SP 320DN/SP 325DNw

User's Guide

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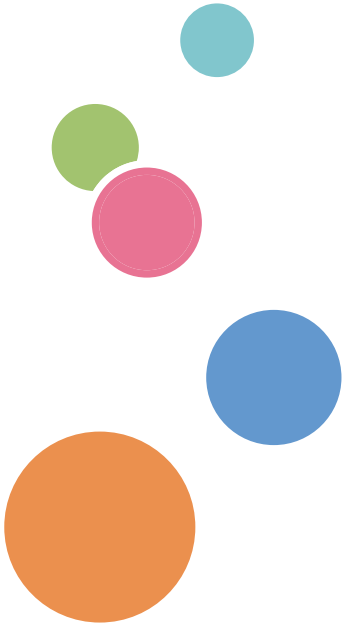
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For safe and correct use, be sure to read Safety Information before using the machine.

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How to Find Information about Operations and Troubleshooting

You can find support information about operating the machine and troubleshooting in the Operating Manual (printed), Operating Manual (digital format), and Help (online).

Operating Manual (Printed)

The following manuals are provided with this machine.

Safety Information

This manual explains the safety precautions that should be followed when using the machine. Be sure to read this manual before using the machine.

Setup Guide

This manual explains how to set up the machine. It also explains how to remove the machine from the packaging and how to connect it to a computer.

Operating Manual (Digital Format)

Operating manuals can be viewed from Ricoh's website or from the provided CD-ROM.

Viewing from a web browser

Access the Internet from a web browser.

Confirm that the computer or the machine is connected to the network.

Download the operating manuals from http://www.ricoh.com/.

Viewing from the provided CD-ROM

Operating manuals can also be viewed from the provided CD-ROM.

- When using Windows

  1. **Insert the CD-ROM into the CD-ROM drive.**
  2. **Click [Read Manual] and follow the instructions on the screen.**

     The PDF file manual opens.

- When using OS X

  1. **Insert the CD-ROM into the CD-ROM drive.**
  2. **Double-click Manuals.htm file, located on the CD-ROM root directory.**
  3. **Select the language.**
  4. **Click [Read PDF manuals].**

5. **Click the manual you want to refer to.**

   The PDF file manual opens.

Help

Use the following procedure to open the Help files learn about the printer driver, Web Image Monitor, and Smart Organizing Monitor functions.

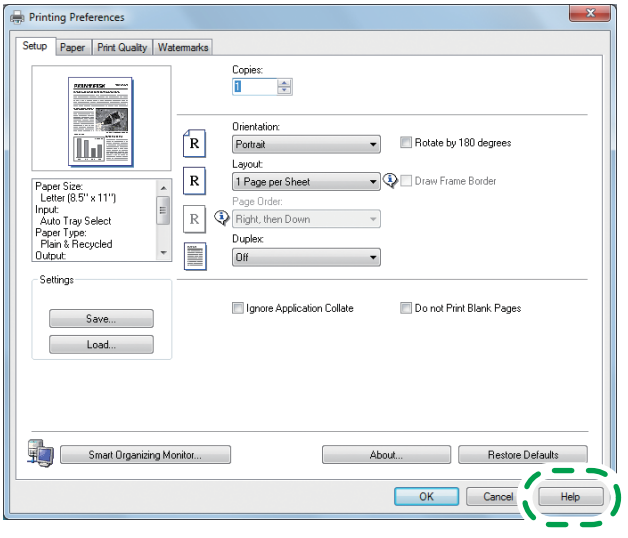
For details about using Smart Organizing Monitor, see page 65 "Using Smart Organizing Monitor".

For details about using Web Image Monitor, see page 52 "Using Web Image Monitor".

Printer driver

1. **Click [Help] on the printing preferences dialog box.**

   For the procedure on how to open the printing preferences dialog box, see page 46 "Displaying the Printing Preferences Dialog Box".

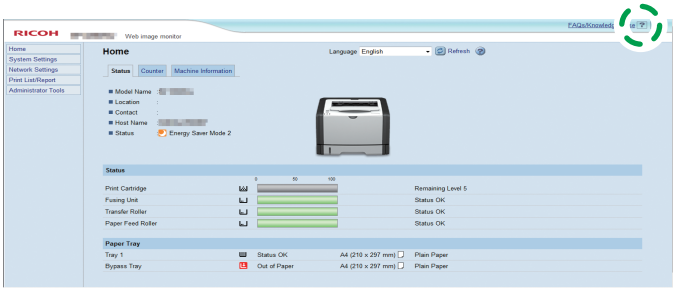


DSG250

Web Image Monitor

1. **Click on the top right of the screen.**

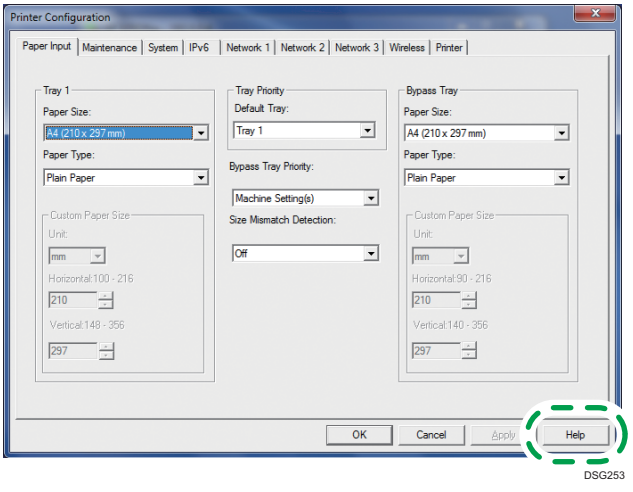
   To display Help, install the help source file beforehand. For details about installing the file, see page 52 "Using Web Image Monitor".



DSG251

Smart Organizing Monitor

1. Click [Help] on the [Printer Configuration] screen.



DSG253

How to Read This Manual

Introduction

This manual contains detailed instructions and notes on the operation and use of this machine. For your safety and benefit, read this manual carefully before using the machine. Keep this manual in a handy place for quick reference.

Symbols Used in This Manual

This manual uses the following symbols:

Important

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

Note

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

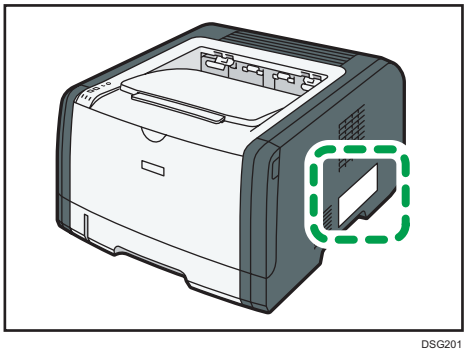
[ ]

Indicates the names of keys that appear on the computer screen.

Model-Specific Information

This section explains how you can identify the region your machine belongs to.

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



DSG201

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

Region A (mainly Europe and Asia)

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

- CODE XXXX -27
- 220–240 V

Region B (mainly North America)

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

- CODE XXXX -17
- 120–127 V

Note

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

Disclaimer

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.

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

Notes

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

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

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

The illustrations of the control panel in this manual are for the SP 325DNw.

Note to Administrator

Password

When you log in to this printer, you will be prompted to enter the password. We strongly recommend you to change the factory default password immediately to prevent information leakage and unauthorized operations by others.

You will be prompted to enter your password when you attempt to change printer settings configured using Web Image Monitor.

To use the factory default password, leave the password blank when using Web Image Monitor.

To change password for Web Image Monitor, you need to log on as an Administrator, and then make the necessary settings.

For details about setting a password, see page 52 "Using Web Image Monitor".

About IP Address

In this manual, "IP address" covers both IPv4 and IPv6 environments. Read the instructions that are relevant to the environment you are using.

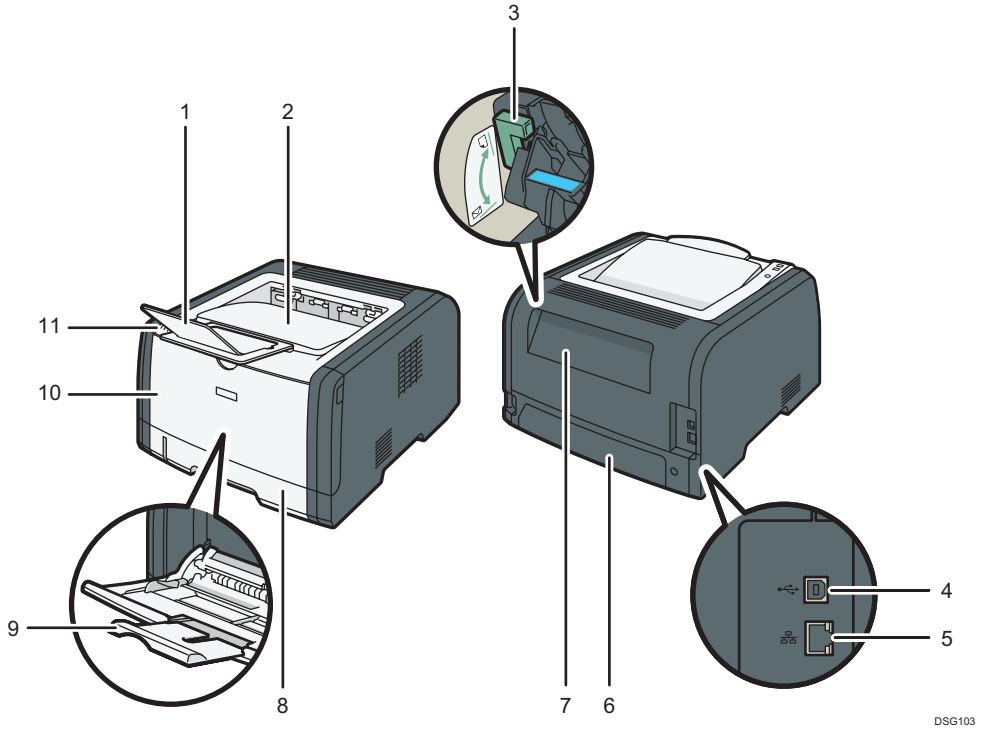
1. Guide to the Machine

This chapter describes preparations for using the machine and its operating instructions.

Guide to Components

This section introduces the names of the various parts on the front and rear side of the machine and outlines their functions.

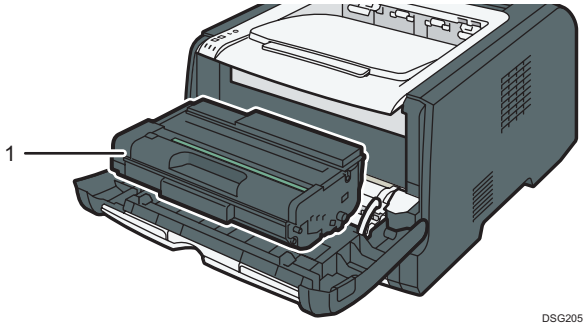
Exterior



No.	Name	Description
1	Stop Fence	Raise this fence to prevent paper from falling off.
2	Standard Tray	Printed paper is output here. Up to 125 sheets of plain paper can be stacked here.
3	Envelope Levers	Lower these levers when printing on envelopes. Pull up these levers back when printing on paper other than envelopes.

No.	Name	Description
4	USB Port	Use a USB cable to connect the printer to the host computer.
5	Ethernet Port	Use a network interface cable to connect the printer to the network.
6	Tray 1 Rear Cover	Remove this cover when loading paper longer than A4 in Tray 1.
7	Rear Cover	Open this cover to remove jammed paper or to lower the levers inside before printing on envelopes.
8	Tray 1	This tray can hold up to 250 sheets of plain paper.
9	Bypass Tray	This tray can hold up to 50 sheets of plain paper.
10	Front Cover	Open this cover to replace consumables or clear a paper jam.
11	Control Panel	The keys to operate the machine and the indicators for checking the status of the machine are on this control panel. For details, see page 15 "Control Panel".

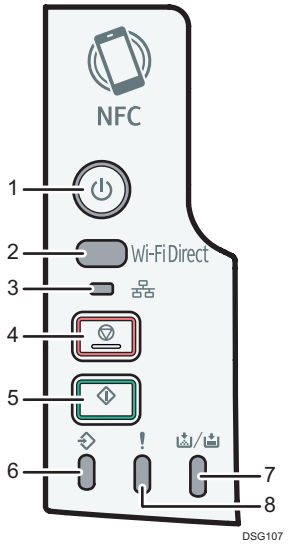
Interior



No.	Name	Description
1	Print Cartridge	A replacement consumable that is required to make prints on paper. It needs to be replaced when the Toner/Paper End indicator flashes red. For details about replacing the cartridge, see page 69 "Replacing the Print Cartridge".

Control Panel

This section introduces the names of the parts of the control panel and explains their functions.



No.	Name	Description
1	[Power] key	This indicator lights blue when the machine is turned on.
2	[Wi-Fi Direct] key (only SP 325DNw)	Pressing this key while Wi-Fi is disabled activates Wi-Fi and reboots the machine automatically. Press this key while Wi-Fi is enabled to activate or deactivate the Wi-Fi Direct function. This indicator lights blue when the Wi-Fi Direct function is active. After a long press of this key, configure the WPS using the PIN code or in PBC mode. For details, see Setup Guide.
3	Network Indicator (only SP 325DNw)	This indicator lights blue when the network is connected.
4	[Stop] key	Press this key once to pause a job that is currently printing. To cancel a job, press it again.
5	[Start] key	Press to restart the printing job.
6	Data In Indicator	This indicator lights blue when the machine receives print data from the host device.
7	Toner/Paper End Indicator	This indicator lights red when the machine runs out of paper or toner. It flashes when the toner is nearly empty.

No.	Name	Description
8	Alert Indicator	This indicator flashes red when paper jams occur, and it lights when the paper settings do not match the settings specified by the driver, and when other errors occur.

Note

- For details about printing a list of the machine's configurations or about doing a test print using Smart Organizing Monitor, see page 65 "Using Smart Organizing Monitor".

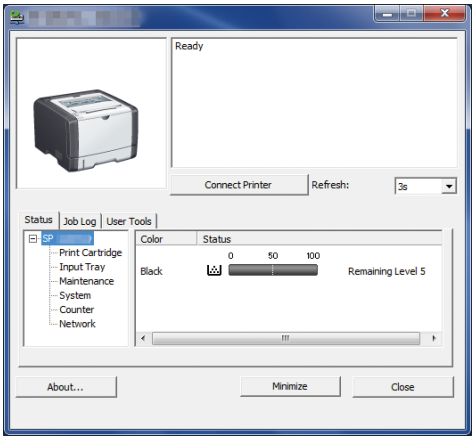
About Operation Tools

This section explains the operation tools of this machine.

Control Panel

The control panel contains keys for controlling the machine.

Smart Organizing Monitor

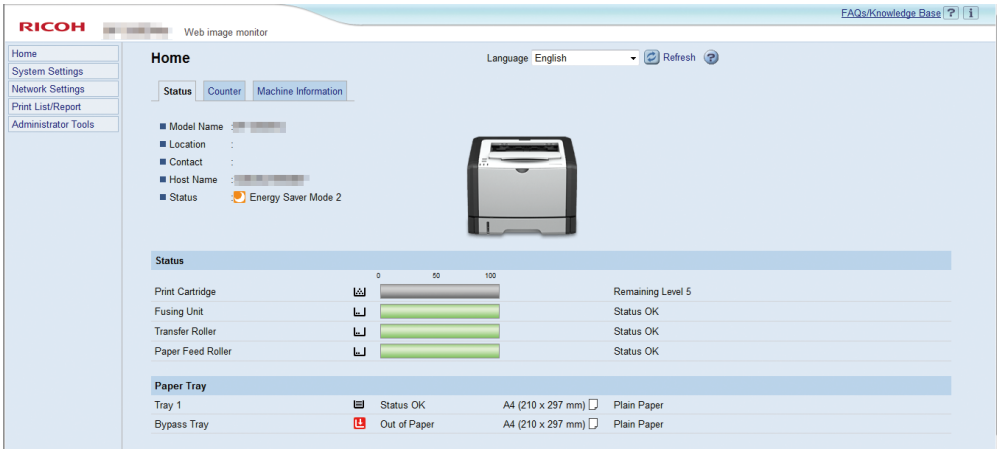


Install this utility on your computer from the included CD-ROM before using it.

Using Smart Organizing Monitor, you can check the machine's status, configure its settings, and use other functions.

For details about how to use Smart Organizing Monitor, see page 65 "Using Smart Organizing Monitor".

Web Image Monitor



You can check the machine's status and configure its settings by accessing the machine directly using Web Image Monitor.

For details about how to use Web Image Monitor, see page 52 "Using Web Image Monitor".

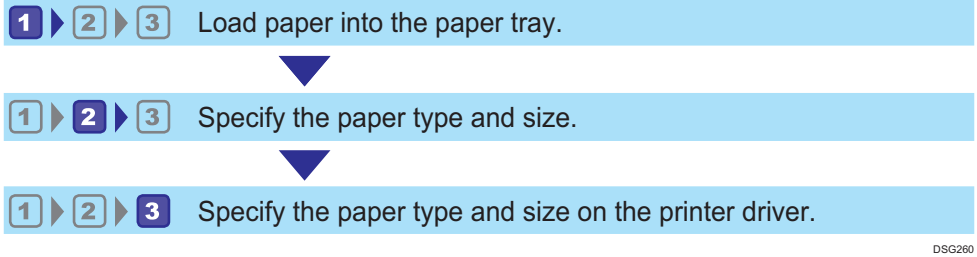
2. Paper Specifications and Adding Paper

This chapter describes how to load paper and originals and about their specifications.

Workflow for Loading Paper and Configuring Paper Sizes and Types

This section explains how to load paper and operations required after paper is loaded.

After following the procedures below, you can print on the paper that is loaded in the machine.



DSG260

For details about the procedures, refer to the next page.

Procedure	Reference
1	See page 20 "Loading Paper".
2	There are two ways to specify the paper type and size. • When using Web Image Monitor See page 31 "Specifying Paper Type and Paper Size Using Web Image Monitor". • When using Smart Organizing Monitor See page 29 "Specifying Paper Type and Paper Size Using Smart Organizing Monitor".
3	See page 32 "Specifying Paper Type and Paper Size Using the Printer Driver".

For details about supported paper, see page 34 "Supported Paper".

Loading Paper

This section explains how to load paper into the paper tray and the bypass tray.

⚠CAUTION

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

For information about supported paper, precautions for storing paper and print areas, see page 34 "Supported Paper".

Loading Paper into Tray 1

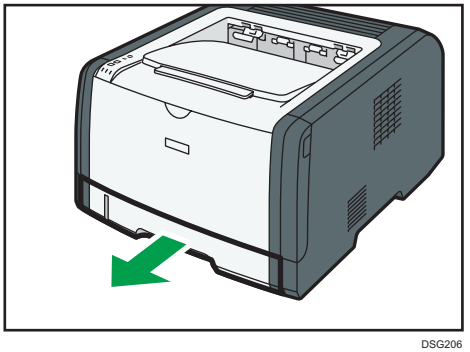
The following example explains how to load paper in the standard paper tray (Tray 1) of SP 325DNw.

All models are loaded in the same way.

Important

- **Before printing on paper other than envelopes, make sure to pull up the levers on the machine rear, inside the rear cover. Leaving the levers lowered can cause print quality problems when printing on paper other than envelopes.**

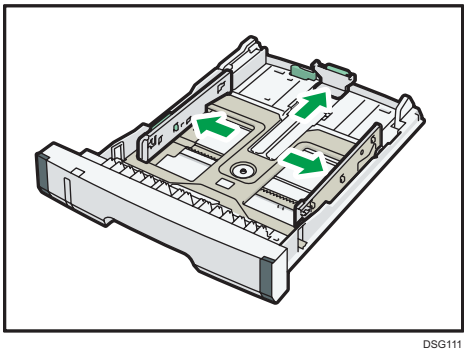
1. **Pull out tray 1 carefully with both hands.**



DSG206

Place the tray on a flat surface.

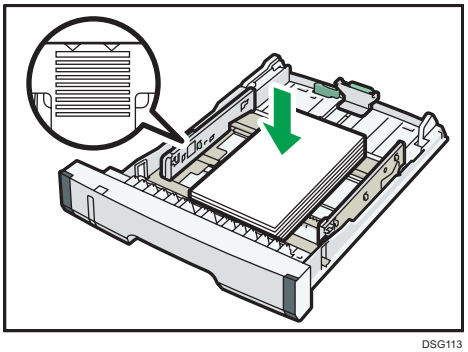
2. **Slide the side and end paper guides outward.**



DSG111

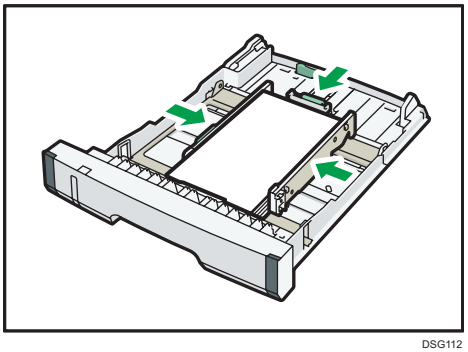
3. **Fan the paper and load it in the tray with the print side faced down.**

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



DSG113

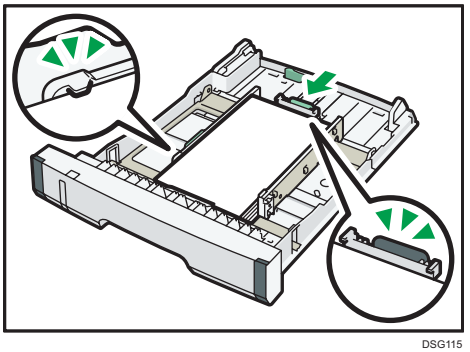
4. **Slide the guides inward until they are flush against the sides of the paper.**



DSG112

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

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



DSG115

6. **Carefully push tray 1 straight into the machine.**

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

Note

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

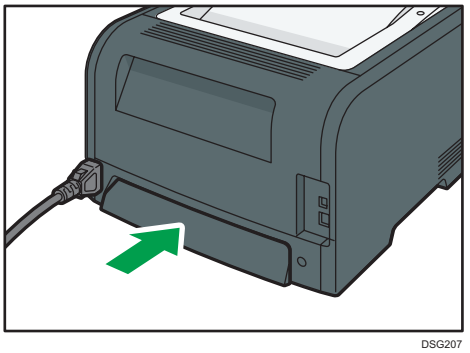
Extending the Tray 1 to load paper (When Using SP 325DNw)

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

1. **Pull out tray 1 carefully with both hands.**

   Place the tray on a flat surface.

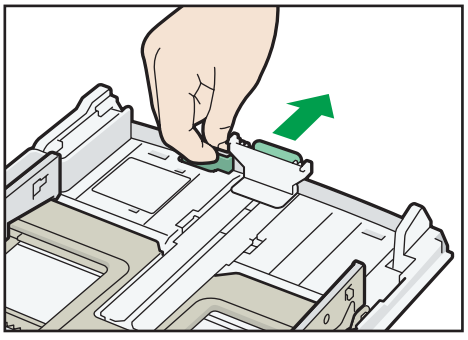
2. **Remove the tray 1 rear cover by pushing its center.**



DSG207

3. **Release the extender lock on the left rear of the tray, and then pull out the extender until it clicks.**

   Make sure the extender's inner surface and the scale are aligned.



DSG117

4. **Follow Steps 2 to 6 in "Loading Paper into Tray 1".**

Note

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

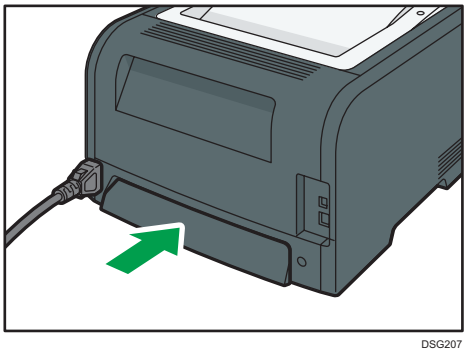
Extending the Tray 1 to load paper (When using SP 325DNw)

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

1. **Pull out tray 1 carefully with both hands.**

   Place the tray on a flat surface.

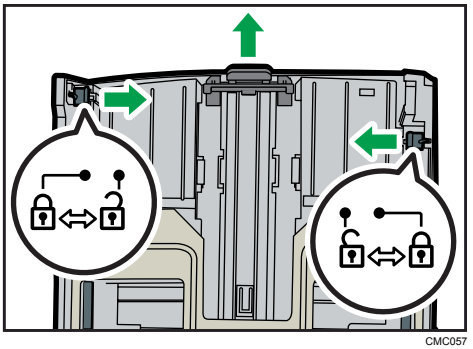
2. **Remove the tray 1 rear cover by pushing its center.**



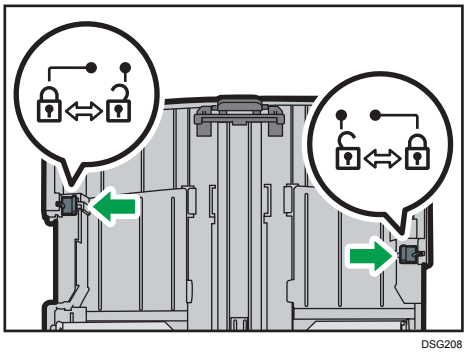
DSG207

3. **Release the extender locks on both sides of the tray, and then pull out the extender until it clicks.**

   Make sure the extender's inner surface and the scale are aligned.


CMC057

4. Lock the extender in the extended position.


DSG208

5. Follow Steps 2 to 6 in "Loading Paper into Tray 1".

Note

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

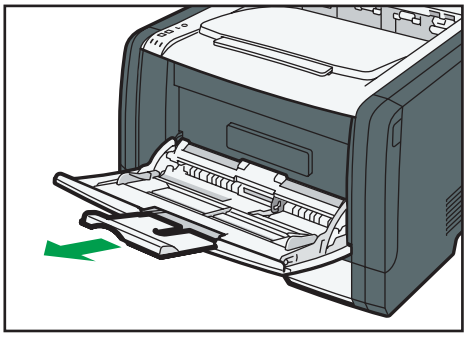
Loading Paper into Bypass Tray

Important

- Before printing on paper other than envelopes, make sure to pull up the levers on the machine rear, inside the rear cover. Leaving the levers lowered can cause print quality problems when printing on paper other than envelopes.
- Do not load paper while the machine is printing.

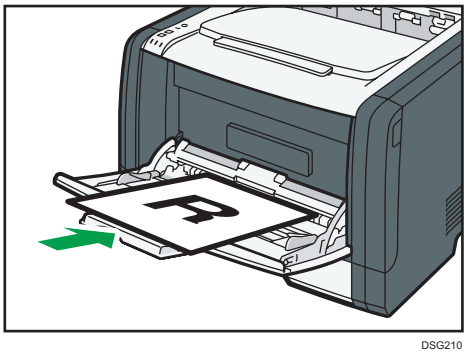
1. Open the bypass tray.

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



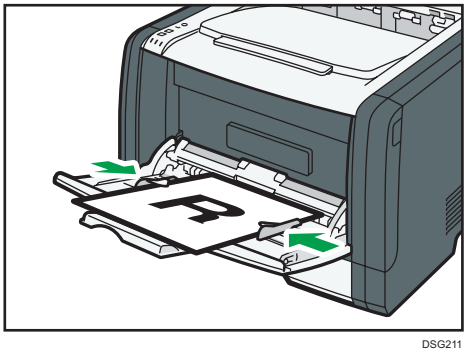
DSG209

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



DSG210

3. Adjust the side guides to the paper width.



DSG211

Loading Envelopes

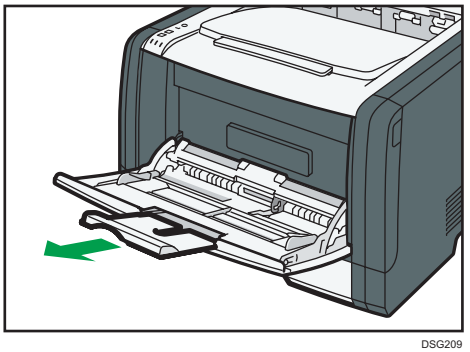
Important

- Before printing on envelopes, make sure to lower the levers on the machine rear, inside the rear cover, to avoid envelopes coming out creased. Also, pull up the levers back to their original

positions after printing. Leaving the levers lowered can cause print quality problems when printing on paper other than envelopes.

- Avoid using self-adhesive envelopes. They may cause machine malfunctions.
- Check there is no air in the envelopes before loading.
- Load only one size and type of envelope at a time.
- Before loading envelopes, flatten their leading edges (the edge going into the machine) by running a pencil or ruler across them.
- Some kinds of envelope might cause misfeeds, wrinkles or print poorly.
- Print quality on envelopes may be uneven if parts of an envelope have different thicknesses. Print one or two envelopes to check print quality.
- In a hot and humid environment, the envelope might be output creased or improper printing quality.

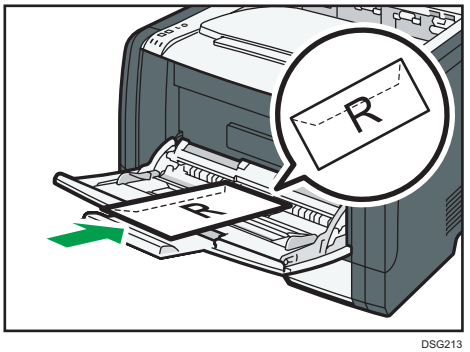
1. **Open the bypass tray.**



DSG209

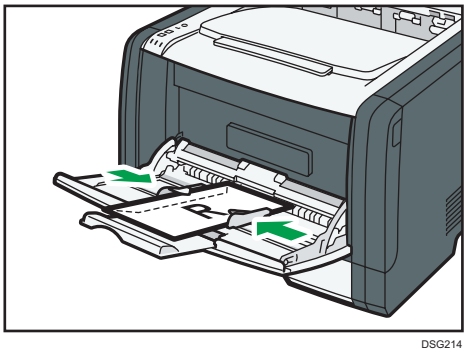
2. **Slide the side guides outward, then load envelopes with the print side up, and push in until it stops against the machine.**

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



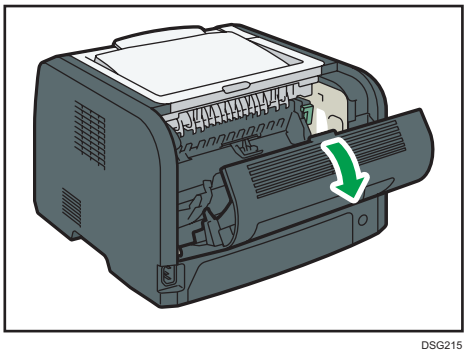
DSG213

3. **Adjust the side guides to the envelope width.**



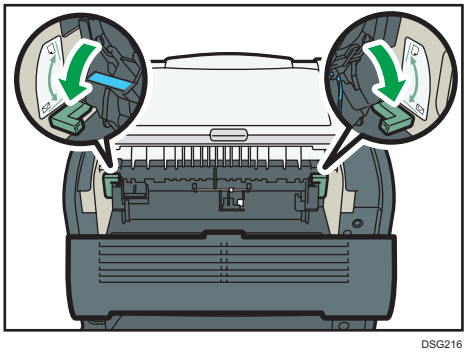
DSG214

4. **Open the rear cover.**



DSG215

5. **Lower the levers for printing envelopes on both sides to the position indicated with an envelope mark.**



DSG216

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

6. **Close the rear cover.**

Note

- Be sure to load envelopes so that their flaps are on the left. If you do not, the envelopes will become creased.

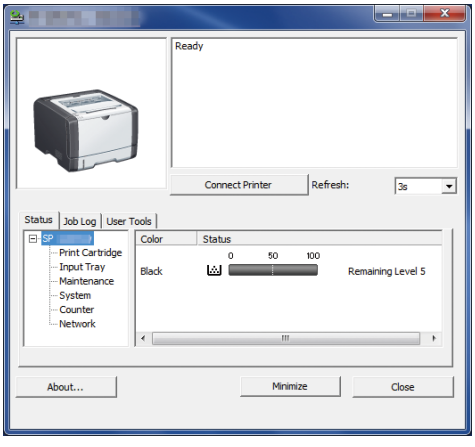
- If printed envelopes come out badly creased, load the envelopes in the opposite direction, and then rotate the print object by 180 degrees using the printer driver before printing. For details, see the printer driver Help.

Specifying Paper Type and Paper Size Using Smart Organizing Monitor

The procedure in this section is an example based on Windows 7. The actual procedure may vary depending on the operating system you are using.

1. **On the [Start] menu, click [All Programs].**
2. **Click [SP 320 Series Software Utilities].**
3. **Click [Smart Organizing Monitor].**

   Smart Organizing Monitor starts.



4. **If the machine you are using is not selected, click [Connect Printer], and then do one of the following:**
   - Select the machine's model.
   - Enter the IP address of the machine manually.
   - Click [Search Network Printer] to search the machine via the network.
5. **Click [OK].**
6. **On the [User Tools] tab, click [Printer Configuration].**

   If you are requested to enter an access code, enter the access code and then click [OK].

   The default access code is "Admin".
7. **On the [Paper Input] tab, select the paper type and paper size, and then click [OK].**
8. **Click [Close].**

Specifying a Custom Paper Size

1. **On the [Start] menu, click [All Programs].**

2. **Click [SP 320 Series Software Utilities].**
3. **Click [Smart Organizing Monitor].**
4. **If the machine you are using is not selected, click [Connect Printer], and then do one of the following:**
   - Select the machine's model.
   - Enter the IP address of the machine manually.
   - Click [Search Network Printer] to search the machine via the network.
5. **Click [OK].**
6. **On the [User Tools] tab, click [Printer Configuration].**

   If you are requested to enter an access code, enter the access code and then click [OK].

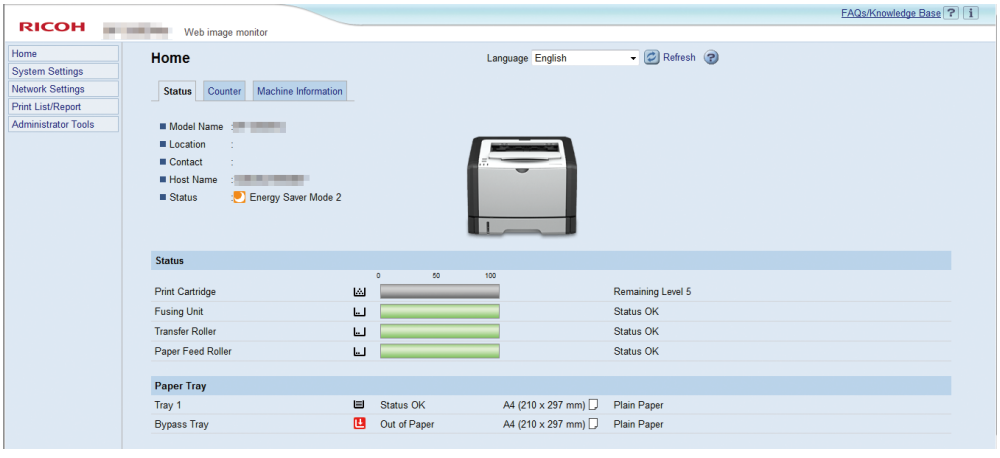
   The default access code is "Admin".
7. **On the [Paper Input] tab, select [Custom Paper Size] in the [Paper Size] list.**
8. **In the [Unit:] list, select [mm:] or [inch:].**
9. **In the [Horizontal] box and [Vertical] box, specify the width and length.**
10. **Click [OK].**
11. **Click [Close].**

Specifying Paper Type and Paper Size Using Web Image Monitor

This section describes how to specify paper sizes and types using Web Image Monitor.

1. **Start the web browser and access the machine by entering its IP address.**

   The top page of Web Image Monitor appears.



2. **Click [System Settings].**
3. **Click [Tray Paper Settings].**
4. **Select the paper type and paper size for the tray you want to use.**
5. **Enter the administrator password if required.**
6. **Click [OK].**
7. **Close the web browser.**

Specifying a Custom Paper Size

1. **Start the web browser and access the machine by entering the IP address.**
2. **Click [System Settings].**
3. **Click [Tray Paper Settings].**
4. **Select [Custom Size] in the [Paper Size] list.**
5. **Select [mm] or [inch] and specify the width and length.**
6. **Enter the administrator password if required.**
7. **Click [OK].**
8. **Close the web browser.**

Specifying Paper Type and Paper Size Using the Printer Driver

Important

- **Make sure that the paper type and size specified with the printer driver matches the type and size of the paper loaded in the tray. Since this machine does not detect paper sizes automatically, the type or size of the paper may be mismatched and the print job may not print correctly.**

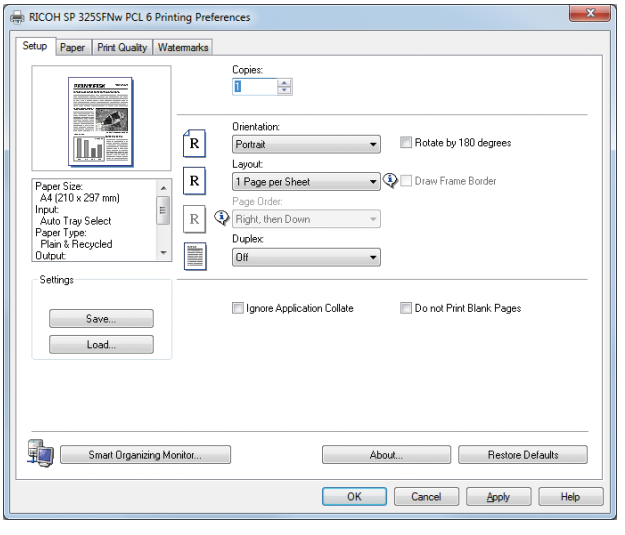
When Using Windows

The procedure in this section is an example based on Windows 7. The actual procedure may vary depending on the operating system you are using.

1. **Open the [Printing Preferences] dialog box from the printer driver.**

   For information of how to open the printer driver properties from [Devices and Printers], see page 46 "Displaying the Printing Preferences Dialog Box".

   The [Printing Preferences] dialog box appears.



2. **Click the [Paper] tab.**
3. **In the [Input Tray:] list, select the paper tray you want to use for printing.**
4. **In the [Paper Type:] list, select the type of paper that is loaded in the paper tray.**
5. **Select the [Print On] check box and select the size of the paper that is loaded in the paper tray.**

   Clear the [Fit to Print Size] check box as necessary.

6. Click [OK].

When Using OS X

The procedure in this section is an example based on OS X 10.11. The actual procedure may vary depending on the operating system you are using.

1. Start System Preferences.
2. Click [Printers & Scanners].
3. Select the printer you are using.
4. In the [Paper Size:] list, select the size of the document to be printed.
5. Select [Printer Features] in the pop-up menu.
6. In the [Media Type:] list, select the type of paper that is loaded in the paper tray.

Supported Paper

Important

- **After loading paper in the tray, specify the paper type and size using Smart Organizing Monitor and the printer driver. This machine does not detect the paper size automatically.**
- **When loading custom size paper, specify the width and length using printer driver.**

Tray 1

Type	Size	Weight	Capacity
Plain Paper Recycled Paper Thick Paper 1 Thick Paper 2 Thin Paper Letterhead Preprinted Paper Label Paper Prepunched Paper Bond Paper Cardstock Color Paper	A4, $8^1/_2 \times 11$, B5 JIS, B6 JIS, A5 LEF, A5 SEF, A6, $8^1/_2 \times 14$, $8^1/_2 \times 13$, 8.5 × 13.4, 8.5 × 13.6, 16K, 8.11 × 13.3, $5^1/_2 \times 8^1/_2$	52 to 162 g/m^2 (14 to 43 lb.)	250 (80 g/m^2, 20 lb.)
Plain Paper Recycled Paper Thick Paper 1 Thick Paper 2 Thin Paper Letterhead Preprinted Paper Label Paper Prepunched Paper Bond Paper Cardstock Color Paper	Custom size: 100 to 216 mm in width, 148 to 356 mm in length (3.94 to 8.50 inches in width, 5.83 to 14.02 inches in length)	52 to 162 g/m^2 (14 to 43 lb.)	250 (80 g/m^2, 20 lb.)

Bypass tray

Type	Size	Weight	Capacity *1
Plain Paper Recycled Paper Thick Paper 1 Thick Paper 2 Thin Paper Letterhead Preprinted Paper Envelope Label Paper Prepunched Paper Bond Paper Cardstock Color Paper	A4, $8^1/_2$ × 11, B5 JIS, B6 JIS, A5 LEF, A5 SEF, A6, $8^1/_2$ × 14, $8^1/_2$ × 13, 8.5 × 13.4, 8.5 × 13.6, 16K, 8.11 × 13.3, $5^1/_2$ × $8^1/_2$, $4^1/_8$ × $9^1/_2$, $3^7/_8$ × $7^1/_2$, DL Env, C6 Env, C5 Env	52 to 162 g/m^2 (14 to 43 lb.)	50 (80 g/m^2, 20 lb.)
Plain Paper Recycled Paper Thick Paper 1 Thick Paper 2 Thin Paper Letterhead Preprinted Paper Envelope Label Paper Prepunched Paper Bond Paper Cardstock Color Paper	Custom size: 90 to 216 mm in width, 140 to 356 mm in length (3.54 to 8.50 inches in width, 5.51 to 14.02 inches in length)	52 to 162 g/m^2 (14 to 43 lb.)	50 (80 g/m^2, 20 lb.)

*1 The number of envelopes that can be loaded is up to 8.

Note

- Always set the paper vertically regardless of the size.

Specifications of Paper Types

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

Important

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

Plain Paper

Item	Description
Paper thickness	65 to 99 g/m^2 (17 to 27 lb.)
Supported paper tray	Tray 1 and bypass tray
Duplex supported size	A4, 8$^1/_2$ × 11, 8$^1/_2$ × 14, 8$^1/_2$ × 13, 8.5 × 13.4, 8.5 × 13.6, 8.11 × 13.3

Thick Paper 1

Item	Description
Paper thickness	100 to 130 g/m^2 (27 to 35 lb.)
Supported paper tray	Tray 1 and bypass tray
Duplex supported size	A4, 8$^1/_2$ × 11, 8$^1/_2$ × 14, 8$^1/_2$ × 13, 8.5 × 13.4, 8.5 × 13.6, 8.11 × 13.3

Thick Paper 2

Item	Description
Paper thickness	131 to 162 g/m^2 (35 to 43 lb.)
Supported paper tray	Tray 1 and bypass tray
Duplex supported size	None

Thin Paper

Item	Description
Paper thickness	52 to 64 g/m^2 (14 to 16 lb.)
Supported paper tray	Tray 1 and bypass tray
Duplex supported size	A4, 8 1/2 × 11, 8 1/2 × 14, 8 1/2 × 13, 8.5 × 13.4, 8.5 × 13.6, 8.11 × 13.3

Recycled Paper

Item	Description
Paper thickness	75 to 90 g/m^2 (20 to 24 lb.)
Supported paper tray	Tray 1 and bypass tray
Duplex supported size	A4, 8 1/2 × 11, 8 1/2 × 14, 8 1/2 × 13, 8.5 × 13.4, 8.5 × 13.6, 8.11 × 13.3
Notes	If the paper thickness is outside the specified range, select [Thin Paper], [Plain Paper], [Thick Paper 1], or [Thick Paper 2].

Color Paper

Item	Description
Paper thickness	75 to 90 g/m^2 (20 to 24 lb.)
Supported paper tray	Tray 1 and bypass tray
Duplex supported size	A4, 8 1/2 × 11, 8 1/2 × 14, 8 1/2 × 13, 8.5 × 13.4, 8.5 × 13.6, 8.11 × 13.3
Notes	If the paper thickness is outside the specified range, select [Thin Paper], [Plain Paper], [Thick Paper 1], or [Thick Paper 2].

Preprinted Paper

Item	Description
Paper thickness	75 to 90 g/m^2 (20 to 24 lb.)
Supported paper tray	Tray 1 and bypass tray
Duplex supported size	A4, 8 1/2 × 11, 8 1/2 × 14, 8 1/2 × 13, 8.5 × 13.4, 8.5 × 13.6, 8.11 × 13.3
Notes	If the paper thickness is outside the specified range, select [Thin Paper], [Plain Paper], [Thick Paper 1], or [Thick Paper 2].

Prepunched Paper

Item	Description
Paper thickness	75 to 90 g/m^2 (20 to 24 lb.)
Supported paper tray	Tray 1 and bypass tray
Duplex supported size	A4, 8 1/2 × 11, 8 1/2 × 14, 8 1/2 × 13, 8.5 × 13.4, 8.5 × 13.6, 8.11 × 13.3
Notes	If the paper thickness is outside the specified range, select [Thin Paper], [Plain Paper], [Thick Paper 1], or [Thick Paper 2].

Letterhead

Item	Description
Paper thickness	100 to 130 g/m^2 (27 to 35 lb.)
Supported paper tray	Tray 1 and bypass tray
Duplex supported size	A4, 8 1/2 × 11, 8 1/2 × 14, 8 1/2 × 13, 8.5 × 13.4, 8.5 × 13.6, 8.11 × 13.3
Notes	Paper that has a thickness outside the specified range cannot be printed onto.

Bond Paper

Item	Description
Paper thickness	105 to 160 g/m^2 (28 to 43 lb.)
Supported paper tray	Tray 1 and bypass tray
Duplex supported size	None
Notes	If the paper thickness is outside the specified range, select [Thin Paper], [Plain Paper], [Thick Paper 1], or [Thick Paper 2].

Cardstock

Item	Description
Paper thickness	105 to 160 g/m2 (28 to 43 lb.)
Supported paper tray	Tray 1 and bypass tray
Duplex supported size	None
Notes	If the paper thickness is outside the specified range, select [Thin Paper], [Plain Paper], [Thick Paper 1], or [Thick Paper 2].

Label Paper

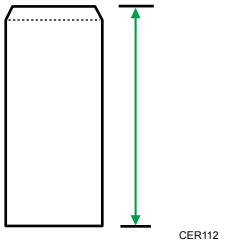
Item	Description
Paper thickness	105 to 160 g/m2 (28 to 43 lb.)
Supported paper tray	Tray 1 and bypass tray
Duplex supported size	None
Notes	Avoid using adhesive label paper on which glue is exposed. Glue may stick to the inner parts of the machine, which can cause paper feed problems, deterioration in print quality, or premature wear of the print cartridge's photo conductor unit.

Envelope

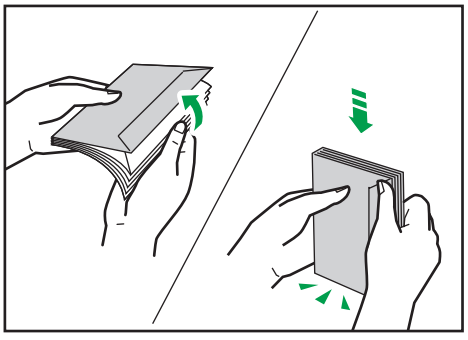
Item	Description
Supported paper tray	Bypass tray
Duplex supported size	None

Notes

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

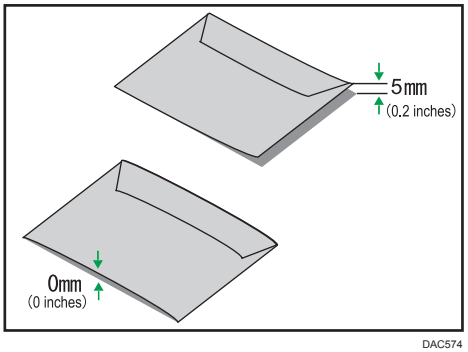


- Fan envelopes, and then align their edges before loading.



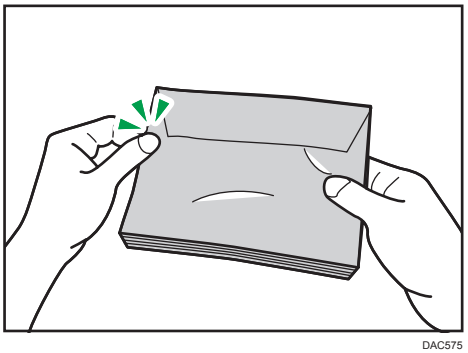
DAC573

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



DAC574

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



DAC575

Non-Recommended Paper Types

Do not use the following types of paper:

- Ink-jet printer paper
- Bent, folded, or creased paper
- Curled or twisted paper
- Torn paper
- Wrinkled paper
- Damp paper
- Dirty or damaged paper
- Paper that is dry enough to emit static electricity
- Paper that has already been printed onto, except a preprinted letterhead paper.

  Malfunctions are especially likely when using paper printed on by other than a laser printer (e.g.monochrome and color copiers, ink-jet printers, etc.)
- Special paper, such as thermal paper and carbon paper
- Paper weighing heavier or lighter than the limit
- Paper with windows, holes, perforations, cutouts, or embossing
- Adhesive label paper on which glue or base paper is exposed
- Paper with clips or staples

Note

- When loading paper, take care not to touch the surface of the paper.
- Even if paper is adequate for the machine, poorly stored paper can cause paper misfeeds, print quality degradation, or malfunctions.

Paper Storage

Important

- **Store paper appropriately. If the paper is stored incorrectly, misfeeds, lower printing quality, or malfunctions may result.**

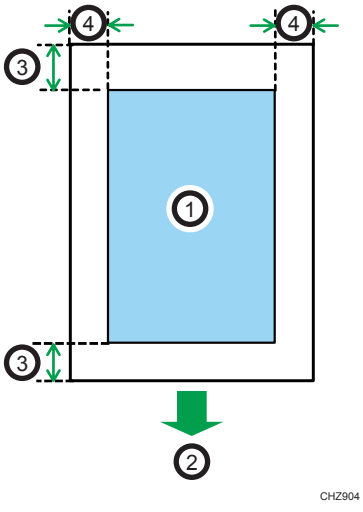
When storing paper:

- Do not store paper in a humid place.
- Do not store paper in direct sunlight.
- Do not stand paper on its edge.
- Store any leftover paper in a wrapping or box supplied with the paper.

Print Area

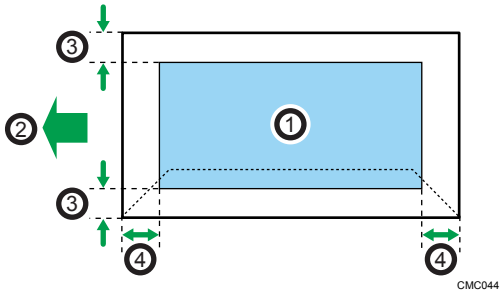
The diagram below shows the area of the paper that the machine can print on.

From the printer driver



1. Print area
2. Feed direction
3. Approx. 4.2 mm (0.2 inches)
4. Approx. 4.2 mm (0.2 inches)

Envelope



1. Print area
2. Feed direction
3. Approximately 4.2 mm (0.2 inches)
4. Approximately 4.2 mm (0.2 inches)

Note

- The print area may vary depending on the paper size, printer language and printer driver settings.

- For better envelope printing, we recommend you set the right, left, top, and bottom print margins to at least 15 mm (0.6 inches) each.

3. Printing Documents

This chapter describes how to configure settings on the printer driver and print documents.

What You Can Do with the Printer Function

Duplex printing

You can print on both sides of a sheet of paper. For details, see the printer driver Help.



DSG261

Combined printing

You can combine multiple pages and print them on a single sheet of paper. For details, see the printer driver Help.



DSG262

Displaying the Printing Preferences Dialog Box

To change the default settings of the printer driver, configure settings in the [Printing Preferences] dialog box.

To change the default settings of all applications, open the [Printing Preferences] dialog box from the OS. For details, see page 46 "Displaying the Printing Preferences Dialog Box from the [Start] Menu".
To change the default settings of a specific application, open the [Printing Preferences] dialog box from that application. For details, see page 46 "Displaying the Printing Preferences Dialog Box in an Application".

Displaying the Printing Preferences Dialog Box from the [Start] Menu

This section explains how to open the [Printing Preferences] dialog box from [Devices and Printers].

Important

- **When the printer driver is distributed from the print server, the setting values specified by the server are displayed as the default for [Printing Defaults...].**
- **You cannot configure different print settings for each user. The settings configured in this dialog box are used as the default.**

1. **On the [Start] menu, click [Devices and Printers].**
2. **Right-click the icon of the printer you want to use.**
3. **Click [Printing Preferences].**

Displaying the Printing Preferences Dialog Box in an Application

You can make printer settings for a specific application. To make printer settings for a specific application, open the [Printing Preferences] dialog box from that application.

The settings displayed in the [Printing Preferences] dialog box opened from the [Devices and Printers] window are applied as the default in the [Printing Preferences] dialog box opened in an application. When printing from an application, modify the settings as required.

The screens displayed may differ depending on the application. The following procedure explains how to print documents from an application using WordPad in Windows 7 as an example.

Displaying the Printing Preferences Dialog Box in an Application When Using Windows

1. **Click the WordPad menu button in the upper left corner of the window, and then click [Print].**

2. **In the [Select Printer] list, select the printer you want to use.**
3. **Click [Preferences].**

Note

- Procedures for opening the [Printing Preferences] dialog box vary depending on the application. For details, see the printer driver Help or the manuals provided with the application.

Displaying the Printing Preferences Dialog Box in an Application When Using OS X

The following procedure is explained using OS X 10.11 as an example.

1. **Open the document to print.**
2. **Select [Print...] on the [File] menu.**
3. **Check that the machine name or IP address you are using is selected in the [Printer:] popup menu.**

   If the machine name or IP address you are using is not selected in the [Printer:] list, click the list, and then select the machine.

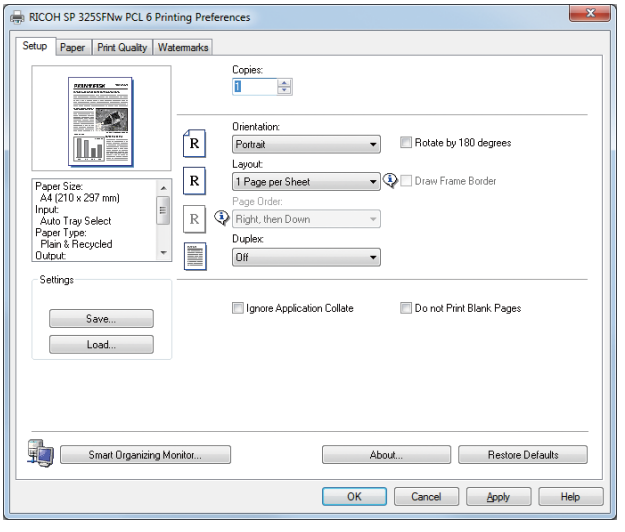
Basic Operation of Printing

The following procedure explains how to perform basic printing.

The procedure in this section is an example based on Windows 7. The actual procedure may vary depending on the operating system you are using.

For details of printing options, see the printer driver Help.

1. **Open the printer properties dialog box in your document's application.**



   For details about each setting, click [Help]. You can also click the information icons to show configuration information.

2. **Set printing options as necessary, and then click [OK].**

   The printer properties dialog box closes.

3. **Click [Print].**

Note

- If a paper jam occurs, printing stops after the current page has been printed out. After the jammed paper is removed, printing restarts from the jammed page automatically. For details about how to remove the jammed paper, see page 83 "Clearing Misfeeds".
- After printing on envelopes, make sure to pull up the levers for printing on envelopes back to their original positions. Leaving the levers lowered can cause print quality problems when printing on paper other than envelopes. For details about the levers for printing on envelopes, see page 20 "Loading Paper".

If a Paper Mismatch Occurs

The machine reports an error if:

- The paper type does not match the print job's settings when [Input Tray:] is set to [Auto Tray Select].
- The paper size does not match the print job's settings when [Size Mismatch Detection] under [Tray Paper Settings] is enabled.

There are two ways to resolve these errors:

Continue printing using mismatched paper

Ignore the error and print using mismatched paper.

Cancel the print job

Cancel printing.

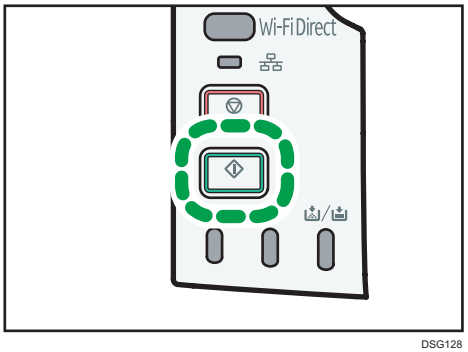
Note

- If [Auto Continue] on Smart Organizing Monitor is enabled, the machine ignores the paper type and size settings and prints on whatever paper is loaded. Printing stops temporarily when the error is detected, and restarts automatically after about ten seconds using the settings made on Smart Organizing Monitor. For details about configuring settings on Smart Organizing Monitor, see page 65 "Using Smart Organizing Monitor".

Continuing printing using mismatched paper

If the paper is too small for the print job, the printed image will be cropped.

1. **If the Alert indicator lights up, press the [Start] key.**



Canceling a Print Job

You can cancel print jobs using either the machine's control panel or your computer, depending on the status of the job.

Canceling a print job before printing has started

- Windows

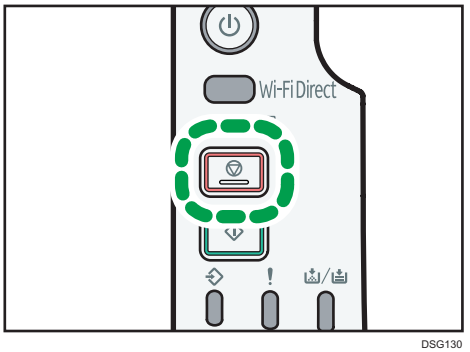
1. **Double-click the printer icon on the task tray of your computer.**
2. **Select the print job you want to cancel, click the [Document] menu, and then click [Cancel].**
3. **Click [Yes].**

Note

- If you cancel a print job that has already been processed, printing may continue for a few pages before being canceled.
- It may take a while to cancel a large print job.

Canceling a print job while printing

1. **Press the [Stop] key.**



4. Configuring the Machine Using Utilities

This chapter describes how to configure the machine using utilities.

Available Setting Functions Using Web Image Monitor and Smart Organizing Monitor

Use Web Image Monitor or Smart Organizing Monitor to change the configuration of the machine from a computer.

Available operations for Web Image Monitor and Smart Organizing Monitor are as follows:

Available operations	Web Image Monitor	Smart Organizing Monitor
Checking the system settings	Available	Available
Configuring paper settings	Available	Available
Adjusting the sound volume	Available	Unavailable
Configuring the priority tray	Available	Available
Configuring toner saving	Available	Unavailable
Configuring interface settings	Available	Available
Checking the network settings	Available	Available
Configuring IPsec settings	Available	Available
Configuring Energy Saver Mode	Available	Available
Configuring administrator settings	Available	Unavailable
Printing lists/reports	Available	Available

Using Web Image Monitor

Important

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

Available operations

The following operations can be remotely performed using Web Image Monitor on a computer:

- Displaying the printer's status or settings
- Configuring the printer's settings
- Configuring the network settings
- Configuring the IPsec settings
- Printing reports
- Setting the administrator password
- Resetting the printer's configuration to the factory default
- Creating backup files of the printer's configuration
- Restoring the printer's configuration from backup files

Recommended web browsers

- Internet Explorer 6 or later
- Firefox 3.0 or later
- Safari 3.0 or later

Displaying Top Page

When you access the machine using Web Image Monitor, the top page appears in your browser's window.

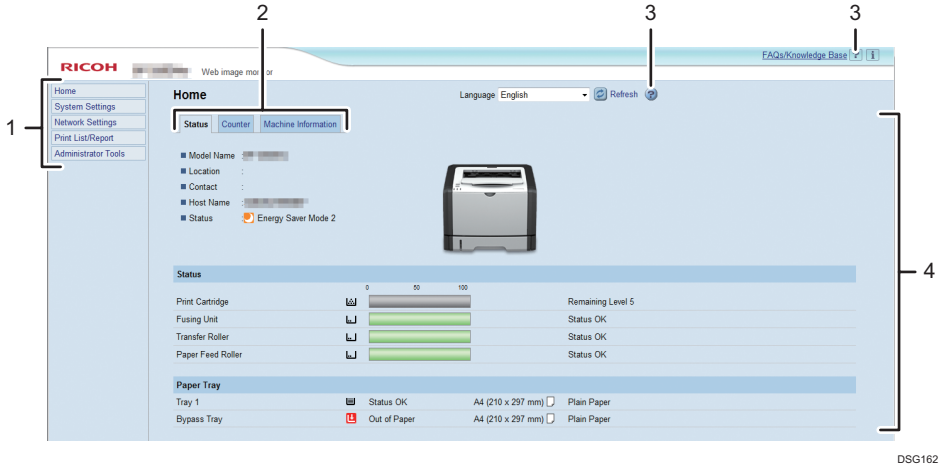
1. **Launch the web browser.**
2. **In the web browser's address bar, enter "http://(machine's IP address)/" to access the machine.**

   If a DNS or WINS server is used and the machine's host name has been specified, you can enter the host name instead of the IP address.

   The top page of Web Image Monitor appears.

Top page

Every Web Image Monitor page is divided into the following areas:



1. **Menu area**

   If you select menu, its content will be shown on the main area.

2. **Tab area**

   Contains tabs for switching between information and settings you want to see or configure.

3. **Help**

   If you click this icon, help index page opens.

4. **Main area**

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

   Printer information in the main area is not automatically updated. Click [Refresh] at the upper right in the main area to update the printer information. Click the refresh button of the web browser to refresh the entire browser screen.

Note

- If you use an older version of a supported web browser or the web browser has JavaScript and cookies disabled, display and operation problems may occur.
- If you are using a proxy server, configure the web browser settings as necessary. For details about the settings, contact your administrator.
- The previous page may not appear even if the back button of the web browser is clicked. If this happens, click the refresh button of the web browser.

Changing the Interface Language

Select the desired interface language from the [Language] list.

Installing the Help Source File

Follow the procedure below to install the help.

1. **Copy the [WIMHELP] folder on the CD-ROM to your computer's hard drive.**

   The example procedures explain how to copy the [WIMHELP] folder to the C:\tmp\WIMHELP directory.
2. **Access Web Image Monitor, and then click [Help Source File Setting] on the [Administrator Tools] page.**
3. **In the text box, enter "C:\tmp\WIMHELP\".**
4. **Enter the administrator password if required.**
5. **Click [OK].**

Displaying Help

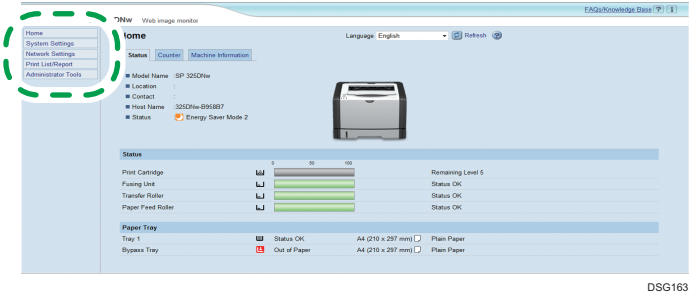
To use Help for the first time, you need to install its source file from the CD-ROM provided with this printer.

Note

- By clicking , the Help icon in the header area, the contents of Help appear.
- By clicking , the Help icon in the main area, Help for the setting items in the main area appears.

Menu

This section explains the items in the web browser menu.



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Home

Check the current system information.

System Settings

Configure machine settings.

Network Settings

Configure network settings.

IPsec Settings

Configure IPsec settings.

Print List/Report

Print a list/report related to the printer.

Administrator Tools

Configure administrator settings.

Home

[Status] tab

Click the [Status] tab on the main page to display system information, paper tray status and toner levels.

[Counter] tab

Click the [Counter] tab on the main page to check the counter information.

- [Print Counter]

  Displays the total number of pages printed.

- [Duplex]

  Displays the total number of duplex pages printed (pages printed on both front and back sides).

[Machine Information] tab

Displays information about the machine such as the version of the firmware and the total amount of memory.

System Settings

[Tray Paper Settings] tab

You can configure tray paper settings.

- [Tray 1]

  Select the paper size and paper type for Tray 1.

- [Bypass Tray]

  Select the paper size and paper type for the bypass tray.

- [Priority Tray]

  Select a tray to check first when automatic tray selection is specified for the print job.

- [Bypass Tray Setting Priority]

  Select how print jobs using the bypass tray are handled.

- [Size mismatch detection]

  Select whether to set the machine to report an error if the paper size does not match the print job's settings.

[Toner Management] tab

- [Supply End Option]

  If [Continue Printing] is selected, refill toner will be available.

[Interface] tab

- [Fixed USB Port]

  Specifies whether the same printer driver can be used for multiple machines or not under USB connection.

Network Settings

[Network Status] tab

- [General Status]

  You can check [Ethernet Speed], [IPP Printer Name], [Network Version], [Ethernet MAC Address], [Active Interface], and [Wi-Fi Direct IP Address] (only SP 325DNw).

- [TCP/IP Status]

  You can specify [DHCP], [IP Address], [Subnet Mask], and [Gateway] for IPv4.

[IPv6 Configuration] tab

- [IPv6]

  Select whether to enable or disable IPv6.

- [IPv6 Address]

  You can specify or check [DHCP], [Stateless Address], [Link-local Address], [Manual Configuration Address] for IPv6.

[Network Application] tab

- [Network Print Setting]

  Specify whether or not to print using [IPP], [FTP], [RAW], or [LPR].

- [mDNS Setting]

  Specify whether to enable Multicast DNS.

[DNS] tab

- [DNS]

  You can specify [DNS Method], [Primary DNS Server], [Secondary DNS Server], [Domain Name], [IPv6 DNS Method], [Primary IPv6 DNS Server], [Secondary IPv6 DNS Server], [IPv6 Domain Name], [DNS Resolve Priority], [DNS Timeout (seconds)], and [Host Name].

[Auto E-mail Notification] tab

The settings on this tab are for sending a notification e-mail when the machine's status changes. You can specify up to two recipients.

- [Display Name]

  Enter a sender name for notification e-mail.

- [E-mail Address]

  Enter the address of the recipient of the alert email.

- [Paper Misfeed]/[Out of Paper]/[Replace Print Cartridge Soon]/[Call Service]/[Replace Print Cartridge]/[Cover Open]

  Select which items to send notifications about.

[SNMP] tab

- [SNMP]

  Select whether to enable the machine to use SNMP services.

- [Trap]

  You can specify [Target Trap], [SNMP Management Host 1], and [SNMP Management Host 2].

- [Community]

  You can specify [Get Community] and [Trap Community].

- [System]

  Enter [Location] and [Contact] that are displayed on the top page.

[SMTP] tab

You can specify [Primary SMTP Server], [Port No.], [Authentication Method], [User Name], [Password], [Device E-mail Address], and [Server Timeout (seconds)].

[POP3] tab

You can specify [POP3 Server], [User Account], [User Password], and [Authentication].

[Wireless] tab (only SP 325DNw)

- [Wireless LAN Status]

  The status of the following items is displayed:

  [Wireless LAN Status], [MAC Address], [Communication Mode], [SSID], [Wireless Signal Status], and [Wireless].

- [Wireless LAN Settings]

  - [SSID]

    Enter the SSID name. Can contain 32 characters.

    When you click [Scan List], a list of access points that is currently available is displayed. You can select the SSID name from the list.

- [Communication Mode]

  [Infrastructure] is selected by default. Therefore, connect the machine to a wireless router or access point.

- [Authentication]

  Select an authentication method.

  - [WPA2-PSK]

    When this is selected, communication will be encrypted with CCMP (AES). Enter a value in [WPA Passphrase] that contains from 8 to 64 characters.

  - [Mixed Mode WPA/WPA2]

    When this is selected, communication will be encrypted with TKIP/AES. Enter a value in [WPA Passphrase] that contains from 8 to 64 characters.

- [Encryption]

  Select an encryption method.

  - [None]

    When it is selected, communication will not be secured by encryption.

  - [WEP]

    When it is selected, communication will be encrypted in WEP (Wired Equivalent Privacy).

    Specify [WEP Key Length], [WEP Transmit Key ID], and [WEP Key Format] and enter [WEP Key]. The following table shows the number and types of characters you can enter, depending on the key settings.

	WEP key length is 64 bits		WEP key length is 128 bits	
	WEP format is Hex	WEP format is ASCII	WEP format is Hex	WEP format is ASCII
WEP key max length	10 characters	5 characters	26 characters	13 characters
WEP key valid characters	0–9, A–F, a–f	0x20–0x7e	0–9, A–F, a–f	0x20–0x7e

- [Wi-Fi Direct Settings]
  - [SSID]

    Enter the SSID name. Can contain 32 characters.

[Google Cloud] tab

- [Google Cloud Print]

Specify whether to enable [Google Cloud Print]. When Google Cloud Print is disabled, [Local Discovery] and [Timeout (seconds)] below cannot be configured.

- [Registration Status]

  Displays the status of Google Cloud Print registration.

- [Registration Account]

  Displays the Account (e-mail address) of Google Cloud Print registration.

- [Local Discovery]

  Specify whether to enable local discovery.

- [Timeout (seconds)]

  Enter the number of seconds the machine waits before an XMPP connection times out.

IPsec Settings

Important

- **This function is available only when an administrator password is specified.**

IPsec Global Settings tab

- [IPsec Function]

  Select whether to enable or disable IPsec.

- [Default Policy]

  Select whether to allow for the default IPsec policy.

- [Broadcast and Multicast Bypass]

  Select the services that you do not want to apply IPsec from the following:

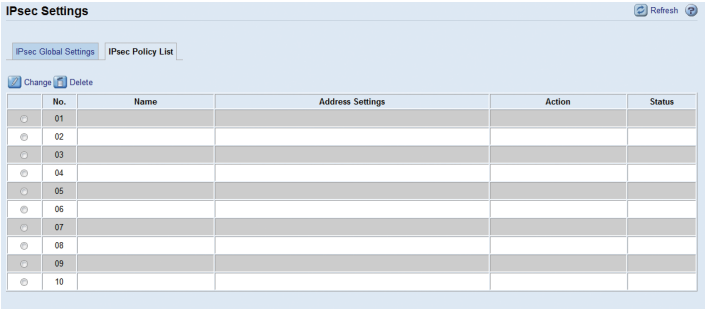
  [DHCPv4], [DHCPv6], [SNMP], [mDNS], [NetBIOS], [UDP Port 53550]

- [All ICMP Bypass]

  Select whether to apply IPsec to ICMP packets (IPv4 and IPv6).

[IPsec Policy List] tab

Click the [IPsec Policy List] tab on the IP security settings page to display the list of registered IPsec policies.



To configure IPsec policies, select the desired IPsec policy, and then click [Change] to open the "IPsec Policy Settings" page. The following settings can be made on the "IPsec Policy Settings" page.

4

IP Policy Settings

- [No.]

  Specify a number between 1 and 10 for the IPsec policy. The number you specify will determine the position of the policy in the IPsec Policy List.

- [Activity]

  Select whether to enable or disable the policy.

- [Name]

  Enter the name of the policy. Can contain up to 16 characters.

- [Address Type]

  Select IPv4 or IPv6 as the type of IP address to be used in IPsec communication.

- [Local Address]

  Displays the IP address of this printer.

- [Remote Address]

  Enter the IPv4 or IPv6 address of the device with which to communicate.

  Can contain up to 39 characters.

- [Prefix Length]

  Enter the prefix length of the Remote Address, using a value between 1 and 128. If this setting is left blank, "32" (IPv4) or "128" (IPv6) will be automatically selected.

- [Action]

  Specify how the IP packets are processed from the following:

  - [Allow]

    IP packets are both sent and received without IPsec applied to them.

  - [Drop]

    IP packets are discarded.

- [Require Security]

  IPsec is applied to IP packets that are both sent and received.

If you have selected [Require Security], you must configure [IPsec Settings] and [IKE Settings].

IPsec Settings

- [Encapsulation Type]

  Specify the encapsulation type from the following:

  - [Transport]

    Select this mode to secure only the payload section of each IP packet when communicating with IPsec compliant devices.

  - [Tunnel]

    Select this mode to secure every section of each IP packet. We recommend this type for communication between security gateways (such as VPN devices).

- [Security Protocol]

  Select the security protocol from the following:

  - [AH]

    Establishes secure communication that supports authentication only.

  - [ESP]

    Establishes secure communication that supports both authentication and data encryption.

  - [ESP&AH]

    Establishes secure communication that supports both data encryption and authentication of packets, including packet headers.

    Note that you cannot specify this protocol when [Tunnel] is selected for [Encapsulation Type].

- [Authentication Algorithm for AH]

  Specify the authentication algorithm to be applied when [AH] or [ESP&AH] is selected for [Security Protocol] from the following:

  [MD5], [SHA1]

- [Encryption Algorithm for ESP]

  Specify the encryption algorithm to be applied when [ESP] or [ESP&AH] is selected for [Security Protocol] from the following:

  [None], [DES], [3DES], [AES-128], [AES-192], [AES-256]

- [Authentication Algorithm for ESP]

  Specify the authentication algorithm to be applied when [ESP] is selected for [Security Protocol] from the following:

  [MD5], [SHA1]

- [Life Time]

  Specify the life time of the IPsec SA (Security Association) as a time period or data volume. The SA will expire when the time period you specify elapses or the volume of data you specify reaches the volume carried.

- [Key Perfect Forward Secrecy]

  Select whether to enable or disable PFS (Perfect Forward Secrecy).

IKE Settings

- [IKE Version]

  Displays the IKE version.

- [Encryption Algorithm]

  Specify the encryption algorithm from the following:

  [DES], [3DES], [AES-128], [AES-192], [AES-256]

- [Authentication Algorithm]

  Specify the authentication algorithm from the following:

  [MD5], [SHA1]

- [IKE Life Time]

  Specify the life time of the ISAKMP SA as a time period. Enter a number of seconds.

- [IKE Diffie-Hellman Group]

  Select the IKE Diffie-Hellman Group to be used in the generation of the IKE encryption key from the following:

  [DH1], [DH2]

- [Pre-Shared Key]

  Specify the PSK (Pre-Shared Key) to be used for authentication of a communicating device. Can contain up to 32 characters.

- [Key Perfect Forward Secrecy]

  Select whether to enable or disable PFS (Perfect Forward Secrecy).

Print List/Report

Print List/Report

- [Configuration Page]

  Prints general information about the printer and its current configuration.

- [Test Page]

  Prints a test page for checking the printing condition.

- [PCL Font List]

  Prints a list of printer-resident fonts.

- [Maintenance Page]

  Prints the maintenance page.

Administrator Tools

Administrator

- [New Password]

  Enter the new administrator password. Can contain up to 16 characters.

- [Confirm New Password]

  Enter the same password again, to confirm.

Reset Settings

- [Reset Network Settings]

  Select to restore network settings to their defaults.

- [Reset Menu Settings]

  Select to restore settings that are not related to the network.

- [Reset IPsec Settings]

  Select to clear the IP security settings.

Note

- [Reset IPsec Settings] appears only when a password is specified in [Administrator].

Backup Setting

Create backup files containing the printer's configuration settings. If necessary, these backup files can be used to restore previous configurations.

- [Back up Network Settings]

  Backs up the network settings.

- [Back up Menu Settings]

  Backs up settings that are not related to the network.

- [Back up IPsec Settings]

  Backs up the IP security settings to a file.

Note

- [Back up IPsec Settings] appears only when a password is specified in [Administrator].

Follow the procedure below to create configuration backup files.

1. **Select the option button for the type of data you wish to back up.**
2. **Enter the administrator password if required.**
3. **Click [OK].**
4. **Click [Save] in the confirmation dialog box.**
5. **Navigate to the location to save the backup file.**
6. **Specify a name for the file, and click [Save].**

Restore Setting

Restore the printer's settings from a previously created backup file.

- [File to Restore]

  Enter the path and name of the file to restore, or click [Browse...] to select the file.

Follow the procedure below to restore configuration backup files.

1. **Click [Browse...].**
2. **Navigate to the directory containing the backup file to restore.**
3. **Select the backup file, and click [Open].**
4. **Enter the administrator password if required.**
5. **Click [OK].**

Help Source File Setting

- [Help Source File]

  Enter the help source file path.

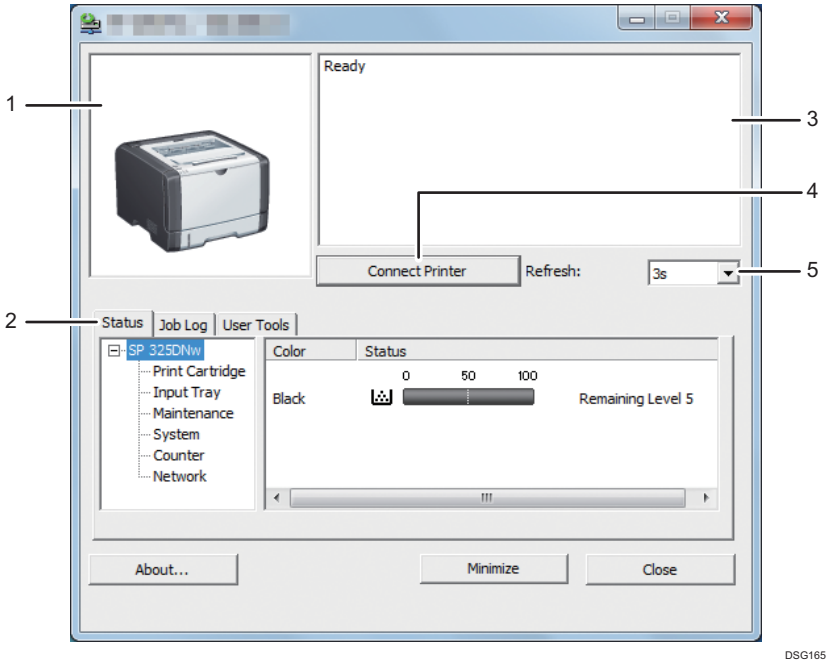
Using Smart Organizing Monitor

The state and status information of the machine can be checked using Smart Organizing Monitor.

Displaying the Smart Organizing Monitor Dialog

1. **On the [Start] menu, click [All Programs].**
2. **Click [SP 320 Series Software Utilities].**
3. **Click [Smart Organizing Monitor].**
4. **If the machine you are using is not selected, click [Connect Printer], and then do one of the following:**
   - Select the machine's model.
   - Enter the IP address of the machine manually.
   - Click [Search Network Printer] to search the machine via the network.
5. **Click [OK].**

Checking the Status Information



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1. **Image area**

   Displays the status of this machine with an icon.

2. **Tab area**
    - Status tab
        - Printer Name
        - Print Cartridge

          Displays the following messages to indicate remaining toner levels: Remaining Level 1 to 5, "Almost Empty" and "Empty".
        - Input Tray

          You can check the following information about the input trays.

          [Input Tray], [Status], [Paper Size], [Paper Type]

          Displays the type of the paper loaded into each input tray.
        - Maintenance

          Displays the consumables statuses.
        - System

          Displays the system information about the printer, such as the model name, system version, and memory size.
        - Counter

          Displays information about the counters.
        - Network

          Displays network details such as the printer's IP address and network-related information.
    - Job Log tab

      Displays the job log information.
    - User Tools tab

      Click to print lists or configuration pages, or to configure settings of the machine.
3. **Message area**

   Displays the status of this machine with a message.

   For details about error messages, see page 81 "Error and Status Messages Appear on Smart Organizing Monitor".
4. **[Connect Printer] button**

   Click to select a printer driver.
5. **[Refresh:]**

   Specify the automatic update of the display.

Configuring the Machine Settings

Smart Organizing Monitor is used to modify the machine's settings.

1. **On the [Start] menu, click [All Programs].**
2. **Click [SP 320 Series Software Utilities].**
3. **Click [Smart Organizing Monitor].**

4. **If the machine you are using is not selected, click [Connect Printer], and then do one of the following:**
    - Select the machine's model.
    - Enter the IP address of the machine manually.
    - Click [Search Network Printer] to search the machine via the network.
5. **Click [OK].**
6. **On the [User Tools] tab, click [Printer Configuration].**
7. **Enter the access code, and then click [OK].**

    The default access code is "Admin".
8. **Change the settings if necessary.**
9. **Click [OK].**
10. **Click [Close].**

Access Code

The configurable functions depend on the authority of the access code you enter.

- Administrator

  All tabs in the [Printer Configuration] dialog box are available.
- General users

  Only the [Paper Input] tab is available.

Tab Settings

This section provides a tab-by-tab overview of the machine settings that can be modified using Smart Organizing Monitor. For more information on each setting item, see the Smart Organizing Monitor Help.

Paper Input tab

- You can change paper size and other paper settings.

Maintenance tab

- You can adjust print starting positions.

System tab

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

IPv6, Network 1, Network 2 and Network 3 tabs

- You can set configurations about network connection and communication.

- The following operations are possible on these tabs:
  - Checking the printer name, active protocol, and other printer information
  - Making interface settings, including the timeout setting and protocol settings
  - Checking or making TCP/IP settings
  - Checking or making SMTP, SNMP and IPsec settings
  - Checking or making Alert settings

Wireless tab

- You can set configurations about wireless LAN network connection and communication.
- The following operations are possible on the tab:
  - Checking the wireless LAN status
  - Connecting wireless LAN manually
  - Connecting with one touch using WPS (only SP 320DN)

Printer tab

- You can set configurations about the printer.

Printing the Configuration Page

1. **On the [Start] menu, click [All Programs].**
2. **Click [SP 320 Series Software Utilities].**
3. **Click [Smart Organizing Monitor].**
4. **If the machine you are using is not selected, click [Connect Printer], and then do one of the following:**
   - Select the machine's model.
   - Enter the IP address of the machine manually.
   - Click [Search Network Printer] to search the machine via the network.
5. **Click [OK].**
6. **On the [User Tools] tab, select [Configuration Page] in the [List/Test Print] list.**
7. **Click [Print].**

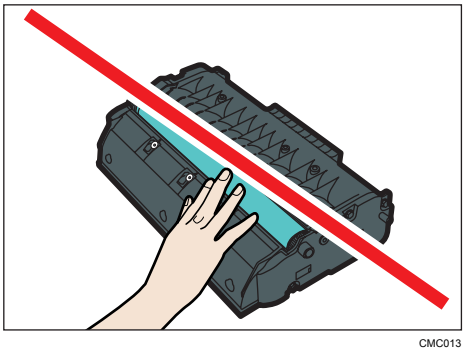
5. Maintaining the Machine

This chapter describes how to replace supplies and how to clean the machine.

Replacing the Print Cartridge

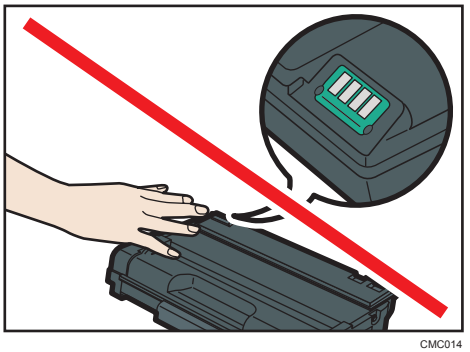
Important

- Store print cartridge in a cool dark place.
- Actual printable numbers vary depending on image volume and density, number of pages printed at a time, paper type and size, and environmental conditions such as temperature and humidity. Toner quality degrades over time. Early replacement of the print cartridge might be necessary. Therefore, we recommend you always keep a new print cartridge ready.
- For good print quality, the manufacturer recommends that you use genuine toner from the manufacturer.
- The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.
- Do not allow paper clips, staples, or other small objects to fall inside the machine.
- Do not expose the print cartridge without its cover to direct sunlight for a long time.
- Do not touch the print cartridge's photo conductor unit.



CMC013

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



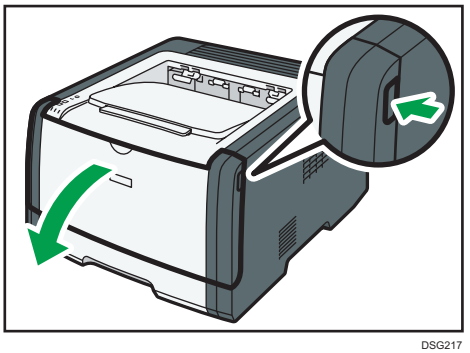
CMC014

- **If toner runs out, you cannot print until the print cartridge is replaced.**

Toner/Paper End indicator

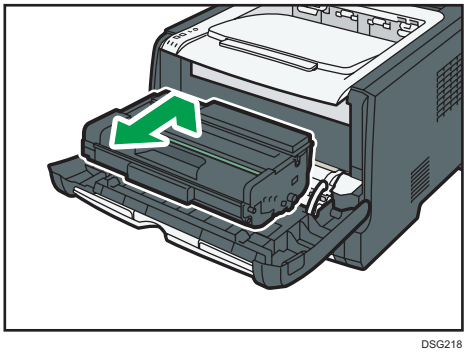
- Replace the print cartridge when the Toner/Paper End indicator lights up.
- Prepare a new print cartridge when the Toner/Paper End indicator flashes.

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



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3. **Hold the center of the print cartridge and carefully raise it slightly and then pull it out horizontally.**

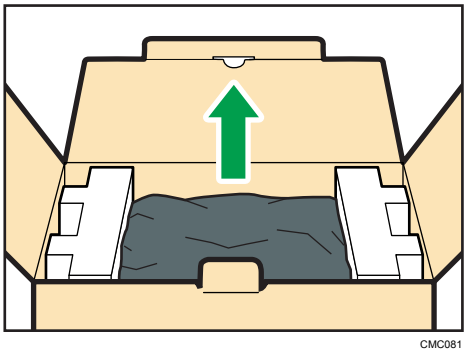


DSG218

- Do not shake the removed print cartridge. Doing so can cause remaining toner to leak.

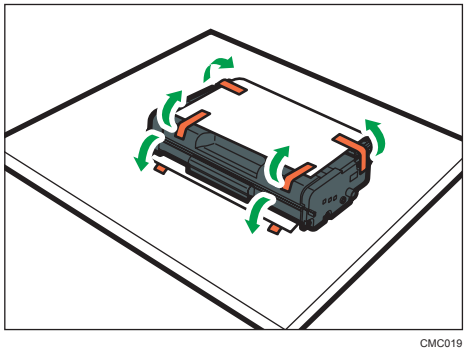
- Place the old print cartridge on paper or similar material to avoid dirtying your workspace.

4. **Take the new print cartridge out of the box, and then take it out of the plastic bag.**



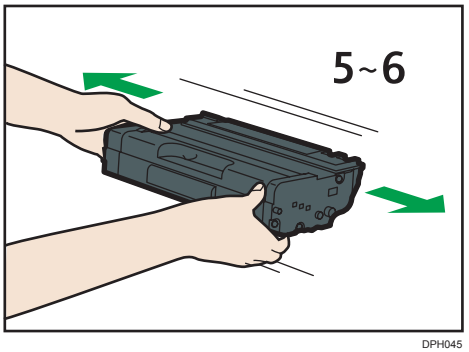
CMC081

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



CMC019

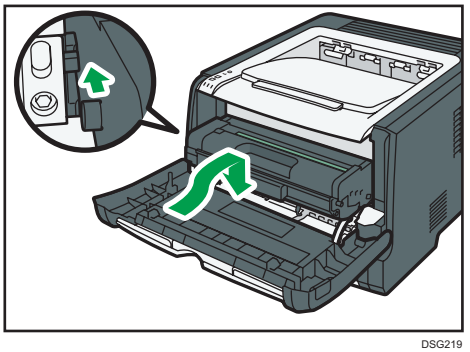
6. **Hold the print cartridge and shake it from side to side five or six times.**



DPH045

Even distribution of toner within the bottle improves print quality.

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

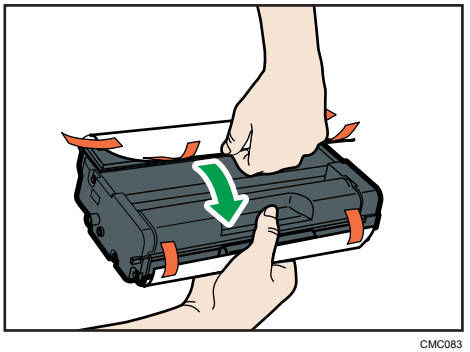


DSG219

8. **Carefully push up the front cover until it closes. Be careful not to trap your fingers.**

   After closing the front cover, wait until the print cartridge is ready to use.

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



CMC083

Note

- Make sure to cover the old print cartridge with the protective cover for recycling and environmental purposes.
- Region A (mainly Europe and Asia)
  If you want to discard your used toner container, please contact your local sales office. If you discard it by yourself, treat it as general plastic waste material.
- Region B (mainly North America)
  Please see our local company website for information on the recycling of supply products, or you can recycle items according to the requirements of your local municipalities or private recyclers.

Cautions When Cleaning

Clean the machine periodically to maintain high print quality.

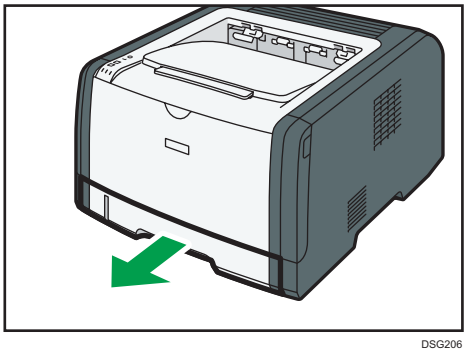
Dry wipe the exterior with a soft cloth. If dry wiping is not sufficient, wipe with a soft, damp cloth that has been wrung out thoroughly. If you still cannot remove the stain or grime, use a neutral detergent, wipe over the area with a thoroughly-wrung damp cloth, and then dry wipe the area and allow it to dry.

Important

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

Cleaning the Friction Pad and Paper Feed Roller

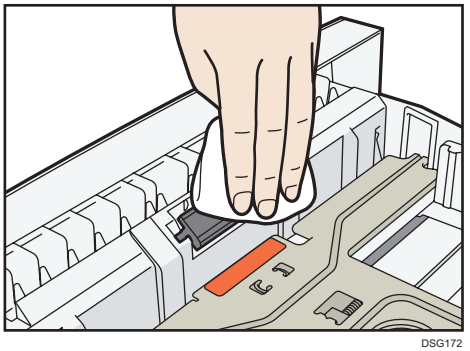
1. **Turn off the power.**
2. **Unplug the power cord from the wall outlet. Remove all the cables from the machine.**
3. **Pull out tray 1 carefully with both hands.**



DSG206

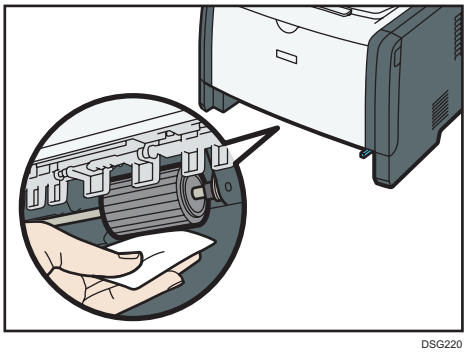
Place the tray on a flat surface. If there is paper in the tray, remove it.

4. **Wipe the friction pads with a damp cloth.**



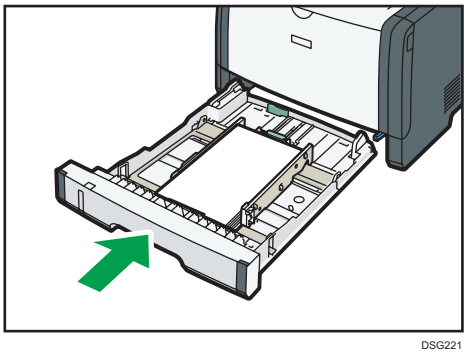
DSG172

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



DSG220

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



DSG221

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

Note

- If jams or multi-sheet feeds occur after cleaning the friction pad, contact your sales or service representative.

Moving and Transporting the Machine

This section provides cautions that you must follow when moving the machine both short and long distances.

Repack the machine in its original packing materials when moving it over a long distance.

Important

- **Be sure to disconnect all cables from the machine before transporting it.**
- **The machine is a precision piece of machinery. Be sure to handle it carefully when moving it.**
- **Make sure to move the machine horizontally. Take extra caution when carrying the machine up or down stairs.**
- **Do not remove the print cartridge when moving the machine.**
- **Be sure to hold the machine level while carrying it. To prevent toner from spilling, move the machine carefully.**
- Keep the machine away from salt-bearing air and corrosive gases. Also, do not install the machine in places where chemical reactions are likely (laboratories, etc.), as doing so will cause the machine to malfunction.

Ventilation

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

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

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

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

New machine smell

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

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

1. **Be sure to check the following points:**
   - The power switch is turned off.
   - The power cord is unplugged from the wall outlet.
   - All other cables are unplugged from the machine.
2. **Lift the machine using the inset grips on both sides of the machine, and then move it horizontally to the place where you want to use it.**

Note

- To move the machine over a long distance, pack it well and empty all the paper trays. Take care not to tip or tilt the machine during transit.

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

Disposal

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

Where to Inquire

Contact your sales or service representative for further information about the topics included in this manual or to inquire about other topics not included in this manual.

6. Troubleshooting

This chapter provides solutions for error messages and other problems.

Error and Status Indicate on the Control Panel

The LED on the operation panel indicates the machine status, including any errors.

LED			Status	Solution
Power	Alert	Toner/ Paper End		
On	-	-	The power is on.	The status is normal.
On	-	Flashing	The print cartridge is almost empty.	Replace the print cartridge before it becomes empty.
On	-	On	• The print cartridge is empty. • The print cartridge is not set correctly. • The tray has run out of paper.	• Replace the print cartridge. • Set the print cartridge again correctly. • Load paper into the tray.
On	Flashing	-	A paper jam has occurred in the machine.	Use Web Image Monitor or Smart Organizing Monitor to determine where the paper jam is, and then remove the jammed paper. See page 83 "Clearing Misfeeds" and page 94 "Paper Feed Problems".

LED			Status	Solution
Power	Alert	Toner/ Paper End		
On	On	-	• The size of paper to print on and the size of the paper loaded in the tray do not match. • A cover is open.	• Use Web Image Monitor or Smart Organizing Monitor to check the paper size settings, and then change either the size of paper to print on or the size of paper loaded in the tray. • Confirm that all the covers are closed completely.
On	On	-	Another type of error has occurred.	Use Web Image Monitor or Smart Organizing Monitor to check the error, and then take appropriate measures. See page 52 "Using Web Image Monitor" or page 65 "Using Smart Organizing Monitor".
On	On	On	A malfunction has occurred.	Contact your sales or service representative.

Error and Status Messages Appear on Smart Organizing Monitor

Message	Causes	Solutions
No Response from I/O Device Check the cable, power cord, and main switch.	• The power cable of the machine is not plugged in. • The power of the machine is not turned ON. • The USB cable is not connected.	• Check the printer power cord. • Check the printer power switch is on. • Check the USB cable is properly connected.
Tray Not Detected or No Paper The indicated paper source tray is not set properly, or no paper loaded. Check the indicated tray.	• Tray 1 has run out of paper. • The bypass tray has run out of paper.	• Load paper into Tray 1. See page 20 "Loading Paper". • Load paper into the bypass tray. See page 20 "Loading Paper".
Tray 1 Jam Bypass Tray Jam Duplex Jam Inner Jam Outer Jam Total Jam	A paper jam has occurred in the machine.	Remove the jammed paper. See page 83 "Clearing Misfeeds" and page 94 "Paper Feed Problems".
Paper Size Mismatch Paper of the selected paper size is not loaded in the indicated paper source tray. Check the indicated tray.	The paper size specified on the machine and the size specified in the printer driver do not match.	For details about specifying the paper size setting on the machine, see page 19 "Paper Specifications and Adding Paper". For details about changing the paper size setting in the printer driver, see the printer driver Help.

Message	Causes	Solutions
Paper Type Mismatch Paper of the selected paper type is not loaded in the indicated paper source tray. Check the indicated tray.	The paper type specified on the machine and the type specified in the printer driver do not match.	For details about changing the paper type setting of the machine, see page 19 "Paper Specifications and Adding Paper". For details about changing the paper type setting in the printer driver, see the printer driver Help.
Print Cartridge is near empty.	The print cartridge is almost empty.	Prepare a new print cartridge.
Shortly printing becomes not available. Please keep Print Cartridge handy.	The machine has run out of the toner.	Replace the print cartridge. See page 69 "Replacing the Print Cartridge".
Printing has been interrupted because of the memory overflow.	The data is too large or complex to print.	Select [600 x 600 dpi] in [Resolution] to reduce the size of data. For details, see the printer driver Help.
Waste Toner full No printing is available. Open the indicated cover, and then replace Print Cartridge.	The waste toner bottle is full.	Replace the print cartridge.
No Toner or Waste Toner full No printing is available. Open the indicated cover, and then replace Print Cartridge.	The print cartridge has not been installed.	Replace the print cartridge. See page 69 "Replacing the Print Cartridge".

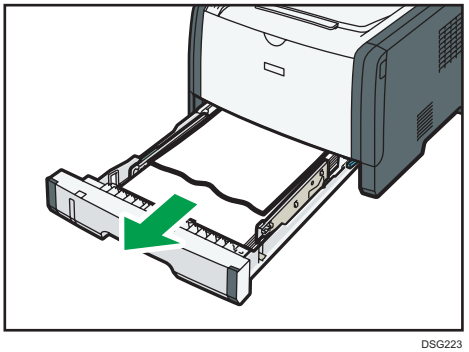
Clearing Misfeeds

Important

- Jammed paper may be covered in toner. Be careful not to get toner on your hands or clothes.
- Toner on prints made immediately after clearing a paper jam may be insufficiently fused and can smudge. Make test prints until smudges no longer appear.
- Do not forcefully remove jammed paper, as it may tear. Torn pieces remaining inside the machine will cause further jams and possibly damage the machine.
- Paper jams can cause pages to be lost. Check your print job for missing pages and reprint any pages that did not print out.
- If the alert indicator lights up continuously or flashes, switch to copier mode and check the displayed message.

Removing Jammed Paper from Tray 1

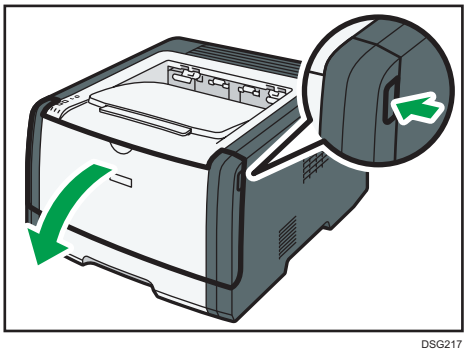
1. Pull tray 1 halfway out, and check for jammed paper. If there is jammed paper, remove it carefully.



DSG223

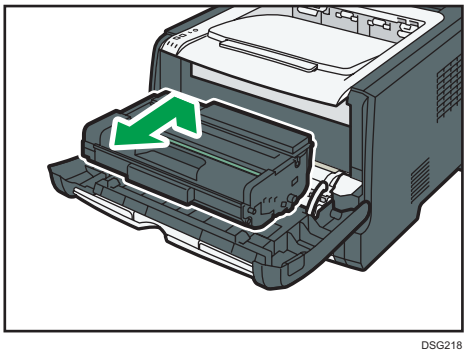
2. Carefully slide tray 1 back in until it stops.
3. If paper is loaded in the bypass tray, remove the paper.
4. Close the bypass tray.

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



DSG217

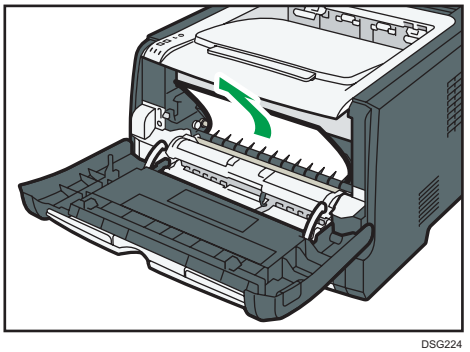
6. **Hold the center of the print cartridge and carefully raise it slightly and then pull it out horizontally.**



DSG218

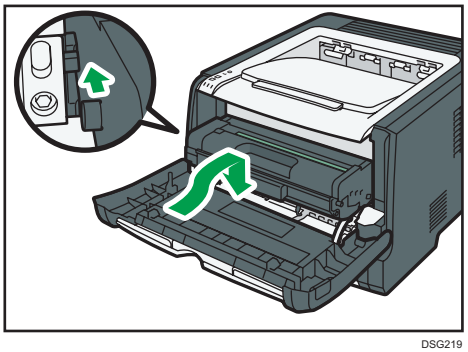
- Do not shake the removed print cartridge. Doing so can cause remaining toner to leak.
- Place the print cartridge on paper or similar material to avoid dirtying your workspace.

7. **Lifting the guide plate, remove the jammed paper carefully.**



DSG224

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



DSG219

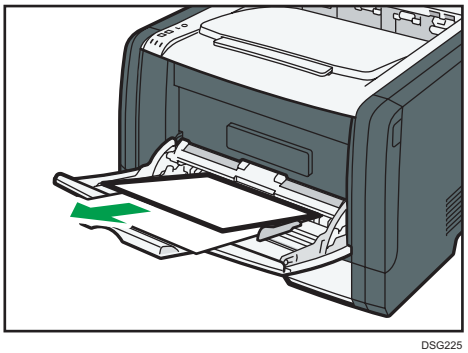
9. **Using both hands, carefully push up the front cover until it closes.**

Note

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

Removing Jammed Paper from the Bypass Tray

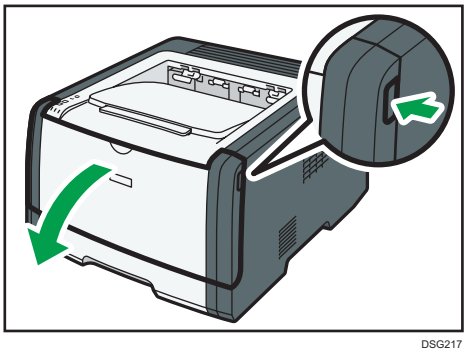
1. **If paper is jammed in the bypass tray input area, remove the jammed paper carefully.**



DSG225

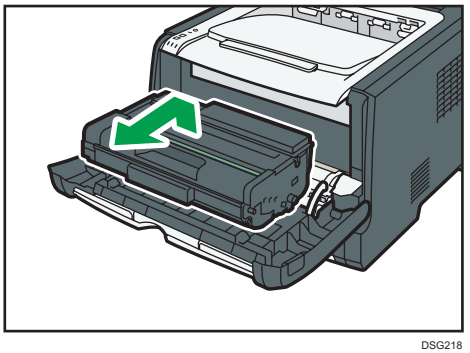
2. **Close the bypass tray.**

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



DSG217

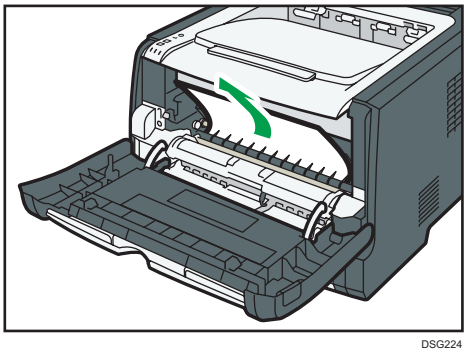
4. **Hold the center of the print cartridge and carefully raise it slightly and then pull it out horizontally.**



DSG218

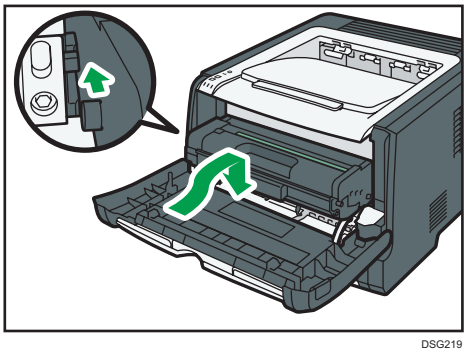
- Do not shake the removed print cartridge. Doing so can cause remaining toner to leak.
- Place the print cartridge on paper or similar material to avoid dirtying your workspace.

5. **Lifting the guide plate, remove the jammed paper carefully.**



DSG224

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



DSG219

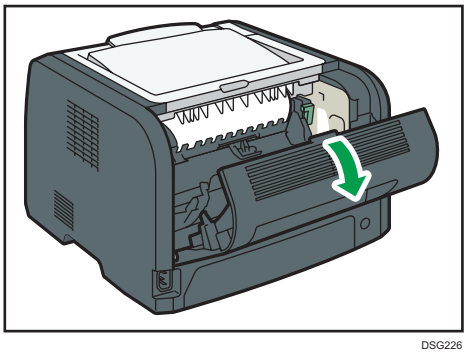
7. **Using both hands, carefully push up the front cover until it closes.**

Note

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

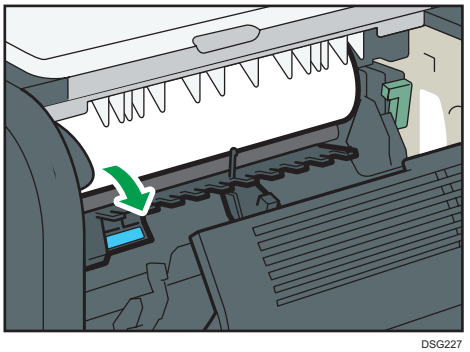
Removing Jammed Paper from the Standard Tray or Duplex Unit

1. **Open the rear cover.**



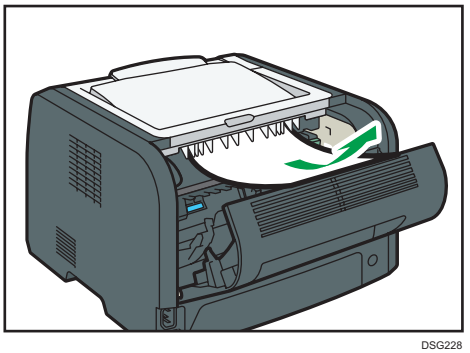
DSG226

2. **Hold down the B lever.**



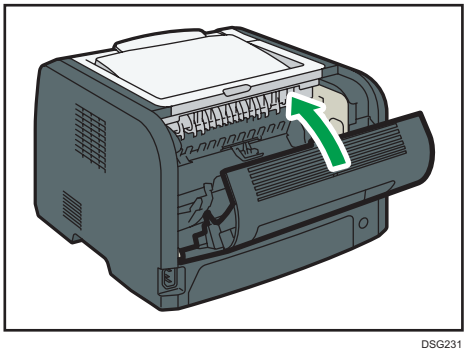
DSG227

3. **Remove the jammed paper carefully.**



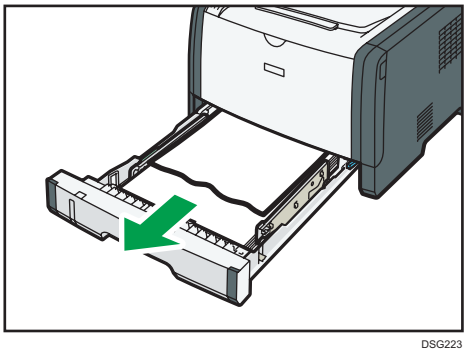
DSG228

4. **Close the rear cover.**



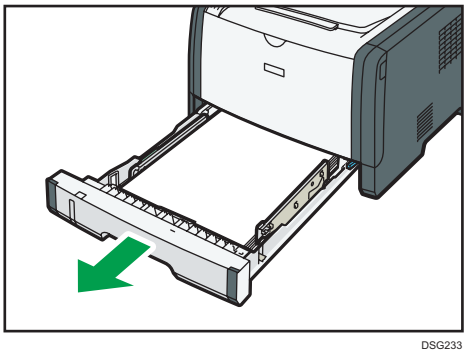
DSG231

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



DSG223

6. **Pull tray 1 out completely with both hands.**

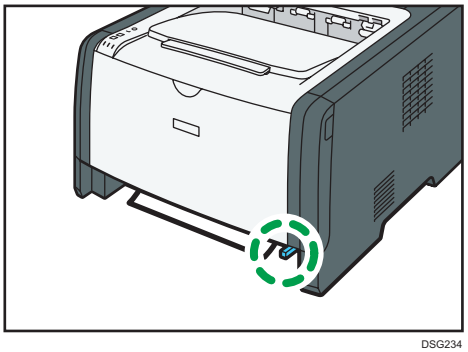


DSG233

Place the tray on a flat surface.

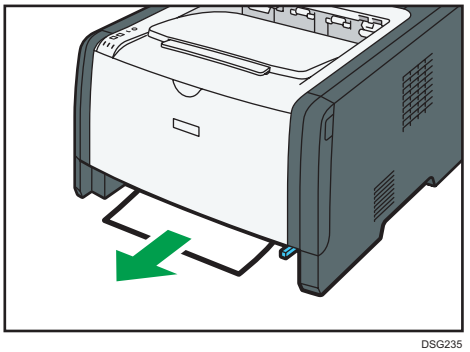
7. **Push the lever.**

Pushing the lever lowers the duplex transport unit.



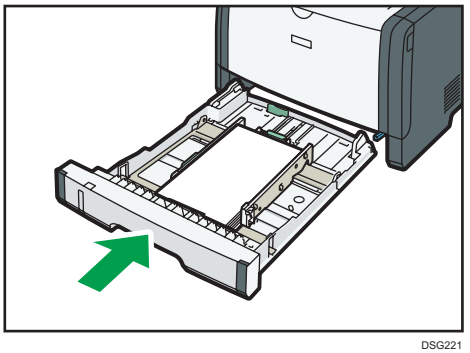
DSG234

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



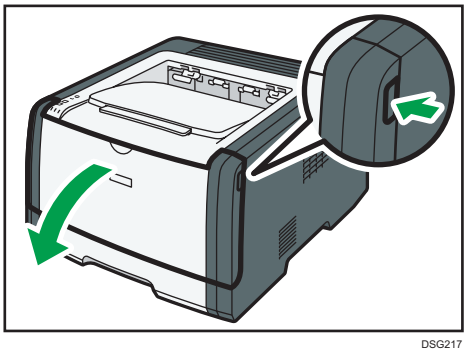
DSG235

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



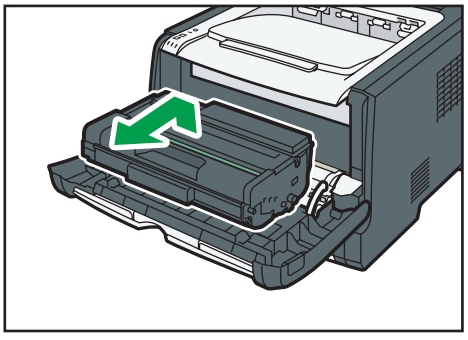
DSG221

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



DSG217

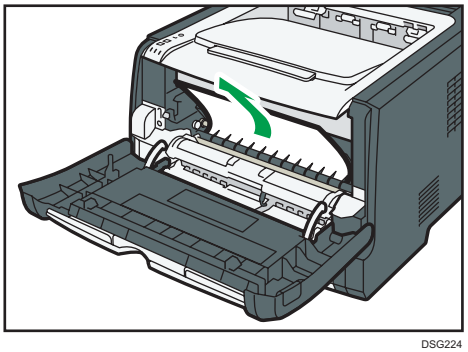
12. **Hold the center of the print cartridge and carefully raise it slightly and then pull it out horizontally.**



DSG218

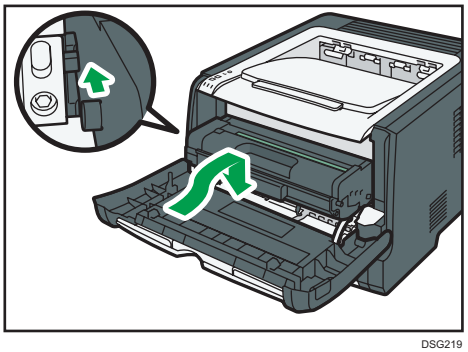
- Do not shake the removed print cartridge. Doing so can cause remaining toner to leak.
- Place the print cartridge on paper or similar material to avoid dirtying your workspace.

13. **Lifting the guide plate, remove the jammed paper carefully.**



DSG224

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



DSG219

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

Note

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

When You Cannot Print Test Page

Possible cause	Solution
The power cord, a USB cable, or a network cable is not connected correctly.	Make sure that the power cord, USB cable, and network cable are connected correctly. Also confirm that they are not damaged.
The port connection is not established correctly.	1. On the [Start] menu, click [Devices and Printers]. 2. Right-click the icon of the machine, and then click [Printer properties]. 3. Click the [Ports] tab, and then make sure that the port is set as a USB or network printer.

Paper Feed Problems

If the machine is operating but paper will not feed or paper jams occur frequently, check the condition of the machine and paper.

Problem	Solution
Paper does not feed smoothly.	• Use supported types of paper. See page 34 "Supported Paper". • Load paper correctly, making sure that the paper guides are properly adjusted. See page 20 "Loading Paper". • If the paper is curled, straighten the paper. • Take out the paper from tray and fan it well. Then, reverse the top and bottom of the paper, and put it back in the tray.
Paper jams occur frequently.	• If there are gaps between the paper and the paper guides, adjust the paper guides to remove the gaps. • Avoid printing on both sides of paper when printing images that contain large solid areas, which consume a lot of toner. • Use supported types of paper. See page 34 "Supported Paper". • Load paper only as high as the upper limit markings on the paper guide. • Make sure that the friction pads and paper feed rollers are clean. See page 74 "Cleaning the Friction Pad and Paper Feed Roller".

Problem	Solution
Multiple sheets of paper are fed at one time.	• Fan the paper well before loading. Also make sure that the edges are even by tapping the stack on a flat surface such as a desk. • Make sure that the paper guides are in the right position. • Use supported types of paper. See page 34 "Supported Paper". • Load paper only as high as the upper limit markings on the paper guide. • Make sure that the friction pads and paper feed rollers are clean. • Check that paper was not added while there was still some left in the tray. Only add paper when there is none left in the tray.
Paper gets wrinkles.	• Paper is damp. Use paper that has been stored properly. See page 34 "Supported Paper". • Paper is too thin. See page 34 "Supported Paper". • If there are gaps between the paper and the paper guides, adjust the paper guides to remove the gaps.
The printed paper is curled.	• Load the paper upside down in the paper tray. • If the paper curl is severe, take prints from the output tray more frequently. • Paper is damp. Use paper that has been stored properly. See page 34 "Supported Paper".
Images are printed diagonally to the pages.  CER091	If there are gaps between the paper and the paper guides, adjust the paper guides to remove the gaps.

Print Quality Problems

Checking the Condition of the Machine

If there is a problem with the quality of printing, first check the condition of the machine.

Possible Cause	Solution
There is a problem with the machine's location.	Make sure that the machine is on a level surface. Place the machine where it will not be subject to vibration or shock.
Unsupported types of paper is used.	Make sure that the paper being used is supported by the machine. See page 34 "Supported Paper".
The paper type setting is incorrect.	Make sure that the paper type setting of the printer driver matches the type of paper loaded. See page 32 "Specifying Paper Type and Paper Size Using the Printer Driver".
A non-genuine print cartridge is being used.	Refilled or non-genuine print cartridge reduces print quality and can cause malfunctions. Use genuine print cartridge only.
An old print cartridge is being used.	Print cartridge should be opened before their expiration date and used within six months of being opened.
The machine is dirty.	See page 69 "Maintaining the Machine", and clean the machine as required.
Humidity level surrounding the machine may be too low.	Using the machine in a room where humidity level is too low may cause black lines of a few millimeters thick to appear on printouts with 75-millimeter spaces in between. In this case, set [Low Humidity Mode] to [On]. For details about how to configure the settings, see page 65 "Using Smart Organizing Monitor" and the Smart Organizing Monitor Help.

Checking the Printer Driver Settings

Problem	Solution
The printed image is smudged.	On the printer driver's [Paper] tab, select [Bypass Tray] in the [Input Tray:] list. In the [Paper Type:] list, select a proper paper type.

Problem	Solution
Images smudge when rubbed. (Toner is not fixed.)	On the printer driver's [Paper] tab, select a proper paper type in the [Paper Type:] list.
When printing graphics, the output and the screen are different.	To print accurately, specify the printer driver setting to print without using the graphics command. For details about specifying the printer driver setting, see the printer driver Help.
Images are cut off, or excess is printed.	Use the same size paper 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 coarse.	Use the application's or printer driver's settings to specify a higher resolution. For details about the printer driver's settings, see the printer driver Help.
A solid line is printed as a dashed line or appears blurred.	Change the dithering settings on the printer driver. For details about the dithering settings, see the printer driver Help.
Fine lines are fuzzy, of inconsistent thickness, or do not appear.	Change the dithering settings on the printer driver. For details about the dithering settings, see the printer driver Help. If the problem persists, specify the settings of the application in which the image was created to change the thickness of the lines.

Printer Problems

This section describes printing problems and possible solutions.

When You Cannot Print Properly

Problem	Solution
An error occurs.	If an error occurs when printing, change the computer or printer driver settings. • Check the printer icon name does not exceed 32 alphanumeric characters. If it does, shorten it. • Check whether other applications are operating. Close any other applications, as they may be interfering with printing. If the problem is not resolved, close unneeded processes too. • Check that the latest printer driver is being used.
A print job is canceled.	Set I/O Timeout to a larger value than the current settings.
There is a considerable delay between the print start command and actual printing.	• Processing time depends on data volume. High volume data, such as graphics-heavy documents, take longer to be processed. • To speed up printing, reduce the printing resolution using the printer driver. For details, see the printer driver Help. • The machine is calibrating color. Wait for a while.
Documents are not printed properly when using a certain application, or image data is not printed properly. Some characters are printed faintly or not printed.	Change the print quality settings.

Problem	Solution
It takes too long to complete the print job.	• Photographs and other data intensive pages take a long time to be processed so simply wait when printing such data. • Changing the settings with printer driver may help to speed up printing. See the printer driver Help. • The data is so large or complex that it takes a long time to be processed. • If "Processing..." is displayed on the screen, the machine is receiving data. Wait for a while. • The printer is adjusting the color registration. Wait for a while.
A printed image is different from the image on the computer's display.	• When you use some functions, such as enlargement and reduction, the layout of the image might be different from that displayed in the computer display. • Check that the page layout settings are properly configured in the application. • Make sure the paper size selected in the printer properties dialog box matches the size of the paper loaded. For details, see the printer driver Help.
Images are cut off, or excess pages are printed.	If you are using paper whose size is smaller than the paper size selected in the application, use the same size paper selected in the application. If you cannot load paper of the correct size, use the reduction function to reduce the image, and then print. See the printer driver Help.

When You Cannot Print Clearly

Problem	Solution
The whole printout is blurred.	• The paper being used may be damp. Use paper that has been stored properly. See page 34 "Supported Paper". • If you enable [Toner Saving] under [System Settings], printing is generally less dense. • The print cartridge is almost empty. If "Replacement Required: Print Cartridge" appears on the screen, replace the indicated print cartridge. • Condensation may have occurred. If rapid change in temperature or humidity occurs, use this machine only after it has acclimatized.
Toner smears appear on the print side of the page.	• The paper setting may not be correct. For example, although you are using thick paper, the setting for thick paper may not be specified. Check the printer driver's paper settings. See the printer driver Help. • Check that the paper is not curled or bent. Envelopes can be curled easily. Flatten out the paper before loading it. See page 20 "Loading Paper".
Horizontal lines appear on the printed paper.	• Impact can cause lines to appear on printed paper and other malfunctions. Protect the printer from impact at all times, especially while it is printing. • If lines appear on prints, turn the printer off, wait a few moments, and then turn it back on again. Then, perform the print job again.
Photo images are coarse.	Some applications lower the resolution for making prints.
The backs of printed sheets are blemished.	• When removing a jammed sheet, the inside of the printer may have become dirty. Print several sheets until they come out clean. • If document size is larger than paper size, e.g. A4 document on B5 paper, the back of the next printed sheet may become dirty.

Problem	Solution
Fine dot patterns do not print.	Change the [Dithering] setting in the printer driver's dialog box. See the printer driver Help.
If rubbed with your finger, the print smears.	The setting of the paper may not be correct. For example, although thick paper is used, the setting for thick paper may not be specified. • Check the paper settings of this printer. See page 19 "Paper Specifications and Adding Paper". • Check the paper settings of the printer driver. See the printer driver Help.

When Paper is Not Fed or Ejected Properly

Problem	Solution
Prints do not stack properly.	The paper being used may be damp. Use paper that has been stored properly. See page 34 "Supported Paper".
The printed paper is curled.	If you enable [Toner Saving] under [System Settings], printing is generally less dense.
Printed envelopes come out creased.	Check if the fusing unit levers are properly set. Lower the fusing unit levers.
Prints fall in front of the machine when they are output.	Raise the stop fence. See Setup Guide.
Prints do not stack properly.	• Paper is damp. Use paper that has been stored properly. See page 34 "Supported Paper". • Raise the stop fence. See Setup Guide.

Common Problems

This section describes how to troubleshoot common problems that may occur while operating the machine.

Problem	Possible cause	Solution
The machine does not turn on.	The power cord is not connected properly.	• Make sure that the power plug is firmly inserted into the wall outlet. • Make sure that the wall outlet is not defective by connecting another working device.
The red indicator is lit or flashing.	An error has occurred.	See page 79 "Error and Status Indicate on the Control Panel".
Pages do not print.	The machine is receiving data.	If the Data In indicator is flashing, the machine is receiving data. Wait for a while.
Pages are not printed.	The interface cable is not connected correctly.	• Reconnect the cable. • Check that the interface cable is the correct type.
Strange noise is heard.	The supplies are not properly installed.	Confirm that the supplies are properly installed.
The network setting may not have been configured properly or the 3G dongle may not be connected properly.	Using Web Image Monitor, check the setting and check whether printing can be performed.	If the problem persists, contact your service representative.

Note

- If any of these problems persist, turn off the power, pull out the power cord, and contact your sales or service representative.

7. Configuring Network Settings Using OS X

This chapter describes how to connect the machine to the network and specify the network settings using OS X.

Configurations differ according to the communication environment of your system.

Connecting the Machine to a Wired Network

The following procedure is explained using OS X 10.11 as an example.

Using a USB Cable

1. **Turn on your computer.**
2. **Insert the provided CD-ROM into the CD-ROM drive of the computer.**

   If your computer does not have a CD-ROM drive, download a setup file from our website (http://www.ricoh.com/printers/sp310/support/gateway/).
3. **Double-click the CD-ROM drive icon.**
4. **Double-click the [Mac OS X] folder.**
5. **Double-click the folder of driver you want to install.**
6. **Follow the instructions in the setup wizard.**
7. **Click [Close] in the [Summary] dialog box.**
8. **Start System Preferences.**
9. **Click [Printers & Scanners].**

   Check that the machine automatically recognized by plug-and-play appears in the printers list.
10. **Click the [+] button.**

    If [Add Printer or Scanner...] appears, click it.
11. **Click [Default].**
12. **Select the printer that has "USB" indicated in the [Kind] column.**
13. **Select the printer you are using from the [Use:] pop-up menu.**
14. **Click [Add].**
15. **Click [Duplexer] on the [Setting up] screen, and then click [OK].**
16. **Quit System Preferences.**

    Setup is completed.

Note

- If you want to install Smart Organizing Monitor, see page 106 "Installing Smart Organizing Monitor".

Using an Ethernet Cable

1. **Turn on your computer.**
2. **Insert the provided CD-ROM into the CD-ROM drive of the computer.**

   If your computer does not have a CD-ROM drive, download a setup file from our website (http://www.ricoh.com/printers/sp310/support/gateway/).
3. **Double-click the CD-ROM drive icon.**
4. **Double-click the [Mac OS X] folder.**
5. **Double-click the folder of driver you want to install.**
6. **Follow the instructions in the setup wizard.**
7. **Click [Close] in the [Summary] dialog box.**
8. **Start System Preferences.**
9. **Click [Printers & Scanners].**
10. **Click the [+] button.**

    If [Add Printer or Scanner...] appears, click it.
11. **Click [Default].**
12. **Select the printer that has "Bonjour" indicated in the [Kind] column.**

    If the printer name is not displayed, select the icon that corresponds to your network environment (TCP/IP, etc.).
13. **Select the printer you are using from the [Use:] pop-up menu.**
14. **Click [Add].**
15. **Click [Duplexer] on the [Setting up] screen, and then click [OK].**
16. **Quit System Preferences.**
17. **On the [Application] menu, double-click [Smart Organizing Monitor].**

    For details about how to install Smart Organizing Monitor, see page 106 "Installing Smart Organizing Monitor".
18. **Click [User Tools] tab.**
19. **Click [Printer Configuration].**
20. **Enter the access code, and then click [OK].**

    The default access code is "Admin".

21. **On the [Network 1] tab, select [On] for [DHCP] to automatically obtain the IP address or [Off] to specify the IP address manually.**

    If you have selected [On], proceed to Step 25.

22. **Enter the machine's IPv4 address in [IP Address].**
23. **Enter the subnet mask in [Subnet Mask].**
24. **Enter the gateway address in [Default Gateway Address].**
25. **Click [OK].**
26. **Wait until the machine restarts.**

    Setup is completed.

Connecting the Machine to a Wireless Network

You can use this function on SP 325DNw only.

There are four methods for connecting the machine to a wireless network:

- Using the WPS button

  See page 107 "Using the WPS Button".

- Using a PIN code

  See page 108 "Using a PIN Code".

- Manual setup

  See page 109 "Manual Setup".

Note

- It is necessary to install Smart Organizing Monitor to the computer before configuring the settings. For details about how to install Smart Organizing Monitor, see page 106 "Installing Smart Organizing Monitor".

Installing the Printer Driver

The following procedure is explained using OS X 10.11 as an example.

1. **Turn on your computer.**
2. **Insert the provided CD-ROM into the CD-ROM drive of the computer.**

   If your computer does not have a CD-ROM drive, download a setup file from our website (http://www.ricoh.com/printers/sp310/support/gateway/).
3. **Double-click the CD-ROM drive icon.**
4. **Double-click the [Mac OS X] folder.**
5. **Double-click the folder of driver you want to install.**
6. **Follow the instructions in the setup wizard.**
7. **Click [Close] in the [Summary] dialog box.**

Installing Smart Organizing Monitor

The following procedure is explained using OS X 10.11 as an example.

1. **Turn on your computer.**

2. **Insert the provided CD-ROM into the CD-ROM drive of the computer.**

   If your computer does not have a CD-ROM drive, download a setup file from our website (http://www.ricoh.com/printers/sp310/support/gateway/).
3. **Double-click the CD-ROM drive icon.**
4. **Double-click the [Mac OS X] folder.**
5. **Double-click the [Utility] folder.**
6. **Double-click the package file icon.**
7. **Follow the instructions in the setup wizard.**
8. **If the [Printer Driver Selection] dialog box appears, do one of the following:**
   - Select the machine's model.
   - Enter the IP address of the machine manually.
   - Click [Search Network Printer] to search the machine via the network.
9. **Click [OK].**
10. **Click [Close] in the [Summary] dialog box.**

Using the WPS Button

A router (access point) is needed to set up a connection.

Before doing the following procedure, install the printer driver according to the procedure on page 106 "Installing the Printer Driver".

Make sure the Ethernet cable is not connected to the machine.

1. **Turn on your computer.**
2. **On the [Application] menu, double-click [Smart Organizing Monitor].**
3. **Click [User Tools] tab.**
4. **Click [Printer Configuration].**
5. **Enter the access code, and then click [OK].**

   The default access code is "Admin".
6. **On the [Network 1] tab, make sure [Wireless Function:] is set to [Active].**

   When [Inactive] is set, follow the steps below:

   1. Select [Active], and then click [OK].
   2. "The settings will become effective after restart of the printer" is displayed on the screen, and then click [OK].
   3. Wait until the machine restarts. Go back to the step to continue the setting process after Smart Organizing Monitor has dis-played "Ready".

7. **Click [OK].**
8. **Wait until the machine restarts.**
9. **Click [User Tools] tab.**
10. **Click [Printer Configuration].**
11. **Enter the access code, and then click [OK].**

    The default access code is "Admin".
12. **On the [Wireless] tab, select [Setup with WPS] for [Configuration Method].**
13. **Click [Connect].**
14. **Press the WPS button on the router (access point) within two minutes.**

    For details about how to use the WPS button, refer to the manuals for the router (access point).
15. **Check the result.**

    - Connection has succeeded:

      The Power indicator lights up.

      Configuring the Wi-Fi settings is complete.
    - Connection has failed:

      All the indicators start to flash simultaneously, and after 30 seconds, only the Power indicator lights up. Check the configuration for the router (access point), then try the connection again.

Using a PIN Code

A router (access point) is needed to set up a connection. To establish a connection using the PIN code, use a computer that is connected to the router (access point).

Before doing the following procedure, install the printer driver according to the procedure on page 106 "Installing the Printer Driver".

Make sure the Ethernet cable is not connected to the machine.

The following procedure is explained using OS X 10.11 as an example.

1. **Check that the router (access point) is working correctly.**
2. **Open the PIN code configuration window (web page) for the router (access point)on your computer.**
3. **Turn on your computer.**
4. **On the [Application] menu, double-click [Smart Organizing Monitor].**
5. **Click [User Tools] tab.**
6. **Click [Printer Configuration].**

7. **Enter the access code, and then click [OK].**

   The default access code is "Admin".

8. **On the [Wireless] tab, select [Setup with WPS] for [Configuration Method].**
9. **Select [Wi-Fi Protected Setup with PIN Code] for [One-Touch Connection Setting (WPS)].**
10. **Click [Get PIN Code] and check the PIN code.**

    Write down the PIN code in case you might forget it.

11. **Enter the machine's PIN code (8 digits) on the router (access point)'s web page.(The web page accessed in Step 2)**
12. **Execute WPS (PIN system) from the router (access point)'s web page.**
13. **Check the result.**

    - Connection has succeeded:

      The Power indicator lights up.

      Configuring the Wi-Fi settings is complete.

    - Connection has failed:

      All the indicators start to flash simultaneously, and after 30 seconds, only the Power indicator lights up. Check the configuration for the router (access point), then try the connection again.

Manual Setup

A router (access point) is needed to set up a connection. You need to select the same authentication method and encryption method that the router (access point) is using. You can check them on the settings screen of the router (access point).

Before doing the following procedure, install the printer driver according to the procedure on page 106 "Installing the Printer Driver".

Make sure the Ethernet cable is not connected to the machine.

Checking the SSID and encryption key

The SSID and Encryption key for the router (access point) may be printed on a label affixed to the router (access point). For details about the SSID and Encryption key, refer to the router (access point) manual.

Configuring settings using Smart Organizing Monitor

1. **Check that the router (access point) is working correctly.**
2. **Turn on your computer.**
3. **On the [Application] menu, double-click [Smart Organizing Monitor].**
4. **Click [User Tools] tab.**
5. **Click [Printer Configuration].**

6. **Enter the access code, and then click [OK].**

   The default access code is "Admin".

7. **On the [Wireless] tab, select [Manual Setup] for [Configuration Method].**
8. **Select the authentication method in [Authentication]. Configurations differ according to the authentication method.**
   - WPA2-PSK or Mix Mode WPA/WPA2
     - Enter the SSID of the router (access point) in [SSID].
     - Enter the WPA passphrase of the access point (router) in [WPA Passphrase].
   - Open System or Shared Key
     - Enter the SSID of the router (access point) in [SSID].
     - Select [WEP] in [Encryption].

       Do not select [None] except in special circumstances. If you select [None], the security system may not work.
     - Select [64 bit] or [128 bit] in [WEP Key Length].
     - When you register multiple encryption keys, select a registration number between [#1] and [#4] in [WEP Transmit Key ID].
     - Select [Hexadecimal] or [ASCII] in [WEP Key Format].
     - Enter the WEP key in [WEP Key].
9. **Click [Apply], and then click [OK].**
10. **When "Connected" is displayed in [Wireless Status] on the [Wireless] tab, the connection has been established.**
11. **Click [OK].**

8. Appendix

This chapter describes the machine specifications and consumables.

Transmission Using IPsec

For securer communications, this machine supports the IPsec protocol. When applied, IPsec encrypts data packets at the network layer using shared key encryption. The machine uses encryption key exchange to create a shared key for both sender and receiver. To achieve even higher security, you can also renew the shared key on a validity period basis.

Important

- IPsec is not applied to data obtained through DHCP, DNS, or WINS.
- IPsec compatible operating systems are Windows 7 or later, Windows Server 2003 or later, OS X 10.7 or later, Red Hat Enterprise Linux 6 or later. However, some setting items are not supported depending on the operating system. Make sure the IPsec settings you specify are consistent with the operating system's IPsec settings.
- If you cannot access Web Image Monitor due to IPsec configuration problems, disable IPsec on the [Network 2] tab under [Printer Configuration] using Smart Organizing Monitor, and then access Web Image Monitor.
- For details about specifying the IPsec settings using Web Image Monitor, see page 52 "Using Web Image Monitor".
- For details about enabling and disabling IPsec using Smart Organizing Monitor, see the Smart Organizing Monitor Help.

Encryption and Authentication by IPsec

IPsec consists of two main functions: the encryption function, which ensures the confidentiality of data, and the authentication function, which verifies the sender of the data and the data's integrity. This machine's IPsec function supports two security protocols: the ESP protocol, which enables both of the IPsec functions at the same time, and the AH protocol, which enables only the authentication function.

ESP Protocol

The ESP protocol provides secure transmission through both encryption and authentication. This protocol does not provide header authentication.

- For successful encryption, both the sender and receiver must specify the same encryption algorithm and encryption key. The encryption algorithm and encryption key are specified automatically.

- For successful authentication, the sender and receiver must specify the same authentication algorithm and authentication key. The authentication algorithm and authentication key are specified automatically.

AH Protocol

The AH protocol provides secure transmission through authentication of packets only, including headers.

- For successful authentication, the sender and receiver must specify the same authentication algorithm and authentication key. The authentication algorithm and authentication key are specified automatically.

AH Protocol + ESP Protocol

When combined, the ESP and AH protocols provide secure transmission through both encryption and authentication. These protocols provide header authentication.

- For successful encryption, both the sender and receiver must specify the same encryption algorithm and encryption key. The encryption algorithm and encryption key are specified automatically.
- For successful authentication, the sender and receiver must specify the same authentication algorithm and authentication key. The authentication algorithm and authentication key are specified automatically.

Note

- Some operating systems use the term "Compliance" in place of "Authentication".

8

Security Association

This machine uses encryption key exchange as the key setting method. With this method, agreements such as the IPsec algorithm and key must be specified for both sender and receiver. Such agreements form what is known as an SA (Security Association). IPsec communication is possible only if the receiver's and sender's SA settings are identical.

The SA settings are auto configured on both parties' machines. However, before the IPsec SA can be established, the ISAKMP SA (Phase 1) settings must be auto configured. When this is done, the IPsec SA (Phase 2) settings, which allow actual IPsec transmission, will be auto configured.

Also, for further security, the SA can be periodically auto updated by applying a validity period (time limit) for its settings. This machine only supports IKEv1 for encryption key exchange.

Multiple settings can be configured in the SA.

Settings 1-10

You can configure ten separate sets of SA details (such as different shared keys and IPsec algorithms).

IPsec policies are searched through one by one, starting at [No.1].

Encryption Key Exchange Settings Configuration Flow

This section explains the procedure for specifying encryption key exchange settings.

Machine	PC
1. Set the IPsec settings on Web Image Monitor.	1. Set the same IPsec settings as the machine on PC.
2. Enable IPsec settings.	2. Enable IPsec settings.
3. Confirm IPsec transmission.	

Note

- After configuring IPsec, you can use "ping" command to check if the connection is established correctly. Because the response is slow during initial key exchange, it may take some time to confirm that transmission has been established.
- If you cannot access Web Image Monitor due to IPsec configuration problems, disable IPsec on the [Network 2] tab under [Printer Configuration] using Smart Organizing Monitor, and then access Web Image Monitor.
- For details about enabling and disabling IPsec using Smart Organizing Monitor, see the Smart Organizing Monitor Help.

Specifying Encryption Key Exchange Settings

Important

- **This function is available only when an administrator password is specified.**

1. **Start the web browser and access the machine by entering its IP address.**
2. **Click [IPsec Settings].**
3. **Click the [IPsec Policy List] tab.**
4. **Select the number of the setting you want to modify in the list, and then click [Change].**
5. **Modify the IPsec related settings as necessary.**
6. **Enter the administrator password, and then click [Apply].**
7. **Click the [IPsec Global Settings] tab, and then select [Active] in [IPsec Function].**
8. **If necessary, specify [Default Policy], [Broadcast and Multicast Bypass], and [All ICMP Bypass] also.**
9. **Enter the administrator password, and then click [Apply].**

Note

- An administrator password can be specified in the [Administrator] tab.

Specifying IPsec Settings on the Computer

Specify exactly the same settings for IPsec SA settings on your computer as are specified for the IPsec Settings on the machine. Setting methods differ according to the computer's operating system. The following procedure is based on Windows 7 in an IPv4 environment as an example.

1. **On the [Start] menu, click [Control Panel], [System and Security], and then click [Administrative Tools].**
2. **Double-click [Local Security Policy], and then click [IP Security Policies on Local Computer].**
3. **In the "Action" menu, click [Create IP Security Policy...].**

   The IP Security Policy Wizard appears.
4. **Click [Next].**
5. **Enter a security policy name in "Name", and then click [Next].**
6. **Clear the "Activate the default response rule" check box, and then click [Next].**
7. **Select "Edit properties", and then click [Finish].**
8. **In the "General" tab, click [Settings...].**
9. **In "Authenticate and generate a new key after every", enter the same validity period (in minutes) that is specified on the machine in [IKE Life Time], and then click [Methods...].**
10. **Confirm that the Encryption Algorithm ("Encryption"), Hash Algorithm ("Integrity"), and IKE Diffie-Hellman Group ("Diffie-Hellman Group") settings in "Security method preference order" all match those specified on the machine in [IKE Settings].**

    If the settings are not displayed, click [Add...].
11. **Click [OK] twice.**
12. **Click [Add...] in the "Rules" tab.**

    The Security Rule Wizard appears.
13. **Click [Next].**
14. **Select "This rule does not specify a tunnel", and then click [Next].**
15. **Select the type of network for IPsec, and then click [Next].**
16. **Click [Add...] in the IP Filter List.**
17. **In [Name], enter an IP Filter name, and then click [Add...].**

    The IP Filter Wizard appears.
18. **Click [Next].**

19. **In [Description:], enter a name or a detailed explanation of the IP filter, and then click [Next].**

    You may click [Next] and proceed to the next step without entering any information in this field.

20. **Select "My IP Address" in "Source address", and then click [Next].**
21. **Select "A specific IP Address or Subnet" in "Destination address", enter the machine's IP address, and then click [Next].**
22. **For the IPsec protocol type, select "Any", and then click [Next].**
23. **Click [Finish], and then click [OK].**
24. **Select the IP filter that you have just created, and then click [Next].**
25. **Click [Add...] in the Filter Action.**

    The Filter Action Wizard appears.

26. **Click [Next].**
27. **In [Name], enter a Filter Action name, and then click [Next].**
28. **Select "Negotiate security", and then click [Next].**
29. **Select one of options for computers allowed to communicate with, and then click [Next].**
30. **Select "Custom" and click [Settings...].**
31. **When [ESP] is selected for the machine in [Security Protocol] under [IPsec Settings], select [Data integrity and encryption (ESP)], and configure the following settings:**

    Set the value of [Integrity algorithm] to the same value as the [Authentication Algorithm for ESP] specified on the machine.

    Set the value of [Encryption algorithm] to the same value as the [Encryption Algorithm for ESP] specified on the machine.

32. **When [AH] is selected for the machine in [Security Protocol] under [IPsec Settings], select [Data and address integrity without encryption (AH)], and configure the following settings:**

    Set the value of [Integrity algorithm] to the same value as the [Authentication Algorithm for AH] specified on the machine.

    Clear the [Data integrity and encryption (ESP)] check box.

33. **When [ESP&AH] is selected for the machine in [Security Protocol] under [IPsec Settings], select [Data and address integrity without encryption (AH)], and configure the following settings:**

    Set the value of [Integrity algorithm] under [Data and address integrity without encryption (AH)] to the same value as [Authentication Algorithm for AH] specified on the machine.

    Set the value of [Encryption algorithm] under [Data integrity and encryption (ESP)] to the same value as [Encryption Algorithm for ESP] specified on the machine.

34. **In the Session key settings, select "Generate a new key every", and enter the same validity period (in [Seconds] or [Kbytes]) as that specified for [Life Time] on the machine.**
35. **Click [OK], and then click [Next].**
36. **Click [Finish].**

    If you are using IPv6, you must repeat this procedure from Step 12 and specify ICMPv6 as an exception. When you reach Step 22, select [58] as the protocol number for the "Other" target protocol type, and then set [Negotiate security] to [Permit].
37. **Select the filter action that you have just created, and then click [Next].**
38. **Select one of options for an authentication method, and then click [Next].**
39. **Click [Finish], and then click [OK] twice.**

    The new IP security policy (IPsec settings) is specified.
40. **Select the security policy that you have just created, right click on it, and then click [Assign].**

    IPsec settings on the computer are enabled.

Note

- To disable the computer's IPsec settings, select the security policy, right click, and then click [Unassign].

Notes About the Toner

- Proper operation cannot be guaranteed if any third-party toner is used.
- Depending on printing conditions, there are cases where the printer cannot print the number of sheets indicated in the specifications.
- Replace the print cartridge if the printed image suddenly becomes pale or blurred.
- When operating the machine for the first time, use the print cartridge supplied with this machine. If this cartridge is not initially used, the following problems may occur:
  - Toner/Paper End indicator will flash before the toner runs out.
  - Toner/Paper End indicator will light up when the toner runs out, but instead the printed image suddenly becomes pale or blurred.
- The lifetime of the photo conductor, which is built into the print cartridge, is taken into account when Toner/Paper End indicator flashes. If the photo conductor stops working before the toner runs out, Toner/Paper End indicator may flash.

Specifications of the Machine

This section lists the machine's specifications.

General Function Specifications

Item	Description
Configuration	Desktop
Print process	Laser electrostatic transfer
Maximum paper size for printing	216 mm × 356 mm (8.5 × 14 inches)
Warm-up time (23 °C, 71.6 °F)	24 seconds
Paper sizes	For details, see page 34 "Supported Paper".
Paper type	For details, see page 34 "Supported Paper".
Paper output capacity (80 g/m^2, 20 lb)	125 sheets
Paper input capacity (80 g/m^2, 20 lb)	• Tray 1 250 sheets • Bypass tray 50 sheets
Memory	128 MB
Power requirements	Region A 220-240 V, 4 A, 50/60 Hz Region B 120 V, 7 A, 60 Hz If the voltage supplied to the machine is outside the guaranteed operating range, "SC560" appears on the screen. If this happens, turn the power off and then back on. If the message does not disappear, contact your service representative.

Item	Description
Power consumption Region A	• Maximum 857 W • Ready 64.6 W • During printing 475 W
Power consumption Region B	• Maximum 752 W • Ready 67.2 W • During printing 489 W
Noise emission (SP 320DN)	• Sound power level Stand-by: 27.0 dB (A) During printing: 65.1 dB (A) • Sound pressure level Stand-by: 17.9 dB (A) During printing: 53.4 dB (A)
Noise emission (SP 325DNw)	• Sound power level Stand-by: 27.0 dB (A) During printing: 65.8 dB (A) • Sound pressure level Stand-by: 17.9 dB (A) During printing: 54.4 dB (A)
Machine dimensions (Width × Depth × Height)	376 × 392 × 262 mm (14.8 × 15.4 × 10.3 inches)
Weight (machine body with consumables)	12.5 kg (28 lb.) or less

Note

- Sound power level and sound pressure level are actual values measured in accordance with ISO 7779.
- Sound pressure level is measured from the position of the bystander.

Printer Function Specifications

Item	Description
Printing speed	• SP 320DN 26 pages per minute (A4) • SP 325DNw 28 pages per minute (A4)
Resolution	600 × 600 dpi (maximum: 1200 × 1200 dpi)
First print speed	8 seconds or less
Interface	• Ethernet (10BASE-T, 100BASE-TX) • USB 2.0 • Wi-Fi (only SP 325DNw)
Printer language	• PCL XL for Windows and the Linux operating system • PCL5e for OS X
Fonts	80 fonts

Consumables

⚠CAUTION

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

Print Cartridge

Print cartridge	Average printable number of pages per cartridge *1
Black	3,500 pages, 6,400 pages

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

Note

- For information about consumables, see our website (http://www.ricoh.com/printers/sp310/support/gateway/).
- If print cartridges are not changed when necessary, printing will become impossible. For easy replacement, we recommend you purchase and store extra print cartridges.
- The actual number of printable pages varies depending on the image volume and density, number of pages printed at a time, paper type and paper size used, and environmental conditions such as temperature and humidity.
- Print cartridges may need to be changed sooner than indicated above due to deterioration over the period of use.
- Print cartridges (consumables) are not covered by warranty. However, if there is a problem, contact the store where they were purchased.
- When you first use this machine, use the print cartridges packaged with the machine.
- The supplied print cartridges are good for approximately 1,000 pages.
- This machine routinely performs cleaning and uses toner during this operation to maintain quality.
- To prevent a cleaning malfunction, you may need to replace a print cartridge even if it is not empty.

Information for This Machine

User Information on Electrical & Electronic Equipment Region A (mainly Europe and Asia)

Users in the countries where this symbol shown in this section has been specified in national law on collection and treatment of E-waste

Our Products contain high quality components and are designed to facilitate recycling.

Our products or product packaging are marked with the symbol below.



The symbol indicates that the product must not be treated as municipal waste. It must be disposed of separately via the appropriate return and collection systems available. By following these instructions you ensure that this product is treated correctly and help to reduce potential impacts on the environment and human health, which could otherwise result from inappropriate handling. Recycling of products helps to conserve natural resources and protect the environment.

For more detailed information on collection and recycling systems for this product, please contact the shop where you purchased it, your local dealer or sales/service representatives.

All Other Users

If you wish to discard this product, please contact your local authorities, the shop where you bought this product, your local dealer or sales/service representatives.

For Users in India

This product complies with the "India E-waste Rule 2011" and prohibits use of lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers in concentrations exceeding 0.1 weight % and 0.01 weight % for cadmium, except for the exemptions set in Schedule 2 of the Rule.

For Turkey only

EEE Yönetmeliğine Uygundur.
Bu sistem sarf malzemeleri ve yedek parçaları da dahil olmak üzere EEE Yönetmeliğine Uygundur.

Üretici:

Ricoh Company, Ltd.

8-13-1 Ginza,
Chuo-ku, Tokyo 104-8222 Japan

+81-36278-2111(English only/Sadece İngilizce)

Note for the Battery and/or Accumulator Symbol (For EU countries only)



In accordance with the Battery Directive 2006/66/EC Article 20 Information for end-users Annex II, the above symbol is printed on batteries and accumulators.

This symbol means that in the European Union, used batteries and accumulators should be disposed of separately from your household waste.

In the EU, there are separate collection systems for not only used electrical and electronic products but also batteries and accumulators.

Please dispose of them correctly at your local community waste collection/recycling centre.

Environmental Advice for Users Region A (mainly Europe)

Users in the EU, Switzerland and Norway

Consumables yield

Please refer to either the User's Manual for this information or the packaging of the consumable.

Recycled paper

The machine can use recycled paper which is produced in accordance with European standard EN 12281:2002 or DIN 19309. For products using EP printing technology, the machine can print on 64 g/m^2 paper, which contains less raw materials and represents a significant resource reduction.

Duplex printing (if applicable)

Duplex printing enables both sides of a sheet of paper to be used. This saves paper and reduces the size of printed documents so that fewer sheets are used. We recommend that this feature is enabled whenever you print.

Toner and ink cartridge return program

Toner and ink cartridge for recycling will be accepted free of charge from users in accordance with local regulations.

For details about the return program, please refer to the Web page below or consult your service person.

https://www.ricoh-return.com/

Energy efficiency

The amount of electricity a machine consumes depends as much on its specifications as it does on the way you use it. The machine is designed to allow you to reduce electricity costs by switching to Ready mode after it prints the last page. If required, it can immediately print again from this mode. If no additional prints are required and a specified period of time passes, the device switches to an energy saving mode.

In these modes, the machine consumes less power (watts). If the machine is to print again, it needs a little longer to return from an energy saving mode than from Ready mode.

For maximum energy savings, we recommend that the default setting for power management is used.

Products that comply with the Energy Star requirement are always energy efficient.

Notice To Wireless LAN Interface Users Region A (mainly Europe)

CE

Declaration of Conformity

Notice to Users in EEA Countries

This product complies with the essential requirements and provisions of Directive 2014/53/EU.

The CE Declaration of Conformity is available by accessing the URL: http://www.ricoh.com/products/ce_doc/

and selecting the product applicable.

Operating frequency band: 2400 - 2483.5 MHz

maximum radio-frequency power: less than 20.0 dBm

As this equipment with the radiating part is not intended to be used in close proximity to the human body, it is recommended to use at least 20cm apart from the user.

Model Number: SP 325DNw

Notes to users in the state of California (Notes to Users in USA)

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

Notes to users in the United States of America

Part 15 of the FCC Rules

Note:

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

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

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

Caution:

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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation (MPE). But it is desirable that it should be installed and operated keeping the radiator at least 20cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles).

Certification

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

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

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

Model Number: SP 320DN/SP 325DNw

Notes to Canadian Users of Wireless Devices

This device complies with Industry Canada's licence-exempt RSSs.

Operation is subject to the following two conditions:

(1) This device may not cause interference; and

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

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles).

Model Number: SP 325DNw

Remarques à l'attention des utilisateurs canadiens d'appareils sans fil

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage

radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'IC. Cet équipement doit être installé et utilisé en gardant une distance de 20 cm ou plus entre le radiateur et le corps humain.(à l'exception des extrémités : mains, poignets, pieds et chevilles)

Model Number: SP 325DNw

ENERGY STAR Program

ENERGY STAR® Program Requirements for Imaging Equipment



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

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

It is an open program in which manufacturers participate voluntarily.

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

Saving Energy

This machine is equipped with the following Energy Saver modes: Energy Saver mode 1 and Energy Saver mode 2. If the machine has been idle for a certain period of time, the machine automatically enters Energy Saver mode.

The machine recovers from Energy Saver mode when it receives a print job or when any key is pressed.

Energy Saver mode 1

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

Energy Saver mode 2

The machine enters Energy Saver mode 2 after the period of time specified for this setting is passed. Power consumption is lower in Energy Saver mode 2 than in Energy Saver mode 1, but it takes longer to recover from Energy Saver mode 2 than from Energy Saver mode 1.

Specifications

Energy Saver mode 1	Power Consumption*1	Region A 45.9 W Region B 42.8 W
	Recovery Time*1	Region A 8.2 seconds Region B 9.1 seconds
Energy Saver mode 2	Power Consumption*1	Region A 0.93 W Region B 0.87 W
	Default Interval	30 seconds
	Recovery Time*1	Region A 10 seconds Region B 12 seconds
Duplex Function*2		Standard

*1 Recovery time and power consumption may differ depending on the conditions and environment of the machine.

*2 Achieves ENERGY STAR energy savings; product fully qualifies when packaged with (or used with) a duplex tray and the duplex function is enabled as an option.

For details about Energy Saver modes, see the Smart Organizing Monitor Help.

Note

- Even if Energy Saver mode 2 is enabled, the machine will not enter Energy Saver mode 2 for two hours if Low Humidity Mode is enabled. However, the machine will enter Energy Saver mode 1 as normal (even when Energy Saver mode 1 is not enabled).
- For details about Energy Saver modes, see the Smart Organizing Monitor Help.

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Version 2.0, January 2004

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dnsmasq

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Iperf User Docs

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