SP 311 DN/SP 311 DNw

User Guide

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

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3. Printing Documents

4. Configuring the Machine Using Utilities

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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.

Legal Prohibition

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

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

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

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

Disclaimer

Contents of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

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.

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.

Two kinds of size notation are employed in this manual.

Some illustrations or explanations in this guide may differ from your product due to improvement or change in the product.

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 47 "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.

Differences in Performance/Functions between Different Models

The differences in main performance/functions between different models are as follows:
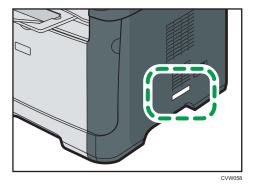
	SP 311DN	SP 311DNw
Type	Type 1	Type 2
Wireless LAN	Not Available	Available (Standard)

Some illustrations in this guide may differ from your product, but all of the explanations are for your product.

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.

CVW058

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
- 220-240V

🌐 Region **B** (mainly North America)

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

- CODE XXXX -17
- 120V

⬇ 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.

Important Safety Instructions ⊕ Region A

User Information on Electrical & Electronic Equipment

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.

Environmental Advice for Users

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 $64g/m^2$ 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.

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.

Important Safety Instructions 🌐 Region B
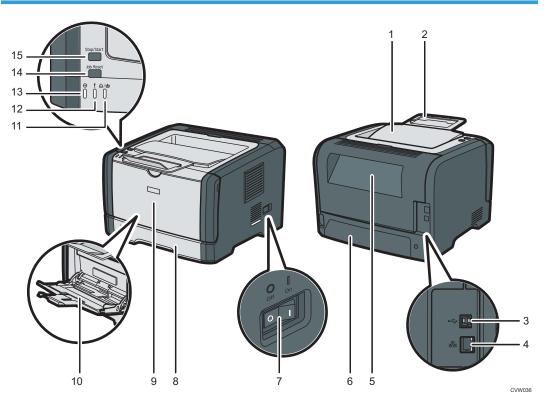
Notes to Users in the State of California

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

1. Guide to the Machine

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

CVW036

1. **Standard Tray**

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

2. **Stop Fences**

   Raise this fence to prevent paper from falling off.

3. **USB Port**

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

4. **Ethernet Port**

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

5. **Rear Cover**

   Open this cover to deliver sheets face up or remove jammed paper.

6. **Tray 1 Rear Cover**

   Remove this cover when loading paper longer than A4 in Tray 1.

7. **Power Switch**

   Use this switch to turn the power on or off.

8. **Tray 1**

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

9. **Front Cover**

   Lift up this cover to replace consumables or clear a paper jam.

10. **Bypass Tray**

    This tray can hold 50 sheets of plain paper.

11. **Toner/Paper End Indicator**

    This indicator flashes red when the toner is nearly empty, and it lights up when the machine runs out of paper or toner and when the toner is not set correctly.

12. **Alert Indicator**

    This indicator flashes red when paper jams occur, and it lights up when the paper settings do not match the settings specified by the driver, and when other errors occur.

13. **Power Indicator**

    This indicator lights up blue when the machine is turned on. It flashes when a print job is received.
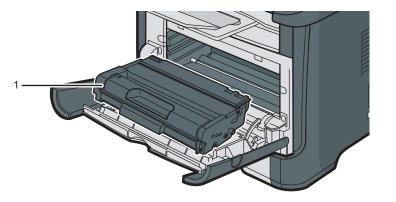
14. **[Job Reset] key**

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

15. **[Stop/Start] key**

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

Interior

CVW037

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 65 "Replacing the Print Cartridge".

Installing the Printer

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

Where to Put the Printer

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

⚠ WARNING

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

⚠ WARNING

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

⚠ CAUTION

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

⚠ CAUTION

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

⚠ CAUTION

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

⚠ CAUTION

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

⚠️CAUTION

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

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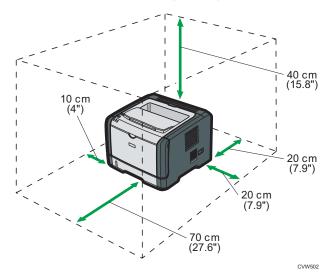
- Do not obstruct the machine's vents. Doing so risks fire caused by overheated internal components.

⚠️CAUTION

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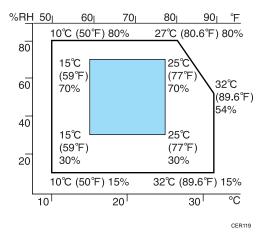
Space Required for Installation

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

CVW502

Optimum Environmental Conditions

Permissible and recommended temperature and humidity ranges are as follows:

CER119

- White area: Permissible Range
- Blue area: Recommended Range

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

Environments to Avoid

⭐ Important

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

Ventilation

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

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

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

- Set up the machine so that it does not directly ventilate towards people.
- Ventilation should be more than 30 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.

Power requirements

- 🌐 Region A 220 - 240 V, 4 A, 50/60 Hz

- 🌐 Region B 120 V, 7 A, 60 Hz

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

1

Installing the Driver and Software

You can install the necessary driver for this machine using the included CD-ROM.

The supplied drivers are supported by the following operating systems:

- PCL 6 printer driver: Windows XP/Vista/7/8 and Windows Server 2003/ 2003 R2/2008/2008 R2/2012
- Smart Organizing Monitor: Windows XP/Vista/7/8 and Windows 2003/ 2003 R2/2008/2008 R2/2012

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.

⭐ **Important**

- Be sure to disconnect the USB cable or Ethernet cable from the machine and turn the machine off before beginning the installation.

Quick Install for USB

Use Quick Install to install the printer driver, and Smart Organizing Monitor from the CD-ROM.

1. **Close all applications except this manual.**
2. **Insert the CD-ROM into the CD-ROM drive.**
3. **Select a language for the interface, and then click [OK].**
4. **From the CD-ROM menu, click [USB Quick Install].**
5. **Follow the instructions in the installation wizard.**

Quick Install for Network

Use Quick Install to install the printer driver, and Smart Organizing Monitor from the CD-ROM.

1. **Close all applications except this manual.**
2. **Insert the CD-ROM into the CD-ROM drive.**
3. **Select a language for the interface, and then click [OK].**
4. **From the CD-ROM menu, click [Network Quick Install].**
5. **Follow the instructions in the installation wizard.**

Upgrading or Deleting the Printer Driver

Upgrading the printer driver

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

2. Right-click the icon of the printer model you want to modify, and then click [Printer properties].

3. Click the [Advanced] tab.

4. Click [New Driver...], and then click [Next].

5. Click [Have Disk...].

6. Click [Browse...], and then select the printer driver location.

7. Click [OK], and then specify the printer model.

8. Click [Next].

9. Click [Finish].

10. Click [OK] to close the printer properties window.

11. Restart the computer.

Deleting the printer driver

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

2. Right-click the icon of the printer you want to delete, and then click [Remove device].

3. Click [Yes].

4. Click any printer icon, and then click [Print server properties].

5. Click the [Drivers] tab.

6. Click [Change Driver Settings] if it is displayed.

7. Click [Remove...].

8. Select [Remove driver and driver package.], and then click [OK].

9. Click [Yes].

10. Click [Delete].

11. Click [OK].

12. Click [Close] to close the print server properties window.

1

Installing Smart Organizing Monitor

Smart Organizing Monitor is a utility that allows you to modify the machine's settings or view the machine's status from your computer. For details, see page 23 "About Operation Tools".

1. **Close all applications except this manual.**
2. **Insert the CD-ROM into the CD-ROM drive.**
3. **Select a language for the interface, and then click [OK].**
4. **From the CD-ROM menu, click [Smart Organizing Monitor].**
5. **Follow the instructions in the installation wizard.**

About Operation Tools

This section explains the operation tools of this 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 60 "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 47 "Using Web Image Monitor".

1

2. Loading Paper

Supported Paper

Paper Size

- A4
- $8^1/_2$ " × 11 " (Letter)
- $8^1/_2$ " × 14 " (Legal)
- B5 JIS
- $5^1/_2$ " × $8^1/_2$ " (Half Letter)
- $7^1/_4$ " × $10^1/_2$ " (Executive)
- A5
- A6
- B6 JIS
- 16K (195 ×267 mm)
- 8"×13"(F)
- $8^1/_2$ "×13"(Foolscap)
- $8^1/_4$ "×13"(Folio)
- Com10 (104.8×241.3 mm)
- Monarch (98.4×190.5 mm)
- C5 Env (162×229 mm)
- C6 Env (114×162 mm)
- DL Env (110×220 mm)
- Custom Paper Size

  The following paper sizes are supported as custom paper sizes:

  - Approximately 90-216 mm (3.6-8.5 inches) in width
  - Approximately 148-356 mm (5.8-14 inches) in length

Paper Type

- Plain paper (65-99 g/m^2 (17-27 lb.))
- Recycled paper (75-90 g/m^2 (20-24 lb.))
- Thin paper (52-64 g/m^2 (14-16 lb.))
- Thick paper1 (100-130 g/m^2 (27-35 lb))
- Thick paper2 (131-162 g/m^2 (35-43 lb))

- Color paper (75-90 g/m^2 (20-24 lb.))
- Preprinted paper (75-90 g/m^2 (20-24 lb.))
- Prepunched paper (75-90 g/m^2 (20-24 lb.))
- Letterhead (100-130 g/m^2 (27-35 lb.))
- Bond paper (105-160 g/m^2 (28-43 lb.))
- Cardstock (100-130 g/m^2 (27-35 lb.))
- Label paper (100-130 g/m^2 (27-35 lb.))
- Envelope

Paper Capacity

- Tray1

  250 sheets

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

- Bypass Tray

  50 sheets

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

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
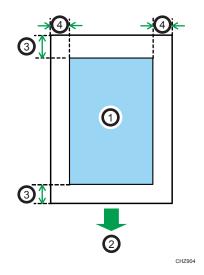
🔽 **Note**

- 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.

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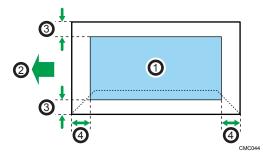
The diagram below shows the area of the paper that the machine can print on.

From the printer driver

CHZ904

1. **Print area**

2. **Feed direction**

3. **Approx. 4.2 mm (0.2 inches)**

4. **Approx. 4.2 mm (0.2 inches)**

Envelope

CMC044

1. **Print area**

2. **Feed direction**

3. **Approximately 10 mm (0.4 inches)**

4. **Approximately 10 mm (0.4 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.
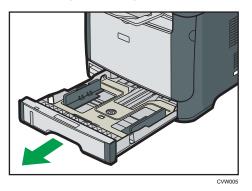
Loading Paper

Loading Paper into Tray 1

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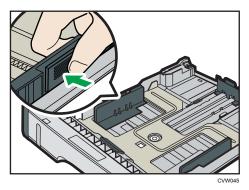
⭐ **Important**

- 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.**

   CVW005
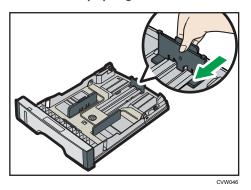
   Place the tray on a flat surface.

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

   CVW045

   When loading custom size paper, position the paper guide slightly wider than the actual paper size.
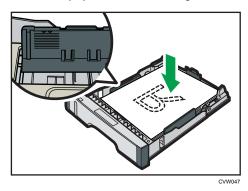
3. **Pinch the end paper guide and slide it inward to match the standard size.**

CVW046

When loading custom size paper, position the paper guide slightly wider than the actual paper size.
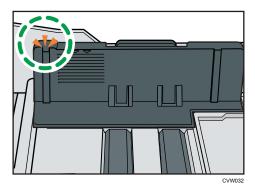
4. **Load the new paper stack print side down.**

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

CVW047
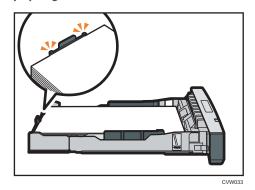
Slide the guides inward, until they are flush against the paper's sides.

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

CVW032

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

CVW033

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

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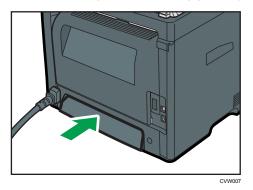
   ⬇ **Note**

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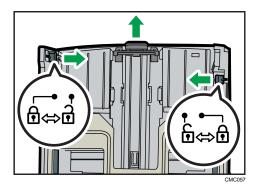
This section explains how to load paper longer than A4 (297 mm) into the machine.

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

CVW007
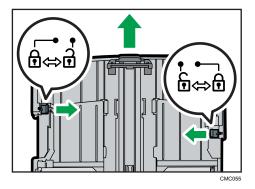
2. **Pull out tray 1 carefully with both hands.**

   Place the tray on a flat surface.

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.**

CMC055

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

⬇ **Note**
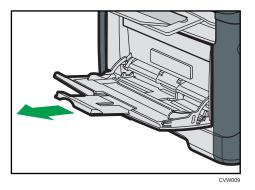
• To reinsert the extender, you might have to push it with moderate force.

• 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
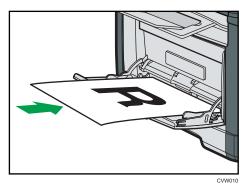
⭐ **Important**

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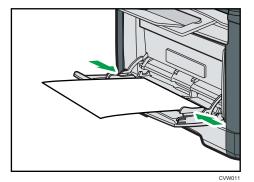
   If you load A4 (297 mm) or larger size paper, pull out the bypass tray extension.

CVW009

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

CVW010

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

CVW011
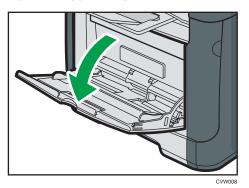
Loading Envelopes

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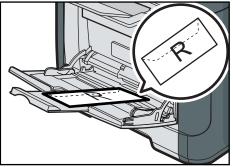
positions after printing. Leaving the levers lowered can cause print quality problems when printing on paper other than envelopes.

- 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.**

CVW008
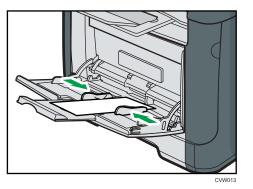
2. **Slide the side guides outward, then load envelopes with the print side up, and push in until it stops against the machine.**

   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.
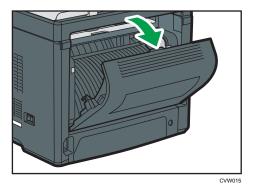
CVW012
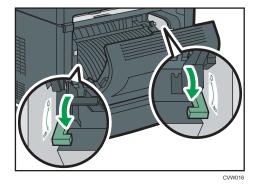
3. **Adjust the side guides to the envelope width.**

CVW013

4. **Open the rear cover.**

CVW015

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

CVW016

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.

Specifying the paper type and paper size

1. On the [Start] menu, click [All Programs].
2. Click [Smart Organizing Monitor].
3. Click [Smart Organizing Monitor Status].
4. If the machine you are using is not selected, click [Connect Printer], and then select the machine's model.
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].
7. 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 [Smart Organizing Monitor].
3. Click [Smart Organizing Monitor Status].
4. If the machine you are using is not selected, click [Connect Printer], and then select the machine's model.
5. Click [OK].
6. On the [User Tools] tab, click [Printer Configuration].
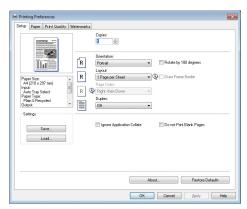
   If you are requested to enter an access code, enter the access code and then click [OK].
7. On the [Paper Input] tab, select [Custom Paper Size] in the [Paper Size] list.
8. In the [Unit] list, select [mm] or [inch].
9. In the [Horizontal] box and [Vertical] box, specify the width and length.
10. Click [OK].

11. **Click [Close].**

3. Printing Documents

Basic Operation

The following procedure explains how to perform basic printing.

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 [OK].**

⬇ **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 76 "Removing Printing Jams".

- 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 25 "Loading Paper".

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
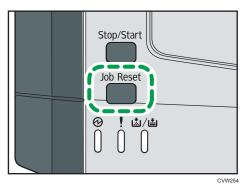
- Windows

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].**

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 [Job Reset] key.**

CVW254

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] in [Tray Paper Settings] under system settings is enabled.

  There are two ways to resolve these errors:

Continue printing using mismatched paper

Use the form-feed function to ignore the error and print using mismatched paper.
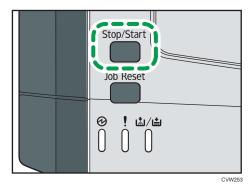
Reset the print job

Cancel printing.

Continuing Printing Using Mismatched Paper

If the paper is too small for the print job, the printed image will be cropped.
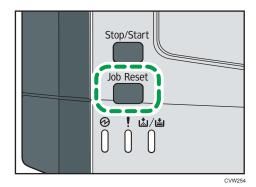
1. **If the Alert indicator lights up, press the [Stop/Start] key.**

CVW253

Resetting the Print Job

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

CVW254

Using Various Print Functions

This section briefly describes various print functions that you can configure with the printer driver to make printouts appropriate for your purposes.

Print Quality Functions

Print quality and color tone can be adjusted to suit the print data. Some of the print quality settings you can configure are described below.

Changing the image printing method

You can select to print with priority on print quality or print speed. When printing images, the higher the resolution of images, the longer the time required for printing.

Changing the graphics mode

You can send graphic information to the machine as either raster or vector images. Most geometric shapes or patterns print faster as vector images than as raster images. However, if certain graphics do not print as they appear on the screen, try to print them as raster images.

Saving toner when printing

You can save toner by printing with lower toner consumption. While this increases the life of the print cartridge, the output appears slightly lighter.

Changing the printable area

You can change the printable area when printing a document printed on a single page with one machine is printed on two separate pages with another machine, or vice-versa.

Changing the method of downloading TrueType fonts to the machine

When you print documents that contain characters in TrueType fonts, garbled or distorted characters may be printed. Changing the method of downloading TrueType fonts may help to solve the problem.

Changing the dither pattern

A dither pattern is a pattern of dots used to simulate a color or shade of an image. If the pattern is changed, the characteristics of the image will also change. You can select a pattern suitable for the image to be printed.

🔻Note

- Some of the functions described above might not be available depending on the printer driver or operating system. For details, see the printer driver Help.

Print Output Functions

You can specify the form of print outputs according to your purposes. This section briefly describes some of the settings that you can specify.

Printing multiple sets of a document

You can print multiple sets of the same document.

Collating the output in document batches

You can print complete sets of a multiple-page document one set at a time (P1, P2, P1, P2 ...). If this function is not used when printing multiple sets, prints will be output in page batches (P1, P1, P2, P2 ...). This function is useful when, for example, making presentation materials.

Changing orientation or rotating the image

You can change the orientation of an image to portrait or landscape. You can also rotate the image by 180 degrees. Use rotation to prevent an image from being printed upside down when using paper that a predefined top and bottom (such as letterhead paper).

Printing multiple pages per sheet

You can print multiple pages onto one sheet of paper.

When using this function, a suitable reduction ratio is selected automatically based on the paper size and the number of pages you want to fit on each sheet.

Printing on both sides of paper (duplex printing)

You can print on both sides of paper.

Reducing or enlarging the document

You can reduce or enlarge documents by a specific ratio, from 25% to 400% in 1% increments. You can also reduce or enlarge documents automatically to fit a specific paper size. This function is useful, for example, when printing Web pages.

If the [Enable Large Papers] option is selected, A3/11" × 17"/B4/8K documents can be scaled to a size that the machine supports, so it can then be printed out.

Suppressing printing of blank pages

If a print job contains blank pages, they can be prevented from being printed.

Printing with a cover page

You can add a cover page to the print job.

You can select to leave the cover page blank, or print the first page of the document on the cover page. If a cover page is inserted into a duplex job, you can print on its back side also.

Paper for the cover page can either be the same as or different from the remaining pages.

Printing on custom size paper

You can print using non-standard size paper by specifying the size of the paper as custom size.

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

Superimposing text on prints (watermark)

You can superimpose watermark text on prints. Various predefined watermarks are provided. You can also create your own watermarks.

↓Note

- Some of the functions described above might not be available depending on the printer driver or operating system. For details, see the printer driver Help.

3

3

4. Configuring the Machine Using Utilities

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.
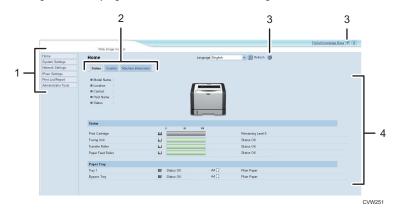
1. **Launch the Web browser.**

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:

CVW251

1. **Menu area**

   If you select menu, its content will be shown on the work area, or the sub area.

2. **Tab area**

   Contains menus for the Status and Counter modes and tabs for switching between them.

3. **Help**

   If you click this icon, help index page opens.

4. **Main area**

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

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

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.

Install 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.

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.

[I/O Timeout] 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], and [Active Interface].

- [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 [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 (Type 2 model only)

- [Wireless LAN Status]

  The status of the following items is displayed:

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

- [Channel]

  Select an Ad Hoc channel only if Ad Hoc mode is selected for [Communication Mode].

- [Wireless Signal Status]

  If Infrastructure mode is selected for [Communication Mode], displays the status of the signal with the access point.

- [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]

    Select Infrastructure mode or Ad Hoc mode

  - [Ad-Hoc Channel]

    Select a channel for Ad-Hoc mode.

  - [Authentication]

    Select an authentication method.

    If [Ad-Hoc] is selected for [Communication Mode], you can select only [Open System] and [Shared Key].

  - [Encryption]

    Select an encryption method.

    If [Ad-Hoc] is selected for [Communication Mode], you can select only [None] and [WEP].

    - [None]

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

    - [WEP]

      When it is ON, 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

  - [WPA2-PSK]

When this is selected, communication will be encrypted with WPA2 (WiFi Protected Access 2). 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 WPA (WiFi Protected Access) or WPA2 (WiFi Protected Access 2). Enter a value in [WPA Passphrase] that contains from 8 to 64 characters.

IPsec Settings

[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.

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.

- [Maintenance Page]

  Prints the maintenance page.

Administrator Tools

Administrator Settings

- [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

🔽 Note

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

- [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.

Backup Settings

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

↓Note

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

- [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.

Follow the procedure below to create configuration backup files.

1. **Select the radio button for the type of data you wish to back up.**

2. **Enter the administrator password if required.**

3. **Click [OK].**

4. **Select [Save] or [Save as] from the dropdown list at the bottom of the Window.**

5. **The backup file is stored in the default folder if choosing [Save]. Navigate to the location to save the backup file if choosing [Save as] and proceed to the next step.**

6. **Specify a name for the file, and click [Save].**

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].**

6. **Reboot the printer if you are requested to do so.**
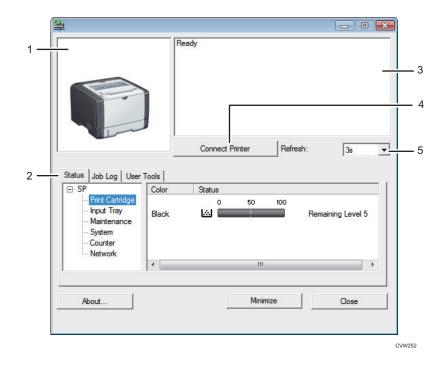
Help Source File Setting

- [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.

Checking the Status Information

CVW252

1. **Image area**

   Displays the status of this machine with an icon.

2. **Status area**

   - 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 comments.

3. **Message area**

Displays the status of this machine with a message.

For details about error messages, see .page 90 "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 [Smart Organizing Monitor].**

3. **Click [Smart Organizing Monitor Status].**

4. **If the machine you are using is not selected, click [Connect Printer], and then select the printer driver.**

5. **Click [OK].**

6. **On the [User Tools] tab, click [Printer Configuration].**

7. **Enter the access code.**

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 and SNMP settings

  - Checking or making Alert settings

Wireless LAN Settings tab (Type 2 model only)

- 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

Configuring the IPv6 Settings

This section explains how to configure the IPv6 settings using Smart Organizing Monitor.

IPv6 automatic settings

⭐ Important

- A router with DHCP functionality or a DHCP server that is supported by IPv6 is required.

1. On the [Start] menu, click [All Programs].
2. Click [Smart Organizing Monitor].
3. Click [Smart Organizing Monitor Status].
4. Click the [User Tools] tab.
5. Click Printer [Configuration].
6. Enter the access code, and then click [OK].
7. Click the [IPv6] tab.
8. Select [Active] in [IPv6 DHCP:], and the click [OK].
9. Turn off the machine, and then disconnect the USB cable from the machine.
10. Connect the machine to the router or the hub using the Ethernet cable.
11. Follow Steps 1 to 3, and then start Smart Organizing Monitor.
12. Click [Connect Printer].
13. Click [Search Network Printer].

    A list of printers currently connecting to the network appears.
14. Select your printer, and then click [OK].
15. If the printer information appears after a while, the connection is established successfully.

    If nothing appears on the screen in about two minutes, repeat this procedure.
16. The network settings are complete.

    The next step is to install the printer driver from the provided CD-ROM. For details, see page 20 "Installing the Driver and Software".

IPv6 manual settings

1. On the [Start] menu, click [All Programs].
2. Click [Smart Organizing Monitor].
3. Click [Smart Organizing Monitor Status].
4. Click the [User Tools] tab.
5. Click Printer [Configuration].
6. Enter the access code, and then click [OK].

    The default access code is "Admin". Enter "Admin" if it has not been changed. Case is significant.

7. **Click the [IPv6] tab.**

8. **Select [Inactive] in [IPv6 DHCP:], and the click [OK].**

9. **Enter values in [Manual address:], [Prefix length:], and [Gateway:], and then click [OK].**

10. **Turn off the machine, and then disconnect the USB cable from the machine.**

11. **Connect the machine to the router or the hub using the Ethernet cable.**

12. **Follow Steps 1 to 3, and then start Smart Organizing Monitor.**

13. **Click [Connect Printer].**

14. **Click [Search Network Printer].**

    A list of printers currently connecting to the network appears.

15. **Select your printer, and then click [OK].**

16. **If the printer information appears after a while, the connection is established successfully.**

    If nothing appears on the screen in about two minutes, repeat this procedure.

17. **The network settings are complete.**

    The next step is to install the printer driver from the provided CD-ROM. For details, see page 20 "Installing the Driver and Software".

Printing the Configuration Page

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

2. **Click [Smart Organizing Monitor].**

3. **Click [Smart Organizing Monitor Status].**

4. **If the machine you are using is not selected, click [Connect Printer], and then select the machine's model.**

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

Replacing the Print Cartridge
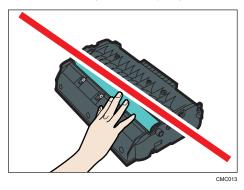
★ **Important**

- 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.

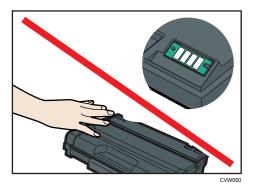**Toner/Paper End indicator**

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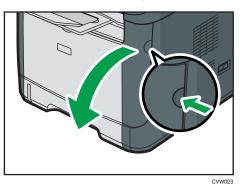
★ **Important**

- 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.
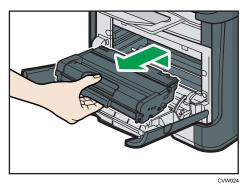- Do not touch the print cartridge's photo conductor unit.

CMC013

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

CVW050

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

1. **If paper is loaded in the bypass tray, remove the paper and close the bypass tray.**

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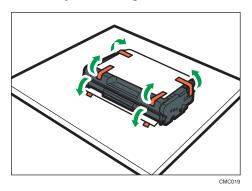

CVW023

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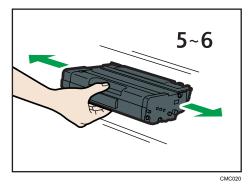

CVW024

- 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.**
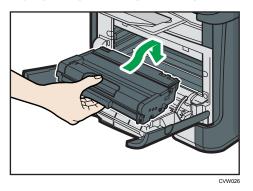

CMC019

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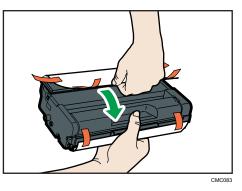

CMC020

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.

CVW026

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.

• Comply with the print cartridge Recycling Program, whereby used print cartridges are collected for processing. For details, ask your sales or service representative.

Cautions When Cleaning

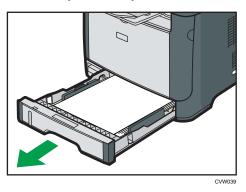Clean the machine periodically to maintain high print quality.

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.
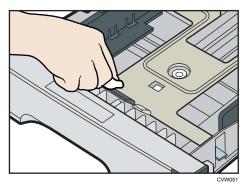
5

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.**

CVW039
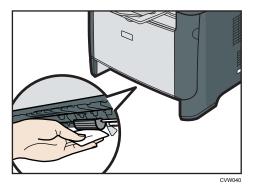
Place the tray on a flat surface. If there is paper in the tray, remove it.
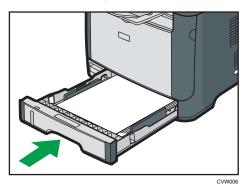
4. **Wipe the friction pads with a damp cloth.**

CVW051

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.**

CVW040

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

CVW006

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.

5

6. Troubleshooting

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 88 "Error and Status Indicate on the Control Panel".
Pages do not print.	The machine is receiving data.	If the Power 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.

🔽 **Note**

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

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 25 "Supported Paper". • Load paper correctly, making sure that the paper guides are properly adjusted. See page 30 "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 25 "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 70 "Cleaning the Friction Pad and Paper Feed Roller".

6

| 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 25 "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. page 25 "Supported Paper". - 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 25 "Supported Paper". - Paper is too thin. See page 25 "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 25 "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.

6

Removing Printing Jams
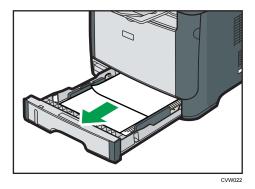
⭐ **Important**
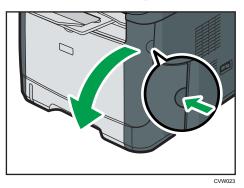
- Jammed paper may be covered in toner. Be careful not to get toner on your hands or clothes.

- 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.

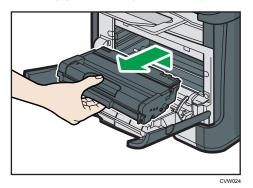### Removing Jammed Paper from Tray 1

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

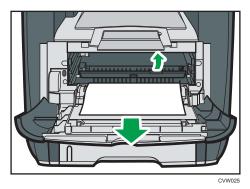CVW022

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.**

CVW023

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

CVW024

- 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.**

CVW025

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.**

CVW026

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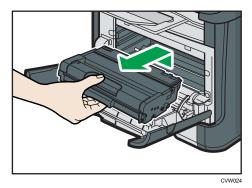
1. **If paper is jammed in the bypass tray input area, remove the jammed paper carefully.**

CVW027
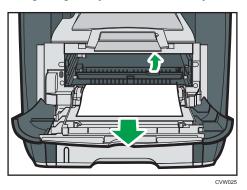
2. **Close the bypass tray.**

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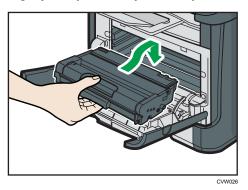

CVW023

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

CVW024

- 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.**

CVW025

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.**
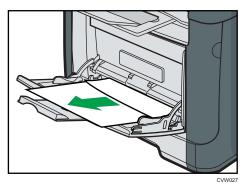

CVW026

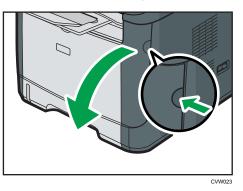7. **Using both hands, carefully push up the front cover until it closes.**
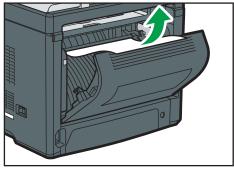
⬇Note

- 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
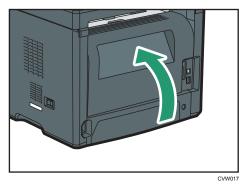
1. **Open the rear cover.**

CVW052
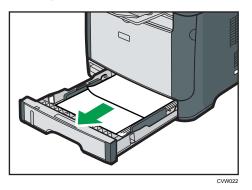
2. **Remove the jammed paper carefully.**
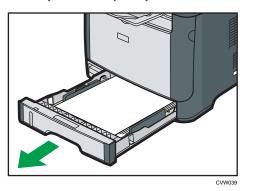
CVW053

3. **Close the rear cover.**

CVW017

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

CVW022
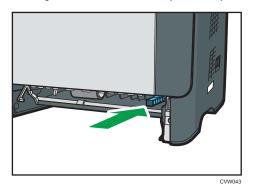
5. **Pull tray 1 out completely with both hands.**

CVW039
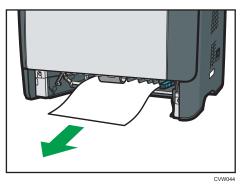
Place the tray on a flat surface.

6. **Push the lever.**
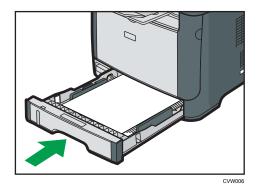
Pushing the lever lowers the duplex transport unit.

CVW043
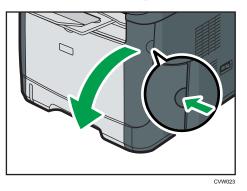
7. **If there is jammed paper, carefully remove it.**

CVW044
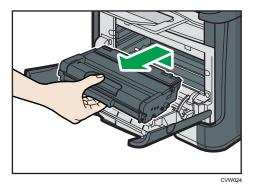
8. **With the duplex transport unit still lowered, carefully slide tray 1 back in until it stops.**

CVW006
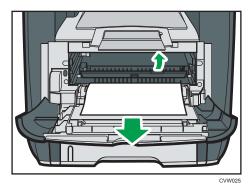
9. **If paper is loaded in the bypass tray, remove the paper and close the bypass tray.**

10. **Push the side button to open the front cover, and then carefully lower it.**
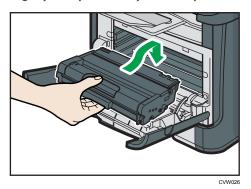
CVW023
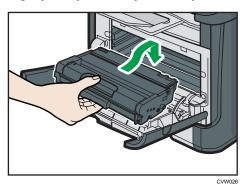
11. **Carefully pull out the print cartridge horizontally, holding its center.**

CVW024

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

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

CVW025

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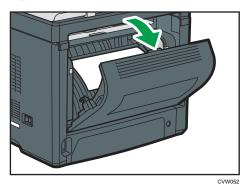

CVW026

14. **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.

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 25 "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 25 "Supported Paper".
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. See page 102 "Consumables".
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 65 "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 60 "Using Smart Organizing Monitor" and the Smart Organizing Monitor Help.

6

Printer Problems

This section describes printing problems and possible solutions.

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 setting.
There is 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 process. • To speed up printing, reduce the printing resolution using the printer driver. For details, see the printer driver Help.
Prints fall in front of the machine when they are output.	Raise the stop fence. See "Loading Paper", Quick Installation Guide.
Prints do not stack properly.	• Paper is damp. Use paper that has been stored properly. See page 25 "Supported Paper". • Raise the stop fence. See "Unpacking", Quick Installation Guide.
The whole printout is blurred.	• Paper is damp. Use paper that has been stored properly. See page 25 "Supported Paper". • If you enable [Toner Saving], printing is generally less dense. • Toner is almost depleted. Replace the print cartridge. • Condensation may have collected. If rapid change in temperature or humidity occurs, use this machine only after it has acclimatized.

Problem	Solution
The toner is powdery and comes away from the paper, or the printed image has a matt appearance.	Check if the levers for printing on envelopes inside the rear cover are properly set. Pull up the levers.
Printed envelopes come out creased.	Check if the levers for printing on envelopes inside the rear cover are properly set. Lower the levers.
Documents are not printed properly when using a certain application, or image data is not printed properly.\nSome characters are printed faintly or not printed.	Change the print quality settings.

Print Positions Do Not Match Display Positions

If the position of items on the printed page differs from the position displayed on the computer screen, the cause may be one of the following.

Possible Cause	Solution
Page layout settings have not been configured.	Check that the page layout settings are properly configured in the application.
The paper size setting does not match the paper loaded.	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.
The printable area has been changed.	Set the printable area to maximum. For details, see the printer driver Help.

Note

- If the position of items on the printed page differs slightly from the position displayed on the computer screen even after performing the above procedures, you can adjust the printing position of each tray in the range of -1.5 to +1.5 mm.

Error and Status Indicate on the Control Panel

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

LED			Status	Solution
Toner/ Paper End	Alarm	Power		
-	-	On	The power is on.	The status is normal.
-	-	Flashing	Importing data.	The status is normal.
Flashing	-	On	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.
-	Flashing	On	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 74 "Paper Feed Problems".
-	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.

6

LED			Status	Solution
Toner/ Paper End	Alarm	Power		
-	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 47 "Using Web Image Monitor" or page 60 "Using Smart Organizing Monitor".
On	On	On	A malfunction has occurred.	Contact your sales or service representative.

6

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 30 "Loading Paper". Load paper into the bypass tray. See page 30 "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 74 "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 30 "Loading 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 30 "Loading 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 65 "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.	Reinstall the print cartridge. See page 65 "Replacing the Print Cartridge".

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7. Appendix

Functions and Network Settings Available in an IPv6 Environment

The functions and network settings of this machine that are available in an IPv6 environment differ from those available in an IPv4 environment. Make sure the functions you use are supported in an IPv6 environment, and then configure the necessary network settings.

For details about specifying the IPv6 settings, see page 60 "Using Smart Organizing Monitor".

Available Functions

FTP Printing

Prints documents via FTP using the EPRT and EPSV commands. Windows Vista/7/8 and an FTP application that supports IPv6 are required to use these commands.

Printer

Prints documents using the printer driver.

Web Image Monitor

Allows you to check the machine's status and configure its settings using a Web browser.

Configuration Page

Prints a configuration page that shows you the machine's configuration, IP address, and other details.

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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 XP SP2, Windows Vista/7, Windows Server 2003/2003 R2/2008/2008 R2, Red Hat Enterprise Linux WS 4.0, and Solaris 10. However, some setting items are not supported depending on the operating system. Make sure the IPsec settings you specify are consistent with the operating system's IPsec settings.

- If you cannot access Web Image Monitor due to IPsec configuration problems, disable IPsec 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 47 "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".

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

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].

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 (earlier versions of Windows only)." check box, and then click [Next].

7. Select "Edit properties", and then click [Finish].

8. In the "General" tab, click [Settings...].

9. In "Authenticate and generate a new key after every", enter the same validity period (in minutes) that is specified on the 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].

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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 under Windows Vista or a newer version of Windows, you must repeat this procedure from Step 12 and specify ICMPv6 as an exception. When you reach Step 22, select [58] as the protocol number for the "Other" target protocol type, and then set [Negotiate security] to [Permit].

37. **Select the filter action that you have just created, and then click [Next].**

38. **Select one of options for an authentication method, and then click [Next].**

39. **Click [Finish], and then click [OK] twice.**

    The new IP security policy (IPsec settings) is specified.

40. **Select the security policy that you have just created, right click on it, and then click [Assign].**

    IPsec settings on the computer are enabled.

↓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.

7

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.

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.

Consumables

Print Cartridge

Print cartridge	Average printable number of pages per cartridge [1]
Black	2,000 or 3,500 pages

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

Note

- Unless a print cartridge is replaced before toner runs out, printing will become impossible. To facilitate cartridge 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 are not covered by warranty. However, if there is a problem, contact the store where you purchased them.

- The supplied print cartridge can print approximately 1,000 pages.

Specifications of the Machine

This section lists the machine's specifications.

General Function Specifications

Configuration

Desktop

Print process

Laser electrostatic transfer

Maximum paper size for printing

216 mm × 356 mm (8.5 × 14 inches)

Warm-up time

26 seconds or less (23 °C, 71.6 °F)

Paper sizes

A4, $8^1/_2$ " × 11 " (Letter), $8^1/_2$ " × 14 " (Legal), B5 JIS, $5^1/_2$ " × $8^1/_2$ " (Half Letter), $7^1/_4$ " × $10^1/_2$ " (Executive), A5, A6, B6 JIS, 16K (195 × 267 mm), 8 " × 13 " (F), $8^1/_2$ " × 13 " (Foolscap), $8^1/_4$ " × 13 " (Folio), Com10 (104.8×241.3 mm), Monarch (98.4 ×190.5 mm), C5 Env (162 ×229 mm), C6 Evn (114 ×162 mm), DL Env (110 ×220 mm), Custom Paper Size

⬇️Note

- The following paper sizes are supported as custom paper sizes:

    - Approximately 90-216 mm (3.6-8.5 inches) in width

    - Approximately 148-356 mm (5.8-14 inches) in length

Paper type

Plain paper (65-99 g/m^2 (17-27 lb.)), Recycled paper (75-90 g/m^2 (20-24 lb.)), Thin paper (52-64 g/m^2 (14-16 lb.)), Thick paper 1 (100-130 g/ m^2 (27-35 lb)), Thick paper 2 (131-162 g/ m^2 (35-43 lb)), Color paper (75-90 g/m^2 (20-24 lb.)), Preprinted paper (75-90 g/m^2 (20-24 lb.)), Prepunched paper (75-90 g/m^2 (20-24 lb.)), Letterhead (100-130 g/m^2 (27-35 lb.)), Bond paper (105-160 g/m^2 (28-43 lb.)), Cardstock (100-130 g/m^2 (27-35 lb.)), Label paper (100-130 g/m^2 (27-35 lb.)), Envelope

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

Power consumption

- Maximum power consumption

    🌐Region **A** : 890 W

    🌐Region **B** : 800 W

- Energy Saver mode 1

    50 W or less

- Energy Saver mode 2

    3.8 W or less

Machine dimensions (Width × Depth × Height)

370 × 392 × 262 mm (14.6 × 15.4 × 10.3 inches)

Weight (machine body with consumables)

Approximately 12.7 kg (28.0 lb.) or less

Printer Function Specifications

Printing speed

🌐Region **A** : 28 pages per minute (A4)

🌐Region **B** : 30 pages per minute (Letter)

Resolution

600 × 600 dpi (maximum: 1200 × 600 dpi)

First print speed

12 seconds or less

Interface

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

- USB 2.0
- Wi-Fi

Printer language

PCL6c

Fonts

80 fonts

Copyright Information about Installed Applications

expat

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OpenSSL 0.9.8g

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  Microsoft® Windows Server® 2012 Standard

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