# SP C435<sub>DN</sub>/SP C440<sub>DN</sub>









# **User Guide**

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# Manuals for This Machine

Read this manual carefully before using this machine.

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

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- The method for viewing the manual depends on the manual.
- Adobe<sup>®</sup> Acrobat<sup>®</sup> Reader<sup>®</sup>/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.

#### User Guide

Summaries are provided below for the operating instructions regarding the basic usage of this machine, frequently used functions, and troubleshooting when an error message appears.

#### **Read This First**

Before using the machine, be sure to read the "Safety Information" section of this manual. It describes the regulations and environmental conformance.

#### **Quick Installation Guide**

Describes procedures from unpacking the machine to connecting it to a computer.

#### **Operating Instructions**

Provides detailed information about the operation of the machine in HTML format. The following are the main topics of the manual:

- Getting Started
- · Setting Up the Printer
- · Loading Paper
- Printing
- · Configuring and Managing the Printer
- Troubleshooting
- · Maintenance and Specifications

#### **VM Card Extended Feature Settings**

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

#### Security Guide

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

Install the Device Certificate.

- Enable SSL (Secure Sockets Layer) Encryption.
- Change the user name and password of the administrator using Web Image Monitor.

For details, see "Before Using This Printer", Security Guide.

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

#### **Driver Installation Guide**

Explains how to install and configure the drivers.

#### Other Manuals

- Appendix
- DHCP Option 204

# 1. Getting Started

This section describes the symbols used in the manuals supplied with the printer, available options, and names and functions of components.

# **Before You Start**

## How to Read the Manuals

## Symbols used in the manuals

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.

Indicates the key sequence order you should perform using the control panel.

Example:

Select [Host Interface] ▶ Press [OK]

(Select [Host Interface], and then press the [OK] key.)

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 the 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 page 6 "Model-Specific Information".

#### Disclaimer

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

To the maximum extent permitted by applicable laws, in no event will the manufacturer be liable for any damages whatsoever arising out of failures of this machine, losses of the registered data, or the use or non-use of this product and operation manuals provided with it.

Make sure that you always copy or have backups of the data registered in this machine. Documents or data might be erased due to your operational errors or malfunctions of the machine.

In no event will the manufacturer be responsible for any documents created by you using this machine or any results from the data executed by you.

#### Notes

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.

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

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

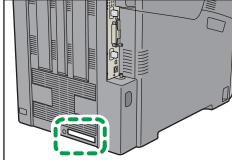
#### About IP addresses

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 to identify the region to which your printer belongs.

There is a label on the rear of the printer, located in the position shown below. The label contains details that identify the region to which your printer belongs. Read the label.



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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 -27
- 220-240 V

Region B (mainly North America)

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

- CODE XXXX -17
- 120-127 V



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

# **List of Options**

This section provides a list of options for this printer and the names commonly used in this manual.

Option name	Description
Paper Feed Unit PB 1 0 2 0	550-sheet paper feed unit
Hard Disk Drive Option Type P7	Hard disk
IEEE802.11 Interface Unit Type O	Wireless LAN interface board
IEEE 1284 Interface Board Type A	IEEE 1284 interface board
USB Device Server Option Type M12	USB device server
XPS Direct Print Option Type P7	XPS card
Camera Direct Print Card Type P7	Camera direct print card
VM CARD Type P7	VM card

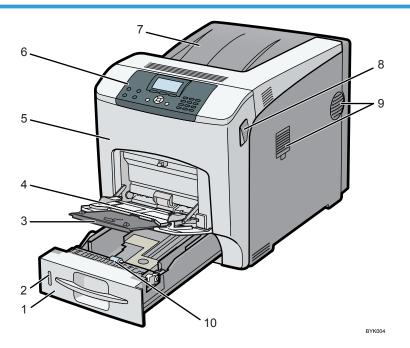
# Guide to Names and Functions of Components

# **Guide to Components**



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

#### **Exterior: Front view**



#### 1. Tray 1

Up to 550 sheets of plain paper can be loaded.

For details about the sizes and types of paper that can be used, see page 28 "Paper Size Specifications" and page 30 "Paper Type Specifications".

#### 2. Remaining paper indicator

Indicates the approximate amount of paper remaining in the tray.

#### 3. Extender for the bypass tray

Pull this extender out when loading A5<sup>d</sup> or larger size paper in the bypass tray.

#### 4. Bypass tray

Up to 100 sheets of plain paper can be loaded.

For details about the sizes and types of paper that can be used, see page 28 "Paper Size Specifications" and page 30 "Paper Type Specifications".

#### 5. Front cover

Open the front cover to replace the fusing unit or transfer roller, or to remove jammed paper.

#### 6. Control panel

For details, see page 13 "Guide to the Names and Functions of the Control Panel".

#### 7. Standard Tray / Top Cover

Under normal operation, output is stacked on the top cover, which works as the standard output tray. Open this cover to replace the toner.

#### 8. Front Cover Open Levers

Pull these levers toward the front side of the printer to open the front cover.

#### 9. Ventilation holes

The right side of the printer features two ventilation holes. To prevent overheating, heat from internal components is released through these vents. Malfunctions and failure can result if these ventilation holes are blocked or obstructed.

The dustproof filter needs to be replaced regularly for proper maintenance.

Replace the dustproof filter when the following message appears:

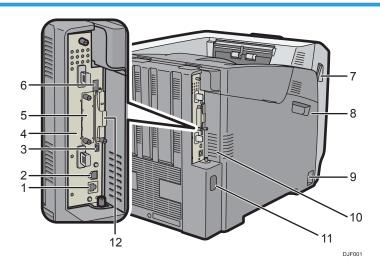
"Replcmnt Rqrd:Fusing Unit"

Replace the dustproof filter and the fusing unit together.

#### 10. Paper Feed Roller

This ensures only one sheet of paper is fed in at a time. If multi-sheet feeds occur, clean the paper feed roller carefully.

#### **Exterior: Rear view**



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#### 1. Ethernet port

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

#### 2. USB port B

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

#### 3. USB port H (Port for use by customer engineer)

Do not use this port.

#### 4. Controller Board

Slide this out to install options such as the memory unit or printer hard disk. Plug cables such as a USB cable and Ethernet cable into their connectors.

## 5. Optional interface board slot

Optional interface boards can be inserted.

Insert an optional wireless LAN interface board, IEEE 1284 interface board, or USB device server board.

#### 6. USB port A

Connect external devices such as a digital camera, a card authentication device, etc.

#### 7. Front Cover Open Levers

Pull these levers toward the front side of the printer to open the front cover.

#### 8. Left Cover

Open this cover when replacing the drum unit, transfer unit or waste toner bottle.

#### 9. Main power switch

Use this switch to turn the power on and off.

For details about how to shut down the printer, see page 17 "Turning Off the Power".

#### 10. Ventilation holes

To prevent overheating, heat from internal components is released through these ventilation holes.

Malfunctions and failure can result if these ventilation holes are blocked or obstructed.

The dustproof filter needs to be replaced regularly for proper maintenance.

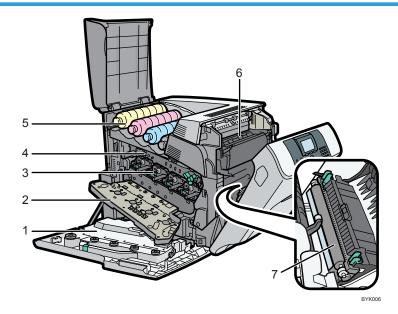
#### 11. Power connector

Connect the power cord to the printer. Insert the other end into an electrical outlet.

#### 12. Expansion card slots

Remove the cover to install SD cards.

#### Interior: Front view



#### 1. Waste Toner Bottle

Collects toner that is wasted during printing.

If the message which prompts you to replace it appears on the display, replace the waste toner bottle.

For details about the messages that appear on the screen when consumables need to be replaced, see "Replacing Other Consumables", Operating Instructions.

#### 2. Inner Cover

Open this cover when replacing the drum unit or transfer unit.

#### 3. Drum Unit

From the left, the drum units are installed in the order of yellow (Y), magenta (M), cyan (C), and black (K). For details about the messages that appear on the screen when consumables need to be replaced, see "Replacing Other Consumables", Operating Instructions.

#### 4. Transfer Unit

Replace the transfer unit and transfer roller together.

For details about the messages that appear on the screen when consumables need to be replaced, see "Replacing Other Consumables", Operating Instructions.

#### 5. Toner

From the left, the toner is installed in the order of yellow (Y), magenta (M), cyan (C), and black (K). For details about the messages that appear on the screen when consumables need to be replaced, see "Adding Toner (Print Cartridge)", Operating Instructions.

#### 6. Fusing Unit

Replace the fusing unit and the dustproof filter together.

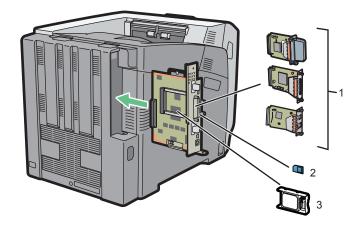
For details about the messages that appear on the screen when consumables need to be replaced, see "Replacing Other Consumables", Operating Instructions.

#### 7. Transfer Roller

Replace the transfer roller and the transfer unit together.

For details about the messages that appear on the screen when consumables need to be replaced, see "Replacing Other Consumables", Operating Instructions.

## Guide to functions of the printer's internal options



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#### 1. Optional interface units

• Wireless LAN board

Allows you to communicate over a wireless LAN.

• IEEE 1284 interface board

Allows you to connect to an IEEE 1284 cable.

• USB device server

Allows you to add an Ethernet port to the printer and use two IP addresses at the same time.

To attach this option, see "Installing the Interface Units", Operating Instructions.

#### 2. SD memory card options

• Camera direct print card

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

• VM card

With this card, you can install embedded software applications.

• XPS card

Allows you to print XPS files.

To attach this option, see "Installing SD Card Options", Operating Instructions.

#### 3. Hard disk

Allows you to store documents to be printed.

To attach this option, see "Installing the hard disk", Operating Instructions.



 If you want to use two or more SD cards that can be inserted in the same slot, contact your sales or service representative.

#### Cautions When Re-installing the Controller Board

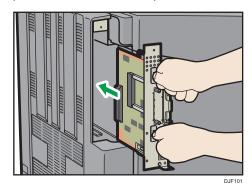
This section describes handling the controller board when installing options.

If you slide out the controller board to install the hard disk, carefully follow the instruction below to reinstall the controller board.



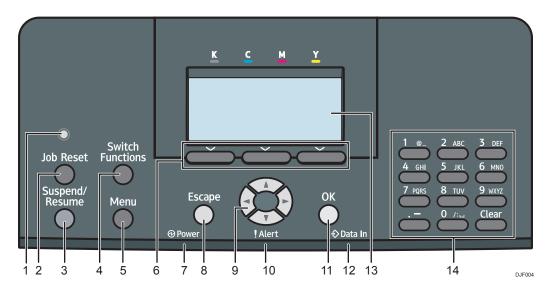
- The following may occur if the controller board is not correctly installed:
  - All control panel indicators are lit.
  - No control panel indicators are lit.
- The "SC670" error message appears on the display.

Re-install the controller board in the printer. To do this, grip the handles on the back of the board and push the board in until it stops.



## Guide to the Names and Functions of the Control Panel

This illustration shows the control panel of the printer.



#### 1. Light sensor

The sensor that detects the ambient light level when the ECO Night Sensor function is enabled.

#### 2. [Job Reset] key

Press to cancel the current print job.

#### 3. [Suspend/Resume] key

Press this to suspend the print job currently being processed. The indicator remains lit as long as the job is suspended.

To resume the job, press this key again. The suspended job will resume automatically when the time specified in [Auto Reset Timer] elapses (default: **60 seconds**).

For details about the [Auto Reset Timer] setting, see "Timer Settings", Operating Instructions.

#### 4. [Switch Functions] key

Press this key to switch between the operation screen of the printer function and the function screens of the extended features currently in use.

## 5. [Menu] key

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

Press to change the default settings to meet your requirements. See "Function Details of the Printer Configuration Items", Operating Instructions.

#### 6. Selection keys

Correspond to the function items at the bottom line on the display.

Example: When this manual instructs you to press [Option], press the selection key on the left below the initial screen.

#### 7. Power indicator

Lights up when the printer is ready to receive data from a computer. Flashes when the printer is warming up or receiving data. It is unlit when the power is off or when the printer is in energy saver mode.

#### 8. [Escape] key

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

#### 9. Scroll keys

Press these keys to move the cursor in each direction.

When the  $[ ^{\blacktriangle} ] [ ^{\blacktriangledown} ] [ ^{\blacktriangledown} ] [ ^{\blacktriangleright} ]$  keys appear in this manual, press the applicable key for the direction that you want to move the cursor.

#### 10. Alert indicator

Lights up or flashes when a printer error occurs.

Steady red: printing is not possible, or is possible but print quality cannot be ensured.

Flashing yellow: the printer will soon require maintenance or a replacement consumable such as print cartridge.

Follow the instructions that appear on the display.

#### 11. [OK] key

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

#### 12. Data in indicator

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

#### 13. Display

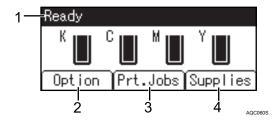
Displays current printer status and error messages.

Entering energy saver mode turns off the back light. For details about energy saver mode, see page 18 "Saving Energy".

#### 14. Number Keys

Use these to enter characters or numbers.

## Guide to the Names and Functions of the Control Panel Screen



#### 1. Operational Status or Messages

Displays the printer status and messages.

#### 2. [Option]

Press to display the following items:

• Form Feed

You can output data that is unprintable due to errors such as a missing line-feed code.

#### • Error Log

If a document cannot be printed due to errors or other reasons, an error log is created. You can check the error log using the control panel.

#### 3. [Prt.Jobs]

Press to display print jobs sent from a computer.

[Prt.Jobs] is displayed only when the optional hard disk is installed in the printer.

#### 4. [Supplies]

Press to display the information about printer supplies.



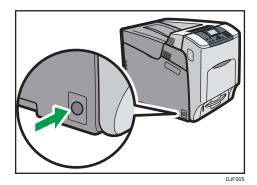
• By default, the remaining amount of toner is displayed. To avoid displaying the remaining amount of toner, set [Display Supply Info] to [Off] in [General Settings] under [Maintenance].

# **Turning On/Off the Power**

This section explains how to turn on/off the printer.

## **Turing On the Power**

- 1. Make sure the power cord is firmly plugged into the wall outlet.
- 2. Push the main power switch.



The power indicator turns on.



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

# Turning Off the Power

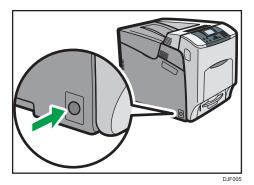


When disconnecting the power cord from the wall outlet, always pull the plug, not the cord.
 Pulling the cord can damage the power cord. Use of damaged power cords could result in fire or electric shock.

# 

- Do not press and hold the main power switch when turning off the printer. Doing so shuts down the
  printer forcefully and may damage the hard disk and the SDRAM module, causing a malfunction of
  the printer.
- Before unplugging the power cord plug, turn off the power switch and make sure the power switch indicator turns off. Not doing so may result in damage to the hard disk or memory, leading to a malfunction.

- Do not turn off the power while the printer is in operation.
- 1. Push the main power switch.



The main power is turned off automatically when the shutdown process is complete.

If the shutdown process is not complete within the period of time displayed on the screen, contact your service representative.

## Saving Energy

This printer has the following energy saving functions:

#### Low Power mode

If the printer is not used for a certain period of time, it enters Low Power mode.

In Low Power mode, the printer consumes less electricity than in the standby mode by turning off the display and lowering the temperature of the fusing unit heater. If the printer receives a job, it increases the temperature of the fusing unit and perform printing, but the display remains off.

You can configure the period of time the printer waits before it enters Low Power mode in [Low Power Mode Timer]. For details, see "System", Operating Instructions.

To exit Low Power mode, do one of the following:

- Start print jobs
- Press any key on the control panel
- Open any cover
- Open any paper tray

The printer also exits Low Power mode when the ECO Night Sensor detects an increase in the ambient light level.

#### **Fusing Unit Off mode**

If you do not use the printer for a certain period after an operation, the display will turn off and the printer goes into Fusing Unit Off mode. The printer uses less electricity in Fusing Unit Off mode.

When the printer is in Fusing Unit Off mode, the display is on but the fusing unit heater is off to save energy. In this mode, you can change the printer settings on the control panel. However, the printer must exit this mode to print.

You can change the amount of time that the printer waits before switching to Fusing Unit Off mode under [Fusing Unit Off Mode Timer]. For details, see "System", Operating Instructions.

To exit Fusing Unit Off mode, do one of the following:

- Start print jobs
- Display the [Maintenance] screen on the control panel
- Operate the control panel when [Exit Fusing Unit Off Mode] is set to [On Operating Control Panel]

#### Sleep mode

If the printer remains inactive for a specified period after entering Fusing Unit Off mode, it enters Sleep mode to further reduce the power consumption. The printer also enters Sleep mode when:

- The printer waits before entering Sleep mode is set in [Sleep Mode Timer]
- It is the day and time specified in [Weekly Timer]

The printer can print jobs from computers.

You can change the amount of time that the printer waits before switching to Sleep mode.

For details about setting [Sleep Mode Timer] and [Weekly Timer], see "System", Operating Instructions.

To exit Sleep mode, do one of the following:

- Press one of the keys on the control panel
- Start print jobs

#### **ECO Night Sensor**

ECO Night Sensor can detect darkness and automatically turn off this product's power.

If ECO Night Sensor is enabled and detects darkness in a room after the lights are turned off, the sensor automatically turns the power off and reduces the power consumption of this product to 1W or less.

The default settings of ECO Night Sensor are enabled.

To change the settings, see "System", Operating Instructions.



- The ECO Night Sensor function's factory default is [Auto Power Off Only]. If the printer is
  located in an environment where the ambient light level is low (such as in a hallway or a
  location with motion sensor lighting), it is advisable that you either keep this function disabled
  or adjust its sensitivity.
- You can configure the printer to automatically turn its power on when it detects an increase in the ambient light level. The printer may also react to daylight and turn its power on. If the

printer is located in an environment where it is exposed to direct sunlight, it is advisable that you do not change the factory default configuration and only enable [Auto Power Off Only].



- The energy saving functions will not activate when:
  - Communicating with external devices
  - The hard disk is active
  - · A warning message is displayed
  - The service call message is displayed
  - · Paper is jammed
  - The printer's covers are opened
  - Toner is being replenished
  - The printer settings screen is displayed
  - Fixed warm-up is in progress
  - · Data is being processed
  - · Operations are suspended during printing
  - The Data In indicator is on or flashing
  - The sample print, locked print, hold print, or stored print screen is displayed
  - · Accessing the printer using Web Image Monitor
- The printer consumes less energy when in Sleep mode, but it takes longer to start printing.
- If two or more energy saving functions are set, the function for which the predetermined conditions to enter energy saving mode are met takes effect first.

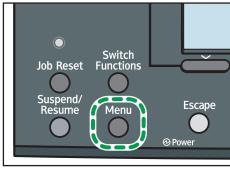
# Displaying the Printer Configuration Screens Using the Control Panel

# Configuring Printer Settings from the [Menu] key

The configuration screens allow you to change or set defaults.



- If Administrator Authentication Management is specified, contact your administrator.
- 1. Press the [Menu] key.



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2. Select the settings you want to change.

Press the [▼] or [▲] key to select the next or previous items.

3. Press the [OK] key.



- Any changes you make with configuration screens remain in effect even if the main power switch is turned off.
- To cancel changes made to settings and return to the initial display, press the [Escape] key.

# **Using Web Image Monitor**



 You cannot configure the printer settings using Web Image Monitor from a computer connected to the USB device server's network. Be sure to access Web Image Monitor from the printer's network.

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 from a client computer.

- · Displaying printer status or settings
- · Checking the print job status or history
- · Interrupting currently printing jobs
- · Resetting the printer
- · Managing the Address Book
- · Configuring printer settings
- Configuring network protocol settings
- · Configuring security settings

#### 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 browser

• Windows:

Internet Explorer 6.0 or higher

Firefox 10 and 15 or higher

Google Chrome 19 or higher

• Mac OS:

Safari 3.0 or higher

Firefox 10 and 15 or higher

Google Chrome 19 or higher

Web Image Monitor supports screen reader software. We recommend JAWS 7.0 or a later version.



Display and operation problems may occur if you do not enable JavaScript and cookies, or if you
are using a non-recommended Web browser.

- If you are using a proxy server, change the Web browser settings. Contact your administrator for information about the settings.
- We recommend using Web Image Monitor in the same network.
- If the printer is firewall-protected, it cannot be accessed from computers outside the firewall.
- If the printer under DHCP is used, the IP address may be changed automatically by the DHCP server settings. Enable DDNS setting on the printer, and then connect using the printer's host name. Alternatively, set a static IP address to the DHCP server.
- If the HTTP port is disabled, a connection to the printer using the printer's URL cannot be
  established. SSL settings must be enabled on this printer. For details, contact your network
  administrator.
- If Firefox is used, fonts and colors may be different, or tables may not appear properly configured.
- When using a host name under Windows Server 2003/2003 R2/2008/2008 R2/2012/2012 R2 with IPv6 protocol, perform host name resolution using an external DNS server. The host file cannot be used.
- To use JAWS 7.0 under Web Image Monitor, you must be running Windows and Internet Explorer 6.0 or a later version.
- If you are using Internet Explorer 8.0 or higher, downloading will be slower than with other browsers. To download faster with Internet Explorer 8.0 or higher, open the browser's [Internet Options] menu and register the printer's URL as a trusted site, and then disable SmartScreen filter for trusted sites. For details about these settings, see the Internet Explorer Help files.
- You can access Web Image Monitor more quickly by registering the printer's URL as a bookmark.
   Note that the URL you register must be the URL of the top page, which is the page that appears before login. If you register the URL of a page that appears after login, Web Image Monitor will not open properly from the bookmark.
- If user authentication is activated, you must enter your login user name and password to use Web Image Monitor. For Details, see "Logging In Using Web Image Monitor", Operating Instructions.
- When you configure settings using Web Image Monitor, do not log in from the control panel. The settings you have configured using Web Image Monitor may become invalid.

# Displaying the top page

There are two modes available with Web Image Monitor: guest mode and administrator mode.

Displayed items may differ depending on the printer type.

#### Guest mode

This mode requires no login to enter.

In the guest mode, the printer status, settings, and print job status can be viewed, but the printer settings cannot be changed.

#### Administrator mode

This mode requires an administrator login to enter.

In the administrator mode, you can configure various printer settings.



- When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10".
- 1. Start your Web browser.
- 2. Enter "http://(printer's IP address or host name)/" in your Web browser's address bar.

The top page of Web Image Monitor appears.

If the printer's host name has been registered on the DNS or WINS server, you can enter it.

When setting SSL, a protocol for encrypted communication, under the environment in which server authentication is issued, enter "https://(printer's IP address or host name)/".

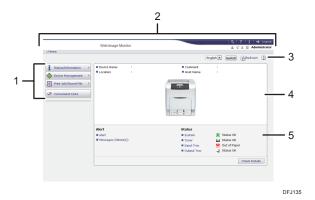
3. To log in to Web Image Monitor in the administrator mode, click [Login] on the top page.

The window for entering the login user name and password appears.

4. Enter your login user name and password, and then click [Login].

For details about the login user name and password, contact your administrator.

Depending on the configuration of your Web browser, the login user name and password might be saved. If you do not want to save them, configure your Web browser's settings so that this information is not saved.



#### 1. Menu area

Displays the content of a selected menu item.

#### 2. Header area

Displays the dialog box for switching to the user mode and administrator mode and the menu for each mode. Also displays the link to Help and dialog box for keyword search.

## 3. Refresh/Help

- (Refresh): Click at the upper right in the work area to update the printer information. Click the Web browser's [Refresh] button to refresh the entire browser screen.
- (Help): Use Help to view or download Help file contents.

#### 4. Basic Information area

Displays the basic information of the printer.

#### 5. Work area

Displays the contents of the item selected in the menu area.

# 2. Loading Paper

This chapter describes available trays for each paper size and type, and explains how to load paper in paper trays.

# **Paper Loading Procedure**

To achieve the print results you expect, it is important to select an appropriate input tray according to the size, type, and weight of the paper you want to use for printing. You also need to specify the paper size and type properly using the control panel or Web Image Monitor.

Follow the procedure below to load paper.

 Check the paper tray available for the size, type, and weight of the paper you want to use for printing.

For details about available paper trays for each paper size and type, see page 28 "Paper Size Specifications" and page 30 "Paper Type Specifications".

2. Change the paper size and type settings for the tray you selected.

Use the control panel of the printer or Web Image Monitor to change the paper size and type.

For details about changing paper settings using the control panel, see page 46 "Paper Settings".

3. Load paper into the tray.

For details about loading paper, see page 35 "Loading Paper into Paper Trays" or page 38 "Loading Paper into the Bypass Tray".

For details about loading envelopes, see page 42 "Loading Envelopes".

# **Paper Size Specifications**

The following tables show the paper sizes that can be loaded in each paper tray. The "Paper size" column shows the names of paper sizes and their dimensions in millimeters and inches. The  $\Box$  and  $\Box$  icons indicate the paper orientation in relation to the printer body.

The letters in the tables indicate the following:

- A: The paper size is detected automatically. You can also select the paper size using the control panel.
- B: Select the paper size using the control panel.
- C: Select the paper size using the printer driver.
- ': You can print on both sides of paper.
- -: Not supported

#### Metric sizes

Paper size name	Actual size	Bypass tray	Trays 1–4	Two-sided
A4D	210 × 297 mm	В	А	<b>✓</b>
A5D	148 × 210 mm	В	Region A  A Region B  B	<b>~</b>
А6П	105 × 148 mm	В	Region A  A  Region B  B	<b>~</b>
B5 <b>□</b>	182 × 257 mm	В	В	<b>✓</b>
86₽	128 × 182 mm	В	В	<b>✓</b>
C5 Env₽	162 × 229 mm	В	В	-
C6 Env₽	114 × 162 mm	В	В	-
DL EnvD	110 × 220 mm	В	В	-
16KD	195 × 267 mm	В	В	<b>√</b>

2

# Imperial sizes

Paper size name	Actual size	Bypass tray	Trays 1–4	Two-sided
81/2×14D	8.5" × 14"	В	А	<b>✓</b>
$8^{1}/_{2} \times 13\overline{D}$	8.5" × 13"	В	В	<b>√</b>
8 <sup>1</sup> / <sub>2</sub> × 11D	8.5" × 11"	В	А	<b>√</b>
8 <sup>1</sup> / <sub>4</sub> × 13D	8.25" × 13"	В	В	<b>√</b>
8 × 13D	8"×13"	В	В	<b>√</b>
$7^{1}/_{4} \times 10^{1}/_{2}$	7.25" × 10.5"	В	А	<b>√</b>
5 <sup>1</sup> / <sub>2</sub> × 8 <sup>1</sup> / <sub>2</sub> D	5.5" × 8.5"	В	А	<b>✓</b>
$4^{1}/_{8} \times 9^{1}/_{2}$	4.125" × 9.5"	В	В	-
$3^{7}/_{8} \times 7^{1}/_{2}$	3.875" × 7.5"	В	В	-
$8^{1}/_{2} \times 13^{2}/_{5}$	8.5" × 13.4"	С	С	<b>✓</b>

# **Custom Size Specifications**

You can also load custom size paper by specifying horizontal and vertical sizes.

The following tables show the custom paper sizes that can be loaded in each tray.

#### Metric sizes

Tray	Horizontal size	Vertical size	Horizontal size	Vertical size
	(One-sided)	(One-sided)	(Two-sided)	(Two-sided)
Bypass tray	70.0 to 216.0 mm	127.0 to 1260.0 mm	102.0 to 216.0 mm	148.0 to 355.6 mm
Trays 1–4	98.0 to 216.0	148.0 to 355.6	102.0 to 216.0	148.0 to 355.6
	mm	mm	mm	mm

#### Imperial sizes

Tray	Horizontal size (One-sided)	Vertical size (One-sided)	Horizontal size (Two-sided)	Vertical size (Two-sided)
Bypass tray	2.76 to 8.50"	5.00 to 49.60"	4.02 to 8.50"	5.83 to 14.00"
Trays 1–4	3.86 to 8.50"	5.83 to 14.00"	4.02 to 8.50"	5.83 to 14.00"

# **Paper Type Specifications**

The following table show the paper types that can be loaded in each tray. See "Paper weight" table for the actual paper weight indicated by numbers in the "Paper weight No." column. Use both tables to specify the correct paper type for the paper you are using.

The letters in the tables indicate the following:

- A: Supported
- ': You can print on both sides of paper.
- -: Not supported

Paper type	Paper weight No.	Bypass tray	Trays 1–4	Two-sided
Thin Paper	1	А	А	-
Plain Paper 1	2	А	А	<b>→</b>
Plain Paper 2	3	А	А	<b>→</b>
Middle Thick Paper	4	А	А	<b>→</b>
Thick Paper 1	5	А	А	<b>→</b>
Thick Paper 2	6	А	А	<b>√</b>
Thick Paper 3	7	А	А	-
Thick Paper 4	8	А	-	-
Recycled Paper	2, 3	А	А	<b>√</b>
Special Paper 1	2, 3	А	А	<b>√</b>
Special Paper 2	5	А	А	<b>√</b>
Special Paper 3	6	А	А	<b>√</b>
Letterhead Paper	2 to 6	А	А	<b>√</b>
Preprinted Paper	2, 3	А	А	-
Transparency	_*1	А	-	-
Label Paper	2 to 7	А	А	-
Envelope	4 to 7	А	А	-
Waterproof Paper	3 to 7	А	А	-

Paper type	Paper weight No.	Bypass tray	Trays 1–4	Two-sided
Coated Paper (Glossy)	2 to 6	А	А	<b>✓</b>
Coated Paper (Glossy: Thick)	7, 8 *2	А	А	-
Coated Paper (Matted)	2 to 6	А	А	<b>√</b>
Coated Paper (Matted: Thick)	7, 8 *2	А	А	-

<sup>\*1</sup> It is not necessary to specify the paper weight for this paper type.

# Paper weight

No.	Paper weight
1	52-60 g/m² (14-16 lb. BOND)
2	61-80 g/m² (16-20 lb. BOND)
3	81-90 g/m² (20-24 lb. BOND)
4	91-105 g/m² (24-28 lb. BOND)
5	106-130 g/m² (28-35 lb. BOND)
6	131–163 g/m² (35 lb. BOND–90 lb. INDEX)
7	164-220 g/m² (90 lb. INDEX-80 lb. COVER)
8	221-256 g/m² (80 lb. COVER-140 lb. INDEX)

<sup>\*2</sup> Paper weight No. 8 is available for the bypass tray only.

# **Paper Precautions**



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

#### **Precautions**

- Print quality is not guaranteed if paper other than the ones recommended is used. For more information about recommended paper, contact your sales or service representative.
- If paper jams occur or multiple sheets are fed at once, fan the paper before loading it.



- If you load paper when only a few sheets of paper remain in the tray, multiple sheet feeding may occur. Remove any remaining paper, stack them upon the new sheets of paper, and then fan the entire stack before loading it into the tray.
- Straighten curled or warped paper before loading.
- For details about available paper sizes and types for each paper tray, see page 28 "Paper Size Specifications" and page 30 "Paper Type Specifications".
- Depending on the environment where the printer is being used, you might at times hear a
  rustling noise from paper moving through the printer. This noise does not indicate a
  malfunction.
- If paper cannot be fed properly because of burrs on the edges of paper, load paper upside down.
- It is recommended to load envelopes and labels into the bypass tray.

#### **Unusable Paper**

To prevent errors and misfeeds, do not use:

- Paper for inkjet printers, thermal fax paper, art paper, paper with perforated lines, hemmededge paper, or window envelopes
- Bent, folded, or creased paper, perforated paper, slippery paper, torn paper, rough paper, thin paper with little stiffness, and paper with a dusty surface



- Errors can occur if you print onto sides that are already printed. Be sure to print onto blank sides only.
- Even supported types of paper may cause paper jams or malfunctions if they have been improperly stored.
- If you print onto rough grain paper, the output image might be blurred.
- Do not load sheets that have already been printed by another printer.

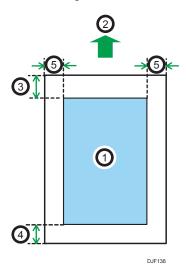
#### **Paper Storage**

When storing paper, the following precautions should always be followed:

- Do not store paper where it will be exposed to direct sunlight.
- Avoid storing paper in humid areas (humidity: 70% or less).
- Store on a flat surface.
- Do not store paper vertically.
- Once opened, store paper in plastic bags.

#### **Print Area**

The following shows the recommended print area for paper printed with this printer:



- 1. Print area
- 2. Feed direction
- 3. Varies depending on the paper type
  - Plain Paper, Middle Thick Paper, Thick Paper 1, Thick Paper 2, Thick Paper 3, Thick Paper 4:
     4.2 mm (0.2 inches)
  - Thin Paper:5.25 mm (0.2 inches)

#### 4. Varies depending on the paper type

- Plain Paper, Middle Thick Paper, Thick Paper 1, Thick Paper 2, Thick Paper 3, Thick Paper 4:
   2 mm (0.1 inches)
- Thin Paper:3.2 mm (0.1 inches)

#### 5. 2 mm (0.1 inches)



- The print area may vary depending on the paper size, printer language, and printer driver settings.
- The recommended printing area for the bypass tray is up to 355.6 mm (14.00 inches) in length in the paper feeding direction.
- Depending on the printer driver settings, you may be able to print outside the recommended print area. However, the actual output may not come out as desired, or a paper feed problem may occur.

# **Loading Paper into Paper Trays**

In the following example procedure, paper is loaded into Tray 1.

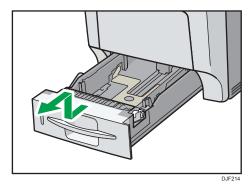


#### CAUTION

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

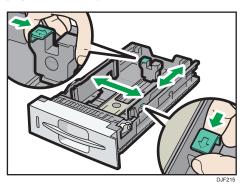


- For details about trays that can be loaded for each paper size and type, see page 28 "Paper Size Specifications" and page 30 "Paper Type Specifications".
- If paper jams occur frequently, flip the paper stack in the tray.
- Do not mix different types of paper in the same paper tray.
- After loading paper of the size that cannot be detected automatically, specify the paper size and type using the control panel. When printing a document, specify the same paper size and type in the printer driver as specified on the printer.
- · Do not move the side paper guides and end paper guide forcefully. Doing so may damage the tray.
- When loading label paper, load it one by one.
- 1. Pull the tray carefully until it stops, lift the front side of the tray, and then pull it out of the printer.



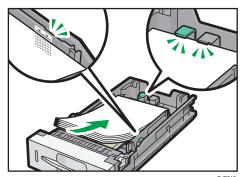
Place the tray on a flat surface.

2. Squeeze the clip on the side paper guide and end guide, and then adjust the guides to the paper size being loaded.



3. Load the new paper stack print side up.

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

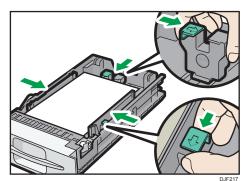


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4. Adjust the paper guides to close any gaps.

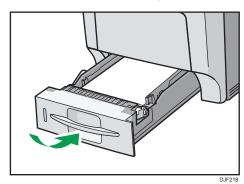
Do not move paper loaded in the tray more than a few millimeters.

Moving the loaded paper excessively may cause damage to paper edges on the openings of the tray's lifting plate, resulting in sheets being folded or becoming jammed.



\_\_\_\_

5. Lift the front side of the tray, and then slide it into the printer carefully until it stops.



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

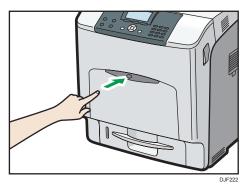


 Letterhead paper and envelopes must be loaded in a specific orientation. For details, see page 40 "Loading Orientation-Fixed Paper or Two-Sided Paper" or page 42 "Loading Envelopes".

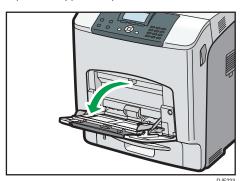
# **Loading Paper into the Bypass Tray**

## 

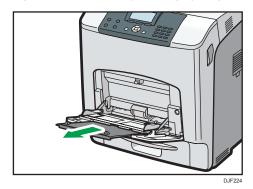
- For details about trays that can be loaded for each paper size and type, see page 28 "Paper Size Specifications" and page 30 "Paper Type Specifications".
- Do not mix different types of paper.
- After loading paper, specify the paper size and type using the control panel. When printing a
  document, specify the same paper size and type in the printer driver as specified on the printer.
- When loading label paper, load it one by one.
- Paper feeding conditions and printing quality may vary depending on the paper thickness and width. Be sure to perform test printing using the same paper beforehand.
- Load paper with the print side down and in the short-edge feed direction.
- 1. Press the mark in the center of the bypass tray.



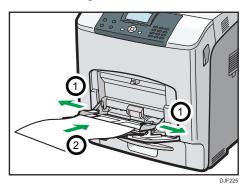
#### Open the bypass tray.



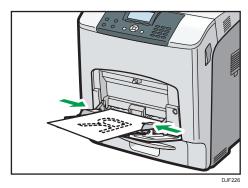
2. If you load A5 or larger size paper, pull out the bypass tray extension.



3. Slide the side guides outward, and then load paper print side down, until it stops.



4. Adjust the side guides to fit the paper width.



**U** Note

 Letterhead paper and envelopes must be loaded in a specific orientation. For details, see page 40 "Loading Orientation-Fixed Paper or Two-Sided Paper" or page 42 "Loading Envelopes".

# Loading Orientation-Fixed Paper or Two-Sided Paper

Orientation-fixed (top to bottom) or two-sided paper (for example, letterhead paper, or copied paper) might not print correctly, depending on how the paper is placed.

#### Settings using the control panel

Set [Letterhead Setting] in [Machine Modes] under [Print Settings] to [Auto Detect] or [On (Always)], and then place the paper as shown in the table below. For details about [Letterhead Setting], see "Machine Modes", Operating Instructions.

#### **Paper orientation**

The meanings of the icons are as follows:

lcon	Meaning
=	Place or load paper printed side face up.
	Place or load paper printed side face down.

Print side	Trays 1–4	Bypass tray
One-sided		62
	[.	66
Two-sided	C)	
	CCC	



• To print on letterhead paper when [Letterhead Setting] is set to [Auto Detect], you must specify [Letterhead] for the paper type in the printer driver's settings.

- If a print job is changed partway through printing from one-sided to two-sided printing, one-sided
  output after the first copy may be printed facing a different direction. To ensure all paper is output
  facing the same direction, specify different input trays for one-sided and two-sided printing. Note
  also that two-sided printing must be disabled for the tray specified for one-sided printing.
- For details about how to make two-sided prints, see "Printing on Both Sides of a Page", Operating Instructions.

#### 2

# **Loading Envelopes**

This section explains various details about and recommendations concerning envelopes.

## Specifications of Envelopes

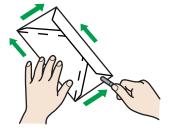


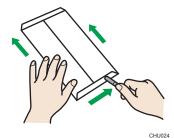
#### **⚠** CAUTION

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

## **Important**

- Do not use window envelopes.
- Envelopes, especially those with glue on their flaps, may stick together. Fan the envelopes to separate them before loading. If the envelopes still stick together, load them one by one. For the envelope types that can be used with this printer, see page 28 "Paper Size Specifications" and page 30 "Paper Type Specifications".
- Misfeeds might occur depending on the length and shape of the flaps.
- When loading envelopes with their flaps open, specify a custom size. You can print with a standard envelope size setting only when printing on envelopes with their flaps closed. However, be sure to open the flaps when loading envelopes into Tray 1 with their flaps toward the back of the printer.
- Before loading envelopes, press down on them to remove any air from inside, flattening out all four edges. If they are bent or curled, flattening their leading edges (the edge going into the printer) by running a pencil or ruler across them.





#### Loading orientation for envelopes

The method for loading envelopes varies depending on the orientation of the envelopes. Be sure to load envelopes with the correct orientation.

Orientation	Paper tray 1–4	Bypass tray
• Bo tov pri	aps: closed attom side of envelopes: ward the right of the inter de to be printed: face up	<ul> <li>Flaps: closed</li> <li>Bottom side of envelopes: toward the right of the printer</li> <li>Side to be printed: face down</li> </ul>

#### Recommended envelopes

For details about recommended envelopes, contact your local dealer.

The size of envelopes that you can load depends on the tray in which you load them. For details, see page 28 "Paper Size Specifications".



- Load only one size and type of envelope at a time.
- The duplex function cannot be used with envelopes.
- Straighten any curls within 2 mm (0.1 inch) upward and 0 mm (0 inches) downward on the tray before loading.
- To achieve better output quality, it is recommended that you set the right, left, top, and bottom print margin to at least 15 mm (0.6 inches) each.
- The output quality on envelopes may be uneven if parts of an envelope have differing thicknesses. Print one or two envelopes to check the print quality.
- When printing onto envelopes, the print speed is slower than usual.
- Flatten out prints if they are creased or curled.
- Check that the envelopes are not damp.
- High temperature and high humidity conditions can reduce print quality and cause envelopes to become creased.
- Depending on the environment, printing on envelopes may wrinkle them even if they are the recommended envelopes.
- Certain types of envelopes might be output creased, dirtied, or misprinted. If you are printing a
  solid color on an envelope, lines may appear where the overlapped edges of the envelope make it
  thicker.

## Printing on Envelopes with Windows (PCL 6/PostScript 3)

- After creating a document, open the [Printing Preferences] dialog box in the document's native application.
- 2. Click the [Frequently Used Settings] tab, and then configure the following settings:
  - Document Size:

Select the envelope size.

• Input Tray:

Select the paper tray where the envelopes are loaded.

• Paper Type:

Select [Envelope].

Change any other print settings as necessary. For details, see the printer driver's Help.

- 3. Click [OK].
- 4. Start printing from the application's [Print] dialog box.



- Configure the paper settings appropriately using both the printer driver and the control panel. For
  details about settings using the control panel, see page 47 "Configuring Envelope Settings Using
  the Control Panel".
- Envelopes must be loaded in a specific orientation. For details, see page 42 "Loading Envelopes".

## Printing on Envelopes with Windows (PCL 5c)

- After creating a document, open the [Printing Preferences] dialog box in the document's native application.
- 2. Click the [Paper] tab, and then configure the following settings:
  - Input Tray:

Select the paper tray where the envelopes are loaded.

• Document Size:

Select the envelope size.

• Type:

Select [Envelope].

Change any other print settings as necessary. For details, see the printer driver's Help.

- 3. Click [OK].
- 4. Start printing from the application's [Print] dialog box.



- Configure the paper settings appropriately using both the printer driver and the control panel. For
  details about settings using the control panel, see page 47 "Configuring Envelope Settings Using
  the Control Panel".
- Envelopes must be loaded in a specific orientation. For details, see page 42 "Loading Envelopes".

#### Printing on Envelopes with Mac OS X

- 1. After creating a document, open the printing preferences screen in the document's native application.
- 2. Configure the following settings:
  - Two-Sided:
    - Select [Off].
  - Paper Size:
    - Select the envelope size.
  - Orientation:
    - Select the orientation of the envelope.
- 3. Select [Paper Feed] in the pop-up menu.
- 4. Select the paper tray where the envelopes are loaded.
- 5. Select [Printer Features] in the pop-up menu.
- 6. Select [Paper] for "Feature Sets:", and then select [Envelope] for "Paper Type:".
- 7. Change any other print settings as necessary.
- 8. Start printing from the application's printing preferences screen.



- Configure the paper settings appropriately using both the printer driver and the control panel. For
  details about settings using the control panel, see page 47 "Configuring Envelope Settings Using
  the Control Panel".
- Envelopes must be loaded in a specific orientation. For details, see page 42 "Loading Envelopes".

# **Paper Settings**

This section explains how to specify paper size and type using the control panel.



When [Tray Setting Priority] is set to [Machine Setting(s)], the paper settings configured using the
printer's control panel have priority over the settings specified in the printer driver or commands.
 For details, see "Machine Modes", Operating Instructions.

## Specifying a Paper Size

When loading paper whose size cannot be selected automatically or in the bypass tray, specify the paper size using the control panel. For details about the paper sizes that can be detected automatically, see page 28 "Paper Size Specifications".



- To use custom size paper, be sure to specify the paper size using the control panel and the printer driver.
- The printer cannot print on custom size paper if the application does not support custom size paper.

#### Specifying Standard Size Paper

Press the [Menu] key, and then select the setting items using the  $[ ^{\blacktriangledown} ]$  or  $[ ^{\blacktriangle} ]$  key.

- 1. Select [Paper Input] ▶ Press [OK]
- 2. Select [Paper Size: (tray name)] Press [OK]
- 3. Select the size of the paper set in the specified tray Press [OK]



- For details about the available paper size, see page 28 "Paper Size Specifications".
- To resume automatic paper size detection after specifying the paper size manually, select [Auto Detect] on Step 3.

#### **Specifying Custom Size Paper**

Press the [Menu] key, and then select the setting items using the [▼] or [▲] key.

- 1. Select [Paper Input] Press [OK]
- 2. Select [Paper Size: (tray name)] Press [OK]
- 3. Select [Custom Size] ▶ Press [OK]

- 4. Press the number keys to enter the horizontal value Press [OK]
- 5. Press the number keys to enter the vertical value Press [OK]



• For details about the available paper size, see page 28 "Paper Size Specifications".

## Specifying a Paper Type

You can improve printer performance by selecting the optimum paper type for the tray.

Press the [Menu] key, and then select the setting items using the  $[ \mathbf{V} ]$  or  $[ \mathbf{A} ]$  key.

- 1. Select [Paper Input] Press [OK]
- 2. Select [Paper Type: (tray name)] ▶ Press [OK]
- 3. Select the type of the paper set in the specified tray Press [OK]

The setting is complete when specifying the following types of paper:

Thin Paper, Middle Thick, Thick Paper 1, Thick Paper 2, Thick Paper 3, Thick Paper 4, Special Paper 1, Special Paper 2, Special Paper 3, Recycled Paper, Preprinted Paper, OHP (Transparency)

- 4. If you have selected [No Display (Plain Paper)], [Letterhead], [Coated Paper (Glossy)], [Coated Paper(Glossy:Thick)], [Coated Paper (Matted)], [Coated Paper (Matted:Thick)], [Waterproof Paper], [Label Paper], or [Envelope] for the paper type, press [Escape]
- 5. Select [Maintenance] ▶ Press [OK]
- 6. Select [General Settings] ▶ Press [OK]
- 7. Select the paper thickness setting for the specified paper type Press [OK]
- 8. Select the tray where the specified type of paper is loaded [OK]

If you selected [Letterhead Setting], [Label Paper Setting], or [Envelope Setting] in Step 8, you can specify the paper thickness for each tray separately. For other paper types, the specified paper thickness is applied to all trays.

9. Select the paper thickness Press [OK]



• For details about the available paper type, see page 30 "Paper Type Specifications".

## Configuring Envelope Settings Using the Control Panel

When printing on envelopes, load envelopes in bypass tray or Tray 1, and then follow the procedure below to specify envelope type and thickness.

Press the [Menu] key, and then select the setting items using the [♥] or [▲] key.

- 1. Select [Paper Input] Press [OK]
- 2. Select [Paper Size: (tray name)] Press [OK]
- 3. Select the envelope type Press [OK]
- 4. Select [Paper Type: (tray name)] Press [OK]
- 5. Select [Envelope] Press [OK]
- 6. Press [Escape]
- 7. Select [Maintenance] Press [OK]
- 8. Select [General Settings] Press [OK]
- 9. Select [Envelope Setting] Press [OK]
- 10. Select the source tray for which you want to change the paper thickness Press [OK]
- 11. Select the paper thickness Press [OK]

## **U** Note

- For details about the envelope types that can be loaded in each tray, see page page 28 "Paper Size Specifications" and page 30 "Paper Type Specifications".
- For details about how to load envelopes, see page 42 "Loading Envelopes".
- Configure the paper settings appropriately using both the printer driver and the control panel. For
  details about paper settings using the printer driver, see "Printing on Envelopes", Operating
  Instructions.

# 3. Troubleshooting

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

# When a Panel Tone Beeps

The following table describes various beep patterns that the printer produces to alert users about printer conditions and the meaning of each beep pattern.

Beep pattern	Meaning	Causes
Single short beep	Panel/screen input accepted.	A control panel key was pressed.
Two long beeps	Printer has warmed up.	When the power is turned on or the printer exits Sleep mode, the printer has fully warmed up and is ready for use.
Five long beeps repeated four times.	Soft alert	An error message appears on the control panel if there is no tray for the selected paper size or the tray is empty.
Five short beeps repeated five times.	Strong alert	The printer requires user attention because paper has jammed, the toner needs replenishing, or other problems have occurred.



- Beep alerts cannot be muted. If the printer's covers are opened and closed repeatedly within a short space of time during an alert indicating a paper jam or insufficient toner, a beep alert might continue, even after normal status has resumed.
- You can enable or disable beep alerts. For details, see "General Settings", Operating Instructions.

# When Checking the Indicator Lamps, Status Icons, and Messages on the Control Panel

## **Indicators**

This section describes the indicators displayed when the printer requires the user to remove misfed paper, to add paper, or to perform other procedures.

Indicator	Status
<sup>8</sup> <b>√r</b> : Paper Misfeed indicator	Appears when a paper misfeed occurs.
	For details about removing jammed paper, see page 85 "Removing Jammed Paper".
🛓 : Load Paper indicator	Appears when paper runs out.
	For details about loading paper, see page 27 "Loading Paper".
ង់ : Add Toner indicator	Appears when toner runs out.
	For details about adding toner, see "Adding Toner (Print Cartridge)", Operating Instructions.
? : Service Call indicator	Appears when the printer is malfunctioning or requires maintenance.
☐• : Cover Open indicator	Appears when one or more covers of the printer are open.

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# **If USB Connection Fails**

Problem	Causes	Solutions
The printer is not automatically recognized.	The USB cable is not connected properly.	Disconnect the USB cable, turn off the printer, and then turn it on again. When the printer has fully booted up, reconnect the USB cable.
Windows has already configured the USB settings.	Check whether or not the computer has identified the printer as an unsupported device.	Open Windows' Device Manager, and then, under [Universal Serial Bus controllers], remove any conflicting devices. A [!] or [?] icon is displayed for conflicting devices. Take care not to accidentally remove required devices. For details, see Windows Help.

# When Messages Are Displayed

This section describes the main messages that appear on the display panel and printed error logs and reports. If other messages appear, follow their instructions.

## Status Messages

Message	Status
"Calibrating"	The printer is calibrating the color. Wait a while.
"Energy Saver Mode"	The printer is in Energy Saver mode. Press any key to recover to the normal mode.
"Hex Dump Mode"	In Hex Dump mode, the printer receives data in a hexadecimal format.  Turn off the printer after printing, and then turn it on again.
"Job Suspended"	All jobs are suspended. Turn off the printer, and turn it on again to resume the jobs.
"Offline"	The printer is offline and cannot print.
"Please wait"	This message may appear for a few seconds. It means the printer is initializing, replenishing toner, or performing maintenance operations. Wait a while.
"Printing"	The printer is printing. Wait a while.
"Printing Suspended"	Printing is suspended. To resume printing, press the [Suspend/Resume] key.
"Ready"	This is the default ready message. The printer is ready for use. No action is required.
"Resetting Job"	The printer is resetting the print job. Wait a while.
"Setting change"	The printer is applying the changes made to its settings. Wait a while.
"Updating Certificate"	The printer is updating the @Remote certificate. Turn the power off, and then turn it on again.
"Waiting for print data"	The printer is waiting for the next data to print. Wait a while.

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#### 3

## Alert Messages (Displayed on the Control Panel)

Message	Cause	Solution
"8 <b>1</b> r(A) Remove misfeed in Trays. Opn & cls Frt.Cov."	Remove paper from the Tray 1 and then reload paper. Then open the front cover and then close it again, so the error message disappears.	For details, see page 85 "Removing Jammed Paper".
"%(B) (C) Open Front Cover and remove the paper."	Open the front cover and remove any jammed paper from the internal paper feed path.	For details, see page 85 "Removing Jammed Paper".
"% (Y1) Remove misfeed in Tray 2. Opn & cls Frt. Cov."	Open Tray 2 and remove the jammed paper. To reset the error, open the front cover and then close it.	For details, see page 85 "Removing Jammed Paper".
"%1r(Y2) Remove misfeed in Tray 3. Opn & cls Frt. Cov."	Open Tray 3 and remove the jammed paper. To reset the error, open the front cover and then close it.	For details, see page 85 "Removing Jammed Paper".
"% (Y3) Remove misfeed in Tray 4. Opn & cls Frt. Cov."	Open Tray 4 and remove the jammed paper. To reset the error, open the front cover and then close it.	For details, see page 85 "Removing Jammed Paper".
"%(Z) Open Frt. Cov and remove paper in Dup.Feed."	Open the front cover and remove any jammed paper from the internal paper feed path.	For details, see page 85 "Removing Jammed Paper".
"Land Add toner. Replace Toner Cartridge."	The toner has run out. Replace the print cartridge.	For details, see "Adding Toner (Print Cartridge)", Operating Instructions.
"latoner is almost empty."	The print cartridge is almost empty.	For details, see "Adding Toner (Print Cartridge)", Operating Instructions.
"র্প্রেWaste Toner Bottle full"	The waste toner bottle is full. Replace the waste toner bottle.	For details, see "Replacing Other Consumables", Operating Instructions.

Message	Cause	Solution
"@Remote Cert. update failed"	Updating the @Remote certificate failed.	Turn the printer off, and then turn it on again. If the problem persists, contact your sales or service representative.
"Cannot connect=>Comm.Serv. Check proxy user/password."	The proxy user name or password is incorrect.	Check the proxy server settings, and then change the user name and/or password if they are incorrect.
"Change (Tray name) to the following settings:"	The size of the paper in the tray does not match the paper size specified in the printer driver.	Select a tray containing paper that is the same size as the specified paper size.
"Connect failed:WirelessCard Turn power off, check card."	The printer cannot detect the wireless LAN interface board.	Check that the board is supported or installed correctly.
"Duplex mode is in off position for (tray name)"	The duplex mode for the indicated tray is not available.	You can use one-sided printing only. Press [Change] to change the tray's settings, press [JobReset] to reset the job, or press [Form Feed] to force printing.
"Ethernet Board Error"	An error on the Ethernet is detected.	Turn the printer off, and then turn it on again. If the problem persists, contact your sales or service representative.
"Independent-supply toner"	Independent-supply toner is set.	Use the toner recommended for this printer.
"Load paper in (tray name)"	There is no paper in the specified tray.	Load the specified paper in the tray, press [JobReset] to reset the job.
"Parallel I/F Error"	The printer's self-diagnostic test failed due to a loopback error.	Replace the IEEE 1284 board that caused the error.

Message	Cause	Solution
"Printer Font Error."	There are problems with the printer's font file.	Turn the printer off, and then turn it on again.  If the problem persists, contact your sales or service representative.
"Problem with Hard Disk Please call service."	The printer cannot detect the hard disk.	Check that the hard disk installed correctly. If the problem persists, contact your sales or service representative.
"Problem:Wireless card Please call service."	The printer cannot detect a wireless LAN interface board.	Check that the wireless LAN interface board installed correctly.  If the problem persists, contact your sales or service representative.
"Repl Rqrd Soon:FusingUnit"	You will need to replace the fusing unit soon.	Contact your sales or service representative to obtain a new unit.
"Repl Rqrd Soon:IntTrans"	You will need to replace the transfer unit soon.	Contact your sales or service representative to obtain a new unit.
"Repl Rqrd Soon:PCU:Black"	You will need to replace the black drum unit soon.	Contact your sales or service representative to obtain a new unit.
"Repl Rqrd Soon:PCU:Color"	You will need to replace the color drum unit soon.	Contact your sales or service representative to obtain a new unit.
"Replacmnt Requrd:IntTrans"	You need to replace the transfer unit.	For details, see "Replacing Other Consumables", Operating Instructions.
"Replcmnt Rqrd:Fusing Unit"	You need to replace the fusing unit.	For details, see "Replacing Other Consumables", Operating Instructions.

Message	Cause	Solution
"Rplcmnt Requird:PCU:Black"	You need to replace the black drum unit.	For details, see "Replacing Other Consumables", Operating Instructions.
"Rplcmnt Requird:PCU:Color"	You need to replace the color drum units.	For details, see "Replacing Other Consumables", Operating Instructions.
"SD Card authenticatn.failed Error recurs, call service."	Authentication from the SD card failed.	Turn the printer off, and then turn it on again. If the problem persists, contact your sales or service representative.
"Set the Drum Unit correctly."	The drum unit may not be installed correctly.	Turn the printer off, and then install the drum unit again.
"Set the Fusing Unit correctly."	The fusing unit may have not been installed correctly.	Turn the printer off, and then install the fusing unit again.  If the message continues to appear after the unit is installed again, contact your sales or service representative.
"Set the Intermediate Transfer Unit correctly."	The transfer unit may not be installed correctly.	Turn the printer off and re-install the transfer unit.
"Set the Toner Cartridge correctly."	The print cartridge may have not been installed correctly.	Turn the printer off, and install the print cartridge again.
"Set Waste Toner Bottle correctly."	The waste toner bottle may not be installed correctly.	Turn the printer off and re-install the waste toner bottle, and then close the left cover.
"Standard Tray is full. Remove the paper."	The standard tray is full.	Remove the paper.
"Supply order has failed."	The automatic supply order failed.	The message indicates the printer tried to order the supplies.
"USB has a problem. Please call service."	The printer has detected a USB board failure.	Turn the printer off, and then turn it on again. If the problem persists, contact your sales or service representative.

## Alert Messages (Printed on Error Logs and Reports)

This section describes likely causes of and possible solutions for the error messages that are printed on the error logs or reports.

Message	Cause	Solution
"86: Error"	Parameters of the control code are invalid.	Check the print settings.
"91: Error"	Printing was canceled by the auto job cancel function due to a command error.	Check that the data is valid.
"92: Error"	Printing was canceled because the [Job Reset] key or the [Suspend/Resume] key was pressed on the printer's control panel.	Perform the print operation again as necessary.
"Address book is in use."	The printer currently cannot perform authentication because the Address Book is being used by another function.	Wait a while, and then retry the operation.
"Auto-user prog. failed."	Automatic registration of information for LDAP Authentication or Windows Authentication failed because the Address Book is full.	For details about the automatic registration of user information, see Security Guide.
"Cannot print."	You have no privileges to print the PDF file you want to print.	Contact the owner of the document.
"Classification Code Error"	The classification code is not specified with the printer driver.	Select [Optional] for the classification code. For details about how to specify classification code settings, see "Registering Classification Codes", Operating Instructions.
"Collate cancelled."	Collate was canceled.	Reduce the number of pages to be printed.

Message	Cause	Solution
"Collate: Page max."	The amount of free memory is insufficient to perform collating.	Reduce the number of pages to be printed.
"Command Error."	An RPCS command error occurred.	Check that the communication between a device and the printer is working correctly.
"Compressed Data Error"	The printer detected corrupt compressed data.	Check that the program you used to compress the data is functioning correctly.
"Duplex cancelled."	Duplex printing was canceled.	Change the setting for "Duplex Tray" in [Paper Input] to enable duplex printing for the paper tray.
"Error occured. Prntd/Cncld."	An error occurred during printing, but it was ignored.	Check the print settings.
"Excd Prt Vol Use max count."	Printing was canceled because the print maximum number was reached.	Contact your user administrator.
"Excd Prt Vol Use max count."	Maximum number of user codes that can be registered has been reached.	Delete unnecessary user codes.
"Exceeded max. No. of files."	While printing a Sample Print, Locked Print, Hold Print, or Stored Print file, the maximum file capacity was exceeded.	Delete unneeded files stored in the printer.
"Exceeded max. No. of pages."	While printing a Sample Print, Locked Print, Hold Print, or Stored Print file, the maximum page capacity was exceeded.	<ul> <li>Delete unneeded files stored in the printer.</li> <li>Reduce the number of pages to print.</li> </ul>
"File System Error."	PDF direct printing could not be performed because the file system could not be obtained.	Turn the printer off, and then turn it on again. If the message appears again, contact your service representative.

Message	Cause	Solution
"File System Full."	The PDF file cannot be printed because the capacity of the file system is full.	Delete all unnecessary files from the hard disk, or decrease the file size sent to the printer.
"Function use denied."	The print job was cancelled because of one of the following:  • The user does not have privileges to print.  • No privileges to print are assigned to the entered user name or user code, or a wrong password was specified for the user name.	Enter the user name or user code with privileges to print, or enter the correct password for the user name.
"HDD is full."	The hard disk became full while printing a Sample Print, Locked Print, Hold Print, or Stored Print file. Delete unnecessary files stored in the printer.	Reduce the data size of the Sample Print, Locked Print, Hold Print, or Stored Print file. When printing with the PostScript 3 printer driver, the hard disk capacity for fonts and forms has been exceeded. Delete unnecessary forms or fonts registered to the printer.
"HDD not installed."	The printer received a stored job file but no hard disk is installed.	Install a hard disk.
"I/O buffer overflow."	An input buffer overflow occurred.	<ul> <li>Select [Font Priority] for [Memory Usage] in [System].</li> <li>In [I/O Buffer] under the [Host Interface] menu, set the maximum buffer size to a larger value.</li> <li>Reduce the number of files being sent to the printer.</li> </ul>

Message	Cause	Solution
"Insufficient Memory."	A memory allocation error occurred.	PCL 6:  Select a lower resolution on the printer driver. For details about how to change the resolution setting, see the printer driver Help. On the printer driver's [Detailed Settings] tab, click [Print Quality] in "Menu:", and then select [Raster] in the "Vector/Raster:" list. In some cases, it will take a long time to complete a print job.  PCL 5c, PostScript 3:  Select a lower resolution on the printer driver. For details about how to change the resolution setting, see the printer driver Help.
"Memory Retrieval Error."	A memory allocation error occurred.	Turn off the printer, and then turn it on again. If the message appears again, contact your service representative.
"No response from server."	A timeout occurred while the printer was connecting to the server for LDAP Authentication or Windows Authentication.	Check the status of the server.
"Paper Size Error"	Printing was canceled because the specified paper size cannot be fed from the tray.	Check the available paper size.
"Paper Type Error"	The printer does not recognize the paper type specified using the printer driver.	Check that the printer is connected to the network correctly and bidirectional communication is enabled. If the problem persists, check the user paper type settings of the printer.

Message	Cause	Solution
"Password mismatch."	A wrong password was entered when an encrypted PDF file was printed.	Check the password.
"PDF File Error."	A syntax error, etc., occurred.	Check that the PDF file is valid.
"Print overrun."	Printing images was aborted.	Select a lower resolution on the printer driver. For details about how to change the resolution setting, see the printer driver Help.
"Receiving data failed."	Data reception was aborted.	Resend the data.
"Sending data failed."	The printer received a command to stop a transmission from the printer driver.	Check that the computer is working correctly.
"User auth. already exists."	The same account name is already used in the newly selected domain or server in an environment using LDAP Authentication.	Contact your user administrator.

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# When You Cannot Print

Problem	Cause	Solution
Printing does not start.	The power is off.	For details about how to turn on the main power switch, see page 17 "Turning On/Off the Power".
Printing does not start.	The cause is displayed on the screen of the control panel.	Check the error message or warning status on the display panel, and then take the required action. For details about solutions, see page 52 "When Messages Are Displayed".
Printing does not start.	The interface cable is not connected correctly.	For details about how to connect interface cables correctly, see "Connecting the Printer", Operating Instructions.
Printing does not start.	The correct interface cable is not being used.	The type of interface cable to use depends on the computer. Be sure to use the correct one. If the cable is damaged or worn, replace it. For details about interface cable, see "Connecting the Printer", Operating Instructions.
Printing does not start.	The interface cable was connected after the printer was switched on.	Connect the interface cable before turning on the main power switch.

Problem	Cause	Solution
Printing does not start.	If the printer is using wireless LAN, failure to print might result from a weak wireless signal.	Check the radio signal status of the wireless LAN in [System Settings]. If the signal quality is not satisfactory, move the printer to a location where radio waves can pass or remove objects that might cause interference.
		You can check the signal status only when wireless LAN is used in infrastructure mode. For details about the radio signal status of the wireless LAN, see "Host Interface", Operating Instructions.
Printing does not start.	If the printer is using wireless LAN, when there is a microwave oven, mobile phone, industrial machine, scientific instrument, or medical instrument which uses the same frequency range near the device, radio waves may be interfering with the wireless LAN's communication.	Turn off the microwave oven, mobile phone, industrial machine, scientific instrument, or medical instrument which uses the same frequency range and then try printing again. If printing is successful, move the device to a location where it does not interfere.
Printing does not start.	If the printer is using wireless LAN, SSID settings may be incorrect.	Check that the SSID is correctly set using the printer's display panel. For details about SSID Setting, see "Connecting to the Wireless LAN Interface", Operating Instructions.

Problem	Cause	Solution
Printing does not start.	If the printer is using wireless LAN, the receiver's MAC address may be preventing communication with the access point.	Check the access point settings when using the infrastructure mode. Depending on the access point, client access may be filtered by MAC address. Also, check that there are no transmission problems between the access point and wired clients, and between the access point and wireless clients.
Printing does not start.	The Login User Name, Login Password, or Driver Encryption Key is incorrect.	Check the Login User Name, Login Password, and Driver Encryption Key.
Printing does not start.	Advanced encryption has been set using the Extended Security function.	Check the settings of the Extended Security function. For details about Extended Security function settings, see Security Guide.
[List / Test Print] is disabled.	A mechanical error might have occurred.	Contact your service representative.
Printing does not start when using the extended wireless LAN in Ad-hoc Mode.	The correct Communication Mode is not set.	<ul> <li>Turn the main power switch off and then back on again. For details about how to turn on/off the main power switch, see page 17 "Turning On/Off the Power".</li> <li>Change [Communication Mode] in [System Settings] to [802.11 Ad-hoc Mode], and then select [Off] for [Security Method]. For details about Communication Mode, see "Host Interface", Operating Instructions.</li> </ul>

If printing does not start, contact your service representative.

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## When the Data In Indicator Does Not Light Up or Flash

When the Data In indicator does not light up or flash after a print job starts, data is not being sent to the printer.

#### When the printer is connected to the computer using the interface cable

Check that the print port setting is correct. When connecting the printer to the computer using a parallel interface, connect using LPT1 or LPT2.

- Open the printer properties dialog box, and then click the [Ports] tab.
   For details about displaying the printer properties dialog box, see "Displaying the Printer Driver Properties with Windows", Operating Instructions.
- 2. In the [Print to the following port(s)] list, check that the correct port is selected.

#### **Network connection**

For details about the network connection, contact your administrator.

# **Other Printing Problems**

This section describes likely causes of and possible solutions for problems that can occur when a print job is performed from a computer.

## When You Cannot Print Properly

Problem	Cause	Solution
The printed image is smudged.	Settings for thick paper have not been configured when printing on thick paper in the bypass tray.	PCL 5c:  On the printer driver's [Paper] tab, select [Bypass Tray] in the "Input Tray:" list. Then in the "Type:" list, select a proper paper type.  PCL 6/PostScript 3:  On the printer driver's [Detailed Settings] tab, click [Paper] in "Menu:", and then select [Bypass Tray] in the "Input Tray:" list. Then in the "Paper Type:" list, select a proper paper type.
Printed images contain blots or are patchy.	The paper is damp.	Use paper that has been stored in the recommended temperature and humidity conditions. For details about the proper way to store paper, see page 32 "Paper Precautions".
Printed images contain blots or are patchy.	The printer is not on a level surface.	The printer must be placed on a stable and level surface. Check the printer environment and select an appropriate location. For details about the printer's environment, see "Install Location", Operating Instructions.

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Problem	Cause	Solution
Printed images contain blots or are patchy.	The paper is creased, curled, or has blemishes.	Smooth out the wrinkles or replace the paper. For details about paper, see page 32 "Paper Precautions".
The printed image is faded over the entire page.	The paper is damp.	Use paper that has been stored in the recommended temperature and humidity conditions. For details about the proper way to store paper, see page 32 "Paper Precautions".
The printed image is faded over the entire page.	The paper is unsuitable. Printing on coarse or treated paper might result in faint print image.	Use recommended paper. For details about recommended paper, see page 28 "Paper Size Specifications" and page 30 "Paper Type Specifications".
The printed image is faded over the entire page.	If [On] is selected in the "Toner Saving:" list in the printer driver settings, the entire page will be faded when printed.	PCL 6/PostScript 3: On the printer driver's [Detailed Settings] tab, click [Print Quality] in "Menu:", and then select [Off] in the "Toner Saving".
Images smudge when rubbed.	The specified paper type and	PCL 5c:
(Toner is not fixed.)	the paper that is actually loaded might be different. For example, thick paper might be loaded but not specified as the paper type.	On the printer driver's [Paper] tab, select a proper paper type in the [Type:] box. PCL 6/PostScript 3:
		On the printer driver's [Detailed Settings] tab, click [Paper] in "Menu:", and then select a proper paper type in the "Paper Type:" list.

Problem	Cause	Solution
The printed image is different from the image on the computer's display.	Printing will be performed by the printer's graphic processing function.	PCL 6: On the printer driver's [Detailed Settings] tab, click [Print Quality] in "Menu:", and then select [Raster] in the "Vector/Raster:" list.
The image is too dark or too light.	The paper type settings are not configured correctly.	Check that the paper loaded on the paper tray or bypass tray matches the paper type set on the display panel. For details about paper type settings, see page 46 "Paper Settings".
The image is too dark or too light.	The paper is loaded reverse side up. Printing on non-print surfaces reduces print quality and can damage the printer's internal components.	Before printing on special paper, check its surface carefully. For details about special paper, see page 32 "Paper Precautions".
Image is dirty.	Use of non-recommended toner can result in a loss of print quality and other problems.	Use genuine manufacturer toner. Contact your service representative.
Printed graphics do not match graphics on the screen.	If the printer driver is configured to use the graphics command, the graphics command from the printer is used to print.	If you want to print accurately, set the printer driver to print without using the graphics command. For details about settings for printer driver, see the printer driver Help.
Print result differs from the display.	A non-Windows operating system is being used.	Check that the application supports the printer driver.

Problem	Cause	Solution
Print result differs from the display.	The printer is not selected for printing.	Use the printer driver of the printer and check that the printer is the specified printer. For details about how to open the printer driver settings screen, see  "Displaying the Printing Preferences dialog box from the [Start] menu", Operating Instructions.
Print result differs from the display.	Data transmission failed or was canceled during printing.	Check whether there is failed or canceled data remaining. For details about how to identify the cause of the error, see "Checking Error Logs", Operating Instructions.
Characters differ from the display.	The loaded paper is unsuitable.	Printing on recommended paper produces better resolution. For details about recommended paper, see page 28 "Paper Size Specifications" and page 30 "Paper Type Specifications".
Image position differs from the display.	The page layout settings are not configured correctly.	Check the page layout settings configured using the application. For details about page layout settings, see the application's Help.

Problem	Cause	Solution
Image position differs from the display.	The page layout settings are not configured correctly.	PCL 5c: On the printer driver's [Paper] tab, select [Print On] box, and then select the desired size. PCL 6 / PostScript 3: On the printer driver's [Detailed Settings] tab, click [Basic] in "Menu:", and then select the desired size in the "Print On:" list.
Lines of garbled or unwanted alphanumeric characters appear.	An incorrect printer language might have been selected.	Select the correct printer driver, and then print the file again.
Images are cut off, or excess is printed.	You may be using paper smaller than the size selected in the application.	Use the same size paper as that selected in the application. If you cannot load paper of the correct size, use the reduction function to reduce the image, and then print. For details about the reduction function, see the printer driver Help.
Photo images are grainy.	Some applications print at a lower resolution.	Use the application's or printer driver's settings to specify a higher resolution. For details about printer driver's settings, see the printer driver Help.
A solid line is printed as a dashed line or appears blurred.	Dither patterns do not match.	PostScript 3:  Change the dithering settings on the printer driver. For details about the dithering settings, see the printer driver Help.

Problem	Cause	Solution
Fine lines are fuzzy with inconsistent thickness or color, or do not appear.	Super fine lines have been specified in the application, or a color that is too light has been specified for the lines.	PostScript 3:  Change the dithering settings on the printer driver. For details about the dithering settings, see the printer driver Help.
		If the problem continues after you change the dithering settings, use the settings of the application in which the image was created to change the color and thickness of the lines.
Images appear only partially colored.	The paper is damp.	Use paper that has been stored in the recommended temperature and humidity conditions. For details about the proper way to store paper, see page 32 "Paper Precautions".
When printing is performed using the USB device server, a print job cannot be completed properly.	Even if the USB device server has received the data successfully, the printer cannot complete the print job properly because the timeout period set on the printer is too short.	Specify a longer period for [I/O Timeout] using the printer's control panel.

# Paper Misfeeds Occur Frequently

Problem	Cause	Solution
Paper is not fed from the selected tray.	When you are using Windows, printer driver settings override those settings using the display panel.	PCL 5c: On the printer driver's [Paper] tab, select the desired input tray in the "Input Tray:" list. PCL 6/PostScript 3: On the printer driver's [Detailed Settings] tab, click [Paper] in "Menu:", and then select the desired input tray in the "Input Tray:" list.
Images are printed at a slant.	The tray's side fences might not be locked.	Check that the side fences are locked. For details about how to set the side fences, see page 35 "Loading Paper into Paper Trays" or page 38 "Loading Paper into the Bypass Tray".
Images are printed at a slant.	The paper is feeding in at a slant.	Load the paper correctly. For details about loading paper, see page 35 "Loading Paper into Paper Trays" or page 38 "Loading Paper into the Bypass Tray".
Misfeeds occur frequently.	The number of sheets loaded exceeds the capacity of the printer.	Load paper only as high as the upper limit markings on the side fences of the paper tray, or the markings on the paper guides of the bypass tray.
Misfeeds occur frequently.	The paper tray's side fences are set too tightly.	Push the side fences lightly, and then reset them.

Problem	Cause	Solution
Misfeeds occur frequently.	The paper is damp.	Use paper that has been stored in the recommended temperature and humidity conditions. For details about the proper way to store paper, see page 32 "Paper Precautions".
Misfeeds occur frequently.	The paper is too thick or too thin.	Use recommended paper. For details about recommended paper, see page 28 "Paper Size Specifications" and page 30 "Paper Type Specifications".
Misfeeds occur frequently.	The paper is wrinkled or has been folded/creased.	<ul> <li>Use recommended paper.         For details about         recommended paper, see         page 28 "Paper Size         Specifications" and         page 30 "Paper Type         Specifications".</li> <li>Use paper that has been         stored in the recommended         temperature and humidity         conditions. For details         about the proper way to         store paper, see page 32         "Paper Precautions".</li> </ul>
Misfeeds occur frequently.	Printed paper is being used.	Do not load sheets that have already been copied or printed by another printer.
Misfeeds occur frequently.	Sheets are sticking together.	Fan the sheets thoroughly before loading them. Alternatively, feed the sheets into the printer one at a time.
Sheets are feeding in together, resulting in jams.	Sheets are sticking together.	Fan the sheets thoroughly before loading them. Alternatively, feed the sheets into the printer one at a time.

Problem	Cause	Solution
Printed paper becomes creased.	The paper is damp.	Use paper that has been stored in the recommended temperature and humidity conditions. For details about the proper way to store paper, see page 32 "Paper Precautions".
Printed paper becomes creased.	The paper is too thin.	Use recommended paper. For details about recommended paper, see page 28 "Paper Size Specifications" and page 30 "Paper Type Specifications".
Edges of sheets are creased.	The paper is damp.	Use paper that has been stored in the recommended temperature and humidity conditions. For details about the proper way to store paper, see page 32 "Paper Precautions".
Edges of sheets are creased.	You are using non-recommended paper.	Use recommended paper. For details about recommended paper, see page 28 "Paper Size Specifications" and page 30 "Paper Type Specifications".
Duplex printing is malfunctioning.	You have selected a paper tray that is not set for duplex print.	Change the setting to enable duplex printing for the paper tray.
The image on the back side of duplex printing has mottled blank patches or is smudged.	Missing patches and smudges are caused by moisture leaking from the paper.	<ul> <li>Do not install the printer in areas that are susceptible to low temperature.</li> <li>Use paper that has been stored in the recommended temperature and humidity conditions. For details about the proper way to store paper, see page 32 "Paper Precautions".</li> </ul>

Problem	Cause	Solution
White stripes appear on the OHP.	Fragments of paper are stuck to the OHP.	Use a dry cloth to wipe any paper fragments off the back of the OHP.

# Additional Troubleshooting

Problem	Causes	Solutions
It takes a long time to complete a print job.	.	If the Data In indicator is flashing, data has been received by the printer. Wait for a moment.
		Changing the following settings with the printer driver may help speed up printing:
		Select [Speed] in "Print     Priority" list.
		Select a lower resolution.
		For details about how to change the settings, see the printer driver Help.
Images are printed in the wrong orientation.	The feed orientation you selected and the feed orientation selected in the printer driver's option setup might not be the same.	Set the printer's feed orientation and the printer driver's feed orientation accordingly. For details about settings for printer driver, see the printer driver Help.
Optional components connected to the printer are not recognized.	Bidirectional communication is not working.	Set up optional devices on the properties of the printer. For details about how to set up optional devices, see the printer driver Help.

Problem	Causes	Solutions
Combined printing, booklet printing, or Auto Reduce/Enlarge printing does not come out as expected.	The application or printer driver settings are not configured correctly.	Make sure the application's paper size and orientation settings match those of the printer driver. If a different paper size and orientation are set, select the same size and orientation.
Some types of data, such as graphics data or data from certain applications, do not print.	The printer driver settings are not configured correctly.	PCL 5c: On the printer driver's [Print Quality] tab, select [600 dpi] in the "Resolution" area. PCL 6:  On the printer driver's [Detailed Settings] tab, click [Print Quality] in "Menu:", and then select [Quality] in the "Print Priority:" list.  On the printer driver's [Detailed Settings] tab, click [Print Quality] in "Menu:", and then select [Raster] in the "Vector/ Raster:" list.  PostScript 3: On the printer driver's [Detailed Settings] tab, click [Print Quality] in "Menu:", and then select [Photographic] in the "Dithering:" list.  For details about the printer driver settings, see the printer driver Help.

Problem	Causes	Solutions
Some characters are not printed or appear strange.	The printer driver settings are not configured correctly.	PCL 5c: On the printer driver's [Print Quality] tab, select [600 dpi] in the "Resolution" area.  PCL 6:  • On the printer driver's     [Detailed Settings] tab,     click [Print Quality] in     "Menu:", and then select     [Quality] in the "Print     Priority:" list.  • On the printer driver's     [Detailed Settings] tab,     click [Print Quality] in     "Menu:", and then select     [Raster] in the "Vector/     Raster:" list.  PostScript 3: On the printer driver's [Detailed Settings] tab, click [Print     Quality] in "Menu:", and then select [Text] in the "Dithering:" list.  For details about the printer driver settings, see the printer driver Help.
Print speed or application relinquishing speed is slow.	The printer driver settings are not configured correctly.	PCL 6: On the printer driver's [Detailed Settings] tab, click [Print Quality] in "Menu:", and then select [Speed] in the "Print Priority:" list. For details about the printer driver settings, see the printer driver Help. Quit any other applications.

Problem	Causes	Solutions
Print ends mid-job.	An error might have occurred.	Check the printer's display panel to see if an error has occurred.
A print instruction was issued from the computer, but printing did not start.	User Authentication may have been set.	For details about User Authentication, see Security Guide.
Color originals are printed in black and white.	No color print settings are configured on the printer driver.	Change the "Color/Black and White:" setting on the printer driver. For details about how to change the "Color/ Black and White:" setting, see the printer driver Help.
PDF files do not print out/ cannot perform PDF direct print.	PDF files are password- protected.	To print password-protected PDF files, enter the password in [PDF Menu].
PDF files do not print out/ cannot perform PDF direct print.	PDF files cannot be printed if they are print-disabled in PDF file security setting.	Change the PDF file security setting.
PDF direct print produces strange or malformed characters.	Fonts were not embedded.	Embed fonts in the PDF file you want to print, and then print.
"Resetting job" appears and printing is suspended.	Memory is insufficient.	In [System], select [Memory Usage] to [Font Priority].
Printing via wireless LAN is slow.	The number of jobs exceeds the capacity of the printer.	Reduce the number of jobs.

Problem	Causes	Solutions
Printing via wireless LAN is slow.	A communication error might have occurred.      Interference from other wireless LAN devices can reduce the communication speed  If the printer is using a wireless LAN, radio waves may be interfering with the wireless communication. This may occur if there is a microwave oven, cordless telephone, industrial printer, scientific instrument, or medical instrument using the same frequency range near the device.	<ul> <li>Move the printer farther away from the wireless LAN device.</li> <li>If there are active wireless LAN devices nearby, move the printer or disable those devices.</li> <li>Turn off other printers or instruments that use the same frequency range, and then try printing again. If printing is successful, move the devices to a location where they do not interfere with the printer.</li> </ul>

# The Printed Image is Different from the Image on the Computer

Problem	Solutions
The printed image is different from the image on the computer's display.	When you use some functions, such as enlargement or reduction, the layout of the image might be different from that displayed on the computer display.
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 with 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.  For details, see the printer driver's Help.

Problem	Solutions
PDF Direct Print is not executed (PDF file is not printed).	You must install an optional hard disk or set the value of [RAM Disk] in the System Menu to 2 MB or higher.
	For details about [RAM Disk], see "System", Operating Instructions.
	When printing a PDF using a password, set the password of the PDF file using the [Change PDF Password] menu in [PDF Menu] or Web Image Monitor. For details about [Change PDF Password], see "PDF Menu", Operating Instructions.
	For details about Web Image Monitor, see Web Image Monitor Help.
	PDF files not allowed to be printed by the PDF file security setting cannot be printed.
	Highly compressed PDFs cannot be printed using PDF Direct Print. Open the relevant application and print the PDF file using the printer driver. Set the file format to standard PDF.
As a result of printing using PDF Direct Printing, characters are missing or misshapen.	Before printing, embed the font in the PDF file to be printed.
The paper size appears on the control panel and printing is not performed with PDF Direct Print.	When PDF Direct Print is used, printout requires paper set within the PDF file. When a message indicating a paper size appears, either place the indicated size in the paper tray or perform Form Feed.
	Also, if [Sub Paper Size] in the [System] menu is set to [Auto], printing is performed assuming Letter size and A4 size to be the same size. For example, when a PDF file set to A4 size paper is printed using PDF Direct Print and Letter size paper is loaded in the paper tray, or vice versa, the file will be printed out.
The printer takes a long time to start printing.	The printer accesses the USB interface when it receives a print job from the USB device server's network. In this case, it takes longer than usual to start a print job received from the printer's network.
	If it takes too long to start printing, specify a shorter period for [I/O Timeout] using the printer's control panel.

Problem	Solutions		
The color of the printout is different from the color on the	The colors created using color toner are different from the ones displayed on the display.		
computer's display.	If you select [On] for [Economy Color:] on the [Print Quality]     menu in the printer driver's dialog box, the color gradation     may appear differently.		
	For details, see the printer driver's Help.		
	Turn the printer off, and then turn it on again. If the colors are different from what you expect, perform [Color Registration].		
	For details, see "Adjusting the Color Registration", Operating Instructions.		
The color of the printout is different from the color specified.	If a specific color is missing turn the printer off, wait a few moments, and then turn it on again. If this does not resolve the problem, contact your sales or service representative.		
The color changes significantly when adjusted with the printer driver.	Do not make extreme settings for the color balance on the [Print Quality] menu under the [Detailed Settings] tab in the printer driver's dialog box.		
	Note that the sample image displayed in the printer driver is used only to show what processing will be performed, so it may not match the print results.		
	For details, see the printer driver's Help.		
Color documents are printed in	Color printing is not enabled for the printer.		
black and white.	For details, see the printer driver's Help.		
	Some applications print color files in black and white.		
Solid areas, lines, or text are shiny or glossy when created as	Select [K (Black)] for [Gray Reproduction:] in the printer driver's dialog box.		
a mixture of cyan, magenta, yellow.	For details, see the printer driver's Help.		
Black gradation is not natural.	Select [CMY + K] for [Gray Reproduction:] in the printer driver's dialog box.		
	For details, see the printer driver's Help.		

Problem	Solutions
A color is missing or partially blurred.	Paper is damp. Use paper that has been stored properly.  For details, see page 32 "Paper Precautions".
	<ul> <li>A print cartridge is almost empty. When the "Toner is almost empty." message appears on the display panel. If the toner indicator on the initial screen seems empty, replace the print cartridge of the displayed color.</li> </ul>
	For details, see "Adding Toner (Print Cartridge)", Operating Instructions.
	<ul> <li>Condensation may have collected. If there were sudden changes in temperature or humidity, restart the printer when it is acclimatized.</li> </ul>

# When Printer Is Not Functioning Properly

Problem	Solutions
Paper is not fed from the selected tray.	When you are using a Windows operating system, the printer driver settings override those set using the control panel. Set the input tray you want using the printer driver.  For details, see the printer driver's Help.
Prints do not stack properly.	<ul> <li>Paper is damp. Use paper that has been stored properly. See page 32 "Paper Precautions".</li> <li>If printed sheets come out curled, use the standard tray extension. See page 8 "Guide to Components".</li> </ul>
It takes too long to turn on the printer.	If the printer is turned off while accessing the hard disk (for example: during file deletion), the printer will require more time to power-up the next time it is turned on. To avoid this time delay, do not turn the printer off while it is in operation.
It takes too long to resume printing.	<ul> <li>The data is so large or complex that it takes time to process it. If Data In indicator is flashing, the data is being processed. Wait until it resumes.</li> <li>The printer was in the Energy Saver mode or the Sleep mode. To recover from these modes, the printer must warm up, and this takes time until printing starts. For details, see page 18 "Saving Energy".</li> </ul>

Problem	Solutions		
It takes too long to complete the print job.	<ul> <li>Photographs and other data-intensive pages take a long time for the printer to process, so wait when printing such data.</li> <li>Changing the settings with printer driver may help to speed up printing. For details, see the printer driver's Help.</li> </ul>		
	The data is so large or complex that it takes time for the printer to process it. If Data In indicator is flashing, the data is being processed. Wait until it resumes.		
	If "Waiting for print data" appears on the display, the printer is now warming up. Wait for a while. The printer is adjusting the color registration. Wait for a while.		
Attached options are not detected in the printer properties.	The computer and printer are not in bidirectional communication. You must configure attached options in the printer properties. For details, see the printer driver's Help.		
When printing combined prints or bound prints.	Check that the paper size and direction set in the printer driver are the same as those set in the application.		
	If the settings are not the same, change the settings of the printer driver.		
An empty tray is selected by Auto Tray Select, and the document is not printed due to	If a paper tray is opened and closed while the printer is in Energy Saver mode, the printer will initialize the tray upon recovery, but the tray will not be selectable by Auto Tray Select.		
out of paper error.	To print from a paper tray that you opened and closed while the printer was in Energy Saver mode, you must manually specify the tray as the source paper tray before printing. When the printer recovers from Energy Saver mode and completes initialization, it will then print the document from the tray you have specified.		

# When PictBridge Printing Does Not Work

Problem	Causes	Solutions
PictBridge is not available.	There is a problem with the USB connection or the PictBridge settings.	Use the following procedure to check the connection and settings:  1. Disconnect, and then reconnect the USB cable.
		Check that the PictBridge settings are enabled.
		3. Disconnect the USB cable, and then turn off the printer. Turn the printer back on. When the printer has fully booted up, reconnect the USB cable.
When two or more digital cameras are connected, the second and subsequent cameras are not recognized.	You have connected multiple digital cameras.	Connect only one digital camera. Do not connect multiple cameras.
Printing is disabled.	The number of originals exceeds the maximum number of pages that can be printed at a time.	The maximum specifiable print quantity at a time is 999. Respecify the quantity to 999 or less, and then retry printing.
Printing is disabled.	There is no paper of the specified size remaining.	There is no paper of the specified size remaining.
		If you have to use paper that is not of the specified size, perform Form Feed. To cancel printing, perform Job Cancel.
Printing is disabled.	The paper size setting for this tray cannot be printed on the printer.	Select the paper size setting that can be printed on the printer.

# **Removing Jammed Paper**

An error message appears if a paper misfeed occurs. The error message indicates where the misfeed occurs.

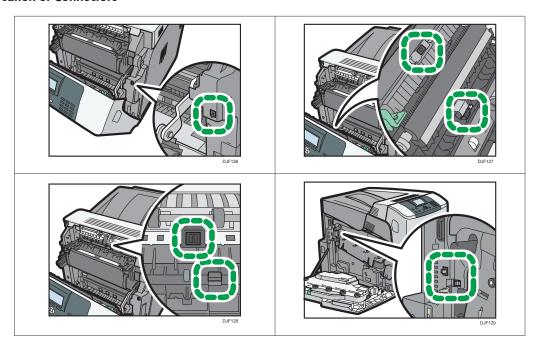
Check the location and remove the paper.

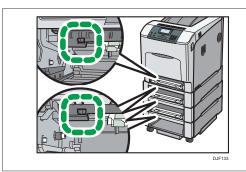


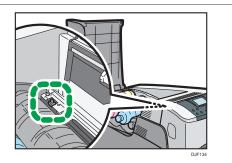
#### **ACAUTION**

- 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.
- When removing jammed paper, make sure not to trap or injure your fingers.
- Some of this machine's components get damaged on contact. Do not touch the sensors, connectors, LEDs, or other fragile parts that are shown in this manual when removing jammed paper. Otherwise, a malfunction might occur.

#### **Location of Connectors**





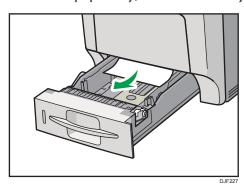


- To prevent misfeeds, do not leave any torn scraps of paper inside the printer.
- Contact your service representative if misfeeds occur frequently.
- If the error message remains displayed even after you remove misfed paper, open and close the front cover.

### Paper Misfeed Message (A)

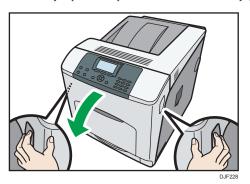
The paper misfeed message " ${}^{9}\Gamma(A)$ " appears when a paper misfeed occurs in the standard paper feed tray.

1. Pull out the paper tray, and then carefully remove any misfed paper.



2. Push in the paper tray. Make sure the tray is securely inserted to avoid paper jams.

3. Carefully open the printer's front cover by pulling the left and right side levers.



4. Carefully close the front cover.



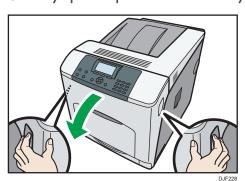
• When closing the front cover, push the upper side of the cover firmly. After closing the cover, check that the error has cleared.

## Paper Misfeed Message (B) (C)

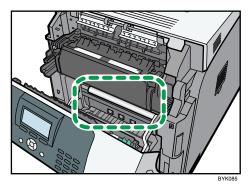
The paper misfeed message " $^{8}$ **r**(B) (C)" appears when a paper misfeed occurs in the internal paper feed path.

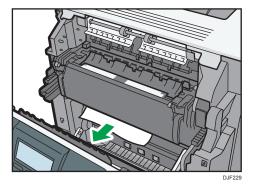


- Forcefully removing misfed paper may cause paper to tear and leave scraps of paper in the printer.
- Remove the paper from the bypass tray before opening the front cover.
- If a misfeed occurs when using the bypass tray, open the front cover, and then remove the misfed paper.
- The inside of this printer becomes very hot. Before removing paper around the fusing unit, wait until the temperature of the covers inside the fusing unit and paper transfer unit cools down.
- 1. Carefully open the printer's front cover by pulling the left and right side levers.



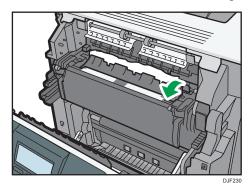
## 2. Remove misfed paper slowly.



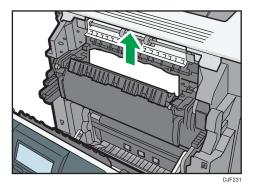


If you cannot find the misfed paper, look inside the printer.

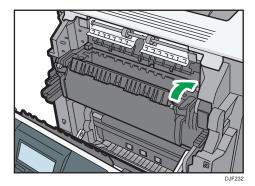
3. If a misfeed occurs in the output area of the fusing unit, open the output cover by pulling back the levers marked "C" (left and right on the fusing unit's upper side).



4. Remove misfed paper slowly.



5. Close the output cover of the fusing unit.



6. Carefully close the front cover.



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

# Paper Misfeed Message (Y1), (Y2) or (Y3)

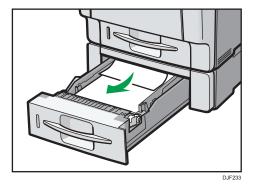
The following messages are displayed according to the tray where the paper is jammed:

- "**¾** (Y1)": Tray 2
- "**%** (Y2)": Tray 3
- "<sup>8</sup> (Y3)": Tray 4

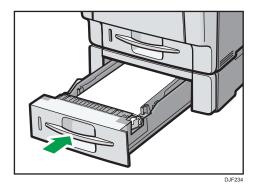
## **Important**

 Forcefully removing misfed paper may cause paper to tear and leave scraps of paper in the printer. This might cause a misfeed and damage the printer.

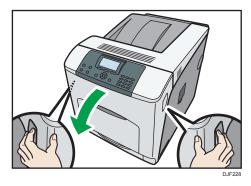




2. Carefully slide the tray back into the optional paper feed until it stops.



3. Carefully open the printer's front cover by pulling the left and right side levers.



4. Carefully close the front cover.



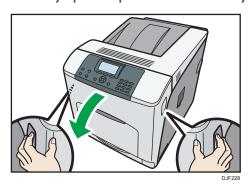
If a paper jam occurs in one of the optional paper feed trays, pull out all the paper trays above the
tray in which the jam occurred, and then remove any jammed or partially fed sheets. If you cannot
pull a tray fully out, jammed sheets are the most likely cause. To pull a stuck tray fully out, use
moderate force.

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

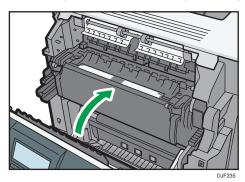
## Paper Misfeed Message (Z)

The paper misfeed message " $^{8}$  (Z)" appears when a paper misfeed occurs inside the duplex unit.

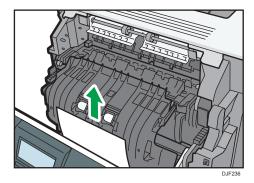
1. Carefully open the printer's front cover by pulling the left and right side levers.



2. Tilt the duplex unit backward by carefully raising its front end.



3. Carefully remove misfed paper.



4. Carefully close the front cover.



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

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• The product names of Windows Vista are as follows:

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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:

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Microsoft® Windows® 7 Professional

Microsoft® Windows® 7 Ultimate

Microsoft® Windows® 7 Enterprise

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Microsoft® Windows® 8 Pro

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Microsoft® Windows® 8.1 Pro

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# Operating Instructions **Driver Installation Guide**

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# 1. Introduction

This chapter explains the software included on this CD-ROM and a brief overview for the connection method.

# **Before Installation**

#### 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.

[]

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

#### Notes on this manual

- This manual covers several different models, and therefore contains functions and settings that may
  not be available for your model.
- Functions and supported operating systems may differ from those of your model.
- Installation procedures for Windows 7 is shown as an example unless other operating systems are indicated.
- The installation procedure is the same for the PCL 5c and PCL 5e printer drivers. In this manual, the PCL 5c and PCL 5e printer drivers are referred to as the "PCL 5c/5e printer driver".

#### Notes to Install the Printer Driver



Administrator privileges are required to install the printer driver. Log on as an administrator.



- Quit all applications except for this manual.
- If the [User Account Control] dialog box appears during the driver installation procedure, click [Yes] or [Continue].
- If the [Windows Security] dialog box appears during the driver installation procedure, click [Install this driver software anyway].
- Auto Run might not work automatically with certain OS settings. If this is the case, double-click
  "Setup.exe", located on the CD-ROM root directory, or click [Run SETUP.EXE] in the [AutoPlay]
  dialog box.
- A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add Printer].
- For details about driver installation problems, see page 31 "Messages Displayed When Installing the Printer Driver".

# Start Installer

To connect this printer to a client computer and print documents, the software included on the provided CD-ROM must be installed on the client computer.

The installer starts automatically when you insert the provided CD-ROM into the CD-ROM drive of a client computer running under Windows or Windows Server. You can then install the printer driver included on the CD-ROM.

The contents (display item) of the installer are as follows:

#### **Quick Install**

Install the PCL 6 printer driver, and configure the Standard TCP/IP port to establish a connection with a network printer.

For details, see page 11 "About Quick Install".

#### **PCL Printer Driver**

Installs the PCL 6 and/or PCL 5c/5e printer drivers.

For details about installing drivers, see page 13 "Installing the Printer Driver for a Network Connection" or page 23 "Installing the Printer Driver for a Local Connection".

#### **PostScript 3 Printer Driver**

Install the PostScript 3 printer driver.

For details about installing the driver, see page 13 "Installing the Printer Driver for a Network Connection" or page 23 "Installing the Printer Driver for a Local Connection".

#### Select Language

Change the interface language.

#### **Browse This CD-ROM**

Browse the contents of this CD-ROM.

#### Install/Print Manuals

Allows you to install or print manuals.

#### Exit

Quit Installer.

# Software and Utilities Included on the CD-ROM

This section explains the software and utilities CD-ROM provided with this printer.



- For the latest information on the corresponding operating system, see "Readme.txt" file in the root folder.
- For the latest information on Windows terminal service, Citrix Presentation Server, and Citrix Xen App, see the manufacturer's Web site.

#### **Printer Drivers**

For printing, install a printer driver on your computer. The following drivers are included on the CD-ROM:

	Printer Drivers		
Operating System <sup>*</sup> 1	PCL 5c/5e	PCL 6	PostScript 3
Windows Vista *2	0	0	0
Windows 7 *3	0	0	0
Windows 8 *4	0	0	0
Windows 8.1 *5	0	0	0
Windows Server 2003 *6	0	0	0
Windows Server 2008 *7	0	0	0
Windows Server 2012 *8	0	0	0
Mac OS X *9	_	_	0

## O: Supported

- \* 1 Printer drivers support both 32-bit and 64-bit Windows.
- \*2 Microsoft Windows Vista Ultimate/Microsoft Windows Vista Enterprise/Microsoft Windows Vista Business/ Microsoft Windows Vista Home Premium/Microsoft Windows Vista Home Basic
- \*3 Microsoft Windows 7 Home Premium/Microsoft Windows 7 Professional/Microsoft Windows 7 Ultimate/ Microsoft Windows 7 Enterprise
- \*4 Microsoft Windows 8/Microsoft Windows 8 Pro/Microsoft Windows 8 Enterprise
- \*5 Microsoft Windows 8.1/Microsoft Windows 8.1 Pro/Microsoft Windows 8.1 Enterprise

- \*6 Microsoft Windows Server 2003 Standard Edition/Microsoft Windows Server 2003 Enterprise Edition/ Microsoft Windows Server 2003 R2 Standard Edition/Microsoft Windows Server 2003 R2 Enterprise Edition
- \*7 Microsoft Windows Server 2008 Standard/Microsoft Windows Server 2008 Enterprise/Microsoft Windows Server 2008 R2 Standard/Microsoft Windows Server 2008 R2 Enterprise
- \*8 Microsoft Windows Server 2012 Foundation/Microsoft Windows Server 2012 Essentials/Microsoft Windows Server 2012 R2 Foundation/Microsoft Windows Server 2012 R2 Foundation/Microsoft Windows Server 2012 R2 Essentials/Microsoft Windows Server 2012 R2 Standard
- \*9 Mac OS X 10.6 or later

#### PCL printer drivers

PCL 5c/5e and PCL 6 printer drivers are included. A computer installed with these drivers can communicate with this printer using a printer language.

### Adobe® PostScript® printer driver

A computer installed with Adobe PostScript printer driver can communicate with the printer using a printer language.

#### **PPD** files

If the PostScript 3 printer driver is used, PPD files enable printer functions using PostScript 3 printer language.



- The PCL 5c/5e printer driver needs to be installed for some applications. In this case, you can
  install PCL 5c/5e without having to install PCL 6.
- For details about installing the driver, see page 13 "Installing the Printer Driver for a Network Connection" or page 23 "Installing the Printer Driver for a Local Connection".

## Supported languages

The languages supported in each printer driver are as follows:

English, German, French, Italian, Spanish, Dutch, Swedish, Norwegian, Danish, Finnish, Hungarian, Czech, Polish, Portuguese, Russian, Catalan, Turkish, Brazilian Portuguese, Greek



- The PCL 5c/5e printer driver does not support Brazilian Portuguese and Greek. Use the English version of the driver.
- The PCL 6 and PostScript 3 printer drivers use the same interface language as the one specified by your operating system. However, the PostScript 3 printer driver will be displayed in English if your operating system uses one of the following languages: Finnish, Hungarian, Czech, Polish, Portuguese, Russian, Catalan, Turkish, Brazilian Portuguese, Greek.

# **Confirming the Connection Method**

This printer supports network and local connection.

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

#### **Network Connection**

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

#### Using the Windows' printing port

Network connections can be established through Ethernet and Wireless LAN.

Available ports depends on which Windows operating systems are used with available connection methods.

Connection Methods	Available Ports
• Ethernet	Standard TCP/IP port
Wireless LAN	IPP port
	LPR port
	WSD port
	SmartDeviceMonitor for Client port * 1

<sup>\* 1</sup> SmartDeviceMonitor for Client port does not support Windows 8/8.1 and Windows Server 2012/2012 R2.



 For details about how to install printer drivers for these ports, see page 13 "Installing the Printer Driver Using the Selected Port".

#### Using this printer as a network printer

This printer can be used as a remote printer using the Windows print server function.

The printer drivers that support Windows servers as follows:

- Windows Vista print server
- Windows 7 print server
- Windows 8 print server

- Windows 8.1 print server
- Windows Server 2003/2003 R2 print server
- Windows Server 2008/2008 R2 print server
- Windows Server 2012/2012 R2 print server



 For details about how to install printer drivers to print servers, see page 21 "Using as a Network Printer".

### **Local Connection**

Local connections can be established via USB and parallel connections.



• For details about how to install printer drivers using available connection methods, see page 23 "Installing the Printer Driver for a Local Connection".

П

# 2. Quick Install

This chapter explains the "Quick Install" procedure. This installation method allows users to easily install the drivers and configure settings.

# **About Quick Install**

Using Quick Install, the PCL 6 printer driver is installed under network environment, and the Standard TCP/IP port will be set.

Before installing, check that no applications are running on the computer and no print jobs are in progress.

- 1. Click [Quick Install] on the installer screen.
- 2. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].
- 3. Click [Next].
- 4. Select the printer model you want to use in the [Select Printer] dialog box.
- 5. Click [Install].
- 6. Configure the user code, default printer, and shared printer as necessary.
- 7. Click [Continue].

Follow the instructions on the screen.

# 3. Installing the Printer Driver for a Network Connection

This chapter explains how to install printer drivers for network connections under Windows operating system.

# Installing the Printer Driver Using the Selected Port

This section explains how to install printer drivers using printer ports. See the following installation procedure for the printer port you use.

Ports	Reference		
Standard TCP/IP port	page 13 "Using the Standard TCP/IP port"		
IPP port	page 14 "Using the IPP port"		
LPR port	page 15 "Using the LPR port"		
WSD port	page 16 "Using the WSD port"		
SmartDeviceMonitor for Client port	page 20 "Changing the Port Settings for SmartDeviceMonitor for Client"		

## Using the Standard TCP/IP port

- 1. Click [PCL Printer Driver] or [PostScript 3 Printer Driver] on the installer screen.
- 2. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].
- 3. Select a printer driver you want to use, and then click [Next].
- 4. Select [Specify a new port], and then click [Next].
- 5. Select [Standard TCP/IP Port], and then click [Next].
- 6. Click [Next].
- 7. Enter the printer name or IP address, and then click [Next].
  When the device type selection appears, select "RICOH Network Printer C model".
- 8. Click [Finish].
- 9. Select the [Printer Name] check box of the printer model you want to use.

- 10. Specify the user code, default printer, and shared printer as necessary.
- 11. Click [Continue].

Follow the instructions on the screen.

#### Using the IPP port



- To print via IPP-SSL, use the SmartDeviceMonitor for Client port.
- Installing certificates is required for users who want to print via IPP-SSL from Windows Vista/ 7/8/8.1 or Windows Server 2008/2008 R2/2012/2012 R2. For details, contact your administrator.
- If a certificate authority issues a certificate that must be authenticated by an intermediate certificate
  authority, and the certificate is installed on this printer, an intermediate certificate must be installed
  on the client computer. Otherwise, validation by the certificate authority will not be performed
  correctly.
- If validation cannot be performed properly, a warning message informing you that installation is not possible might appear when you try to add a printer using IPP-SSL under Windows Vista/7/8/8.1 or Windows Server 2008/2008 R2/2012/2012 R2. To enable authentication from the client computer, install the intermediate certificate on the client computer, and then reestablish connection.
- Intermediate certificates cannot be installed on this printer.
- 1. On the [Start] menu, click [Devices and Printers].

If you are using a computer that is running Windows 8 or Windows Server 2012, click [Search] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].

2. Click [Add a printer].

If you are using a computer that is running Windows 8 or Windows Server 2012, proceed to Step 5.

- Click [Add a network, wireless or Bluetooth printer].
- 4. Click [The printer that I want isn't listed].
- 5. In the [Select a shared printer by name] box, enter "http://(printer's IP address or host name)/printer (or ipp)" as the printer's address, and then click [Next].
- 6. Click [Have Disk...].
- 7. Insert the provided CD-ROM into the computer's CD-ROM drive.

If the [AutoPlay] dialog box appears, click [Close].

8. Click [Browse...], and then specify a location for the INF file.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

- PCL 5c/5e
  - 32-bit driver D:\X86\DRIVERS\PCL5C or PCL5E\X86\(Language)\DISK1
  - 64-bit driver D:\X64\DRIVERS\ PCL5C or PCL5E\X64\(Language)\DISK1
- PCL 6
  - 32-bit driver D:\X86\DRIVERS\PCL6\X86\MUI\DISK1
  - 64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1
- PostScript 3
  - 32-bit driver D:\X86\DRIVERS\PS\X86\MUI\DISK1
  - 64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported by the printer drivers, see page 7 "Supported languages".

- 9. Click [Open].
- 10. Click [OK] to close the [Install From Disk] window.
- Select the manufacturer and model name of the printer you want to use, and then click [Next].
- 12. Follow the instructions on the screen.

## Using the LPR port

- 1. Click [PCL Printer Driver] or [PostScript 3 Printer Driver] on the installer screen.
- The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].
- 3. Select the printer driver you want to use, and then click [Next].
- 4. Select [Specify a new port], and then click [Next].
- 5. Select [LPR Port], and then click [Next].
- 6. Enter the printer name or IP address in the [Name or address of server providing lpd:] box.
- 7. Enter "lp" in the [Name of printer or print queue on that server:] box, and then click [OK].
- 8. Select the [Printer Name] check box of the printer model you want to use.
- 9. Specify the user code, default printer, and shared printer as necessary.
- 10. Click [Continue].

Follow the instructions on the screen.

## Using the WSD port



 You can connect to the printer only if both the printer and computer are on the same network segment, or "Network discovery" is enabled. For details, see Windows Help.

#### Windows Vista, Windows Server 2008

- 1. On the [Start] menu, click [Network].
- 2. Right-click the printer's icon, and then click [Install].
- 3. Click [Locate and install driver software (recommended)].
- 4. Click [Browse my computer for driver software (advanced)].
- 5. Insert the provided CD-ROM into the computer's CD-ROM drive.

If the [AutoPlay] dialog box appears, click [Close].

6. Click [Browse...], and then specify the location of the INF file.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

PCL 5c/5e

32-bit driver D:\X86\DRIVERS\PCL5C or PCL5E\X86\(Language)\DISK1

64-bit driver D:\X64\DRIVERS\PCL5C or PCL5E\X64\(Language)\DISK1

PCL 6

32-bit driver D:\X86\DRIVERS\PCL6\X86\MUI\DISK1

64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1

PostScript 3

32-bit driver D:\X86\DRIVERS\PS\X86\MUI\DISK1

64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported in the printer drivers, see page 7 "Supported languages".

- 7. Click [Next].
- 8. Click [Close].

If installation is complete, the icon of the printer connected to the WSD port will appear in the window for configuring printers.



- The port name that follows "WSD" uses random character strings. It cannot be changed freely.
- To stop the installation, click [Cancel] before the installation is complete. To install the WSD Port again, right-click the printer's icon in the [Network] window, and then click [Uninstall].

#### Windows 7, Windows Server 2008 R2

- 1. On the [Start] menu, click [Computer].
- 2. Click [Network].
- 3. Right-click the machine's icon, and then click [Install].
- 4. On the [Start] menu, click [Devices and Printers].
- 5. Click [Add a printer].
- 6. Click [Add a local printer].
- 7. Select [Use an existing port:], and then select WSD port.
- 8. Click [Next].
- 9. Click [Have Disk...].
- 10. Click [Browse...], and then specify the location of the INF file.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

• PCL 5c/5e

```
32-bit driver D:\X86\DRIVERS\PCL5C or PCL5E\X86\(Language)\DISK1 64-bit driver D:\X64\DRIVERS\PCL5C or PCL5E\X64\(Language)\DISK1
```

PCL 6

```
32-bit driver D:\X86\DRIVERS\PCL6\X86\MUI\DISK1 64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1
```

PostScript 3

```
32-bit driver D:\X86\DRIVERS\PS\X86\MUI\DISK1 64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1
```

For details about the languages supported in the printer drivers, see page 7 "Supported languages".

- 11. Click [OK] to close the [Install From Disk] window.
- Select the manufacturer and model name of the machine you want to use, and then click [Next].
- 13. Follow the instructions that appear. Modify settings such as printer name, default printer, and printer sharing configuration, as necessary. You can also print a test page.
- 14. Click [Finish].

If installation is successful, the icon of the printer connected to the WSD port will appear in the window for configuring printers.



To stop installation of the selected driver, click [Cancel] before the installation is complete. When
re-installing the WSD Port, right-click the machine's icon in the [Network] window, and then click
[Uninstall].

### Windows 8/8.1, Windows Server 2012/2012 R2

- Click [Settings] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].
- 2. Click any machine icon, and then click [Print server properties].
- 3. Click the [Drivers] tab, and then click [Add].
- 4. Click [Next].
- 5. Check the [x64] (64 bit) or [X86] (32 bit) check box, and then click [Next].
- 6. Click [Have Disk...].
- 7. Click [Browse...], and then select the printer driver location.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

- PCL 5e
  - $32-bit\ driver\ D: \X86\DRIVERS\PCL5C\ or\ PCL5E\X86\(Language)\DISK1$
  - 64-bit driver D:\X64\DRIVERS\PCL5C or PCL5E\X64\(Language)\DISK1
- PCL 6
  - 32-bit driver D:\X86\DRIVERS\PCL6\X86\MUI\DISK1
  - 64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1
- PostScript 3
  - 32-bit driver D:\X86\DRIVERS\PS\X86\MUI\DISK1
  - 64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported in the printer drivers, see page 7 "Supported languages".

- 8. Click [OK].
- Select the manufacturer and model name of the machine you want to use, and then click [Next].
- 10. Click [Finish].
- 11. Click [Close] to close the print server properties window.
- 12. Click [Add a Printer] on the [Devices and Printers] window.
- 13. Click [The printer that I want isn't listed].
- 14. Select the connection method.
  - Windows 8

[Add a network, wireless or Bluetooth printer]

• Windows 8.1

[Add a Bluetooth, wireless or network discoverable printer]

- 15. Click [Next].
- 16. Select the machine you want to use, and then click [Next].

## Using the SmartDeviceMonitor for Client port

To use this function, you must first download SmartDeviceMonitor for Client from the manufacturer's Web site and install it on your computer. Contact your local dealer to check how to download SmartDeviceMonitor for Client.

- 1. Click [PCL Printer Driver] or [PostScript 3 Printer Driver] on the installer screen.
- 2. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].
- 3. Select the printer driver you want to use, and then click [Next].
- 4. Select [Specify a new port], and then click [Next].
- 5. Select [SmartDeviceMonitor], and then click [Next].
- 6. To configure port settings using TCP/IP, click [TCP/IP], and then click [Search].

To configure port settings using IPP, proceed to Step 8.

7. Select the printer you want to use, and then click [OK].

Only the printer that responds to a broadcast from the computer appears on the screen. To use a printer that does not appear on the screen, click [Specify Address], and then enter the IP address or host name of the printer.

Proceed to Step 13.

- 8. To configure port settings using IPP, click [IPP].
- In the [Printer URL] box, enter "http:// printer 's IP address/printer" as the printer 's address.

If the server authentication is issued, enter "https:// printer's IP address/printer" to enable SSL (a protocol for encrypted communication). Example IP address: 192.168.15.16

http://192.168.15.16/printer

https://192.168.15.16/printer

You can enter "http:// printer's IP address/ipp" as the printer's address.

 Enter a name for identifying the printer in the [IPP Port Name] box. Use a name different from the one of any existing ports.

If a name is not specified here, the address entered in the [Printer URL] box becomes the IPP port name.

11. Click [Detailed Settings] Settings to configure necessary settings.

For details about the settings, see SmartDeviceMonitor for Client Help.

- 12. Click [OK].
- 13. Select the [Printer Name] check box of the printer model you want to use.
- 14. Specify the user code, default printer, and shared printer as necessary.
- 15. Click [Continue].

Follow the instructions on the screen.

## Changing the Port Settings for SmartDeviceMonitor for Client

Follow the procedure below to change the SmartDeviceMonitor for Client settings, such as the TCP/IP settings.

- 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 [Ports] tab, and then click [Configure Port].

The [Port Configuration:] window appears.



- User, proxy, and timeout settings can be configured for IPP.
- For details about these settings, see SmartDeviceMonitor for Client Help.

# Using as a Network Printer

This section explains how to install printer drivers for print servers. See the installation procedure for the print server you are using.

## **Using Windows Print Server**

- 1. Click [PCL Printer Driver] or [PostScript 3 Printer Driver] on the installer screen.
- 2. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].
- 3. Select the printer driver you want to use, and then click [Next].
- 4. Select [Specify a new port], and then click [Next].
- 5. Select [Network Printer], and then click [Next].
- Double-click the computer name you want to use as a print server in the [Browse for Printer] window.
- 7. Select the printer you want to use, and then click [OK].
- 8. Select the [Printer Name] check box of the printer model you want to use.
- 9. Specify the user code, default printer, and shared printer as necessary.
- 10. Click [Continue].
- 11. Follow the instructions on the screen.



- If you print with a print server connected to the printer using the SmartDeviceMonitor for Client port,
   Recovery Printing and Parallel Printing cannot be used from the client computer.
- If you print under Windows Vista/7/8/8.1 or Windows Server 2008/2012/2012 R2 print server, notification functions of SmartDeviceMonitor may not be used with the client computer.

# 4. Installing the Printer Driver for a Local Connection

This chapter explains how to install printer drivers for USB or parallel connection under Windows operating systems.

## **USB** Connection

This section explains how to install printer drivers using USB.

Before installing, check that no applications are running on the computer and no print jobs are in progress.

### Windows Server 2003/2003 R2

- 1. Check that the printer is turned off.
- 2. Connect the printer and computer using the USB cable.

Connect the USB cable firmly.

3. Turn the printer on.

If New Hardware Wizard has been installed, it starts automatically to install USB Printing Support.

- 4. Select [No, not this time], and then click [Next].
- Click [Install from a list or specific location [Advanced]], and then click [Next].
- 6. Insert the provided CD-ROM into the computer's CD-ROM drive.

If Auto Run starts, click [Cancel], and then [Exit].

- Select the [Search removable media (floppy, CD-ROM...)] check box under [Search for the best driver in these locations.], and then click [Next].
- 8. Select the name of the printer whose driver you want to install.

Check where the source files of the printer driver are stored.

If the CD-ROM drive is D, the source files are stored in the following locations:

- PCL 5c/5e
  - 32-bit driver D:\X86\DRIVERS\PCL5C or PCL5E\X86\(Language)\DISK1 64-bit driver D:\X64\DRIVERS\ PCL5C or PCL5E\X64\(Language)\DISK1
- PCL 6

32-bit driver D:\X86\DRIVERS\PCL6\X86\MUI\DISK1 64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1

PostScript 3

32-bit driver D:\X86\DRIVERS\PS\X86\MUI\DISK1 64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported for the printer drivers, see page 7 "Supported languages".

9. Click [Next].

The installation starts.

10. Click [Finish].

If the printer driver has already been installed and plug and play is enabled, the icon of the printer connected to the "USB001" port is added to the [Printers], [Printers and Faxes], or [Devices and Printers] window.

The number after "USB" varies depending on the number of the printers connected.

#### Windows Vista, Windows Server 2008

- 1. Check that the power of the machine is off.
- 2. Connect the machine and computer using a USB cable.

Connect the USB cable firmly.

3. Turn on the power of the machine.

Found New Hardware Wizard starts, and USB Printing Support is installed automatically.

- 4. In the [Found New Hardware] window, click [Locate and install driver software (recommended)].
- 5. Select the name of the machine whose driver you want to install.

Check the location where the source files of the printer driver is stored.

If the CD-ROM drive is D, the source files are stored in the following locations:

- PCL 5c/5e
  - 32-bit driver D:\X86\DRIVERS\PCL5C or PCL5E\X86\(Language)\DISK1
  - 64-bit driver D:\X64\DRIVERS\ PCL5C or PCL5E\X64\(Language)\DISK1
- PCL 6
  - 32-bit driver D:\X86\DRIVERS\PCL6\X86\MUI\DISK1
  - 64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1
- PostScript 3
  - 32-bit driver D:\X86\DRIVERS\PS\X86\MUI\DISK1
  - 64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported in the printer drivers, see page 7 "Supported languages".

#### 6. Click [Next].

The installation starts.

#### 7. Click [Close].

If the printer driver has already been installed and plug and play is enabled, the icon of the printer connected to the "USB001" port is added to the [Printers], [Printers and Faxes], or [Devices and Printers] window.

The number after "USB" varies depending on the number of printers connected.

## Windows 7/8/8.1, Windows Server 2008 R2/2012/2012 R2

- 1. Open the [Devices and Printers] window.
  - Windows 7, Windows Server 2008 R2:
     On the [Start] menu, select [Devices and Printers].
  - Windows 8/8.1, Windows Server 2012/2012 R2:
     Click [Settings] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].
- 2. Click any machine icon, and then click [Print server properties].
- 3. Click the [Drivers] tab, and then click [Add].
- 4. Click [Next].
- 5. Check the [x64] (64 bit) or [X86] (32 bit) check box, and then click [Next].
- 6. Click [Have Disk...].
- 7. Click [Browse...], and then select the printer driver location.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

- PCL 5c/5e
  - 32-bit driver D:\X86\DRIVERS\PCL5C or PCL5E\X86\(Language)\DISK1
  - 64-bit driver D:\X64\DRIVERS\PCL5C or PCL5E\X64\(Language)\DISK1
- PCL 6
  - 32-bit driver D:\X86\DRIVERS\PCL6\X86\MUI\DISK1
  - 64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1
- PostScript 3
  - 32-bit driver D:\X86\DRIVERS\PS\X86\MUI\DISK1
  - 64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported for the printer drivers, see page 7 "Supported languages".

- 8. Click [OK].
- Select the manufacturer and model name of the machine you want to use, and then click [Next].
- 10. Click [Finish].
- 11. Click [Close] to close the print server properties window.
- 12. Check that the power of the machine is off.
- 13. Connect the machine and computer using a USB cable.
  Connect the USB cable firmly.
- 14. Turn on the power of the machine.

# **Parallel Connection**

- 1. Click [PCL Printer Driver] or [PostScript 3 Printer Driver] on the installer screen.
- 2. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].
- 3. Select the printer driver you want to use, and then click [Next].
- 4. Select [Specify a new port], and then click [Next].
- 5. Select [Local Port], and then click [Next].
- 6. Enter a port name, and then click [OK].
- 7. Select the [Printer Name] check box of the printer model you want to use.
- 8. Specify the user code, default printer, and shared printer as necessary.
- 9. Click [Continue].
- 10. Follow the instructions on the screen.



- The [AutoPlay] dialog box is displayed only for a few seconds under Windows 8/8.1 and Windows Server 2012/2012 R2. If the [AutoPlay] dialog box disappears, use the following procedure to replay the CD-ROM:
  - Windows 8, Windows Server 2012
    - 1. On the Charm Bar, click [Search], and then click [Computer].
    - 2. Double-click the CD-ROM drive in which the provided CD-ROM is set, and then click "Setup.exe".
  - Windows 8.1, Windows Server 2012 R2
    - 1. On the desktop, right-click the [Start] button, and then click [File Explorer].
    - Double-click the CD-ROM drive in which the provided CD-ROM is set, and then click "Setup.exe".

# 5. Configuring Option Settings for the Printer

This chapter explains the conditions for bidirectional communication between your computer and the printer. It also explains how to configure the printer's option settings manually.

# **Conditions for Bidirectional Communication**

When bidirectional communication is enabled, your computer automatically obtains information about option, paper size, or paper feed direction settings from the printer.

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

## When your computer is connected with parallel cables

- The computer must support bidirectional communication.
- The interface cable must support bidirectional communication.
- The printer must be connected to the computer using the standard parallel cables and parallel connectors.

#### When your computer is connected with the network

- The Standard TCP/IP port must be used.
- The TCP/IP protocol or the IPP protocol must be used. (If the IPP protocol is used, the IPP port name must include the IP address.)

#### When your computer is connected with USB

- The printer must be connected to the computer's USB port using the USB interface cable.
- The computer must support bidirectional communication.
- [Enable bidirectional support] must be selected, and [Enable printer pooling] must not be selected on the [Ports] tab in the printer driver's properties window.



- The PCL 6 and PostScript 3 printer drivers support bidirectional communication and automatic printer status updates.
- To obtain printer information automatically using the bidirectional communication function of the PCL 6 or PostScript 3 printer driver, you must select the [Automatically Update Printer Information] check box on the [Accessories] tab in the printer driver's properties window.
- The PCL 5c/5e printer driver supports bidirectional communication. You can update the printer status manually.

# If Bidirectional Communication is Disabled

If bidirectional communication is disabled, manually configure option, paper size, or paper feed direction settings on your computer. This section explains how to configure option, paper size, or paper feed direction settings on your computer manually.

## Mportant !

- You must have permission to change the printer properties. Log on as an Administrators group member.
- 1. On the [Start] menu, select [Devices and Printers].
- 2. Right-click the printer's icon, and then click [Printer properties].
- 3. Click the [Accessories] tab.
  - If options in the [Accessories] tab are disabled, bidirectional connection is enabled. In this case, no change is necessary for option settings.
- Select options installed from the [Options] area, and then configure the necessary settings.
- 5. Click [Change Input Tray Settings...].
- In [Input Tray:], specify which trays to use. Following this, in [Paper Size:], specify the size of the paper that you want to load in each tray.

Click [Modify Input Tray/Paper Size] to apply the setting for each tray.

- 7. Click [OK].
- 8. Click [OK] to close the printer's properties window.



For details about configuring option settings for the printer using a Mac OS X, see page 38
 "Configuring Option Settings for the Printer Under Mac OS X".

# 6. Troubleshooting

This chapter provides solutions for driver installation and USB connection problems.

# Messages Displayed When Installing the Printer Driver

This section explains what to do if a message appears while the printer driver is installed.

Message number 58 or 34 indicates that the printer driver cannot be installed using Auto Run. Install the printer driver using Add Printer Wizard.

Message number 58 appears if there is a newer version of the currently installed printer driver.

#### 1. Open the printer window.

- Windows Server 2003/2003 R2:
  - On the [Start] menu, select [Printers and Faxes].
- Windows Vista, Windows Server 2008:
  - On the [Start] menu, select [Control Panel], and then click [Printers] in [Hardware and Sound] category.
- Windows 7, Windows Server 2008 R2:
  - On the [Start] menu, select [Devices and Printers].
- Windows 8/8.1, Windows Server 2012/2012 R2:
  - Click [Search] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].

#### 2. Click [Add a printer].

#### 3. Follow the instructions in Add Printer Wizard.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

- PCL 5c/5e
  - 32-bit driver D:\X86\DRIVERS\PCL5C or PCL5E\X86\(Language)\DISK1
  - 64-bit driver D:\X64\DRIVERS\ PCL5C or PCL5E\X64\(Language)\DISK1
- PCL 6
  - 32-bit driver D:\X86\DRIVERS\PCL6\X86\MUI\DISK1
  - 64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1
- PostScript 3
  - 32-bit driver D:\X86\DRIVERS\PS\X86\MUI\DISK1
  - 64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported for the printer drivers, see page 7 "Supported languages".

## 4. Specify a port.

Available ports vary according to your Windows operating system or the type of interface. For details, see page 8 "Confirming the Connection Method".

# **If USB Connection Fails**

This section explains how to troubleshoot problems related to USB connections.

Problems	Causes	Solutions		
The printer is not automatically recognized.	The USB cable is not connected properly.	Disconnect the USB cable, and then turn off the main power switch. Turn on the main power switch again. When the printer has fully booted up, connect the USB cable to the printer again.		
Windows has already configured the USB settings.	Check whether the computer has identified the printer as an unsupported device.	Open Windows' Device Manager, and then, under [Universal Serial Bus controllers], remove any conflicting devices. Conflicting devices have a [!] or [?] icon by them. Take care not to accidentally remove required devices. For details, see Windows Help.		
The printer does not recognize the USB connection even when a USB cable is connected.	If the USB cable is connected while the printer is turned off, the printer might not recognize the USB connection.	Press the operation switch, and then disconnect the USB cable. When the printer has returned to the ready condition, connect the USB cable to the printer again.		

# 7. Installing the Printer Driver Under Mac OS X

This chapter explains how to install and configure the printer drivers for Mac OS X operating systems.

# **Installing PPD Files**

To print using the printer specific features under Mac OS X, install PPD files.



- You need an administrator name and a password or passphrase. For details, contact your network administrator.
- 1. Double-click the [Mac OS X] folder.
- 2. Double-click the [(brand name)] folder.
- 3. Double-click the [MacOSX PPD Installer] folder.
- 4. Double-click the package file icon.
- 5. Follow the instructions on the screen.



- PPD files will be automatically installed in the following location:
- \Library\Printers\PPDs\Contents\Resources\

# Registering the Printer

To use the printer, the printer must be registered in the printer list.

Make sure the printer and computer are connected and turned on, and perform the following procedure.

For details about how to connect the printer to the computer, see "Connecting the Printer" HTML manual.



- When printing with a USB connection to a Macintosh computer, the printer language does not change automatically. Use the control panel on the printer to change the printer language to [Auto Detect] or [PS] before printing.
- The operating procedure under Mac OS X differs depending on the version of the operating system. Check the procedure described in this manual, and configure the necessary settings according to the manual for each version.

#### **USB Connection**



- Make sure the computer and the printer are connected using the USB cable, and the power of the
  devices has been turned on.
- 1. Start System Preferences.
- 2. Click [Print & Fax] or [Print & Scan].
- 3. Click the [+] button.
- 4. Click [Default Browser] or [Default].
- Select the printer that has "USB" indicated in the [Connection] or [Kind] column.
- 6. Select the printer you are using from the [Print Using:] or [Use:] pop-up menu.

If the printer you are using is not selected in [Print Using:] or [Use:], select its manufacturer, [Select a driver to use...], or [Select Printer Software...] in the pop-up menu, and then select the PPD file of the printer. For the location of the PPD files, see page 35 "Installing PPD Files".

7. Click [Add].

If option settings need to be configured, click [Configure...] in the dialog box that appears, and then configure the option settings.

8. Quit System Preferences.

#### **Network Connection**

- 1. Start System Preferences.
- 2. Click [Print & Fax] or [Print & Scan].
- 3. Click the [+] button.
- 4. Click [Default Browser] or [Default].
- 5. Select the printer that has "Bonjour" indicated in the [Connection] or [Kind] column.

If the printer name is not displayed, select the icon that corresponds to your network environment (TCP/IP, etc.).

6. Select the printer you are using from the [Print Using:] or [Use:] pop-up menu.

If the printer you are using is not selected in [Print Using:] or [Use:], select its manufacturer, [Select a driver to use...], or [Select Printer Software...] in the pop-up menu, and then select the PPD file of the printer. For the location of the PPD files, see page 35 "Installing PPD Files".

7. Click [Add].

If option settings need to be configured, click [Configure...] in the dialog box that appears, and then configure the option settings.

8. Quit System Preferences.

# Configuring Option Settings for the Printer Under Mac OS X

- 1. Start System Preferences.
- 2. Click [Print & Fax] or [Print & Scan].
- 3. Select the printer you are using, and then click [Options & Supplies...].
- 4. Click [Driver], and then configure the settings as necessary.
- 5. Click [OK].
- 6. Quit System Preferences.



• If the option you want to select is not displayed, PPD files may not be configured correctly. To complete the configuration, check the name of the PPD file displayed in the dialog box.

# 8. Updating or Deleting the Printer Driver

This chapter explains how to update or delete the printer driver.

# **Updating the Printer Driver**



For driver updates, select a driver that is compatible with the printer and driver type you are using.
 An error may result if you select a driver that is not compatible with the printer and driver type.

## Windows Operating System

You can download the most recent version of the driver from the manufacturer's Web site. Download the latest driver, and then perform the following procedure.

- 1. Open the printer window.
  - Windows Server 2003:
    - On the [Start] menu, select [Printers and Faxes].
  - Windows Vista, Windows Server 2008:
    - On the [Start] menu, select [Control Panel], and then click [Printers] in [Hardware and Sound] category.
  - Windows 7, Windows Server 2008 R2:
    - On the [Start] menu, select [Devices and Printers].
  - Windows 8/8.1, Windows Server 2012/2012 R2:
    - Click [Settings] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].
- 2. Open the printer properties dialog box.
  - Windows Vista, Windows Server 2003/2008:
    - Right-click the machine's icon, and then click [Properties].
  - Windows 7/8/8.1, Windows Server 2008 R2/2012/2012 R2:
     Right-click the machine's icon, and then click [Printer properties].
- 3. Click the [Advanced] tab.
- 4. Click [New Driver...], and then click [Next].
- 5. Click [Have Disk...].

- 6. Click [Browse...], and then select the driver location.
- 7. Click [OK].
- 8. Select the machine model, and then click [Next].
- 9. Click [Finish].

The driver update starts.

- 10. Click [OK] to close the printer properties window.
- 11. Restart the computer.

### Mac OS X

You can download the most recent version of PPD file from the manufacturer's Web site.

Delete the old version of the PPD file first, and then install the new PPD file. For details about how to delete the PPD file, see page 41 "Deleting the Printer Driver".

# **Deleting the Printer Driver**

#### Windows Operating System

#### Windows Server 2003/2003 R2

- 1. On the [Start] menu, click [Printers and Faxes].
- 2. Right-click the icon of the printer you want to delete, and then click [Delete].
- 3. Click [Server Properties] on the [File] menu.
- 4. Click the [Drivers] tab.
- 5. Select the driver you want to delete, and then click [Remove].
- 6. Click [Yes].
- 7. Click [Close] to close the print server properties window.

### Windows Vista, Windows Server 2008

- On the [Start] menu, select [Control Panel], and then click [Printers] in [Hardware and Sound] category.
- 2. Right-click the icon of the printer you want to delete, and then click [Delete].
- 3. On the [File] menu, point to [Run as administrator], and then click [Server Properties...].
- 4. Click the [Drivers] tab.
- 5. Select the driver you want to delete, and then click [Remove...].
- 6. Select [Remove driver and driver package.], and then click [OK].
- 7. Click [Yes].
- 8. Click [Delete].
- 9. Click [OK].
- 10. Click [Close] to close the print server's properties window.

#### Windows 7/8/8.1, Windows Server 2008 R2/2012/2012 R2

1. On the [Start] menu, click [Devices and Printers].

If you are using a computer that is running Windows 8/8.1 or Windows Server 2012/2012 R2, click [Settings] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].

- 2. Right-click the icon of the machine you want to delete, and then click [Remove device].
- 3. Click [Yes].
- 4. Click any machine icon, and then click [Print server properties].
- 5. Click the [Drivers] tab.
- 6. Click the [Change Driver Settings] button if it is displayed.
- 7. Select the driver you want to delete, and then click [Remove...].
- 8. Select [Remove driver and driver package.], and then click [OK].
- 9. Click [Yes].
- 10. Click [Delete].
- 11. Click [OK].
- 12. Click [Close] to close the print server properties window.

### Mac OS X

- 1. Start System Preferences.
- 2. Click [Print & Fax] or [Print & Scan].
- 3. Select the printer you want to delete, click the [-] button.

# 9. Appendix

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