SP 3500N/SP 3510DN

Information

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.

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

Caution

For good output 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.

1

Notes

The model names of the machines do not appear in the following pages. Check the type of your machine before reading this manual. (For details, see "Model-Specific Information", **Hardware Guide** in the manuals CD-ROM.)

Model type	Model name	Duplex Printing
Type 1	SP 3500N	Manual
Type 2	SP 3510DN	Automatic

Certain types might not be available in some countries.

Two kinds of size notation are employed in this manual. With this machine refer to the inch version.

Power Source

120 V, 60 Hz, 10 A

Please be sure to connect the power cord to a power source as above.

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.

Laser Safety

CDRH Regulations

This machine complies with the requirements of 21 CFR Subchapter J for class 1 laser product. The machine contains multiple AlGalnP laser diodes, 9-milliwatt, 648-663 nanometer wavelength for each emitter. The divergence of laser beams is $\theta \perp$ 31 deg (Ave.), θ // 9 deg (Ave.) and laser beams are generated by CW (Continuous Wave) mode.

Caution:

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

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.

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.
- Keep the machine in an area that is within optimum environmental conditions. Operating the machine in an environment that is outside the recommended ranges of humidity and temperature can cause an electrical fire hazard. Keep the area around the socket free of dust. Accumulated dust can become an electrical fire hazard.
- 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.

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

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.
- Be sure to disconnect the plug from the wall outlet at least once a year.
 - There are burn marks on the plug.
 - The prongs on the plug are deformed.

If any of the above conditions exist, do not use the plug and consult your dealer or service representative. Use of the plug could result in fire or electric shock.

- Be sure to disconnect the power cord from the wall outlet at least once a year.
 - The power cord's inner wires are exposed, broken, etc.
 - · The power cord's coating has a crack or dent.
 - When bending the power cord, the power turns off and on.
 - · Part of the power cord becomes hot.
 - The power cord is damaged.

If any of the above conditions exist, do not use the power cord and consult your dealer or service representative. Use of the power cord 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.

↑ 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

↑ 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.
- The following explains the warning messages on the plastic bag used in this product's packaging.
 - 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.
- The machine weighs approximately 12.4 kg (27.4 lb.). When moving the machine, use the inset grips on both sides, and lift slowly. The machine will break or cause injury if dropped.
- When moving the machine after use, do not take out the toner to prevent toner spill inside the machine.
- Do not connect the Ethernet port of the machine to a network that may supply excess voltage, such as a telephone line. Doing so may result in fire or electric shock.

- · Be careful not to trap your fingers when opening or closing the top cover.
- When moving the machine, use the inset grips on both sides. The machine will break or cause injury if dropped.
- 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.
- Before installing or removing options, always disconnect the power cord plugs from the wall outlet and allow time for the main unit to fully cool. Failing to take these precautions could result in burns.

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:

- The inside of this machine becomes very hot. Do not touch parts labelled "A" (indicating a hot surface).
- 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.
- When removing jammed paper, make sure not to trap or injure your fingers.
- When loading paper, take care not to trap or injure your fingers.
- During operation, rollers for transporting the paper and originals revolve.
 A safety device has been installed so that the machine can be operated safety. But take care not to touch the machine during operation. Otherwise, an injury might occur.
- Lifting the paper feed unit carelessly or dropping it may cause injury.

- Do not pull out the paper tray forcefully. If you do, the tray might fall and cause an injury.
- Do not put your hands inside the machine when the input tray is removed.
 Some internal parts become hot and are a burn hazard.

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 use the cleaner to suck spilled toner (including used toner).
 Sucked toner may cause firing or explosion due to electrical contact flickering inside the cleaner. However, it is possible to use the cleaner designed for dust explosion-proof purpose. If toner is spilled over the floor, sweep up spilled powder toner slowly and clean remainder with wet cloth.
- The following explains the warning messages on the plastic bag used in this product's packaging.
 - 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.
- Store toner (new or used), toner containers, and components that have been in contact with toner 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.

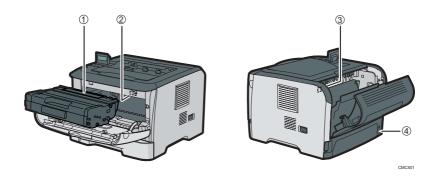
- If toner or used toner is swallowed, dilute by drinking a large amount of water. Consult a doctor if necessary.
- When removing jammed paper or replacing toner, avoid getting toner (new or used) on your clothing. If toner comes into contact with your clothing, wash the stained area with cold water. 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.
- Our products are engineered to meet high standards of quality and functionality, and we recommend that you use only the expendable supplies available at an authorized dealer.

Safety Labels of This Machine

This section explains the machine's safety information labels.

Positions of \(\text{\text{WARNING}} \) and \(\text{\text{CAUTION labels}} \)

This machine has labels for <u>MARNING</u> and <u>MCAUTION</u> at the positions shown below. For safety, please follow the instructions and handle the machine as indicated.



1



Do not incinerate toner or toner containers.

Toner dust may cause flashback when exposed to an open flame.

2



Do not touch the parts a label indicates.

The inside of the machine could be very hot.

(3)



Do not touch the parts a label indicates.

The inside of the machine could be very hot.

Type 1 Model



The machine weighs approximately $11.4\ kg\ (25.2\ lb.)$. When moving the machine, use the inset grips on both sides, and lift slowly.

Type 2 Model



The machine weighs approximately 12.4 kg (27.4 lb.). When moving the machine, use the inset grips on both sides, and lift slowly.

Power Switch Symbols

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

: POWER ON.

• O: POWER OFF.

Environmental Features (Type 1 Model)

This machine is equipped with the following Energy Saver modes: Energy Saver mode 1 and Energy Saver mode 2. The machine recovers from Energy Saver mode when it receives a print job, or when any key is pressed.

Energy Saver mode 1

This machine automatically enters Energy Saver mode 1 about 30 seconds after the last operation is completed.

Energy Saver mode 2

This machine automatically enters Energy Saver mode 2 1 minute after the last operation is completed.

Specifications

Energy Saver mode 1	Power Consumption	70 W
	Default Time	OFF
	Recovery Time	10 seconds
Energy Saver mode 2	Power Consumption	5 W
	Default Time	1 minute
	Recovery Time	20 seconds or less

❖ Note

- ☐ For more information about how to configure Energy Saver mode, see "Making Printer Settings Using the Control Panel", **Software Guide** as a HTML file on the CD-ROM.
- ☐ Even if Energy Saver mode 2 is enabled, the machine will not enter Energy Saver mode 2 for two hours if [Low Humidity Mode] under [System] is enabled. However, the machine will enter Energy Saver mode 1 as normal (even when Energy Saver mode 1 is not enabled).

❖ Reference

"Making Printer Settings Using the Control Panel", **Software Guide** as a HTML file on the CD-ROM.

"Configuring the System Settings", **Software Guide** as a HTML file on the CD-ROM.

❖ Recycled Paper

We recommend you to use environmentally friendly recycled paper. Please contact your sales representative for recommended paper.

Environmental Features (Type 2 Model)

ENERGY STAR Program

ENERGY STAR® Program Requirements for Imaging Equipment



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.

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❖ Reference

"Making Printer Settings Using the Control Panel", **Software Guide** as a HTML file on the CD-ROM.

"Configuring the System Settings", **Software Guide** as a HTML file on the CD-ROM.

Recycled Paper

We recommend you to use environmentally friendly recycled paper. Please contact your sales representative for recommended paper.

Notice

Note to users in the United States of America

FCC Rules

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.

Note to users in Canada

Note

This Class B digital apparatus complies with Canadian ICES- 003.

Remarque concernant les utilisateurs au Canada

Avertissement

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

For users in the state of California

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

MEMO



SP 3500N/SP 3510DN

Operating Instructions

Hardware Guide

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Notice

Introduction

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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.

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.

For good output 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.

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

How to Read This Manual

Symbols

This manual uses the following symbols:



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.



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 p.6 "Model-Specific Information".

Notes

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

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

Model-Specific Information

This section explains how you can identify the model type and region of your machine.

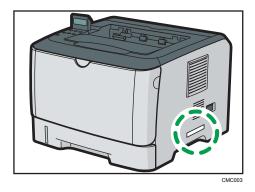
This printer comes in two models that have different duplex functions.

When describing procedures that are model-specific, this manual refers to the different printer models as Type 1 or Type 2. The following table describes the model types.

Model types

Model type	Model name	Duplex Printing
Type 1	SP 3500N	Manual
Type 2	SP 3510DN	Automatic

Furthermore, there is a label on the right side of the machine, located in the position shown below. The label contains details that identify the region your machine belongs to. Read the label.



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 -22, -27
- 220-240V

Region B (mainly North America)

If the label contains the following, your machine is a region B model:

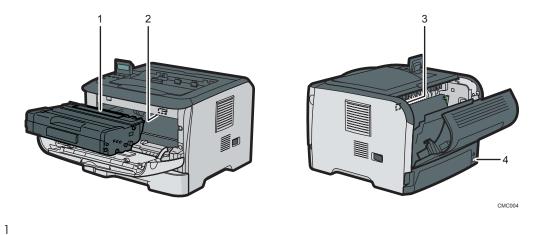
- CODE XXXX -17
- 120 V



• 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.

Positions of **AWARNING** and **ACAUTION** labels

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





Do not incinerate toner or toner containers.

Toner dust may cause flashback when exposed to an open flame.

2



Do not touch the parts a label indicates.

The inside of the machine could be very hot.

3



Do not touch the parts a label indicates.

The inside of the machine could be very hot.

4

• Type 1 Model



The machine weighs approximately $11.4\ kg$ ($25.2\ lb.$). When moving the machine, use the inset grips on both sides, and lift slowly.

• Type 2 Model



The machine weighs approximately 12.4 kg (27.4 lb.). When moving the machine, use the inset grips on both sides, and lift slowly.

Power Switch Symbols

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

• I : POWER ON

• O : POWER OFF

Manuals for This Printer

Read this manual carefully before you use this printer.

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

Mportant (

- 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.

Safety Information

Contains information about safe usage of this printer.

To avoid injury and prevent damage to the printer, be sure to read this.

Quick Installation Guide

Contains procedures for removing the printer from its box, and connecting it to a computer.

Hardware Guide (This manual)

Contains information about paper; names and functions of the parts of this printer; and procedures such as installing options, replacing consumables, responding to error messages, and resolving jams.

Driver Installation Guide

Contains procedures for installing the PCL 6 and PostScript 3 printer drivers. This manual is included on the driver CD-ROM.

Software Guide

Contains information about using this printer, its software, and its security functions.

List of Option

This section provides a list of option for this printer, and how it is referred to as in this manual.

Option List	Referred to as
Paper Feed Unit TK1080	Paper feed unit



• For details about the specifications of this option, see "Specifications".

■ Reference

• p.139 "Specifications"

Operating Instructions

This section explains how to use HTML format manuals.

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 into 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.



- The browsers we recommend are Internet Explorer 6 or later, Firefox 3.5 or later, and Safari 4.0 or later.
- Depending on your computer's operating environments, you can select the HTML manual from the following two versions:
 - Standard version
 - Simplified version
- If you want to read the HTML manuals on a Macintosh, insert the CD-ROM into 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.

Reading the HTML Manuals That You Install on the Computer

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

For easy access, we recommend you install the manuals on your computer.

- 1. Insert the CD-ROM into 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 following the on-screen instructions.
- 5. When the installation is complete, click [Finish].
- 6. Click [Exit].

7. Open the HTML manuals that you installed.

When opening the manuals from an icon, double-click the manual icon on the desktop. When opening the manuals from the [Start] menu, point to [All Programs], and then [Product Name].

8. Click the title of the manual you want to read.

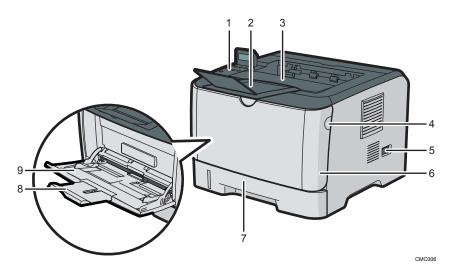
U Note

- 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 XP/Vista/7, Windows Server 2003/2003 R2/2008/2008
 R2
 - Minimum display resolution: 800 × 600 pixels
- 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], then [Product Name], and then uninstall the data.
- Depending on the settings made during installation, menu folder names may differ.

1. Guide to the Printer

This chapter explains the names and functions of the printer's components.

Exterior: Front View



1. Control Panel

Contains keys for printer control and indicators that shows the printer status.

2. Stop Fences

Raise this fence to prevent paper from falling off.

3. Output Tray

Printed paper is output here. Up to 125 sheets of plain paper can be stacked here.

4. Front Cover Release Button

Press this to open the front cover.

5. Power Switch

Use this switch to turn the power on and off.

6. Front Cover

Open this cover to replace the print cartridge or remove jammed paper.

7. Tray 1

This tray can hold up to 250 sheets of plain paper.

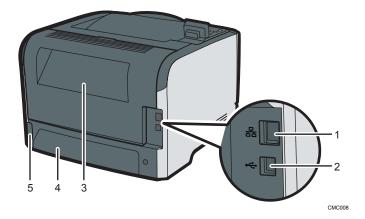
8. Bypass Tray Extension

Pull this out when loading a sheet that is longer than A4 SEF on the Bypass Tray.

9. Bypass Tray

This tray can hold up to 50 sheets of plain paper.

Exterior: Rear View



1. Ethernet Port

Use a network interface cable to connect the printer to the network.

2. USB Port

Use a USB cable to connect the printer to the host computer.

3. Rear Cover

Open this cover to remove jammed paper or when printing on envelopes.

4. Tray 1 Rear cover

Remove this cover when you load paper larger than A4 in the paper tray.

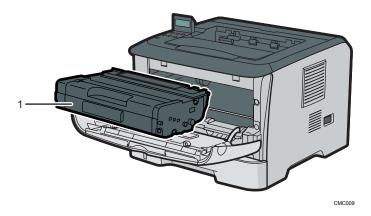
5. Power Socket

For connecting the power cord to the printer.

П

1

Interior



1. Print Cartridge

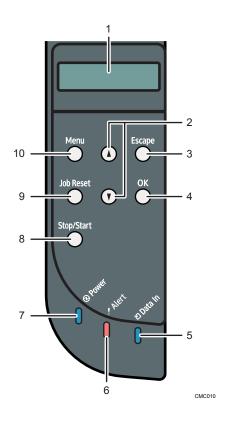
If the following message appears on the control panel, replace the print cartridge.

"Replace Print Cartridge"

■ Reference

• For details about the messages which appear on the screen to prompt you to replace the units, see p.103 "Error & Status Messages on the Control Panel".

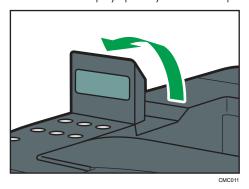
Control Panel



1. Display

Displays current printer status and error message.

You can set the display up with your hands. Adjust the angle of it to see clearly.



2. Scroll Keys

Press to move the cursor in each direction, step by step.

3. [Escape] key

Press this key to cancel an operation or to return to the previous display.

4. [OK] key

Press this key to confirm settings and setting values, or move to the next menu level.

5. Data In Indicator

Flashes when the printer is receiving data from a computer. The data indicator is lit if there is data to be printed.

6. Alert Indicator

Lights up in red whenever printer error occurs. Use display to check the error.

Flashes in yellow when toner is nearly empty.

7. Power Indicator

Remains lit while the power is on. It is unlit when the power is off.

8. [Stop/Start] key

If you press this key, the printer stops receiving data, and printing is not possible.

9. [Job Reset] key

Press this key to cancel a job that is printing out.

10. [Menu] key

Press this key to make and check the current printer settings.

Press the [Menu] key again to return to the ready condition.



• The actual control panel may look different from the illustration, depending on the country of use or model type.

2. Installing the Printer and Options

This chapter explains how to set up, configure the printer for operation, and install the optional paper feed unit for this printer.

Installing the Printer

This section describes how to install the printer and perform settings after installation.

Where to Put the Printer

The printer's location should be carefully chosen because environmental conditions greatly affect its performance.

MARNING

• 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.

ACAUTION

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

ACAUTION

 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.

ACAUTION

Keep the machine in an area that is within optimum environmental conditions. Operating the
machine in an environment that is outside the recommended ranges of humidity and
temperature can cause an electrical fire hazard. Keep the area around the socket free of dust.
Accumulated dust can become an electrical fire hazard.

ACAUTION

 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.

ACAUTION

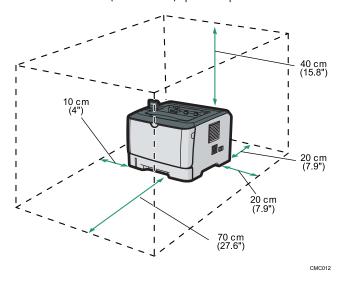
 Do not obstruct the machine's vents. Doing so risks fire caused by overheated internal components.

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.

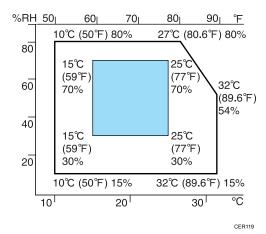
Space Required for Installation

The recommended (or minimum) space requirements are as follows:



Optimum Environmental Conditions

Permissible and recommended temperature and humidity ranges are as follows:



White area: Permissible Range

• Blue area: Recommended Range

To avoid possible build-up of ozone, locate this machine in large well ventilated room that has an air turnover of more than $30m^3/hr/person$.

Environments to Avoid

- · Areas exposed to direct sunlight or strong light
- Dusty areas
- Areas with corrosive gases
- · Areas that are excessively cold, hot, or humid
- · Areas directly exposed to currents of hot, cold, or room-temperature air from air conditioners
- Areas directly exposed to radiant heat from heaters
- Locations near air conditioners or humidifiers
- · Locations near other electronic equipment
- Locations subject to frequent strong vibration

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 m³/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.

Power Source

Region A: 220 - 240 V, 5 A, 50/60 Hz

• Region B: 120 V, 10 A, 60 Hz

Please be sure to connect the power cord to a power source as above.

Unpacking

To protect it from shock and vibration during transit, this printer comes packaged in cushioning foam and secured with tape. Remove these protective materials after bringing the machine to where it will be installed.

MARNING

• 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.

MARNING

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

- The following explains the warning messages on the plastic bag used in this product's packaging.
 - 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.

MARNING

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

MARNING

Do not use the cleaner to suck spilled toner (including used toner). Sucked toner may cause
firing or explosion due to electrical contact flickering inside the cleaner. However, it is possible
to use the cleaner designed for dust explosion-proof purpose. If toner is spilled over the floor,
sweep up spilled toner slowly and clean remainder with wet cloth.

MARNING

• 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.

ACAUTION

• 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.

ACAUTION

• Store toner (new or used), toner containers, and components that have been in contact with toner out of reach of children.

ACAUTION

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

ACAUTION

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

ACAUTION

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

CAUTION

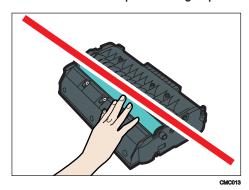
 When moving the machine, use the inset grips on both sides. The machine will break or cause injury if dropped.

ACAUTION

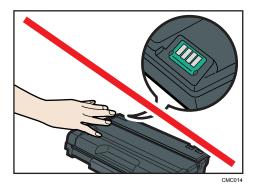
 During operation, rollers for transporting the paper and originals revolve. A safety device has been installed so that the machine can be operated safety. But take care not to touch the machine during operation. Otherwise, an injury might occur.

Mportant !

- Removed tape is dirty. Be careful not to let it touch your hands or clothes.
- Leave the tape holding the paper feed tray and cover in place while moving the printer.
- Lower the printer slowly and carefully to prevent trapping your hands.
- Do not grip on the tray area when lifting the printer.
- Do not allow paper clips, staples, or other small metallic objects to fall inside the machine.
- · Keep the uncovered print cartridge away from direct sunlight.
- Do not touch the print cartridge's photo conductor.

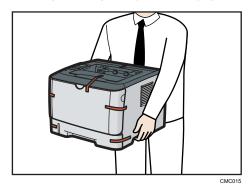


Do not touch the ID chip on the side of the print cartridge.

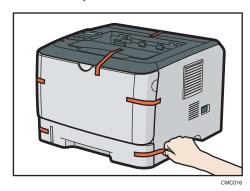


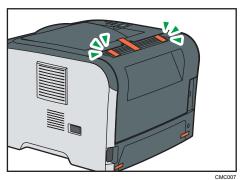
1. Take out the printer from the box, and then remove the plastic bag.

2. Lift the printer by using the inset grips on both sides of the printer.



3. Remove the protective materials attached on the printer's exterior.

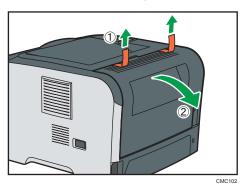




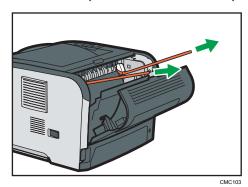
Note

• Wait until step 4 before removing the adhesive tape on the rear cover.



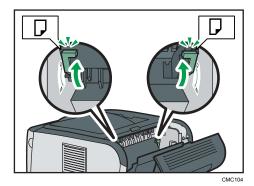


5. Pull out the tape, and then remove the protective materials.



The actual printer may come with protective materials attached in different positions. Make sure to check the printer's exterior for all protective materials, and remove them completely.

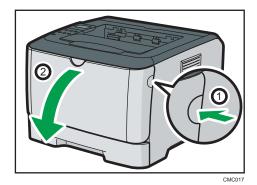
6. Make sure the levers are pulled up.



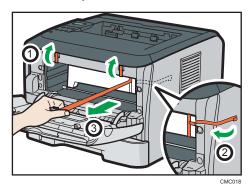
Important

- If you leave the levers lowered, toner may not settle properly when printing on standard paper. Make sure the levers are pulled up before printing on standard paper. If not, print may easily smudge or rub off.
- After printing envelopes, make sure the levers are pulled up.

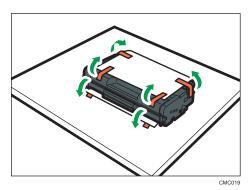
7. Push the side button to open the front cover, and then carefully lower it.



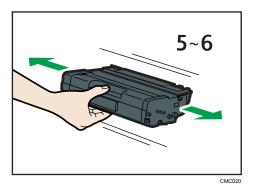
8. Remove the protective material attached inside the printer.



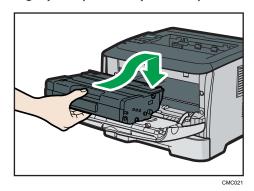
9. Unpack the print cartridge. Then, place it on a flat surface, and remove the protection sheet.



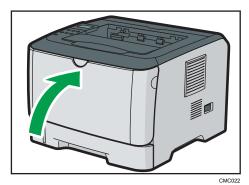
Shake the print cartridge from side to side five or six times.



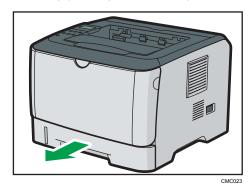
10. Slide the print cartridge in horizontally. When the cartridge can go no further, raise it slightly and push it fully in. Then push down on the cartridge until it clicks into place.



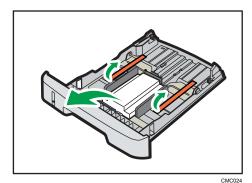
11. Using both hands, carefully push up the front cover until it closes.



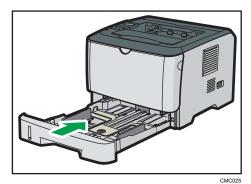
12. Carefully pull tray 1, and then pull out with both hands.



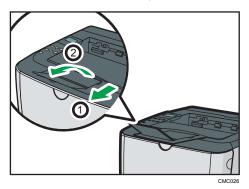
13. Remove the protective material attached inside the tray.



14. Carefully push tray 1 straight into the printer.



15. Pull out and raise the stop fence.



Turning the Power On

Follow the procedure below to turn the power on.

⚠ 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.

MARNING

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

MARNING

• 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.

MARNING

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

MARNING

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.

MARNING

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

ACAUTION

• 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.

ACAUTION

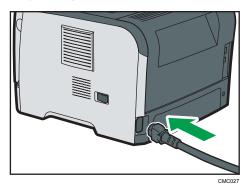
 If this machine is not going to be used for several days or longer at a time, disconnect its power cord from the wall outlet.

ACAUTION

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

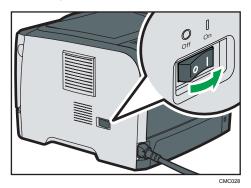
Important

- Make sure the power cable is plugged securely into the wall outlet.
- Turn the power switch off when plugging and unplugging the power plug.
- Do not turn off the power switch until initializing is completed. Doing so results in malfunction.
- 1. Plug in the power cable.



2. Insert the plug of the power cord into the wall socket securely.

3. Turn the power switch to On.



The Power indicator on the control panel lights up.



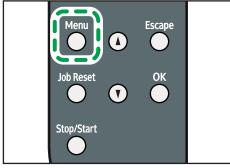
- Wait until the Power indicator turns on.
- The machine may make a noise while initializing. This noise does not indicate a malfunction.

Selecting the Display Language

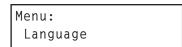
Select a language using the procedure described here. The message for the selected language will appear on the display. If you want to use the display in English, the following procedures are unnecessary.



- The default setting is English.
- 1. Press the [Menu] key.



2. Press the [▲] or [▼] key to display [Language], and then press the [OK] key.



3. Press the $[^{\blacktriangle}]$ or $[^{\blacktriangledown}]$ key to select the language, and then press the [OK] key.

```
Language:
English
```

4. Press the [Menu] key to return to the initial screen.

Test Printing

The following explains the procedure for performing a test print.

Perform the test print to verify the printer is working normally. Test printing checks printer performance only; it does not test the connection to the computer.

- 1. Press the [Menu] key.
- 2. Press the [▲] or [▼] key to display [List/Test Print], and then press the [OK] key.

3. Press the [▲] or [▼] key to display [Config. Page], and then press the [OK] key.

```
List/Test Print:
Config. Page
```

The configuration page will be printed.

4. Press the [Menu] key to return to the initial screen.



- If printing is not normal, check to see if an error message appears on the display.
- If there is an error message, see p.103 "Error & Status Messages on the Control Panel".

Installing Option

This section describes how to install option.

By installing option, you can improve the printer performance and have an expanded variety of features to use. For the specifications of each option, see p.139 "Specifications".

Attaching Paper Feed Unit

⚠ WARNING

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

⚠ WARNING

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

⚠ CAUTION

 Before installing or removing options, always disconnect the power cord plugs from the wall outlet and allow time for the main unit to fully cool. Failing to take these precautions could result in burns.

ACAUTION

• The machine weighs approximately 12.4 kg (27.4 lb.). When moving the machine, use the inset grips on both sides, and lift slowly. The machine will break or cause injury if dropped.

⚠ CAUTION

• Lifting the paper feed unit carelessly or dropping may cause injury.

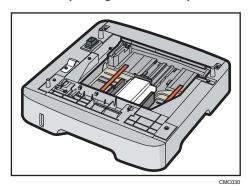
CAUTION

 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.

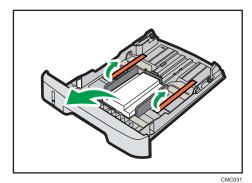
Mportant !

- Tray 1 is required to print using the optional paper feed unit. Without Tray 1, paper jams will occur.
- Do not grip on the tray area when lifting the printer.

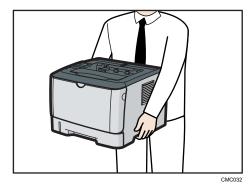
1. Check the package contains Paper Feed Unit.



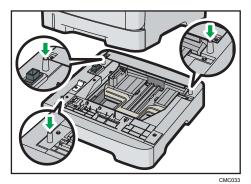
- 2. Turn off the printer's power switch, and then unplug the printer's power cord from the wall outlet.
- 3. Remove the adhesive tape from the optional paper feed unit.



4. Lift the printer using the inset grips on both sides of the printer.



5. There are three upright pins on the optional paper feed unit. Align them with the holes on the underside of the printer, and then carefully lower the printer.



6. After installing the option, print the configuration page to confirm the installation.



- When moving the printer, remove the optional paper feed unit.
- Before using the optional paper feed unit, you can make settings in the printer driver.
- If the new device is listed in the column of configuration options, then it has been properly installed.
- If the optional paper feed unit is not installed properly, reinstall it following this procedure. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

Reference

- For printing the configuration page, see Software Guide.
- For loading paper into the paper tray, see p.67 "Loading Paper".
- When adjusting the printing position, see Software Guide.

3. Connecting the Printer

This chapter explains how to connect network and USB cables.

Network Connection

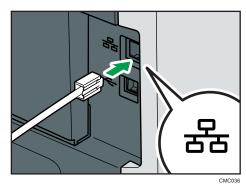
Follow the procedure below to connect the printer to the computer through the network. Prepare a hub, straight-through Ethernet cable, and any other necessary network devices before connecting the 10BASE-T or 100BASE-TX cable to the printer's Ethernet port.

ACAUTION

 Do not connect the Ethernet port of the machine to a network that may supply excess voltage, such as a telephone line. Doing so may result in fire or electric shock.

Important

- The Ethernet cable is not supplied with this printer. Select your cable according to the network environment.
- 1. Connect the Ethernet cable to the Ethernet port.



2. Connect the other end of the cable to the printer's network, such as a hub.

Reference

• For details about network environment settings, see Software Guide.

Reading the LED Lamps



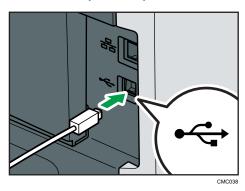
CMF062

- 1. Yellow: flashes when 100BASE-TX/RX or 10BASE-TX/RX is being used.
- 2. Green: comes on when the printer is properly connected to the network.

3

USB Connection

- USB2.0 interface cable is not supplied. Obtain it separately, according to the computer you are using.
- USB connection is possible under Windows XP/Vista/7, Windows Server 2003/2003 R2/2008/2008 R2, and Mac OS X.
- USB connection with Macintosh is only possible via the computer's standard USB port.
- 1. Connect the square-shaped connector of the USB2.0 cable to the USB port.



2. Connect the opposite end's flat connector to devices such as your computer's USB interface.

Reference

• For details about settings for USB connection printing, see Software Guide.

4. Configuration

This chapter explains supported network connections and settings for the IP addresses.

Ethernet Configuration

If connecting the printer to a network using an Ethernet cable, set the necessary settings, depending on the network environment, on the control panel.

Web Image Monitor can be used for the settings related to the IP address.



• The following table shows the control panel settings and their default values. These items appear in the [Network Setting] under [Host Interface] menu.

Setting Name	Value
Ethernet Speed	Auto Select
IPsec	Off
MAC Address	XX-XX-XX-XX-XX * 1
IPv4 Config.	DHCP: Active IP Address: XXX.XXX.XXX.XXX * 1 Subnet Mask: XXX. XXX. XXX. XXX * 1
	Gateway Address: XXX.XXX.XXX.XXX * 1

Setting Name	Value
IPv6 Config.	 IPv6: On DHCP: Off IP Ad. (DHCP): XXXX: XXXX If the DHCP setting is enabled, the IPv6 address obtained
	from a DHCP server is displayed. • Manual Address:
	Manual Address: 0000:0000:0000
	Prefix Length: (0-128) 0
	• Gateway Address: 0000:0000:0000:
	Stateless Ad.:
	 Address 1: XXXX: XXXX: XXXX: XXXX: XXXX: XXXX: XXXX: XXXX
	 Address 2: XXXX: XXXX: XXXX: XXXX: XXXX: XXXX: XXXX: XXXX
	 Address 3: XXXX: XXXX:
	 Address 4: XXXX: XXXX:
	Link-local Ad.: XXXX: XXXX: XXXX: XXXX: XXXX * 1

^{* 1 &}quot;X" indicates a unique address number for your printer.

U Note

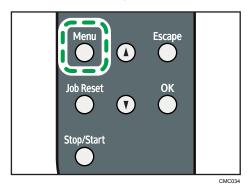
- If [DHCP] is in use, the IP address, subnet mask, and gateway address are all set automatically.
- Each printer has a unique [MAC Address] value.
- Set the Ethernet speed if necessary.

Specifying an IP Address for IPv4 (No DHCP)

Use the following procedure to assign a specific IP address to the printer with IPv4 protocol. This procedure is only necessary if you want to use the printer on a network without DHCP, or want to prevent the printer's IP address from changing.

Before beginning this procedure, make sure you have the IP address, subnet mask, and gateway address that the printer will use.

1. Press the [Menu] key.



2. Press the [▲] or [▼] key to display [Host Interface], and then press the [OK] key.

Menu: Host Interface

Press the [▲] or [▼] key to display [Network Setting], and then press the [OK] key.

Host Interface: Network Setting

4. Press the [▲] or [▼] key to display [IPv4 Config.], and then press the [OK] key.

Network Setting: IPv4 Config.

When [IPv4 Config.] setting is changed, Alert indicator lights up indicating that the machine needs to be restarted. Although the printer can be used normally, the light will not turn off until you restart the machine.

5. Press the [▲] or [▼] key to display [DHCP], and then press the [OK] key.

IPv4 Config.: DHCP

6. Press the $[^{\blacktriangle}]$ or $[^{\blacktriangledown}]$ key to select [Inactive], and then press the [OK] key.

DHCP: Inactive

7. Press the [A] or [V] key to display [IP Address], and then press the [OK] key.

IPv4 Config.: IP Address

8. Press the [▲] or [▼] key to enter the address, and then press the [OK] key.

IP Address:
XXXX.XXXX.XXXX.XXXX

Press the $[\blacktriangle]$ or $[\blacktriangledown]$ key to enter the left most entry field of the address. After entering the left field, press the [OK] key, and then you can enter the next field. After completing to enter in the all field, press the [OK] key.

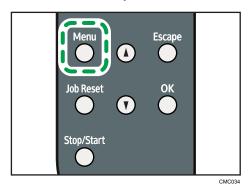
- 9. Use this method to assign Subnet Mask and Gateway Address.
- 10. Press the [Menu] key.
- 11. If you are requested to restart the printer, turn off the printer, and then turn it back on.
- 12. Print a configuration page to confirm the settings made.

Reference

• For details about printing the configuration page using control panel, see p.35 "Test Printing".

Receiving an IP Address for IPv4 Automatically (DHCP)

- When you use this printer protocol in the DHCP environment with IPv4 protocol, select [DHCP] following this procedure.
- When [DHCP] is selected, you cannot make settings for the following items:
 - IP Address
 - Subnet Mask
 - Gateway Address
- Consult your network administrator for information about making network settings.
- 1. Press the [Menu] key.



2. Press the [▲] or [▼] key to display [Host Interface], and then press the [OK] key.

Menu: Host Interface

4

3. Press the [▲] or [▼] key to display [Network Setting], and then press the [OK] key.

Host Interface: Network Setting

4. Press the [▲] or [▼] key to display [IPv4 Config.], and then press the [OK] key.

Network Setting: IPv4 Config.

When [IPv4 Config.] setting is changed, Alert indicator lights up indicating that the machine needs to be restarted. Although the printer can be used normally, the light will not turn off until you restart the machine.

5. Press the [▲] or [▼] key to display [DHCP], and then press the [OK] key.

IPv4 Config.: DHCP

6. Press the [▲] or [▼] key to select [Active], and then press the [OK] key.

DHCP: Active

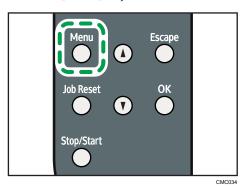
The address will be detected by the printer.

- 7. Press the [Menu] key.
- 8. If you are requested to restart the printer, turn off the printer, and then turn it back on.
- 9. Print a configuration page to confirm the settings made.
- Reference
 - For details about printing the configuration page using control panel, see p.35 "Test Printing".

Specifying an IP Address for IPv6 (No DHCP)

Use the following procedure to assign a specific IP address to the printer with IPv6 protocol. This procedure is only necessary if you want to use the printer on a network without DHCP, or want to prevent the printer's IP address from changing.

Before beginning this procedure, make sure you have the IP address, subnet mask, and gateway address that the printer will use.



2. Press the [▲] or [▼] key to display [Host Interface], and then press the [OK] key.

Menu: Host Interface

Press the [▲] or [▼] key to display [Network Setting], and then press the [OK] key.

Host Interface: Network Setting

4. Press the [▲] or [▼] key to display [IPv6 Config.], and then press the [OK] key.

Network Setting: IPv6 Config.

When [IPv6 Config.] setting is changed, Alert indicator lights up indicating that the machine needs to be restarted. Although the printer can be used normally, the light will not turn off until you restart the machine.

5. Press the [▲] or [▼] key to display [IPv6], and then press the [OK] key.

IPv6 Config.: IPv6

6. Press the $[^{\blacktriangle}]$ or $[^{\blacktriangledown}]$ key to display [On], and then press the [OK] key.

IPv6: On

7. Press the [A] or [V] key to display [DHCP], and then press the [OK] key.

IPv6 Config.: DHCP

8. Press the [▲] or [▼] key to display [Off], and then press the [OK] key.

DHCP: Off

4

Press the [▲] or [▼] key to display [Manual Address], and then press the [OK] key.

IPv6 Config.: Manual Address

10. Press the [▲] [▼] keys to display [Prefix Length], and then press the [OK] key.

Manual Address: Prefix Length

11. Press the [▲] [▼] keys to enter the value, and then press the [OK] key.

Prefix Length: (0 - 128) 0

12. Press the [▲] or [▼] key to display [Manual Address], and then press the [OK] key.

Manual Address: Manual Address

13. Press the [▲] or [▼] key to enter the address, and then press the [OK] key.

Manual Address: XXXX:XXXX:XXXX:

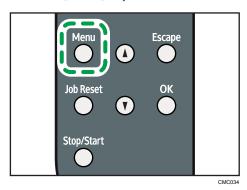
Press the $[\blacktriangle]$ or $[\blacktriangledown]$ key to enter the left most entry field of the address. After entering the left field, press the [OK] key, and then you can enter the next field. After completing to enter in the all field, press the [OK] key.

- 14. Use this method to assign Gateway Address.
- 15. Press the [Menu] key.
- 16. If you are requested to restart the printer, turn off the printer, and then turn it back on.
- 17. Print a configuration page to confirm the settings made.
- Reference
 - For details about printing the configuration page using control panel, see p.35 "Test Printing".

Receiving an IP Address for IPv6 Automatically (DHCP)

Important

- When you use this printer in the DHCP environment with IPv6 protocol, select [DHCP] following this
 procedure.
- Consult your network administrator for information about making network settings.



2. Press the [▲] or [▼] key to display [Host Interface], and then press the [OK] key.

Menu: Host Interface

Press the [▲] or [▼] key to display [Network Setting], and then press the [OK] key.

Host Interface: Network Setting

4. Press the [▲] or [▼] key to display [IPv6 Config.], and then press the [OK] key.

Network Setting: IPv6 Config.

When [IPv6 Config.] setting is changed, Alert indicator lights up indicating that the machine needs to be restarted. Although the printer can be used normally, the light will not turn off until you restart the machine.

5. Press the [▲] or [▼] key to display [IPv6], and then press the [OK] key.

IPv6 Config.: IPv6

6. Press the [▲] or [▼] key to display [On], and then press the [OK] key.

IPv6: On

7. Press the [▲] or [▼] key to display [DHCP], and then press the [OK] key.

IPv6 Config.: DHCP

8. Press the [▲] or [▼] key to select [On], and then press the [OK] key.

DHCP: On

4

The address will be detected by the printer.

- 9. Press the [Menu] key.
- 10. If you are requested to restart the printer, turn off the printer, and then turn it back on.
- 11. Print a configuration page to confirm the settings made.
- Reference
 - For details about printing the configuration page using control panel, see p.35 "Test Printing".

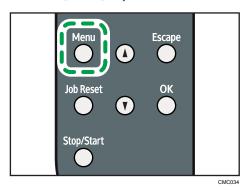
Setting the Ethernet Speed

You can set the speed that the printer will use for Ethernet communication. For normal usage, the default setting [Auto Select] is suitable and does not need to be changed. This setting allows two connected interfaces to automatically determine the optimum speed that they will communicate at.

Router/HUB	Printer				
	[10Mbps Half D.]	[10Mbps Full D.]	[100Mbps Half D.]	[100Mbps Full D.]	[Auto Select]
10Mbps Half Duplex	0	_	_	_	0
10Mbps Full Duplex	_	0	_	_	_
100Mbps Half Duplex	_	_	0	_	0
100Mbps Full Duplex	_	_	_	0	_
auto- negotiation (auto selection)	0	_	0	_	0



- Connection cannot be established if the selected Ethernet speed does not match your network's transmission speed.
- The use of this feature is recommended. To use it, select [Auto Select].



2. Press the $[^{\blacktriangle}]$ or $[^{\blacktriangledown}]$ key to display [Host Interface], and then press the [OK] key.

Menu: Host Interface

3. Press the [▲] or [▼] key to display [Network Setting], and then press the [OK] key.

Host Interface: Network Setting

4. Press the [▲] or [▼] key to display [Ethernet Speed], and then press the [OK] key.

Network Setting: Ethernet Speed

- 5. Press the [▲] or [▼] key to select the Ethernet speed, and then press the [OK] key.
- 6. Press the [Menu] key.
- 7. Print a configuration page to confirm the settings made.

Reference

• For details about printing the configuration page using control panel, see p.35 "Test Printing".

5. Paper and Other Media

This chapter explains the paper sizes and types supported by this printer, and how to load paper into the paper trays.

Paper and Other Medias Supported by This Printer

This section describes the type, size, and weight of paper that can be loaded in each tray. The capacity of each paper tray is also provided.



• All paper must be set vertically, regardless of the paper size.

Tray 1

Туре	Size	Weight	Capacity
Thin Paper	A4	52 to 162 g/m ²	250
Thick Paper 1	B5 JIS	(13.8 to 43.0 lb.)	(80 g/m², 20 lb.)
Thick Paper 2	A5		
Plain Paper	B6 JIS		
Recycled Paper	A6		
Color Paper	Legal (8 ¹ / ₂ " × 14 ")		
Preprinted Paper	Letter $(8^{1}/_{2}$ " × 11 ")		
Prepunched Paper	Half Letter-S ($5^{1}/_{2}$ " × $8^{1}/_{2}$ ")		
Letterhead	Executive $(7^{1}/_{4}" \times 10^{1}/_{2}")$		
Bond Paper	8"×13"		
Cardstock	8 ¹ / ₂ " × 13 "		
Label Paper	Folio (8 ¹ / ₄ " × 13")		
	16K (195 × 267 mm)		
	Custom size:		
	100 to 216 mm in width,		
	148 to 356 mm in length		
	(3.94 to 8.50 inches in width,		
	5.83 to 14.02 inches in length)		

Туре	Size	Weight	Capacity
Thin Paper	A4	60 to 105 g/m ²	250
Thick Paper 1	Letter $(8^{1}/_{2} " \times 11 ")$	(16.0 to 28.0 lb.)	(80 g/m², 20 lb.)
Plain Paper	B5 JIS		
Recycled Paper	A5		
Color Paper	Legal $(8^{1}/_{2}$ " × 14 ")		
Preprinted Paper	Half Letter ($5^{1}/_{2}$ " × $8^{1}/_{2}$ ")		
Prepunched Paper			
Letterhead			

Bypass tray

Туре	Size	Weight	Capacity
Thin Paper	A4	52 to 162 g/m ²	50
Thick Paper 1	B5 JIS	(13.8 to 43.0 lb.)	
Thick Paper 2	A5		
Plain Paper	B6 JIS		
Recycled Paper	A6		
Color Paper	Legal $(8^{1}/_{2}$ " × 14 ")		
Preprinted Paper	Letter $(8^{1}/_{2}" \times 11")$		
Prepunched Paper	Half Letter-S $(5^{1}/_{2}" \times 8^{1}/_{2}")$		
Letterhead	Executive $(7^{1}/_{4} \times 10^{1}/_{2})$		
Bond Paper	16K (195 mm × 267 mm)		
Cardstock	Com 10 $(4^{1}/8" \times 9^{1}/2")$		
Label Paper	Monarch $(3^7/8" \times 7^1/2")$		
OHP	C5 Env (162 × 229 mm)		
Envelope	C6 Env (114 × 162 mm)		
	DL Env (110 × 220 mm)		
	Custom size:		
	90 to 216 mm in width,		
	140 to 356 mm in length		
	(3.54 to 8.50 inches in width,		
	5.51 to 14.02 inches in length)		





• The number of sheets that can be printed in one minute may become lower than normal when printing on Legal size paper.

5

Paper Recommendations

Loading Paper



- Do not use ink-jet printer paper because it may stick to the fusing unit and cause a paper misfeed.
- · Set the paper as described below
 - Tray 1: Print side facing down
 - Paper Feed Unit (Tray 2): Print side facing down
 - Bypass Tray: Print side facing up
- Print quality cannot be guaranteed if paper other than the ones recommended is used. For more
 information about recommended paper, contact your sales or service representative.
- Do not use paper that has already been printed onto by other printers.
- When loading the paper, take care not to touch the surface of the paper.
- Do not use dirty or damaged paper.
- Specify the paper size and type using control panel.
- The remaining paper indicator on the right front side of the paper tray shows approximately how much paper is remaining.

Storing Paper

- Paper should always be stored properly. Improperly stored paper might result in poor print quality, paper misfeeds, or printer damage. Recommendations are as follows:
 - · Avoid storing paper in humid areas.
 - · Avoid exposing paper to direct sunlight.
 - Store on a flat surface.
- Keep paper in the package in which the paper came.

Types of Paper and Other Media

This section provides information about the type of paper supported by this printer and cautions for use.

Setting the paper type

Use the printer driver or control panel to specify the paper type you want to use.

Printer driver

On the printer driver screen, click the [Paper] tab, and then select a paper type under [Paper Type:].

For details about the printer driver, see Help for the driver.

Control Panel

Press the [Menu] key, and then specify the paper type that you want to use by selecting a [Paper Type] at [Paper Input].

For details, see p.78 "Specifying a paper type for Tray 1 and Tray 2" and p.84 "Specifying a paper type for the bypass tray".

Specifications of Paper Types

The following tables describe the types of paper that can be used with this printer.



- Depending on the paper type, the toner may take a while to dry. Before handling, make sure printed sheets have fully dried. Otherwise, the toner may smudge.
- Print quality can be guaranteed only if recommended paper is used. For more information about recommended paper, contact your sales or service representative.

Thin Paper

ltem	Description
Paper thickness	52 to 64 g/m ² (13.8 to 17.0 lb.)
Supported paper tray	Any input tray can be used.
Duplex supported size	A4, Legal (8 $^{1}/_{2}$ " × 14"), Letter (8 $^{1}/_{2}$ " × 11")
Note	Tray 2 only supports paper weighing 60 to 64 g/m² (16.0 to 17.0 lb.).

Plain Paper

ltem	Description
Paper thickness	65 to 99 g/m² (17.1 to 26.5 lb.)
Supported paper tray	Any input tray can be used.
Duplex supported size	A4, Legal (8 $^{1}/_{2}$ " × 14"), Letter (8 $^{1}/_{2}$ " × 11")

Thick Paper 1

ltem	Description
Paper thickness	100 to 130 g/m² (26.6 to 34.6 lb.)
Supported paper tray	Any input tray can be used.
Duplex supported size	A4, Legal (8 $^{1}/_{2}$ " × 14"), Letter (8 $^{1}/_{2}$ " × 11")
Notes	• Tray 2 only supports thick paper weighing 100 to 105 g/m² (26.6 to 28.0 lb).
	 Duplex printing is only possible with thick paper weighing 100 to 105 g/m² (26.6 to 28.0 lb).
	 The number of sheets that can be printed in one minute is approximately half that of plain paper.
	• The number of sheets that can be printed in one minute may become lower than normal when printing on paper of the following sizes: A4, Legal ($8^1/_2$ " × 14"), Letter ($8^1/_2$ " × 11"), 8" × 13", $8^1/_2$ " × 13", Folio ($8^1/_4$ " × 13"), or 16K (195 × 267 mm).

Thick Paper 2

Item	Description
Paper thickness	131 to 162 g/m ² (34.7 to 43.0 lb.)
Supported paper tray	Tray 1 and bypass tray
Duplex supported size	None
Notes	The number of sheets that can be printed in one minute is approximately half that of plain paper.
	• The number of sheets that can be printed in one minute may become lower than normal when printing on paper of the following sizes: A4, Legal (8 ¹ / ₂ " × 14"), Letter (8 ¹ / ₂ " × 11"), 8" × 13", 8 ¹ / ₂ " × 13", Folio (8 ¹ / ₄ " × 13"), or 16K (195 × 267 mm).
	When using 135 g/m² (35.9 lb.) or heavier paper, prints may be output with strong curls.
	 When using 135 g/m² (35.9 lb.) or heavier paper, take prints from the output tray frequently.

5

Recycled Paper

ltem	Description
Paper thickness	75 to 90 g/m 2 (20.0 to 24.0 lb.)
Supported paper tray	Any input tray can be used.
Duplex supported size	A4, Legal (8 $^{1}/_{2}$ " × 14"), Letter (8 $^{1}/_{2}$ " × 11")
Notes	If the paper thickness is outside the specified range, select [Thin Paper], [Thick Paper 1], or [Thick Paper 2].

Color Paper

ltem	Description
Paper thickness	75 to 90 g/m ² (20.0 to 24.0 lb.)
Supported paper tray	Any input tray can be used.
Duplex supported size	A4, Legal (8 $^{1}/_{2}$ " × 14"), Letter (8 $^{1}/_{2}$ " × 11")
Notes	If the paper thickness is outside the specified range, select [Thin Paper], [Thick Paper 1], or [Thick Paper 2].

Preprinted

ltem	Description
Paper thickness	75 to 90 g/m ² (20.0 to 24.0 lb.)
Supported paper tray	Any input tray can be used.
Duplex supported size	A4, Legal (8 $^{1}/_{2}$ " × 14 "), Letter (8 $^{1}/_{2}$ " × 11 ")
Notes	If the paper thickness is outside the specified range, select [Thin Paper], [Thick Paper 1], or [Thick Paper 2].

Prepunched

ltem	Description
Paper thickness	75 to 90 g/m 2 (20.0 to 24.0 lb.)
Supported paper tray	Any input tray can be used.
Duplex supported size	A4, Legal (8 $^{1}/_{2}$ " × 14"), Letter (8 $^{1}/_{2}$ " × 11")

ltem	Description
Notes	If the paper thickness is outside the specified range, select [Thin Paper], [Thick Paper 1], or [Thick Paper 2].

Letterhead

ltem	Description
Paper thickness	100 to 130 g/m ² (26.6 to 34.6 lb.)
Supported paper tray	Any input tray can be used.
Duplex supported size	A4, Legal (8 $^{1}/_{2}$ " × 14"), Letter (8 $^{1}/_{2}$ " × 11")
Notes	• Tray 2 only supports paper weighing 100 to 105 g/m² (26.6 to 28.0 lb).
	 If the paper thickness is outside the specified range, select [Thin Paper], [Thick Paper 1], or [Thick Paper 2].

Bond paper

ltem	Description
Paper thickness	105 to 160 g/m² (28.0 to 42.6 lb.)
Supported paper tray	Tray 1 and bypass tray
Duplex supported size	None
Notes	The number of sheets that can be printed in one minute is approximately half that of plain paper.
	 When using 135 g/m² (35.9 lb.) or heavier paper, prints may be output with strong curls.
	 When using 135 g/m² (35.9 lb.) or heavier paper, take prints from the output tray frequently.
	If the paper thickness is outside the specified range, select [Plain Paper] or [Thick Paper 1].

Cardstock

ltem	Description
Paper thickness	105 to 160 g/m² (28.0 to 42.6 lb.)
Supported paper tray	Tray 1 and bypass tray

ltem	Description
Duplex supported size	None
Notes	The number of sheets that can be printed in one minute is approximately half that of plain paper.
	 When using 135 g/m² (35.9 lb.) or heavier paper, prints may be output with strong curls.
	 When using 135 g/m² (35.9 lb.) or heavier paper, take prints from the output tray frequently.
	 Paper thicker than 160 g/m² cannot be printed onto.

Label paper

ltem	Description
Supported paper tray	Tray 1 and bypass tray
Duplex supported size	None
Notes	The number of sheets that can be printed in one minute is approximately half that of plain paper.
	 Avoid using adhesive label paper on which glue is exposed. Glue may stick to the inner parts of the machine, which can cause paper feed problems, deterioration in print quality, or premature wear of the print cartridge's photo conductor unit.

OHP

ltem	Description
Supported paper tray	Bypass tray
Duplex supported size	None

ltem	Description
Notes	When loading OHP transparencies, take care not to load them upside down. Doing so may cause a malfunction.
	It is recommended to place one sheet at a time.
	 Make sure to fan OHP transparencies every time before printing. Leaving OHP transparencies loaded in the bypass tray may cause them to stick together and result in a misfeed.
	If multiple OHP transparencies are fed at the same time, load them one by one.
	When printing on OHP transparencies, remove the transparencies one by one as they are output.
	 When printing on OHP transparencies that have a print side, load them with the print side over on the bypass tray. Not taking this precaution may cause them to stick to the fusing unit and cause misfeeds.

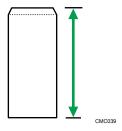
Envelope

ltem	Description
Supported paper tray	Bypass tray
Duplex supported size	None

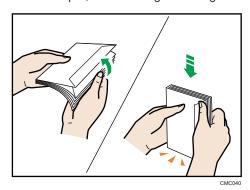
Notes

- The number of envelopes that can be printed in one minute is approximately half that of plain paper.
- Paper can be loaded only up to the lower of the two paper limit marks of the tray.
- If printed envelopes come out badly creased, load the envelopes in the opposite direction. Also, configure the printer driver to rotate the print object 180 degrees. For details about changing the loading orientation, see the printer driver Help.
- Environmental factors can degrade the print quality on both recommended and non-recommended envelopes.
- If envelopes are severely curled after printing, flatten them by bending them back against the curl.
- After printing, envelopes sometimes have creases along their long edges and toner smear on their unprinted sides. Their print images might also be blurred. When printing large, black-solid areas, striping can occur as a result of the envelopes overlapping.
- To correctly specify the length of an envelope whose flap opens along its short edge, be sure to include the open flap when measuring.

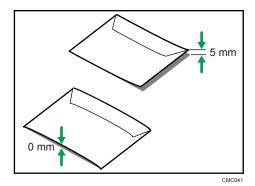




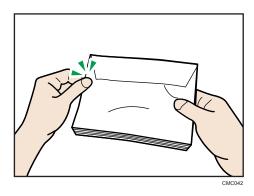
• Fan envelopes, and then align their edges before loading.



- When fanning envelopes, make sure they are not stuck together. If they are stuck together, separate them.
- When fanning envelopes, make sure the envelope flaps are not stuck together. If they are stuck together, separate them.
- Before loading envelopes, flatten them out so that their curl does not exceed that shown in the illustration below.



• If the curl is severe, flatten out the envelopes using your fingers, as shown in the illustration below.



Paper Not Supported by This Printer

Avoid using the following paper as they are not supported by this printer.

- Paper meant for an ink-jet printer
- Bent, folded, or creased paper
- Curled or twisted paper
- Torn paper
- Wrinkled paper
- Damp paper
- Dirty or damaged paper
- Paper that is dry enough to emit static electricity
- Paper that has already been printed onto, except a preprinted letterhead. Malfunctions are
 especially likely when using paper printed on by other than a laser printer (e.g. monochrome and
 color copiers, ink-jet printers, etc.)
- Special paper, such as thermal paper, aluminum foil, carbon paper and conductive paper
- Paper whose weight is heavier or lighter than the specified limitation
- · Paper with windows, holes, perforations, cutouts, or embossing
- · Adhesive label paper on which glue or base paper is exposed
- Paper with clips or staples
- Do not use ink-jet printer paper because it may stick to the fusing unit and cause a paper jam.
- Do not use paper that has already been printed onto by other printers.



- When loading paper, take care not to touch the surface of the paper.
- Even supported types of paper may cause paper jams or malfunctions if the paper is not in good condition.

5

Paper Storage Precautions

Paper should always be stored properly. Improperly stored paper might result in poor print quality, paper jams, or printer damage.

Recommendations are as follows:

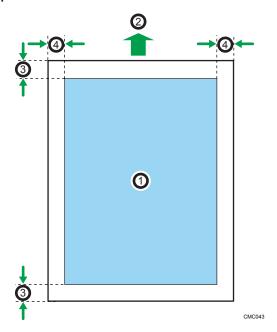
- Avoid storing paper in areas that are excessively cold, hot, humid, or dry.
- Avoid exposing paper to direct sunlight.
- Store on a flat surface.
- Keep paper in its original packaging.

Print Area

The following diagrams show the areas of paper that the machine can print onto.

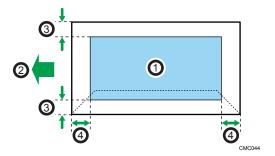
Be sure to set the print margins correctly using the settings of the application in which it was created.

Paper



- 1. Print area
- 2. Feed direction
- 3. Approx. 4.2 mm (0.17 inches)
- 4. Approx. 4.2 mm (0.17 inches)

Envelope



- 1. Print area
- 2. Feed direction
- 3. Approx. 4.2 mm (0.17 inches)
- 4. Approx. 4.2 mm (0.17 inches)



- The print area may vary depending on the paper size, printer language and printer driver settings.
- For better envelope printing, we recommend you set the right, left, top, and bottom print margins to at least 15 mm (0.59 inches) each.

5

Loading Paper

This describes how to load paper into the paper tray and bypass tray.



• Do not pull out the paper tray forcefully. If you do, the tray might fall and cause an injury.

CAUTION

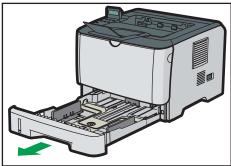
• When loading paper, take care not to trap or injure your fingers.

Loading Paper in Tray 1

The following example explains loading procedure for the standard paper tray (Tray 1).



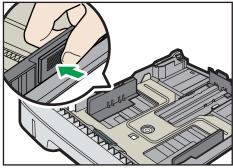
- Before printing on paper other than envelopes, make sure that the levers inside the rear cover are
 pulled up. Leaving the levers lowered can cause print quality problems when printing on paper
 other than envelopes.
- Make sure paper is not stacked above the limit mark inside the tray. Misfeeds might occur.
- After loading paper in the tray, specify the paper type and size using control panel to avoid printing problems. This printer does not detect the paper size automatically.
- Do not mix different types of paper in the same paper tray.
- Do not move the side paper guides forcefully. Doing so can damage the tray.
- Do not move the end paper guide forcefully. Doing so can damage the tray.
- When inserting the tray, make sure it is not slanted. Inserting it at a slant can damage the printer.
- Curled paper may jam. Straighten curled paper before loading.
- 1. Pull out tray 1 carefully with both hands.



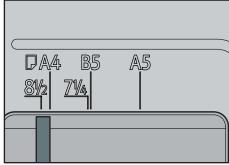
CMC045

Place the tray on a flat surface.

2. Pinch the clip on the side paper guide and slide it to match the standard size.



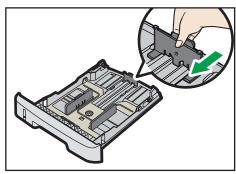
CMC04



MC047

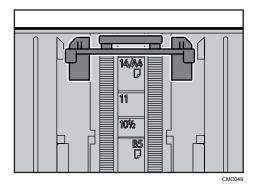
When loading custom size paper, position the paper guide slightly wider than the actual paper size.

3. Pinch the end paper guide and slide it inward to match the standard size.



CMC048

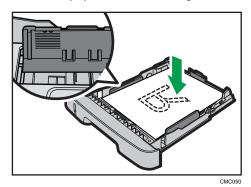




When loading custom size paper, position the paper guide slightly wider than the actual paper size.

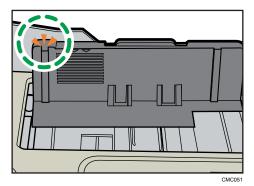
4. Load the new paper stack print side down.

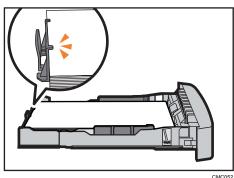
Make sure paper is not stacked higher than the upper limit marked inside the tray.



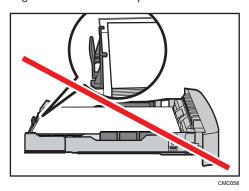
Slide the guides inward, until they are flush against the paper's sides.

Make sure the paper is not stacked higher than the projection on the side paper guides.

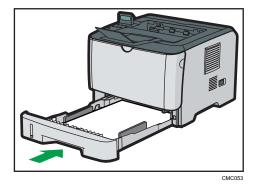




If there is a gap between the paper and the end paper guide, as in the example below, the paper might not feed in correctly.



6. Carefully push Tray 1 straight into the printer.



To avoid paper jams, make sure the tray is securely inserted.



• The remaining paper indicator on the left front side of the paper tray shows approximately how much paper is remaining.

Reference

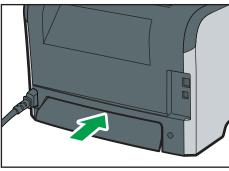
- For details about paper types supported by the printer, see p.56 "Paper Recommendations".
- For details about the paper settings, see Software Guide.

Loading paper longer than A4

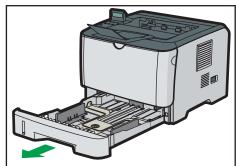
This section explains how to load paper longer than A4 (297 mm) into the printer.

Important

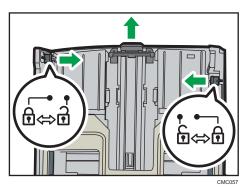
- Make sure paper is not stacked above the limit mark inside the tray. Misfeeds might occur.
- · After loading paper in the tray, specify the paper type and size using the control panel to avoid printing problems. This printer does not detect the paper size automatically.
- Do not mix different types of paper in the same paper tray.
- Do not move the side paper guides forcefully. Doing so can damage the tray.
- Do not move the end paper guide forcefully. Doing so can damage the tray.
- When inserting the tray, make sure it is not slanted. Inserting it at a slant can damage the printer.
- 1. Remove the tray 1 rear cover by pushing its center.



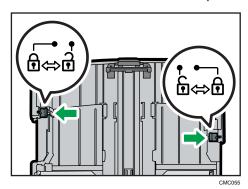
2. Pull out tray 1 carefully with both hands.



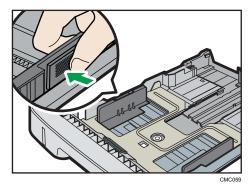
Place the tray on a flat surface.



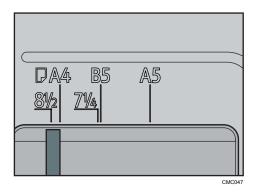
4. Lock the extender in the extended position.



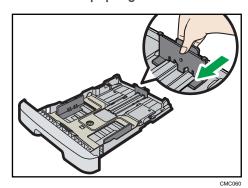
5. Pinch the clip on the side paper guide, and then slide it to match the standard size.

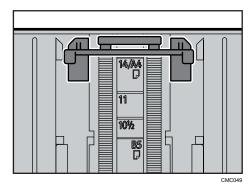


J



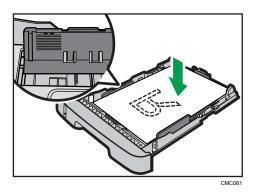
6. Pinch the end paper guide and slide it inward to match the paper size.





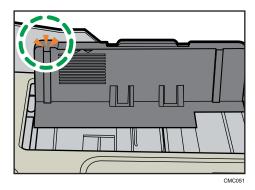
7. Load the new paper stack print side down.

Make sure paper is not stacked higher than the upper limit marked inside the tray.

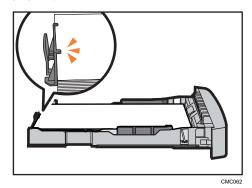


Slide the guides inward until they are flush against the paper's sides.

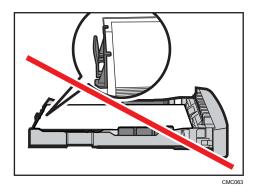
Make sure the paper is not stacked higher than the projection on the side paper guides.



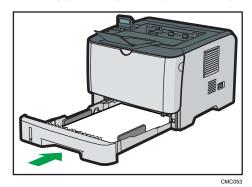
8. Check there are no gaps between the paper and the paper guides; both side and end paper guides.



If there is a gap between the paper and the end paper guide, as in the example below, the paper might not feed in correctly.



9. Carefully push Tray 1 straight into the printer.



To avoid paper jams, make sure the tray is securely inserted.

U Note

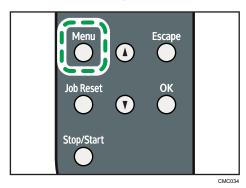
- To reinsert the extender, you might have to push it with moderate force.
- The remaining paper indicator on the left front side of the paper tray shows approximately how much paper is remaining.

Reference

- For details about paper types supported by the printer, see p.56 "Paper Recommendations".
- For details about the paper settings, see Software Guide.

Setting a paper size using the control panel

To load paper whose size cannot be selected automatically, set the paper size on the control panel. Follow the procedure described below to set the paper size.



2. Press the [▲] or [▼] key to display [Paper Input], and then press the [OK] key.

Menu: Paper Input

3. Press the $[^{\blacktriangle}]$ or $[^{\blacktriangledown}]$ key to display [Paper Size], and then press the [OK] key.

Paper Input: Paper Size

4. Press the $[^{\blacktriangle}]$ or $[^{\blacktriangledown}]$ key to display the target paper tray, and then press the [OK] key.

In this example, [Tray 1 Ppr Size] is selected.

Paper Size: Tray 1 Ppr Size

5. Press the [A] or [V] key to display the loaded paper size, and then press the [OK] key.

Tray 1 Ppr Size: A4

6. Press the [Menu] key.



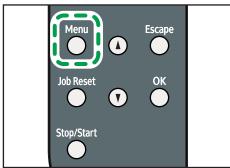
If the [Auto Continue] setting under [System] is enabled, the printer ignores the paper type and size
settings and prints on whatever paper is loaded. Printing stops temporarily when the error is
detected, and restarts automatically after about ten seconds using the settings made on the control
panel.

Specifying custom size paper for Tray 1



 When printing on custom size paper, specify the paper size using the control panel or printer driver.

- Paper sizes between 100 216 mm (3.94 8.50 inch) in width and 148 356 mm (5.83 14.02 inch) in length can be loaded in the tray 1.
- The printer cannot print from applications that do not support custom size paper.
- 1. Press the [Menu] key.



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2. Press the [▲] or [▼] key to display [Paper Input], and then press the [OK] key.

Menu: Paper Input

3. Press the [▲] or [▼] key to display [Paper Size], and then press the [OK] key.

Paper Input: Paper Size

4. Press the $[^{\blacktriangle}]$ or $[^{\blacktriangledown}]$ key to display [Tray 1 Ppr Size], and then press the [OK] key.

Paper Size: Tray 1 Ppr Size

In this example, [Tray 1] is selected.

5. Press the [▲] or [▼] key to display [Custom Size], and then press the [OK] key.

Tray 1 Ppr Size: Custom Size

6. Press the [▲] or [▼] key to select a unit, and then press the [OK] key.

Custom Size:

Press the [▲] or [▼] key to enter the horizontal value, and then press the [OK] key.

Custom Size: Horiz. 216 mm Press the [▲] or [▼] key to enter the vertical value, and then press the [OK] key.

Custom Size: Vert. 356 mm

9. Press the [Menu] key.



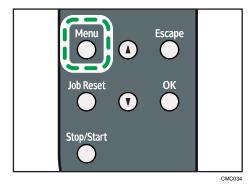
If the [Auto Continue] setting under [System] is enabled, the printer ignores the paper type and size
settings and prints on whatever paper is loaded. Printing stops temporarily when the error is
detected, and restarts automatically after about ten seconds using the settings made on the control
panel.

Specifying a paper type for Tray 1 and Tray 2

Improve printer performance by selecting the optimum paper type for the tray.

You can select from the following paper types:

- Tray 1
 [Thin Paper], [Thick Paper 1], [Thick Paper 2], [Plain Paper], [Recycled Paper], [Color Paper], [Preprinted], [Prepunched], [Letterhead], [Bond Paper], [Cardstock], [Label Paper]
- Tray 2
 [Thin Paper], [Thick Paper 1], [Plain Paper], [Recycled Paper], [Color Paper], [Preprinted], [Prepunched], [Letterhead]
- 1. Press the [Menu] key.



2. Press the [▲] or [▼] key to display [Paper Input], and then press the [OK] key.

Menu: Paper Input

Press the [▲] or [▼] key to display [Paper Type], and then press the [OK] key.

```
Paper Input:
Paper Type
```

4. Press the $[^{\blacktriangle}]$ or $[^{\blacktriangledown}]$ key to select the paper tray, and then press the [OK] key.

In this example, [Tray 1] is selected.

```
Paper Type:
Tray 1
```

5. Press the [▲] or [▼] key to select the paper type, and then press the [OK] key.

```
Tray 1:
Plain Paper
```

6. Press the [Menu] key.

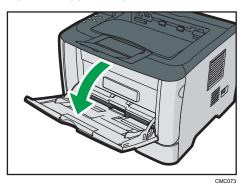


- Duplex printing is not possible for [Thick Paper 2], [Bond Paper], [Cardstock], and [Label Paper].
- If the [Auto Continue] setting under [System] is enabled, the printer ignores the paper type and size settings and prints on whatever paper is loaded. Printing stops temporarily when the error is detected, and restarts automatically after about ten seconds using the settings made on the control panel.

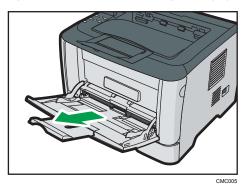
Loading Paper in the Bypass Tray



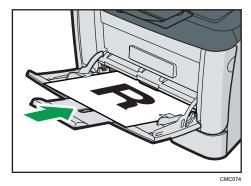
- Before printing on paper other than envelopes, make sure that the levers inside the rear cover are
 pulled up. Leaving the levers lowered can cause print quality problems when printing on paper
 other than envelopes.
- After loading paper in the tray, specify the paper type and size using the control panel to avoid printing problems. This printer does not detect the paper size automatically.
- Load paper with the print side up and in the short-edge feed direction.
- If paper is curled, straighten it before loading, by bending the paper in the opposite direction to the curl, for example.
- Do not load paper while the printer is printing.
- Make sure paper is not stacked above the paper guides inside the bypass tray.



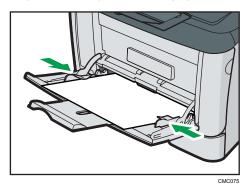
If you load A4 (297 mm) or larger size paper, pull out the bypass tray extension.



2. Slide the side guides outward, then load paper with the print side up, and push in until it stops against the printer.



3. Adjust the side guides to the paper width.



UNote

• After loading paper in the tray, specify the paper type and size using the control panel. Also, specify the printer driver's paper setting accordingly before printing.

Reference

- For details about supported types of paper, see p.53 "Paper and Other Media".
- For details about the paper settings, see p.75 "Setting a paper size using the control panel" and p. 84 "Specifying a paper type for the bypass tray".

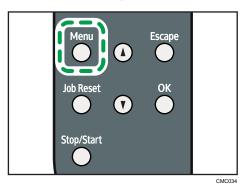
Specifying standard size paper for the bypass tray

This describes how to load standard size paper into the bypass tray.

Mportant (

- When you specify the bypass tray as the input tray on the printer driver and perform printing, if you
 set [Bypass Priority] to [Any Size/Type] under [Paper Input] on the control panel, the printer
 ignores the paper type and size settings made on the control panel. Printing is performed with the
 settings made on the printer driver.
- If you set [Bypass Priority] to [Machine Setting] under [Paper Input], paper size settings made on the printer driver must match those made on the control panel. If they do not match, an error message appears and printing stops if [Auto Continue] is not set to [On] under [System].

1. Press the [Menu] key.



2. Press the [▲] or [▼] key to display [Paper Input], and then press the [OK] key.

Menu: Paper Input

3. Press the $[^{\blacktriangle}]$ or $[^{\blacktriangledown}]$ key to display [Paper Size], and then press the [OK] key.

Paper Input: Paper Size

4. Press the [▲] or [▼] key to display [Bypass Ppr Size], and then press the [OK] key.

Paper Size: Bypass Ppr Size

Press the [▲] or [▼] key to select the paper size you want to set, and then press the [OK] key.

Bypass Ppr Size: A4

6. Press the [Menu] key.



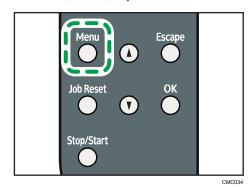
• The number of pages that can be loaded in the bypass tray differs depending on the paper type.

Specifying custom size paper for the bypass tray



When you specify a custom size paper and specify the bypass tray as the input tray on the printer
driver, and perform printing with [Bypass Priority] set to [Any Custom S/T] under [Paper Input] on
the control panel, the printer ignores the paper type and size settings made on the control panel.
 Printing is performed with the settings made on the printer driver.

- If you set [Bypass Priority] to [Machine Setting] under [Paper Input], paper size settings made on the printer driver must match those made on the control panel. If they do not match, an error message appears and printing stops if [Auto Continue] is not set to [On] under [System].
- When loading custom size or special paper, specify the paper size using the control panel or printer driver.
- You cannot print on custom size paper with an application that does not support the custom size setting.
- Paper sizes between 90 216 mm (3.54 8.50 inches) in width and 140 356 mm (5.51 14.02 inches) in length can be loaded in the bypass tray.
- 1. Press the [Menu] key.



2. Press the [▲] or [▼] key to display [Paper Input], and then press the [OK] key.

Menu: Paper Input

3. Press the [▲] or [▼] key to display [Paper Size], and then press the [OK] key.

Paper Input: Paper Size

4. Press the [▲] or [▼] key to display [Bypass Ppr Size], and then press the [OK] key.

Paper Size: Bypass Ppr Size

5. Press the [▲] or [▼] key to display [Custom Size], and then press the [OK] key.

Bypass Ppr Size: Custom Size

6. Press the [▲] or [▼] key to select a unit, and then press the [OK] key.

Custom Size:

7. Press the [▲] or [▼] key to enter the horizontal value, and then press the [OK] key.

Custom Size: Horiz. 216 mm

Press the [▲] or [▼] key to enter the vertical value, and then press the [OK] key.

Custom Size: Vert. 356 mm

9. Press the [Menu] key.

Reference

• For details about the printer driver, see the printer driver Help.

Specifying a paper type for the bypass tray

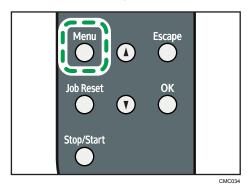
By selecting the paper type you want to load, the printer performs better. You can select from the following paper types:

• [Thin Paper], [Thick Paper 1], [Thick Paper 2], [Plain Paper], [Recycled Paper], [Color Paper], [Preprinted], [Prepunched], [Letterhead], [Bond Paper], [Cardstock], [Label Paper], [OHP], [Envelope]

Important

- When you specify the bypass tray as the input tray on the printer driver, and perform printing, if
 you set [Bypass Priority] to [Any Size/Type] under [Paper Input] on the control panel, the printer
 ignores the paper type and size settings made on the control panel. Printing is performed with the
 settings made on the printer driver.
- When you specify a custom size paper and specify the bypass tray as the input tray on the printer
 driver, and perform printing with [Bypass Priority] set to [Any Custom S/T] under [Paper Input] on
 the control panel, the printer ignores the paper type and size settings made on the control panel.
 Printing is performed with the settings made on the printer driver.
- If you set [Bypass Priority] to [Machine Setting] under [Paper Input], paper type settings made on the printer driver must match those made on the control panel. If they do not match, an error message appears and printing stops if [Auto Continue] is not set to [On] under [System].

1. Press the [Menu] key.



2. Press the [▲] or [▼] key to display [Paper Input], and then press the [OK] key.

Menu: Paper Input

3. Press the [▲] or [▼] key to display [Paper Type], and then press the [OK] key.

Paper Input: Paper Type

4. Press the [▲] or [▼] key to display [Bypass Tray], and then press the [OK] key.

Paper Type: Bypass Tray

5. Press the [A] or [V] key to select the paper type, and then press the [OK] key.

Bypass Tray: Plain Paper

6. Press the [Menu] key.

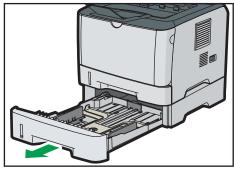
Loading Paper in Tray 2

The following example explains the loading procedure for tray 2.



- Before printing on paper other than envelopes, make sure that the levers inside the rear cover are
 pulled up. Leaving the levers lowered can cause print quality problems when printing on paper
 other than envelopes.
- Make sure paper is not stacked above the limit mark inside the tray. Misfeeds might occur.
- After loading paper in the tray, specify the paper type and size using the control panel to avoid printing problems. This printer does not detect the paper size automatically.

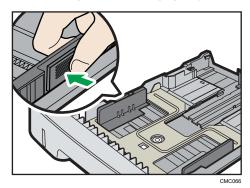
- Do not mix different types of paper in the same paper tray.
- Do not move the side paper guides forcefully. Doing so can damage the tray.
- Do not move the end paper guide forcefully. Doing so can damage the tray.
- When inserting the tray, make sure it is not slanted. Inserting it at a slant can damage the printer.
- 1. Pull out tray 2 carefully with both hands.



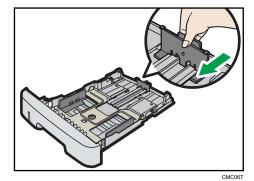
CMC06

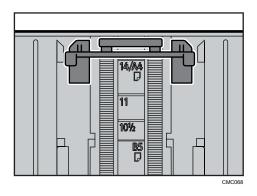
Place the tray on a flat surface.

2. Pinch the clips on the side paper guide, and then adjust the guide to the paper size.



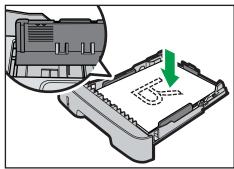
3. Pinch the clip on the end paper guide, and slide it inward to match the paper size.





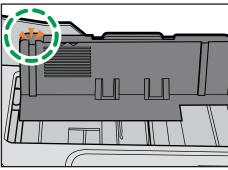
4. Load the new paper stack print side down.

Make sure paper is not stacked higher than the upper limit marked inside the tray.

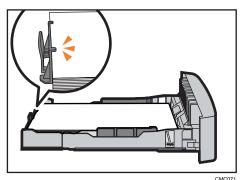


CMC069

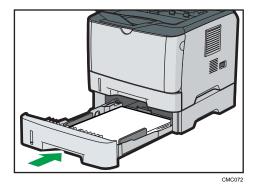
Make sure the paper is not stacked higher than the projection on the side paper guides.



CMC070



6. Carefully push tray 2 straight into the printer.



To avoid paper jams, make sure the tray is securely inserted.



 The remaining paper indicator on the left front side of the paper tray shows approximately how much paper is remaining.

Reference

- For details about paper types supported by the printer, see p.53 "Paper and Other Media".
- For details about the paper settings, see p.75 "Setting a paper size using the control panel" and p.78 "Specifying a paper type for Tray 1 and Tray 2".

Loading Envelopes in Bypass Tray

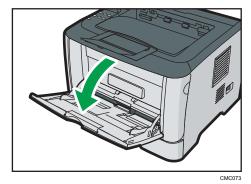
The following explains how to load envelopes into Bypass Tray.

CAUTION

 The inside of this machine becomes very hot. Do not touch parts labelled "▲" (indicating a hot surface).

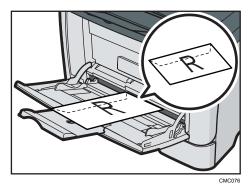
Important

- Before printing on envelopes, make sure to lower the levers on the printer rear, inside the rear
 cover, to avoid envelopes coming out creased. Also, pull up the levers back to their original
 positions after printing. Leaving the levers lowered can cause print quality problems when printing
 on paper other than envelopes.
- Avoid using self-adhesive envelopes. They may cause printer malfunctions.
- Check there is no air in the envelopes before loading.
- Envelopes whose flaps are open must be printed with the flaps open, and envelopes whose flaps are closed must be printed with the flaps closed.
- Load only one size and type of envelope at a time.
- Before loading envelopes, flatten their leading edges (the edge going into the printer) by running a
 pencil or ruler across them.
- Some kinds of envelope might cause misfeeds, wrinkles or print poorly.
- Print quality on envelopes may be uneven if parts of an envelope have different thicknesses. Print
 one or two envelopes to check print quality.
- In a hot and humid environment, the envelope might be output creased or improper printing quality.
- After loading envelopes in the tray, specify the paper type and size using the control panel to avoid printing problems. This printer does not detect the paper size automatically.
- 1. Open the bypass tray.

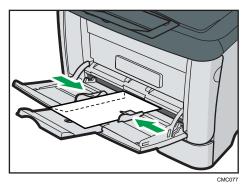


2. Slide the side guides outward, then load envelopes with the print side up, and push in until it stops against the printer.

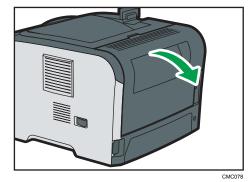
Envelopes whose flaps are open must be printed with the flaps open, and envelopes whose flaps are closed must be printed with the flaps closed. Before loading envelopes, make sure they are as flat as possible.



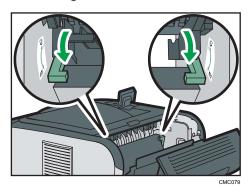
3. Adjust the side guides to the envelope width.



4. Open the rear cover.

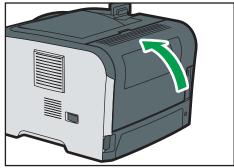


5. Lower the green levers on both sides.



Make sure to raise the levers back to their original positions after printing.

6. Close the rear cover.



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U Note

- After loading envelopes in the tray, specify the paper type and size using the control panel. Also, specify the printer driver's paper setting accordingly before printing.
- Be sure to load envelopes so that their flaps are on the left. If you do not, the envelopes will become creased.
- If printed envelopes come out badly creased, load the envelopes in the opposite direction, and then rotate the print object by 180 degrees using the printer driver before printing. For details, see the printer driver Help.

Reference

- For details about paper types supported by the printer, see p.53 "Paper and Other Media".
- For details about the paper settings, see p.75 "Setting a paper size using the control panel" and p.84 "Specifying a paper type for the bypass tray".

6. Replacing Consumables

This chapter explains how to replace consumables.

Replacing the Print Cartridge

∴ WARNING

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

MARNING

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.

MARNING

- The following explains the warning messages on the plastic bag used in this product's packaging.
 - 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.

ACAUTION

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.

ACAUTION

 Store toner (new or used), toner containers, and components that have been in contact with toner out of reach of children.

ACAUTION

 Store toner (new or used), toner containers, and components that have been in contact with toner out of reach of children.

ACAUTION

 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

 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

 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

 The inside of this machine becomes very hot. Do not touch parts labelled "▲" (indicating a hot surface).

Mportant !

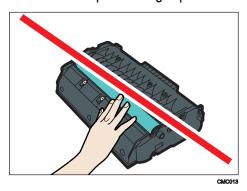
- Store print cartridge in a cool dark place.
- · Actual printable numbers vary depending on image volume and density, number of pages printed at a time, paper type and size, and environmental conditions such as temperature and humidity. Toner quality degrades over time. Early replacement of the print cartridge might be necessary. Therefore, we recommend you always keep a new print cartridge ready.
- · For good print 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.

When to replace the print cartridge

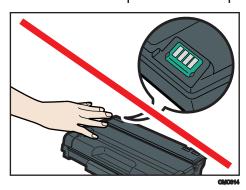
If the Alert indicator on the control panel lights up and the following message appears on the display, replace the print cartridge:

"Replace Print Cartridge"

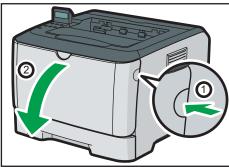
- Do not allow paper clips, staples, or other small metallic objects to fall inside the machine.
- Do not expose the print cartridge without its cover to direct sunlight for a long time.
- Do not touch the print cartridge's photo conductor unit.



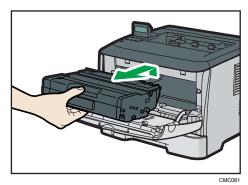
• Do not touch the ID chip on the side of the print cartridge as indicated in the illustration below.



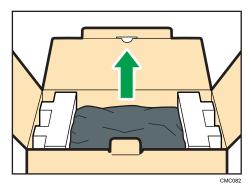
- If toner runs out, you cannot print until the black cartridge is replaced.
- 1. If paper is loaded in the bypass tray, remove the paper and close the bypass tray.
- 2. Push the side button to open the front cover, and then carefully lower it.



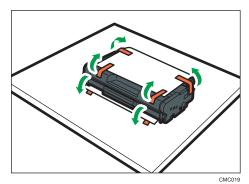
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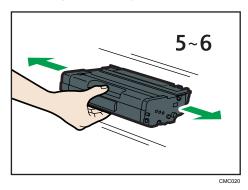
- Do not shake the removed print cartridge. Doing so can cause remaining toner to leak.
- Place the old print cartridge on paper or similar material to avoid dirtying your workspace.
- 4. Take the new print cartridge out of the box, and then take it out of the plastic bag.



5. Place the print cartridge on a flat surface, and then remove the protection sheet.

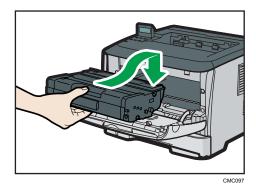


6. Hold the print cartridge and shake it from side to side five or six times.



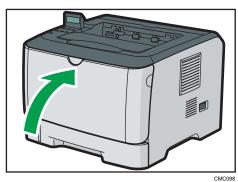
Even distribution of toner within the bottle improves print quality.

7. Slide the print cartridge in horizontally. When the cartridge can go no further, raise it slightly and push it fully in. Then push down on the cartridge until it clicks into place.

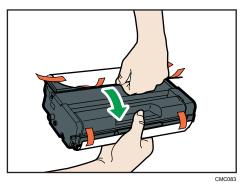


8. Carefully push up the front cover until it closes. Be careful not to you're your fingers.

After closing the front cover, wait until the initial screen is displayed.



9. Put the protective sheet you removed in step 5 on the old print cartridge. Then, put the old print cartridge into the bag, and then put it into the box.





- Make sure to cover the old print cartridge with the protective cover for recycling and environmental purposes.
- Comply with the print cartridge Recycling Program, whereby used print cartridges are collected for processing. For details, ask your sales or service representative.

7. Cleaning the Printer

This chapter explains how to clean the printer.

Cautions to Take When Cleaning

∴ 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.

ACAUTION

• The inside of this machine becomes very hot. Do not touch the parts labeled "A" (indicating a hot surface).

ACAUTION

• 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.

Clean the printer periodically to maintain fine printing.

Dry wipe the exterior with a soft cloth. If dry wiping is not enough, wipe with a soft, wet cloth that is wrung out well. If you still cannot remove the stain or grime, use a neutral detergent, and then wipe over with a well-wrung wet cloth, dry wipe, and let it dry.

- To avoid deformation, discoloration, or cracking, do not use volatile chemicals, such as benzine and thinner, or spray insecticide on the printer.
- If there is dust or grime inside the printer, wipe with a clean, dry cloth.
- You must disconnect the plug from the wall outlet at least once a year. Clean away any dust and grime from the plug and outlet before reconnecting. Accumulated dust and grime pose a fire hazard.
- Do not allow paper clips, staples, or other small metallic objects to fall inside the machine.

Cleaning the Friction Pad and the Paper Feed Roller

If the friction pad or paper feed roller is dirty, a multi-feed or misfeed might occur. In this case, clean the friction pad and paper feed roller as follows:

ACAUTION

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.

ACAUTION

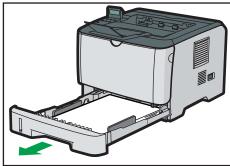
• Do not pull out the paper tray forcefully. If you do, the tray might fall and cause an injury.

ACAUTION

• Do not put your hands inside the machine when the input tray is removed. Some internal parts become hot and are a burn hazard.

☆ Important

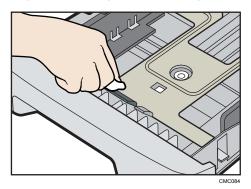
- Do not use chemical cleaner or organic solvent such as thinner or benzine.
- 1. Turn off the power.
- 2. Unplug the power cord from the wall outlet. Remove all the cables from the printer.
- 3. Pull out tray 1 carefully with both hands.



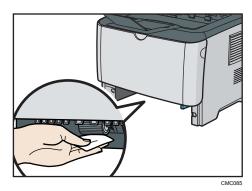
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Place the tray on a flat surface. When there is paper in the tray, remove paper.

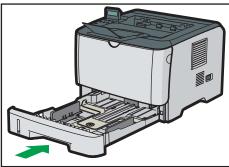
4. Wipe the friction pad with a damp cloth.



5. Wipe the rubber part of the roller with a soft damp cloth. After that, wipe it with a dry cloth to remove moisture.



6. Reload the removed paper into the tray, and then push the tray carefully into the printer until it clicks into place.



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- 7. Insert the plug of the power cord into the wall socket securely. Connect all the interface cables that were removed..
- 8. Turn on the power.

U Note

- If jams or multi-sheet feeds occur after cleaning the friction pad, contact your sales or service representative.
- If the optional tray 2 is installed, clean its friction pad and paper feed roller in the same way as you did for tray 1.

8. Troubleshooting

This chapter provides solutions to common problems and it also explains how to correct unwanted print results

Error & Status Messages on the Control Panel

This section explains what the messages that appear on the control panel mean and what to do when a particular message appears.

Status messages

Message	Explanation	Recommended Action
Calibrating	The printer is calibrating.	Wait a while.
Cancellng Job	The printer is cancelling a print job.	Wait a while.
Cooling Down	The printer is cooling down.	Wait a while.
Offline	The printer is Offline.	To start printing, switch the printer to online by pressing the [Stop/Start] key on the control panel.
Please wait	The printer is waiting for the next data to print.	Wait a while.
Printing	The printer is printing.	Wait a while.
Processing	The printer is printing.	Wait a while.
Ready	This is the default ready message.	The printer is ready for use. No action is required.
Warming up	The printer is warming up or toner is being supplied.	Wait until "Ready" appears on the display.

Messages

Message	Explanation	Recommended Action
Cover Open	The front cover is open.	Open and then close the front
		cover.

Message	Explanation	Recommended Action	
Controller FW download failed	Controller FW could not be downloaded.	Turn off the main power, turn it back on, and then download the controller FW again. If the download fails again, contact your sales or service representative.	
Incor Prt Cart	Irregular toner is set.	Replace the toner to appropriate one.	
Internal Misfeed	There is a paper jam in the fusing unit.	Remove the misfed paper. See p.121 "Removing Misfed Paper".	
Load Paper #	The indicated tray # (1, 2, bypass) is out of paper.	Load paper into the indicated paper tray. See p.67 "Loading Paper".	
Memory Overflow	This error occurs when FW memory is not enough to save the printing page.	Reduce the size of the data, and then try the operation again.	
Misfeed: Tray 1	There is a paper jam in Tray 1.	Remove the misfed paper.	
Misfeed: Tray 2	There is a paper jam in Tray 2.	See p.121 "Removing Misfed Paper".	
Misfd: BypssTray	There is a paper jam in Bypass tray.		
Misfd: Dupl Unit	There is a paper jam in the duplex unit.		
Misfd: Stnd Tray	There is a paper jam in the paper exit area.		
Replace Fusing Unit	It is time to replace the fusing unit.	Contact your sales or service representative.	
Replace Ppr. Feed Roller	It is time to replace the paper feed roller.	Contact your sales or service representative.	

Message	Explanation	Recommended Action
Replace Print Cartridge	The printer is out of toner.	Replace the print cartridge. See, p.93 "Replacing the Print Cartridge".
Replace soon Print Cartridge	The printer is almost out of toner .	Prepare a new print cartridge.
Replace Transfer Roller	It is time to replace the transfer roller.	Contact your sales or service representative.
Reset Tray 1	The indicated paper input tray 1 is not installed correctly, or not installed.	Install the indicated paper input tray 1 correctly.
Service call SCXXX	There is a problem with the printer's controller.	Turn off the main power, and then turn it on again.
		If the error occurs again, contact your sales or service representative.
Set Er: Prt Cart	The indicated print cartridge is not set correctly, or not set.	Set the indicated print cartridge correctly.
	The error message appears even though the print cartridge is set correctly.	Using a dry cloth, carefully wipe the interface area on the print cartridge surface.
Size Msmtch: # Start/JobReset	The paper size setting in the tray # (1, 2, bypass) differs from that of actual paper siOze in the tray.	Load paper of the selected size in the tray, and then press the [Stop/Start] key to continue printing.
		Press the [Job Reset] key to cancel printing.
TypeMsmtch: # Start/JobReset	The paper type setting in the tray # (1, 2, bypass) differs from that of actual paper type in the tray.	Load paper of the selected type in the tray, and then press the [Stop/Start] key to continue printing.
		Press the [Job Reset] key to cancel printing.

Panel Indicator

The following table explains the meaning of the various indicator patterns that the printer alerts to users about its conditions.

Indicator patterns	Cause
The Alert indicator is lit.	The printer cannot be used normally. Check the error on the control panel.
The Alert indicator is flashing in yellow.	Toner is nearly empty.
The Data In indicator is flashing.	The printer is receiving print data from a computer.
The Data In indicator is lit.	There is data to be printed.
The Power indicator is lit.	The printer is ready for use.

Printer Does Not Print

Possible Cause	Solutions
Is the power on?	Confirm that the cable is securely plugged into the power outlet and the printer. Turn on the power.
Does the Alert indicator stay red?	If so, check the error message on the control panel and take the required action.
Is paper loaded?	Load paper into the paper tray or the bypass tray. See p.67 "Loading Paper".
Can you print a configuration page?	If you cannot print a configuration page, it probably indicates a printer malfunction. Contact your sales or service representative.
	For details about printing the configuration page using control panel, see p.35 "Test Printing".
Is the interface cable connected securely to the printer and the computer?	Connect the interface cable securely. If it has a fastener, fasten it securely as well.
Are you using the correct interface cable?	The type of interface cable you should use depends on the computer you use. Be sure to use the correct one.
	If the cable is damaged or worn, replace it with a new one. See p.139 "Specifications".
Is the Data In indicator blinking or lit after starting the print job?	If not blinking or lit, the data is not being sent to the printer. If the printer is connected to the computer using the interface cable
	Check the port connection setting is correct. For details about checking the port connection, see p.108 "When the Printer is Directly Connected to a Computer via USB Cable".
	Network Connection
	Contact your network administrator.

If printing still does not start, contact your sales or service representative. Consult with the store where the printer was purchased for information about the location of sales or service representatives.

When the Printer is Directly Connected to a Computer via USB Cable

Windows

When the printer is directly connected via a USB cable to a computer but the Data In indicator does not flash or light up, use the following method to check the port connection:

- For a USB port connection, port USB00 (n) *1 should be set.
 - *1 (n) is the number of printers connected.

Windows XP Professional and Windows Server 2003/2003 R2

- 1. Access the [Printers and Faxes] window from [Start] on the taskbar.
- 2. Click to select the icon of the printer. Next, on the [File] menu, click [Properties].
- 3. Click the [Ports] tab.
- 4. Check the [Print to the following port(s).] box to confirm that the correct port is selected.

If the port (such as LPT1) is not correct, reinstall the driver.

■ Reference

• For details about installation and port settings, see Software Guide.

Windows XP Home Edition

- 1. Access the [Control Panel] window from [Start] on the taskbar.
- 2. Click [Printers and Other Hardware].
- 3. Click [Printers and Faxes].
- 4. Click to select the icon of the printer. Next, on the [File] menu, click [Properties].
- 5. Click the [Port] tab.
- Check the [Print to the following port(s).] box to confirm that the correct port is selected.

If the port (such as LPT1) is not correct, reinstall the driver.

Reference

• For details about installation and port settings, see Software Guide.

Windows Vista and Windows Server 2008

- Click [Control Panel] on the [Start] menu, and then click [Printer] in the "Hardware and Sound".
- 2. Right-click to select the icon of the printer, and then click [Properties]. [Properties].
- 3. Click the [Ports] tab.

4. Check the [Print to the following port(s).] box to confirm that the correct port is selected.

If the port (such as LPT1) is not correct, reinstall the driver.

Reference

• For details about installation and port settings, see Software Guide.

Windows 7 and Windows Server 2008 R2

- 1. Click [Start] button, and then click [Devices and Printers].
- 2. Right-click the printer icon you want to check, and then click [Printer Properties].
- 3. Click the [Ports] tab.
- 4. Check the [Print to the following port(s)] list to confirm the correct port is selected.

Reference

• For details about installation and port settings, see Software Guide.

Mac OS X

When the printer is connected to Mac OS X and the Data In indicator does not flash or light up, try the following procedures to check the port connection.

- Use [About This Mac] to check the USB information.
- Use the printer browser to check if the printer is displayed.

Using [About This Mac]

- 1. From the Apple menu, select [About This Mac].
- 2. Click [More Info...].
- 3. Under [Contents], for [Hardware], Select [USB].

Using the printer browser - Mac OS X 10.4 or earlier

- 1. On the [Go] menu, click [Utilities].
- 2. Double-click [Printer Setup Utility].
- 3. Click [Add].

Check that the printer appears in the browser. If it does not, reinstall the driver.

Using the printer browser - Mac OS X 10.5 or later

- 1. From the Apple menu, select [System Preferences...].
- 2. Under "Hardware", click [Print & Fax].
- 3. Click [+], and then click [Default].

4. Select the name of the printer you are using, and then click [Add].

Check that the printer appears in the browser. If it does not, reinstall the driver.

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Other Printing Problems

Status	Possible Causes, Descriptions, and Solutions
Toner smears appear on the print side of the page.	 The paper setting may not be correct. For example, although you are using thick paper, the setting for thick paper may not be set.
	Check the printer driver's paper settings.
	See the printer driver Help.
	 Confirm that the paper is not curled or bent. Envelopes can be curled easily. Flatten paper before loading.
	See p.53 "Paper and Other Media".

Status	Possible Causes, Descriptions, and Solutions
Paper jams occur frequently.	 Number of paper set in the tray exceeds the limit. Confirm that the top of the stack is not higher than the limit mark inside the tray. See p.67 "Loading Paper".
	There may be a gap between the front end paper guide and the paper, or between the paper guide both side and the paper in the paper tray. Make sure there are no gaps.
	See p.67 "Loading Paper".
	Paper is either too thick or too thin.
	See p.53 "Paper and Other Media".
	 Paper is bent or wrinkled. Use paper that have no bents or wrinkles.
	See p.53 "Paper and Other Media".
	Paper has already been printed on.
	See p.53 "Paper and Other Media".
	Paper is damp. Use paper that has been stored properly.
	See p.53 "Paper and Other Media".
	 The friction pad or paper feed roller may be dirty. Clean the pertinent section as necessary.
	See p.100 "Cleaning the Friction Pad and the Paper Feed Roller".
	The paper setting may not be correct. For example, although you are using thick paper, the setting for thick paper may not be set.
	Check the printer driver's paper settings.
	See the printer driver Help.
Prints fall behind the machine when they are output.	Raise the appropriate stop fence (forward fence for A4, rear fence for legal size prints).
	See, p.15 "Exterior: Front View".

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Status	Possible Causes, Descriptions, and Solutions
Prints do not stack properly.	 Paper is damp. Use paper that has been stored properly. See p.53 "Paper and Other Media". Pull out the extender. Perform the following operation. 1. Press the [Menu] key on the control panel, select
	 [Maintenance], and then press the [OK] key. 2. Press the [▲] or [▼] key and select [Low Humid. Mode], and then press the [OK] key. 3. Press the [▲] or [▼] key, and then select [On].
	Note that the first print takes longer than subsequent prints to complete.
	See the printer driver help.
	 Raise the appropriate stop fence (forward fence for A4, rear fence for legal size prints).
	See, p.15 "Exterior: Front View".

Status	Possible Causes, Descriptions, and Solutions
Multiple pages are fed at once.	 There may be a gap between the front end paper guide and paper, or between the paper guide both side and paper in the paper tray. Make sure there are no gaps.
	See p.67 "Loading Paper".
	Paper is either too thick or too thin.
	See p.53 "Paper and Other Media".
	Paper has already been printed on.
	See p.53 "Paper and Other Media".
	 Number of paper set in the tray exceeds the limit. Confirm that the top of the stack is not higher than the limit mark inside the tray.
	See p.53 "Paper and Other Media".
	Paper is static. Use paper that has been stored properly.
	See p.53 "Paper and Other Media".
	 The friction pad or paper feed roller may be dirty. Clean the pertinent section as necessary.
	See p.100 "Cleaning the Friction Pad and the Paper Feed Roller".
	Check that paper has not been added while there is still some left in the tray.
	Only add paper when there is none left in the tray.
	Fan the paper before loading.
Paper gets wrinkles.	Paper is damp. Use paper that has been stored properly. See p.53 "Paper and Other Media".
	Paper is too thin.
	See p.53 "Paper and Other Media".
	There may be a gap between the front end paper guide and
	the paper, or between the paper guide both side and the paper in the paper tray. Make sure there are no gaps.
	See p.67 "Loading Paper".

Status	Possible Causes, Descriptions, and Solutions
Images are not printed in the right position	Adjust the front end paper guide and both side paper guides to match the paper size. See p.67 "Loading Paper".
Images are printed diagonally to the pages	Adjust the front end paper guide and both side paper guides to match the paper size. See p.67 "Loading Paper".
Horizontal lines appear on the printed paper.	 Impact can cause lines to appear on printed paper and other malfunctions. Protect the printer from impact at all times, especially while it is printing. If lines appear on prints, turn the printer off, wait a few moments, and then turn it back on again. Then, perform the print job again.
Paper is not fed from the selected tray.	Make sure that the settings made on the printer driver match the settings made on the control panel.
A printed image is different from the image on the computer's display.	When you use some functions, such as enlargement and reduction, the layout of the image might be different from that displayed in the computer display.

Status	Possible Causes, Descriptions, and Solutions
It takes too much time to resume printing.	 The data is so large or complex that it takes time to process it. If the Data In indicator is blinking, the data is being processed. Just wait until it resumes.
	The printer was in the Energy Saver mode. To resume from the Energy Saver mode, the printer has to warm up, and this takes time until printing starts. To disable Energy Saver mode:
	 Press the [Menu] key on the control panel, select [System], and then press the [OK] key.
	 Press the [▲] or [▼] key and select [Energy Saver 2], and then press the [OK] key.
	 Press the [▲] or [▼] key, and then select [Off].
It takes too much time to complete the print job.	Photographs and other data intensive pages take a long time for the printer to process, so simply wait when printing such data.
	Changing the settings with printer driver may help to speed up printing.
	See the printer driver Help.
	The data is so large or complex that takes time to process.
	If the Data In indicator is blinking, the data is being processed. Just wait until it resumes.
	If the Data In indicator on the control panel is flashing, the printer is warming up. Wait for a while.
Images are cut off, or excess pages are printed.	If you are using paper smaller than the paper 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 lower the resolution for making prints.

Status	Possible Causes, Descriptions, and Solutions
The whole printout is blurred.	Paper is damp. Use paper that has been stored properly.
	See p.53 "Paper and Other Media".
	Perform the following operation.
	 Press the [Menu] key on the control panel, select [Maintenance], and then press the [OK] key.
	 Press the [▲] or [▼] key and select [Low Humid. Mode], and then press the [OK] key.
	 Press the [▲] or [▼] key, and then select [On].
	If the Alert indicator on the control panel lights up and the following message appears on the display, replace the print cartridge: [Replace Print Cartridge]
	See p.93 "Replacing the Print Cartridge".
	 Condensation may have collected. If rapid change in temperature or humidity occurs, use this printer only after it has acclimatized.
White streaks appear.	Toner is almost depleted. If an error message appears on the control panel, replace the print cartridge.
	See p.93 "Replacing the Print Cartridge".
The backs of printed sheets are blemished.	When removing a jammed sheet, the inside of the printer may have become dirtied. Print several sheets until they come out clean.
	 If document size is larger than paper size, e.g. A4 document on B5 paper, the back of the next printed sheet may be dirtied.
If rubbed with your finger, it smears out.	The setting of the paper may not be correct. For example, although thick paper is used, the setting for thick paper may not be set.
	Check the paper settings of this printer.
	See p.56 "Types of Paper and Other Media".
	Check the paper settings of the printer driver.
	See the printer driver Help.
The toner has run out and printing has stopped.	When the toner runs out, pressing the [Stop/Start] key allows you to print a few more pages, but the print quality of those pages cannot be guaranteed.

Status	Possible Causes, Descriptions, and Solutions
The toner is powdery and comes away from the paper, or the printed image has a matt appearance.	Check if the levers are lowered. Raise the levers.
Printed envelopes come out creased.	Check if thelevers are properly set.

If the problem cannot be solved, contact your sales or service representative.

Additional Troubleshooting

Problems	Solutions
Strange noise is heard.	If a supply was recently replaced or an option attached in the area the strange noise is coming from, check the supply or option is properly attached. If the strange noise persists, contact your sales or service representative.
No e-mail is received when an Alert occurs, and after resolving an Alert.	 Confirm the setting using Web Image Monitor. Confirm that [Auto E-mail Notification] setting is specified.
	When the power is turned off before the e-mail is transmitted, the e-mail will not be received.
	 Check the e-mail address set for the destination. If the email was sent but not received, it is possible the destination was incorrect. Also check error mail information from the e-mail server.
No e-mail notification is received even though advance auto e-mail notification was set using Web Image Monitor or the control panel.	After changing the setting, turn the main unit's power off and then back on again.
When no date information is included in sent e-mail, the mail server has a malfunction.	Make the setting for obtaining time information from the SMTP server. For details, see "Printer Status Notification by E-Mail", Software Guide.



If the printer is still not operating satisfactorily, contact your sales or service representative. Consult
with the store where the printer was purchased for information about the location of sales or service
representatives.

9. Removing Misfed Paper

This chapter explains how to remove misfed paper.

When Paper is Jammed

If a paper jam occurs, the Alert indicator on the control panel flashes and one of the following messages appears on the control panel:

"Internal Misfeed"

"Misfeed: Tray 1"

"Misfeed: Tray 2"

"Misfd: BypssTray"

"Misfd: Stnd Tray"

"Misfd: Dupl Unit"

Open the front cover, and check the following locations for the paper jam.

ACAUTION

 The inside of this machine becomes very hot. Do not touch parts labelled "△" (indicating a hot surface).

ACAUTION

 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.

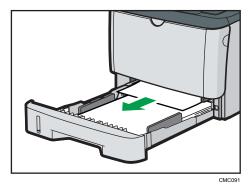
- Misfed paper may be covered in toner. Be careful not to get toner on your hands or clothes.
- Toner on prints made after removing misfed paper may be loose (inadequately fused). Make a few test prints until smudges no longer appear.
- Do not forcefully remove misfed paper, it will tear. Torn pieces remaining inside the printer will
 cause further misfeeds and possibly damage the printer.
- Paper jams can cause pages to be lost. Check your print job for missing pages and reprint any pages that did not print out.

When "Internal Misfeed", "Misfeed: Tray 1", "Misfeed: Tray 2", or "Misfd: Stnd Tray" Appears

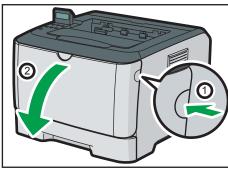
"Internal Misfeed", "Misfeed: Tray 1", "Misfeed: Tray 2", or "Misfd: Stnd Tray" appears when a paper jam has occurred in the fusing unit, tray 1, or tray 2.

Use the following procedure to remove paper that has become jammed inside the printer or in the paper feed area.

1. Pull tray 1 halfway out, and check for jammed paper. If there is jammed paper, remove it carefully.

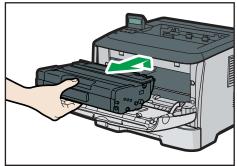


- 2. Carefully slide tray 1 back in until it stops.
- 3. If paper is loaded in the bypass tray, remove the paper.
- 4. Close the bypass tray.
- 5. Push the side button to open the front cover, and then carefully lower it.



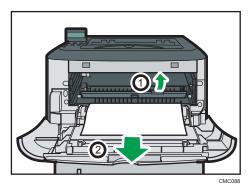
CMC09

6. Carefully pull out the print cartridge horizontally, holding its center.

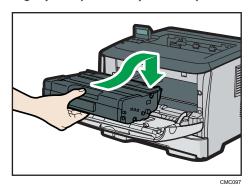


CMC08

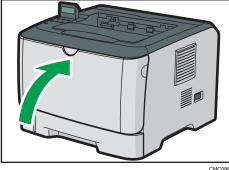
- Do not shake the removed print cartridge. Doing so can cause remaining toner to leak.
- Place the print cartridge on paper or similar material to avoid dirtying your workspace.
- 7. Lifting the guide plate, remove the jammed paper carefully.



8. Slide the print cartridge in horizontally. When the cartridge can go no further, raise it slightly and push it fully in. Then push down on the cartridge until it clicks into place.



9. Using both hands, carefully push up the front cover until it closes.



CM

U Note

• If paper is jammed in tray 2 but is difficult to locate, pull out tray 2 to remove it. After removing the paper, carefully push Tray 2 all the way back inside the printer.

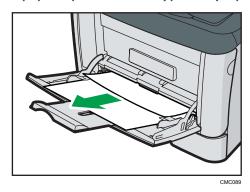
• When closing the front cover, push the upper side of the cover firmly. After closing the cover, check that the error is cleared.

When "Misfd: BypssTray" Appears

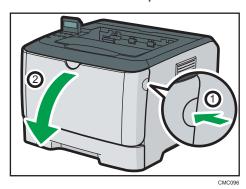
"Misfd: BypssTray" appears when a paper jam has occurred in the bypass tray.

Use the following procedure to remove paper that has become jammed after being fed in from the bypass tray.

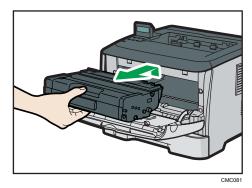
1. If paper is jammed in the bypass tray input area, remove the jammed paper carefully.



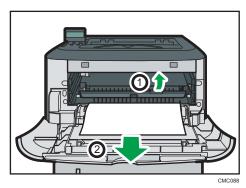
- 2. Close the bypass tray.
- 3. Push the side button to open the front cover, and then carefully lower it.



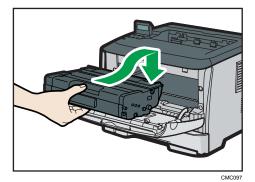
4. Carefully pull out the print cartridge horizontally, holding its center.



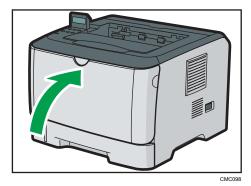
- Do not shake the removed print cartridge. Doing so can cause remaining toner to leak.
- Place the print cartridge on paper or similar material to avoid dirtying your workspace.
- 5. Lifting the guide plate, remove the jammed paper carefully.



6. Slide the print cartridge in horizontally. When the cartridge can go no further, raise it slightly and push it fully in. Then push down on the cartridge until it clicks into place.



7. Using both hands, carefully push up the front cover until it closes.



UNote

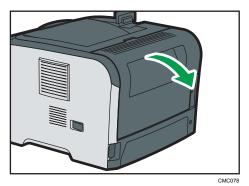
• When closing the front cover, push the upper side of the cover firmly. After closing the cover, check that the error is cleared.

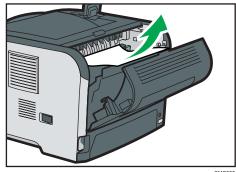
When "Misfd: Dupl Unit" Appears

"Misfd: Dupl Unit" appears when a paper jam has occurred in the duplex unit.

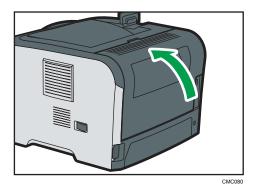
Use the following procedure to remove paper that has become jammed in the exit area or inside the duplex unit.

1. Open the rear cover.

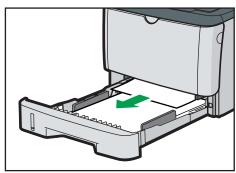




3. Close the rear cover.

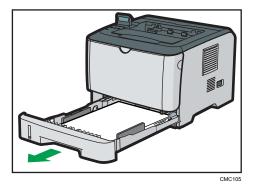


4. Pull tray 1 halfway out, and check for jammed paper. If there is jammed paper, remove it carefully.



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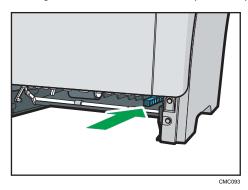
5. Pull tray 1 out completely with both hands.



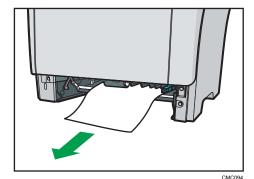
Place the tray on a flat surface.

6. Push the blue lever.

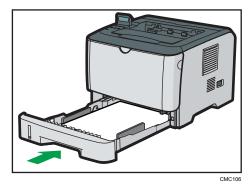
Pushing the blue lever lowers the duplex transport unit.



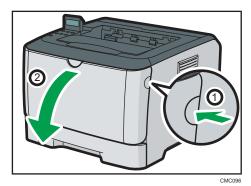
7. If there is jammed paper, carefully remove it.



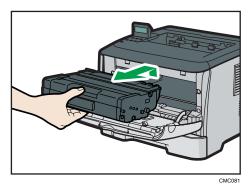
8. With the duplex transport unit still lowered, carefully slide tray 1 back in until it stops.



- 9. If paper is loaded in the bypass tray, remove the paper and close the bypass tray.
- 10. Push the side button to open the front cover, and then carefully lower it.

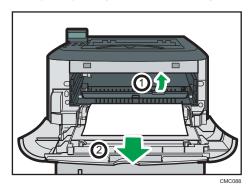


11. Carefully pull out the print cartridge horizontally, holding its center.

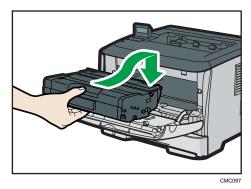


- Do not shake the removed print cartridge. Doing so can cause remaining toner to leak.
- Place the print cartridge on paper or similar material to avoid dirtying your workspace.

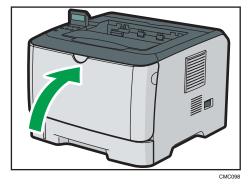
12. Lifting the guide plate, remove the jammed paper carefully.



13. Slide the print cartridge in horizontally. When the cartridge can go no further, raise it slightly and push it fully in. Then push down on the cartridge until it clicks into place.



14. Using both hands, carefully push up the front cover until it closes.



U Note

• When closing the covers, push the covers firmly. After closing the covers, check that the error is cleared.

10. Appendix

This section explains maintenance and operation procedures for this printer. It also describes the specifications of the printer and its options.

If the Printer is Not Going to Be Used for a Long Time

If the printer is going to be inactive for a long time, follow the procedure shown here.

WARNING

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

ACAUTION

• The inside of this machine becomes very hot. Do not touch the parts labeled "A" (indicating a hot surface).

ACAUTION

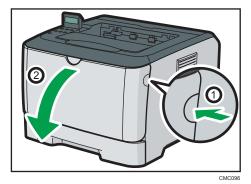
• Unplug the power cord from the wall outlet before you move the machine. While moving the machine, take care that the power cord is not damaged under the machine. Failing to take these precautions could result in fire or electric shock.

Preparing the Printer For a Long Period of Inactivity

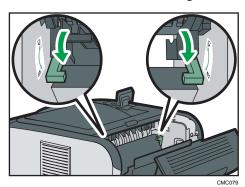
Use this procedure to prepare the printer for a long period of inactivity with its power switch turned to off.

Note that not using the following procedure could result in unusual noises when use of this printer is resumed.

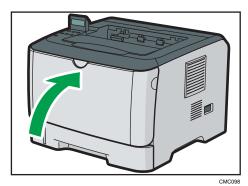
- Do not switch off the printer during printing.
- 1. Turn off the power switch.
- 2. Pull out the plug from the socket.



4. Lower the levers with thumb fingers.



5. Close the front cover with both hands carefully.



U Note

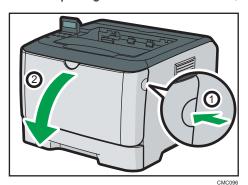
• This step is not necessary if the printer's power switch is on but the printer has been inactive for a long time.

Using the Printer Again after it has been Inactive for a Long Period

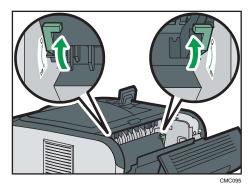
Use the following procedure to start using the printer again after it has been inactive for a long period.

IU

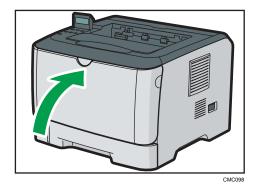
- 1. Plug in the power cable.
- 2. Pull the opening lever on the front cover, and then carefully lower the front cover.



3. Pull up the levers with thumb fingers.



4. Close the front cover with both hands carefully.



5. Turn the power switch to On.

Moving and Transporting the Printer

ACAUTION

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

The machine weighs approximately 12.4 kg (27.4 lb.). When moving the machine, use the
inset grips on both sides, and lift slowly. The machine will break or cause injury if dropped.

ACAUTION

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.

ACAUTION

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

 When moving the machine after use, do not take out the toner to prevent toner spill inside the machine.

Repack the printer in its original packing materials for transporting.

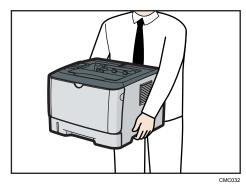
- Be sure to disconnect all cables from the printer before transporting it.
- The printer is a precision piece of machinery. Be sure to handle it carefully when moving it.
- Make sure to move the printer horizontally. Take extra caution when carrying the printer up or down stairs.
- If Tray 2 is installed, remove it from the printer, and then move them separately.
- Do not grip on the tray area when lifting the printer.

10

Moving over a Short Distance



- Do not remove the print cartridge when moving the printer.
- 1. Be sure to check the following points:
 - The power switch is turned off.
 - The power cable is unplugged from the wall outlet.
 - The interface cable is unplugged from the printer.
- 2. If Tray 2 is installed, remove it.
- Lift the printer by using the inset grips on both sides of the printer, and then move it horizontally to the place where you want to use it.



4. If you have removed Tray 2, reinstall it.



 Be sure to move the printer horizontally. To prevent toner from scattering, move the printer carefully.

Moving over a Long Distance

If you intend to move the printer over a long distance, you must pack it well.

Empty all the paper trays, but do not remove the print cartridge. Take care not to tip or tilt the printer during transit.



- Do not remove the print cartridge when moving the printer.
- 1. Be sure to check the following points:
 - The power switch is turned off.
 - The power cable is unplugged from the wall outlet.

- The interface cable is unplugged from the printer.
- All paper trays are empty.
- 2. If Tray 2 is installed, remove it.



- Toner might spill inside the printer if the printer is not kept level during transit.
- For more information about moving the printer, contact your sales or service representative.

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Disposal

Ask your sales or service representative for information about correct disposal of this machine.

Consumables



• Our products are engineered to meet high standards of quality and functionality, and we recommend that you use only the expendable supplies available at an authorized dealer.

Print Cartridge

Print cartridge	Average printable number of pages per cartridge * 1
Black	2,500 pages, 6,400 pages

* 1 The printable number of pages is based on pages that are compliant with ISO/IEC 19752 and the image density set as the factory default. ISO/IEC 19752 is an international standard on measurement of printable pages, set by the International Organization for Standardization.



- If print cartridge is not changed when necessary, printing will become impossible. We recommend
 keeping a stock of bottles or purchasing them soon.
- The actual number of printable pages varies depending on the image volume and density, number
 of pages to be printed at a time, paper type and paper size used, and environmental conditions
 such as temperature and humidity.
- Print cartridge may need to be changed sooner than indicated above due to deterioration over the period of use.
- Print cartridge (consumable) is not covered by warranty. However, if there is a problem, contact
 the store where they were purchased.
- When you first use this printer, use the print cartridge packaged with the printer.
- The supplied print cartridge is good for approximately 1,500 pages.
- To prevent a cleaning malfunction, you may need to replace a print cartridge even if it is not empty.
- If the toner has run out but you urgently need to continue printing, see p.111 "Other Printing Problems".

IN

Specifications



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.

Main Unit

Configuration

Desktop

Print Process

Laser beam scanning & Electrophotographic printing

First Print Speed

8 seconds or less (A4/Letter, 600 × 600)



• If the printer has not been used for a while, there may be a short delay before the first page starts printing.

Printing Speed (Single sided printing)

• 600 dpi

28 pages per minute (A4) / 30 pages per minute (Letter)

• 1200 dpi

14 pages per minute (A4) / 15 pages per minute (Letter)

Printing Speed (Duplex Printing)

• 600 dpi

14 pages per minute (A4) / 15 pages per minute (Letter)

• 1200 dpi

Duplex printing is not possible

Resolution

600 dpi (Maximum: 1200 × 1200 dpi)

Paper size

See p.53 "Paper and Other Media"

Paper Weight

See p.53 "Paper and Other Media"

Media Type

See p.53 "Paper and Other Media"

Paper Output Capacity

Standard 125 sheets (80 g/ m^2 , 20 lb.)

Paper Input Capacity

Standard Paper Tray	250 sheets * 1
Bypass Tray	50 sheet * 1
Optional Paper Feed Units	250 sheets * 1

*1 Paper weight: 80 g/m² (20 lb. bond)

Power Source

• Region A

220-240 V, 5A, 50/60 Hz

• Region B

120 V, 10 A, 60 Hz

Power Consumption

Maximum power consumption	• Region A 880 W • Region B 850 W
Energy Saver mode 1	70 W or less
Energy Saver mode 2	5 W or less

Warm-up Time

Less than 20 seconds (23 °C, 71.6 F)

Dimensions

	Width	Depth	Height
Printer only (tray not extended)	370 mm (14.6 inches)	392 mm (15.5 inches)	262 mm (10.4 inches)*1

*1 If tray 2 is installed, the height increases by 89 mm (3.5 inches).

10

Weight

• Type 1

11.4 kg (25.2 lb.)

Type 2

12.4 kg (27.4 lb.)

Noise Emission *1

Sound Power Level (Main unit only)

Stand-by	Less than 40 dB (A)
Printing	Less than 65.8 dB (A)

Sound Power Level (Complete system)

Stand-by	Less than 40 dB (A)
Printing	Less than 69.8 dB (A)

Sound Pressure Level *2 (Main unit only)

Stand-by	Less than 34 dB (A)
Printing	Less than 59.8 dB (A)

Sound Pressure Level *2 (Complete system)

Stand-by	Less than 34 dB (A)
Printing	Less than 63.8 dB(A)

 $^{^{\}star\,1}$ The preceding measurements made in accordance with ISO7779 are actual values.

Memory

Standard 64MB

Interface

- Ethernet (10 Base-T/100 Base-TX)
- USB2.0

It requires a USB computer port and cable that support USB 2.0.

Printer Language

PCL 6, PostScript 3

^{*2} Measured at the position of a bystander.

Fonts

80 fonts

Options

Paper Feed Unit TK1080

Paper capacity

250 sheets

Paper size

A4, B5 JIS, A5, Legal (8 $^{1}/_{2}$ " × 14"), Letter (8 $^{1}/_{2}$ " × 11), Half Letter (5 $^{1}/_{2}$ " × 8 $^{1}/_{2}$ ")

Dimensions (W × D × H)

 $370 \times 392 \times 89 \text{ mm} (14.6 \times 15.5 \times 3.5 \text{ inches})$

Paper weight

 $60 - 105 \text{ g/m}^2$, (16.0 - 28.0 lb.)

Weight

Less than 2.4 kg (5.3 lb.)

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The proper names of the Windows operating systems are as follows:

• The product names of Windows XP are as follows:

Microsoft® Windows® XP Professional Edition

Microsoft® Windows® XP Home Edition

Microsoft® Windows® XP Professional x 64 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 Starter

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

Microsoft® Windows Server® 2003 Web Edition

Microsoft® Windows Server® 2003 Datacenter 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

Microsoft® Windows Server® 2003 R2 Datacenter Edition

• The product names of Windows Server 2008 are as follows:

Microsoft® Windows Server® 2008 Foundation

Microsoft® Windows Server® 2008 Standard

Microsoft® Windows Server® 2008 Enterprise

Microsoft® Windows Server® 2008 Datacenter

Microsoft® Windows Server® 2008 for Itanium-based Systems

Microsoft® Windows® Web Server 2008

Microsoft® Windows® HPC Server 2008

• The product names of Windows Server 2008 R2 are as follows:

Microsoft® Windows Server® 2008 R2 Foundation

Microsoft® Windows Server® 2008 R2 Standard

Microsoft® Windows Server® 2008 R2 Enterprise

Microsoft® Windows Server® 2008 R2 Datacenter

Microsoft® Windows Server® 2008 R2 for Itanium-based Systems

Microsoft® Windows® Web Server 2008 R2

Microsoft® Windows® HPC Server 2008 R2



• PostScript[®] 3 in this manual stands for "Adobe PostScript 3 Emulation".

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MEMO

MEMO



SP 3500N/SP 3510DN

Operating Instructions

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Notice

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.

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.

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.

For good output 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.

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

How to Read This Manual

Symbols

This manual uses the following symbols:



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.



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 p.8 "Model-Specific Information".

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.

Model-Specific Information

This section explains how you can identify the model type and region of your machine.

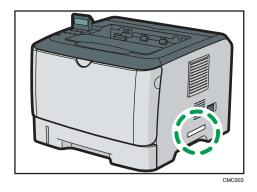
This printer comes in two models that have different duplex functions.

When describing procedures that are model-specific, this manual refers to the different printer models as Type 1 or Type 2. The following table describes the model types.

Model types

Model type	Model name	Duplex Printing
Type 1	SP 3500N	Manual
Type 2	SP 3510DN	Automatic

Furthermore, there is a label on the right side of the machine, located in the position shown below. The label contains details that identify the region your machine belongs to. Read the label.



The following information is region-specific. Read the information under the symbol that corresponds to the region of your printer.

Region A (mainly Europe and Asia)

If the label contains the following, your printer is a region A model:

- CODE XXXX -22, -27
- 220-240V

Region (mainly North America)

If the label contains the following, your printer is a region B model:

- CODE XXXX -17
- 120 V



• Dimensions in this manual are given in two units of measure: metric and inch. If your printer is a Region A model, refer to the metric units. If your printer is a Region B model, refer to the inch units.

Manuals for This Printer

Read this manual carefully before you use this printer.

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

Mportant !

- 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.

Safety Information

Contains information about safe usage of this printer.

To avoid injury and prevent damage to the printer, be sure to read this.

Quick Installation Guide

Contains procedures for removing the printer from its box, and connecting it to a computer.

Hardware Guide

Contains information about paper; names and functions of the parts of this printer; and procedures such as installing options, replacing consumables, responding to error messages, and resolving jams.

Driver Installation Guide

Contains procedures for installing the PCL6 and PostScript 3 printer drivers. This manual is included on the driver CD-ROM.

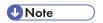
Software Guide (This manual)

Contains information about using this printer, its software, and its security functions.

List of Option

This section provides a list of option for this printer, and how it is referred to as in this manual.

Option List	Referred to as
Paper Feed Unit TK 1080	Paper feed unit



• For details about the specifications of this option, see "Specifications", Hardware Guide.

1. Preparing for Printing

This chapter explains the preparation procedure to use this printer.

Confirming the Connection Method

This printer supports network and USB connection.

Before installing the printer driver, check how the printer is connected. Follow the driver installation procedure that is appropriate to the connection method.

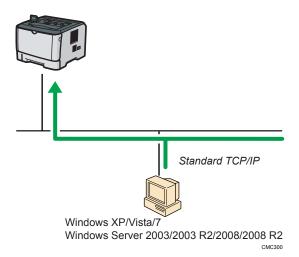
The printer drivers can be installed from the driver CD-ROM provided with this printer.

Network Connection

This printer can be used as a Windows printing port or network printer.

Using this printer as the Windows printing port

Network connections can be established via Ethernet.



Operating system

Windows XP/Vista/7, and Windows Server 2003/2003 R2/2008/2008 R2

Connection method

Ethernet (10BASE-T/100BASE-TX)

Available ports

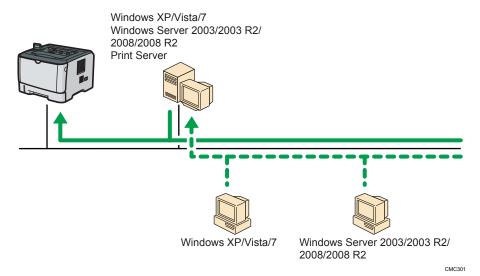
Standard TCP/IP

■ Reference

 For details about how to use this printer as the Windows printing port, see "Installing the Printer Driver When Using the Network Connection (Windows)", Driver Installation Guide.

Using as a network printer

This printer can be used as the Windows network printer.



Reference

 For details about how to use this printer as a Windows network printer, see "Installing the Printer Driver to Use As a Windows Network Printer", Driver Installation Guide.

USB Connection

This printer can be connected directly to a computer using a USB cable.

Reference

 For details about how to install the printer driver, see "Installing the Printer Driver When Using the USB Connection (Windows)", Driver Installation Guide.

Configuring Option and Paper Settings

Configure the printer driver according to the printer's option and paper settings.

- Manage Printers permission is required to change the printer properties in the [Printers] folder. Log
 on as an Administrators group member to acquire this permission.
- We recommend that bidirectional communication between the machine and the computer be enabled whenever possible. Bidirectional communication allows the computer to retrieve the machine's paper settings, current status, and other information.

Conditions for Bidirectional Communication

To establish bidirectional communication, the following conditions must be met:

- Operating system of the computer: Windows XP/Vista/7, and Windows Server 2003/2003 R2/2008/2008 R2
- When connected via a network

The printer is connected via a standard TCP/IP port, and the default port name must not be changed.

[Enable bidirectional support] in the [Port] tab of the printer properties is selected.

When connected via USB

The printer is connected to the computer's USB port using a USB interface.

[Enable bidirectional support] in the [Port] tab of the printer properties is selected.

The following procedure is based on Windows 7 as an example.

Printing is possible without bidirectional communication, but the computer will not be able to retrieve the status of print jobs. For this reason, we recommend you enable bidirectional communication when possible.

- 1. On the [Start] menu, click [Devices and Printers].
- 2. Right-click the icon of the printer you want to use, and then click [Printer properties].
- 3. Click the [Accessories] tab.
- 4. Click [Update Now].

If bidirectional communication is not established, select the installed option manually.

- Click the [Paper Size Settings] tab.
- 6. Select the tray you want to use, then select the paper size, and then click [Update Now].
 If bidirectional communication is not established, select the tray and paper size manually.
- 7. Click [OK] to close the printer properties dialog box.

2. Setting Up the Printer Driver

This chapter explains about accessing the printer properties and making the printer settings.

Accessing the Printer Properties

Windows XP and Windows Server 2003/2003 R2 - Making Printer Settings

Making the printer default settings - the [Printers and Faxes] window

Important

- To change the printer default settings including option configuration settings, log on using an
 account that has Manage Printers permission. Members of the Administrators group have Manage
 Printers permission by default.
- You cannot change the printer default settings for each user. Settings made in the printer properties dialog box are applied to all users.
- 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].
 The printer properties dialog box appears.
- 4. Make the necessary settings, and then click [OK].



- Settings you make here are used as the default settings for all applications.
- When accessing the PostScript3 printer properties, do not change settings for [Form to Tray Assignment].

Reference

• For details about settings, see the printer driver Help.

Making the printer default settings - Printing Preferences



 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 [Printing Preferences...].

The [Printing Preferences] dialog box appears.

4. Make the necessary settings, and then click [OK].



• Settings you make here are used as the default settings for all applications.

Reference

• For details about settings, see the printer driver Help.

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 printer's properties in that application. The following explains how to make settings for the WordPad application provided with Windows XP.

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].



- 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.
- Any settings you make in the procedure above are valid for the current application only.
- 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.

■ Reference

• For details about settings, see the printer driver Help.

Windows Vista/7 and Windows Server 2008/2008 R2 - Making Printer Settings

Making the printer default settings - the printer properties

- To change the printer default settings including option configuration settings, log on using an
 account that has Manage Printers permission. Members of the Administrators group have Manage
 Printers permission by default.
- 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 [View devices and printers] in "Hardware and Sound".
 - If using Windows Vista or Windows 2008, click [Printer] 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 the [Printer properties].

If using Windows Vista or Windows Server 2008, right-click the icon of the printer you want to use, and then click [Properties].

The printer properties dialog box appears.

4. Make the necessary settings, and then click [OK].



- Settings you make here are used as the default settings for all applications.
- When accessing the PostScript3 printer properties, do not change settings for [Form to Tray Assignment].

Reference

• For details about settings, see the printer driver Help.

Making the printer default settings - Printing Preferences



- 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 [Devices and Printers] in "Hardware and Sound".
 - If using Windows Vista or Windows 2008, click [Printer] in "Hardware and Sound".
 - If using Windows Server 2008 R2, click [View devices and printers] in "Hardware".
- Right-click the icon of the printer you want to use, and then click [Printing Preferences].

If using Windows Vista or Windows Server 2008, 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].



• Settings you make here are used as the default settings for all applications.

Reference

• For details about settings, see the printer driver Help.

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 printer's properties in that application. The following explains how to make settings for the WordPad application provided with Windows 7.

- 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].



- 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.
- Any settings you make in the procedure above are valid for the current application only.
- 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.

Reference

• For details about settings, see the printer driver Help.

3. Other Print Operations

Restricting Printing Function According to User

You can set the printer to require a user code when someone tries to use the printing function.



 When print jobs are restricted, you can only authenticate through the PCL6 printer driver. Printing from the PostScript 3 printer driver will not be possible.

To enable this setting, you must first configure the printer via Web Image Monitor.

Enabling the User Restriction Settings

This section describes how to set the printer to permit only authorized users to use the printing function.

Using Web Image Monitor, enable user restriction for the printing function, and then register users who can use the function.

For each user, you can specify if the printing function is available upon authentication. A maximum of 30 users can be registered.

- 1. Start the Web browser, and access the printer by entering its IP address.
- 2. Click [Restrict Available Functions].
- 3. Enter the administrator password if required, and then click [Apply].
- 4. Under "Available Functions", select [Restrict], and then click [Apply].



The user restriction setting is enabled. Proceed to the following steps to register users.

5. Click [Available Functions per User].

A list of currently registered user entries appears.



- 6. Select a user entry, and then click [Change].
- 7. Type a unique user name in [User Name] using up to 16 alphanumeric characters and a unique user code in [User Code] using up to 8 digits.



The user code will be used to authenticate users when they try to use a restricted function.

- 8. Click [Printing].
- 9. Click [Apply].
- 10. Close the Web browser.



- You must enter both a user name and user code to register a user entry.
- No two user entries can have the same user name or user code.

Reference

• For details about using Web Image Monitor, see p.65 "Using Web Image Monitor".

Modifying user entries

This section describes how to modify user entries.

- 1. Start the Web browser, and access the printer by entering its IP address.
- 2. Click [Restrict Available Functions].
- 3. Enter the administrator password if required, and then click [Apply].

4. Click [Available Functions per User].

A list of currently registered user entries appears.

- 5. Select the entry to modify, and then click [Change].
- 6. Modify settings as necessary.
- 7. Click [Apply].
- 8. Close the Web browser.

■ Reference

• For details about using Web Image Monitor, see p.65 "Using Web Image Monitor".

Deleting user entries

This section describes how to delete user entries.

- 1. Start the Web browser, and access the printer by entering its IP address.
- 2. Click [Restrict Available Functions].
- 3. Enter the administrator password if required, and then click [Apply].
- 4. Click [Available Functions per User].

A list of currently registered user entries appears.

- 5. Select the entry to delete, and then click [Delete].
- 6. Confirm that the entry you have selected is the entry that you want to delete.
- 7. Click [Apply].
- 8. Close the Web browser.

■ Reference

• For details about using Web Image Monitor, see p.65 "Using Web Image Monitor".

When Printing Function is Restricted

When the printing function is restricted, only authorized users are able to use that function.

Users will be authenticated in the printer driver.



 When print jobs are restricted, you can only authenticate through the PCL6 printer driver. Printing from the PostScript 3 printer driver will not be possible.

The table below shows how users can be authenticated to use the printing function.

Restricted function	Authentication method
Printing	The user must enter a valid user code in the printer driver before executing a print command.

Authenticating through the printer driver

- 1. Open the file you want to print on your computer.
- 2. Open the printer driver's properties.
- 3. Click the [Valid Access] tab.
- 4. Type the user code using 1 to 8 digits, and then click [OK].
- 5. Execute a print command.

If an incorrect user code is entered, the job will be canceled automatically (there will be no error message).

Printing Confidential Documents

If you use the Locked Print function, you can password protect your print job.

This means that your job is printed only after you enter the password using the printer's control panel.

This function prevents unauthorized users from seeing sensitive documents at the printer.



 This function is available only when using the PCL6 printer driver, and printing from a computer running a Windows operating system.

Storing a Locked Print File

This section describes how to store a Locked Print file in the printer using the printer driver.

- 1. Open the file you want to print on your computer.
- 2. Open the printer driver's properties.
- 3. Click the [Setup] tab, and then select [Locked Print].

The [User ID: (1 to 9 alphanumeric letters)] and [Password: (4 to 8 digits)] text boxes become available.

The [User ID: (1 to 9 alphanumeric letters)] text box contains the login user name of your computer account or the user ID that you used for the previous Locked Print job.

4. Type the user ID (containing 1 to 9 alphanumeric characters) and password (containing 4 to 8 digits), and then click [OK].

The user ID will be used to identify your Locked Print file on the printer's control panel.

5. Execute a print command.

The print job is stored in the printer as a Locked Print file. You can print the file by entering the password using the control panel.



- The Locked Print file is automatically erased from the printer's memory when it is printed out, or when the printer's power is turned off.
- The printer can store a maximum of 5 jobs or 5 MB of Locked Print data at a time.
- Even if the printer cannot store any more Locked Print files, the printer holds a new Locked Print file
 for the period of time specified in [Timeout:LockPrt] under [Host Interface] before canceling the job.
 Within this time, you can print or delete the new Locked Print file. You can also print or delete an
 existing Locked Print file so that the new Locked Print file can be stored in the printer.
- When a Locked Print job is canceled, the printer automatically records the cancellation in a log.
 You can use this log to identify which Locked Print jobs have been canceled.



• For details about [Timeout:LockPrt], see p.55 "Host Interface Menu".

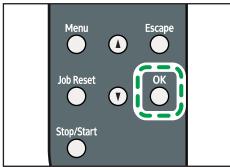
Printing a Locked Print File

When there is a Locked Print file stored in the printer, "Locked Print Job Press OK" appears on the printer's control panel display.

Locked Print Job Press OK

Use the following procedure to unlock and print the Locked Print file.

1. When the Locked Print message is displayed, press the [OK] key.



CMC03

2. Press the [▲][▼] keys to select the file you want to print, and then press the [OK] key.

Locked Print: HH:MM User ID

"HH:MM" is the time when the Locked Print file was stored, and "User ID" is the ID entered using the printer driver.

- 3. Press the [▲][▼] keys to select [Print Job], and then press the [OK] key.
- Enter the password using the [▲][▼] keys.
 - Press the [OK] key to input each digit.
 - Press the [Escape] key to discard the current digits and press it again to exit to the previous level of the menu tree.
- 5. Press the [OK] key.

The Locked Print file is printed.



• Use the following keys to cancel operation:

- [Escape]: Cancels the operation and returns the display to the previous screen.
- [Menu]: Cancels the operation and returns the display to the initial screen.
- If the printer is currently printing, you cannot print a Locked Print file.
- · While entering a password using the control panel, the printer cannot begin other print jobs.
- The Locked Print file is automatically erased from the printer's memory when it is printed out, or when the printer's power is turned off.

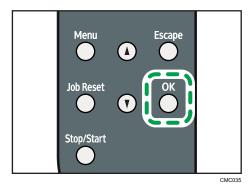
Deleting a Locked Print File

When there is a Locked Print file stored in the printer, "Locked Print Job Press OK" appears on the printer's control panel display.

Locked Print Job Press OK

Use the following procedure to delete a Locked Print file. You do not need to enter a password to delete a Locked Print file.

1. When the Locked Print message is displayed, press the [OK] key.



Press the [♠][▼] keys to select the file you want to delete, and then press the [OK] key.

Locked Print: HH:MM User ID

"HH:MM" is the time when the Locked Print file was stored, and "User ID" is the ID entered using the printer driver.

- Press the [[▲]][[▼]] keys to select [Delete Job], and then press the [OK] key.
- Press the [▲][▼] keys to select [Execute], and then press the [OK] key.

The Locked Print file is deleted.

If there are Locked Print files/logs remaining in the printer, the display returns to the list of Locked Print files/logs. If there are none remaining, the display returns to the initial screen.

- Use the following keys to cancel operation:
 - [Escape]: Cancels the operation and returns the display to the previous screen.
 - [Menu]: Cancels the operation and returns the display to the initial screen.

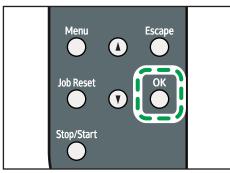
Checking which Locked Print File Jobs Have Been Canceled

When a Locked Print job is canceled, the printer automatically records the cancellation in a log. If the printer has created a cancellation log, "Locked Print Job Deleted" will appear on the control panel display.

Locked Print Job Deleted

Use the following procedure to check which Locked Print file jobs have been canceled.

1. When the Locked Print message is displayed, press the [OK] key.



CMC03

2. Press the [▲][▼] keys to find a file whose name starts with an "!" mark.

The "!" mark indicates that the job has been canceled.

Locked Print: !HH:MM User ID

"HH:MM" is the time when the Locked Print file was stored, and "User ID" is the ID entered using the printer driver.

To delete the log entry, proceed to the following steps.

- 3. Press the [OK] key.
- 4. Confirm that the log entry you want to delete is selected, and then press the [OK] key.
- Press the [▲][▼] keys to select [Execute], and then press the [OK] key.
 The log is deleted.

If there are Locked Print logs/files remaining in the printer, the display returns to the list of Locked Print logs/files. If there are none remaining, the display returns to the initial screen.



- Use the following keys to cancel operation:
 - [Escape]: Cancels the operation and returns the display to the previous screen.
 - [Menu]: Cancels the operation and returns the display to the initial screen.
- The printer keeps a log of the 10 most recent canceled jobs. If a Locked Print file is canceled when the printer's log is already full, the oldest log will be deleted automatically.
- The message "Locked Print Job Deleted" disappears when all log entries are cleared.
- The log will be cleared when the printer is turned off.

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.



- The following procedure is based on Windows 7 as an example. Procedures might vary depending on the operating system you are using.
- This function is not available if [Booklet] is selected from [Duplex:], or [Zoom %] is selected in [Paper].

For the PCL6 printer driver:

- 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 in the document's native application.

The [Printing Preferences] dialog box appears.

- 3. On the [Setup] tab, in the [Layout:] list, select a layout type.
- 4. Select [Draw Frame Border] if you need a frame around each page.
- 5. After making any additional settings, click [OK].
- 6. Start printing.



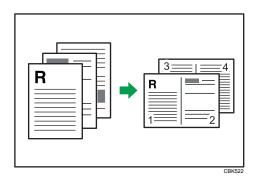
- If the document contains pages with different original sizes, page breaks may occur.
- If the application you are using also has a combine function, disable it. If the application's combine
 function is also enabled when the driver's combine function enabled, incorrect printing is likely.

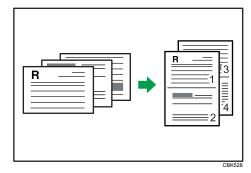
Types of Combine Printing

This section explains the different methods of combine printing that are available. Combine printing 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. For 2 pages per sheet combine, you can select from two patterns. When combining 4 or more pages onto a single sheet of paper, four patterns are available. The following illustrations show examples of page ordering patterns for 2- and 4- page combinations when using the PCL6 printer driver.

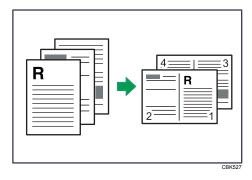
2 Pages per Sheet

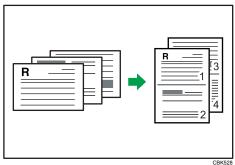
· Right, then Down or Down, then Right





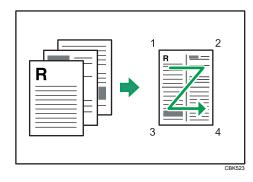
• Left, then Down or Down, then Left



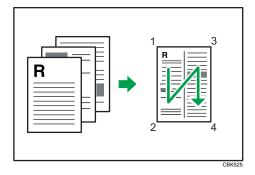


4 Pages per Sheet

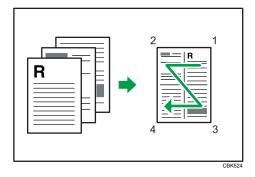
• Right, then Down



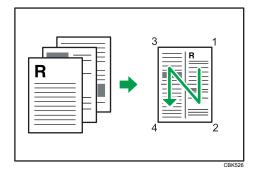
• Down, then Right



• Left, then Down



• Down, then Left



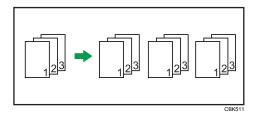
Collate

Use the Collate function to print documents into page-ordered sets.



• If the [Ignore Application Collate] check box is cleared, the application's collate settings are applied.

Output can be assembled as sets in sequential order.





- If Auto Continue occurs on the first set, the Collate will be canceled.
- If a form feed occurs on the first set, the Collate will be canceled.

■ Reference

• For details about printing method, see the printer driver Help.

Cover

Use the Cover function to insert cover sheets using paper in a specified tray.



• The cover sheet's size and orientation must be the same as those of the body paper.



• For details about printing methods, see the printer driver Help.

Saving on Toner When Printing

Use the Toner Saving function to save on toner.



• For details about the setting method, see the printer driver Help.

Watermark

Use the Watermark function to print watermark text.



• If the watermark size is larger than the paper size, watermarks cannot be printed properly.



• For details about the setting method, see the printer driver Help.

Manual Duplex

To print on both sides of paper using the Type 1 model, use the Manual Duplex function. Follow the procedure below to perform manual duplex printing.

In Manual Duplex printing, the printer prints only even pages of a document first, asks you to reload the output paper turned upside down into the printer, and then prints odd pages on the back sides of the paper.

- This function is only available when printing from a computer running a Windows operating system using the PCL6 printer driver.
- The printer always uses tray 1 to print on the back sides of paper, regardless of the tray you
 selected with the printer driver. Make sure that the paper settings of the trays that will be used
 match the paper settings of the print job to avoid paper mismatch errors.
- 1. Open the file you want to print on your computer.
- 2. Open the printer driver's properties.
- On the [Setup] tab, select [Long edge bind (to left/top)] or [Short edge bind (to top/left)] from the [Duplex:] list.

Manual duplex printing requires that [Zoom] be set at 100% and [Print On] be checked on the [Paper] tab. If not, a dialog box appears to inform you that the setting must be changed; clicking [OK] will automatically change the settings.

4. Configure printing preferences according to your needs, and then click [OK] twice.

The Manual Duplex guidance screen appears on your computer showing the subsequent procedure, and the printer starts printing even pages.

5. Reload the output paper into tray 1 with the printed side up.

If paper orientation is portrait, put the top of paper towards you for [Long edge bind (to left/top)] or towards the printer rear for [Short edge bind (to top/left)].

If paper orientation is landscape, put the top of paper to the right for [Long edge bind (to left/top)] or to the left for [Short edge bind (to top/left)].

6. Press the [Stop/Start] key.

Odd pages will then be printed.



When you print a document whose page count is an odd number, a blank page is printed last. This
blank page is the last page of the document. When you start printing on the other side of the
paper, include this blank page in the bundle of paper.

Reference

• For details about loading paper in the trays, see Hardware Guide.

• For details about printer driver operation, see the printer driver Help.

3

Printing on Custom Size Paper

To specify a non-standard paper size, select [Custom Paper Size] from the [Document Size:] list, and then click the [Custom Paper Size...] button in the lower part of the dialog box to configure the paper size.



• Custom paper size is only available with tray 1 and bypass tray.

Reference

• For details about the setting method, see the printer driver Help.

If a Paper Mismatch Occurs

Use the form feed function to continue printing when a paper size or paper type error occurred.

This function can be performed using the control panel.



If the [Auto Continue] setting under [System] is enabled, the printer ignores the paper type and size
settings and prints on whatever paper is loaded. Printing stops temporarily when the error is
detected, and restarts automatically after about ten seconds using the settings made on the control
panel.



• For details about [Auto Continue], see p.49 "System Menu".

Performing Form Feed

Use the following procedure to perform form feed.

While an error message is displayed on the control panel, press the [Stop/Start] key.
 Printing starts.



- If you want to print after adding paper to the tray, load the correct paper, and then press the [Stop/Start] key.
- 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 that is related to the printer error occurred.

1. Press the [Job Reset] key.

Canceling a Print Job

This section describes how to stop printing from the control panel or computer.

Canceling a Print Job Using the Control Panel

You can cancel a print job using the control panel, if transferring print job is not completed.

1. Press the [Job Reset] key.

Windows - Canceling a Print Job from the Computer

You can cancel a print job from the computer if transferring print job is not completed.

The following procedure is based on Windows 7 as an example.

- 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].
- 4. If you are asked whether you want to cancel the document, click [Yes].



- If the printer is shared by multiple computers, be careful not to cancel the print job of another user.
- You can also open the print job queue window by double-clicking the printer icon in the [Printers] window.
- You cannot stop printing data that has already been processed. For this reason, printing may continue for a few pages after you cancel printing.
- A print job containing a large volume of data may take considerable time to stop.
- If you cancel a Locked Print job, the printer might have already stored some pages of the job as a Locked Print file. If this happens, use the control panel to delete the Locked Print file.
- It may take while to cancel a large print job.

Reference

• For details about deleting a Locked Print file, see p.25 "Deleting a Locked Print File".

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4. Making Printer Settings Using the Control Panel

This chapter explains the menu displayed on the control panel and how to change the printer's settings.

Menu Chart

Paper Input

Sub Paper Size

Duplex

This section explains how to change the default settings of the printer and provides information about the parameters included in each menu.

<u> </u>
Paper Size
Paper Type
Tray Priority
Bypass Priority
List/Test Print
Config. Page
Menu List
Test Page
Dup. Test Page
Maintenance Pg.
PCL Font List
PS Font List
System
Auto Continue
Def. Ppr. Size
Copies

Prt. Err.Report

Blank Pg. Print

Energy Saver 1

Energy Saver 2

Restore Default

Image Density

Maintenance

Print Regist.

Low Humid. Mode

Host Interface

Timeout:LockPrt

Timeout: USB

Timeout: NW
Network Setting

Fixed USB Port

PCL Menu

Orientation

Form Lines

Font Number

Point Size

Font Pitch

Symbol Set

Courier Font

Extend A4 Width

Append CR to LF

Resolution
PS Menu
Resolution
Language
English
German
French
Italian
Dutch
Swedish
Norwegian
Danish
Spanish
Finnish

Portuguese

Japanese

Portuguese (BR)

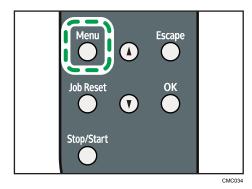
Paper Input Menu

This section explains about paper settings on the Paper Input menu such as paper sizes and types on each tray.

Changing the Paper Input Menu

Use the following procedure to change the tray priority.

1. Press the [Menu] key.



The menu screen appears.

- Press the [[▲]][[▼]] keys to select [Paper Input], and then press the [OK] key.
- Press the [▲][▼] keys to select [Tray Priority], and then press the [OK] key.
- Press the [▲][▼] keys to select the tray you want to use.
- 5. Press the [OK] key.

The selected item is displayed for two seconds with an asterisk, and then the [Tray Priority] screen appears.

6. Press the [Menu] key to return to the initial screen.

Paper Input Menu Parameters

This section explains about parameters that can be set on the Paper Input menu.

Paper Size

• Tray 1 Ppr Size

Specifies the paper size for tray 1.

Default: Region A [A4], Region B [8 1/2 x 11]

- A4, 8 1/2 x 11, 5 1/2 x 8 1/2, 7 1/4 x 10 1/2, 8 x 13, 8 1/2 x 13, 8 1/4 x 13, 16K, Custom Size, B5 JIS, A5, B6 JIS, A6, 8 1/2 x 14
- Tray 2 Ppr Size

Specifies the paper size for tray 2.

This setting appears only when the optional paper feed unit is installed.

Default: Region A [A4], Region B [8 1/2 x 11]

- A4, 8 1/2 x 11, B5 JIS, A5, 8 1/2 x 14, 5 1/2 x 8 1/2
- Bypass Ppr Size

Specifies the paper size for the bypass tray.

Default: Region A [A4], Region B [8 1/2 x 11]

• A4, 8 1/2 x 11, 5 1/2 x 8 1/2, 7 1/4 x 10 1/2, 16K, Custom Size, 4 1/8 x 9 1/2, 3 7/8 x 7 1/2, C5 Env, C6 Env, DL Env, B5 JIS, A5, B6 JIS, A6, 8 1/2 x 14

Paper Type

Tray 1

Specifies the paper type for tray 1.

Default: [Plain Paper]

- Plain Paper, Recycled Paper, Color Paper, Preprinted, Prepunched, Letterhead, Bond Paper, Cardstock, Label Paper, Thin Paper, Thick Paper 1, Thick Paper 2
- Tray 2

Specifies the paper type for tray 2.

This setting appears only when the optional paper feed unit is installed.

Default: [Plain Paper]

- Plain Paper, Recycled Paper, Color Paper, Preprinted, Prepunched, Letterhead, Thin Paper, Thick Paper 1
- Bypass Tray

Specifies the paper type for the bypass tray.

Default: [Plain Paper]

 Plain Paper, Recycled Paper, Color Paper, Preprinted, Prepunched, Letterhead, Bond Paper, Cardstock, Label Paper, OHP, Envelope, Thin Paper, Thick Paper 1, Thick Paper
 2

Tray Priority

Specifies the tray that the printer checks first for paper that can be used for the job when a tray is set to be selected automatically.

If multiple trays contain valid paper, the first tray the machine finds will be used for printing; when that tray runs out of paper, the machine automatically switches to the next tray to continue printing.

[Tray 2] appears only when the optional paper feed unit is installed.

Default: [Tray 1]

- Tray 1
- Tray 2
- Bypass Tray

Bypass Priority

Specifies how print jobs using the bypass tray are handled.

Default: [Machine Setting]

Machine Setting

The printer prints all print jobs according to the printer's settings.

An error will occur if the paper size/type settings of the printer and printer driver do not match.

Any Size/Type

The printer prints all print jobs according to the printer driver's settings.

Printing proceeds even if the paper size/type settings of the printer and printer driver do not match. However, if the paper is too small for the print job, the printed image will be cropped.

Any Custom S/T

The printer prints custom size print jobs according to the printer driver's settings and prints standard size print jobs according to the printer's settings.

For custom size print jobs, printing proceeds even if the paper size/type settings of the printer and printer driver do not match. However, if the paper is too small for the print job, the printed image will be cropped.

For standard size print jobs, an error will occur if the paper size/type settings of the printer and printer driver do not match.



• JIS stands for "Japanese Industrial Standard".

■ Reference

• For details about the type of paper loaded in each tray, see Hardware Guide.

List/Test Print Menu

You can print lists of configurations on printer or the paper printings.

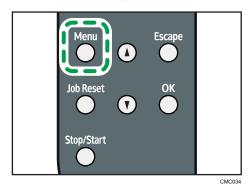
Also, you can check the types and characters of all the printable fonts.

Printing the Configuration Page

Use the following procedure to print the configuration page.



- The configuration page is printed on A4 or Letter (8¹/₂ " x 11 ") size paper from the priority tray.
 Load this size of paper into the priority tray before printing the configuration page.
- 1. Press the [Menu] key.



The menu screen appears.

- 2. Press the [▲][▼] keys to select [List/Test Print], and then press the [OK] key.
- Press the [▲][▼] keys to select [Config. Page], and then press the [OK] key.
 The configuration page is printed. The [List/Test Print] screen appears on completion of printing.
- 4. Press the [Menu] key to return to the initial screen.



 If you start configuration page printing when appropriate paper is not loaded, an error message appears. If this happens, load appropriate paper in a tray, and then perform a form feed, or cancel the job.

Reference

 For details about the items displayed on the configuration page, see p.100 "Reading the Configuration Page".

List/Test Print Menu Parameters

This section explains about parameter that can be set on the List/Test Print menu.



• Some items might not appear, depending on the model type you are using.

Config. Page

Prints the current configurations and general information of the printer.

Menu List

Prints the menu list showing all available menus.

Test Page

Prints a test page for checking the single-sided printing condition. The test page contains network settings.

Dup. Test Page

Prints a test page for checking the duplex printing condition.

Maintenance Pg.

Prints the maintenance page.

PCL Font List

Prints the current configuration and installed PCL font list.

PS Font List

Prints the current configuration and installed PostScript font list.



• Due to print layout limitations, the menu order of the menu list might not match to that of the display panel.

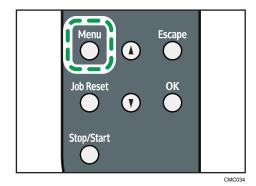
System Menu

You can set basic functions required to use the printer. The printer can be used on factory default, but the configuration can be changed depending on the condition of the user. The changed condition holds even if the printer is turned off.

Changing the System Menu

Use the following procedure to change the settings for Energy Saver 2 timer.

1. Press the [Menu] key.



The menu screen appears.

- 2. Press the [▲][▼] keys to select [System], and then press the [OK] key.
- Press the [▲][▼] keys to select [Energy Saver 2], and then press the [OK] key twice.
- Press the [[▲]][[▼]] keys to select [On], and then press the [OK] key.
- Press the [▲][▼] keys to select [E.Saver2 Timer], and then press the [OK] key.
- Specify the lead time needed to switch to the Energy Saver mode using [▲][▼] keys.
- 7. Press the [OK] key.

The selected lead time is displayed for two seconds with an asterisk, and then the [Energy Saver 2] screen appears.

8. Press the [Menu] key to return to the initial screen.

System Menu Parameters

This section explains about parameters that can be set on the System menu.

Auto Continue

Sets the printer to ignore an error with paper size or type and continue printing. The printing stops temporarily when an error is detected, and restarts automatically after about ten seconds using the settings made on the control panel.

However, even if you set to [On] and certain errors occur, the current job may be canceled, and the printer automatically performs the next queued job.

Default: [Off]

- Off
- On

Def. Ppr. Size

Sets the printer's default paper size.

```
Default: Region A [A4], Region B [8 1/2 x 11]
```

A4, B5 JIS, A5, B6 JIS, A6, 8 1/2 x 14, 8 1/2 x 11, 5 1/2 x 8 1/2, 7 1/4 x 10 1/2, 8 x 13, 8 1/2 x 13, 8 1/4 x 13, 16K, 4 1/8 x 9 1/2, 3 7/8 x 7 1/2, C5 Env, C6 Env, DL Env

Copies

Specifies the number of pages to print.

This setting is disabled if the number of pages to print is specified by command or the printer driver.

Default: "1"

• 1 - 999

Sub Paper Size

Sets the printer to print onto paper of another size if the specified paper is not loaded in any tray. Alternative sizes are preset to A4 and Letter.

Default: [Off]

- Off
- Auto

Duplex

Sets the printer to print on both sides of paper according to the specified binding method.

Default: [Off]

- Off
- · Long Edge Bind
- Short Edge Bind

Prt. Err.Report

Sets the printer to print an error page when the printer detects a printer or memory error.

Default: [Off]

- On
- Off

Blank Pg. Print

Sets the printer to print blank pages.

When cover sheet printing is enabled from the printer driver, cover sheets are inserted even if you select [Off].

Note that this setting has lower priority than the printer driver's blank page setting ([Do not Print Blank Pages] on the [Setup] tab of the PCL6 printer driver, or [Print Blank Pages] under [Printer Features] of the PostScript 3 printer driver).

Default: [On]

- On
- Off

Energy Saver 1

Sets the printer to enter Energy Saver mode 1 if the printer has been idle for about 30 seconds. It takes less time to recover from Energy Saver mode 1 than from power-off state or Energy Saver mode 2, but power consumption is higher in Energy Saver mode 1 than in Energy Saver mode 2.

Default: [Off]

- Off
- On (30 seconds)

Energy Saver 2

Sets the printer to enter Energy Saver mode 2 after the period of time specified for this setting is passed. The printer consumes less power in Energy Saver mode 2 than in Energy Saver mode 1, but it takes longer to recover from Energy Saver mode 2 than from Energy Saver mode 1.

Default: [On] (1 minute)

- On (1 to 240 minutes, in 1 minute increments)
- Off

Restore Default

Resets the printer settings to their factory-set defaults. Rebooting the printer is required after you are requested to do so on the control panel.

Image Density

Adjusts the printer's image density.

Default: "0"

• -3 to 3



• Even if Energy Saver 2 is enabled, the machine will not enter Energy Saver 2 for two hours if [Low Humid. Mode] under [Maintenance] Menu is enabled. However, the printer will enter Energy Saver 1 as normal (even when Energy Saver 1 is not enabled).

Maintenance Menu

You can set the mode appropriate to low humidity condition and adjust the print registration.

Maintenance Menu Parameters

This section explains about parameters that can be set on the Maintenance menu.

Print Regist.

Adjust the registration of each tray if necessary. You can adjust the registration value between -1.5 and +1.5 mm in increments of 0.1 mm.

[Horiz.: Tray 2] and [Vert.: Tray 2] appear only when the optional paper feed unit is installed.

Default: 0 for all parameters

• Horiz.: Tray 1

Select this to adjust the tray 1 registration horizontally.

• Vert.: Tray 1

Select this to adjust the tray 1 registration vertically.

• Horiz.: Tray 2

Select this to adjust the tray 2 registration horizontally.

• Vert.: Tray 2

Select this to adjust the tray 2 registration vertically.

· Horiz.: Bypass

Select this to adjust the bypass tray registration horizontally.

• Vert.: Bypass

Select this to adjust the bypass tray registration vertically.

• Horz: Dup: Back

Select this to adjust the duplex back side registration horizontally.

· Vert: Dup: Back

Select this to adjust the duplex back side registration vertically.

Low Humid. Mode

If the machine is used in a room where humidity level is low, black lines of a few millimeters thick may appear on printouts with 75-millimeter spaces in between. Selecting [On] for this setting may prevent these lines from appearing (wait for about one day until this setting becomes effective).

Note that when this setting is enabled, the machine automatically performs self-maintenance in every 10 minutes.

Default: [Off]

- Off
- On

Δ

Host Interface Menu

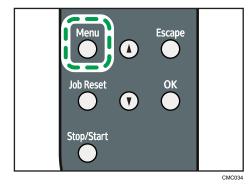
You can set configurations about network connections and communication.

The changed configuration holds even if the printer is turned off.

Changing the Host Interface Menu

Use the following procedure to change the network settings.

1. Press the [Menu] key.



The menu screen appears.

- 2. Press the [▲][▼] keys to select [Host Interface], and then press the [OK] key.
- Press the [▲][▼] keys to select [Network Setting], and then press the [OK] key.
- 4. Press the [▲][▼] keys to select [IPv4 Config.], and then press the [OK] key.
- Press the [▲][▼] keys to select [DHCP], and then press the [OK] key.
- Press the [♠][♥] keys to select [Active] or [Inactive] according to the network environment, and then press the [OK] key.

If you select [Active], proceed to step 10.

- 7. Press the [▲][▼] keys to select [IP Address], and then press the [OK] key.
- 8. Specify the printer's IPv4 address using [▲][▼] keys, and then press the [OK] key.
 - To go to the next field, press the [OK] key.
 - To go back to the previous field, press the [Escape] key.
- 9. Set the subnet mask and gateway address.

Set values for each setting following the same procedure as for the IPv4 address.

- 10. Press the [Menu] key to return to the initial screen.
- 11. Restart the printer to enable the network settings.

This section explains parameters that can be set on the Host Interface menu.

Timeout:LockPrt

Specifies how many seconds the printer holds a new Locked Print file, when the printer cannot store any more Locked Print files. Within this time, you can print or delete the new Locked Print file. You can also print or delete an existing Locked Print file so that the new Locked Print file can be stored in the printer.

Default: 60 seconds

• 0 to 300 seconds, in increments of 1 second

Timeout: USB

Specifies how many seconds the printer waits for print data, if the data is interrupted while it is being sent from the computer via USB. If the printer does not receive any more data within the time specified here, the printer only prints the data it has received. If printing is frequently interrupted by data from other ports, increase the timeout period.

Default: [60 sec.]

- 60 sec.
- 300 sec.
- 15 sec.

Timeout: NW

Specifies how many seconds the printer waits for print data, if the data is interrupted while it is being sent from the computer via network. If the printer does not receive any more data within the time specified here, the printer only prints the data it has received. If printing is frequently interrupted by data from other ports, increase the timeout period.

Default: [60 sec.]

- 60 sec.
- 300 sec.
- 15 sec.

Network Setting

Specifies the network-related settings.

Ethernet Speed

Select the network speed to operate the printer.

Default: [Auto Select]

- Auto Select
- 10Mbps Half D.
- 10Mbps Full D.

- 100Mbps Half D.
- 100Mbps Full D.
- IPsec

Selects whether to enable or disable IPsec.

Default: [Off]

- Off
- On
- MAC Address

Check the MAC address.

- IPv4 Config.
 - DHCP

Selects whether to set the IPv4 address, subnet mask, and default gateway address automatically or manually.

Default: [Active]

- Active
- Inactive
- IP Address

Specifies the IPv4 address.

When [DHCP] is set to [Active], the IP address cannot be changed.

To change it, set [DHCP] to [Inactive].

Default: XXX,XXX,XXX,XXX

The numbers represented by "X" vary according to your network environment.

• Subnet Mask

Specifies the subnet mask.

When [DHCP] is set to [Active], the subnet mask cannot be changed.

To change it, set [DHCP] to [Inactive].

Default: XXX.XXX.XXX.XXX

The numbers represented by "X" vary according to your network environment.

Gateway Address

Specifies the gateway address.

When [DHCP] is set to [Active], the gateway address cannot be changed.

To change it, set [DHCP] to [Inactive].

Default: XXX,XXX,XXX,XXX

The numbers represented by "X" vary according to your network environment.

• IP Addr. Method

Displays the IP address acquisition method.

- DHCP
- Auto IP
- · Manual Config.
- Default IP
- · IPv6 Config.
 - IPv6

Selects whether to enable or disable IPv6.

Default: [On]

- On
- Off
- DHCP

Sets the printer to receive its IPv6 address from a DHCP server.

Default: [Off]

- On
- Off
- IP Ad. (DHCP)

Displays the IPv6 address obtained from a DHCP server.

- Manual Address
 - Manual Address

Specifies the printer's IPv6 address when DHCP is not used. Can contain up to 39 characters.

· Prefix Length

Specifies the prefix length, using a value between 0 and 128.

• Gateway Address

Specifies the IPv6 address of the default gateway. Can contain up to 39 characters.

• Stateless Ad.

Displays the IPv6 stateless addresses obtained from a Router Advertisement.

- Address 1
- Address 2
- Address 3

- Address 4
- Link-local Ad.

Displays the IPv6 link local address.

Fixed USB Port

Specifies whether the same printer driver can be used for multiple printers or not under USB connection.

Default: [Off]

On

The same printer driver you have installed in your computer can be used with any printer other than the one originally used for installation, if the printer is of the same model.

Off

You must install the printer driver separately for individual printers, because the printer other than the original will be recognized as a new device upon USB connection.



• Contact your network administrator for information about the network configuration.

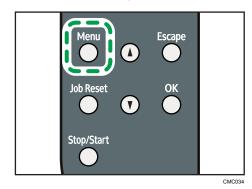
PCL Menu

You can set conditions when using PCL for printing.

Changing the PCL Menu

Use the following procedure to change the settings for orientation.

1. Press the [Menu] key.



The menu screen appears.

- 2. Press the [▲][▼] keys to select [PCL Menu], and then press the [OK] key.
- 3. Press the [▲][▼] keys to select [Orientation], and then press the [OK] key.
- 4. Press the [^A][[▼]] keys to select the orientation, and then press the [OK] key.
 The selected orientation is displayed for two seconds with an asterisk, and then the [PCL Menu] screen appears.
- 5. Press the [Menu] key to return to the initial screen.

PCL Menu Parameters

This section explains about parameters that can be set on the PCL Menu.

Orientation

Selects the page orientation.

Default: [Portrait]

- Portrait
- Landscape

Form Lines

Specifies the number of lines per page between 5 and 128.

Default: Region A 64, Region B 60

Font Number

Specifies the ID of the default font you want to use between 0 and 89.

Default: "0"

Point Size

Specifies the point size you want to use for the default font between 4.00 and 999.75 in 0.25 increments.

Default: [12.00 points]

Font Pitch

Specifies the number of characters per inch you want to use for the default font between 0.44 and 99.99 in 0.01 increments.

This setting is effective only for fixed-space fonts.

Default: [10.00 pitch]

Symbol Set

Specifies the character set for the default font. Available sets are as follows: PC-8, PC-8 D/N, PC-850, PC-852, PC-858, PC8-TK, Win L1, Win L2, Win L5, Desktop, PS Text, VN Intl, VN US, MS Publ, Math-8, PS Math, VN Math, Pifont, Legal, ISO 4, ISO 6, ISO 11, ISO 15, ISO 17, ISO 21, ISO 60, ISO 69, Win 3.0, MC Text, ISO L6, ISO L9, PC-775, PC-1004, Win Balt, Roman-8, Roman-9, ISO L1, ISO L2, ISO L5

Default: [PC-8]

Courier Font

Selects a courier-type font.

Default: [Regular]

- Regular
- Dark

Extend A4 Width

Sets the printer to extend the width of the printable area of A4 size paper, reducing side margin width.

Default: [Off]

- Off
- On

Append CR to LF

Sets the printer to append a CR code to each LF code to print text data clearly.

Default: [Off]

Off

• On

Resolution

Specifies the print resolution in dots per inch.

Default: 600 x 600 dpi

• 600 x 600 dpi

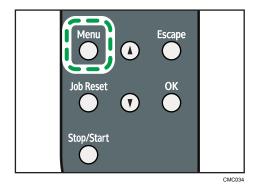
PS Menu

You can set conditions when using PostScript for printing.

Changing the PS Menu

Use the following procedure to change the settings for resolution.

1. Press the [Menu] key.



The menu screen appears.

- 2. Press the [▲][▼] keys to select [PS Menu], and then press the [OK] key.
- 3. Press the [▲][▼] keys to select [Resolution], and then press the [OK] key.
- 4. Press the [♠][♥] keys to select the resolution, and then press the [OK] key.
 The selected resolution is displayed for two seconds with an asterisk, and then the [PS Menu] screen appears.
- 5. Press the [Menu] key to return to the initial screen.

PS Menu Parameters

This section explains about parameters that can be set on the PS Menu.

Resolution

Specifies the print resolution in dots per inch.

Default: 600 x 600 dpi

- 600 x 600 dpi
- 1200 x 600 dpi
- 1200 x 1200 dpi

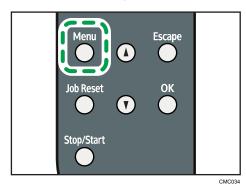
Language Menu

You can set language displayed on the menu.

Changing the Language Menu

Use the following procedure to change the language.

1. Press the [Menu] key.



The menu screen appears.

- 2. Press the [▲][▼] keys to select [Language], and then press the [OK] key.
- 3. Press the [♠][▼] keys to select the language, and then press the [OK] key.
 The selected item is displayed for two seconds with an asterisk, and then the [Language] screen appears.
- 4. Press the [Menu] key to return to the initial screen.

Language Menu Parameters

You can select the language you want to use. Available languages are as follows:

English, German, French, Italian, Dutch, Swedish, Norwegian, Danish, Spanish, Finnish, Portuguese, Japanese, Portuguese (BR).

Default: [English]

5. Monitoring and Configuring the Printer

This chapter explains how to use Web Image Monitor to monitor the printer or change its settings.

Using Web Image Monitor

Using Web Image Monitor, you can check the printer status and change settings.

Available operations

The following operations can be remotely performed using Web Image Monitor on a computer:

- Displaying the printer's status or settings
- · Configuring the printer's settings
- Configuring the user restriction settings
- · Configuring the network settings
- · Configuring the IPsec settings
- Printing reports
- · Setting the administrator password
- · Resetting the printer's configuration to the factory default
- · Creating backup files of the printer's configuration
- · Restoring the printer's configuration from backup files

Configuring the printer

To perform the operations from Web Image Monitor, TCP/IP is required.

After the printer is configured to use TCP/IP, operations from Web Image Monitor become available.

Recommended Web browsers

- Internet Explorer 6 or later
- Firefox 3.0 or later
- Safari 3.0 or later



- If the previous versions of the Web browser above are used or JavaScript and cookies are not enabled with the Web browser used, display and operation problems may occur.
- If you are using a proxy server, change the Web browser settings. Contact your network administrator for information about the settings.

- The previous page may not appear even after the back button of the Web browser is clicked. If this happens, click the refresh button of the Web browser.
- Updating the printer information is not automatically performed. Click [Refresh] in the main area to update the printer information.
- We recommend using Web Image Monitor in the same network.
- When using the printer under DHCP, the IP address may be automatically changed by the DHCP server settings.
- If the HTTP port is disabled, connection to the printer using the printer's URL cannot be established.

Displaying Top Page

This section explains how to display Web Image Monitor and its Top Page.

Displaying Top Page of Web Image Monitor

- 1. Start your Web browser.
- 2. Enter "http://(printer's address)/" in the address bar of the Web browser.

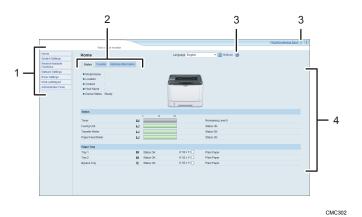


Top Page of Web Image Monitor appears.

If the printer's host name has been registered on the DNS server, you can enter it.

Top Page

Every Web Image Monitor page is divided into the following areas:



1. Menu area

If you select menu, its content will be shown on the work area, or the sub area.

2. Tab area

Contains menus for the Status and Counter modes and tabs for switching between them.

3. Help

If you click this icon, help index page opens.

4. Main area

Displays the contents of the item selected in the menu area.

Printer information in the main area is not automatically updated. Click [Refresh] at the upper right in the main area to update the printer information. Click the Web browser's [Refresh] button to refresh the entire browser screen.



• An administrator needs to set help file path before using help page.

Changing the Interface Language

Select the desired interface language from the [Language] list.

Checking the System Information

Click [Home] to display the main page of Web Image Monitor. You can check the current system information on this page.

This page contains the following tabs: [Status], [Counter], and [Machine Information].

Checking the Status Information

Click the [Status] tab on the main page to display system information, paper tray status and toner levels.



ltem	Description
Model Name	Shows the name of the printer.
Location	Shows the location of the printer as registered on the [SNMP] page.
Contact	Shows the contact information of the printer as registered on the [SNMP] page.
Host Name	Shows the host name specified in [Host Name] on the [DNS] page.
Device Status	Shows the current messages on the printer's display.

Status

Description
ws the amount of print cartridge remaining.
ws the remaining life of the fusing unit, as "Status OK", "Replacement uired Soon" or "Replacement Required". replacing, contact your sales or service representative.
V

Paper Tray

ltem	Description
Tray 1	Shows the current state and paper size/type setting of tray 1.
Tray 2	Shows the current state and paper size/type setting of tray 2.
Bypass Tray	Shows the current state and paper size/type setting of the bypass tray.



- The information about tray 2 appears only when the optional paper feed unit is installed.
- If a non-genuine print cartridge is installed, toner life cannot be reliably indicated.

Reference

- For details about the printer's location and contact information, see p.82 "Configuring the SNMP Settings".
- For details about the printer's host name, see p.80 "Configuring the DNS Settings".

Checking the Counter Information

Click the [Counter] tab on the main page to check the counter information.



Print Counter

ltem	Description
Page Total	Shows the total number of pages printed using the printer driver, lists/reports printed from the [Print List/Report] menu and [List/Test Print] menu.

Duplex

ltem	Description
Duplex Total Page	Shows the total number of sheets printed on both sides.



• A sheet printed on both sides counts as two printed pages.

Checking the Machine Information

Click the [Machine Information] tab on the main page to display printer information.



Machine Information

ltem	Description
Firmware Version	Shows the version of firmware installed on the printer.
Engine FW Version	Shows the version of firmware for the printer engine.
Machine ID	Shows the serial number of the printer.
Total Memory	Shows the total memory installed on the printer.

Configuring the System Settings

Click [System Settings] to display the page for configuring the system settings.

This page contains the following tabs: [Tray Paper Settings] and [I/O Timeout].

Configuring the Paper Settings

Click the [Tray Paper Settings] tab on the system settings page to configure the paper settings.



Tray 1

ltem	Description
Paper Size	Select the paper size for tray 1 from the following: [A4], [B5 JIS], [A5], [B6 JIS], [A6], [8 $1/2 \times 14$], [8 $1/2 \times 11$], [5 $1/2 \times 8 \ 1/2$], [7 $1/4 \times 10 \ 1/2$], [8 $\times 13$], [8 $1/2 \times 13$], [8 $1/4 \times 13$], [16K], [Custom Size]
Paper Type	Select the paper type for tray 1 from the following: [Thin Paper (52 to 64g/m2)], [Thick Paper 1 (100 to 130g/m2)], [Thick Paper 2 (131 to 162g/m2)], [Plain Paper], [Recycled Paper], [Color Paper], [Preprinted Paper], [Prepunched Paper], [Letterhead], [Bond Paper], [Cardstock], [Label Paper]

Tray 2

Item	Description
Paper Size	Select the paper size for tray 2 from the following:
	[A4], [B5 JIS], [A5], [8 1/2 × 14], [8 1/2 × 11], [5 1/2 × 8 1/2]

ltem	Description
Paper Type	Select the paper type for tray 2 from the following:
	[Thin Paper (52 to 64g/m2)], [Thick Paper 1 (100 to 130g/m2)], [Plain Paper], [Recycled Paper], [Color Paper], [Preprinted Paper], [Prepunched Paper], [Letterhead]

Bypass Tray

Item	Description
Paper Size	Select the paper size for the bypass tray from the following: [A4], [B5 JIS], [A5], [B6 JIS], [A6], [8 1/2 × 14], [8 1/2 × 11], [5 1/2 × 8 1/2], [7 1/4 × 10 1/2], [16K], [4 1/8 × 9 1/2], [3 7/8 × 7 1/2], [C5 Env], [C6 Env], [DL Env], [Custom Size]
Paper Type	Select the paper type for the bypass tray from the following: [Thin Paper (52 to 64g/m2)], [Thick Paper 1 (100 to 130g/m2)], [Thick Paper 2 (131 to 162g/m2)], [Plain Paper], [Recycled Paper], [Color Paper], [Preprinted Paper], [Prepunched Paper], [Letterhead], [Bond Paper], [Cardstock], [Label Paper], [Envelope], [OHP]

Priority Tray

ltem	Description
Priority Tray	Select the tray that the machine checks first for paper that can be used for the job from [Tray 1], [Tray 2], or [Bypass Tray].
	If automatic tray selection is specified for the print job and multiple trays contain valid paper, the first tray the machine finds will be used for printing; when that tray runs out of paper, the machine automatically switches to the next tray to continue printing.

Bypass Tray Setting Priority

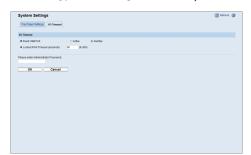
ltem	Description
Bypass Tray Setting Priority	Select how print jobs using the bypass tray are handled. • [System Settings]
	The printer prints all print jobs according to the printer's settings. An error will occur if the paper size/type settings of the printer and printer driver do not match.
	• [Any Size/Type]
	The printer prints all print jobs according to the printer driver's settings. Printing proceeds even if the paper size/type settings of the printer and printer driver do not match, but If the paper is too small for the print job, the printed image will be cropped.
	• [Any Custom Size/Type]
	The printer prints custom size print jobs according to the printer driver's settings and prints standard size print jobs according to the printer's settings.
	For custom size print jobs, printing proceeds even if the paper size/ type settings of the printer and printer driver do not match, but if the paper is too small for the print job, the printed image will be cropped.
	For standard size print jobs, an error will occur if the paper size/type settings of the printer and printer driver do not match.



• The information about tray 2 appears only when the optional paper feed unit is installed.

Configuring I/O Timeout Settings

Click the [I/O Timeout] tab on the system settings page to configure the I/O timeout settings.



I/O Timeout

Item	Description
Fixed USB Port	Specifies whether the same printer driver can be used for multiple printers or not under USB connection.
	If this setting is active, the same printer driver you have installed in your computer can be used with any printer other than the one originally used for installation, if the printer is of the same model.
	If inactive, you must install the printer driver separately for individual printers, because the printer other than the original will be recognized as a new device upon USB connection.
Locked Print Timeout (seconds)	Specifies how many seconds the printer holds a new Locked Print file, when the printer cannot store any more Locked Print files (0 to 300 seconds). Within this time, you can print or delete the new Locked Print file. You can also print or delete an existing Locked Print file so that the new Locked Print file can be stored in the printer.

Restricting Printing Function According to User

You can set the printer to require a user code when someone tries to use the printing function.



 When print jobs are restricted, you can only authenticate through the PCL6 printer driver. Printing from the PostScript 3 printer driver will not be possible.

Using Web Image Monitor, enable user restriction for the printing function, and then register users who can use the function.

For each user, you can specify if the printing function is available upon authentication. A maximum of 30 users can be registered.



• For details about configuring the user restriction settings, see p.19 "Restricting Printing Function According to User".

Configuring the Network Settings

Click [Network Settings] to display the page for configuring the network settings.

This page contains the following tabs: [Network Status], [IPv6 Configuration], [Network Application], [DNS], [Auto E-mail Notification], [SNMP], [SMTP], and [POP3].

Checking the Network Status

Click the [Network Status] tab on the network settings page to display network information.



General Status

ltem	Description
Ethernet Speed	Shows the type and speed of the network connection.
IPP Printer Name	Shows the name used to identify the printer on the network.
Network Version	Shows the version of the printer's network module (a part of the printer firmware).
MAC Address	Shows the MAC address of the printer.

TCP/IP Status

ltem	Description
DHCP	Select whether the printer should receive a dynamic IPv4 address automatically using DHCP. To use DHCP, select [Active]. When enabled, the items below cannot be configured.
IP Address	Enter the IPv4 address for the printer.
Subnet Mask	Enter the subnet mask of the network.
Gateway	Enter the IPv4 address of the network gateway.

Configuring the IPv6 Settings

Click the [IPv6 Configuration] tab on the network settings page to configure the IPv6 settings.



IPv6

ltem	Description
IPvó	Select whether to enable or disable IPv6. You cannot disable IPv6 using Web Image Monitor if the printer is currently in use in an IPv6 environment. In this case, use the control panel to disable [IPv6] under [Network Setting]. When disabled, [DHCP], [Manual Configuration Address], [Prefix Length], and [Gateway Address] below cannot be configured.

IPv6 Address

Item	Description
DHCP	Select whether or not the printer obtains its IPv6 address from a DHCP server.
IP Address (DHCP)	Displays the IPv6 address obtained from the DHCP server when [DHCP] is set to [Active].
Stateless Address	Displays up to four stateless auto addresses.
Gateway Address	Displays the printer's default gateway address.
Link-local Address	Displays the link local address of the printer. The link local address is an address that is valid only inside the local network (local segment).
Manual Configuration Address	Enter the printer's IPv6 address. Can contain up to 39 characters.
Prefix Length	Enter the prefix length using a value between 0 and 128.
Gateway Address	Enter the default gateway's IPv6 address. Can contain up to 39 characters.



• For details about [IPv6], see p.56 "Host Interface Menu Parameters".

Configuring the Network Application Settings

Click the [Network Application] tab on the network settings page to configure the network application settings.



Network Print Setting

ltem	Description
IPP	Select to enable network printing using Internet Print Protocol (via TCP port 631/80).
FTP	Select to enable network printing using an embedded FTP server in the printer (via TCP port 20/21).
RAW	Select to enable network raw printing.
Port No.	Enter the TCP port number to use for raw printing. The valid range is 1024 to 65535, except 53550 and 49999 (default is 9100).
LPR	Select to enable network printing using LPR/LPD (via TCP port 515).

mDNS Setting

ltem	Description
mDNS	Select to enable Multicast DNS (via UDP port 5353). If disabled, the item below cannot be configured.
Printer Name	Enter the name of the printer. Can contain up to 32 characters.

Configuring the DNS Settings

Click the [DNS] tab on the network settings page to configure the DNS settings.



DNS

ltem	Description
DNS Method	Select whether to specify domain name servers manually or receive DNS information from the network automatically. When set to [Auto-Obtain (DHCP)], [Primary DNS Server], [Secondary DNS Server], and [Domain Name] below become unavailable.
Primary DNS Server	Enter the IPv4 address of the primary DNS.
Secondary DNS Server	Enter the IPv4 address of the secondary DNS.
Domain Name	Enter the IPv4 domain name for the printer. Can contain up to 32 characters.
IPv6 DNS Method	Select whether to specify the domain server manually or have the printer obtain its DNS information automatically.
	When set to [Auto-Obtain (DHCP)], [Primary IPv6 DNS Server], [Secondary IPv6 DNS Server], and [IPv6 Domain Name] below become unavailable.
Primary IPv6 DNS Server	Enter the IPv6 address of the primary IPv6 DNS server. Can contain up to 39 characters.
Secondary IPv6 DNS Server	Enter the IPv6 address of the secondary IPv6 DNS server. Can contain up to 39 characters.
IPv6 Domain Name	Enter the IPv6 domain name of the printer. Can contain up to 32 characters.
DNS Resolve Priority	Select whether to give priority to IPv4 or IPv6 for DNS name resolution.
DNS Timeout (seconds)	Enter the number of seconds the printer waits before considering a DNS request to have timed out (1 to 999 seconds).

Item	Description
Host Name	Enter a host name for the printer. Can contain up to 15 characters.



• For details about each setting, see Web Image Monitor Help.

Configuring the Auto E-mail Notification Settings

Click the [Auto E-mail Notification] tab on the network settings page to configure the auto e-mail notification settings.

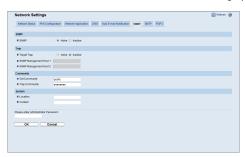


E-mail Notification 1/E-mail Notification 2

ltem	Description
Display Name	Enter a sender name for alert e-mail. Can contain up to 32 characters.
E-mail Address	Enter the address of the recipient of the alert email. Can contain up to 64 characters.
Paper Misfeed	Select to send an alert e-mail to the specified address if a paper jam occurs.
Out of Paper	Select to send an alert e-mail to the specified address if paper runs out.
Replace Print Cartridge Soon	Select to send an alert e-mail to the specified address if toner becomes low.
Call Service	Select to send an alert e-mail to the specified address if the printer requires servicing.
Replace Print Cartridge	Select to send an alert e-mail to the specified address if toner runs out.
Cover Open	Select to send an alert e-mail to the specified address if a cover is open.

Configuring the SNMP Settings

Click the [SNMP] tab on the network settings page to configure the SNMP settings.



SNMP

ltem	Description
SNMP	Select whether to enable the printer to use SNMP services.

Trap

Item	Description
Target Trap	Select whether to enable the printer to send traps to the management host (NMS). When set to [Inactive], [SNMP Management Host 1] and [SNMP Management Host 2] below become unavailable.
SNMP Management Host 1	Enter the IP address or host name of a management host. Can contain up to 64 characters.
SNMP Management Host 2	Enter the IP address or host name of a management host. Can contain up to 64 characters.

Community

Item	Description
Get Community	Enter the community name to use for authentication of Get requests. Can contain up to 32 characters.
Trap Community	Enter the community name to use for authentication of Trap requests. Can contain up to 32 characters.

System

ltem	Description
Location	Enter the location of the printer. The location entered here is displayed on the main page. Can contain up to 64 characters.
Contact	Enter the contact information of the printer. The contact information entered here is displayed on the main page. Can contain up to 64 characters.

Configuring the SMTP Settings

Click the [SMTP] tab on the network settings page to configure the SMTP settings.



SMTP

ltem	Description
Primary SMTP Server	Enter the IP address or host name of the SMTP server. Can contain up to 64 characters.
Port No.	Enter the port number for SMTP (1 to 65535).
Authentication Method	 Select an authentication method from the following: [Anonymous]: The user name and password are not necessary. [SMTP]: The printer supports NTLM and LOGIN authentication. [POP before SMTP]: The POP3 server is used for authentication. When sending e-mails to an SMTP server, you can enhance the SMTP server security level by connecting to the POP server for authentication.
User Name	Enter the user name for logging in to the SMTP server. Can contain up to 32 characters.
Password	Enter the password for logging in to the SMTP server. Can contain up to 32 characters.

Configuring the POP3 Settings

Click the [POP3] tab on the network settings page to configure the POP3 settings.



POP3 Settings

Item	Description
POP3 Server	Enter the IP address or host name of the POP3 server for authentication. The POP3 server specified here will be used for [POP before SMTP]. Can contain up to 64 characters.
User Account	Enter the user name for logging in to the POP3 server. Can contain up to 32 characters.
User Password	Enter the password for logging in to the POP3 server. Can contain up to 32 characters.
Authentication	Select an authentication method from the following:
	[None]: Password will not be encrypted.
	[APOP Authentication]: Password will be encrypted.
	[Auto]: Password will be encrypted or not encrypted according to the POP3 server's settings.

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Configuring the IPsec Settings

Click [IPsec Settings] to display the page for configuring the IPsec settings.

This page contains the following tabs: [IPsec Global Settings] and [IPsec Policy List].



• This function is available only when an administrator password is specified.

Configuring the IPsec Global Settings

Click the [IPsec Global Settings] tab on the IPsec settings page to configure the IPsec global settings.



ltem	Description
IPsec Function	Select whether to enable or disable IPsec.
Default Policy	Select whether to allow for the default IPsec policy.
Broadcast and Multicast Bypass	Select the services that you do not want to apply IPsec from the following: [DHCPv4], [DHCPv6], [SNMP], [mDNS], [NetBIOS], [UDP Port 53550]
All ICMP Bypass	Select whether to apply IPsec to ICMP packets (IPv4 and IPv6) from the following: • [Active]: All ICMP packets will be bypassed without IPsec protection. "ping" command (echo request and echo reply) is not encapsulated by IPsec.
	[Inactive]: Some ICMP message types will be bypassed without IPsec protection.



• For details about which ICMP message types will be bypassed when setting [All ICMP Bypass] to [Inactive], see Web Image Monitor Help.

Click the [IPsec Policy List] tab on the IPsec settings page to display the list of the registered IPsec policies.



ltem	Description
No.	IPsec policy number.
Name	Displays the name of the IPsec policy.
Address Settings	Displays the IP address filter of the IPsec policy as below: Remote address/Prefix length
Action	Displays the action of the IPsec policy as "Allow", "Drop", or "Require Security".
Status	Displays the status of the IPsec policy as "Active" or "Inactive".

To configure IPsec policies, select the desired IPsec policy, and then click [Change] to open the "IPsec Policy Settings" page. The following settings can be made on the "IPsec Policy Settings" page.



IP Policy Settings

ltem	Description
No.	Specify a number between 1 and 10 for the IPsec policy. The number you specify will determine the position of the policy in the IPsec Policy List. Policy searching is performed according to the order of the list. If the number you specify is already assigned to another policy, the policy you are configuring will take the number of the earlier policy, and the earlier policy and any subsequent policies will be renumbered accordingly.
Activity	Select whether to enable or disable the policy.
Name	Enter the name of the policy. Can contain up to 16 characters.
Address Type	Select IPv4 or IPv6 as the type of IP address to be used in IPsec communication.
Local Address	Displays the IP address of this printer.
Remote Address	Enter the IPv4 or IPv6 address of the device with which to communicate. Can contain up to 39 characters.
Prefix Length	Enter the prefix length of the Remote Address, using a value between 1 and 128. If this setting is left blank, "32" (IPv4) or "128" (IPv6) will be automatically selected.

ltem	Description
Action	Specify how the IP packets are processed from the following: • [Allow]: IP packets are both sent and received without IPsec applied to them.
	[Drop]: IP packets are discarded.
	 [Require Security]: IPsec is applied to IP packets that are both sent and received.
	If you have selected [Require Security], you must configure [IPsec Settings] and [IKE Settings].

IPsec Settings

Item	Description
Encapsulation Type	Specify the encapsulation type from the following: • [Transport]: Select this mode to secure only the payload section of each IP packet when communicating with IPsec compliant devices. • [Tunnel]: Select this mode to secure every section of each IP packet. We recommend this type for communication between security gateways (such as VPN devices).
Security Protocol	Select the security protocol from the following: • [AH]: Establishes secure communication that supports authentication only. • [ESP]: Establishes secure communication that supports both authentication and data encryption. • [ESP&AH]: Establishes secure communication that supports both data encryption and authentication of packets, including packet headers. Note that you cannot specify this protocol when [Tunnel] is selected for [Encapsulation Type].
Authentication Algorithm for AH	Specify the authentication algorithm to be applied when [AH] or [ESP&AH] is selected for [Security Protocol] from the following: [MD5], [SHA1]
Encryption Algorithm for ESP	Specify the encryption algorithm to be applied when [ESP] or [ESP&AH] is selected for [Security Protocol] from the following: [None], [DES], [3DES], [AES-128], [AES-192], [AES-256]

ltem	Description
Authentication Algorithm for ESP	Specify the authentication algorithm to be applied when [ESP] is selected for [Security Protocol] from the following: [MD5], [SHA1]
Life Time	Specify the life time of the IPsec SA (Security Association) as a time period or data volume. The SA will expire when the time period you specify elapses or the volume of data you specify reaches the volume carried.
	If you specify both a time period and a data volume, the SA will expire as soon as either is reached, and a new SA will then be obtained by negotiation.
	To specify the life time of the SA as a time period, enter a number of seconds.
	To specify the life time of the SA as a data volume, enter a number of KBs.
Key Perfect Forward Secrecy	Select whether to enable or disable PFS (Perfect Forward Secrecy).

IKE Settings

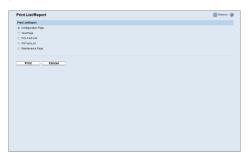
ltem	Description
IKE Version	Displays the IKE version.
Encryption Algorithm	Specify the encryption algorithm from the following: [DES], [3DES], [AES-128], [AES-192], [AES-256]
Authentication Algorithm	Specify the authentication algorithm from the following: [MD5], [SHA1]
IKE Life Time	Specify the life time of the ISAKMP SA as a time period. Enter a number of seconds.
IKE Diffie-Hellman Group	Select the IKE Diffie-Hellman Group to be used in the generation of the IKE encryption key from the following: [DH1], [DH2]
Pre-Shared Key	Specify the PSK (Pre-Shared Key) to be used for authentication of a communicating device. Can contain up to 32 characters.
Key Perfect Forward Secrecy	Select whether to enable or disable PFS (Perfect Forward Secrecy).



• For details about IPsec, see p.118 "Transmission Using IPsec".

Printing Lists/Reports

Click [Print List/Report] to display the page for printing reports. Then, select an item and click [Print] to print out information for that item.



Print List/Report

Item	Description
Configuration Page	Prints general information about the printer and its current configuration.
Test Page	Prints a test page for checking the printing condition.
PCL Font List	Prints the current configuration and installed PCL font list.
PS Font List	Prints the current configuration and installed PostScript font list.
Maintenance Page	Prints the maintenance page.



- Reports cannot be printed via Web Image Monitor if other jobs are printing. Before printing reports, confirm that printer is not printing.
- Reports will be printed on A4 or Letter size paper. Load one of these sizes of paper into the priority tray before printing reports.

Reference

- For details about priority tray settings, see p.72 "Configuring the Paper Settings".
- For details about loading paper, see "Loading Paper" Hardware Guide.

Configuring the Administrator Settings

Click [Administrator Tools] to display the page for configuring the administrator settings.

This page contains the following tabs: [Administrator], [Reset Settings], [Backup Setting], [Restore Setting], and [Help Source File Setting].

Configuring the Administrator Password

Click the [Administrator] tab on the administrator settings page to configure the administrator password.



Administrator Settings

Item	Description
New Password	Enter the new administrator password. Can contain up to 16 characters.
Confirm New Password	Enter the same password again, to confirm.

Resetting the Printer's Settings

Click the [Reset Settings] tab on the administrator settings page to reset the printer's settings.



Reset Settings

ltem	Description
Reset Network Settings	Select to restore network settings to their defaults.
Reset Menu Settings	Select to restore settings that are not related to the network.
Reset Settings of Available Functions	Select to clear the user restriction settings.
Reset IPsec Settings	Select to clear the IP security settings.



• [Reset IPsec Settings] appears only when a password is specified in [Administrator].

Backing Up the Printer's Settings

Click the [Backup Setting] tab on the administrator settings page to create backup files containing the printer's configuration settings. If necessary, these backup files can be used to restore previous configurations.



• When sending the printer for repair, it is important that you create backup files in advance. The printer's settings are returned to the default after repair.



Backup Setting

ackep sening	
ltem	Description
Back up Network Settings	Backs up the network settings.
Back up Menu Settings	Backs up settings that are not related to the network.
Back up Settings of Available Functions	Backs up user restriction settings to a file.

ltem	Description
Back up IPsec Settings	Backs up the IP security settings to a file.

Follow the procedure below to create configuration backup files.

- 1. Select the radio button for the type of data you wish to back up.
- 2. Enter the administrator password if required.
- 3. Click [OK].
- 4. Select [Save] or [Save as] from the dropdown list at the bottom of the Window.
- 5. The backup file is stored in the default folder if choosing [Save]. Navigate to the location to save the backup file if choosing [Save as] and proceed to the next step.
- 6. Specify a name for the file, and click [Save].



• [Back up IPsec Settings] appears only when a password is specified in [Administrator].

Restoring the Printer's Settings from a Backup File

Click the [Restore Setting] tab on the administrator settings page to restore the printer's settings from a previously created backup file.



 When the printer is returned from repair, it is important that you restore the printer's settings from the backup files. The printer's settings are returned to the default after repair.



Restore Setting

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ltem	Description
File to Restore	Enter the path and name of the file to restore, or click [Browse] to select the file.

Follow the procedure below to restore configuration backup files.

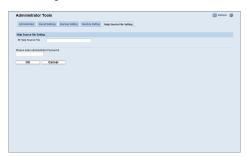
- 1. Click [Browse...].
- 2. Navigate to the directory containing the backup file to restore.
- 3. Select the backup file, and click [Open].
- 4. Enter the administrator password if required.
- 5. Click [OK].
- 6. Reboot the printer if you are requested to do so.



• If the settings are not restored successfully, an error message appears. Try again to restore the file completely.

Configuring Help Source File Setting

Click the [Help Source File Setting] tab on the administrator settings page to configure the help source file setting.



Help Source File Setting

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ltem	Description
Help Source File	Enter the help source file path.

Follow the procedure below to install the help.

- Copy the [WIMHELP] folder on the CD-ROM to your computer's hard drive.
 - The example procedures explain how to copy the [WIMHELP] folder to the C:\tmp\WIMHELP directory.
- 2. Access Web Image Monitor, and then click [Help Source File Setting] on the [Admin Settings] page.
- 3. In the text box, enter "C:\tmp\WIMHELP\".
- 4. Enter the administrator password if required.
- 5. Click [OK].

Displaying Web Image Monitor Help

To use Help for the first time, you need to install its source file from the CD-ROM provided with this printer.



- By clicking?, the Help icon in the header area, the contents of Help appear.
- By clicking ?, the Help icon in the main area, Help for the setting items in the main area appears.

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Printer Status Notification by E-Mail

Whenever a toner cartridge becomes empty or paper is jammed, an e-mail alert is issued to the registered addresses to notify the printer status.



- This function is available only if you are using this printer in a network environment.
- 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 an 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, refer to your e-mail application's Help.

For this notification, you can make the e-mail notification settings.

You can be notified of the following events:

- Paper Jam
- Toner Low
- No Toner
- No Paper
- Service Required
- Cover Open

Also you can see the information of the printer, such as printer name and serial number.

- 1. Start the Web browser, and access the printer by entering its IP address.
- 2. In the menu area, click [Network Settings].

The "Network Settings" page appears.

- 3. Click the [Auto E-mail Notification] tab.
- 4. Enter a sender name for alert e-mail and the address of the recipient of the alert e-mail.

You can set up to 2 e-mail notification settings.

- 5. Select the checkbox in which event you want to notify.
- 6. Enter the administrator password if required.
- 7. Click [OK].

Mail Authentication

You can configure mail authentication to prevent illegal use of the mail server.

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.

Use the following procedure to specify SMTP authentication.

- 1. Start the Web browser, and access the printer by entering its IP address.
- 2. In the menu area, click [Network Settings].

The "Network Settings" page appears.

- 3. Click the [SMTP] tab.
- 4. Make the following settings:
 - Authentication Method: Select [SMTP] or [POP before SMTP].
 - User Name: Enter the user name for SMTP Authentication.
 - Password: Enter the password set for the SMTP User Name.
 - Device E-mail Address: Enter the e-mail address.
- 5. Enter the administrator password if required.
- 6. Click [OK].
- 7. Quit Web Image Monitor.

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SNMP

You can use the SNMP manager to obtain information about the printer.

The SNMP agent operating on UDP is built into the Ethernet board that is installed in this printer.



 If you change the printer's community name, use Web Image Monitor to change the computer's settings accordingly.



• The default community name is [public]. You can use this community name to obtain MIB information.

Reading the Configuration Page

The configuration page contains the information shown below.

System Reference

Machine ID

Shows the serial number assigned to the printer by the manufacturer.

Total Memory

Shows the total amount of memory installed on the printer.

• Firmware Version

Shows the version of the printer's firmware.

• Printer Language

Shows the version of the printer language installed in the printer.

• Attached Equipment

Shows "Tray 2" if tray 2 is attached.

Print Cartridge

Shows the remaining life of the print cartridge.

• Transfer Roller

Shows the remaining life of the transfer roller.

Paper Feed Roller

Shows the remaining life of the paper feed roller.

Fusing Unit

Shows the remaining life of the fusing unit.

Paper Input

Shows settings made in the [Paper Input] menu. For details, see "Paper Input Menu".

Maintenance

Shows the settings made in the [Maintenance] menu. For details, see "Maintenance Menu".

System

Shows settings made in the [System] menu. For details, see "System Menu".

PCL Menu

Shows settings made in the [PCL Menu]. For details, see "PCL Menu".

PS Menu

Shows settings made in the [PS Menu]. For details, see "PS Menu".

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Host Interface

Shows settings made in the [Host Interface] menu. For details, see "Host Interface Menu".

Interface Information

Shows the printer's interface information (MAC address and host name).

Counter List

Shows the printer's counter information.

Paper Misfeed Counter

Shows the printer's paper jam counter information.

Error Log

Shows the printer's error log information.

IPv6 Configuration

Shows the printer's IPv6-related settings.



 The configuration page can be printed using the control panel or Web Image Monitor. For details, see "Printing the Configuration Page" or "Printing Lists/Reports".

Reference

- For details about paper settings, see p.44 "Paper Input Menu".
- For details about the configuration page, see p.47 "Printing the Configuration Page".
- For details about low humidity mode and adjusting print registration, see p.53 "Maintenance Menu".
- For details about setting basic functions, see p.49 "System Menu".
- For details about network connections and communications, see p.55 "Host Interface Menu".
- For details about parameters for PCL, see p.60 "PCL Menu".
- For details about parameters for PS, see p.63 "PS Menu".
- For details about selecting languages on the display, see p.64 "Language Menu".
- For details about printing various configuration pages, see p.91 "Printing Lists/Reports".

6. Using a Print Server

This chapter explains how to configure this printer to work as a network printer.

Preparing Print Server

This section explains how to configure this printer as a Windows network printer.

The printer is configured to enable network clients to use it.



- Under Windows XP Professional or Windows Server 2003/2003 R2/2008/2008 R2, to change
 printer properties in the [Printer] folder, you need Printer Management access authentication; under
 Windows Vista/7, Full Control access authentication. Log on to the file server as an Administrator
 group.
- The following procedure is based on Windows 7 as an example. If you are using another
 operating system, the procedure might vary slightly.
- 1. Open the [Devices and Printers] window from the [Start] menu.
 - The [Devices and Printers] window appears.
- Right click the icon of the printer you want to use, and then click [Printer properties].
 The printer properties appears.
- 3. On the [Sharing] tab, click [Share this printer].
- 4. To share this printer with users using a different version of Windows, click [Additional Drivers...].
 - If you have installed an alternative driver by selecting [Share this printer] during the printer driver installation, this step can be ignored.
- 5. On the [Advanced] tab, click the [Printing Defaults...] button. Specify the default values for the printer driver that will be distributed to client computers, and then click [OK].
- 6. Click [OK] to close the printer properties.

7. Special Operations under Windows

Printing Files Directly from Windows

You can print files directly using Windows commands; "lpr" or "ftp".

Setup

Use the following procedure to make network environment settings.

 Enable TCP/IP using the control panel, and then set up the printer's network environment about TCP/IP including IP addresses.

TCP/IP of the printer 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, install "Printing service for UNIX" as the network application.

Reference

- For details about setting an IP address, see Hardware Guide.
- For details about setting an IP address of the printer using DHCP, see p.124 "Using DHCP".
- This completes the setup for specifying a printer using an IPv4 address when printing. When using a
 host name to specify a printer, proceed to p.105 "Using a Host Name Instead of an IPv4 Address"
 and continue the setup.

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 an IPv4 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.

Reference

- For details about printing configuration page using the control panel, see p.47 "Printing the Configuration Page".
- For details about printing configuration page using Web Image Monitor, see p.91 "Printing Lists/ Reports".

In other cases

Add the IPv4 address and host name of the network printer to the hosts file on the computer used for printing.

1. Open the hosts file using memo pad files, for instance.

The hosts file is in the following location:

\WINDOWS\SYSTEM32\DRIVERS\ETC\HOSTS

2. Add an IPv4 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 this 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.

3. Save the file.

Printing Commands

The following explains printing operations using the "lpr" and "ftp" commands.

Enter commands using the command prompt window. The location of the command prompt varies depending on operating systems:

Windows XP/Vista/7, Windows Server 2003/2003 R2/2008/2008 R2
 [Start] - [All Programs] - [Accessories] - [Command Prompt]



- Match the data format of the file to be printed with the emulation mode of this 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: 10
- Enter the file name in a format including the path from the directory executing commands.

/

■ Reference

• The "option" specified in a command is an intrinsic printer option and its syntax is similar to printing from UNIX.

lpr

When specifying a printer by an IP address

c:\> lpr -Sprinter's IP address -Pprinter name [-ol] \pass name\file name

When specifying a printer by host name instead of an IP address

c:\> lpr -Sprinter host name -Pprinter's name [-ol] \pass name\file name

To print a binary file, include the "-ol" switch (a dash followed by a lowercase O and L) after the printer name.

ftp

Use the "put" or "mput" command according to the number of files to be printed.

When one file is printed

ftp> put \pass name \file name [option]

When multiple files are printed

ftp> mput \pass name\file name [\pass name\file name...] [option]

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 [OK] key.

User: sysadm

Password: sysadm

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

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5. Quit ftp.

ftp> bye



- "=", ", ", "=", and "; " cannot be used for file names. File names will be read as option strings.
- For "mput" command, option can not be defined.
- 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.

8. Mac OS X Configuration

This chapter explains how to use this printer under Mac OS X.

The example procedures in this chapter explain configuration under Mac OS X 10.6.

The procedure might be different according to the version of OS.

Setting Up the PPD File

1. Start [System Preferences...] and click [Print & FAX].

Under Mac OS X 10.3, click [Print & FAX] in [System Preferences], and then click [Set Up Printers...].

Under Mac OS X 10.4, Start [Printer Setup Utility].

2. Click [+] or [Add] button.

Follow one of the procedures below according to the version of OS.

- Mac OS X 10.3
 - Click [Rendezvous] on the first pop-up menu.
- Mac OS X 10.4

Click [More Printers...]. Then select the zone from the second pop-up menu.

Mac OS X 10.5 and 10.6

Click [Default]. If the printer name is not displayed, select the icon that corresponds to your network environment.

3. Select the printer you are using from the [Printer Name] list.

Under Mac OS X 10.3, manufacturer from the [Printer Model:] pop-up menu.

Under Mac OS X 10.4, select the printer, and then select its manufacturer from the [Print Using] pop-up menu.

- 4. Select the connected printer from the list of printer models, and then click [Add].
- 5. From the [System Preferences] menu, click [Quit System Preferences]

Under Mac OS X 10.3 and 10.4, quit [Printer Setup Utility].

Setting Up Options

Use this procedure to configure the printer's options.

- 1. From the Apple menu, select [System Preferences...].
- 2. Under "Hardware", click [Print & Fax].
- 3. Select the machine from the list, and then click [Options & Supplies...].
- 4. Click the [Driver] tab.
- 5. Check the tray 2 configuration, and then click [OK].
- 6. From the [System Preferences] menu, click [Quit System Preferences].



• 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.

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Setting Up for Printing

Use the following procedures to configure the printer.

Making Paper Settings from an Application

- 1. Open the file you want to print.
- 2. On the [File] menu, click [Page Setup...].
- 3. Check that the printer you want to use is displayed in [Format for], and then select the paper size you want to use in [Paper Size].
 - If this printer is not displayed in [Format for], select the printer you want to use.
- 4. Configure the settings, and then click [OK].

Reference

• The [Page Setup...] dialog box varies depending on the application you use. For details, see the manuals provided with the Mac OS X.

Printing from an Application

- 1. Open the file you want to print.
- 2. On the [File] menu, click [Print...].
- 3. In the [Printer] list, select the printer.
- 4. Configure the print settings, and then click [Print].

Canceling a Print Job from the Computer

- 1. From the Apple menu, select [System Preferences...].
- 2. Under "Hardware", click [Print & Fax].
- 3. Double-click the printer from "Printer".
- 4. Select the print job you want to cancel, and then click [Delete].



- If the printer is shared by multiple computers, be careful not to cancel a print job of other user.
- You cannot stop printing data that has already been processed. For this reason, printing may continue for a few pages after you cancel printing.
- If you cancel a Locked Print job, the machine might have already stored some pages of the job as a Locked Print file. If this happens, use the control panel to delete the Locked Print file.
- To stop a large data size print job may take a while.

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Using PostScript 3

Use the PostScript 3 driver to print files.

You can use the following functions in the [Print] dialog:

Paper Size

Use this function to select the paper size.

Input Tray

Use this function to select the tray from which you want to feed paper.

You can select [Auto Select], [Tray 1], [Tray 2], or [Bypass Tray].

Paper Type

Use this function to select the paper type.

In the [Feature Sets] list, select [Paper Type], and then, in the [Media Type] list, select the paper type you want to use for printing.

Duplex

Use this function to print on both sides of sheets. In the drop-down menu, select [Layout], and then specify the binding pattern in the [Two-Sided] area. Both short edge and long edge binding is possible with this function.

Print Quality

Use this function to select the print quality.

In the [Feature Sets] list, select [Imaging], and then, in the [Print Quality] list, select the print quality. You can select $[600 \times 600 \text{ dpi}]$ or $[1200 \times 1200 \text{ dpi}]$.

Dithering

Use this function to specify the rendering mode.

In the [Feature Sets] list, select [Dithering], and then, in the [Dithering] list, select the rendering mode.

You can select [Automatic], [Photographic], or [Text].

Toner Saving

Use this function to reduce the amount of toner used when printing.

To reduce toner consumption, in the [Feature Sets] list, select [Toner]. Then set [Toner Saving] to [On].

Gradation

Use this function to adjust the quality of the output.

You can select [1 bit] or [2 bits].

Print Blank Pages

Use this function to print blank pages.

To print blank pages, in the [Feature Sets] list, select [Toner]. Then set [Print Blank Pages] to [On].

Watermark Type

Use this function to select the watermark style.

In the [Feature Sets] list, select [Watermark Text], and then select the watermark type in the list.

You can select [Outlined], [Solid], or [Transparent Text].

Watermark Text

Use this function to select the watermark text.

In the [Feature Sets] list, select [Watermark Text], and then select the watermark text in the list.

You can select the following text:

- CONFIDENTIAL
- URGENT
- DRAFT
- ORIGINAL
- COPY

Watermark Font Size (points)

Use this function to select the watermark font size.

In the [Feature Sets] list, select [Watermark Text], and then, select the watermark font size in the list.

Watermark Font Typeface

Use this function to select the watermark font typeface.

In the [Feature Sets] list, select [Watermark Text], and then, select the watermark typeface.

Watermark Font Shading

Use this function to select the watermark font shading.

In the [Feature Sets] list, select [Watermark Text], and then, select the watermark font shading in the list.

Watermark Position

Use this function to select the watermark position.

In the [Feature Sets] list, select [Watermark Location]. Then, in the [Watermark Position (Horizontal)] and [Watermark Position (Vertical)] lists, select the horizontal and vertical positions, respectively.

Watermark Angle

Use this function to select the watermark angle.

In the [Feature Sets] list, select [Watermark Location], and then, select the watermark angle in the list.

Watermark

Use this function to select which page(s) to print the watermark on.

In the [Feature Sets] list, select [Watermark Location], and then, in the [Watermark] list, select which page(s) you want to print the watermark on.

You can select [Off], [First Page Only], or [All Pages].

Optional Tray

Use this function to specify optional paper feed unit.

Functions and Network Settings Available in an IPv6 Environment

The functions and network settings of this printer that are available in an IPv6 environment differ from those available in an IPv4 environment. Make sure the functions you use are supported in an IPv6 environment, and then configure the necessary network settings.

Reference

 For details about specifying the IPv6 settings, see p.55 "Host Interface Menu" or p.77 "Configuring the Network Settings".

Available Functions

Print via FTP

Prints documents via FTP using the EPRT and EPSV commands. Windows Vista/7 and an FTP application that supports IPv6 are required to use these commands.

Printer

Prints documents using the printer driver.

Bonjour

Allows the printer to communicate with Bonjour protocol-supported computers on the network. The IP address of the multi-cast group supported by IPv6 is ff02::fb.

Web Image Monitor

Allows you to check the printer's status and configure its settings using a Web browser.

Configuration Page

Prints a configuration page that shows you the printer's configuration, IP address, and other details.

Transmission Using IPsec

For securer communications, this printer supports the IPsec protocol. When applied, IPsec encrypts data packets at the network layer using shared key encryption. The printer uses encryption key exchange to create a shared key for both sender and receiver. To achieve even higher security, you can also renew the shared key on a validity period basis.

- 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 10.4.8 and later, Red Hat Enterprise Linux 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.
- If you cannot access Web Image Monitor due to IPsec configuration problems, disable IPsec under [Network Setting] on the control panel, and then access Web Image Monitor.

Reference

- For details about specifying the IPsec settings using Web Image Monitor, see p.85 "Configuring the IPsec Settings".
- For details about enabling and disabling IPsec using the control panel, see p.123 "Enabling and Disabling IPsec Using the Control Panel".

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 printer'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. 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. The authentication algorithm and authentication key are specified automatically.

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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. 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. 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. The authentication algorithm and authentication key are
 specified automatically.



• Some operating systems use the term "Compliance" in place of "Authentication".

Security Association

This printer uses encryption key exchange as the key setting method. With this method, 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.

The SA settings are auto-configured on both parties' machines. However, before the IPsec SA can be established, the ISAKMP SA (Phase 1) settings must be auto-configured. When this is done, the IPsec SA (Phase 2) settings, which allow actual IPsec transmission, will be auto-configured.

Also, for further security, the SA can be periodically auto updated by applying a validity period (time limit) for its settings. This printer only supports IKEv1 for encryption key exchange.

Multiple settings can be configured in the SA.

Settings 1-10

You can configure ten separate sets of SA details (such as different shared keys and IPsec algorithms).

IPsec policies are searched through one by one, starting at [No.1].

Encryption Key Exchange Settings Configuration Flow

This section explains the procedure for specifying encryption key exchange settings.

Printer	PC	
1. Set the IPsec settings on Web Image Monitor.	1. Set the same IPsec settings as the printer on PC.	
2. Enable IPsec settings.	2. Enable IPsec settings.	
3. Confirm IPsec transmission.		



- After configuring IPsec, you can use "ping" command to check if the connection is established correctly. Also, because the response is slow during initial key exchange, it may take some time to confirm that transmission has been established.
- If you cannot access Web Image Monitor due to IPsec configuration problems, disable IPsec on the control panel, and then access Web Image Monitor.

Reference

 For details about enabling and disabling IPsec using the control panel, see p.123 "Enabling and Disabling IPsec Using the Control Panel"

Specifying Encryption Key Exchange Settings

☆ Important

- To display [IPsec Settings] menu, specifying an administrator password is required.
- 1. Start the Web browser, and access the printer by entering its IP address.
- 2. Click [IPsec Settings].
- 3. Click the [IPsec Policy List] tab.
- 4. Select the number of the setting you want to modify in the list, and then click [Change].
- 5. Modify the IPsec related settings as necessary.
- 6. Enter the administrator password, and then click [Apply].
- 7. Click the [IPsec Global Settings] tab, and then select [Active] in [IPsec Function].
- If necessary, specify [Default Policy], [Broadcast and Multicast Bypass], and [All ICMP Bypass] also.
- 9. Enter the administrator password, and then click [Apply].

Specifying IPsec Settings on the Computer

Specify exactly the same settings for IPsec SA settings on your computer as are specified for the IPsec Settings on the printer. Setting methods differ according to the computer's operating system. The following procedure is based on Windows 7 in an IPv4 environment as an example.

- On the [Start] menu, click [Control Panel], [System and Security], and then click [Administrative Tools].
- 2. Double-click [Local Security Policy], and then click [IP Security Policies on Local Computer].
- In the "Action" menu, click [Create IP Security Policy...].
 The IP Security Policy Wizard appears.
- 4. Click [Next].
- 5. Enter a security policy name in "Name", and then click [Next].
- 6. Clear the "Activate the default response rule (earlier versions of Windows only)." check box, and then click [Next].
- 7. Select "Edit properties", and then click [Finish].
- 8. In the "General" tab, click [Settings...].
- 9. In "Authenticate and generate a new key after every", enter the same validity period (in minutes) that is specified on the printer in [IKE Life Time], and then click [Methods...].
- Confirm that the Encryption Algorithm ("Encryption"), Hash Algorithm ("Integrity"), and IKE Diffie-Hellman Group ("Diffie-Hellman Group") settings in "Security method preference order" all match those specified on the printer in [IKE Settings].

If the settings are not displayed, click [Add...].

- 11. Click [OK] twice.
- 12. Click [Add...] in the "Rules" tab.
 The Security Rule Wizard appears.
- 13. Click [Next].
- 14. Select "This rule does not specify a tunnel", and then click [Next].
- 15. Select the type of network for IPsec, and then click [Next].
- 16. Click [Add...] in the IP Filter List.
- 17. In [Name], enter an IP Filter name, and then click [Add...].
 The IP Filter Wizard appears.
- 18. Click [Next].

In [Description:], enter a name or a detailed explanation of the IP filter, and then click [Next].

You may click [Next] and proceed to the next step without entering any information in this field.

- 20. Select "My IP Address" in "Source address", and then click [Next].
- Select "A specific IP Address or Subnet" in "Destination address", enter the printer's IP address, and then click [Next].
- 22. For the IPsec protocol type, select "Any", and then click [Next].
- 23. Click [Finish], and then click [OK].
- 24. Select the IP filter that you have just created, and then click [Next].
- 25. Click [Add...] in the Filter Action.

The Filter Action Wizard appears.

- 26. Click [Next].
- 27. In [Name], enter a Filter Action name, and then click [Next].
- 28. Select "Negotiate security", and then click [Next].
- 29. Select one of options for computers allowed to communicate with, and then click [Next].
- 30. Select "Custom" and click [Settings...].
- 31. When [ESP] is selected for the printer in [Security Protocol] under [IPsec Settings], select [Data integrity and encryption (ESP)], and configure the following settings:

Set the value of [Integrity algorithm] to the same value as the [Authentication Algorithm for ESP] specified on the printer.

Set the value of [Encryption algorithm] to the same value as the [Encryption Algorithm for ESP] specified on the printer.

32. When [AH] is selected for the printer in [Security Protocol] under [IPsec Settings], select [Data and address integrity without encryption (AH)], and configure the following settings:

Set the value of [Integrity algorithm] to the same value as the [Authentication Algorithm for AH] specified on the printer.

Clear the [Data integrity and encryption (ESP)] check box.

33. When [ESP&AH] is selected for the printer in [Security Protocol] under [IPsec Settings], select [Data and address integrity without encryption (AH)], and configure the following settings:

Set the value of [Integrity algorithm] under [Data and address integrity without encryption (AH)] to the same value as [Authentication Algorithm for AH] specified on the printer.

Set the value of [Encryption algorithm] under [Data integrity and encryption (ESP)] to the same value as [Encryption Algorithm for ESP] specified on the printer.

- 34. In the Session key settings, select "Generate a new key every", and enter the same validity period (in seconds or Kbytes) as that specified for [Life Time] on the printer.
- 35. Click [OK], and then click [Next]
- 36. Click [Finish].

If you are using IPv6 under Windows Vista or a newer version of Windows, you must repeat this procedure from step 12 and specify ICMPv6 as an exception. When you reach step 22, select [58] as the protocol number for the "Other" target protocol type, and then set [Negotiate security] to [Permit].

- 37. Select the filter action that you have just created, and then click [Next].
- 38. Select one of options for an authentication method, and then click [Next].
- **39.** Click [Finish], and then click [OK] twice.

The new IP security policy (IPsec settings) is specified.

40. Select the security policy that you have just created, right click on it, and then click [Assign].

IPsec settings on the computer are enabled.



• To disable the computer's IPsec settings, select the security policy, right click, and then click [Unassign].

Enabling and Disabling IPsec Using the Control Panel

- 1. Press the [Menu] key.
- 2. Press the [▲][▼] keys to select [Host Interface], and then press the [OK] key.
- 3. Press the [▲][▼] keys to select [Network Setting], and then press the [OK] key.
- Press the [▲][▼] keys to select [IPsec], and then press the [OK] key.
- 5. Press the [▲][▼] keys to select [On] or [Off], and then press the [OK] key.
- 6. Press the [Menu] key to return to the initial screen.



• You can press the [Escape] key to exit to the previous level of the menu tree.

Cautions to Take When Using in a Network

Using DHCP

You can use this printer in a DHCP environment.

- Supported DHCP servers are those which are included with Windows Server 2003/2003 R2/2008/2008 R2.
- 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 printer operates using data from the DHCP server that responds first.

Using AutoNet

If the printer IPv4 address is not assigned by a DHCP server automatically, a temporary IPv4 address starting with 169.254, which is not used on the network, can be automatically selected by the printer.

If an AutoNet address is set as the printer's IP address, it changes every time you turn on the printer. Configure the TCP/IP settings according to your network environment.

You must change this setting to "on" to use AutoNet.



- 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.
- The printer cannot communicate with devices that do not have the AutoNet function. However, this
 printer can communicate with Macintosh computers running Mac OS X 10.3 or later.

When Using Windows Terminal Service/ MetaFrame

The following explains how to use Windows Terminal Service and MetaFrame.

Operating Environment

The following operating systems and MetaFrame versions are supported.

Windows Server 2003/2003 R2

- MetaFrame XP 1.0 FR3
- MetaFrame Presentation Server 3.0
- Citrix Presentation Server 4.5

Supported Printer Drivers

When Windows Terminal Service is operating

- PCL6 printer driver
- PostScript 3

Limitations

The following limitations apply to the Windows Terminal Service environment.

These limitations are built in Windows Terminal Service or MetaFrame.

MetaFrame's [Auto-creating client printers]

Using [Auto-creating client printers], you can select a logical printer created by copying the client's local printer data to the MetaFrame 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.
- When using MetaFrame XP 1.0 or higher versions, we recommend making settings in [Client Printer bandwidth] under [Citrix Management Console] according to the environment.

- If a print error occurs on the MetaFrame XP 1.0 SP1/FR1 and the print job or a printer
 created in [Auto-creating client printers] cannot be deleted, we recommend making settings in
 [Delete unfinished print jobs] in the registry. For details, see the Readme file provided with
 MetaFrame.
- If a print error occurs on the MetaFrame XP 1.0 FR2 and the print job or a printer created in [Auto-creating client printers] cannot be deleted, we recommend making settings in [Delete unfinished print jobs at logout] of Citrix Management Console.

MetaFrame's [Printer driver replication]

Using [Printer driver replication], you 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.

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expat

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Microsoft® Windows® HPC Server 2008 R2



 \bullet PostScript $^{\textcircled{\tiny{0}}}$ 3 in this manual stands for "Adobe PostScript 3 Emulation".

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MEMO

MEMO

Driver Installation Guide

This manual describes how to install drivers to use this printer.

Installing Drivers and Software

You can install the necessary drivers for this printer from the supplied CD-ROM.

Mportant

- ☐ The supplied drivers are supported by the following operating systems:
 - PCL 6 printer driver: Windows XP/Vista/7 and Windows Server 2003/2003 R2/2008/2008 R2
 - PostScript 3 printer driver: Windows XP/Vista/7 and Windows Server 2003/2003 R2/2008/2008 R2, and Mac OS X 10.3 or later

₩ Note

☐ This manual uses procedures based on Windows 7, and Mac OS X 10.6 as an example, unless otherwise specified. Procedures might vary depending on the operating system you are using.

■ Reference

☐ For the Mac OS X installation procedure, see p.9 "When Using the Printer under Mac OS X".

Installing the Printer Driver When Using the Network Connection (Windows)

This section explains how to install the printer driver that allows you to use this printer in a network environment.

Mportant !

- Before beginning this procedure, you must assign the IP address on the printer. For details about setting the printer's IP address, see Hardware Guide.
- ☐ Manage Printers permission is required to install the driver. Log on as an Administrators group member.

PCL 6 Printer Driver

Use the following procedure to install the PCL 6 printer driver.

- 1 Close all applications except this manual.
- From the CD-ROM menu, click [PCL 6 Printer Driver].

The software license agreement appears.

- After reading the agreement, click [I accept the agreement.], and then click [Next>].
- A Select [Add a new printer], and then click [Next>].
- Select [Connect to a printer port or LAN], and select the printer detection method, and then click [Next>].

To detect the printer automatically, select [Search for printers automatically]. To specify the printer directly, select [Search for printers by specified IP Address].

If you selected [Search for printers automatically] in step 5, select the printer, and then click [Next>].

If you selected [Search for printers by specified IP Address] in step 5, enter the printer's IP address in the [IP Address] box, and then click [OK].

- Double-click the printer name to display the printer's settings, change the settings as required, and then click [Continue].
 - If [Windows can't verify the publisher of this driver software] display appears in the installation, click [Install this driver software anyway].
- If a message appears informing you that the installation was successfully completed, click [Finish].

PostScript 3 Printer Driver

Use the following procedure to install the PostScript 3 printer driver.

- 1 Close all applications except this manual.
- Prom the CD-ROM menu, click [PostScript 3 Printer Driver].
- Click [Add a local printer].
- 4 Click [Create a new port].
- Select [Standard TCP/IP Port], and then click [Next].
- Enter the printer's name or IP address in the [Hostname or IP address] box, and then click [Next].
- Check that the name of the printer whose driver you want to install is selected, and then click [Next].
- Change the name if you want, and then click [Next].

 If [Windows can't verify the publisher of this driver software] display appears in the installation, click [Install this driver software anyway].
- Specify whether or not to share this printer, and then click [Next].

Select whether or not to use this printer as the default printer, and clic [Print a test page] to print a test page if necessary, and then click [Finish].	k
↓ Note	
☐ Auto Run might not work under certain operating system settings. If this is the case, launch "Setup.exe" from the CD-ROM root directory.	
☐ To stop the selected software installing, click [Cancel] before the installation is complete.	
□ 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 a printer]. See p.8 "If a Message Appears during Installation (Windows)".	
E Reference	
☐ For details about reconfiguring the printer settings, when the search for network printer fails, see p.3 "If the network printer search fails".	
☐ For details about the network connection, see Hardware Guide.	
If the network printer search fails	_
This section explains how to reconfigure the settings if the network printer search fails during the installation.	
Use the control panel to check the printer's IP address settings, and then reconfigure these settings if necessary.	. -
❖ Reconfigure the printer's IP address Use the control panel to check the printer's current IP address settings under [Network Setting]. You can change these settings if necessary. For details, see "Changing the Host Interface Menu", Software Guide.	
❖ Reconfigure the port settings	
1 On the [Start] menu, click [Devices and Printers].	
Click the name of this printer, and then click [Print server properties].	
The print server properties appears. Click the [Ports] tab, and then click [Add Port].	
Click [Standard TCP/IP Port], and then click [New Port]. The Add Standard TCP/IP Printer Port Wizard appears.	
5 Click [Next>].	
6 Enter the printer's IP address or printer name that are printed on the configuration page, and then click [Next>].	e
7 Click [Finish].	
8 Click [Close] twice.	

9 Close the Control Panel window.

Installing the Printer Driver to Use As a Windows Network Printer

This section explains how to install the printer driver for using this printer as a Windows network printer.

Mportant

- ☐ Before you can make the following settings, you must configure this printer as a Windows network printer. For details about configuring a Windows network printer, see "Using a Print Server", Software Guide.
- 1 On the [Start] menu, click [Devices and Printers].
- Click [Add a printer].
 The Add Printer wizard appears.
- Click [Add a network, wireless or Bluetooth printer].
- 4 Select this printer from the list of the shared printers, and then click [Next].

If [Do you trust this printer?] display appears in the installation, click [Install driver].

- Click [Next].
- Select whether or not to use this printer as the default printer, and click [Print a test page] to print a test page if necessary, and then click [Finish].

Installing the Printer Driver When Using the USB Connection (Windows)

This section explains how to install the printer driver that allows you to use this printer via USB.

Mportant (

☐ Manage Printers permission is required to install the driver. Log on as an Administrators group member.

PCL 6 Printer Driver

Use the following procedure to install the PCL 6 printer driver.

- 1 Close all applications except this manual.
- **?** Check the following:
 - The printer's USB cable is disconnected
 - The printer's main power switch is turned to off
- From the CD-ROM menu, click [PCL 6 Printer Driver].

The software license agreement appears.

- After reading the agreement, click [I accept the agreement.], and then click [Next>].
- Select [Add a new printer], and then click [Next>].
- 6 Select [Connect USB cable], and then click [Next>].
- In the [Select USB Connected Printer] dialog box, select a printer, and then click [Next>].

A message appears, asking you to check that the USB cable is not connected and the printer's main power switch is turned to off.

- Check the USB cable and the printer status, and then click [Next>].

 If [Windows can't verify the publisher of this driver software] display appears in the installation, click [Install this driver software anyway].
- When the [<Auto-detect USB Port>] dialog box appears, connect this printer to the computer using a USB cable, and then turn the printer's main power switch to on.

The auto-detecting starts.

To cancel the auto-detecting, click [Stop Auto-detecting].

- When the dialog box asking you to use this printer as the default printer appears, click either key.
- When a message appears informing you that the installation was successfully completed, click [Finish].

PostScript 3 Printer Driver

Use the following procedure to install the PostScript 3 printer driver.

- 1 Close all applications except this manual.
- 2 Connect the printer to your computer using a USB cable, and then turn the printer's power switch on.
- On the [Start] menu, click [Devices and Printers].
- In [Unspecified], double-click the name of the printer whose driver you want to install.
- 5 Click the [Hardware] tab in the printer properties dialog box.
- Select the name of the printer whose driver you want to install, and then click [Properties].
- 7 Click [Change settings].
- 8 Click the [Driver] tab.
- Insert the CD-ROM.

If the **[AutoPlay]** dialog box appears, click the **[Close]** button. Skip this step if you are referring this manual from the driver CD-ROM.

- Click [Update Driver...].
- Click [Browse my computer for driver software].
- Click [Browse...] to select the printer driver location, and then click [OK].

If the CD-ROM drive is D, the source files of the driver are stored in the following locations:

D:\DRIVERS\PS\(XP_VISTA or X64)\(language)\DISK1

Click [Next].

If [Windows can't verify the publisher of this driver software] display appears in the installation, click [Install this driver software anyway].

Click [Close].

If installation is successful, the name of the printer connected to the "USB001" port is added to the [Devices and Printers] window.

Click [Close] to close the printer properties dialog box.

lacksquare	Note
	In a Windows 7 environment, depending on security settings, the [User Account Control] dialog box might appear after you insert the CD-ROM. If this is the case, click [Yes] .
	If the printer driver is already installed, plug and play is enabled and the printer connected to the USB port appears automatically in the [Devices and Printers] window.
	When USB is first used, plug and play starts. Then the [New Hardware Found [Device Driver Wizard], or [Add New Hardware Wizard] dialog box appears, depending on the operating system.
	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.
	A message appears if the printer connection fails. Check the USB cable is connected and the printer's main power switch is turned to on, and then click [Retry] .
	The USB port is available only for the printer driver that is installed first. To install additional drivers for this printer, install them using other ports (such as LPT1). Then, after the installation, change the port settings to the specified USB port.

Troubleshooting USB

Problem	Solutions
The printer is not recognized automatically.	Turn off the power of the printer, reconnect the USB cable, and then turn it on again.
Windows has already configured the USB settings.	Open Windows' Device Manager, and then, under [Universal Serial Bus controllers] or [USB Controller], 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.

If a Message Appears during Installation (Windows)

When a message that shows the number 58 or 34 appears during the installation, the printer driver can not be installed using Auto Run. Please use [Add a printer] or [Install Printer] to install the printer driver.

Windows XP Professional, Windows Server 2003/2003 R2

- 1 On the [Start] menu, click [Printers and Faxes].
- Click [Add a printer], or double-click the [Add Printer] icon.
- Follow the instructions in the Add Printer Wizard.

Windows XP Home Edition

- 1 On the [Start] menu, click [Control Panel].
- 2 Click [Printers and Other Hardware].
- Click [Printers and Faxes].
- 4 Click [Install Printer].
- Follow the instructions in the Add Printer Wizard.

Windows Vista, Windows Server 2008

- 1 On the [Start] menu, click [Control Panel].
- 2 Click [Printer] in "Hardware and Sound".
- Click [Add a printer].
- 4 Follow the instructions in the Add Printer Wizard.

Windows 7

- 1 On the [Start] menu, click [Devices and Printers].
- Click [Add a printer].
- 3 Follow the instructions in Add Printer Wizard.

When Using the Printer under Mac OS X

The procedures in this section explain how to set up the printer under Mac OS X 10.6.

Installing the Printer Driver

Use this procedure to install the drivers under Mac OS X 10.6.

Important

- ☐ To install the driver, you must log on as an Administrator. For details, contact your administrator.
- 1 Close all applications except this manual.
- 2 Double-click the CD-ROM icon.
- Double-click the [Mac OS X] folder.
- 4 Double-click the [PS Driver] folder.
- Double-click the folder of the manufacturer.
- Double-click your operating system's version.
- Double-click the package file icon.
- **8** Follow the instructions on the screen.

● Note

When the Authenticate dialog box appears, enter the administrator name and password, and then click [OK].

Setting Up the Printer When Using a USB Connection

Use this procedure to configure the printer for USB connection.

Mportant

- ☐ The procedure in this section is an example based on Mac OS X 10.6. The actual procedure might vary depending on the operating system you are using.
- ☐ Before beginning this procedure, make sure the printer is powered and connected to the computer via a USB cable.
- **1** From the Apple menu, select [System Preferences...].
- 2 Under "Hardware", click [Print & Fax].
- Check the list of printers for the printer name.
- A Select the printer from the list, and then click [Options & Supplies...].
- Click the [Driver] tab.

- 6 Check the tray 2 configuration, and then click [OK].
- From the [System Preferences] menu, click [Quit System Preferences].

Setting Up the Printer When Using a Network Connection

Use this procedure to configure the printer for Network connection.

- ☐ The procedure in this section is an example based on Mac OS X 10.6. The actual procedure might vary depending on the operating system you are using.
- Before beginning this procedure, make sure the printer is powered and connected to the network.
- ☐ Also before beginning this procedure, you must assign the IP address on the printer. For details about assigning the printer's IP address, see Hardware Guide.
- From the Apple menu, select [System Preferences...].
- 2 Under "Hardware", click [Print & Fax].
- Click [+](add) in the lower left area of the [Print & Fax] dialog box.
 The [Add Printer] dialog box appears.
- 4 Click [IP] in the menu.
- In the [Address] field, enter the printer's IP address.

The printer name appears in [Print Using]. If the printer name does not appear in [Print Using], select [Other...] in [Print Using], and then select the model name from the [Resources] list.

- 6 Click [Add].
- **7** Check the tray 2 configuration, and then click [Continue].
- 8 Check that the printer's IP address is shown in the [Printers] list.
- From the [System Preferences] menu, click [Quit System Preferences].

Software on the CD-ROM

This section describes the CD-ROM supplied with this printer.

Viewing the Contents of the CD-ROM

Use this procedure to view the contents of the CD-ROM.

- 1 Insert the CD-ROM into the CD-ROM drive.
 - The installer starts.
- 2 Select an interface language, and then click [OK].
- 3 Click [Browse This CD-ROM].

Explorer starts and displays the contents of the CD-ROM.

Printer Drivers for This Printer

Operations require installing drivers appropriate to your operating system. The following drivers are included on the CD-ROM provided with this printer.

PCL 6 printer driver

This printer driver allows the computer to communicate with the printer via a printer language.

❖ PostScript 3 printer driver

PostScript 3 printer driver allows the computer to communicate with the printer using a printer language.

PPD files

PPD files allow the printer driver to enable specific printer functions.

Appendix

Trademarks

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The proper names of the Windows operating systems are as follows:

- The product names of Windows XP are as follows: Microsoft® Windows® XP Professional Edition
 - Microsoft® Windows® XP Home Edition
 - Microsoft® Windows® XP Professional x64 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 Starter
 - 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
 - Microsoft® Windows Server® 2003 Web Edition
 - Microsoft® Windows Server® 2003 Datacenter 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 Microsoft® Windows Server® 2003 R2 Datacenter Edition
- The product names of Windows Server 2008 are as follows:
 Microsoft® Windows Server® 2008 Foundation
 Microsoft® Windows Server® 2008 Standard
 Microsoft® Windows Server® 2008 Enterprise
 Microsoft® Windows Server® 2008 Datacenter
 Microsoft® Windows Server® 2008 for Itanium-based Systems
 Microsoft® Windows® Web Server 2008
 Microsoft® Windows® HPC Server 2008
- The product names of Windows Server 2008 R2 are as follows:
 Microsoft® Windows Server® 2008 R2 Foundation
 Microsoft® Windows Server® 2008 R2 Standard
 Microsoft® Windows Server® 2008 R2 Enterprise
 Microsoft® Windows Server® 2008 R2 Datacenter
 Microsoft® Windows Server® 2008 R2 for Itanium-based Systems
 Microsoft® Windows® Web Server 2008 R2
 Microsoft® Windows® HPC Server 2008 R2



☐ PostScript® 3 in this manual stands for "Adobe PostScript 3 Emulation".

Notes for Users

Please note the following corrections to these manuals.

Topic:

SP 3500SF/3510SF: User Guide SP 3500N/3510DN: Hardware Guide

Consumables > Print Cartridge > Average printable number of pages per cartridge

Error	Correction
2,500 pages, 5,000 pages	2,500 pages, 6,400 pages

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For Users of SP 3500N/SP 3510DN/SP 3500SF/SP 3510SF Precautions concerning the Universal Driver "PCL6 Driver for Universal Print" for SP 3500N/SP 3510DN/SP 3500SF/SP 3510SF

Thank you for purchasing this machine.

If you are using the Universal Driver "PCL6 Driver for Universal Print" for SP 3500N/SP 3510DN/SP 3500SF/SP 3510SF, pay attention to the following:

■ Models to be supported:

The Universal Driver can be used for:

- SP 3500N
- SP 3510DN
- SP 3500SF
- SP 3510SF

■ Firmware update

SP 3500N/SP 3510DN/SP 3500SF/SP 3510SF are supplied with drivers to maximize modelspecific functionalities. If you want to use the Universal Driver, you need to perform firmware update on the machine first.

See "Firmware Update Guide" for the firmware update procedure.

■ Where to obtain the Universal Driver

You can download the Universal Driver "PCL6 Driver for Universal Print" for SP 3500N/SP 3510DN/SP 3510DSF/SP 3510SF from manufacturer's Web site.

For details about the operating system and installation procedures, see README.HTM.

Important:

- Only a limited amount of memory is allocated to Collate Printing. If a memory overflow error
 occurs due to certain print data/pages, Collate settings and multiple copy settings may be
 canceled and single sheet printing will be resumed. If this is the case, set Ignore Application
 Collate to Off, and configure the Collate settings in the [Print] dialog box.
- The Universal Driver "PCL6 Driver for Universal Print" for SP 3500N/SP 3510DN/SP 3500SF/ SP 3510SF supports the generic version only.

Instructions on how to configure the Universal Driver

To use the Universal Driver, you must set [PCL6 Mode] to [Universal] using the control panel or Web Image Monitor.

If you print using the PCL6 Universal Driver, make sure that [PCL6 Mode] is set to [Universal]. If you print using the SP3500/SP3510 PCL6 Driver, make sure that [PCL6 Mode] is set to [SP 3500/3510]. [PCL6 Mode] can be set to [Universal] or [SP 3500/3510] using the control panel or Web Image Monitor. **Important:**

- [PCL6 Mode] is set to [SP3500/3510] by default.
- Please note this procedure only applies to SP 3500N/SP 3510DN/SP 3500SF/SP 3510SF.

Using the control panel to select [Universal] or [SP 3500/3510]

<SP 3500SF/SP 3510SF>

- Press the [User Tools] key.
- 2. Press the [▲][▼] keys to select [Admin Tools], and then press the [OK] key.
- Press the [▲][▼] keys to select [PCL6 Mode], and then press the [OK] key. 3.
- Press the [▲][▼] keys to select [Universal] or [SP 3500/3510], and then press the [OK] key. 4.
- 5. Press the [User Tools] key to return to the initial screen.
- Print the document using t the Universal Driver or the PCL driver. 6.

<SP 3500N/SP3510DN>

- 1. Press the [Menu] key. The menu screen appears.
- 2. Press the [▲][▼] keys to select [System], and then press the [OK] key.
- 3. Press the [▲][▼] keys to select [PCL6 Mode], and then press the [OK] key.
- 4. Press the [▲][▼] keys to select [Universal] or [SP 3500/3510], and then press the [OK] key.
- 5. Press the [OK] key.
- 6. Press the [Menu] key to return to the initial screen.
- 7. Print the document using the Universal Driver or the PCL driver.

Using Web Image Monitor to select [Universal] or [SP 3500/3510]

- 1. Start the Web browser.
- 2 To access the machine, enter "http://(the machine's IP address)" in the address bar of the Web browser
- 3. Click [Administrator Tools]-[PCL6 Mode].
- 4 Set [PCL6 Mode] to [Universal] or [SP 3500/3510], enter Administrator Password, and then click [OK].
- 5. Print the document using the Universal Driver or the PCL driver.

Precautions to use Universal Driver "PCL6 Driver for Universal Print"

To use Universal Driver "PCL6 Driver for Universal Print" for print jobs, configure settings as follows:

- On the Accessories tab in the printer properties, select [Generic Model].
- Enable Duplex according to the printer you are using:

Duplex: Only supported for SP 3510 Series

· Staple: Not supported · Punch : Not supported



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Using Smart Organizing Monitor Lt

Thank you for purchasing this product.

Below is an overview of Smart Organizing Monitor Lt, which can be used with this product.

Notes:

- ☐ In this manual, we explain how to install, launch, and uninstall Smart Organizing Monitor Lt.
- ☐ This manual uses procedures based on Windows 7, and Mac OS X 10.6 as an example, unless otherwise specified. Procedures might vary depending on the operating system you are using.

Smart Organizing Monitor Lt

Smart Organizing Monitor Lt is a useful tool that allows users to check the machine's status from a computer.

(Important

- ☐ Before using Smart Organizing Monitor Lt, check the firmware version of the machine. This software can work with version 2.0.0 or later. If the version of the firmware you are using is earlier, you need to update the firmware first. You can download the firmware update package from our Web site.

 You can check the firmware version of this machine using the system setting list or the latest Maritan To print the system setting list or the latest Maritan To print the system setting list or the latest Maritan To print the system setting list.
 - Web Image Monitor. To print the system setting list, see "Hardware Guide" on the CD-ROM provided with this machine. To use Web Image Monitor, see "Software Guide" on the CD-ROM provided with this machine.
- ☐ Before using Smart Organizing Monitor Lt, install its printer driver. To install the printer driver, see "Software Guide" on the CD-ROM provided with this machine.
- ☐ If you specify a USB port to install the printer driver, you need to enable bi-directional communication between this machine and the driver. For details about bi-directional communication, see "Software Guide" on the CD-ROM provided with this machine.

What you can do with Smart Organizing Monitor Lt

♦ Check the machine's status.

You can check the machine's status, such as the amount of remaining toner, setting details of each paper tray, etc.

◆ Send error or warning messages when an error occurs on the machine.

If an error or malfunction occurs on the machine while Smart Organizing Monitor Lt is running, a pop-up window appears on the screen of your computer. This pop-up window contains a message about an error or malfunction. This message appears on the screen a few seconds after an error or malfunction occurs.

Supported languages and operating systems

- The supported languages are as follows:
 English, German, French, Italian, Spanish, Dutch, Swedish, Norwegian, Danish,
 Finnish, Hungarian, Czech, Polish, Portuguese, Russian, Brazilian Portuguese, Japanese, Simplified Chinese, Traditional Chinese
- The supported operating systems are as follows: Windows XP/Vista/7 and Windows Server 2003/2003 R2/2008/2008 R2, and Mac OS X 10.3 or later

Installing Smart Organizing Monitor Lt

You can download the Smart Organizing Monitor Lt from our Web site.

Window



- ☐ To install Smart Organizing Monitor Lt, administrative privileges are required. Log on as an Administrators group member.
- 1. Quit all applications. (Do not close this manual.)
- Decompress the file downloaded from our Web site, and double-click the setup.exe file.
- 3. Select an interface language, and then click [Next>].
- 4. Click [Next>].
- 5. Read the software license agreement carefully. If you agree, click [Yes].
- 6. Specify a folder to install Smart Organizing Monitor Lt, and click [Next>].
- 7. Specify a program folder, and click [Next>].
- 8. Select the printer driver.
 - If you specify a USB port to install the printer driver, select this machine from the pull-down menu in [Please select a printer driver:].
 - If you specify a Standard TCP/IP port to install the printer driver, first click [Connect Printer], select this machine from the list that appears on the screen, and then click [OK].
 - If you specify an IP address manually, from the pull-down menu in [Please select a printer driver:], select [Standard TCP/IP port], and then enter the IP address of this machine in [IP Address:].
- Click [OK].The installation starts.
- 10. Click [Finish].

❖ Mac OS X

- 1. Quit all applications. (Do not close this manual.)
- 2. Decompress the file downloaded from our Web site, and double-click the package file icon (.pkg).

- 3. Click [Next>].
- 4. Select an interface language, and then click [Next>].
- 5. Read the software license agreement carefully. If you agree, click [Yes].
- 6. Check the folder to install Smart Organizing Monitor Lt, and click [install].
- 7. When an authentication window appears, enter the administrator's name and password, and then click [OK].
- 8. Select the printer driver.
 - If you specify a USB port to install the printer driver, select this machine from the pull-down menu in [Please select a printer driver:].
 - If you specify a Standard TCP/IP port to install the printer driver, first click [Connect Printer], select this machine from the list that appears on the screen, and then click [OK].
 - If you specify an IP address manually, from the pull-down menu in [Please select a printer driver:], select [Standard TCP/IP port], and then enter the IP address of this machine in [IP Address:].
- Click [OK] The installation starts.
- 10. Click [Finish].

Launching Smart Organizing Monitor Lt

Launching Smart Organizing Monitor Lt allows you to check the status of this machine. If an error or malfunction occurs on the machine while Smart Organizing Monitor Lt is running, a pop-up window appears on your computer screen to notify you of the details of the error or malfunction.

❖ Window

Click [Start], and then click [Smart Organizing Monitor Lt] and [Smart Organizing Lt Status] from [All Programs].

When the Smart Organizing Monitor Lt window opens, the (a) icon appears in the lower-right corner of the desktop.

If you click the [Minimize] button while Smart Organizing Monitor Lt is running, the Smart Organizing Monitor Lt window will be minimized. To open the window again, click the icon.

❖ Mac OS X

- 1. Double-click the hard drive icon on the desktop.
- Double-click [Application], and double-click [Smart Organizing Monitor Lt].
 When the Smart Organizing Monitor Lt window opens, the icon appears.
 If you click the [Minimize] button while Smart Organizing Monitor Lt is running, the Smart Organizing Monitor Lt window will be minimized. To open the window again, click the icon.

Deleting the Smart Organizing Monitor Lt

Window

- 1. Quit Smart Organizing Monitor Lt.
- Click [Start], and then click [Smart Organizing Monitor Lt] and [Smart Organizing Lt Uninstall] from [All Programs].
- 3. Follow the instructions that appear on the screen to uninstall Smart Organizing Monitor Lt.

❖ Mac OS X

- 1. Quit Smart Organizing Monitor Lt.
- 2. Double-click the hard drive icon on the desktop.
- Double-click [Application].
- 4. Drag the [Smart Organizing Monitor Lt] icon to the bin.

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M1178532

SP 3500/3510 Series

Firmware Update Guide

This manual explains how to update the firmware of the following machine:

- Multifunctional Printer: SP 3500SF/SP 3510SF
- Printer: SP 3500N/SP 3510DN

You can download the firmware update package from our Web site.

About the firmware package

The firmware packages on our Web site are each designed to be used for a specific model, and cannot be used for any other model. Confirm the model of your machine, and download the appropriate firm-

ware package for your model.

Disclaimer

The Manufacturer shall not be liable to the customer for any consequential, incidental or indirect damages (including, but not limited to, damages for loss of profits, business interruption or loss of business information, and the like) caused by failure of this software or loss of documents or data, nor for any other damages arising out of the use of this software, even if the customer has been advised of the possibility of such damages.

Before Updating the Firmware

This section explains the operating environment for updating the firmware.

Compatible Operating Systems

Your computer must be running one of the following operating systems: Windows XP (32/64 bit)/Vista (32/64 bit)/7 (32/64 bit), or Mac OS X 10.3.9 or later.

* Backing up the machine's settings

After the firmware update, the machine's settings may return to their factory defaults.

Before you reconnect the machine for the update, we recommend that you back up the machine's settings by accessing the machine using a Web browser from a computer connected via a network.

Also, you can print out lists of scan and fax destinations or a configuration page using a Web browser or the machine's control panel. For details, see the manuals provided with the machine.

Connection

Connect your computer and the machine through a network or directly by USB.

↑ CAUTION:

- We recommend that you update the firmware via USB. If you update the firmware over the network, the machine may receive data over the network such as a print job during the updates, which can interfere with the update process.
- If you are updating the firmware via USB, the printer driver for USB connection must be installed on your computer beforehand. However, if you are updating via a network, no printer driver is necessary.
- Make sure your computer is securely connected to the machine with the USB or network cable that you will be using for the firmware update.
- Disconnect any other cables that are not necessary for the firmware update, such as a telephone cable, from the machine.
- Make sure that your computer does not enter standby or hibernation mode during the update process. Following is a procedure for configuring this setting based on Windows 7 as an example:
 - 1. On the [Start] menu, click [Control Panel].
 - 2. Click [System and Security].
 - 3. Click [Power Options].
 - Click [Change plan settings] on the right side of the item currently selected in [preferred plans].
 - 5. Select [Never] for [Turn off the display:] and [Put the computer to sleep:].
 - 6. Click [Save changes].

Updating the Firmware

This section explains the procedure for updating the firmware.

Follow the procedure carefully.

↑ CAUTION:

- Do not operate the machine using the control panel, access the machine using Web Image Monitor, perform fax transmissions, printing, or TWAIN scanning during the update process.
- The update may take a while to complete. Do not turn off the power during the update. Turn off the power only when "FW Update Done. *** Please reboot the Machine.***" appears in the firmware update tool window.
- Never disconnect the cable you are using for the updates during the update process.

- When using a computer running on a Windows operating system, you must have an account that has Manage Printers permission. Log on as an Administrators group member to acquire this permission.
- Be sure to print the configuration page both before and after the update. Comparing pre- and post-update configuration pages allows you to check whether or not the update was successful.
- The screens shown in the following procedure are examples based on Windows 7, unless otherwise stated.
- If you are using SP 3500SF/SP 3510SF under LDAP authentication, you
 must have logged in to the machine or have the LDAP authentication
 disabled before performing the following procedure. For details, see the
 manual provided with the machine.

- Connect your computer securely to the machine with the USB or network cable that you will be using for the firmware update. Disconnect any other non-essential cables.
- 2 Print the configuration page.

Use the following procedure to print the configuration page. Take note of the current firmware version (shown under "Firmware Version" on the configuration page).

- SP 3500SF/SP 3510SF
- A. Turn on the machine.
- **B.** Press the [User Tools] key on the machine's control panel.
- C. Press the [▲][▼] keys to select [Print List/Report], and then press the [OK] key.
- D. Press the [▲][▼] keys to select [Configuration Page], and then press the [OK] key.
- E. Press [Yes].
- ❖ SP 3500N/SP 3510DN
- **A.** Turn on the printer.
- **B.** Press the [Menu] key.
- **C.** Press the $[\blacktriangle][\blacktriangledown]$ keys to select [List/Test Print], and then press the [OK] key.
- **D.** Press the $[\Delta][\nabla]$ keys to select [Config. Page], and then press the [OK] key.
- Double-click the [FwUpdateTool.exe] (Windows) or [Firmware Update Tool] (Mac OS X) icon to launch the firmware update tool.

A dialog box with cautionary statements appears.

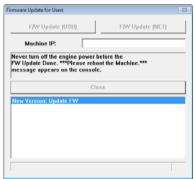


4 Read the cautionary statements carefully, and then click [OK]. The firmware update tool opens.

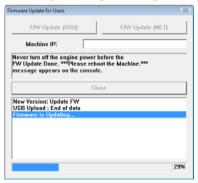


Do not close the update tool unless you are instructed to do so.

For a USB connection, click [F/W Update (USB)]. For a network connection, enter the machine's IP address in [Machine IP:], and then click [F/W Update (NET)].

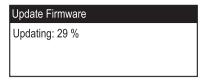


6 Check the firmware update tool window for messages and the update's current percentage of completion.



Update progress is also shown on the machine's control panel.

SP 3500SF/SP 3510SF

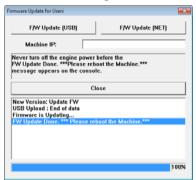


❖ SP 3500N/SP 3510DN

The Alert indicator lights up.

```
Update Firmware:
Updatin§...: 029%
```

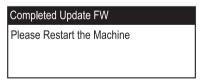
Wait until "FW Update Done.***Please reboot the Machine.***" appears in the firmware update tool window.



Click [Close] to close the update tool.

Also check that update completion message appears on the machine's control panel.

❖ SP 3500SF/SP 3510SF



❖ SP 3500N/SP 3510DN

The Alert indicator starts flashing.

Controller FW Dwnload complete

Turn off the power of the machine, and then turn it back on.

After you turn the power back on, the machine performs initialization.

❖ SP 3500SF/SP 3510SF

"Please wait..." appears on the machine's control panel. Log in to the machine if the machine requests you to do so.

❖ SP 3500N/SP 3510DN

The Alert and Data In indicators flash twice.

Warming up...

9 Wait until "Ready" appears on the machine's control panel.

If "Ready" does not appear on the machine's control panel after one minute, the update is not complete. In this case, see p.7 "If initialization does not end following a firmware update".

Print the configuration page again.

Confirm that the firmware has been updated by checking its version (shown under "Firmware Version" on the configuration page).

❖ SP 3500SF/SP 3510SF

- **A.** Press the [User Tools] key on the machine's control panel.
- B. Press the [▲][▼] keys to select [Print List/Report], and then press the [OK] key.
- C. Press the [▲][▼] keys to select [Configuration Page], and then press the [OK] key.
- D. Press [Yes].
- SP 3500N/SP 3510DN
- A. Press the [Menu] key.
- **B.** Press the [▲][▼] keys to select [List/Test Print], and then press the [OK] key.
- **C.** Press the $[\blacktriangle][\blacktriangledown]$ keys to select [Config. Page], and then press the [OK] key.
- Reconnect the cables as they were before the update.



 In addition to printing a configuration page, you can check the machine's firmware version by accessing the machine using a Web browser. For details, see the manuals provided with the machine.

Troubleshooting

This section explains solutions to common update-related problems.

If initialization does not end following a firmware update

If "Ready" does not appear on the machine's control panel after one minute following a firmware update, a power failure or similar interruption prevented the update from completing.

In this case, you will see the following screen on the machine's control panel.

SP 3500SF/SP 3510SF

Initializing

SP 3500N/SP 3510DN

The Power, Alert and Data In indicators light up simultaneously.

If this happens, read p.1 "Before Updating the Firmware" carefully again, and then use the following procedure to recover from the failure and complete the update.

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- To be recovered following a failed update, the machine must be connected to a computer by USB.
- When using a computer running on a Windows operating system, you must have an account that has Manage Printers permission. Log on as an Administrators group member to acquire this permission.
- The screens shown in the following procedure are examples based on Windows 7, unless otherwise stated.
- 1 If you performed the update through a network connection, disconnect the network cable, and then connect the machine to your computer using a USB cable.

After confirming that "Initializing" has been shown on the machine's control panel for more than one minute, double-click the [FwUpdateTool. exe] (Windows) or [Firmware Update Tool] (Mac OS X) icon to launch the firmware update tool.

A dialog box with cautionary statements appears.



Read the cautionary statements carefully, and then click [OK]. The firmware update tool opens.



Do not close the update tool unless you are instructed to do so.

4 Click [F/W Update (USB)].



Make sure that you keep the power of the machine turned on.

Wait until "FW Update Done.***Please reboot the Machine.***" appears in the firmware update tool window.



Click [Close] to close the update tool.

Turn off the power of the machine, and then turn it back on.

After you turn the power back on, the machine performs initialization.

❖ SP 3500SF/SP 3510SF

"Please wait..." appears on the machine's control panel. Log in to the machine if the machine requests you to do so.

SP 3500N/SP 3510DN

The Alert and Data In indicators flash twice.



- Wait until "Ready" appears on the machine's control panel.
- 8 Print the configuration page.

Confirm that the firmware has been updated by checking its version (shown under "Firmware Version" on the configuration page).

- ❖ SP 3500SF/SP 3510SF
- **A.** Press the [User Tools] key on the machine's control panel.
- B. Press the [▲][▼] keys to select [Print List/Report], and then press the [OK] key.
- C. Press the [▲][▼] keys to select [Configuration Page], and then press the [OK] key.
- D. Press [Yes].
- ❖ SP 3500N/SP 3510DN
- A. Press the [Menu] key.
- **B.** Press the $[\![\Delta]\!][\![\nabla]\!]$ keys to select $[\![List]\!]$ rest Print], and then press the $[\![OK]\!]$ key.
- **C.** Press the $[\blacktriangle][\blacktriangledown]$ keys to select [Config. Page], and then press the [OK] key.
- P Reconnect the cables as they were before the update.



• In addition to printing a configuration page, you can check the machine's firmware version by accessing the machine using a Web browser. For details, see the manuals provided with the machine.

Firmware Update Tool Messages

The following table lists the firmware update tool messages that can appear during a firmware update, and explains the likely causes of those messages and what action to take when they appear.

(Messages are alphabetically ordered.)

Message	Causes	Solutions
Can't open ROM file. Please check ROM file.	The firmware file (*.brn) or setting file (*.ini) is not stored in the same folder as the update tool. (Note that the setting file only exists when you are using a computer running a Windows operating system.)	Make sure that the firmware file (*.brn) and setting file (*.ini) are stored in the same folder as the update tool. Also, make sure that you do not modify the setting file.
	The path to the location of the update tool is too long.	Make sure that the path to the update tool is not too long. For convenience, save the update tool in a subfolder directly under your computer's C: drive.
Connecting	Your computer is searching the network for the machine.	Wait a while until the machine is found.
Downloaded file is broken! Do NOT use print, scan, fax and copy function at the same time.	The [F/W Update (USB)] or [F/W Update (NET)] button was clicked while the machine was faxing, printing, scanning, or copying.	Wait for the current job to finish, disconnect any unnecessary cables from the machine, and then try again.
	The firmware file is damaged.	Download the firmware package from our Web site again.
FW Update Done. ***Please reboot the Machine.***	The [F/W Update (USB)] or [F/W Update (NET)] button was clicked when the update process was already finished.	The update has already successfully finished. Reboot the machine to complete the update.
Machine is busy.	The machine is being operated through the control panel.	Cancel any operations being performed through the control panel. Put the machine into standby mode, and then perform the update again.
	There is an unsent fax in the machine's memory.There is a received fax waiting to be printed.	Send or delete the unsent fax, and then try again.Print the received fax, and then try again.
	The [F/W Update (USB)] or [F/W Update (NET)] button was clicked when the update was already in progress.	Clicking the [F/W Update (USB)] or [F/W Update (NET)] button during the update process does not interfere with any ongoing update. Ignore this error message and complete the update using the procedure shown in this manual.

Message	Causes	Solutions
Machine is busy.	LDAP authentication is enabled on the machine but you have not logged in (SP 3500SF/SP 3510SF only).	You must log in to the machine or disable the LDAP authentication before beginning the firmware update. For details, see the manual provided with the machine.
Machine is not ready.	The USB cable is not connected.	Make sure the USB connection be- tween the machine and computer is secure. If this message persists, try an- other USB cable.
	The USB printer driver is not installed in your computer.	Install the USB printer driver in your computer.
	The machine is turned off or an error has occurred.	Turn the machine's power off, wait a moment, and then turn it back on again. Then perform the update again. If this message reappears after you turn the power back on, see the manuals provided with the machine.
	The IP address specified for either the machine or your computer is invalid.	Check that both IP addresses are valid.
	The machine is not connected to the network properly.	Check that the machine is properly connected to the network.
Machine loses communication. ***Please check FW Update Done. Then reboot the Machine.***	The firmware update tool is no longer able to acquire update progress from the machine because the connection between the machine and computer has been terminated.	Disconnecting the machine from the computer should not interrupt any ongoing update. Check the machine's control panel to see if the update has completed.
Net Upload : End of data	The firmware has been transferred to the machine successfully.	Follow the instructions in this manual to complete the update.
Net Upload : FAIL	The network cable was disconnected immediately after the [F/W Update (NET)] button was clicked.	Turn the machine's power off, wait a moment, and then turn it back on again. Disconnect any unnecessary cables from the machine, and then try again.
USB Upload : End of data	The firmware has been transferred to the machine successfully.	Follow the instructions in this manual to complete the update.
USB Upload : FAIL	The USB cable was disconnected immediately after the [F/W Update (USB)] button was clicked.	Turn the machine's power off, wait a moment, and then turn it back on again. Disconnect any unnecessary cables from the machine, and then try again.

Message	Causes	Solutions
Wrong Model.	The machine you were trying to update was not the correct model for the firmware you have downloaded from our Web site.	The firmware packages on our Web site are each designed to be used for a specific model, and cannot be used for any other model. Confirm the model of your machine, and download the appropriate firmware package for your model.

Control Panel Display Messages (SP 3500SF/3510SF)

The following table lists the control panel display messages that can appear if an error occurred during a firmware update, and explains the likely causes of those messages and what action to take when they appear.

Message	Likely cause	Solution
Initializing	If this message remains on the control panel display for more than one minute following a firmware update, a power failure or similar interruption prevented the update from completing.	See p.7 "If initialization does not end following a firmware update" and use the procedure shown there to recover from the failure and complete the update. If the recovery fails and the indi- cators continue to flash alternate- ly, contact your sales or service representative.

Control Panel Indicator Patterns (SP 3500N/3510DN)

The indicators of the control panel show the machine's status during and after firmware updates. If an update fails or does not complete normally, refer to the following table to resolve the problem.

Indicator pattern	Likely cause	Solution
The Power, Alert and Data In indicators light up simultane- ously.	If the Power, Alert and Data In indicators light up simultaneously after you turn the machine's power back on following a firmware update, the update did not complete due to a power failure or similar interruption.	See p.7 "If initialization does not end following a firmware update" and use the procedure shown there to recover from the failure and complete the update. If the recovery fails and the indicators continue to flash alternately, contact your sales or service representative.

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The product names of Windows XP are as follows:

- Microsoft® Windows® XP Professional Edition
- Microsoft® Windows® XP Home Edition
- Microsoft® Windows® XP Professional x64 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



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