate the GCSGIDs found in the following lists with the correct IBM Core Interchange Font GCSGID superset in p.270 "GCSGID Subsets for IBM Core Interchange Fonts" to determine which code pages apply to a particular font family.

❖ IBM Core Interchange Resident Code Page Set

Code Page Global ID (CPGID)	Graphic Character Set ID (GCSGID)	Language Supported
Latin 1 Country Extended Code Pages		
37	697	US English, Canadian English, Canadian French, Dutch, Brazilian Portuguese, Portuguese
273	697	Austrian, German
274	697	Belgian
275	697	Brazilian
277	697	Danish, Norwegian
278	697	Finnish, Swedish
280	697	Italian
281	697	Japanese
282	697	Portuguese
284	697	Castillian Spanish, Latin American Spanish
285	697	UK English
297	697	French, Catalan
500	697	Multinational, Belgium French, Belgium Dutch, Swiss French, Swiss German, Swiss Italian
871	697	Icelandic
1140	695	US English, Canadian English, Canadian French, Dutch, Brazilian Portuguese, Portuguese ECECP
1141	695	Austrian, German ECECP
1142	695	Danish, Norwegian ECECP
1143	695	Finnish, Swedish ECECP
1144	695	Italian ECECP
1145	695	Castillian Spanish, Latin American Spanish ECECP

Code Page Global ID (CPGID)	Graphic Character Set ID (GCSGID)	Language Supported
1146	695	UK English ECECP
1147	695	French, Catalan ECECP
1148	695	Multinational ECECP, Belgium French, Belgium Dutch, Swiss French, Swiss German, Swiss Italian
1149	695	Icelandic ECECP
Latin 1 EBCDIC Publishing Code Pages		
361	1145	Multinational, Belgium French, Belgium Dutch, Swiss French, Swiss German, Swiss Italian
382	1145	German
383	1145	Belgian
384	1145	Brazilian Portuguese
385	1145	Canadian French
386	1145	Danish, Norwegian
387	1145	Finnish, Swedish
388	1145	French, Catalan
389	1145	Italian
390	1145	Japanese
391	1145	Portuguese
392	1145	Castillian Spanish
393	1145	Latin American Spanish
394	1145	UK English
395	1145	US English, Canadian English
Latin 1 ASCII Code Pages		
437	919	Multinational, US English, UK English, Dutch, German, Finnish, French, Italian, Spanish, Swedish
850	980	Multinational PC
858	988	Multinational PC with Euro
860	990	Portuguese (Primary = 850)
861	991	Icelandic (Primary = 850)
863	993	Canadian French (Primary = 850)
865	995	Nordic (Primary = 850)
1004	1146	IBM PC Desktop Publishing
819	697	ISO Latin 1
1252	1412	Windows Latin 1

Code Page Global ID (CPGID)	Graphic Character Set ID (GCSGID)	Language Supported
1112	1305	Baltic, Multi EBCDIC
1257	1421	Windows, Baltic Rim
Latin 2/3/4/5 EBCDIC and ASCII Code Pages		
852	982	Croatian, Czech, East German, Hungarian, Polish, Romanian, Slovak, Slovenian
852	1377	Croatian, Czech, East German, Hungarian, Polish, Romanian, Slovak, Slovenian with Euro
870	959	Latin 2 Multilingual
912	959	Latin 2 ISO/ ANSI 8 Bit
1153	1375	Latin 2 Multilingual with Euro
1250	1410	Windows Latin 2
853	983	Latin 3 Multilingual PC
905	1286	Latin 3 Multilingual
913	1286	Latin 3 Multilingual
1069	1256	Latin 4 EBCDIC
914	1256	Latin 4 ISO/ASCII
857	987	Latin 5 Turkey PC
857	1380	Latin 5 Turkey PC with Euro
1155	1378	EBCDIC Turkey with Euro
857	987	Latin 5 PC
920	1152	Latin 5 ISO/ANSI 8 Bit
1026	1152	Latin 5
1254	1414	Windows, Turkish
1157	1391	EBCDIC Estonia with Euro
922	1347	Estonia, PC
902	1392	8-bit Estonia with Euro
1156	1393	EBCDIC Baltic Multilingual with Euro
921	1346	PC Baltic Multilingual
901	1394	PC Baltic Multilingual with Euro
Latin 9 EBCDIC and ASCII Code Pages		
923	1353	Latin 9
924	1353	Latin 9 EBCDIC

Code Page Global ID (CPGID)	Graphic Character Set ID (GCSGID)	Language Supported
Vietnamese		
1130	1336	Vietnamese EBCDIC
1164	1397	Vietnamese EBCDIC with Euro
1129	1336	Vietnamese ISO-8
1163	1397	Vietnamese ISO-8 with Euro
1258	1418	Windows Vietnamese
Thailand		
838	1279	Thailand
889	1102	Thailand
874	1279	Thailand, PC
1160	1395	Thailand, EBCDIC with Euro
1161	1395	Thailand, PC with Euro
1162	1396	Windows Thailand
Lao		
1132	1341	Lao EBCDIC
1133	1341	Lao ISO-8
Latin EBCDIC DCF Code Pages		
1002	1132	DCF Release 2 Compatibility
1003	1133	US Text Subset
1068	1259	Text with Numeric Spacing
1039	1258	GML List Symbols
Cyrillic and Greek EBCDIC and ASCII Code Pages		
880	960	Cyrillic Multilingual (Primary = 1025)
915	1150	Cyrillic ISO/ASCII 8 Bit
855	985	Cyrillic PC
866	996	Cyrillic #2 PC
1025	1150	Cyrillic Multilingual
1251	1411	Windows, Cyrillic
423	218	Greek 183 (Primary = 875)
813	925	Greek ISO/ASCII 8 Bit
813	1371	Greek ISO/ASCII 8 Bit with Euro
851	981	Greek PC (Primary = 869)
869	998	Greek PC
869	1373	Greek PC with Euro

Code Page Global ID (CPGID)	Graphic Character Set ID (GCSGID)	Language Supported
875	925	Greek
875	1371	Greek with Euro
1039	1258	GML List Symbols
1253	1413	Windows, Greek
1253	1381	EBCDIC Cyrillic Multi. with Euro
808	1385	PC, Cyrillic, Russian with Euro
1131	1338	PC, Cyrillic, Belo Russian
849	1387	PC, Cyrillic, Belo Russian with Euro
808	1385	PC, Cyrillic, Russian with Euro
1158	1388	EBCDIC Cyrillic, Ukraine with Euro
1125	1331	PC, Cyrillic, Ukrainian
848	1390	PC, Cyrillic, Ukrainian with Euro
872	1383	Cyrillic PC with Euro
1166	1441	EBCDIC Cyrillic Multi. with Euro
Arabic EBCDIC and ASCII Code Pages		
420	235	Arabic Bilingual
420	1461	Arabic Bilingual with Euro
864	994	Arabic PC
864	1463	Arabic PC with Euro
1008	1162	Arabic ISO/ASCII 8 Bit
1008	1464	Arabic ISO/ASCII 8 Bit with Euro
1029	1154	Arabic Extended ISO/ASCII 8 Bit
1046	1177	Arabic Extended ISO/ASCII 8 Bit
1046	1465	Arabic Extended ISO/ASCII 8 Bit with Euro
1039	1258	GML List Symbols
Hebrew EBCDIC and ASCII Code Pages		
916	941	Hebrew ISO/ASCII 8 Bit
1028	941	Hebrew Publishing
424	941	Hebrew
424	1356	Hebrew with Euro
803	1147	Hebrew Character Set A (Primary = 424)
803	1357	Hebrew Character Set A (Primary = 424) with Euro
856	986	Hebrew PC (Primary = 862)

Code Page Global ID (CPGID)	Graphic Character Set ID (GCSGID)	Language Supported
856	1358	Hebrew PC (Primary = 862) with Euro
862	992	Hebrew PC
867	1360	Israel with Euro
1039	1258	GML List Symbols
Symbols		
259	340	Symbols, Set 7
899	340	Symbols, Set 7 ASCII
1087	1257	Symbols, Adobe
1038	1257	Symbols, Adobe ASCII
1091	1191	Symbols, Modified Set 7
1092	1191	Symbols, Modified Set 7 ASCII
363	630	Symbols, Set 8
829	909	Math Symbols
1039	1258	GML List Symbols
Katakana		
1027	1172	Japanese Latin Extended
290	332	Japan Katakana
290	1172	Host/PC Japanese Katakana Extended
897	1164	Japan PC #1
1041	1187	Japanese Extended PC
1139	1122	Japan Alphanumeric Katakana
APL2		
293	1340	APL USA
310	963	Graphic Escape APL/TN
910	1330	APL ASCII

4028 Compatibility Resident Font Set

The following lists the typefaces resident in the Printer and includes the valid FGID and code pages for each font. The Date Stamp on most of these character sets is 94350, and the Time Stamp used is 00000000.

The Date Stamp on FGIDs 76 and 159(20224) is 96036. The Date Stamp on FGID 164 is 96039 with a Time Stamp 08225100 for all GCSGIDs except 695, where the Data Stamp is 98124 and the Time Stamp is 13491500. The Date Stamp on FGID 701 is 96309 with a Time Stamp of 08230800 for all GCSGIDs except 695, where the Date Stamp is 98124 and the Time Stamp is 13492000. Fonts listed with an "Alt FGID", are used as a substitute for the requested "Alt FGID".

The Printer will substitute Times New Roman (from the IBM Core Interchange Set) for the Times Roman fonts listed in Table 162. The Courier fonts will also come from the IBM Core Interchange Set. All the remaining listed fonts will be from the IBM Coordinated Font Set (See p.280 "Resident PSC Strategic Scalable Font Set 2").

See p.279 "4028 Compatibility Resident Code Page Set" for an explanation of the groups used in the "Code Pages" column.

Note

- Prestige fonts used with code pages with a CPGID of 259 are mapped to the Courier Roman Medium Symbols font (FGID 416 GCSGID 1275) as shown in Table 159. When the printer is in Box-Draw mode, any font which does not indicate CPGID 259 support will print with the Roman Medium Symbols font in a point size of 10 (12 pitch) when used with Code Page 259. This emulates 4028 behavior.
- Courier FGIDs 11 and 85 and Prestige FGIDs 12 and 86 now support Code Page 259 (when Box-Draw mode is on) to the extent these were supported in the 4028. In this mode, CPGID 1091 is substituted for CPGID 259 in order to print box-draw characters that line up with each other. The registered CPGID 259 does not have such characters, and is used when not in Box-Draw mode.
- To match the 4028 and 3116 printed font sizes, the FGIDs 254, 256, 281, and 290 are scaled anamorphically (internal to the Printer) as follows:

FGID	Vertical × Horizontal Scale Factors (points)
254	7.8 vpt × 7.0 hpt
256	7.8 vpt × 7.0 hpt
281	7.0 vpt × 6.0 hpt
290	5.0 vpt × 4.5 hpt

❖ 4028 Compatibility Resident Font Set

Typeface	FGID	Alt FGID	Pitch	Point Size	Font width	Code Pages
Boldface	159		Proportional	12	120	A, B
Prestige PSM Roman Medium	164		Proportional	12	120	A, B
Courier	11		10	12	144	259, A, B
Courier	85		12	10	120	259, A, B
Courier	223		15	8	96	A, B
Courier.17ss	254		17.1	7.8	84	A, B
Courier Bold	46		10	12	144	A, B
Courier Bold	108		12	10	120	A, B
Courier Italic	92		12	10	120	A, B
Letter Gothic	281		20	7	72	A, B
OCR A	19		10	12	144	892
OCR B	3		10	12	144	893
Prestige Pica	12		10	12	144	259, A, B
Prestige Elite	86		12	10	120	259, A, B
Prestige	221		15	7.8	96	A, B
Prestige	256		17.1	8.5	84	A, B
Prestige PSM	164		Proportional	12	120	A, B
Prestige Elite Bold	111		12	10	120	A, B
Prestige Elite Italic	112		12	10	120	A, B
Times Roman	5687	760	Typo	6	40	A
Times Roman	5687	751	Typo	8	53	A
Times Roman	5687	1051	Typo	10	67	A
Times Roman	5687	1351	Typo	12	80	A
Times Roman Bold	5707	1053	Typo	10	67	A
Times Roman Bold	5707	761	Typo	12	80	A
Times Roman Bold	5707	762	Typo	14	93	A
Times Roman Bold	5707	1803	Typo	18	120	A
Times Roman Bold	5707	2103	Typo	24	160	A
Times Roman Italic	5815	1056	Typo	10	67	A
Times Roman Italic	5815	763	Typo	12	80	A
Times Roman Bold Italic	5835	764	Typo	10	67	A

Typeface	FGID	Alt FGID	Pitch	Point Size	Font width	Code Pages
Times Roman Bold Italic	5835	765	Typo	12	80	A
Gothic Text (311x)	203		13.3	9	108	A, B
Gothic Text (311x)	283		20	6	72	A, B
Gothic Text (311x)	290		26.7	5	54	A, B

4028 Compatibility Resident Code Page Set

The following lists provides an explanation of the groups as used in the Code Pages column of p.277 “4028 Compatibility Resident Font Set”.

❖ 4028 Compatibility Resident Code Page Set

Code Page Global ID (CPGID)	Graphic Character Set ID (GCSGID)
Group A	
037, 273, 274, 277, 278, 280, 281, 284, 285, 297, 500, 871	697
1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149	695
038, 367	103
260	341
276	277
286	317
287	321
288	325
1002	1132
437	919
850	980
858	988
1003 (Addition to 4028 font support. Not supported by 4028.)	1133
Group B	
256 (Replaced by 500)	337
289 (Replaced by 500, but missing obsolete “Peseta” character)	329

Code Page Global ID (CPGID)	Graphic Character Set ID (GCSGID)
Miscellaneous	
310	963
259	340
892	968
893	969
1303 (Used internally for resident Code 128 barcode font and postal bar code font support)	n/a

IBM Coordinated Font Set (IPDS)

p.280 “Resident PSC Strategic Scalable Font Set 2” lists the scalable IBM Coordinated font set typefaces resident in the Printer and includes the valid FGID and code pages for each font.

Where the IBM Core Interchange code pages are referenced in p.271 “IBM Core Interchange Resident Code Page Set”, only the Latin 1 Country Extended, Latin 1 EBCDIC Publishing, Latin 1 ASCII and Latin EBCDIC DCF code pages are supported.

GCSGID Subsets

The following lists provides an a mapping of the valid subsets of the GCSGIDs listed for the PSC Strategic Font Set 2.

❖ Resident PSC Strategic Scalable Font Set 2

Typeface	FGID	GCSGID	Font width	Code Pages
APL	307	1304	Scalable	293, 310, 910
APL Bold	322	1304	Scalable	293, 310, 910
Boldface	20224	2039	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Boldface (Euro)	20224	2041	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Gothic Text	304	2039	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Gothic Text (Euro)	304	2041	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Letter Gothic	400	2039	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.

Typeface	FGID	GCSGID	Font width	Code Pages
Letter Gothic (Euro)	400	2041	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Letter Gothic Bold	404	2039	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Letter Gothic Bold (Euro)	404	2041	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
OCR A	305	968	Scalable	876, 892
OCR B	306	969	Scalable	877, 893
OCR B (Euro)	306	1502	Scalable	877, 893
Prestige	432	2039	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Prestige (Euro)	432	2041	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Prestige Bold	318	2039	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Prestige Bold (Euro)	318	2041	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Prestige Italic	319	2039	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Prestige Italic (Euro)	319	2041	Scalable	See p.271 “IBM Core Interchange Resident Code Page Set”.
Katakana Gothic	304	1306	Scalable	290, 897, 1027, 1041

IBM Coordinated Font Set Code Page Set

The following lists provides the GCSGIDs and CPGIDs for the individual Code Pages listed in the Code Pages column of p.280 "Resident PSC Strategic Scalable Font Set 2".

❖ IBM Coordinated Font Set Code Page Set

Code Page Global ID (CPGID)	Graphic Character Set ID (GCSGID)
293	380
310	963
910	1113
876, 892	968
877, 893	969
877, 893	1502
290, 1027	1172
897	1164
1041	1187

❖ GCSGID Subsets for the Strategic Font Set 2

GCSGID	Valid GCSGID Subsets
1304	0380, 0963, 1113
2039	0101, 0103, 0119, 0251, 0265, 0269, 0273, 0277, 0281, 0285, 0288, 0289, 0293, 0297, 0301, 0305, 0309, 0313, 0317, 0321, 0325, 0329, 0337, 0341, 0611, 0697, 0919, 0980, 0990, 0991, 0993, 0995, 1132, 1133, 1145, 1146, 1149, 1198, 1220, 1258, 1259, 1260
1306	0332, 1164, 1172, 1187
2041	0695, 0988, 1243, 1353, 1412, 2039

IPDS Default Font

Factory Setting

The factory setting for the default font is Courier Roman Medium 10 pitch (12 point) using code page 037, version 1. The GRID for the default font is: FGID=416, GCSGID=697, CPGID=037, FontWidth=144 (CPI setting is 10.0). The default font may be changed by the operator using the printer's control panel. It will reset to the Factory Setting upon each IML. It can be reset to the Factory Setting by doing a Cold Reset to the printer.

The default font can be set for Single Byte fonts. It does not contain Double Byte Font Character Sets or Code Pages.

Selectable IPDS Default Font

To change the default font requires the use of the printer's control panel. The printer's control panel will present menu choices for selecting the various parts of the font.

The operator may select the default font using any or all of the Code Page (CPGID), Font (FGID), and Characters Per Inch (CPI) parameters. The available parameters will be listed in Groups to help identify valid/invalid combinations. An invalid combination will be resolved inside the printer because the printer must have a valid default font. However, the parameter adjustment will not be visible at the printer's control panel display. Detailed information listing the valid combinations and how to select them will be available with the printer.

The selection is based upon a hierarchy: Code Page is highest, Font is next, and Font Width (CPI) is the lowest. Should an invalid combination be selected, the Code Page will override Font and CPI, and Font will override CPI.

There are 5 Groups, A-E, into which all the fonts, code pages, and widths fall. All combinations defined within a Group are valid. When internal modification is necessary, the following rules apply:

- An invalid/unsupported CPGID becomes Code Page 037 (Group A).
- An invalid/unsupported Font Width (CPI) becomes 10.0 CPI (which will translate to 12 points).
- For a Group A CPGID, an invalid/unsupported FGID becomes 416 Courier Roman Medium.
- For a Group B CPGID, the FGID is automatically 304 Gothic Katakana.
- For a Group C CPGID, the FGID is automatically 305 OCR A. Font Width is 10.0 CPI.
- For a Group D CPGID, the FGID is automatically 306 OCR B. Font Width is 10.0 CPI.
- For a Group E CPGID, an invalid/unsupported FGID becomes 416 Courier Roman Medium.

Note

❒ The 4028 compatibility fonts are a new addition to the printer's control panel selection. This is necessary because some of these FGIDs are anamorphically scaled, and therefore cannot be correctly reproduced with just an AFP FGID and a CPI value.

These fonts are handled specially in that all of these FGIDs (except 5687, 5707, 5815, 5835) ignore the printer's control panel CPI value, because the FGID fully describes the font. In the case of the 4 typographic FGIDs, there are valid discreet sizes associated with them. If the correct CPI values are not used, the printer will default to the nearest discrete size value. Tie goes to the smaller value.

Selectable Code Pages

The following code pages are selectable by the operator:

Code-Page/Group	Code Page Description
500 A	Belgium, Switzerland / International
037 A	US, Canada, Netherlands, Portugal
038 A	US English ASCII
260 A	Canadian French
273 A	Austrian / German
274 A	Belgium
276 A	Canadian French (94 character set)
277 A	Danish / Norwegian
278 A	Finnish / Swedish
280 A	Italian
281 A	Japanese
284 A	Spanish
285 A	UK English
286 A	Austrian / German (Alternate)
287 A	Danish / Norwegian (Alternate)
288 A	Finnish / Swedish (Alternate)
297 A	French
871 A	Icelandic
1140 A	US, Canada, Netherlands, Portugal (Euro)
1141 A	Austrian, German (Euro)
1142 A	Danish Norwegian (Euro)
1143 A	Finnish, Swedish (Euro)
1144 A	Italian (Euro)
1145 A	Spanish (Euro)
1146 A	UK English (Euro)
1147 A	Catalan French (Euro)
1148 A	Multinational (Euro)
1149 A	Icelandic (Euro)
290 B	Japanese / Katakana
892 C	OCR - A
893 D	OCR - B
420 E	Arabic

Code-Page/Group	Code Page Description
423 E	Greek
424 E	Hebrew
870 E	Latin 2 Multilingual
875 E	Greek
880 E	Cyrillic
905 E	Turkish
1025 E	Cyrillic (primary)
1026 E	Turkish (primary)

Selectable Fonts

The following fonts (FGID) are selectable by the operator:

FGID/Group	FGID Description
2304 A, E	Helvetica Roman/ITC Boutros Modern Rokaa/Narkiss Tam - Medium
2305 A, E	Helvetica Roman/ITC Boutros Modern Rokaa/Narkiss Tam - Bold
2306 A, E	Helvetica Roman/ITC Boutros Modern Rokaa/Narkiss Tam - Italic Medium
2307 A, E	Helvetica Roman/ITC Boutros Modern Rokaa/Narkiss Tam - Italic Bold
2308 A, E	Times New Roman/ITC Boutros Setting Rokaa/Narkissim - Medium
2309 A, E	Times New Roman/ITC Boutros Setting Rokaa/Narkissim - Bold
2310 A, E	Times New Roman/ITC Boutros Setting Rokaa/Narkissim - Italic Medium
2311 A, E	Times New Roman/ITC Boutros Setting Rokaa/Narkissim - Italic Bold
416 A, E	Courier Roman/Boutros Typing/Shalom - Medium
420 A, E	Courier Roman/Boutros Typing/Shalom - Bold
424 A, E	Courier Roman/Boutros Typing/Shalom - Italic Medium
428 A, E	Courier Roman/Boutros Typing/Shalom - Italic Bold
20224 A	Boldface
304 A	Gothic Text
400 A	Letter Gothic
404 A	Letter Gothic Bold
432 A	Prestige

FGID/Group	FGID Description
318 A	Prestige Bold
319 A	Prestige Italic
304 B	Katakana Gothic
305 C	OCR A
306 D	OCR B

4028 Selectable Fonts

The following 4028 fonts (FGID) are also selectable by the operator:

FGID/Group	FGID Description
159 A	Boldface (Proportional Space 12 pt., based on 10 CPI)
11 A	Courier 10.0 CPI
85 A	Courier 12.0 CPI
223 A	Courier 15.0 CPI
254 A	Courier 17.1 CPI
46 A	Courier Bold 10.0 CPI
18 A	Courier Italic 10.0 CPI
92 A	Courier Italic 12.0 CPI
203 A	Gothic Text 13.3 CPI
283 A	Gothic Text 20.0 CPI
290 A	Gothic Text 26.7 CPI
281 A	Letter Gothic 20 CPI
19 C	OCR A
03 D	OCR B
12 A	Prestige Pica 10.0 CPI
86 A	Prestige Elite 12.0 CPI
221 A	Prestige Elite 15.0 CPI
256 A	Prestige Elite 17.1 CPI
111 A	Prestige Elite Bold 12.0 CPI
112 A	Prestige Elite Italic 12.0 CPI
5687 A	Times Roman Typographic 6, 8, 10, 12 pt
5707 A	Times Roman Typographic Bold 10, 12, 14, 18, 24 pt
5815 A	Times Roman Typographic Italic 10, 12 pt
5835 A	Times Roman Typographic Bold Italic 10, 12 pt

Selectable Font Widths

The following Font Widths (CPI) are selectable by the operator:

Group	Range in characters per inch
A, B, E	5.0 CPI - 30.0 CPI, in increments of 0.1 CPI.
C, D	10.0 CPI.

4028 Fixed Width	Ignored. Handled internally because the FGID defines the size.
5687 6 pt	20.0 CPI
5687 8 pt	15.1 CPI
5687 10 pt	11.9 CPI
5687 12 pt	10.0 CPI
5707 10 pt	11.9 CPI
5707 12 pt	10.0 CPI
5707 14 pt	8.6 CPI
5707 18 pt	6.7 CPI
5707 24 pt	5.0 CPI
5815 10 pt	11.9 CPI
5815 12 pt	10.0 CPI
5835 10 pt	11.9 CPI
5835 12 pt	10.0 CPI

Normally, IPDS Font Width is in terms of 1440ths of an inch (for example, 144, 120). However, printer's control panel Font Width selection is more easily understood (and more universally used) as Characters Per Inch. So the values will range from 5.0 cpi (Font Width 288) to 30.0 cpi (Font Width 48) in increments of 0.1 cpi.

The resulting cpi will be translated internally to the nearest integer font width value. Since CPI is inherently a reciprocal, 0.1 cpi increments will be a non-linear font width progression. This should not prove a serious problem since default fonts for IPDS are not the primary selection path.

An extra note is that font widths for fixed width fonts are calculated differently than for typographic fonts.

The vertical point size is the real common ground. So to get a 12 point size, a fixed width font will use a font width of 144; 10 cpi. A typographic font will use a font width of 80. To keep compatible sizes this is also translated from 10 cpi. The FGID defines which range to use. For further details, refer to the LFE and/or AR command sections of the IPDS architecture spec.

IPDS Bar Code Printing

To support the BCOCA tower for printing of bar codes, the OCR-A and OCR-B fonts and their corresponding code pages (892 and 893) must be resident in the printer. These are supported as shown in p.277 “4028 Compatibility Resident Font Set”.

Code page 1303 is also resident to be used for printing code 128 bar codes.

IPDS Font Bolding

The Printer will accept the IPDS Load Font Equivalence command and support the bold and double strike bits for both resident Type 1 and loaded raster fonts. No other bits within the LFE flags byte are supported.

The bold/double strike attributes are handled the same way within the printer. The function is provided by printing a text block multiple times, each time shifted an appropriate amount. Since the attributes are tied to the font LID and not the font resource, the font resource is not affected.

INDEX

A

action codes, 225
applications
    bar codes, 11
    graphics, 10
    images, 10
    IPDS, 4
    letter printing, 6
    overlays, 8
    page segments, 9
attributes
    printing, 256

B

bar codes
    using, 11

C

character IDs
    definition, 257
character image, 257
character properties, 256
Character set, 255
character sets
    definition, 256
Coded font, 255
coded fonts
    definition, 255
Code page, 255
code page global identifier (CPGID)
    definition, 259
code pages, 257, 258
    definition, 257
    printer configuration, 261
    selecting, 261
code points, 257
code tables
    exception, 227
commands, 33
    device control (DC/1), 37
    initialization defaults, 33
    initialization sequence, 36
CPGID, 259

D

data stream classes, 224
data stream commands, 261
    font selection, 261
    IPDS, 261
definitions
    character IDs, 257
    character set, 257
    coded font, 257
    code page, 257
    font, 257
    GCSGID, 259
device control (DC/1), 37
duplex printing, 12

E

error reporting and recovery, 221
exception code tables, 228
    page and copy counter adjustment, 247
    page counter adjustment, 244
exception (error)
    action codes, 224
    alternate actions, 223
    classes, 228
    code tables, 229
    data stream, 224
    handling control, 223
    presentation processing, 223
    reporting, 223
    reporting codes, 227
    rules, 221
    sense byte, 224

F

fixed-pitch fonts, 260
font definitions
    code page, 259
    font global ID (FGID), 259
    font width, 260
    point size, 260
    posture, 260
    spacing, 260
    spacing fixed-pitch, 260
    spacing proportionally spaced machine fonts, 260
    spacing typographic, 260
    typeface, 260
    type size, 260
    weight, 260

font global ID (FGID), 259
fonts
appearance, 257
fixed-pitch, 260
height, 260
pitch, 260
points, 260
proportionally spaced machine (PSM) pitch, 260
selection, 261
typographic, 260
font selection, 259
general information, 255
IPDS, 259
font structure, 255
font values (see metrics), 256

G

GCSGID,
definition, 259
GDDM, 4
global identifiers
CPGID, 259
global identifiers (continued)
GCSGID, 259
graphic character set global identifier (GCSGID)
definition, 259
graphics, 10

H

hex values, 257
How to Read This Manual, 2

I

image
character, 257
images, 10
initialization defaults, 33
initialization sequence, 36
IPDS, 4
capabilities, 4
introduction, 4
software, 4
IPDS font selection, 261

L

language code pages, 258
letter
preparation, 6
printing, 6

N

national language, 258
national language code pages, 258

O

OS/400 font terminology, 259
overlays, 8

P

page and copy counter adj
exceptions, 247
page counter adj
exceptions, 247
page counter adjustment, 244
page segments, 9
pitch, 260
points, 260
printable characters, 257
printer configuration
code pages, 261
printing a letter, 6
printing attributes, 256
printing duplex, 12
properties
character, 256
proportionally spaced machine (PSM) fonts, 260

R

reporting, 223
reporting and recovery
error, 221
rules, 221

S

segments
page, 9
sense byte information, 224
software
IPDS, 4
System i font terminology, 259

T

type size, 260
typographic fonts, 260

Copyright © 2010

IPDS Technical Reference

EN (GB)
EN (US)
EN (AU) D088-7809

Notes for Users

This supplement provides notes for the manual provided with this machine.
Read this supplement in conjunction with the relevant manual.

Note

Section:
"Enabling the Encryption Settings" in 5.Securing Information Sent over the Network or Stored on Hard Disk in ***Operating Instructions Security Reference***

If you specify [Format All Data] to enable encryption when first setting up the machine, the encryption setting procedure will take only several minutes. Note that all data stored on the hard disk will be initialized when this setting is specified.
The table below describes which data will be kept and which data will be initialized when [Format All Data], [File System Data Only], or [All Data] is specified.

Setting	Data to be kept	Data not kept (Data to be initialized)	Required time
Format All Data	None	All Data: Both the data to be kept and data not kept when [File System Data Only] is specified	Several minutes
File System Data Only	• Embedded Software Architecture applications' program/log • Address Book • Registered fonts • Job logs/access logs • Image data in stored files (thumbnail images)	• Stored documents (stored documents in Document Server, Locked Print files / Sample Print files / Stored Print files / Hold Print files, and received and stored fax documents) • Registered stamps	Approximately 1 hour
All Data	All Data: Both the data to be kept and data not kept when [File System Data Only] is specified	None	Approximately 3 hours

Things to note when enabling encryption settings

- If you use Embedded Software Architecture application or App2Me, be sure to specify [File System Data Only] or [All Data].
- Note that the machine's settings will not be initialized to their system defaults even if [Format All Data], [File System Data Only], or [All Data] is specified.

The machine cannot be operated while data is being encrypted.
Once the encryption process begins, it cannot be stopped. Make sure that the machine's main power is not turned off while the encryption process is in progress. If the machine's main power is turned off while the encryption process is in progress, the hard disk will be damaged and all data on it will be unusable.

© 2010
Printed in China
EN (US) EN (AU) D088-7759A

D0887759A

Notes for Users

This supplement provides notes and corrections for the manuals provided with this machine. Read this supplement in conjunction with the relevant manual.

Note

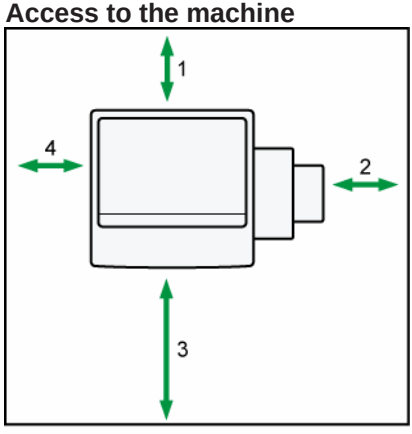
■About the "Bluetooth Interface Unit Type 3245 (optional)"
The Bluetooth interface unit (optional) will be available from 2011.
Information about this option is subject to change. For the latest information, refer to the documentation provided when you purchase the Bluetooth option.

Correction

Section:

"Machine Environment" in 7. Remarks in ***Operating Instructions About This Machine***

Access to the machine



1. Rear: 10 cm (4 inches) or more
2. **Right: 10 cm (4 inches) or more**
3. **Front: 75 cm (29.5 inches) or more**
4. Left: 10 cm (4 inches) or more

Section:

"Specifications for Lower Paper Trays (Optional)" in 8. Appendix in ***Operating Instructions About This Machine***

and

"Specifications for Tray 3 (LCT) (Optional)" in 8. Appendix in ***Operating Instructions About This Machine***

Dimensions (W×D×H)

Error:
580 × 620 × 260 mm (22.9 × 24.5 × 10.3 inches)
580 × 620 × 260 mm (22.9 × 24.4 × 10.3 inches)

Correction:
668 × 766 × 260 mm (26.3 × 30.2 × 10.3 inches)

Section:

"Document Server" in 8. Appendix in ***Operating Instructions About This Machine***

Maximum number of stored documents

Error:

The maximum number of received faxes that can be stored is 800.

Correction:

The maximum number of received faxes that can be stored is 400.

Section:

"Specifications for the Main Unit" in 8. Appendix in ***Operating Instructions About This Machine***

Warm-up time

- **Type 1 and 2**
  Error: 23 seconds or less **Correction: 23 seconds**
- **Type 3**
  Error: 22 seconds or less **Correction: 22 seconds**
- **Type 4**
  Error: 36 seconds or less **Correction: 36 seconds**

Section:

"Specifications for the Main Unit" in 8. Appendix in ***Operating Instructions About This Machine***

Non-reproduction area (Copier):

Error:

Trailing edge: 0.5 - 6.0 mm (0.02 - 0.24 inches)

Correction:

Trailing edge: 0.5 - 6.0 mm (0.02 - 0.24 inches)
(3.0 - 6.0 mm (0.12 - 0.24 inches) in Duplex mode)

Section:

"Specifications for the Main Unit" in 8. Appendix in ***Operating Instructions About This Machine***

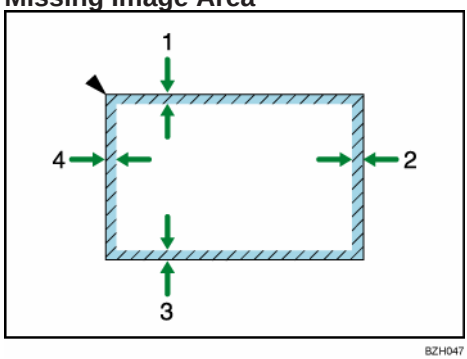
First copy/print time:

- **Type 1 and 2**
  Error:
  • Full Color: 7.8 seconds or less
  • B&W: 5.0 seconds or less
  Correction:
  • **Full Color: 7.8 seconds**
  • **B&W: 4.9 seconds**
- **Type 3**
  Error:
  • Full Color: 6.2 seconds or less
  • B&W: 3.9 seconds or less
  Correction:
  • **Full Color: 5.9 seconds**
  • **B&W: 3.7 seconds**
- **Type 4**
  Error:
  • Full Color: 5.2 seconds or less
  • B&W: 3.2 seconds or less
  Correction:
  • **Full Color: 5.0 seconds**
  • **B&W: 3.1 seconds**

Section:

"Missing Image Area" in 1. Placing Originals in ***Operating Instructions Copy and Document Server Reference***

Missing Image Area



1. 0.5 - 4.0 mm (0.02 - 0.15 inch)
2. **0.5 - 6.0 mm (0.02 - 0.24 inch) (3.0 - 6.0 mm (0.12 - 0.24 inches) in Duplex mode)**
3. 0.5 - 4.0 mm (0.02 - 0.15 inch)
4. 4.2 ± 1.5 mm (0.17 ± 0.06 inch)

© 2010
Printed in China
EN US AU D088-7608

Safety Information for MP C3001/MP C3501/MP C4501/MP C4501A/MP C5501/MP C5501A/ Aficio MP C3001/Aficio MP C3501/Aficio MP C4501/Aficio MP C4501A/Aficio MP C5501/ Aficio MP C5501A

Introduction

Read this manual carefully before using the machine. Keep this manual in a handy place for quick reference.

Important

Contents of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

Notes:

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Depending on which country you are in, certain units may be optional. For details, please contact your local dealer.

Laser Safety for Users of Type 1 and 2

This machine complies with the requirements of IEC60825-1:2007 (EN60825-1:2007) for class 1 laser product. The machine contains four AlGaInP laser diodes, 9-milliwatts, 648 - 663 nanometer wavelength for each emitter.

The following label is attached on the rear side of the machine.

Laser Safety for Users of Type 3 and 4

This machine complies with the requirements of IEC60825-1:2007 (EN60825-1:2007) for class 1 laser product. The machine contains eight AlGaInP laser diodes, 9-milliwatts, 648 - 663 nanometer wavelength for each emitter.

The following label is attached on the rear side of the machine.

Caution:

Use of controls or adjustments or performance of procedures other than those specified in this manual might result in hazardous radiation exposure.

Notes:

The model names of the machines do not appear in the following pages. Check the type of your machine before reading this manual.

- Type 1: MP C3001/Aficio MP C3001
- Type 2: MP C3501/Aficio MP C3501
- Type 3: MP C4501/MP C4501A/Aficio MP C4501/Aficio MP C4501A
- Type 4: MP C5501/MP C5501A/Aficio MP C5501/Aficio MP C5501A

Certain types might not be available in some countries. For details, please contact your local dealer.

For good copy quality, the manufacturer recommends that you use genuine toner from the manufacturer.

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

Power Source

220 - 240 V, 50/60 Hz, 8A

Please be sure to connect the power cord to a power source as above. For details about power source, see About This Machine.

Safety Information

When using this machine, the following safety precautions should always be followed.

Safety During Operation

In this manual, the following important symbols are used:

⚠ ***WARNING:***
Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.

⚠ ***CAUTION:***
Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

Safety Precautions to Be Followed

This section explains safety precautions that should always be followed when using this machine.

Environments where the machine can be used

This section explains safety precautions about environments where the machine can be used.

⚠ WARNING:

- ***Do not use flammable sprays or solvents in the vicinity of this machine. Doing so could result in fire or electric shock.***

- ***Do not place vases, plant pots, cups, toiletries, medicines, small metal objects, or containers holding water or any other liquids, on or close to this machine. Fire or electric shock could result from spillage or if such objects or substances fall inside this machine.***

⚠ CAUTION:

- *Keep the machine away from humidity and dust. Otherwise a fire or an electric shock might occur.*

- *Do not place the machine on an unstable or tilted surface. If it topples over, an injury might occur.*

- *Do not place heavy objects on the machine. Doing so can cause the machine to topple over, possibly resulting in injury.*

- *Make sure the room where you are using the machine is well ventilated and spacious. Good ventilation is especially important when the machine is used heavily.*

- *Keep the machine away from salt-bearing air and corrosive gases. Also, do not install the machine in places where chemical reactions are likely (laboratories, etc.), as doing so will cause the machine to malfunction.*

- *Do not obstruct the machine's vents. Doing so risks fire caused by overheated internal components.*

- *Machine sound levels exceeding LWAd > 63 dB (A) are not suitable for desk work environments, so place the machine in another room.*

Handling power cords and power plugs

This section explains safety precautions about handling power cords and power plugs.

⚠ *WARNING:*

- ***Do not use any power sources other than those that match the specifications shown in this manual. Doing so could result in fire or electric shock.***

- ***Do not use any frequencies other than those that match the specifications shown. Doing so could result in fire or electric shock.***

- ***Do not use multi-socket adaptors. Doing so could result in fire or electric shock.***

- ***Do not use extension cords. Doing so could result in fire or electric shock.***

- ***Do not use power cords that are damaged, broken, or modified. Also, do not use power cords that have been trapped under heavy objects, pulled hard, or bent severely. Doing so could result in fire or electric shock.***

- ***Touching the prongs of the power cable's plug with anything metallic constitutes a fire and electric shock hazard.***

- ***The supplied power cord is for use with this machine only. Do not use it with other appliances. Doing so could result in fire or electric shock.***

- ***It is dangerous to handle the power cord plug with wet hands. Doing so could result in electric shock.***

- ***Disconnect the power plug (by pulling the plug, not the cable) if the power cable or plug becomes frayed or otherwise damaged.***

- ***If the power cord is damaged (exposure of the core, disconnection, etc.), contact your service representative to change a new one. Operating the machine with a damaged power cord may cause an electric shock or fire.***

⚠ ***CAUTION:***

- *Be sure to push the plug of the power cord fully into the wall outlet. Partially inserted plugs create an unstable connection that can result in unsafe buildup of heat.*

- *If this machine is not going to be used for several days or longer at a time, disconnect its power cord from the wall outlet.*

- *When disconnecting the power cord from the wall outlet, always pull the plug, not the cord. Pulling the cord can damage the power cord. Use of damaged power cords could result in fire or electric shock.*

- *Be sure to disconnect the plug from the wall outlet and clean the prongs and the area around the prongs at least once a year. Allowing dust to build up on the plug constitutes a fire hazard.*

- *When performing maintenance on the machine, always disconnect the power cord from the wall outlet.*

Handling the main machine

This section explains safety precautions about handling the main machine.

⚠ ***WARNING:***

- ***Be sure to locate the machine as close as possible to a wall outlet. This will allow easy disconnection of the power cord in the event of an emergency.***

- ***If the machine emits smoke or odours, or if it behaves unusually, you must turn off its power immediately. After turning off the power, be sure to disconnect the power cord plug from the wall outlet. Then contact your service representative and report the problem. Do not use the machine. Doing so could result in fire or electric shock.***

- ***If metal objects, or water or other fluids fall inside this machine, you must turn off its power immediately. After turning off the power, be sure to disconnect the power cord plug from the wall outlet. Then contact your service representative and report the problem. Do not use the machine. Doing so could result in fire or electric shock.***

- ***Do not touch this machine if a lightning strike occurs in the immediate vicinity. Doing so could result in electric shock.***

- ***Keep the polythene materials (bags, etc.) supplied with this machine away from babies and small children at all times. Suffocation can result if polythene materials are brought into contact with the mouth or nose.***

⚠ ***CAUTION:***

- *Unplug the power cord from the wall outlet before you move the machine. While moving the machine, take care that the power cord is not damaged under the machine. Failing to take these precautions could result in fire or electric shock.*

- *If you have to move the machine when the optional paper tray unit is attached, do not push on the main unit's top section. Doing so can cause the optional paper tray unit to detach, possibly resulting in injury.*

- *After you move the machine, use the caster fixture to fix it in place. Otherwise the machine might move or come down to cause an injury.*

- *Contact your service representative if you need to lift the machine (such as when relocating it to another floor). Do not attempt to lift the machine without the assistance of your service representative. The machine will be damaged if it topples or is dropped, resulting in malfunction and risk of injury to users.*

- *Do not look into the lamp. It can damage your eyes.*

- *Protect the machine from dampness or wet weather, such as rain and snow.*

- *For environmental reasons, do not dispose of the machine or expended supply waste at household waste collection points. Disposal can take place at an authorized dealer.*

Handling the machine's interior

This section explains safety precautions about handling the machine's interior.

⚠ *WARNING:*

- ***Do not remove any covers or screws other than those explicitly mentioned in this manual. Inside this machine are high voltage components that are an electric shock hazard and laser components that could cause blindness. Contact your sales or service representative if any of the machine's internal components require maintenance, adjustment, or repair.***
- ***Do not attempt to disassemble or modify this machine. Doing so risks burns and electric shock. Note again that exposure to the laser components inside this machine risks blindness.***

⚠ *CAUTION:*

- *Some of this machine's internal components get very hot. For this reason, take care when removing misfed paper. Not doing so could result in burns.*
- *The inside of the machine could be very hot. Do not touch the parts with a label indicating the "hot surface". Otherwise, an injury might occur.*
- *When loading paper, take care not to trap or injure your fingers.*
- *Keep your hands clear of the booklet finisher tray when removing misfed paper, pulling out or pushing in the finisher's staple unit. You can trap and injure your fingers if you do not.*
- *During operation, rollers for transporting the paper and originals revolve. A safety device has been installed so that the machine can be operated safely. But take care not to touch the machine during operation. Otherwise, an injury might occur.*
- *If the machine's interior is not cleaned regularly, dust will accumulate. Fire and breakdown can result from heavy accumulation of dust inside this machine. Contact your sales or service representative for details about and charges for cleaning the machine's interior.*

Handling the machine's supplies

This section explains safety precautions about handling the machine's supplies.

⚠ *WARNING:*

- ***Do not incinerate toner (new or used) or toner containers. Doing so risks burns. Toner will ignite on contact with naked flame.***

- ***Do not store toner (new or used) or toner containers anywhere near naked flames. Doing so risks fire and burns. Toner will ignite on contact with naked flame.***

- ***Do not incinerate spilled toner or used toner. Toner dust might ignite when exposed to an open flame.***

- ***Keep the polythene materials (bags, gloves, etc.) supplied with this machine away from babies and small children at all times. Suffocation can result if polythene materials are brought into contact with the mouth or nose.***

⚠ *CAUTION:*

- *Do not crush or squeeze toner containers. Doing so can cause toner spillage, possibly resulting in dirtying of skin, clothing, and floor, and accidental ingestion.*

- *Keep toner (used or unused) and toner containers out of reach of children.*

- *If toner or used toner is inhaled, gargle with plenty of water and move into a fresh air environment. Consult a doctor if necessary.*

- *If toner or used toner gets into your eyes, flush immediately with large amounts of water. Consult a doctor if necessary.*

- *If toner or used toner is swallowed, dilute by drinking a large amount of water. Consult a doctor if necessary.*

- *When removing jammed paper or replacing toner, avoid getting toner (new or used) on your clothing. If toner comes into contact with your clothing, wash the stained area with cold water. Hot water will set the toner into the fabric and make removing the stain impossible.*

- *When removing jammed paper or replacing toner, avoid getting toner (new or used) on your skin. If toner comes into contact with your skin, wash the affected area thoroughly with soap and water.*

- *Do not attempt to print on stapled sheets, aluminum foil, carbon paper, or any kind of conductive paper. Doing so risks fire.*

Other safety precautions

This section explains other safety precautions.

⚠ ***CAUTION:***

- *A network interface cable with a ferrite core must be used for RF interference suppression.*

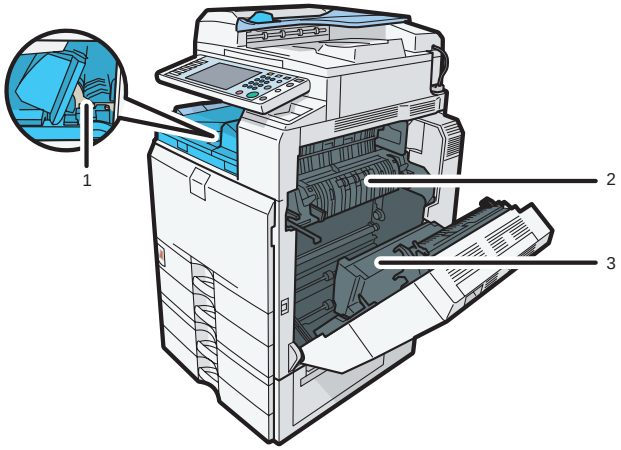
Safety Labels of This Machine

This section explains the machine's safety information labels.

Positions of WARNING and CAUTION labels for Users of Type 1 and 2

This machine has labels for ⚠WARNING and ⚠CAUTION at the positions shown below. For safety, please follow the instructions and handle the machine as indicated.

Main unit



CAS014

1

CAS015

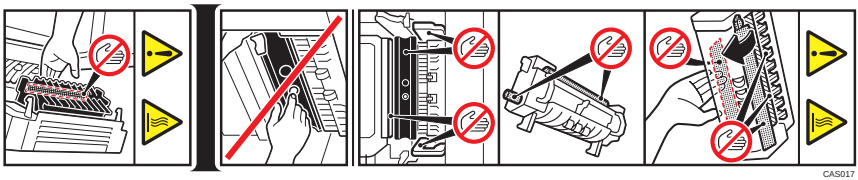
Do not touch the parts a label indicates. The inside of the bridge unit could be very hot. Caution should be taken when removing misfed paper.

2

CAS016

High temperature parts. Wait a while to allow the Fusing Unit to cool down before removing misfed paper.

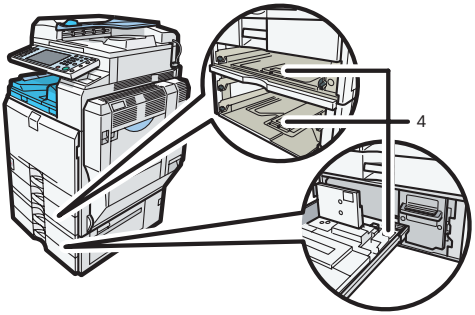
3



CAS017

Do not touch the parts a label indicates. The inside of the machine could be very hot. Caution should be taken when removing misfed paper.

Paper tray



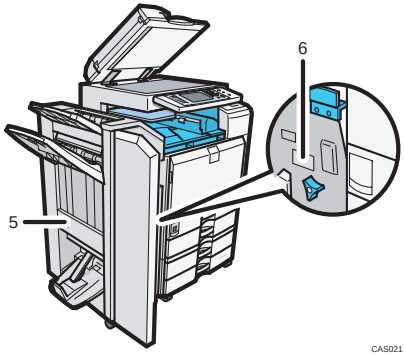
CAS019

4

CAS020

The inside of the machine could be very hot. Do not touch the parts which a label is put on. Otherwise, an injury might occur.

Booklet Finisher SR3000



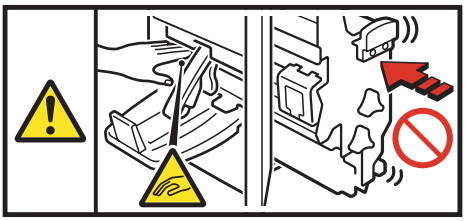
CAS021

5

CAS022

Keep your hands clear of the booklet finisher tray when pulling out or pushing in the finisher's staple unit, or removing paper jam. You might trap your fingers if you do not. Take care not to touch the booklet finisher tray during operation. Otherwise, an injury might occur.

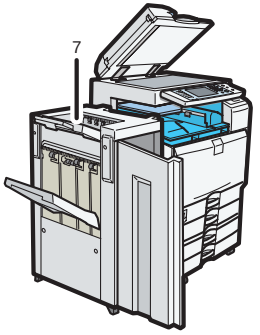
6



CAS023

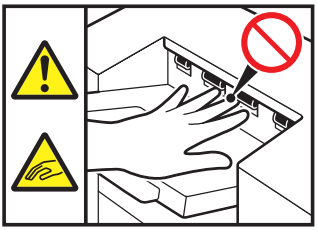
Keep your hands clear of the booklet finisher tray when pulling out or pushing in the finisher's staple unit, or removing paper jam. You might trap your fingers if you do not.

Finisher SR790



CAS127

7



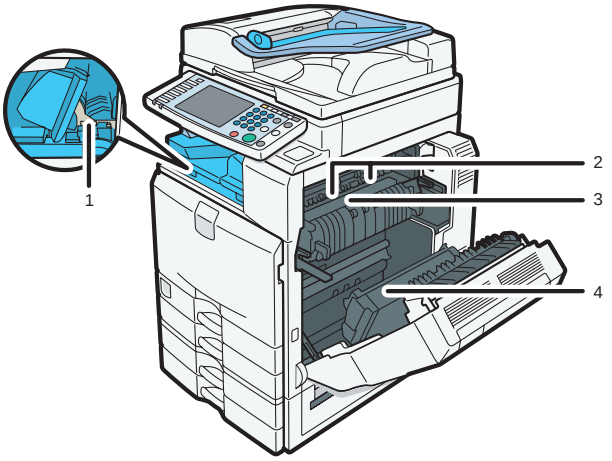
CAS128

During operation, rollers for transporting the paper revolve. Take care not to touch rollers during operation. Otherwise, an injury might occur.

Positions of WARNING and CAUTION labels for Users of Type 3 and 4

This machine has labels for ⚠WARNING and ⚠CAUTION at the positions shown below. For safety, please follow the instructions and handle the machine as indicated.

Main unit



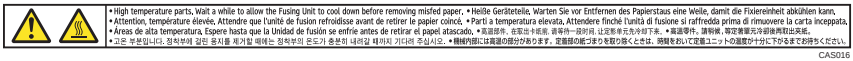
1

Do not touch! Surface may be very hot.

2

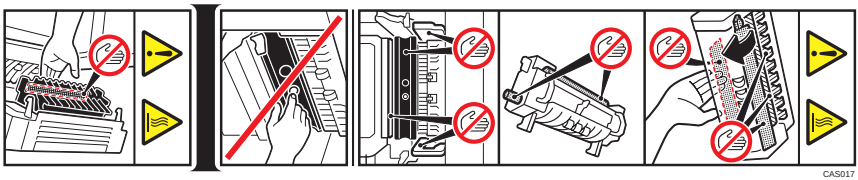
Do not touch the parts a label indicates. The inside of the machine could be very hot. Caution should be taken when removing misfed paper.

3



High temperature parts. Wait a while to allow the Fusing Unit to cool down before removing misfed paper.

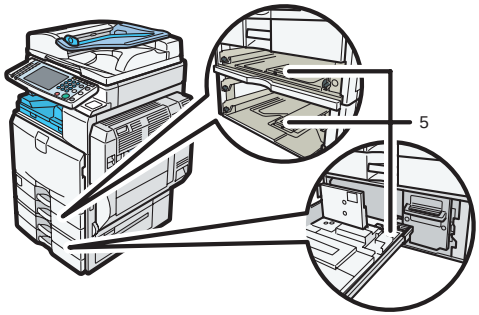
4



CAS017

Do not touch the parts a label indicates. The inside of the machine could be very hot. Caution should be taken when removing misfed paper.

Paper tray



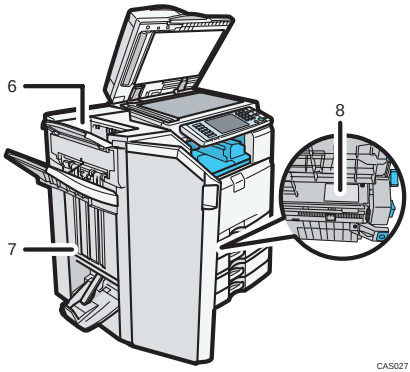
CAS026

5

CAS020

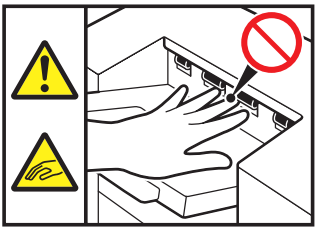
The inside of the machine could be very hot. Do not touch the parts which a label is put on. Otherwise, an injury might occur.

Finisher SR3030 or Booklet Finisher SR3020



CAS027

6



CAS128

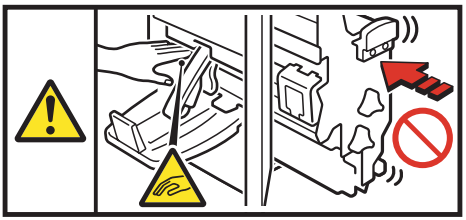
During operation, rollers for transporting the paper revolve. Take care not to touch rollers during operation. Otherwise, an injury might occur.

7

CAS022

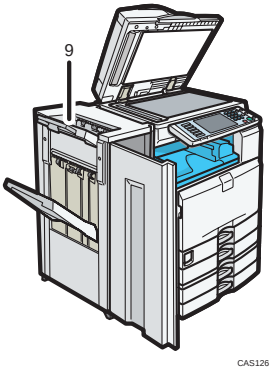
Keep your hands clear of the booklet finisher tray when pulling out or pushing in the finisher's staple unit, or removing paper jam. You might trap your fingers if you do not. Take care not to touch the booklet finisher tray during operation. Otherwise, an injury might occur.

8

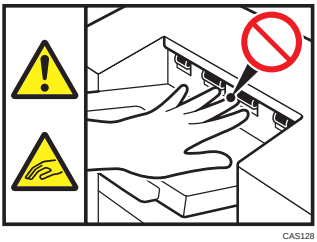


Keep your hands clear of the booklet finisher tray when pulling out or pushing in the finisher's staple unit, or removing paper jam. You might trap your fingers if you do not.

Finisher SR790



9



During operation, rollers for transporting the paper revolve. Take care not to touch rollers during operation. Otherwise, an injury might occur.

Power Switch Symbols

The meanings of the symbols for the switches on this machine are as follows:

- ▎: POWER ON
- ⏻: STANDBY

ENERGY STAR Program

ENERGY STAR® Program Requirements for Imaging Equipment

This company is a participant in the ENERGY STAR® Program.
This machine is compliant with the regulations specified by the ENERGY STAR® Program.

The ENERGY STAR® Program Requirements for Imaging Equipment encourage energy conservation by promoting energy efficient computers and other office equipment.
The program backs the development and dissemination of products that feature energy saving functions.
It is an open program in which manufacturers participate voluntarily.
Targeted products are computers, monitors, printers, facsimiles, copiers, scanners, and multifunction devices. Energy Star standards and logos are internationally uniform.

Note

- For details about the "default delay time", see "Energy Saving Functions".

Reference

- p.21 "Energy Saving Functions"

Energy Saving Functions

To reduce its power consumption, this machine has the following functions:

Low Power Mode

- If this machine remains idle for a specified period, it automatically reduces its electrical consumption.
- The default period the machine waits before entering Low Power Mode is 10 minutes. This default time can be changed.

Sleep Mode

- If this machine is already in Low Power Mode and remains idle for a specified period, it automatically enters Sleep Mode to further reduce its electrical consumption.
- The default delay time the machine waits before entering Sleep Mode for type 1 or 2 is 15 minutes. This default time can be changed.
- The default delay time the machine waits before entering Sleep Mode for type 3 or 4 is 16 minutes. This default time can be changed.
- The machine can print jobs from computers and receive faxes while in Sleep Mode.

Specification for type 1 and 2

	Type 1	Type 2
Reduced Electrical Consumption by Low Power Mode	95 W	95 W
Time of Switch into Low Power Mode	10 minutes	10 minutes
Time of Switch out from Low Power Mode	6 seconds	6 seconds
Reduced Electrical Consumption by Sleep Mode	1.4 W	1.4 W
Time of Switch into Sleep Mode	15 minutes	15 minutes
Time of Switch out from Sleep Mode	13 seconds	13 seconds

Specification for type 3 and 4 (models that can be fitted with the optional ARDF or exposure glass cover)

	Type 3	Type 4
Reduced Electrical Consumption by Low Power Mode	102 W	102 W
Time of Switch into Low Power Mode	10 minutes	10 minutes
Time of Switch out from Low Power Mode	10 seconds	10 seconds
Reduced Electrical Consumption by Sleep Mode	1.5 W	1.5 W
Time of Switch into Sleep Mode	16 minutes	16 minutes
Time of Switch out from Sleep Mode	19 seconds	32 seconds

Specification for type 3 and 4 (models equipped with the one-pass duplex scanning ADF)

	Type 3	Type 4
Reduced Electrical Consumption by Low Power Mode	117 W	117 W
Time of Switch into Low Power Mode	10 minutes	10 minutes
Time of Switch out from Low Power Mode	10 seconds	10 seconds
Reduced Electrical Consumption by Sleep Mode	1.5 W	1.5 W
Time of Switch into Sleep Mode	16 minutes	16 minutes
Time of Switch out from Sleep Mode	19 seconds	32 seconds

Note

- Specifications can vary depending on which options are installed on the machine.
- For details about how to change the default interval, see "Timer Settings", Network and System Settings Reference.
- Depending on which Embedded Software Architecture application is installed on it, the machine might take longer than indicated to enter Sleep Mode.

Reference

- "Timer Settings", Network and System Settings Reference

User Information on Electrical & Electronic Equipment

Users in the EU, Switzerland and Norway

Our Products contain high quality components and are designed to facilitate recycling.

Our products or product packaging are marked with the symbol below.

The symbol indicates that the product must not be treated as municipal waste.

It must be disposed of separately via the appropriate return and collection systems available. By following these instructions you ensure that this product is treated correctly and help to reduce potential impacts on the environment and human health, which could otherwise result from inappropriate handling. Recycling of products helps to conserve natural resources and protect the environment.

For more detailed information on collection and recycling systems for this product, please contact the shop where you purchased it, your local dealer or sales/service representatives.

All Other Users

If you wish to discard this product, please contact your local authorities, the shop where you bought this product, your local dealer or sales/service representatives.

Note for the Battery and/or Accumulator Symbol (For EU countries only)

In accordance with the Battery Directive 2006/66/EC Article 20 Information for end-users Annex II, the above symbol is printed on batteries and accumulators.

This symbol means that in the European Union, used batteries and accumulators should be disposed of separately from your household waste.

In the EU, there are separate collection systems for not only used electrical and electronic products but also batteries and accumulators.

Please dispose of them correctly at your local community waste collection/recycling centre.

Overseas Affiliates and Noise Emission Information

In accordance with TUV "GS Symbol" requirements, details of the EU office or representative company are given below.

❖ **Overseas Affiliates**
Ricoh Europe PLC
66 Chiltern Street, London W1U 4AG, U.K.

❖ **Noise Emission**
Maschinenlärminformations-Verordnung 3. GPSGV:
Der höchste Schalldruckpegel beträgt 70 dB(A) oder weniger gemäss EN ISO 7779

Notice To Facsimile Unit (optional) Users

CE

Declaration of Conformity

Notice to Users in EEA Countries

This product complies with the essential requirements and provisions of Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity.

Notice to Users Accessing Analog PSTN in EEA Countries

This product is designed to be able to access analog PSTN in all EEA countries. Local PSTN compatibility is dependent on software switch settings. Please contact your service representative if relocating this product to another country. In the event of problems, please contact your service representative in the first instance.

The CE Declaration of Conformity is available by accessing the URL: http://www.ricoh.co.jp/fax/ce_doc/ and selecting the product applicable.

User Information for RFID in 13.56 MHz

CE

Declaration of Conformity

Notice to Users in EEA Countries

This product complies with the essential requirements and provisions of Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity.

The CE Declaration of Conformity is available on the Internet at URL:
http://www.ricoh.co.jp/fax/ce_doc/

© 2010
Printed in France
EN GB D088-7400A

D0887526

Quick Reference Copy Guide

⇨Please put this guide above your machine⇦

Tips

Paper Size

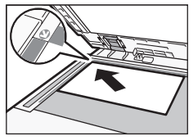
You can check the paper size using the scale on the exposure glass.

Auto Image Density
Adjusts the image density (darker/lighter) automatically for copying.

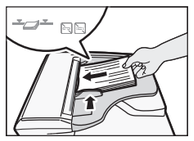
Auto Paper Select
Selects a suitable size of paper automatically.

How to make Copies... (1. Placing Originals, 2. Basic Copying)

1. Press the【Clear Modes】key.
2. Place the originals.
   - Exposure Glass (Face down)



   - Auto Document Feeder (Face up)



3. Make desired settings.
4. Enter the number of copies.
5. Press the【Start】key.

How to select a color mode... (3. Color Copying)

1. Select a color mode.

How to Reduce/Enlarge... (2. Basic Copying)

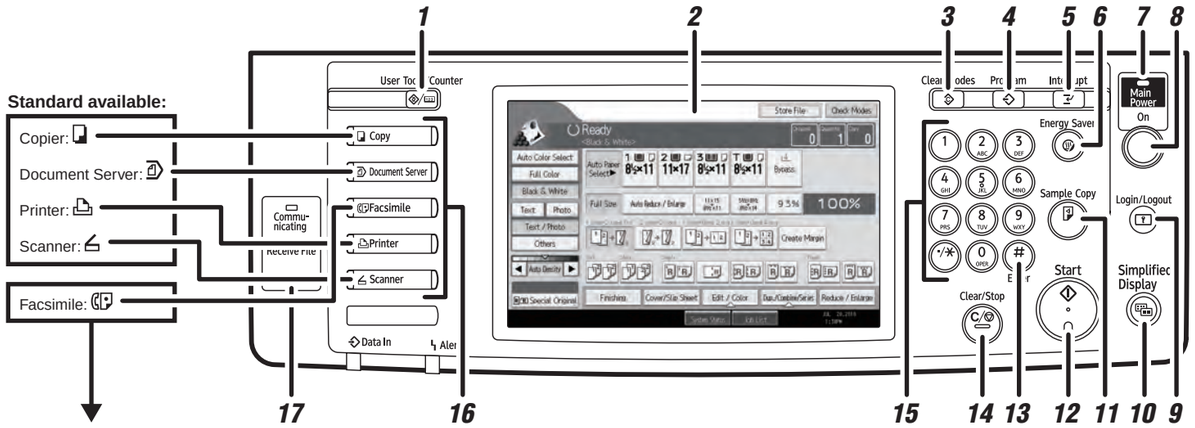
Auto Reduce/Enlarge

1. Press [Auto Reduce / Enlarge].
2. Select the paper size.
3. Place the originals, and then press the【Start】key.

Preset Reduce/Enlarge

1. Press [Reduce / Enlarge].
2. Select a ratio, and then press [OK].
3. Place the originals, and then press the【Start】key. (Paper size is selected automatically.)

1. 【User Tools/Counter】key
2. Display panel
3. 【Clear Modes】key
   Press to clear the current settings.
4. 【Program】key
   Press to register frequently used settings, or to recall registered settings.
5. 【Interrupt】key
6. 【Energy Saver】key
7. Main power indicator
8. Operation switch
9. 【Login/Logout】key
10. 【Simplified Display】key
11. 【Sample Copy】key
12. 【Start】key
    Press to start copying, printing, scanning, or sending.
13. 【#】key (Enter key)
14. 【Clear/Stop】key
    - Clear: Press to delete a number entered.
    - Stop: Press to stop a job in progress.
15. Number keys
16. Function keys
17. Indicators



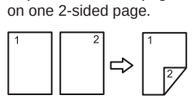
You can also fax on this machine!
Please ask your sales person for this option.

How to save paper... (2. Basic Copying)

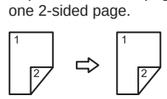
1. See if original is 1-sided or 2-sided (duplex).
2. Press [Dup./Combine/Series].
3. Select the original and copy types and/or the orientation.
4. Place the originals, and then press the【Start】key.

Duplex

1-Sided → 2-Sided
Copies two 1-sided pages on one 2-sided page.

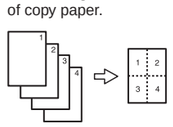


2-Sided → 2-Sided
Copies one 2-sided page on one 2-sided page.

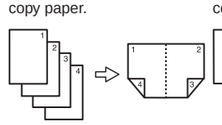


Combine

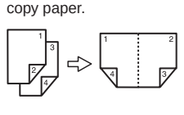
1-sided Combine
Copies multiple 1-sided or 2-sided originals on one side of copy paper.



2-sided Combine
Copies multiple 1-sided originals on two sides of copy paper.



Copies multiple 2-sided originals on two sides of copy paper.

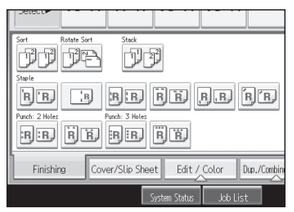


For more functions on Combine, see “2. Basic Copying”.

How to finish your document... (2. Basic Copying)

Staple

1. Press [Finishing].
2. Select one of the stapling positions (Copies will be sorted automatically).
3. Press [OK].
4. Enter the number of copies.
5. Place the originals, and then press the【Start】key.



Punch

1. Press [Finishing].
2. Select one of the punch hole positions (Copies will be hole punched).
3. Press [OK].
4. Enter the number of copies.
5. Place the originals, and then press the【Start】key.

Staple and Punch can be done at the same time.

Availability of finishing depends on your configuration.

Document Server (2. Basic Copying)

Why use it...

- To store often used documents centrally and print on demand.
- To reduce network load.

How to use in copy mode...

1. Press [Store File].
2. Enter a file name, user name, or password if necessary.
3. Press [OK].
4. Place the originals.
5. Make the scanning settings for the original.
6. Press the【Start】key.

The machine stores scanned originals in memory and makes one set of copies.
To find your document, press the【Document Server】key.

For more functions on Document Server, see “5. Document Server”.

Simplified Display

When you press the【Simplified Display】key, the screen changes to the simplified display. Letters and keys are displayed at a larger size, making operations easier. Certain keys do not appear on the simplified display.

Advanced features

Reduce/Enlarge
- Zoom: You can specify the reproduction ratio in increments of 1%.
- Magnification: You can specify the horizontal and vertical reproduction ratios, individually.

Series Copies
- Separately copies the front and back of a 2-sided original onto two sheets.

Booklet/Magazine
- Copies two or more originals in page order.

Edit/Stamp
- Image Repeat/Double Copies: The original image is copied repeatedly.
- Centering: Moves image to center.
- Erase: Erases the center and/or all four sides of the original image.
- Stamps: Copies with the date, page numbers, etc.

Cover/Slip Sheet
- Front Cover / Front/Back Cover: Create cover sheets.
- Designate: Copies certain pages of the original onto designation sheets.

© 2010 Printed in China EN US D088-7526

Chapter references in this guide refer to the bundled OI CD; Copy and Document Server Reference.

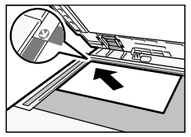
D5458506

Quick Reference Fax Guide

⇨Please put this guide above your machine⇦

How to send a fax... (1. Transmission)

1. Specify a transmission mode:
   - Memory Transmission, or
   - Immediate Transmission (selected by pressing [Immed. TX])
2. Place the original.
   - Exposure glass (face down)



   - ADF (face up)

3. Make the scan settings you require.
4. Specify a destination.
5. Press the【Start】key.

If you choose Memory Transmission, you can send to more destinations at once. To do this, after step 4, press:
- [Add] and specify destinations
- the【Start】key

To send to an Internet Fax, e-mail, or folder destination, press [Internet Fax], [E-mail], or [Folder] to switch the transmission type.

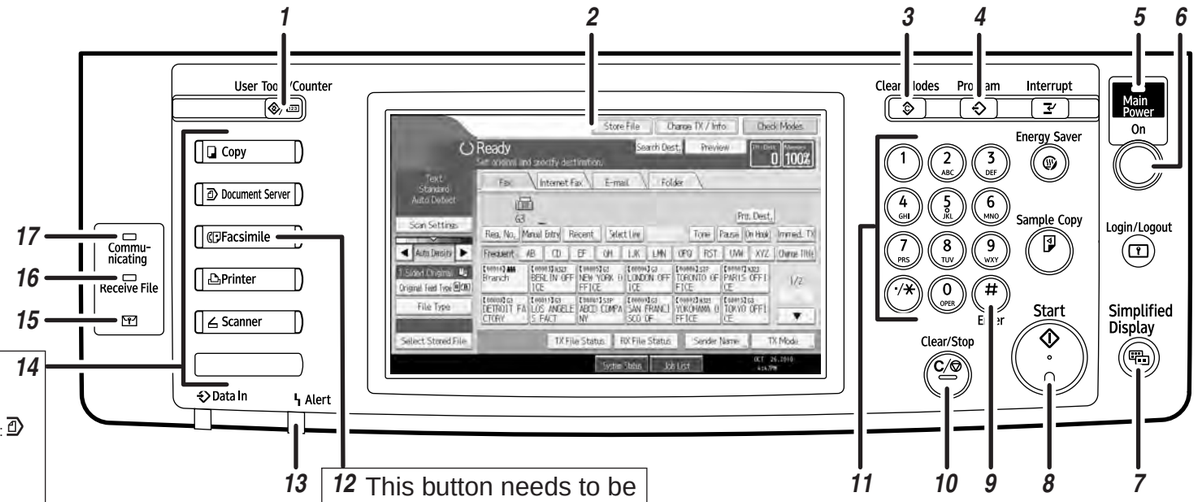
How to fax to Document Server... (5. Storing a Document)

1. Press [Store File].
2. Select [Send & Store].
3. Set the user name, file name, and password as necessary, and then press [OK].
4. Specify a destination, and then press the【Start】key.

To send a fax from Document Server:

1. Press [Select Stored File].
2. Select the documents to be sent, and then press [OK].
3. Specify a destination, and then press the【Start】key.

1. **【User Tools/Counter】key**
2. **Display panel**
3. **【Clear Modes】key**
   Press to clear the current settings.
4. **【Program】key**
   Press to select the program mode.
5. **Main power indicator**
6. **Operation switch**
7. **【Simplified Display】key**
8. **【Start】key**
9. **【#】key (enter key)**
   Registers entered numbers or settings.
10. **【Clear/Stop】key**
11. **Number keys**
12. **【Facsimile】key**
    Press to switch to the facsimile mode.
13. **Alert indicator**
14. **Function keys**
15. **Confidential File indicator**
16. **Receiving File indicator**
17. **Communicating indicator**



Copier:
Document Server:
Facsimile:
Printer:
Scanner:

This button needs to be selected as first step

How to program a Destination key… (1. Transmission)

1. Press the【User Tools/Counter】key.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Press [New Program].
7. Press [Change] and set user's information, press [OK].
8. Press [Fax Dest.].
9. Press [Change] under Fax Destination, enter the fax number using the number keys and press [OK].
10. Press [OK].
11. Press [Exit].
12. Press the【User Tools/Counter】key.
13. You will get a message 'Destination list / machine settings are updated...'. Press [Exit].

How to send at a specific time (Send Later) (2. Other Transmission Features)

Using this function, you can instruct the machine to send the fax at a later time via Memory Transmission.
Advantage: you can take advantage of off-peak telephone charges, without being at the machine.

1. Place the original, and then select the scan settings you require.
2. Press [TX Mode].

3. Press [Send Later].
4. Enter the time using the number keys and select [AM] or [PM]. Then press [OK].

5. Press [OK].
6. Specify a destination, and then press the【Start】key.

How to cancel a transmission... (1. Transmission)

Memory + Immediate
Before the original is scanned = before pressing the【Start】key:
1. Press the【Clear Modes】key.

While the original is being scanned = after pressing the【Start】key:
1. Press the【Clear/Stop】key.

Memory
While the original is being transmitted:
1. Press the【Clear/Stop】key.
2. Select the file you want to cancel.
3. Press [Stop Transmission], and then press [OK].
4. Press [Exit].

Before the transmission is started:
1. Press [Change TX / info].
2. Press [Check / Stop Transmission File].
3. Select the file you want to cancel.
4. Press [Stop Transmission], and then press [OK].
5. Press [Exit] twice.

How to print the Journal... (4. Changing/Confirming Communication Information)

The Journal is printed automatically after every 50 communications. You can also request a Journal at any time, by following the procedure below.

1. Press [Change TX / Info].

2. Select [Print Journal].
3. Select the printing method:
   - [All]
   - [Print per File No.]
   - [Print per User]

4. Press the【Start】key.
5. Press [Exit] twice.

Advanced Fax Features

Please see the <Facsimile Reference> Operating Instructions:

- SUB/SEP Codes (2. Other Transmission Features)
  Privacy can be protected when faxing with a SUB/SEP Code, since only people who know the SUB/SEP Code can receive or print the fax document.
- Printed reports (4. Changing/Confirming Communication Information) Inform you if a fax has been saved, sent, or failed to be transmitted.
- LAN-Fax features - Sending a fax from a computer (6. Fax via Computer)

© 2010 Printed in China EN US D545-8506

Chapter references in this guide refer to the bundled OI CD; Facsimile Reference.

D0887805

Quick Reference Printer Guide

⇨Please follow these instructions using your PC⇦

How to install the printer driver...

! You can install printer driver easily using the supplied CD-ROM.

1. Insert the provided CD-ROM into the computer's CD-ROM drive.
2. Select an interface language, and then click [OK].
3. Click [Quick Install].
   PCL printer driver is installed under network environment, and the Standard TCP/IP port will be set.
4. Click [I accept the agreement], and then click [Next >].
5. Select the machine model you want to use.
6. Click [Install].
   The printer driver installation starts.
7. Click [Finish], and then click [Exit].

Downloading the printer driver

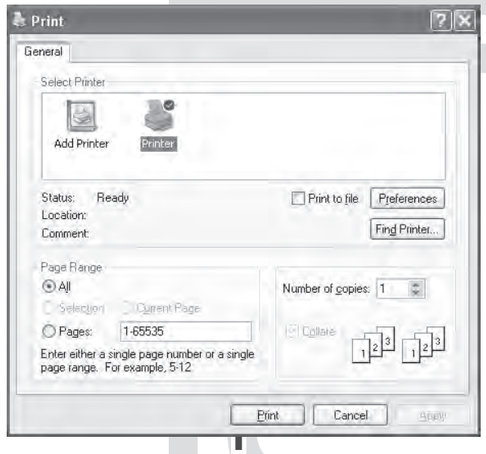
- If you are using the 64-bit version of an operating system, download the printer driver from the manufacturer's Web site. For details, see "Installing the Printer Driver", *Printer Reference*.

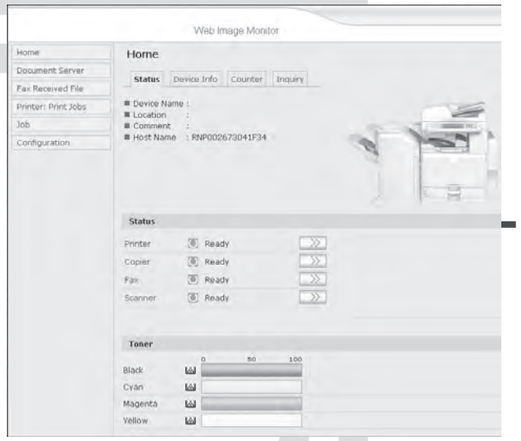
How to prepare for printing...

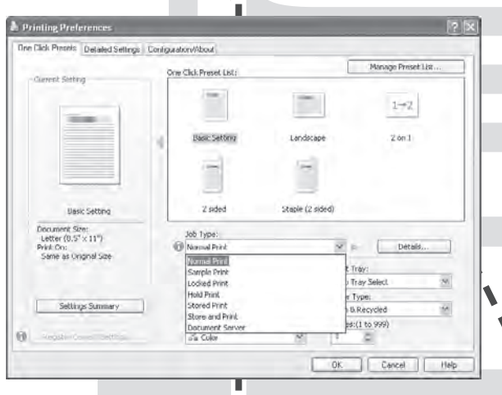
1. On the [Start] menu, click [Printers and Faxes].
2. Right-click the icon of the printer you want to use, and then click [Set as Default Printer].
3. On the [File] menu, click [Properties].
4. If you get the "Configure..." message, click [OK].
5. On the [Accessories] tab, select the options and specify the paper trays you want to use.
6. Specify the paper size of the original, and then click the [General] tab.
7. Click [Printing Preferences...]. Make your settings under [One Click Presets], [Detailed Settings], and [Configuration/About].
8. Save the One Click Presets you have made if necessary: click [Register Current Settings...] on the [One Click Presets] tab, enter a name, and then click [OK].

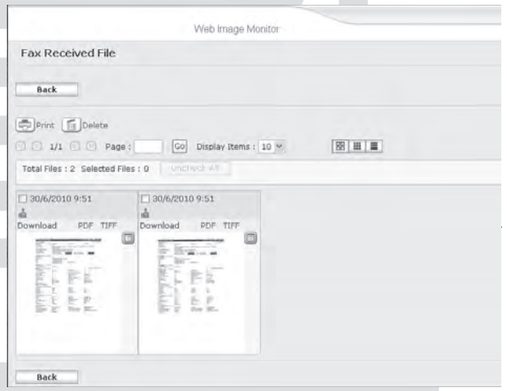
How to print...

1. Open your document.
2. - Click the print icon directly, or
   - On the [File] menu, click [Print].
3. Select the printer, and then open the [Printing Preferences] dialog box.
4. Make the settings you require, and then click [OK].
5. Set a number of copies.
6. Click [OK].









How to print a confidential document...

1. On the [File] menu, click [Print], and then open the [Printing Preferences] dialog box.
2. In [Job Type:], select [Locked Print].
3. Click [Details...].
4. Specify [User ID:] and [Password:].
5. Click [OK].
6. Perform steps as described in 'How to print...' from step 4 onwards.
7. Go to the machine and then press the【Printer】key.
8. Press [Print Jobs].
9. Press [Locked Print Job List].
10. Select your document, and then press [Print].
11. Enter your password, and then press [OK].
    Reconfirm by pressing [Yes].

! The Locked Print file is printed, and deleted afterwards.

How to print documents later (Hold Print)
How to print stored documents on the hard disk (Stored Print)

1. On the [File] menu, click [Print], and then open the [Printing Preferences] dialog box.
2. In [Job Type:], select [Hold Print] or [Stored Print].
3. Click [Details...].
4. Specify [User ID:] and [Password:] if necessary (for password protected Stored Print documents).
5. Click [OK].
6. Perform steps as described in 'How to print...' from step 4 onwards.
7. Go to the machine, and then press the【Printer】key.
8. Press [Print Jobs].
9. Press [Hold Print Job List] or [Stored Print Job List].
10. Select your document, and then press [Print].
    If you set a password in step 4, a password confirmation screen appears. Enter the password.
    Reconfirm by pressing [Yes] (for a Stored Print file, you can enter the number of sets (up to 999) using the number keys).

! The Hold Print file is printed, and deleted afterwards.
The Stored Print file is stored in the machine even after it is printed. To delete the Stored Print file, see "Printing from the Print Job Screen" , *Printer Reference*.

How to use Web Image Monitor...

1. Start your Web browser.
2. In your browser's address bar, enter the following: http://machine's IP address/
3. Select one of the following functions:
   - Home
   - Document Server
   - Fax Received File
   - Printer: Print Jobs
   - Job
   - Configuration

Why use Web Image Monitor?

- To access the machine anywhere via a Web browser.
- To provide you with the convenience of managing certain functions from your computer.

For details about Web Image Monitor, see "Using Web Image Monitor", *Network and System Settings Reference*.

How to receive a fax to download

! Setting must be made before you can receive fax documents. For details, "Fax via Computer", *Facsimile Reference*.

1. Start your Web browser.
2. In your browser's address bar, enter the following: http://machine's IP address/
3. In the menu area to the left, click [Fax Received File].
4. Click the Property icon of a fax document.
5. View contents of fax documents.
6. To download a fax document, click [PDF] or [Multi-page : TIFF].
7. Click [Download], and then click [OK].

How to monitor your machine in the network...

! To use this function, you must first download SmartDeviceMonitor for Client from the manufacturer's Web site and install it on your computer. Contact your local dealer for information on downloading SmartDeviceMonitor for Client.

1. Right-click the PC icon at the bottom of your screen.
2. Point to [Property], and then click [Monitor Device Settings...].
3. On the [Network Devices] tab, click [Browse...].
4. Select your printer, and then click [OK].
5. On the [Printers Folder] tab, click [To be monitored], and then click [Display on the task bar menu] and [Displayed on Task Bar].

! If you select this machine from the SmartDeviceMonitor icon in the notification area, the monitoring screen (Web Image Monitor) appears. You can confirm the machine status, configurations, and job histories in Web Image Monitor.

© 2010
Printed in China EN US EN AU D088-7805

D0887886

Quick Reference Scanner Guide

⇨Please put this guide above your machine⇦

To use the scanner functions, several settings must be made beforehand. For details about these settings, see *Scanner Reference* chapter 9 on the supplied CD-ROM.

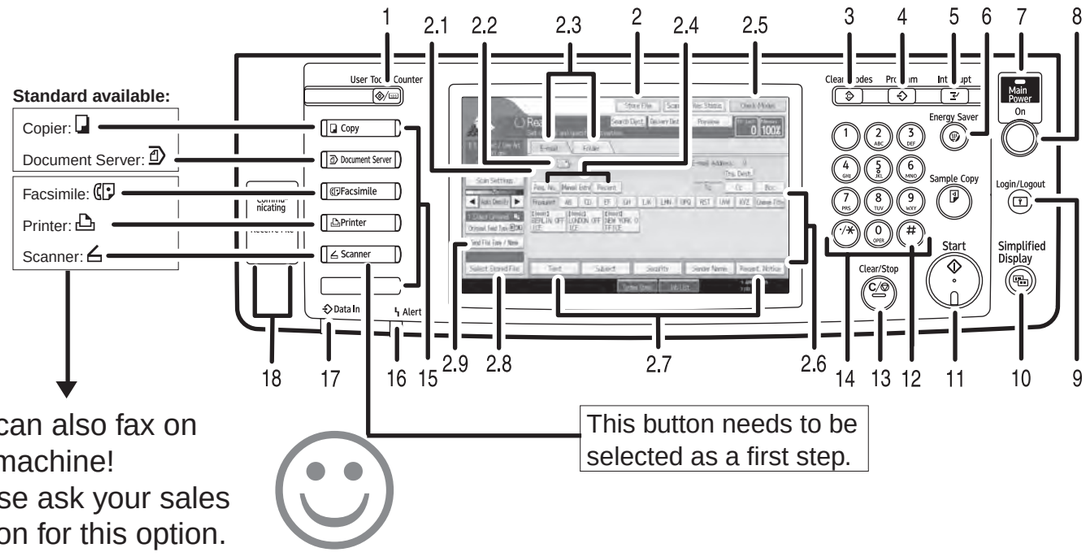
How to scan...

Available scan functions:

1. Scan to E-mail
2. Scan to Folder (SMB/FTP/NCP)
3. Scan Using WSD (Web Services on Devices)
4. Store to Hard Disk
5. Save to Removable Memory Device
6. Scan to Delivery Server
7. Scan via TWAIN Driver

For details about 3, 5, 6, and 7, see *Scanner Reference* on the supplied CD-ROM.

1. 【User Tools/Counter】key
2. Display panel
2.1 Destination field
2.2 E-mail icon
2.3 E-mail/Folder
2.4 [Reg. No.] [Manual Entry] [Recent]
2.5 [Check Modes]
2.6 Destination list
2.7 [Text] [Subject] [Security] [Sender Name] [Recept. Notice]
2.8 [Select Stored File]
2.9 [Send File Type / Name]
3. 【Clear Modes】key
4. 【Program】key
5. 【Interrupt】key
6. 【Energy Saver】key
Press this to switch the machine into or out of Energy Saver mode.
7. **Main power indicator**
8. **Operation switch**
Press this to turn the machine on/off.
9. 【Login/Logout】key
10. 【Simplified Display】key
11. 【Start】key
Press this to begin scanning, storing, or sending.
12. 【#】key (Enter Key)
13. 【Clear/Stop】key
- clears an entered numeric value
- stops scanning
14. **Number keys**
15. **Function keys**
Press the【Scanner】key to activate these keys.
16. **Alert indicator**
17. **Data In indicator**
18. **Indicators**



You can also fax on this machine!
Please ask your sales person for this option.

This button needs to be selected as a first step.

How to save to the machine's hard disk...

(4. Storing Files Using the Scanner Function)

1. Press the【Scanner】key.
2. Press the【Clear Modes】key.
3. Make settings for storing scanned data files:
- Press [Store File] and [Store to HDD].
4. Specify the file information: user name, file name, and password. Press [OK].
5. Place the originals and configure the necessary settings via [Original Feed Type].
6. Configure the basic settings (original type, resolution, etc.) via [Scan Settings].
7. Press the【Start】key.

For details about saving to removable memory devices, see 5. Saving Scan Files on a Removable Memory Device, *Scanner Reference* on the supplied CD-ROM.

Why use it?
To store scanned files in the hard disk of the machine for later (shared) use. (See *Scanner Reference* .)

Displaying a list of files stored on the machine's hard disk

(4. Storing Files Using the Scanner Function)

1. Press the【Scanner】key.
2. Press [Select Stored File]. The list of stored files is displayed.

How to use Scan to E-mail/ Scan to Folder...

(1. Sending Scan Files by E-mail) (2. Sending Scan Files to Folders)

1. Press the【Scanner】key.
2. Press the【Clear Modes】key.
3. If the network delivery scanner screen appears, switch to the E-mail screen or Scan to Folder screen.
4. Place the originals and configure the necessary settings such as original size and orientation.
5. Select destination(s).
In total, up to 500 destinations can be specified.
For scan to e-mail:
Before selecting the destination, be sure to select [To]. When necessary, select [Cc] or [Bcc] and destination(s).
6. If necessary, press [Send File Type / Name] to specify settings such as file name and file format.
7. **For scan to e-mail only**
Specify the e-mail sender.
Depending on the security settings, the logged-in user may appear in the [Sender Name] field.
- To specify the e-mail sender, press [Sender Name].
- Select a sender.
- Press [OK].
- For reception confirmation e-mail, press [Recept. Notice].

8. **For scan to e-mail only**
Enter a subject line if necessary.
- Press [Subject].
- Enter the subject.
- Press [OK].

9. Press the【Start】key.

Registering an E-mail destination...

(*Network and System Settings Reference* 5. Registering Addresses and Users for Facsimile/Scanner Functions)

1. Press the【User Tools/Counter】key.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Press [New Program].
7. Configure the user details.
8. Press [E-mail].
9. Press [Change], which is on the right side of the e-mail address.
10. Enter the e-mail address, and then press [OK].
11. Press [OK].

For details about registering folders, see 5. Registering Addresses and Users for Facsimile/Scanner Functions, *Network and System Settings Reference* .

© 2010 Printed in China EN US D088-7886

Chapter references in this guide refer to the bundled OI CD; Scanner Reference and Network and System Settings Reference.