**Canon**

# i-SENSYS

## LBP151dw

# User's Guide

# Contents

# Important Safety Instructions

# Important Safety Instructions

0YFA-000

This chapter describes important safety instructions for the prevention of injury to users of this machine and others, and damage to property. Read this chapter before using the machine, and follow the instructions to use the machine properly. Do not perform any operations not described in this manual. Canon will not be responsible for any damages resulting from operations not described in this manual, improper use, or repair or changes not performed by Canon or a third party authorized by Canon. Improper operation or use of this machine could result in personal injury and/or damage requiring extensive repair that may not be covered under your Limited Warranty.

# Installation

To use this machine safely and in a trouble-free way, carefully read the following precautions and install the machine in an appropriate location.

## ⚠ WARNING

### Do not install in a location that may result in a fire or electrical shock

- A location where the ventilation slots are blocked
  (too close to walls, beds, sofas, rugs, or similar objects)
- A damp or dusty location
- A location exposed to direct sunlight or outdoors
- A location subject to high temperatures
- A location exposed to open flames
- Near alcohol, paint thinners or other flammable substances

### Other warnings

- Do not connect unapproved cables to this machine. Doing so may result in a fire or electrical shock.
- Do not place necklaces and other metal objects or containers filled with liquid on the machine. If foreign substances come in contact with electrical parts inside the machine, it may result in a fire or electrical shock.
- Do not use near medical equipment. Radio waves emitted from this machine may interfere with medical equipment, which may result in malfunctions and accidents.
- If any foreign substance falls into this machine, unplug the power plug from the AC power outlet and contact your local authorized Canon dealer.

## ⚠ CAUTION

### Do not install in the following locations
The machine may drop or fall, resulting in injury.

- An unstable location
- A location exposed to vibrations

### Other cautions

- When carrying this machine, follow the instructions in this manual. If carried improperly, it may fall, resulting in injury.
- When installing this machine, be careful not to get your hands caught between the machine and the floor or walls. Doing so may result in injury.

## IMPORTANT

### Do not install in the following locations

Doing so may result in damage to the machine.

- A location subject to dramatic changes in temperature or humidity

- A location near equipment that generates magnetic or electromagnetic waves

- A laboratory or location where chemical reactions occur
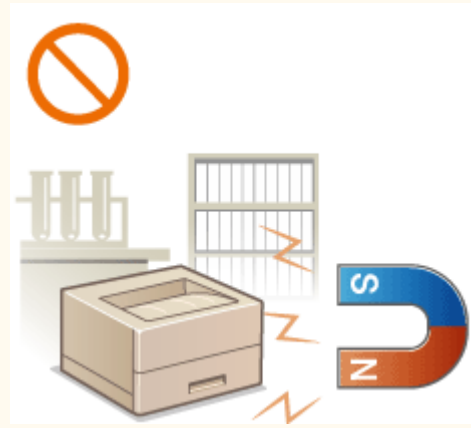
- A location exposed to corrosive or toxic gases

- A location that may warp from the weight of the machine or where the machine is liable to sink (a carpet, etc.)

### Avoid poorly ventilated locations

This machine generates a slight amount of ozone and other emissions during normal use. These emissions are not harmful to health. However, they may be noticeable during extended use or long production runs in poorly ventilated rooms. To maintain a comfortable working environment, it is recommended that the room where the machine operates be appropriately ventilated. Also avoid locations where people would be exposed to emissions from the machine.

### Do not install in a location where condensation occurs

Water droplets (condensation) may form inside the machine when the room where the machine is installed is heated rapidly, and when the machine is moved from a cool or dry location to a hot or humid location. Using the machine under these conditions may result in paper jams, poor print quality, or damage to the machine. Let the machine adjust to the ambient temperature and humidity for at least 2 hours before use.

### When using wireless LAN

- Install the machine at a distance of 50 m or less from the wireless LAN router.

- As far as possible, install in a location where communication is not blocked by intervening objects. The signal may be degraded when passing through walls or floors.

- Keep the machine as far as possible from digital cordless phones, microwave ovens, or other equipment that emits radio waves.

### In altitudes of 3,000 m or above sea level

Machines with a hard disk may not operate properly when used at high altitudes of about 3,000 meters above sea level, or higher.

# Power Supply

This machine is compatible with voltages of 220 to 240 V, and electrical frequency of 50/60 Hz.

> ⚠ **WARNING**
>
> - Use only a power supply that meets the specified voltage requirements. Failure to do so may result in a fire or electrical shock.
> - Do not use power cords other than the one provided, as this may result in a fire or electrical shock.
> - The provided power cord is intended for use with this machine. Do not connect the power cord to other devices.
> - Do not modify, pull, forcibly bend, or perform any other act that may damage the power cord. Do not place heavy objects on the power cord. Damaging the power cord may result in a fire or electrical shock.
> - Do not plug in or unplug the power plug with wet hands, as this may result in an electrical shock.
> - Do not use extension cords or multi-plug power strips with the machine. Doing so may result in a fire or electrical shock.
> - Do not wrap the power cord or tie it in a knot, as this may result in a fire or electrical shock.
> - Insert the power plug completely into the AC power outlet. Failure to do so may result in a fire or electrical shock.
> - Remove the power plug completely from the AC power outlet during a thunder storm. Failure to do so may result in a fire, electrical shock, or damage to the machine.

> ⚠ **CAUTION**
>
> - Install this machine near the power outlet and leave sufficient space around the power plug so that it can be unplugged easily in an emergency.

> **IMPORTANT**
>
> **When connecting power**
>
> - Do not connect the power cord to an uninterruptible power source. Doing so may result in malfunction of or damage to the machine at power failure.
> - If you plug this machine into an AC power outlet with multiple sockets, do not use the remaining sockets to connect other devices.
> - Do not connect the power cord to the auxiliary AC power outlet on a computer.
>
> **Other precautions**
> Electrical noise may cause this machine to malfunction or lose data.

# Handling

0YFA-003

⚠ **WARNING**

- Immediately unplug the power plug from the AC power outlet and contact an authorized Canon dealer if the machine makes an unusual noise, emits an unusual smell, or emits smoke or excessive heat. Continued use may result in a fire or electrical shock.
- Do not disassemble or modify this machine. There are high-voltage and high-temperature components inside the machine. Disassembly or modification may result in a fire or electrical shock.

- Place the machine where children will not come in contact with the power cord and other cables or gears and electrical parts inside the machine. Failure to do so may result in unexpected accidents.
- Do not use flammable sprays near this machine. If flammable substances come into contact with electrical parts inside this machine, it may result in a fire or electrical shock.
- When moving this machine, be sure to turn OFF the power of this machine and your computer, and then unplug the power plug and interface cables. Failure to do so may damage the power cord or interface cables, resulting in a fire or electrical shock.
- When plugging or unplugging a USB cable when the power plug is plugged into an AC power outlet, do not touch the metal part of the connector, as this may result in an electrical shock.

### If you are using a cardiac pacemaker
This machine generates a low level magnetic flux. If you use a cardiac pacemaker and feel abnormalities, please move away from this machine and consult your physician immediately.

⚠ **CAUTION**

- Do not place heavy objects on this machine as they may fall, resulting in injury.
- For safety, unplug the power plug if the machine will not be used for a long period of time.
- Use caution when opening and closing covers to avoid injury to your hands.
- Keep hands and clothing away from the rollers in the output area. If the rollers catch your hands or clothing, this may result in personal injury.
- If the laser beam should escape and enter your eyes, exposure may cause damage to your eyes.

## ⚠ CAUTION

- The inside of the machine and the output slot are very hot during and immediately after use. Avoid contact with these areas to prevent burns. Also, printed paper may be hot immediately after being output, so use caution when handling it. Failure to do so may result in burns.
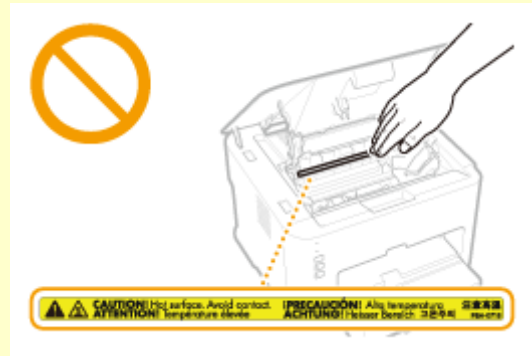
## IMPORTANT

### When transporting the machine

To prevent damage to the machine during transport, do the following.

- Remove the toner cartridge.

- Securely pack the machine in the original box with the original packing materials.

### If the operating noise concerns you

- Depending on the use environment and operating mode, if the operating noise is of concern, it is recommended that the machine be Installed in a place other than the office.

### Other precautions

- Follow the instructions on the caution label attached to this machine.

- Do not subject the machine to strong shocks or vibration.

- Do not forcibly open and close doors, covers, and other parts. Doing so may result in damage to the machine.

- Do not touch the contacts ( **a** ). Doing so may result in damage to the machine.
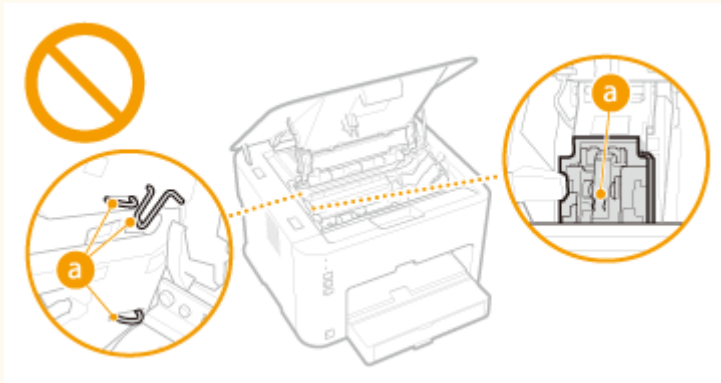
- Do not turn OFF the machine during printing. Also, do not open and close the cover and do not remove or insert paper during printing. Doing so can cause paper jams.

# Maintenance and Inspections

0YFA-004

Clean this machine periodically. If dust accumulates, the machine may not operate properly. When cleaning, be sure to observe the following. If a problem occurs during operation, see ◗**Troubleshooting(P. 211)** . If the problem cannot be resolved or you feel the machine requires an inspection, see ◗**When a Problem Cannot Be Solved(P. 244)** .

⚠ WARNING

- Before cleaning, turn OFF the power and unplug the power plug from the AC power outlet. Failure to do so may result in a fire or electrical shock.

- Unplug the power plug periodically and clean with a dry cloth to remove dust and grime. Accumulated dust may absorb humidity in the air and may result in a fire if it comes into contact with electricity.

- Use a damp, well wrung-out cloth to clean the machine. Dampen cleaning cloths with water only. Do not use alcohol, benzenes, paint thinners, or other flammable substances. Do not use tissue paper or paper towels. If these substances come into contact with electrical parts inside the machine, they may generate static electricity or result in a fire or electrical shock.

- Check the power cord and plug periodically for rust, bent prongs, fraying, cracks, or excessive heat generation. Use of poorly-maintained power cord or plug may result in a fire or electrical shock.

⚠ CAUTION

- The inside of the machine has high-temperature and high-voltage components. Touching these components may result in injury or burns. Do not touch any part of the machine that is not indicated in the manual.

- When loading paper or removing jammed paper, be careful not to cut your hands with the edges of the paper.

IMPORTANT

When removing jammed paper or replacing toner cartridges, be careful not to get any toner on your hands or clothing. If toner gets on your hands or clothing, wash them immediately with cold water.

# Consumables

0YFA-005

⚠ **WARNING**

- Do not dispose of used toner cartridges in open flames. Also, do not store toner cartridges or paper in a location exposed to open flames. This may cause the toner or paper to ignite, and result in burns or fire.

- If you accidentally spill or scatter toner, carefully sweep it up or wipe it up with a damp cloth, and avoid inhaling any toner dust. Do not use a vacuum cleaner to clean up loose toner unless it is equipped with safety measures to prevent dust explosions. Doing so may cause damage to the vacuum cleaner or result in a dust explosion due to static discharge.

**If you are using a cardiac pacemaker**
Toner cartridges generate a low level magnetic flux. If you use a cardiac pacemaker and feel abnormalities, please move away from toner cartridges and consult your physician immediately.

⚠ **CAUTION**

- Use caution not to inhale any toner. If you should inhale toner, consult a physician immediately.

- Use caution so that toner does not get into your eyes or mouth. If toner should get into your eyes or mouth, immediately wash it away with cold water and consult a physician.

- Use caution so that toner does not come into contact with your skin. If it should, wash it off with soap and cold water. If your skin is irritated, consult a physician immediately.

- Keep toner cartridges and other consumables out of the reach of small children. If toner is ingested, consult a physician or poison control center immediately.

- Do not disassemble or modify the toner cartridge. Doing so may cause the toner to scatter.

- Remove the sealing tape of the toner cartridge completely without using excessive force. Doing otherwise may cause the toner to scatter.
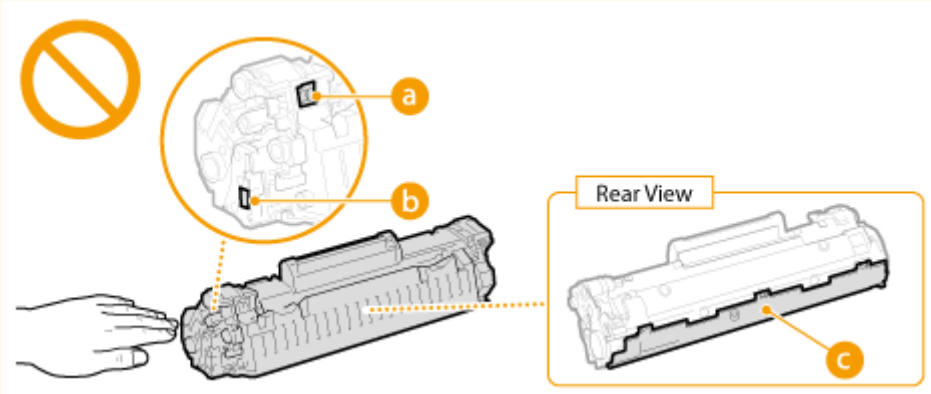
**IMPORTANT**

**Handling the toner cartridge**
- Be sure to use the holder to hold the toner cartridge.
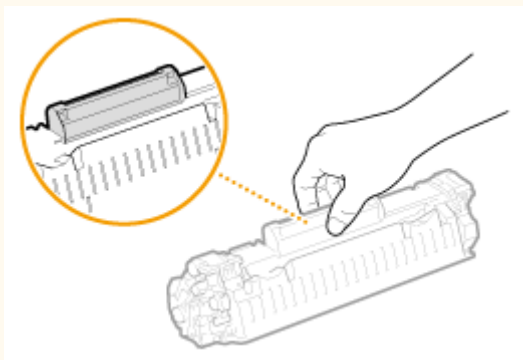


- Do not touch the electrical contacts ( **a** ) or toner cartridge memory ( **b** ). Do not open the drum protection shutter ( **c** ). Doing so risks scratching the drum surface or exposing it to light.

- The toner cartridge is a magnetic product. Keep it away from floppy disks, disk drives, and other devices that can be affected by magnetism. Failure to do so may result in data loss.

### Storing toner cartridges

- To ensure safe and satisfactory performance, store toner cartridges under the following environmental conditions.
  Storage temperature range: 0 to 35 °C
  Storage humidity range: 35 to 85% RH (relative humidity), no condensation[*]

- Store without opening until the toner cartridge is to be used.

- When removing the toner cartridge from this machine for storage, place the removed toner cartridge into the original protective bag or wrap it with a thick cloth.

- When storing the toner cartridge, do not store it upright or upside down. The toner may solidify and not return to its original condition even if it is shaken.

[*] Even within the storable humidity range, water droplets (condensation) may develop inside the toner cartridge if there is a difference of temperature inside and outside the toner cartridge. Condensation inside the toner cartridge will adversely affect print quality.

### Do not store the toner cartridge in the following locations

- Locations exposed to open flames

- Locations exposed to direct sunlight or bright light for five minutes or more

- Locations exposed to excessive salty air

- Locations where there are corrosive gases (i.e. aerosol sprays and ammonia)

- Locations subject to high temperature and high humidity

- Locations subject to dramatic changes in temperature and humidity where condensation may easily occur

- Locations with a large amount of dust

- Locations within the reach of children

### Be careful of counterfeit toner cartridges

Please be aware that there are counterfeit Canon toner cartridges in the marketplace. Use of counterfeit toner cartridge may result in poor print quality or machine performance. Canon is not responsible for any malfunction, accident or damage caused by the use of counterfeit toner cartridge.

For more information, see **canon.com/counterfeit** .

### Availability of repair parts and toner cartridges

Repair parts and toner cartridges for this machine will be available for at least seven (7) years after production of this machine model has been discontinued.

### Toner cartridge packing materials

- Save the protective bag for the toner cartridge. It is required when transporting this machine.

- Packing materials may be changed in form or placement, or may be added or removed without notice.

- Dispose of removed sealing tape according to local regulations.

**Disposal of used toner cartridges**

Place the toner cartridge into its protective bag to prevent the toner from scattering, and then dispose of the toner cartridge according to local regulations.

# Basic Operations

# Basic Operations

0YFA-006

This chapter describes the parts of the machine and basic operations, such as how to load paper.

## ■ Parts and Their Functions

This section describes the names and functions of the exterior and interior parts of the machine. ○**Parts and Their Functions(P. 15)**

## ■ Printer Status Window

This section explains how to use the "Printer Status Window" utility to check the machine's status and make machine settings. ○**Printer Status Window(P. 23)**

## ■ Turning the Power ON and OFF

This section explains how to turn the power ON and OFF. ○**Turning the Power ON and OFF(P. 26)**
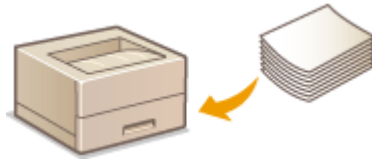
## ■ Saving Power

This section explains how to reduce the machine's power consumption. ○**Saving Power(P. 27)**

## ■ Loading Paper

This section explains how to load paper into the drawer and multi-purpose tray. ⊙**Loading Paper(P. 30)**

# Parts and Their Functions

This section describes the parts of the machine (exterior, front and back side, and interior) and how they function. It also describes the parts of the machine used for basic operations such as loading paper and replacing the toner cartridge, and explains the functions of the keys and meaning of indications by indicators of the machine. Read this section for tips on how to use the machine properly.

# Front Side

0YFA-008
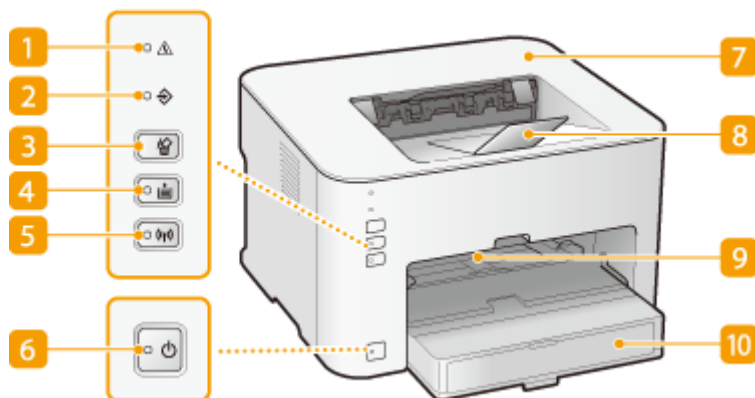


## 🔺 (Alarm) indicator

Lights up or flashes when a paper jam or other error occurs. Solve the problem following the message displayed in the Printer Status Window. ❍**When an Error Message Appears(P. 218)**

## ⬦ (Job) indicator

Lights up when there is print data that is being printed or waiting to be printed. Flashes when a print job is canceled.

## 🗑 (Cancel Job) key

Cancels a print job that is currently printing. ❍**Canceling Print Jobs(P. 49)**

## ᵃ (Paper) indicator / key

Flashes when the machine is out of paper, when the paper is the wrong size, and after other errors when the paper needs to be checked. Reset the paper and press the key to restart printing.

**NOTE:**

You can also use the ᵃ (Paper) key to print a list of the machine's settings (with the machine ready to print, press the key and hold it down for 3 seconds). ❍**Viewing Network Settings(P. 104)**

## 📶 (Wi-Fi) indicator / key

Use this key when setting up a wireless LAN connection by using the WPS push-button method. Indicator flashes when configuring a wireless LAN, and remains lit when connected by the wireless LAN.

## ⏻ (Power) indicator / Power switch

Press the power switch to turn the power ON or OFF. Indicator lights up when the power is turned ON.

## Top cover

Open the top cover to replace the toner cartridge or clear a paper jam. ❍**How to Replace Toner Cartridges(P. 256)**   ❍**Clearing Paper Jams(P. 213)**

16

**8 Paper stopper**

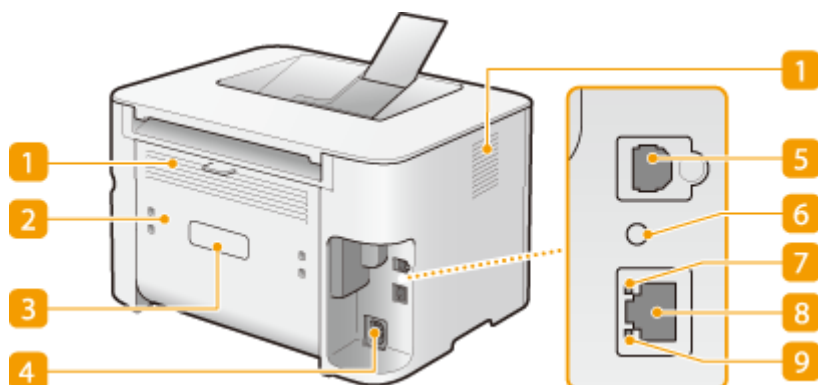Open this tray before printing.

**9 Multi-purpose tray**

When you use paper not loaded in the drawer for limited time, load the paper here. ▶**Loading Paper in the Multi-Purpose Tray(P. 35)**

**10 Drawer**

Load the paper to print in this tray. ▶**Loading Paper in the Drawer(P. 32)**

# Back Side

0YFA-009

## Ventilation slots

Air from inside the machine is vented out to cool down the inside of the machine. Note that placing objects in front of the ventilation slots prevents ventilation. **Installation(P. 3)**

## Rear cover

Open to remove jammed paper. **Clearing Paper Jams(P. 213)**

## Rating label

The label shows the serial number, which is needed when making inquiries about the machine. **When a Problem Cannot Be Solved(P. 244)**

## Power socket

Connect the power cord.

## USB port

Connect a USB cable when connecting the machine and a computer.

## Reset button

You can also press this key while turning ON the power to initialize the settings. **Initializing Settings by Using the Reset Button(P. 267)**

## LNK indicator

Lights up when the machine is connected to wired LAN.

## LAN port

Use a LAN cable to connect to a hub (or router). **Connecting to a Wired LAN(P. 92)**

**9** **ACT indicator**

Flashes when data is sent and received via wired LAN.

# Interior
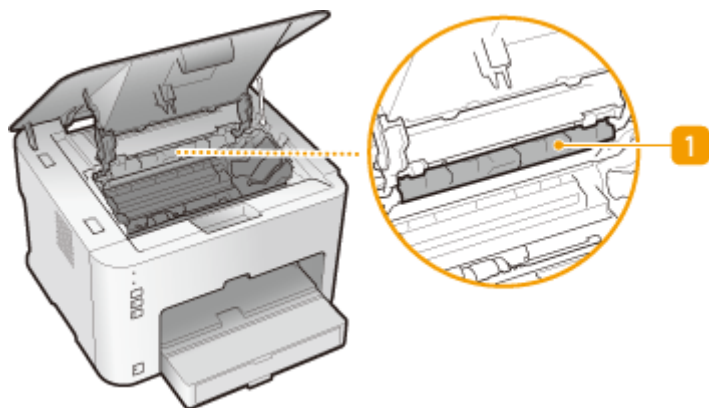
## ① Paper output guide

Open to remove jammed paper. ❖**Clearing Paper Jams(P. 213)**

# Multi-Purpose Tray

0YFA-00C
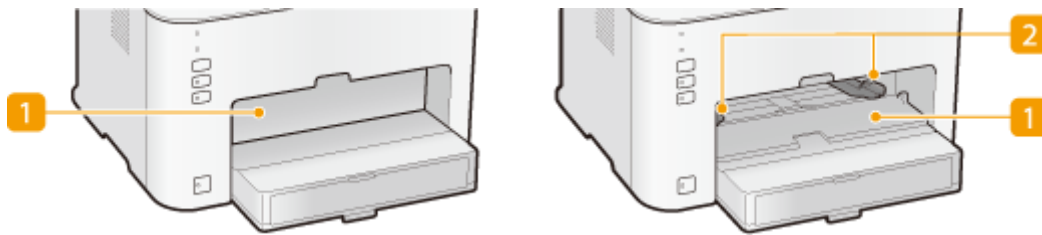
## 1 Multi-purpose cover

Open this slot to load paper in the multi-purpose tray.

## 2 Paper guides

Adjust the paper guides to exactly the width of the loaded paper to ensure that paper is fed straight into the machine.

## LINKS

**▶Loading Paper in the Multi-Purpose Tray(P. 35)**

# Drawer

0YFA-00E



### 1 Dust cover

Lift this cover to load paper in the drawer.

### 2 Paper guides

Adjust the paper guides to exactly the size of the loaded paper to ensure that paper is fed straight into the machine.

## LINKS

**▶Loading Paper in the Drawer(P. 32)**

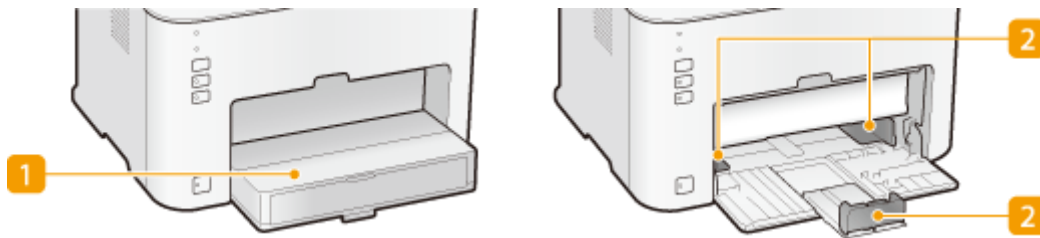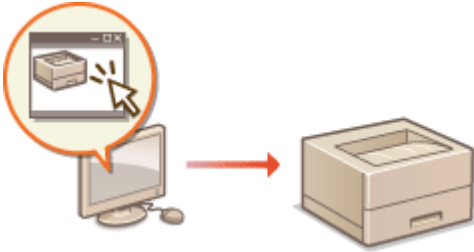# Printer Status Window

<div align="right">0YFA-00H</div>

The Printer Status Window is a utility that allows you to check the machine's status, view error information, and make settings related to the machine, such as power saving settings. You can also use it for operations such as cancelling a print job or printing a list of the machine's settings. The Printer Status Window utility is installed on your computer automatically when you install the printer driver. For more information, see Printer Driver Installation Guide.



▶**Displaying the Printer Status Window(P. 23)**
▶**Parts of the Screen and Their Functions(P. 23)**

## Displaying the Printer Status Window

Select the machine by clicking 🖼 in the system tray.



### NOTE

**Automatic Display of the Printer Status Window**
The Printer Status Window is displayed automatically when an error occurs during printing.

\* You can change the setting that determines when the Printer Status Window is displayed automatically. Change it with the [Options] menu ▶ [Preferences (Users)] or [Preferences (Administrators)] dialog box of the Printer Status Window. For details, see the Help. ▶**[Help] menu(P. 24)**

**If you are using Windows 8/Server 2012**
Display the Printer Status Window after moving to the desktop.

## Parts of the Screen and Their Functions

This section provides an outline of the main screen. For detailed descriptions of the dialog boxes that can be displayed with the controls and menus in this screen, see the Help. ▶**[Help] menu(P. 24)**
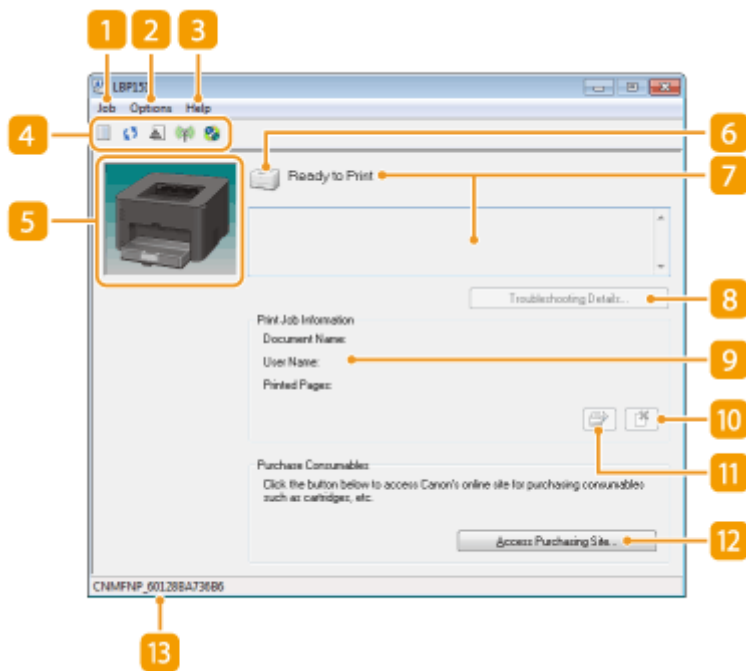
### ❶ [Job] menu

Allows you to check documents that are printing or waiting. You can also select documents and cancel printing.

### ❷ [Options] menu

Allows you to execute maintenance functions, such as printing setting lists or cleaning the fixing unit, and to make machine settings, such as power saving settings. You can also check information such as the total number of pages printed.

### ❸ [Help] menu

Displays Help about the Printer Status Window and version information.

**NOTE:**

You can also display the Printer Status Window Help by clicking the [Help] button in the various dialog boxes. However, some dialog boxes do not have a [Help] button.

### ❹ Toolbar

**(Print Queue)**

Displays the print queue, a Windows function. See the Windows Help for more information about the print queue.

**(Refresh)**

Refreshes the Printer Status Window with the latest information.

**(Consumables Information)**

You can check the amount remaining in the toner cartridge.

**(Wireless LAN Status)**

Allows you to check the connection status (signal strength) of the wireless LAN.

**(Remote UI)**

Starts the Remote UI. ○**Using the Remote UI(P. 174)**

**5 Animation area**

Displays animations and illustrations about the machine's status. After an error occurs, this area may also display a simple explanation of how to deal with the error.

**6 Icon**

Displays an icon that indicates the machine's status. The normal status is     but when an error occurs, the display changes to one of   /  /  , depending on the message.

**7 Message area**

Displays messages about the machine's status. If an error or warning occurs, this area displays an explanation beneath the error message or warning, together with information about how to deal with the problem. **When an Error Message Appears(P. 218)**

**8 [Troubleshooting Details]**

Displays troubleshooting information for problems described by messages.

**9 [Print Job Information]**

Displays information about the document that is currently being printed.

**10 (Cancel Job)**

Cancels the printing of the document currently being printed.

**11 (Continue/Retry)**

When an error has occurred, but printing can be continued, this button allows you to clear the error and resume printing. However, if you use the Continue/Retry function to resume printing, partially printed pages or other improper printing may occur.

**12 [Access Purchasing Site]**

If you click [Access Purchasing Site] ▶ select your country or region ▶ click [OK], a Canon Web site page is displayed where you can find information about purchasing consumables.

**13 Status bar**

Displays the connection destination (port name) of the Printer Status Window.
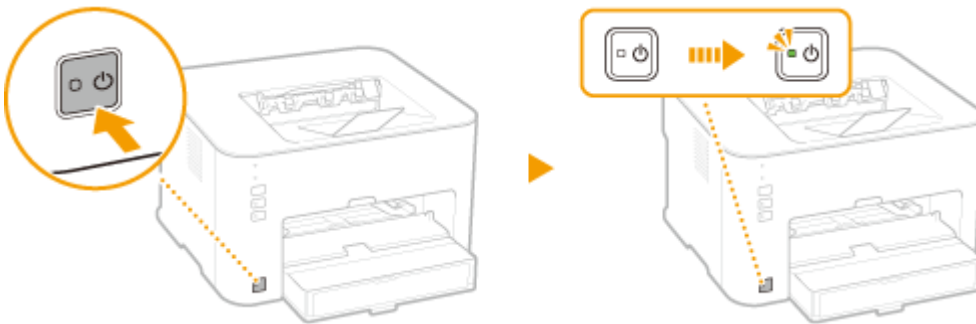
# Turning the Power ON and OFF

Use the power switch on the front side of the machine to turn the power ON and OFF. To restart the machine, turn the machine OFF, wait for at least 10 seconds, and turn it back ON.

**◐Turning the Power ON(P. 26)**
**◐Turning the Power OFF(P. 26)**

## Turning the Power ON

When you press the power switch, the ⏻ (Power) indicator lights and the machine is ready for printing.



**NOTE**

A blank sheet of paper may be output when you turn ON the power for the first time after purchasing the machine. This is not a malfunction.

## Turning the Power OFF

When you press the power switch, the ⏻ (Power) indicator goes out and the power is turned OFF.
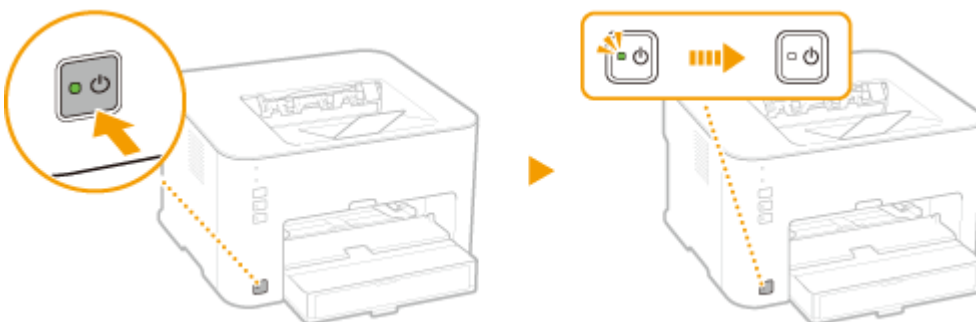


**NOTE**

Even when the power is turned OFF, the machine continues to consume a small amount of power. To reduce power consumption to zero, unplug the power plug from the AC power outlet.

# Saving Power

0YFA-00K

You can save power by setting up the machine to automatically enter sleep mode or turn itself OFF after it remains idle for a certain length of time.

◉**Setting Sleep Mode(P. 28)**
◉**Setting Auto Shutdown(P. 29)**

# Setting Sleep Mode

0YFA-00L

The sleep mode function reduces the amount of power consumed by the machine by temporarily stopping some internal operations. You can set up the machine to enter sleep mode automatically when it remains idle for a certain length of time. The factory default setting for the amount of time that elapses before the machine enters sleep mode is 1 minute. We recommend using the factory default setting to save the most power. If you want to change the amount of time that elapses before the machine enters sleep mode, follow the procedure below in the Printer Status Window.

> **NOTE**
>
> **Situations in which the machine does not enter sleep mode**
>
> - The machine does not enter sleep mode when it is receiving print data from a computer, when a cover is open, when a toner cartridge is not loaded, and in some other situations.

**1** Select the machine by clicking 🖶 in the system tray.

**2** Select [Options] ▶ [Device Settings] ▶ [Sleep Settings].
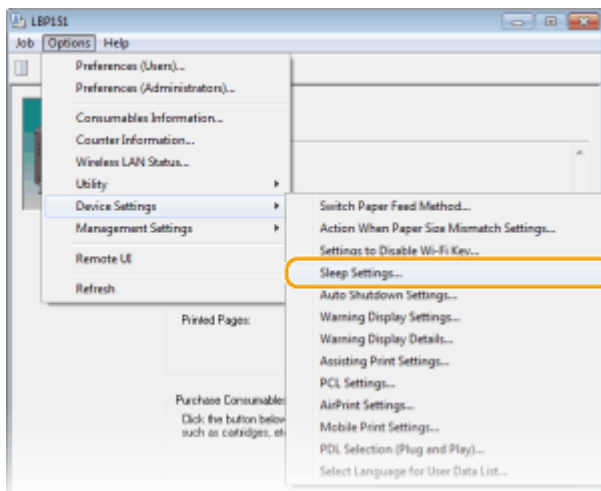
**3** Make sleep mode settings, and click [OK].

**[Auto Sleep After]**
Specify the length of time after which the machine enters sleep mode. You can select from 1 to 30 minutes.

# Setting Auto Shutdown

0YFA-00R

You can set up the machine to automatically turn itself OFF after it remains idle for a certain length of time. This prevents wasted power consumption caused by forgetting to turn the machine OFF. The factory default setting for the amount of time that elapses before the power is turned OFF is 4 hours. If you want to change this setting, perform the following procedure in the Printer Status Window.
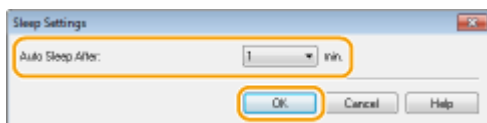
**NOTE**

If you set the time until the power is turned OFF to a time shorter than the factory default setting, the lifetime of the toner cartridge may be shorter.

**1** Select the machine by clicking 📟 in the system tray.

**2** Select [Options] ▶ [Device Settings] ▶ [Auto Shutdown Settings].
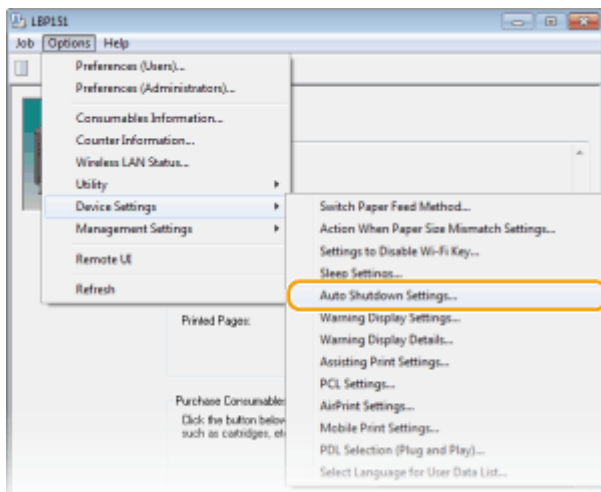
**3** Make auto shutdown settings, and click [OK].
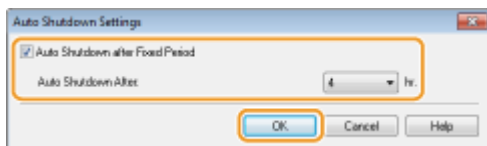
[Auto Shutdown after Fixed Period]
Select the check box to enable auto shutdown after the time specified with [Auto Shutdown After].

[Auto Shutdown After]
Specify the length of time until the machine executes auto shutdown, starting from the time when the machine enters sleep mode. You can select from 1 hour to 8 hours, in units of 1 hour.

# Loading Paper

0YFA-00S

You can load paper in the drawer and multi-purpose tray. Load paper used frequently in the drawer. This is useful because you can load a large number of sheets. When you use paper not loaded in the drawer for limited time, load the paper in the multi-purpose tray. See ❍**Paper(P. 290)** for information about available paper sizes.

## Paper Type and Printer Driver Paper Settings

Before printing, refer to the table below and make the appropriate paper settings in the printer driver, according to the 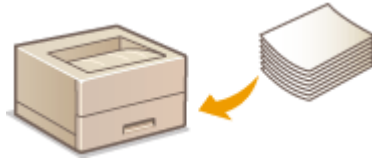type of paper that you have loaded. See ❍**Basic Printing Operations(P. 45)** for detailed information about paper settings, and see ❍**Paper(P. 290)** for information about the number of sheets that can be set.

| Paper Type | | Printer Driver Paper Setting |
|---|---|---|
| Plain paper | 60 to 89 g/m² | [Plain [60-89 g/m2]] <br> [Plain L [60-89 g/m2]][*1] |
| Recycled paper | 60 to 89 g/m² | [Recycled [60-89 g/m2]] |
| Color paper | 60 to 89 g/m² | [Color [60-89 g/m2]] |
| Heavy paper | 90 to 120 g/m² | [Heavy 1 [90-120 g/m2]] |
| | 121 to 163 g/m² | [Heavy 2 [121-163 g/m2]] |
| Bond paper | 60 to 90 g/m² | [Bond 1 [60-90 g/m2]] [*2] [*5] |
| | 91 to 120 g/m² | [Bond 2 [91-120 g/m2]] [*3] [*5] |
| | 121 to 163 g/m² | [Bond 3 [121-163 g/m2]] [*4] [*5] |
| Labels [*6] | | [Labels] |
| Index card | | [Envelope] |
| Envelope | | [Envelope] |

[*1] If paper becomes curled when [Plain [60-89 g/m2]] is selected, select this instead.

[*2] If you select [Plain [60-89 g/m2]] when using paper with a coarse surface (60 to 89 g/m²), there is a possibility that paper jams may occur or that toner may not be fully fixed and printouts may be faded. In that case, select this instead.

[*3] If you select [Heavy 1 [90-120 g/m2]] when using paper with a coarse surface (90 to 120 g/m²), there is a possibility that paper jams may occur or that toner may not be fully fixed and printouts may be faded. In that case, select this instead.

[*4] If you select [Heavy 2 [121-163 g/m2]] when using paper with a coarse surface (121 to 163 g/m²), there is a possibility that paper jams may occur or that toner may not be fully fixed and printouts may be faded. In that case, select this instead.

[*5] If cloth becomes dirty from toner, select this instead.

[*6] Use A4 or Letter size only.

**IMPORTANT**

**Do not use the following types of paper:**

- Wrinkled or creased paper
- Curled or rolled paper
- Torn paper
- Damp paper
- Very thin paper
- Paper with a coarse texture
- Glossy paper
- Paper that was used on a copier or other printer (do not use its blank side, either)

**Paper handling and storage**

- Store paper on a flat surface.
- Keep paper wrapped in its original package to protect the paper from moisture or dryness.
- Do not store paper in a way that may cause it to curl or fold.
- Do not store paper vertically or stack too many packages of paper.
- Do not store paper in direct sunlight, or in a place subject to high humidity, dryness, or drastic changes in temperature or humidity.

**NOTE**

**When printing on paper that has absorbed moisture**
Steam may be emitted from the paper output area, or water droplets may form around the paper output area. This is not a malfunction. It occurs when the heat used to fix toner on the paper causes moisture in the paper to evaporate (most likely to occur at low room temperatures).
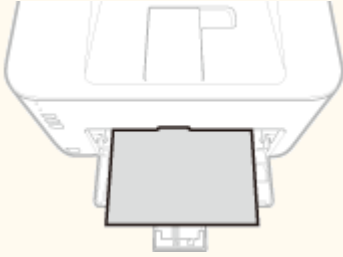
# Loading Paper in the Drawer

0YFA-00U

Load paper used frequently in the drawer. If you want to print using paper not loaded in the drawer, load the paper in the multi-purpose tray. ○**Loading Paper in the Multi-Purpose Tray(P. 35)**

## IMPORTANT

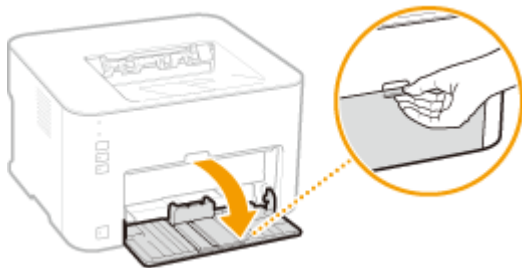### Always load paper in portrait orientation

Paper cannot be loaded in landscape orientation. Be sure to load paper in portrait orientation, as shown in the illustration below.
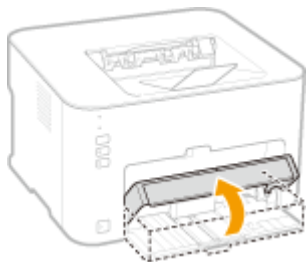


**1** **Open the drawer.**



### NOTE:

**When replenishing paper**

When the drawer is already open and the dust cover is lowered, lift the dust cover.



**2** **Spread the paper guides apart.**

● Slide the paper guides outward.

**3** **Load the paper and slide it all the way in, until it touches the back side.**

- Load the paper in portrait orientation (with the short edge toward the machine) and the print side face up. Paper cannot be loaded in landscape orientation.
- Before loading it, fan the paper stack well, and tap it on a flat surface to align the edges.
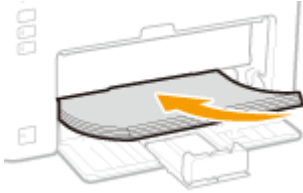


**IMPORTANT:**

**Keep the paper stack within the load limit guides.**

Make sure that the paper stack does not exceed the load limit guides ( **a** ). Loading too much paper can cause paper jams.
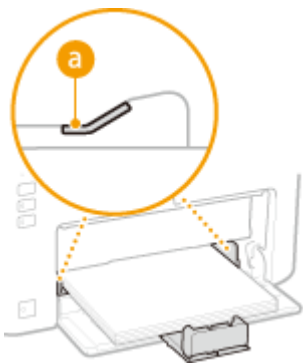


**NOTE:**

When loading envelopes or preprinted paper, see ▶**Loading Envelopes(P. 38)** or ▶**Loading Preprinted Paper(P. 40)** .

**4** **Align the paper guides against the edges of the paper.**

- Align the paper guides securely against the edges of the paper.



**IMPORTANT:**

**Align the paper guides securely against the paper**

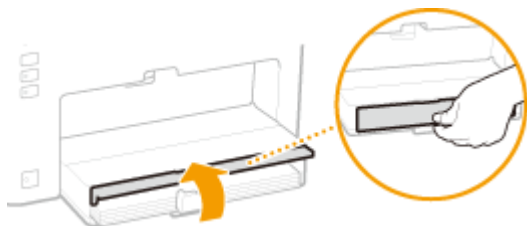Paper guides that are too loose or too tight can cause misfeeds or paper jams.

**5** **Lower the dust cover.**



**NOTE:**

**When Legal size paper is loaded**

The paper guide at the rear edge of the paper will be extended. Open the dust cover extension, then lower the dust cover.

**IMPORTANT**

Make sure that no paper is loaded in the multi-purpose tray before printing from the drawer. If paper is loaded in both the drawer and multi-purpose tray, paper in the multi-purpose tray is to be fed.

**NOTE**

- When performing printing, open the paper stopper in advance so that the output paper does not fall out of the output tray.

- After reloading paper that has run out during printing, or resetting the paper after a paper error notification, press the ⬆ (Paper) key to restart printing.

**Printing on the Back Side of Printed Paper (Manual 2-Sided Printing)**

You can print on the back side of printed paper. Flatten any curls on the printed paper and insert it into the drawer with the side to print face up (previously printed side face down).

- Load only one sheet of paper each time you print.

- You can use only paper printed with this machine.

- You cannot print on the side that has been previously printed.

## LINKS

**Paper(P. 290)**

# Loading Paper in the Multi-Purpose Tray

0YFA-00W

If you want to print using paper not loaded in the drawer, load the paper in the multi-purpose tray. Load paper used frequently in the drawer. ●**Loading Paper in the Drawer(P. 32)**

## IMPORTANT

### Always load paper in portrait orientation

Paper cannot be loaded in landscape orientation. Be sure to load paper in portrait orientation, as shown in the illustration below.
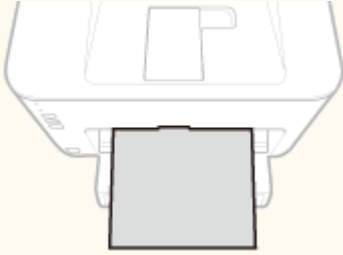
### Only one sheet can be loaded at a time

Load only one sheet of paper each time you print. Furthermore, if you specify multiple copies or multiple pages and perform printing, the second and subsequent sheets are fed from the drawer.

**1** **Open the drawer.**
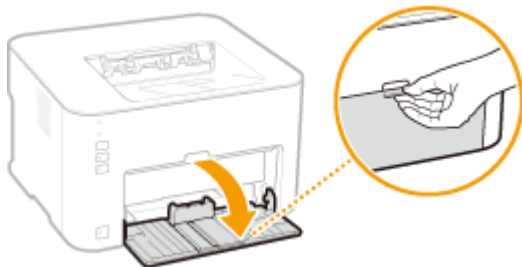
**2** **Lower the dust cover.**

**3** **Open the multi-purpose cover.**

**4** **Spread the paper guides apart.**

- Spread the paper guides outward.

**5** **Load the paper and slide it all the way in until it stops.**

- Load the paper in portrait orientation (with the short edge toward the machine) and the print side face up. Paper cannot be loaded in landscape orientation.
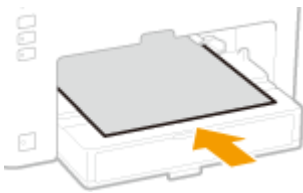
**NOTE:**

When loading envelopes or preprinted paper, see **Loading Envelopes(P. 38)** or **Loading Preprinted Paper(P. 40)** .

**6** **Align the paper guides against the edges of the paper.**

- Move the paper guides inward and align them securely against the edges of the paper.
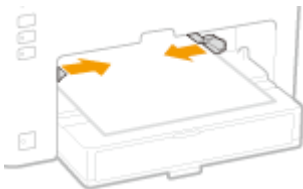
**IMPORTANT:**

**Align the paper guides securely to the width of the paper**

Paper guides that are too loose or too tight can cause misfeeds or paper jams.

**NOTE**

- When performing printing, open the paper stopper in advance so that the output paper does not fall out of the output tray.

- When resetting the paper after a paper error notification, press the ⬐ (Paper) key to restart printing.

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**Printing on the Back Side of Printed Paper (Manual 2-Sided Printing)**

You can print on the back side of printed paper. Flatten any curls on the printed paper and insert it into the multi-purpose tray with the side to print face up (previously printed side face down).

- You can use only paper printed with this machine.

- You cannot print on the side that has been previously printed.

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## LINKS

**Paper(P. 290)**

# Loading Envelopes

0YFA-00X

Make sure to flatten any curls on envelopes before loading them. Also pay attention to the orientation of envelopes and which side is face up.

◉**Before Loading Envelopes(P. 38)**
◉**Loading Envelopes in the Drawer and Multi-Purpose Tray(P. 39)**

> **NOTE**
>
> This section explains how to load envelopes in the orientation you want, as well as preparations that you need to complete before loading envelopes. For a complete description of the procedure for loading envelopes in the drawer or multi-purpose tray, see the following.
> ◉**Loading Paper in the Drawer(P. 32)**
> ◉**Loading Paper in the Multi-Purpose Tray(P. 35)**

## Before Loading Envelopes

Follow the procedure below to prepare the envelopes before loading.

> **NOTE**
>
> When loading in the multi-purpose tray, only one envelope can be loaded at a time. Note that the preparations described in steps 1 to 3 below are necessary.

**1** **Close the flap of each envelope.**

**2** **Press down to expel air from the envelopes and make sure that the folds on all four sides are sharp and that the stack is flat.**

**3** **Remove curls by flexing the stiff sections at the four corners.**
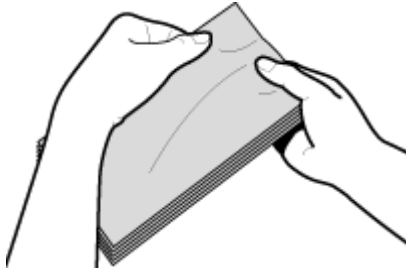
**4** **Tap the stack on a flat surface to even the edges of the envelopes.**
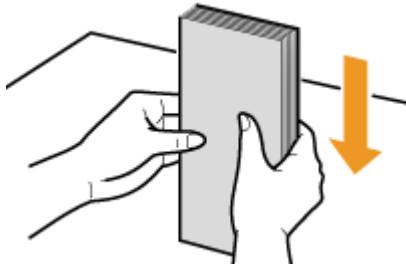


## Loading Envelopes in the Drawer and Multi-Purpose Tray

Load the envelopes Monarch, No. 10 (COM10), DL, or C5 in portrait orientation (with the short edge toward the machine), with the non-glued side (front side) face up. You cannot print on the reverse side of envelopes.

**IMPORTANT**

When loading in the multi-purpose tray, only one envelope can be loaded at a time.

**NOTE**

Load the envelopes so that the edge with the flap is toward the left side as shown in the illustration.

**Drawer**                                **Multi-purpose tray**



Close the flap and load the envelope.



Close the flap and load the envelope.

# Loading Preprinted Paper

0YFA-00Y

When you use paper that has been preprinted with a logo or other information, pay attention to the orientation of the paper when loading. Load the paper in accord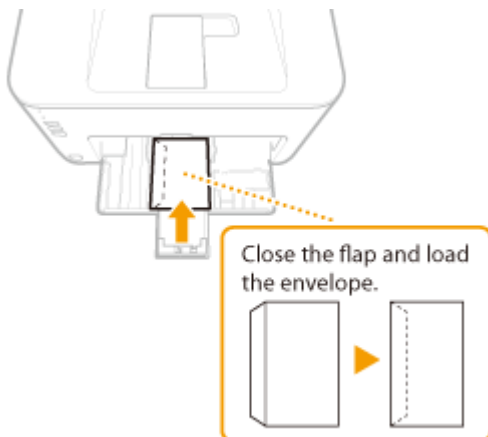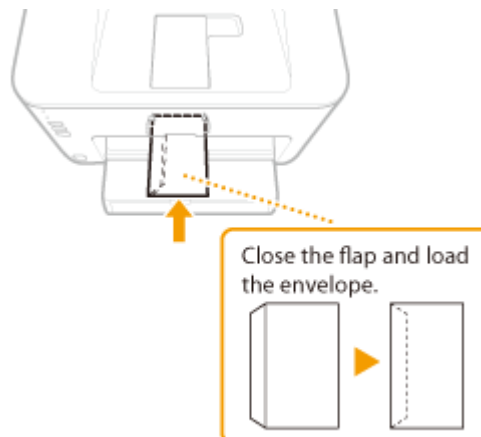ance with the layout and printing method so that the document is printed on the logo side of paper in the proper orientation.



 Making 1-Sided Printing Paper with a Logo(P. 40)
 Making 2-Sided Printing Paper with a Logo(P. 41)

**NOTE**

This section explains how to load preprinted paper with the proper orientation and the right side face up. For a complete description of the procedure for loading paper in the drawer or multi-purpose tray, see the following.
 **Loading Paper in the Drawer(P. 32)**
 **Loading Paper in the Multi-Purpose Tray(P. 35)**

## Making 1-Sided Printing Paper with a Logo

Load the paper with the logo side (the side on which to print the document) face up.

**IMPORTANT**

When loading paper in the multi-purpose tray, only one sheet can be loaded at a time.

### Printing Paper with a Logo in Portrait Orientation
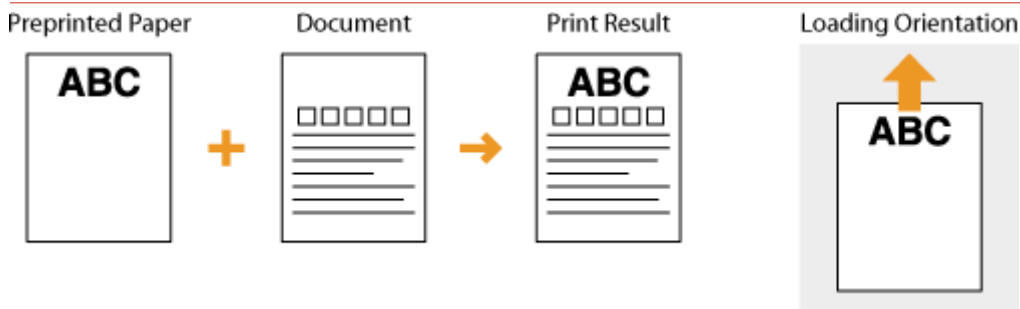
**Printing Paper with a Logo in Landscape Orientation**



## Making 2-Sided Printing Paper with a Logo

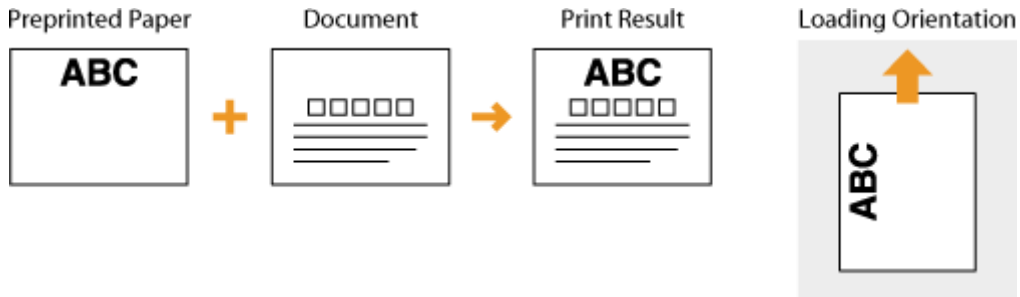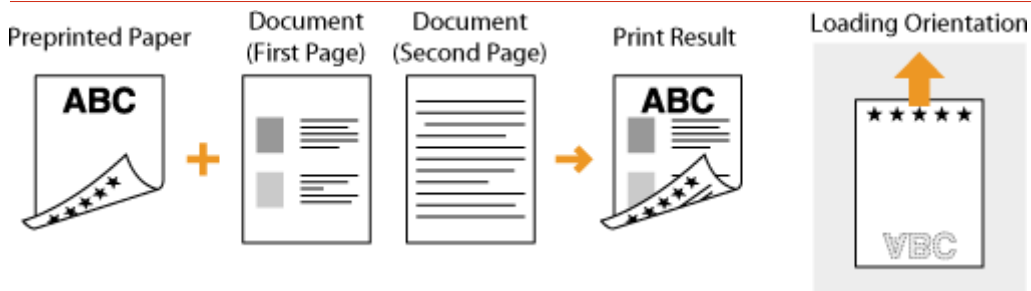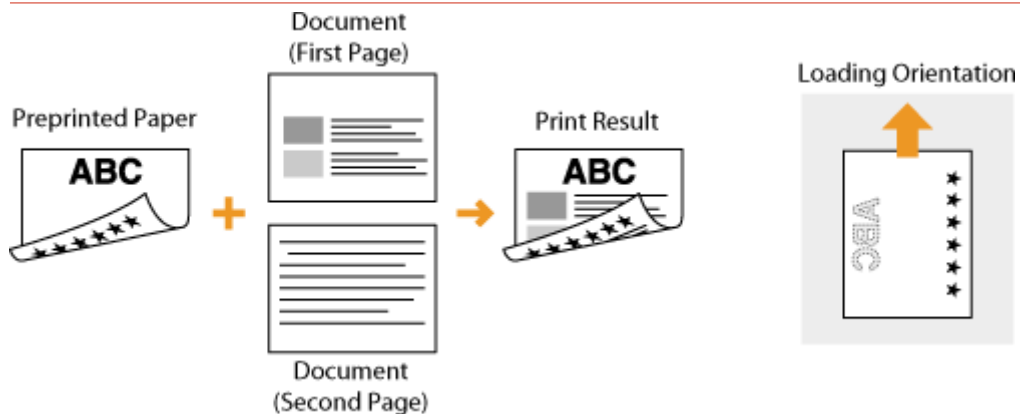Load the logo side (the side on which to print the first page of the document) face down.

**IMPORTANT**

When loading paper in the multi-purpose tray, only one sheet can be loaded at a time.

**Printing Paper with a Logo in Portrait Orientation**



**Printing Paper with a Logo in Landscape Orientation**

# Printing

# Printing

You can print documents made with applications on your computer by using the printer driver. There are useful settings in the printer driver, such as enlarging/reducing and poster printing, that enable you to print your documents in various ways. Before you can use these functions, you need to install the printer driver on your computer and complete some other preparations. For details, see Printer Driver Installation Guide.
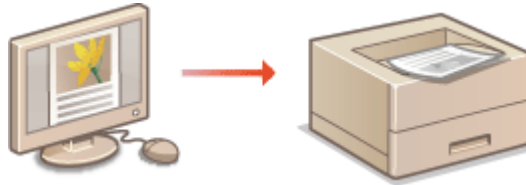
## NOTE

- If you are a Mac user, see Printer Driver Guide for Macintosh and Printer Driver's Help for using print functions ( **For Mac OS Users(P. 323)** ).

- Depending on the operating system and the type or version of the printer driver you are using, the printer driver screens in this manual may differ from your screens.

- You can use the PCL6 printer driver as well as the UFRII LT printer driver. The available print settings vary depending on the printer driver. For more information, click [Help] on each printer driver screen.

## TIPS

### Displaying the printer driver help

Clicking [Help] on the printer driver screen displays the Help screen. On this screen, you can see detailed descriptions that are not in the e-Manual.
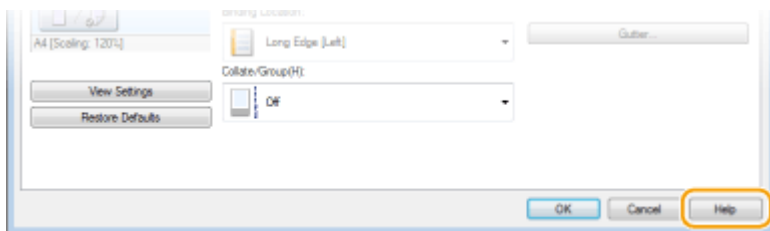
### Printing silently

If you mind the printing noise, you can reduce the noise by specifying the quiet mode. Note that If you print in the quiet mode, printing becomes slower.

* The quiet mode is enabled only when the following conditions are both satisfied.

- The size of paper that is used is A4, Legal, Letter, or custom paper size of width 190.0 mm or more and length 271.0 mm or more.

- [Paper Type] is set to [Plain [60-89 g/m2]], [Recycled [60-89 g/m2]], or [Color [60-89 g/m2]]. **Basic Printing Operations(P. 45)**

### ■ Always printing in the quiet mode

You can set the machine to the quiet mode so that the machine always prints in the quiet mode. Change machine settings in the Printer Status Window.

**1** **Select the machine by clicking** in the system tray.

**2** **Select [Options]** ▶ **[Device Settings]** ▶ **[Assisting Print Settings].**
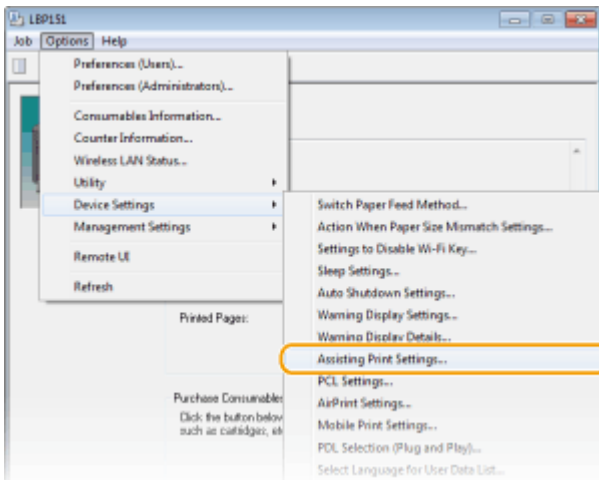


**3** **Select the [Print in Quiet Mode] check box and click [OK].**
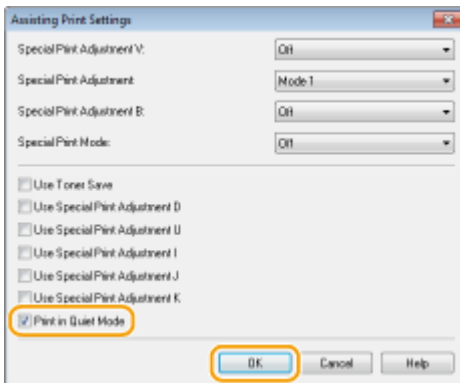
# Basic Printing Operations

0YFA-011

This section describes how to print a document on your computer by using the printer driver.
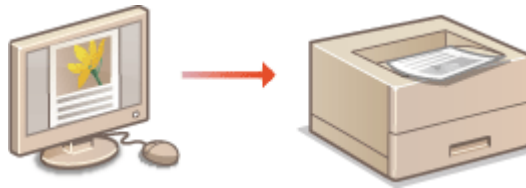


## NOTE

- Before printing, specify the paper size and type for the paper loaded in the paper source.

 **Loading Paper(P. 30)**
 **Paper Settings(P. 186)**

**1** **Open a document in an application and display the print dialog box.**

- How to display the print dialog box differs for each application. For more information, see the instruction manual for the application you are using.

**2** **Select your printer, and click [Preferences] or [Properties].**
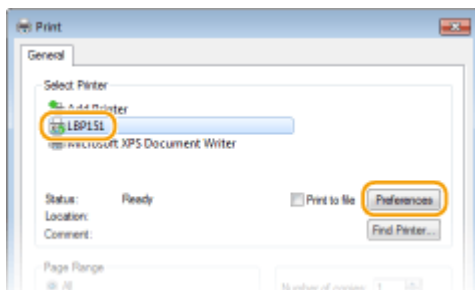


- The screen that is displayed differs depending on the application you are using.

**3** **Specify the paper size.**
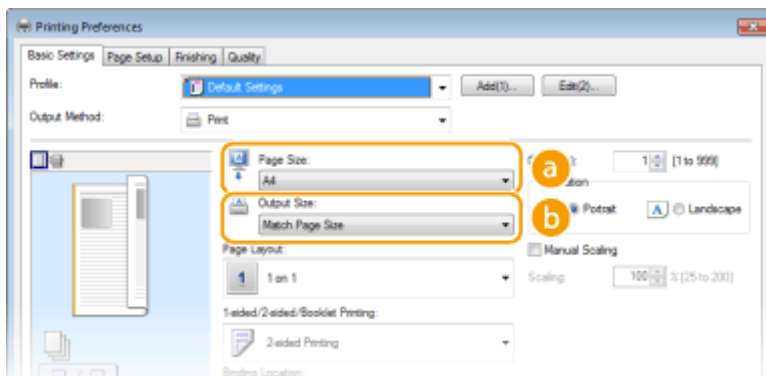


 **a** **[Page Size]**

 Select the size of a document made in the application.

45

**ⓑ [Output Size]**

Select the size of paper on which the document will be actually printed. If the selected size differs from the one specified in [Page Size], the document is printed enlarged/reduced automatically according to the size specified in [Output Size]. **Enlarging or Reducing(P. 55)**

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**TIPS**

**Clickable UI**

- You can easily specify the page layout, binding position, etc. intuitively on the preview image. For more information, click [Help] on the printer driver screen.



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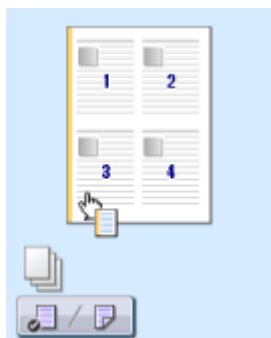
**4** **In the [Page Setup] tab, select the paper type.**

- Set [Paper Type] according to the type of paper to be used in the printing. **Paper Type and Printer Driver Paper Settings(P. 30)**
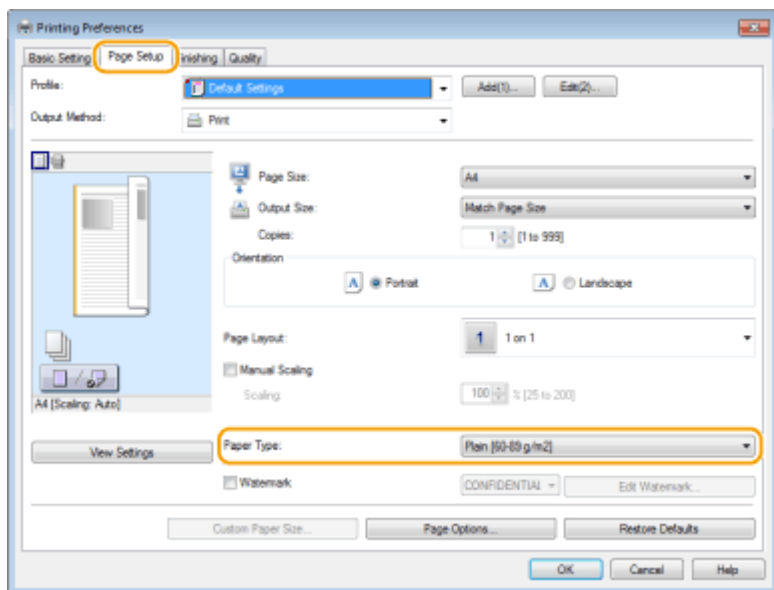


**5** **Specify other print settings as necessary. Various Print Settings(P. 53)**

**NOTE:**

You can register the settings you specified in this step as a "profile" and use the profile whenever you print. You can eliminate the need to specify the same settings every time you print.

**6** **Click [OK].**
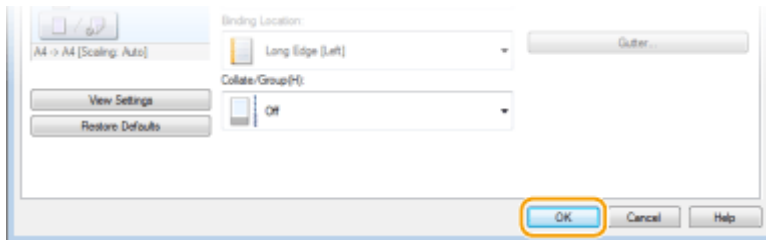
**7** **Click [Print] or [OK].**
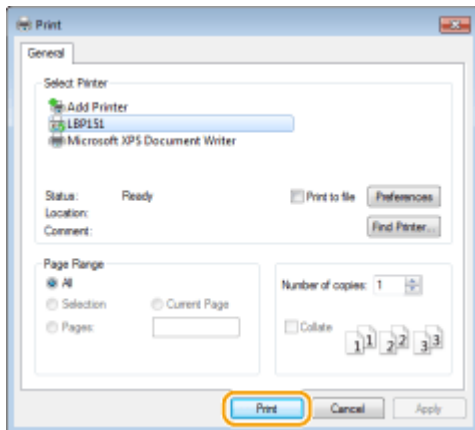


● Printing starts. On some applications, a screen like shown below appears.
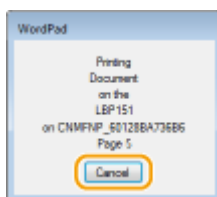


● To cancel printing, click [Cancel] when the screen shown above is displayed. After the screen disappears or if the screen is not displayed, you can cancel printing in other ways. ◎**Canceling Print Jobs(P. 49)**

**IMPORTANT**

**If you become dirty from the toner of printed sheets or if toner comes off the page**

● If you use paper with a coarse surface or cloth becomes dirty from toner, set [Paper Type] to [Bond 1 [60-90 g/m2]] or [Bond 2 [91-120 g/m2]] or [Bond 3 [121-163 g/m2]].

● Do not touch printed pages. Do not touch newly printed sheets with your fingers or a cloth. You may get your fingers or the cloth dirty, and the toner may come off the page.

**NOTE**

**When printing from the Windows Store app in Windows 8/Server 2012**
Display the charms on the right side of the screen and use the procedure shown below.

**Windows 8/Server 2012**
[Devices] ▶ the printer you are using ▶ tap or click [Print]

**Windows 8.1/Server 2012 R2**
[Devices] ▶ [Print] ▶ the printer you are using ▶ tap or click [Print]

● If you print using this method, only a limited number of print settings are available.

- If the message [The printer requires your attention. Go to the desktop to take care of it.] is displayed, go to the desktop and follow the instructions in the displayed dialog box. This message appears when the machine is set to display the user name during printing and similar instances.

LINKS

**Checking the Print Status(P. 52)**

# Canceling Print Jobs

0YFA-012

There are two methods of canceling printing: from a computer and from the Cancel Job key of the machine.

**From a Computer(P. 49)**
**From the Cancel Job key(P. 51)**

## From a Computer

You can cancel print jobs from the Printer Status Window.

**1** **Select the machine by clicking**  **in the system tray.**



➠ The Printer Status Window is displayed.

**2** **Cancel the print job.**

■ **To cancel a print job that is currently printing**

Click  .
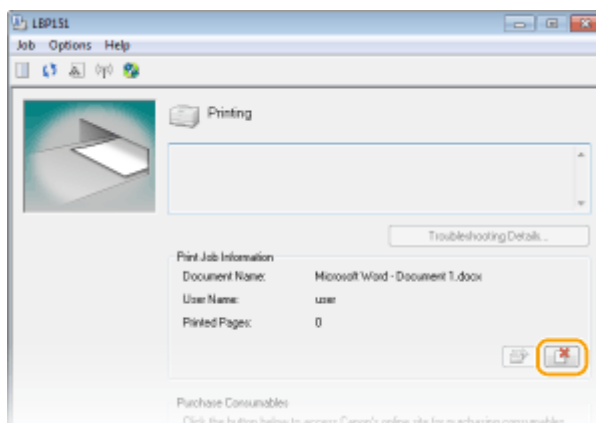


➠ Printing of the current document is canceled.

■ **To cancel a print job that is waiting**

**1** **Select [Job]  ▶  [Job Status].**
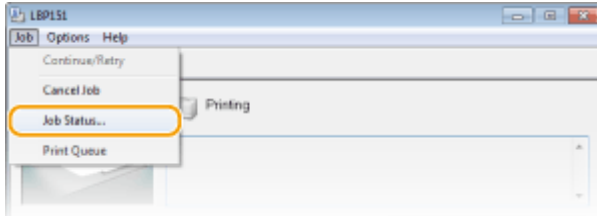
**2** **Select the document that you want to cancel, and click [Delete].**
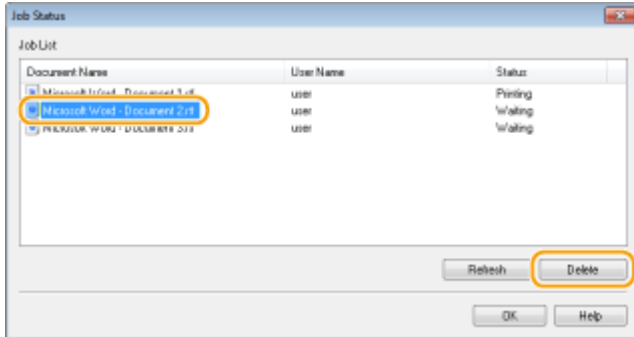
- This screen displays up to 5 documents.

**3** **Click [OK].**
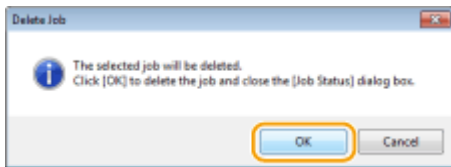
➠ Printing of the selected document is canceled.

**NOTE**

- Several pages may be output after you cancel printing.

**TIPS**

**Canceling from the Remote UI**
You can cancel printing from the [Job Status] page on the Remote UI.
◉**Checking the Current Status of Print Documents(P. 181)**

**Canceling from an application**
On some applications, a screen like the one shown below is displayed during printing. You can cancel printing by clicking [Cancel].
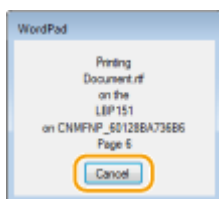
## From the Cancel Job key

If the ![](cancel job icon) (Cancel Job) key of the machine is pressed, the print job that is currently printing is canceled.
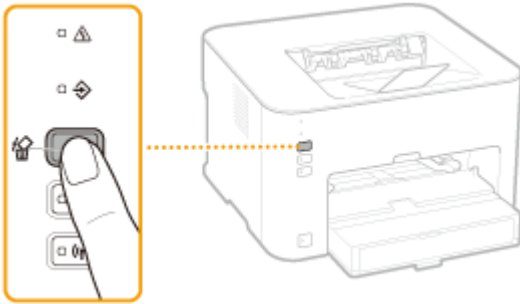


> **NOTE**
>
> - Several pages may be output after you cancel printing.

### LINKS

**◉Basic Printing Operations(P. 45)**
**◉Checking the Print Status(P. 52)**

# Checking the Print Status

0YFA-013

You can check the current print status in the Printer Status Window. This is convenient if you have been waiting for a long time for your document to be printed, and you want to see a list of the documents waiting to be printed.

**1** **Select the machine by clicking 🖳 in the system tray.**

**2** **Select [Job] ▶ [Job Status].**
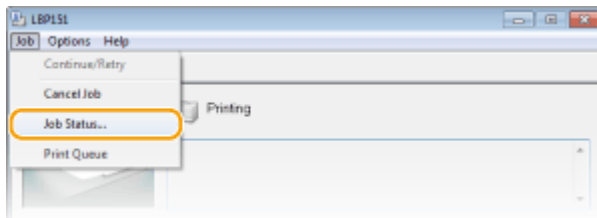
⏩ A list of up to 5 documents appears, showing documents that are being printed or waiting to be printed.

---
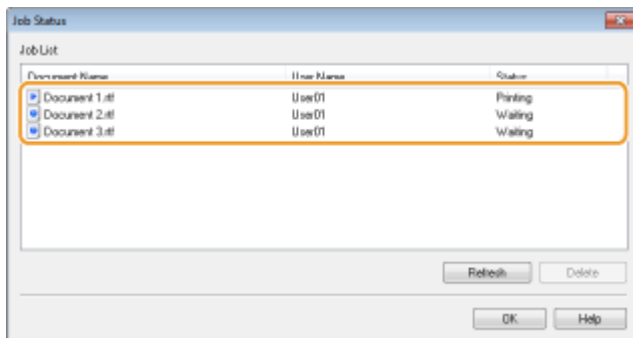
**TIPS**

**Checking from the Remote UI**
You can check the print status on the [Job Status] page of the Remote UI.
◗**Checking the Current Status of Print Documents(P. 181)**

---

LINKS

◗**Basic Printing Operations(P. 45)**
◗**Canceling Print Jobs(P. 49)**

# Various Print Settings

0YFA-014

There are a variety of settings to suit your needs, such as Enlarged/Reduced and 2-sided Printing.
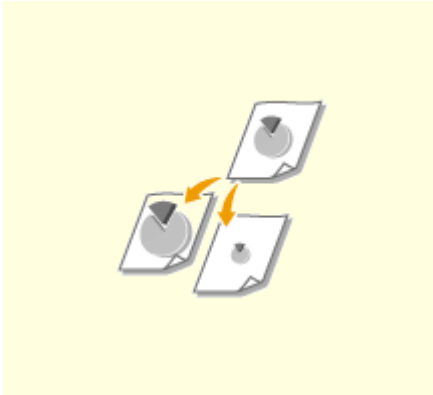


▶**Enlarging or Reducing(P. 55)**
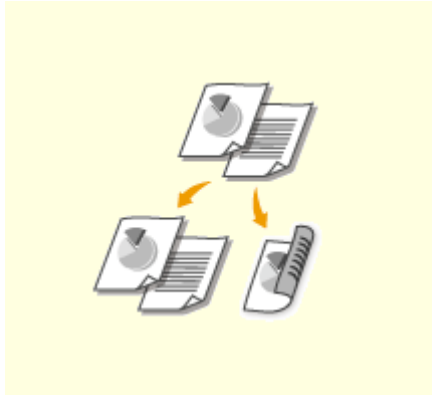


▶**Switching between 1-Sided and 2-Sided Printing(P. 57)**



▶**Collating Printouts by Page(P. 59)**



▶**Printing Multiple Pages onto One Sheet(P. 61)**
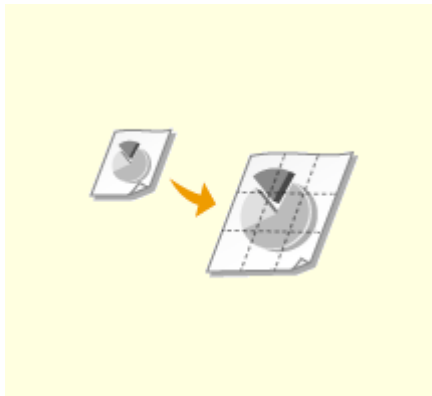


▶**Printing Posters(P. 63)**
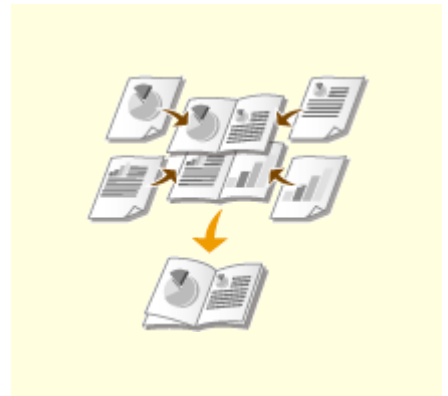


▶**Printing Booklet(P. 64)**



▶**Printing Borders(P. 66)**



▶**Printing Dates and Page Numbers(P. 67)**
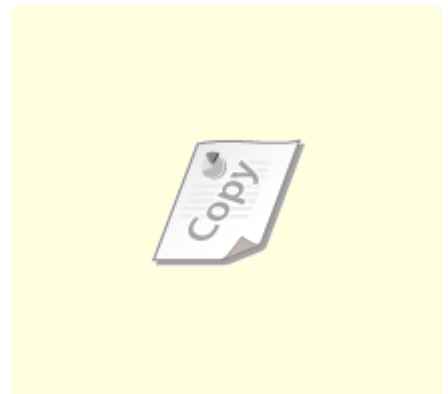


▶**Printing Watermarks(P. 69)**

**❯Printing According to the Document Type(P. 71)**
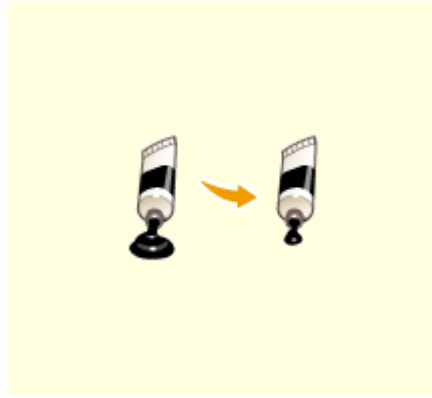
**❯Saving Toner(P. 73)**
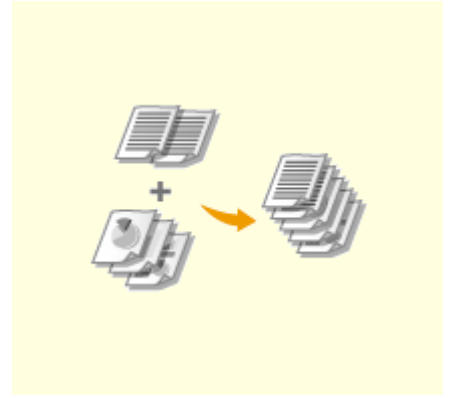
**❯Combining and Printing Multiple Documents(P. 75)**

# Enlarging or Reducing

0YFA-015

You can make enlarged or reduced printouts by using a preset print ratio, such as A5 to A4, or a custom print ratio that you set in increments of 1%.

## Setting Print Ratio by Specifying the Original Document and Paper Size (Preset Ratio)

The print ratio is automatically set based on the document and paper size you have specified.

[Basic Settings] tab ▶ Select the document size in [Page Size] ▶ Select the paper size in [Output Size] ▶ [OK]
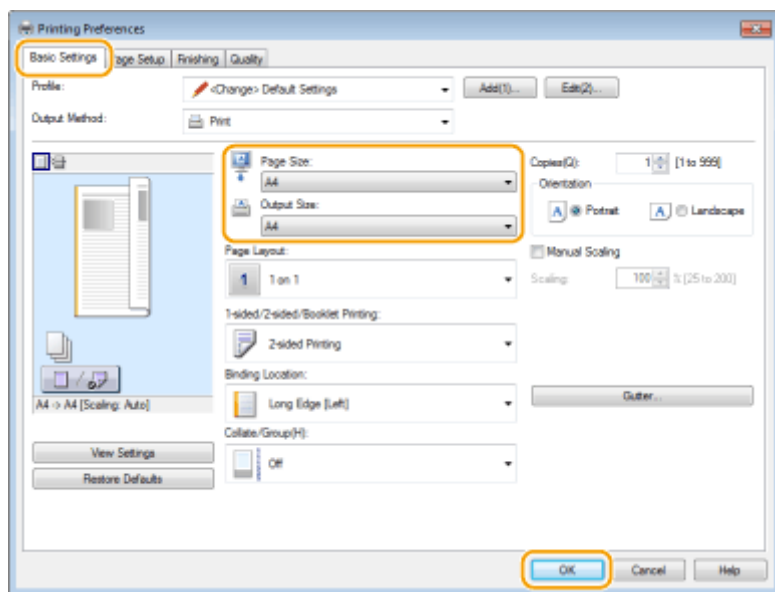


## Specifying Print Ratio in Increments of 1%

[Basic Settings] tab ▶ Select the [Manual Scaling] check box ▶ Enter the print ratio in [Scaling] ▶ [OK]
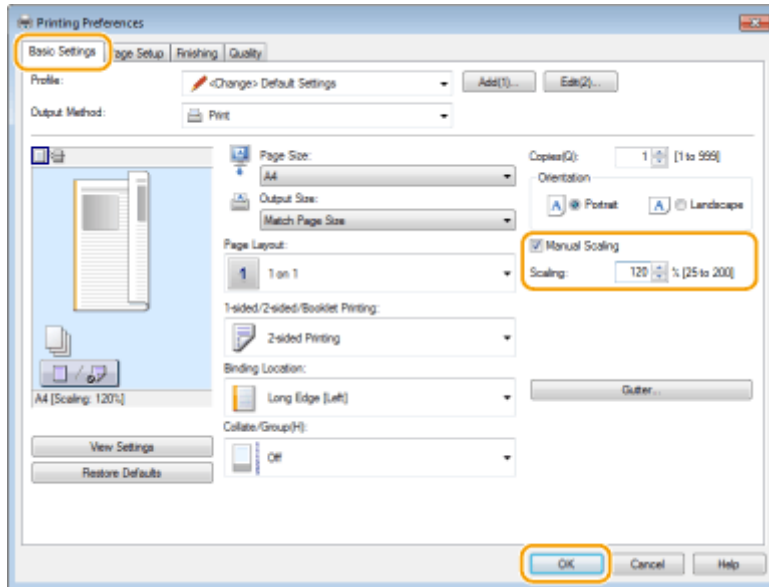
## NOTE

- Depending on the selected paper size, you may not be able to set the optimum enlarging/reducing ratio. For example, there may be large blank spaces on your printout, or portions of the document that are missing.

- The enlarging/reducing settings on some applications have priority over those on the printer driver.

## LINKS

**◉Basic Printing Operations(P. 45)**

# Switching between 1-Sided and 2-Sided Printing

0YFA-016

You can make both 1-sided and 2-sided printouts. The default setting is [2-sided Printing]. Change the setting as necessary.

**NOTE**

- 2-sided printing may not be available with some sizes and types of paper. ○**Paper(P. 290)**

[Basic Settings] tab ▶ Select [1-sided Printing] or [2-sided Printing] in [1-sided/2-sided/Booklet Printing] ▶ Select the position to bind in [Binding Location] ▶ [OK]
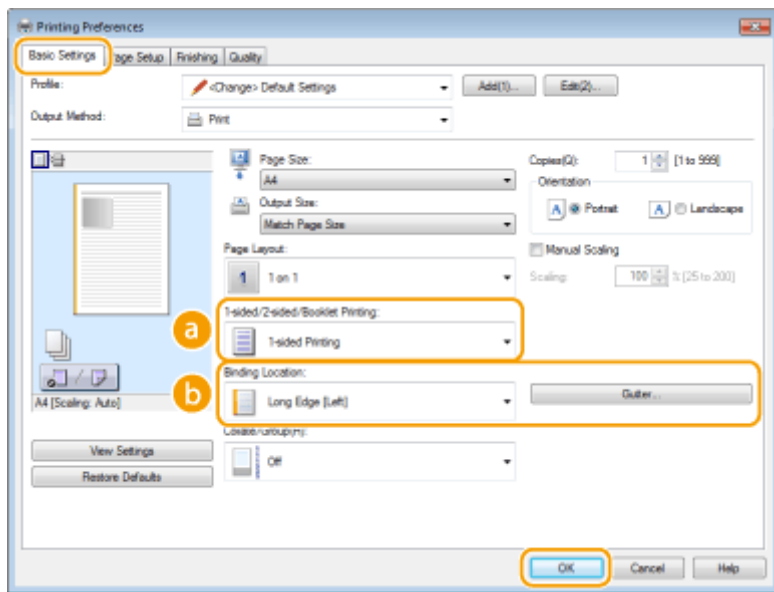


ⓐ **[1-sided/2-sided/Booklet Printing]**

Select [1-sided Printing] or [2-sided Printing].

**NOTE:**

- For [Booklet Printing], see ○**Printing Booklet(P. 64)** .

ⓑ **[Binding Location]**

Specify the position to bind the printouts with a binding tool such as a stapler. Printing orientation will be changed depending on the specified binding position. To specify the margin width for the binding position, click [Gutter].

**[Long Edge [Left]]**
Prints images in such a way that the printed pages are opened horizontally when bound.

**[Short Edge [Top]]**
Prints images in such a way that the printed pages are opened vertically when bound.

**[Gutter]**
Specify a binding margin.

## LINKS

**Basic Printing Operations(P. 45)**
**Printing Multiple Pages onto One Sheet(P. 61)**
**Printing Booklet(P. 64)**

# Collating Printouts by Page

0YFA-017

When printing copies of multi-page documents, select [Collate] to print complete sets in sequential page order. This function is useful when preparing handouts for meetings or presentations.

[Basic Settings] tab ▸ Select [Collate] or [Group] in [Collate/Group] ▸ [OK]
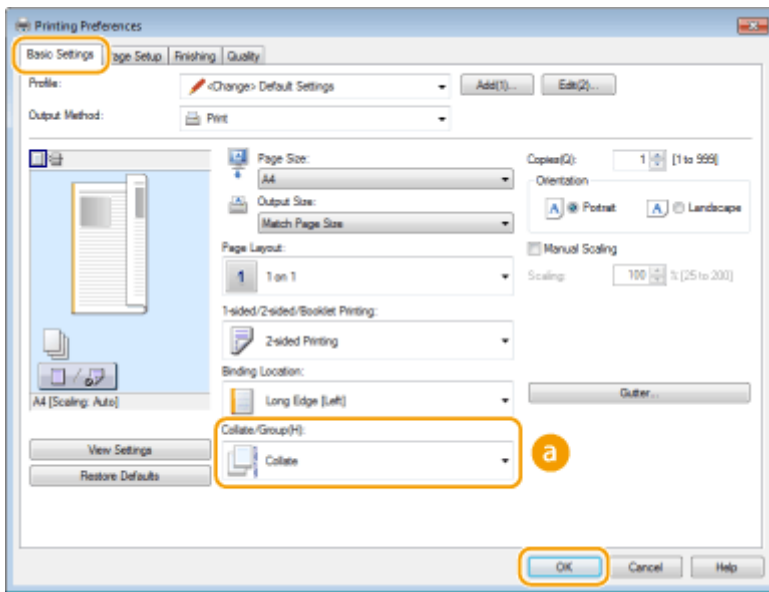
**ⓐ [Collate/Group]**

Specify the sorting method of the printouts when printing multiple-page documents.

**[Collate]**
The printouts are grouped into complete sets in sequential page order. For example, if you are printing three copies of a five-page document, the printouts will be arranged in the following page order: 1, 2, 3, 4, 5, 1, 2, 3, 4, 5, 1, 2, 3, 4, 5.

**[Group]**
The printouts are not collated. For example, if you are printing three copies of a five-page document, the printouts will be arranged in the following page order: 1, 1, 1, 2, 2, 2, 3, 3, 3, 4, 4, 4, 5, 5, 5.
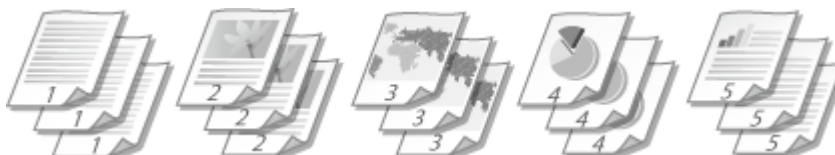
**NOTE:**

- If you select [Off], whether the printouts are collated or not depends on the setting made on the application.

## LINKS

**Basic Printing Operations(P. 45)**

# Printing Multiple Pages onto One Sheet

0YFA-018

You can print multiple pages onto a single sheet. For example, you can print four or nine pages onto a single sheet by using [4 on 1] or [9 on 1]. Use this function if you want to save paper or to view your document in thumbnails.

> **NOTE**
>
> - To save more paper, combine this setting with 2-sided printing. ⊙**Switching between 1-Sided and 2-Sided Printing(P. 57)**

[Basic Settings] tab ▶ In [Page Layout], select the number of pages to print onto a single sheet ▶ In [Page Order], select the page distribution layout ▶ [OK]
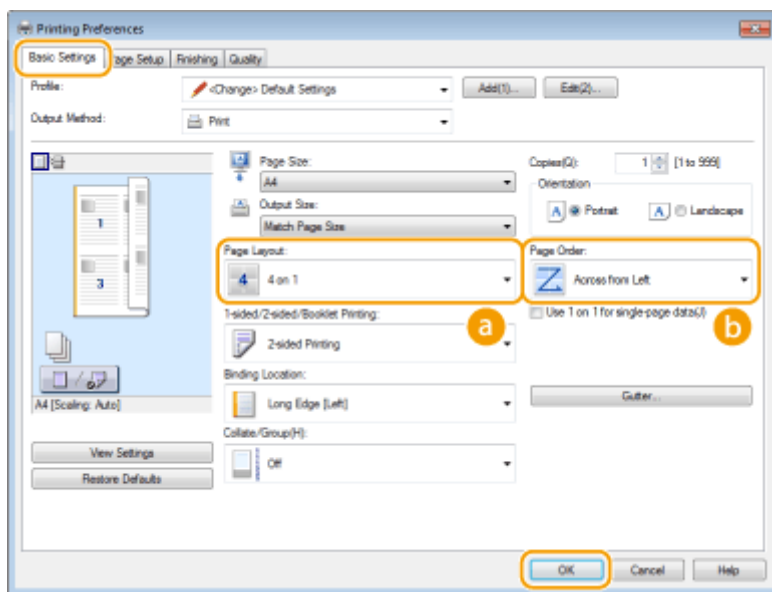
## ⓐ [Page Layout]

Select the number of pages to print onto a single sheet from [1 on 1] to [16 on 1]. For example, to print 16 pages onto a single sheet, select [16 on 1].

**NOTE:**

- For options such as [Poster [2 x 2]], see ⊙**Printing Posters(P. 63)** .

- Printing may not be performed properly if you combine this setting with an application setting for collating printouts.

## **ⓑ [Page Order]**

Select a page distribution layout. For example, if you select [Across from Left], the first page is printed on the top left, and then the rest of the pages are arranged rightward.



## LINKS

**◆Basic Printing Operations(P. 45)**
**◆Switching between 1-Sided and 2-Sided Printing(P. 57)**

# Printing Posters

0YFA-019
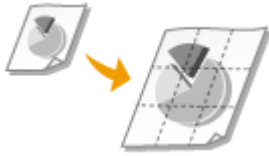
You can print one page of a document onto multiple pages. For example, if you make a one-page A4-size document nine times larger, you will have a poster 3x3 A4 size sheets large after you print the document and paste it together.

[Basic Settings] tab ▶ In [Page Layout], select the dimensions of your poster (for example, [Poster [2 x 2]]) ▶ [OK]
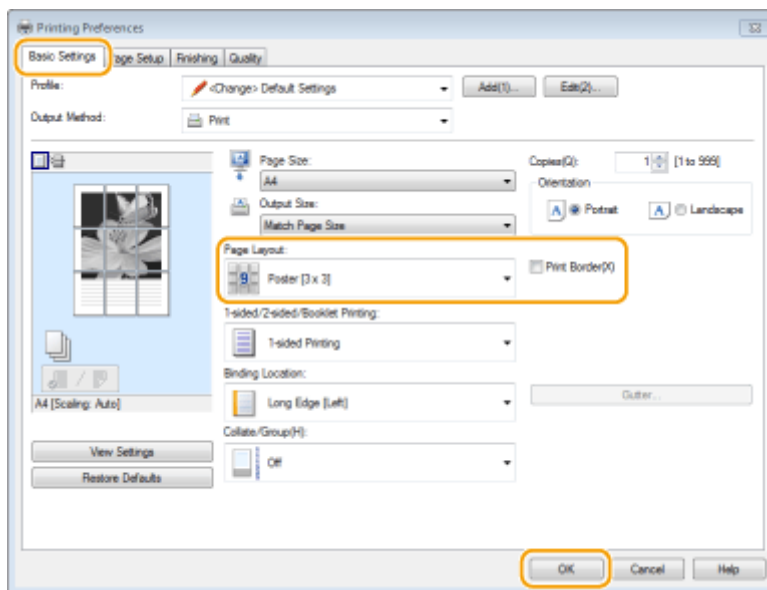
- There are four size settings: [Poster [1 x 2]], [Poster [2 x 2]], [Poster [3 x 3]], and [Poster [4 x 4]].

  **NOTE:**

  Poster size settings cannot be selected when 2-sided printing is enabled. Select [1-sided Printing] in [1-sided/2-sided/Booklet Printing], and then select a poster size setting.

- Select the [Print Border] check box to add borders on your printouts. The borders are helpful if you want to paste the printouts together or cut off the margins.

## LINKS

**◉Basic Printing Operations(P. 45)**
**◉Enlarging or Reducing(P. 55)**

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# Printing Booklet

0YFA-01A

You can print two pages of a document on both sides of paper and then fold your printed pages in half to make a booklet. The printer driver controls the print order in such a way that the page numbers are correctly arranged.

## NOTE

● Booklet printing may not be available with some sizes and types of paper. The paper that is available for 2-sided printing is also available for booklet printing. See **Paper(P. 290)** .

[Basic Settings] tab ▶ Select [Booklet Printing] in [1-sided/2-sided/Booklet Printing] ▶ Click [Booklet] to specify detailed settings as necessary ▶ [OK] ▶ [OK]
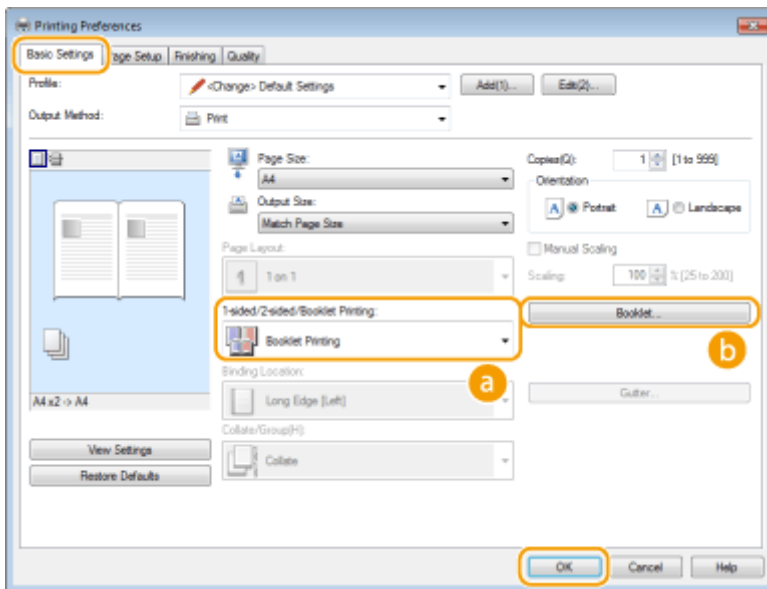
### ⓐ [1-sided/2-sided/Booklet Printing]

Select [Booklet Printing].

**NOTE:**

● For [1-sided Printing] and [2-sided Printing], see **Switching between 1-Sided and 2-Sided Printing(P. 57)** .

### ⓑ [Booklet]

The screen below is displayed.
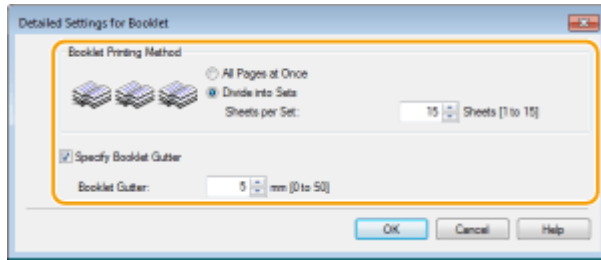
**[Booklet Printing Method]**

- [All Pages at Once]: Prints all of the pages at once as a single bundle so that you can make a booklet just by folding the printed pages in half.

- [Divide into Sets]: Prints as multiple bundles divided by the number of the pages specified on [Sheets per Set]. Bind each bundle, and then combine them as one booklet. Select this option when the document has so many pages that you cannot bind them all into a single booklet.
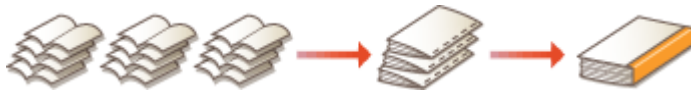


**[Specify Booklet Gutter]**
If you are using a stapler or other binding tools, specify the margin width for binding your booklet. Select the [Specify Booklet Gutter] check box and specify the margin width in [Booklet Gutter].

## LINKS

**Basic Printing Operations(P. 45)**

# Printing Borders

0YFA-01C

You can add borders, such as broken lines or double lines, in the margins of printouts.

[Page Setup] tab ▶ Click [Page Options] ▶ Select the border type in [Edging] ▶ [OK] ▶ [OK]
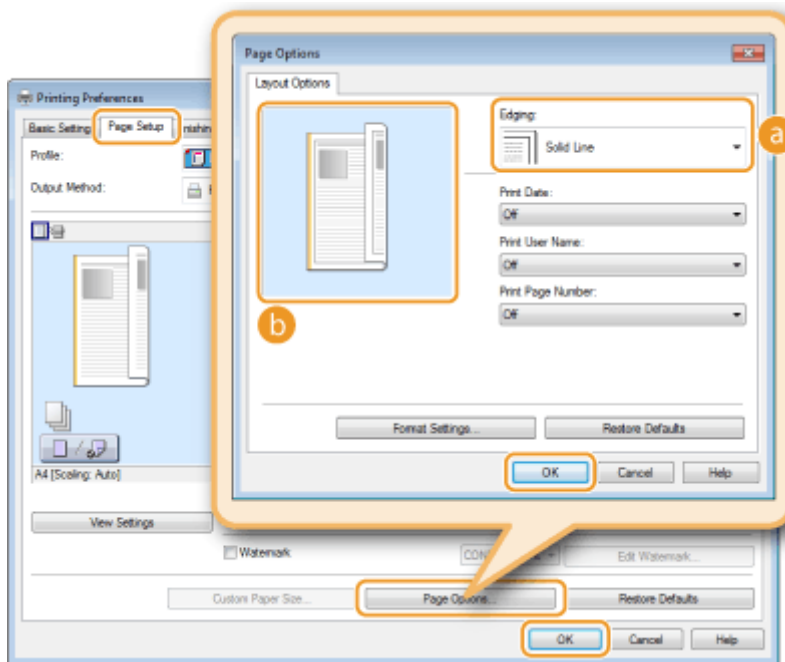


**ⓐ [Edging]**

Select the border type.

**ⓑ Preview**

Displays a preview with the selected border.

## LINKS

**◉Basic Printing Operations(P. 45)**
**◉Printing Dates and Page Numbers(P. 67)**
**◉Printing Watermarks(P. 69)**

# Printing Dates and Page Numbers

0YFA-01E

You can print the information such as dates or page numbers, and you can specify where to print this information on the document (upper-left, lower-right, etc.).

[Page Setup] tab ▶ Click [Page Options] ▶ Select the print position of the print date, user name or page number ▶ [OK] ▶ [OK]
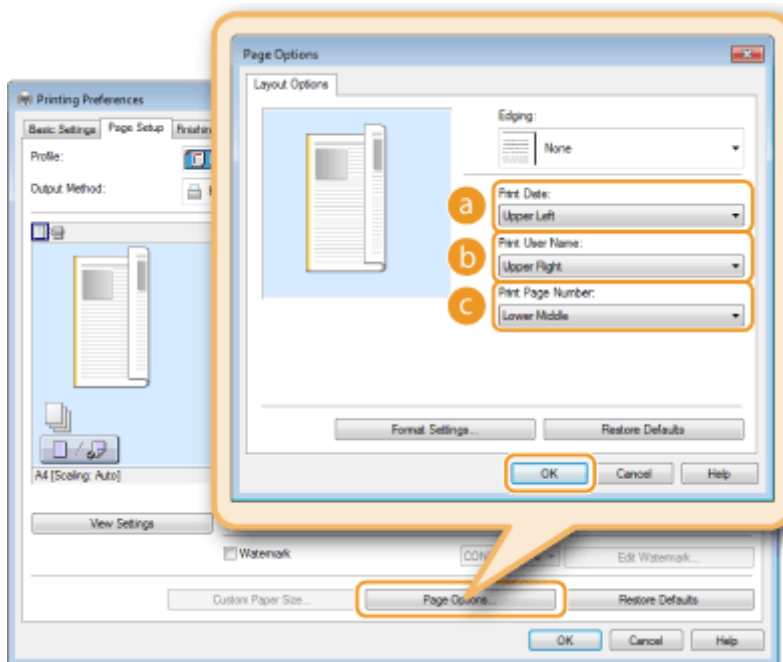


**ⓐ [Print Date]**

Specify the position to print the print date.

**ⓑ [Print User Name]**

Specify the position to print the user name (logon name) for the computer used to print the document.

**ⓒ [Print Page Number]**

Specify the position to print the page number.

---

**Changing the Print Format of Dates and Page Numbers**

- You can change formatting details such as font and font size when printing dates, logon names, or page numbers. Click [Format Settings] on the [Page Options] screen shown above to specify the details.

## LINKS

# Printing Watermarks

0YFA-01F

You can print watermarks such as "COPY" or "CONFIDENTIAL" over the document. You can create new watermarks or use pre-registered watermarks.

[Page Setup] tab ▶ Select the [Watermark] check box ▶ Select the watermark type ▶ [OK]
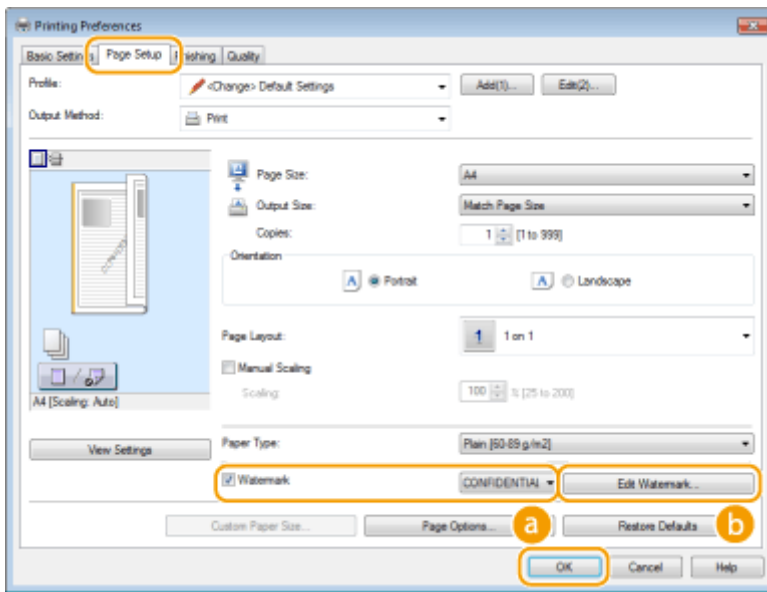
**ⓐ [Watermark]**

Select the [Watermark] check box to display the list of the watermarks. Select a watermark from the menu.

**ⓑ [Edit Watermark]**

Displays the screen to create or edit watermarks.
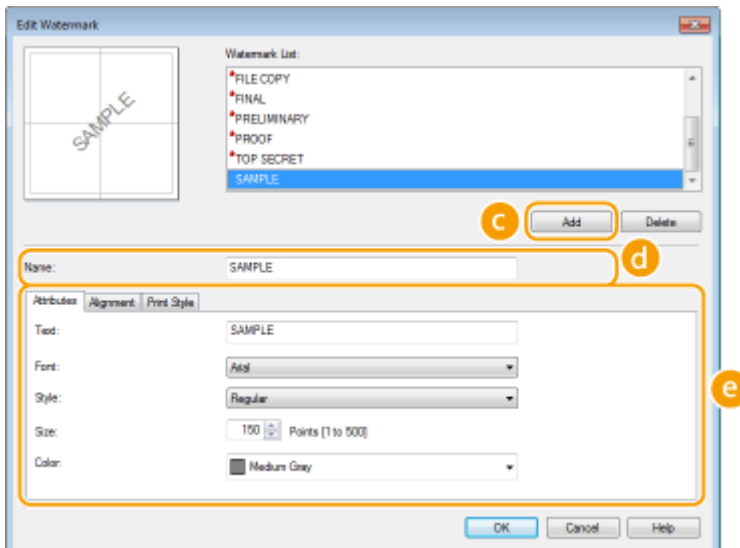
**c [Add]**

Click to create a new watermark. Up to 50 watermarks can be registered.

**d [Name]**

Enter the created watermark name.

**e [Attributes]/[Alignment]/[Print Style]**

Click each tab to specify the text, color, or print position of the watermark. For more information, click [Help] on the printer driver screen.

## LINKS

**Basic Printing Operations(P. 45)**
**Printing Borders(P. 66)**
**Printing Dates and Page Numbers(P. 67)**

# Printing According to the Document Type

0YFA-01H

You can specify the document type to ensure optimal image quality. There are different settings for photo documents, documents that have charts or graphs, and documents that have design drawings with fine lines.

[Quality] tab ▶ Select the document type in [Objective] ▶ [OK]
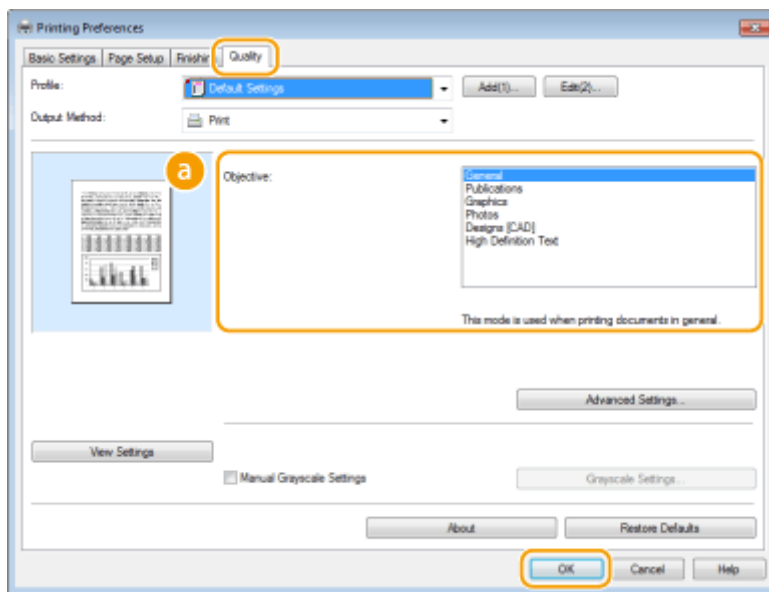


## ⓐ [Objective]

Select an option that suits the document type or purpose of printing. For example, select [General] for general use, or select [Photos] when you want to print photo images in optimal print quality.

**[General]**
A versatile option that is suitable when printing most documents.

**[Publications]**
Suitable when printing documents that have a mix of photo images, charts, and graphs.

**[Graphics]**
Suitable when printing documents that have charts or graphs.

**[Photos]**
Suitable when printing photo images.

**[Designs [CAD]]**
Suitable when printing design drawings that have many fine lines.

**[High Definition Text]**
Suitable when printing documents that have small characters.

NOTE:

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- To specify detailed settings for each item selected on [Objective], click [Advanced Settings]. For more information, click [Help] on the printer driver screen.

## LINKS

**Basic Printing Operations(P. 45)**

# Saving Toner

You can set the printer driver to print documents using less toner.

**IMPORTANT**

- When the toner save setting is enabled, fine lines and portions with lighter print density may become blurred.

[Quality] tab ▶ Select the document type in [Objective] ▶ Click [Advanced Settings] ▶ Select [Toner Save] in the [Advanced Settings] screen ▶ Select [On] from the drop-down list ▶ [OK] ▶ [OK]
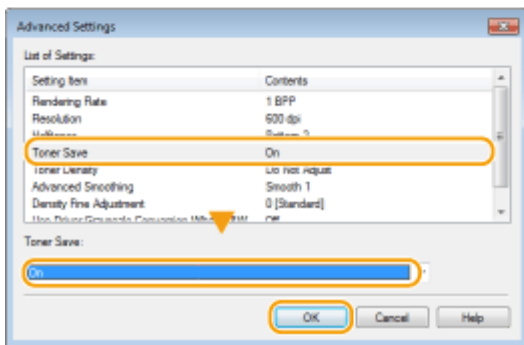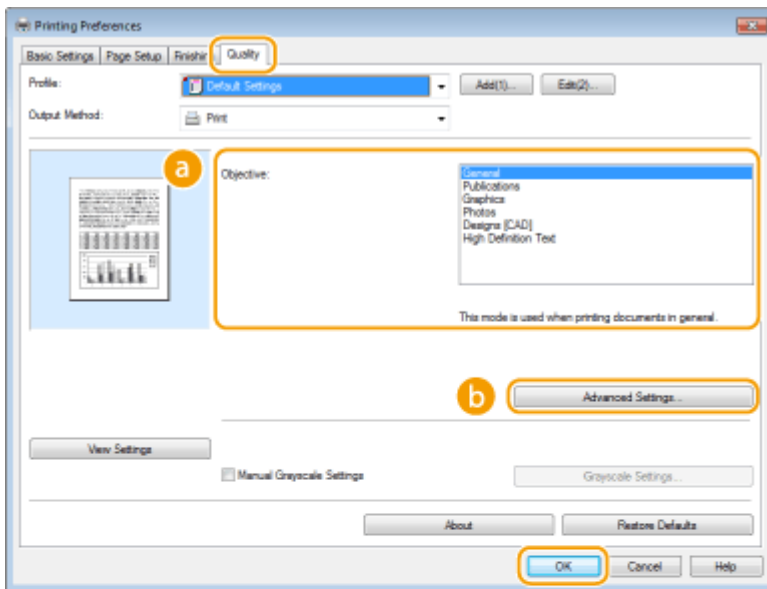


**ⓐ [Objective]**

Select the document type for which you want to enable the toner save setting.

**ⓑ [Advanced Settings]**

A screen with settings is displayed. Click [Toner Save] and select [On] from the drop-down list on the bottom of the screen.

**NOTE:**

- You can specify whether to enable the toner save setting for each document type. Specify the toner save setting for each document type listed in [Objective].

- In the [Advanced Settings] screen, you can specify various print settings other than toner save settings. For more information, click [Help] on the printer driver screen.

## LINKS

**◎Basic Printing Operations(P. 45)**

# Combining and Printing Multiple Documents

0YFA-01K

By using Canon PageComposer, you can combine multiple documents into one print job and print the job with specified print settings. This function, for example, enables you to combine documents made with different applications and print all of the pages in the same paper size.

**1** **Open a document in an application and display the print dialog box.**

- How to display the print dialog box differs for each application. For more information, see the instruction manual for the application you are using.

**2** **Select your printer, and click [Preferences] or [Properties].**
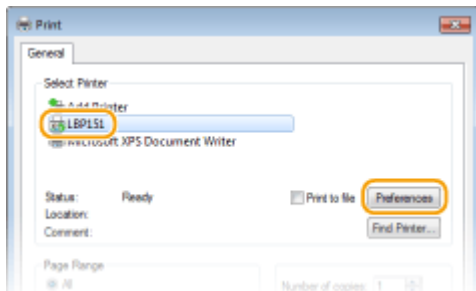
**3** **Select [Edit and Preview] in [Output Method].**

- Click [OK] on the [Information] pop-up screen.
- Click [OK] at the bottom of the screen.

**4** **Click [Print] or [OK].**

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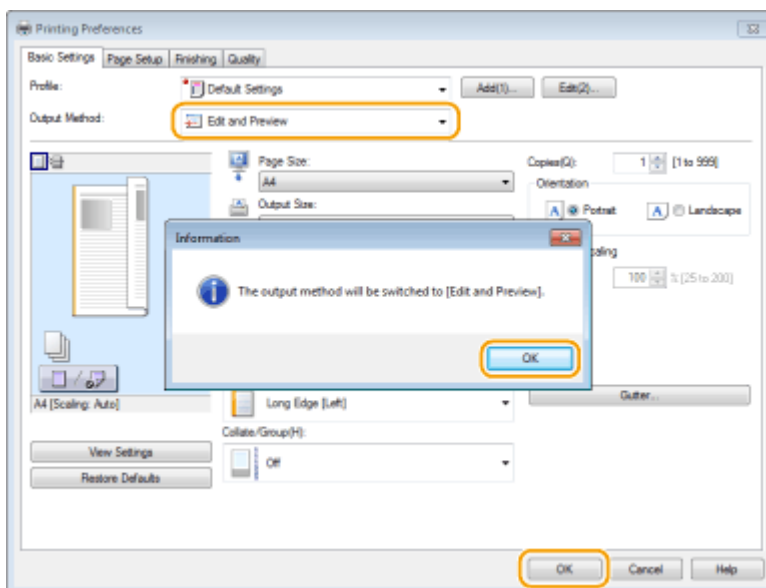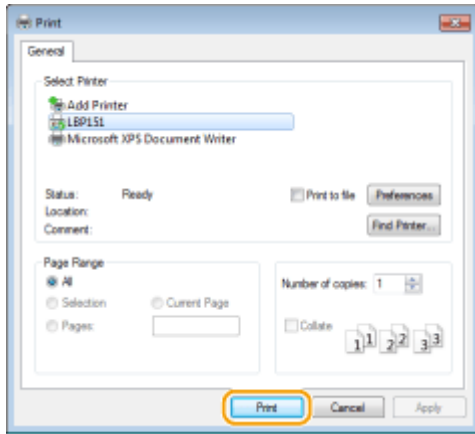
- The Canon PageComposer starts. Printing does not start in this step.

**5** **Repeat steps 1 to 4 for the documents you want to combine.**

- The documents are added to the Canon PageComposer.
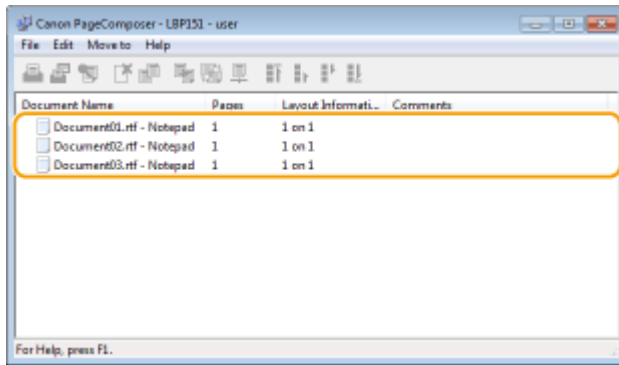


**6** **From the [Document Name] list, select the documents to combine, and click .**

- To select multiple documents, click the documents while holding down [SHIFT] key or [CTRL] key.
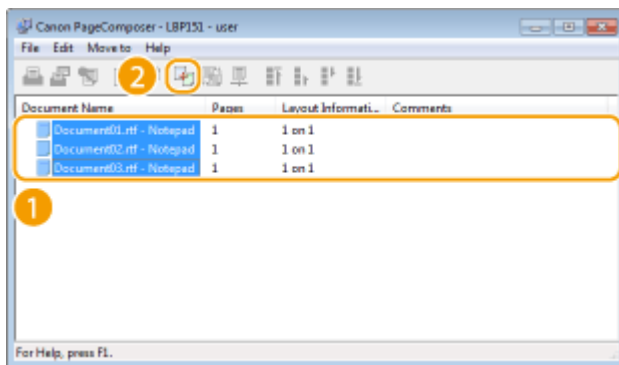


**7** **Change the settings as necessary, and click [Combine].**

- The documents selected in step 6 are combined.
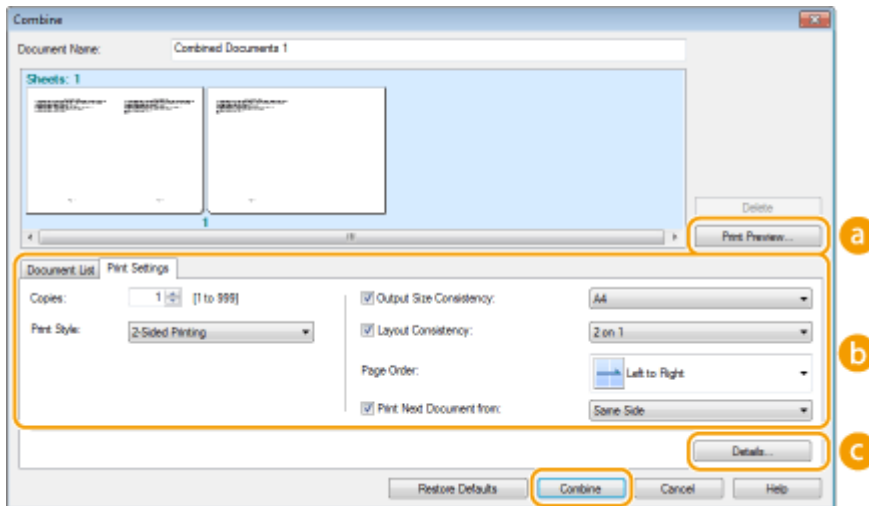
**a** **[Print Preview]**

Displays a preview of the document to be printed.

**b** **[Document List]/[Print Settings]**

- Click the [Document List] tab to display the documents added in steps 1 to 4. You can remove documents by selecting them in the list and clicking [Delete from List].
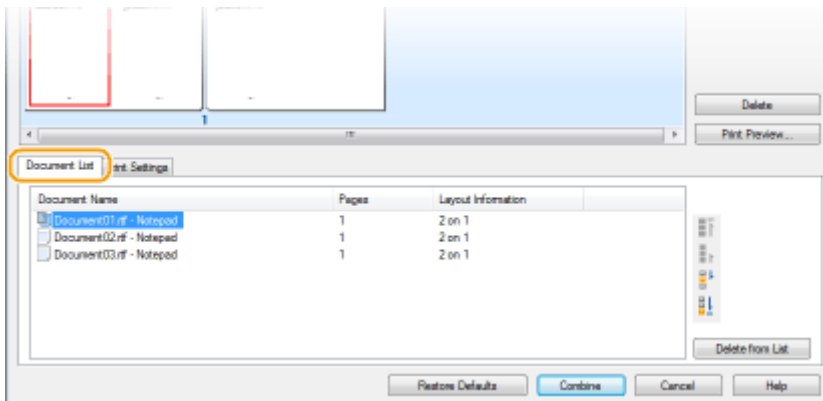


- Click the [Print Settings] tab to display the screen for specifying print settings such as the number of copies or 1-sided/2-sided printing. The settings specified here are applied to the whole print job.
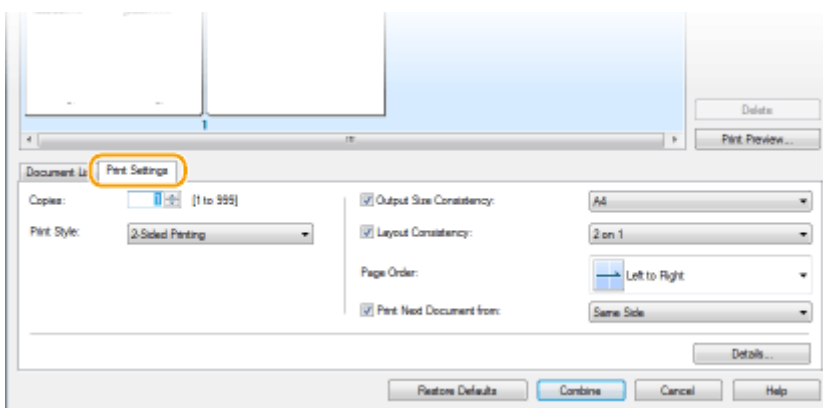


**NOTE:**

- For more information, click [Help] on the Canon PageComposer screen.

**c** **[Details]**

Displays the print setting screen of the printer driver. There are fewer settings available than when using the ordinary printing method.

**8** **On the [Document Name] list, select the combined-document print job you want to print, and click 🖶.**
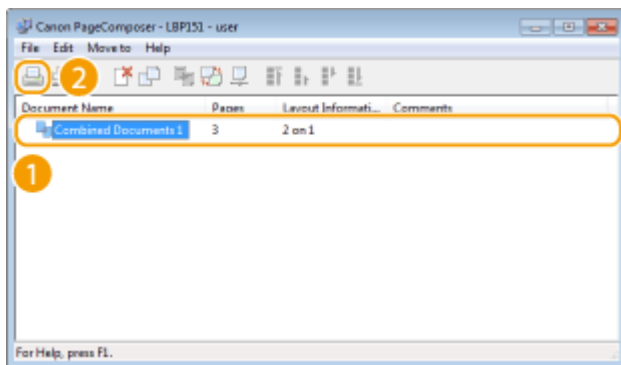


- Printing starts.
- For instructions on how to cancel printing, see **Canceling Print Jobs(P. 49)** .

## LINKS

**Basic Printing Operations(P. 45)**

# Configuring Print Settings to Your Needs

0YFA-01L

You can register combinations of settings as "profiles" to suit your different printing objectives. Also, you can register the settings that you frequently use as the default settings. Once the default settings are registered, they are displayed automatically in the printer driver screen, and you can skip the operations to specify them and proceed to printing immediately.

When I print highly confidential documents, I include a "TOP SECRET" watermark.

Set "TOP SECRET" as a watermark and register it in "profiles." You can then select this watermark from profiles whenever you need it. **◗Registering Combinations of Frequently Used Print Settings(P. 80)**

To save printing costs, I always print 2 document pages on 1 printout page.

Set [2 on 1] as a default setting in the printer driver. From the next print job, every printout page will show 2 pages from the document. **◗Changing Default Settings(P. 82)**

# Registering Combinations of Frequently Used Print Settings

0YFA-01R

Specifying combinations of settings such as "1-sided landscape orientation on A4 size paper" every time you print may be time consuming. If you register these frequently used combinations of print settings as "profiles," you can specify printing settings simply by selecting one of these profiles from the list. This section describes how to register profiles and how to print using them.

◯**Registering a Profile(P. 80)**
◯**Selecting a Profile(P. 81)**

## Registering a Profile

**1** **Change the settings that you want to register as a profile, and click [Add].**

- Click the [Basic Settings], [Page Setup], [Finishing], or [Quality] tabs to specify the print settings on each screen as necessary. ◯**Various Print Settings(P. 53)**
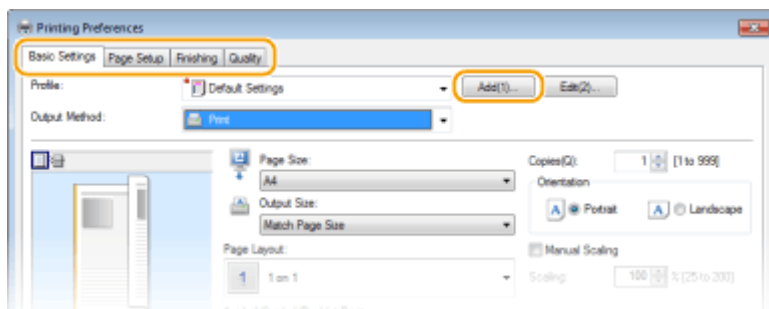


**2** **Enter a profile name in [Name], select an icon, and then click [OK].**

- Enter comments on the profile in [Comment] as necessary.
- Click [View Settings] to see the settings to register.
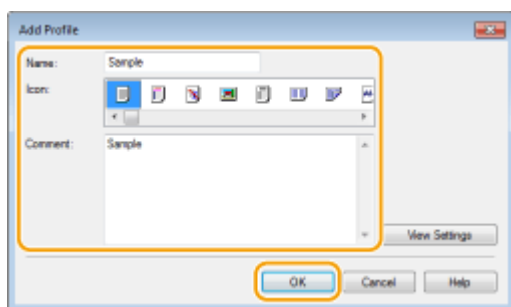


> **NOTE**
>
> **Editing a profile**
>
> - By clicking [Edit] on the right side of [Add] on the screen shown in step 1, you can change the name, icon, or comment of the profiles you have previously registered. You cannot edit the pre-registered profiles.

## Selecting a Profile

Select the profile that suits your needs, and click [OK].
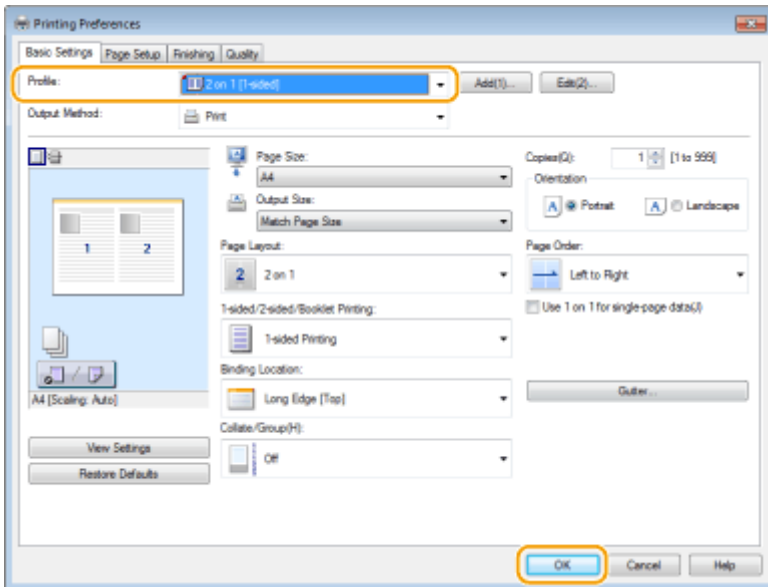


> **NOTE**
>
> **Changing the settings of the selected profile**
> - You can change the settings of a selected profile. In addition, the changed settings can be registered as another profile.

## LINKS

**Basic Printing Operations(P. 45)**
**Changing Default Settings(P. 82)**

# Changing Default Settings

0YFA-01S

The default settings are the settings that are first displayed whenever you open the print settings screen of the printer driver, but you can change them. For example, if you want to print all documents in such manner that each two pages are shrinked and printed on one page, specify [2 on 1] as the user default of page layout. From next time on, the printer driver will be opened with [2 on 1] specified as page layout setting and you will not have to change settings each time you print.

> **IMPORTANT**
>
> - To perform the following procedure, log on to your computer with an administrator account.

**1** Open the printer folder. ○**Displaying the Printer Folder(P. 316)**

**2** Right-click your printer icon and click [Printing preferences].
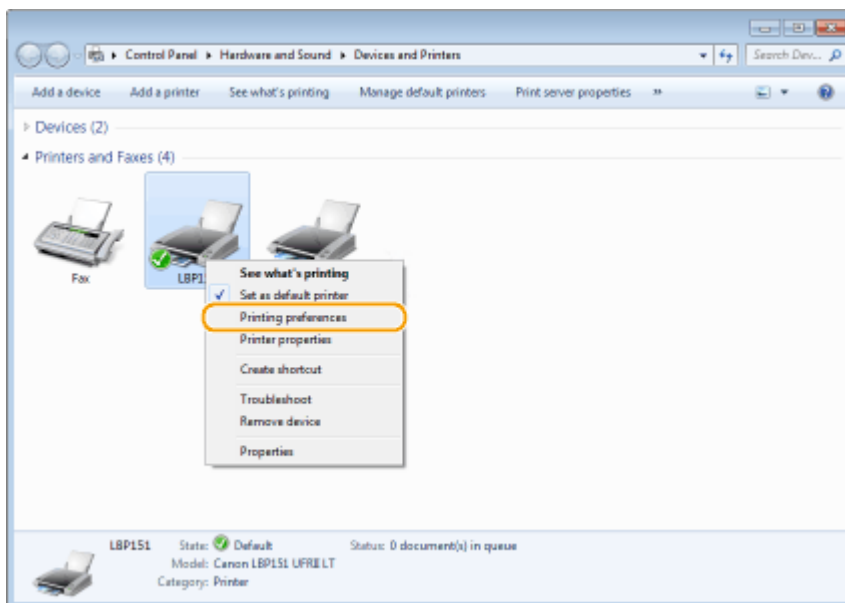


**3** Change the settings on the print setting screen, and click [OK].

- Click the [Basic Settings], [Page Setup], [Finishing], or [Quality] tabs to specify the print settings on each screen as necessary. ○**Various Print Settings(P. 53)**
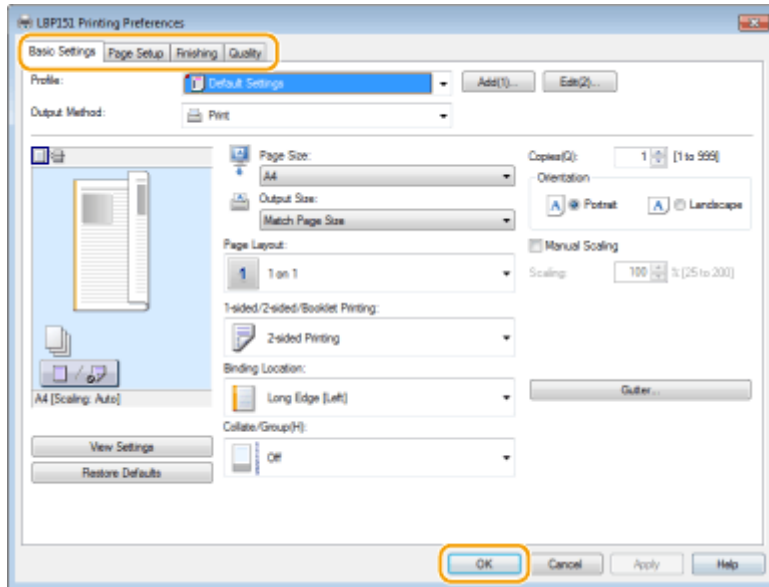
## LINKS

**Basic Printing Operations(P. 45)**
**Registering Combinations of Frequently Used Print Settings(P. 80)**

# Can Be Used Conveniently with a Mobile Device

# Can Be Used Conveniently with a Mobile Device

Combining the machine with a mobile device such as a smartphone or tablet enables you to use an appropriate application to perform printing with ease.

◉**Connecting to a Mobile Device(P. 86)**
◉**Making the Best Use of the Machine by Utilizing Applications(P. 87)**

# Connecting to a Mobile Device

0YFA-01W

Use a wireless LAN when connecting the machine to a mobile device.

## ■Connecting to a Wireless LAN

Like when connecting a computer and the machine, connect a mobile device and the machine via a wireless LAN router. **○Connecting to a Wireless LAN(P. 94)**

# Making the Best Use of the Machine by Utilizing Applications

0YFA-01X

You can use an appropriate application that enables you to print by operating the machine from your mobile device. The machine supports a dedicated application from Canon and various other applications. You can select the most appropriate application to your mobile device, the purpose, the situation, and so on.

## ■ Printing through Canon Mobile Application or a Plug-In

You can perform printing from a mobile device. For compatible operating systems, the detailed setting procedure and operating procedure, please see the Canon website at: **http://www.canon.com/** .

## ■ Using Google Cloud Print

You can print from an application or service that supports Google Cloud Print. You can print by remotely operating the machine at any time and from anywhere, for example even while you are on the go. ◘**Using Google Cloud Print(P. 293)**



## ■ Printing with Mopria™

This machine also supports Mopria™. Using Mopria™ allows you to print with printers of different models from different manufacturers by using common operations and common settings. For example, assume that Mopria™ compatible printers of different models from different manufacturers are installed in your office, at your place, or at places you are visiting. You can then print with any of those printers by using Mopria™ without the need to install the respective dedicated applications on them. For details about the models supporting Mopria™ and the system requirements, see **http://www.mopria.org** .

# Network

# Network

0YFA-020

This machine has been designed for flexibility of use across a variety of environments. In addition to basic network features, it includes advanced network technologies. Make the required settings depending on your network environment. Do not worry if you are not a network expert, because the machine has also been designed for convenience and ease of use. Relax and proceed with the network setup one step at a time.

## ■ Connecting to a Computer/Viewing the Machine's Network Settings
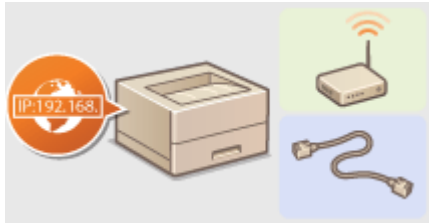
◉**Connecting to a Network(P. 90)**       ◉**Viewing Network Settings(P. 104)**

## ■ Configuring for Printing

◉**Configuring for Printing from a Computer(P. 106)**

## ■ Customizing the Machine for a More Convenient Network Experience
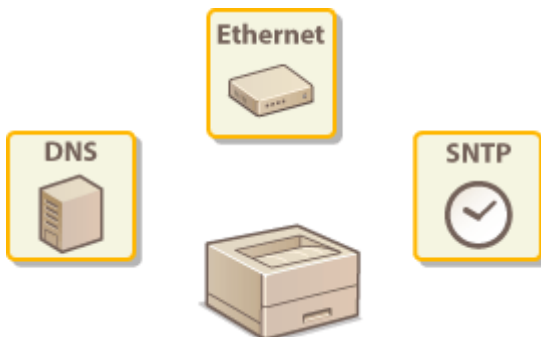
◉**Configuring the Machine for Your Network Environment(P. 115)**

# Connecting to a Network

0YFA-021

You can connect the machine to a network by using wireless LAN or wired LAN communications. In either case, use a unique IP address within the network. Select the connection method that best suits your communication environment and devices. For specific IP address settings, contact your Internet service provider or network administrator.
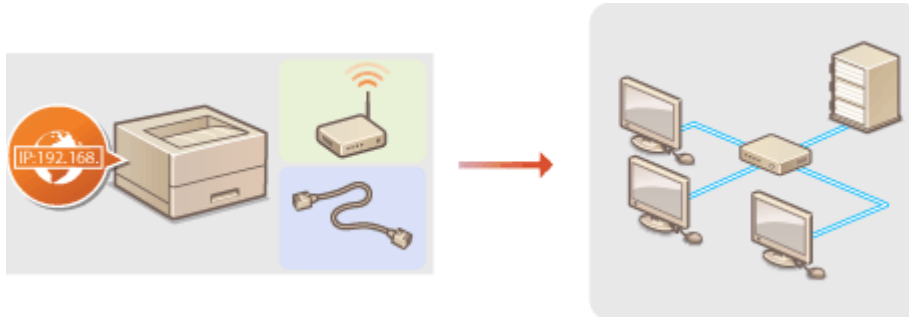
**IMPORTANT**

If the machine is connected to an unsecured network, your personal information might be leaked to a third party.

**NOTE**

- Wired LAN and wireless LAN cannot be used at the same time.

- The machine does not come with a router or LAN cable. Have them ready as necessary.

- If you are not sure whether your router supports wired LAN or wireless LAN, see the instruction manual provided with the router, or contact the manufacturer.

## ■ Before You Start

Follow these steps to connect the machine to a network.

**1**

**Check the device and network settings.**

- Have the computer and the router been connected properly? For more information, see the instruction manuals for the devices you are using, or contact the device manufacturers.

- Make sure that the network settings have been completed on the computer. If the network has not been set up properly, you will not be able to use the machine on the network, even if you perform the rest of the procedure below.

**NOTE:**

- Depending on the network, you may need to change settings for the communication mode (Half Duplex/Full Duplex) or the Ethernet type (10BASE-T/100BASE-TX) ( **Configuring Ethernet Settings(P. 116)** ). For more information, contact your Internet service provider or network administrator.

- To check the machine's MAC address **Viewing Network Settings(P. 104)**

- To connect to an IEEE 802.1X network, see **Configuring IEEE 802.1X Authentication(P. 154)**

▼

**2**  Connect to a wired LAN or wireless LAN.
◯**Connecting to a Wired LAN(P. 92)**
◯**Connecting to a Wireless LAN(P. 94)**

▼

**3**  Set the IP address as necessary.

- This step is required when you want to assign a specific IP address to the machine or change the dynamic IP addressing protocol from the default DHCP.

◯**Setting IP Addresses(P. 97)**

# Connecting to a Wired LAN

0YFA-022

Connect the machine to a computer via a router. Use a LAN cable to connect the machine to the router.
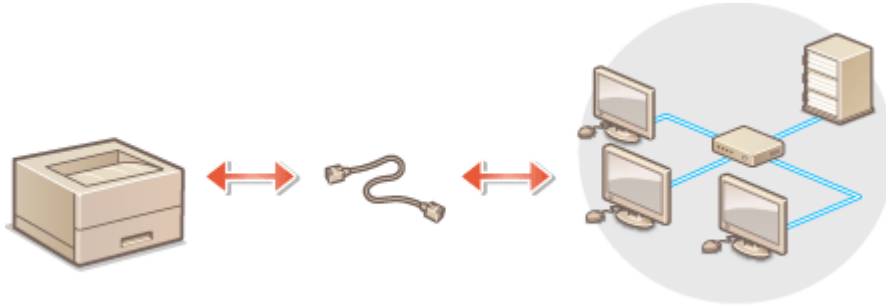


**NOTE**

- The machine does not come with a router or LAN cable. Have them ready as necessary. Use a Category 5 or higher twisted pair cable for the LAN.
- Make sure that there are ports available on the router to connect the machine and the computer.
- The machine supports 10BASE-T and 100BASE-TX connections. If you want to connect the machine to a 100BASE-TX Ethernet network, all the devices connected to the LAN (router, LAN cable, and network board for computer) must support 100BASE-TX.
- Wired LAN and wireless LAN cannot be used at the same time.
- If you are using the machine in your office, consult your network administrator.

**1 Connect a LAN cable.**

- Connect the machine to a router by using a LAN cable.
- Push the connector in until it clicks into the port.
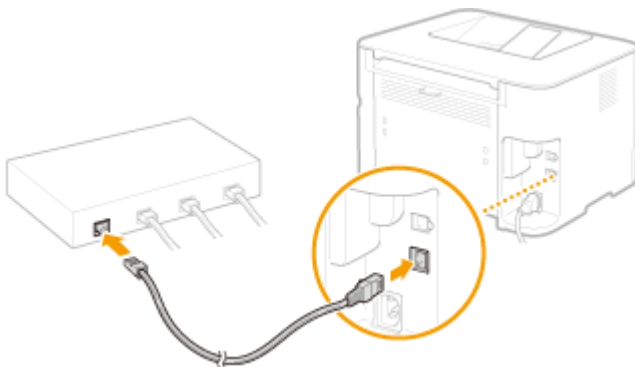


**2 Check that the LNK indicator ( a ) is lit.**
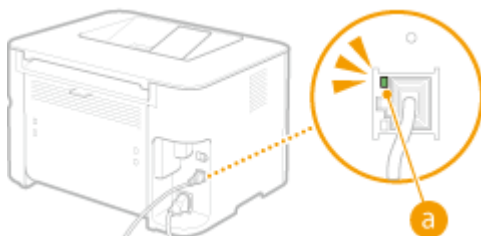
**NOTE:**

When the LNK indicator does not light up ●**Problems with the Wireless/Wired LAN Connection(P. 225)**

**3** **Wait approximately 2 minutes.**

- The IP address is automatically set during this time.

**NOTE:**

- If the IP address is not set automatically ●**Problems with the Wireless/Wired LAN Connection(P. 225)**
- You can also set the IP address manually. ●**Setting IP Addresses(P. 97)**

**IMPORTANT**

**After switching the connection method from wireless LAN to wired LAN**
You need to uninstall the currently installed printer driver, configure the wired LAN connection, and then reinstall the printer driver in accordance with the Printer Driver Installation Guide. When configuring the wired LAN connection, select [Custom Setup] for the configuration method.



LINKS

●**Connecting to a Network(P. 90)**

# Connecting to a Wireless LAN

0YFA-023

Wireless routers (or access points) connect the machine to a computer via radio waves. If your wireless router is equipped with Wi-Fi Protected Setup (WPS), you can configure your network with a simple button push. If your networking devices do not support automatic configuration, or if you want to specify authentication and encryption settings in detail, you need to set up the connection manually. To make wireless settings for this machine, use the MF/LBP Network Setup Tool from your computer. Make sure that your computer is correctly connected to the network.
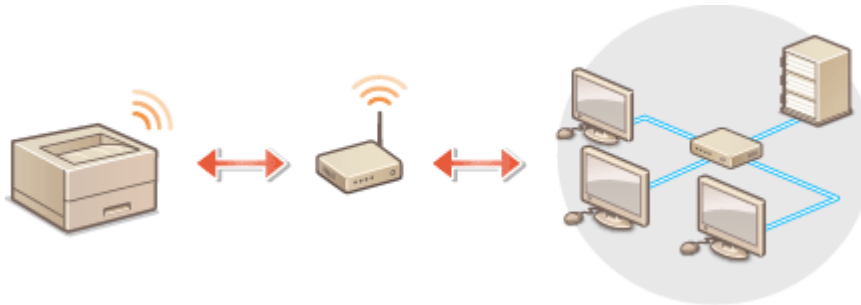


## IMPORTANT

### Log on as an administrator
To perform the following procedure, log on to your computer with an administrator account.

### Risk of information leak
Use wireless LAN connection at your own discretion and at your own risk. If the machine is connected to an unsecured network, your personal information might be leaked to a third party because radio waves used in wireless communication can go anywhere nearby, even beyond walls.

### Wireless LAN security standards
This machine supports the following wireless LAN security standards. For the wireless security compatibility of your wireless router, see the instruction manual or contact the manufacturer.

- 128 (104)/64 (40) bit WEP
- WPA-PSK (TKIP/AES-CCMP)
- WPA2-PSK (TKIP/AES-CCMP)

## NOTE

- The machine does not come with a wireless router. Have the router ready as necessary.
- The wireless router must conform to the IEEE 802.11b/g/n standards and be able to communicate in the 2.4 GHz band. For more information, see the instruction manual for your wireless router or contact the manufacturer.
- Wired LAN and wireless LAN cannot be used at the same time. When using a wireless LAN connection, do not connect a LAN cable to the machine. Doing so may cause a malfunction.
- If you are using the machine in your office, consult your network administrator.

**1** **Insert the supplied DVD-ROM into the drive on the computer.**

**2** **Click [Start Software Programs].**
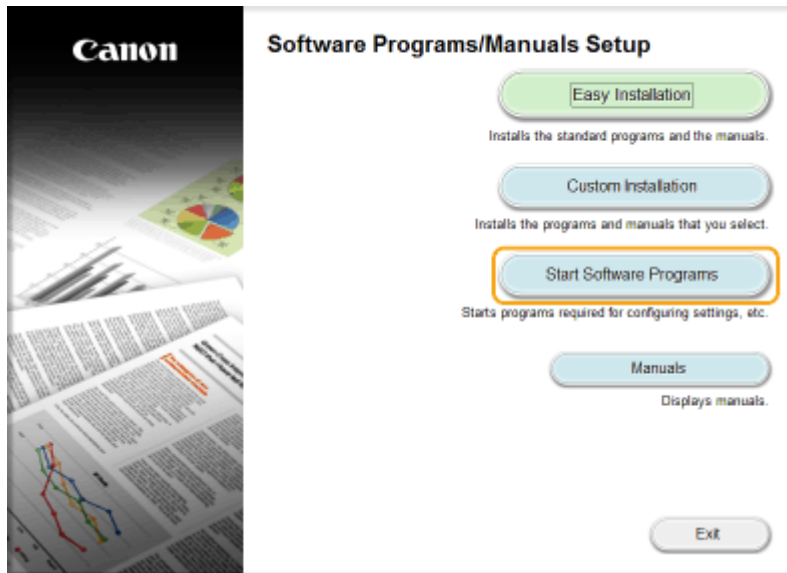
**NOTE:**

- If the above screen does not appear ▶**Displaying the [Software Programs/Manuals Setup] Screen(P. 318)**

- If [AutoPlay] is displayed, click [Run MInst.exe].

**3** Click [Start] for [MF/LBP Network Setup Tool].
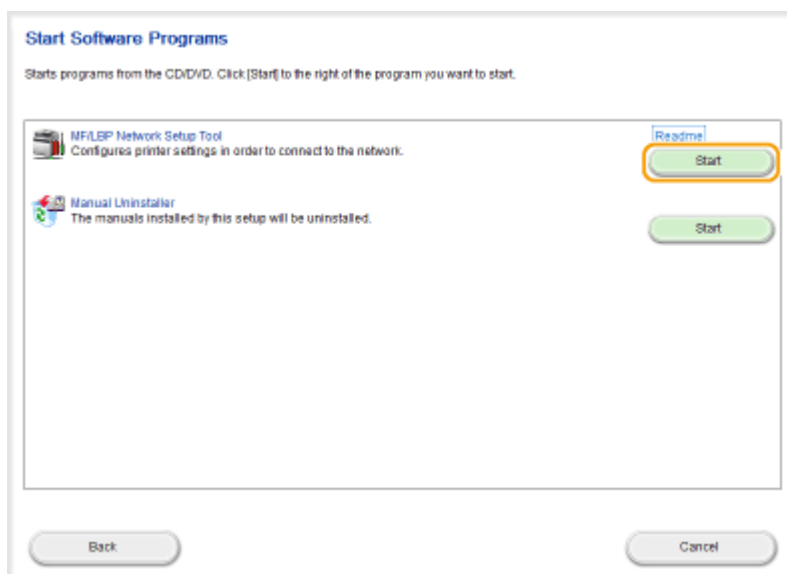


**4** Follow the on-screen instructions to configure the wireless LAN settings.
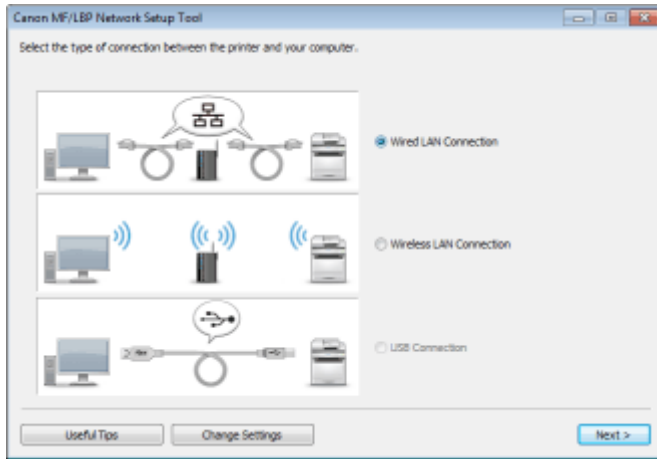
**NOTE:**

**If there is something you do not understand**

Click [Useful Tips] at the bottom left of the screen to display troubleshooting tips.
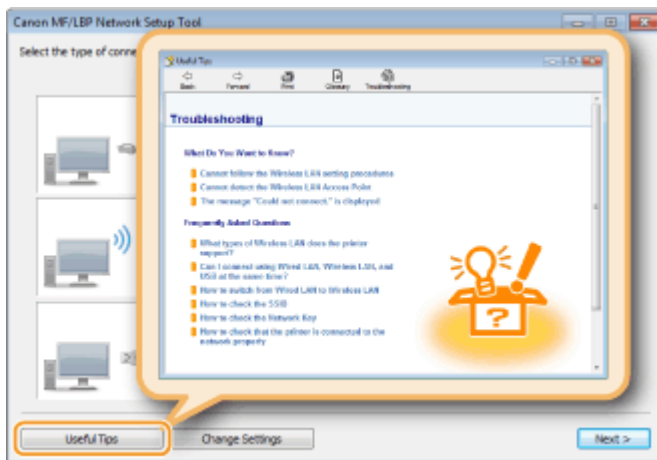


**IMPORTANT**

**After switching the connection method from wired LAN to wireless LAN**

You need to uninstall the currently installed printer driver, and then reinstall it. For more information, see the Printer Driver Installation Guide.

**LINKS**

◉**Connecting to a Network(P. 90)**

# Setting IP Addresses

0YFA-024

Connecting the machine to a network requires an IP address that is unique in that network. There are two types of IP addresses: IPv4 and IPv6. Use the type required by your network environment. Note that before you can use an IPv6 address, you first need to properly configure an IPv4 address.
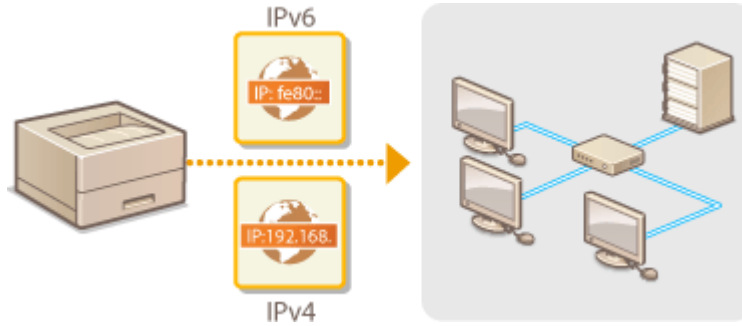
# Setting IPv4 Address

0YFA-025

The machine's IPv4 address can be either assigned automatically by a dynamic IP addressing protocol, such as DHCP, or entered manually. When connecting the machine to a wired LAN, make sure that the connectors of the LAN cable are firmly inserted into the ports ( ⊙**Connecting to a Wired LAN(P. 92)** ).

**1** **Start the Remote UI and log on in System Manager Mode.** ⊙**Starting the Remote UI(P. 175)**

**2** **Click [Settings/Registration].**
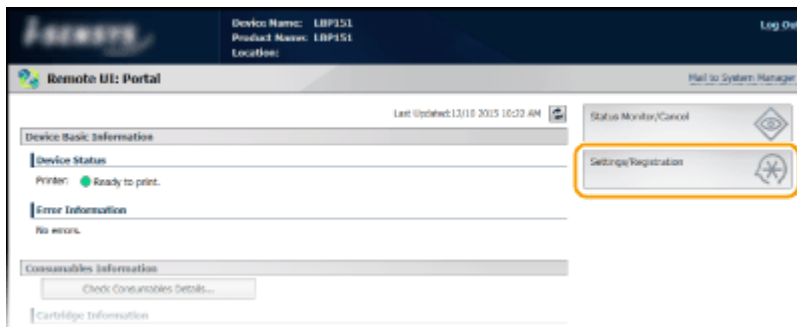


**3** **Click [Network Settings]** ▶ **[TCP/IP Settings].**
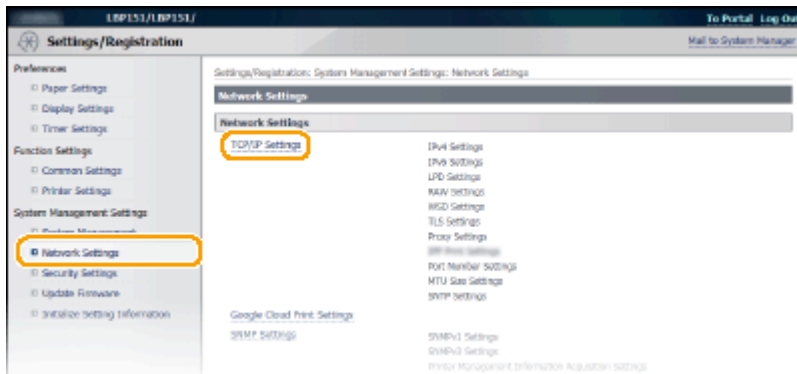


**4** **Click [Edit] in [IPv4 Settings].**

## 5 Set the IP address.
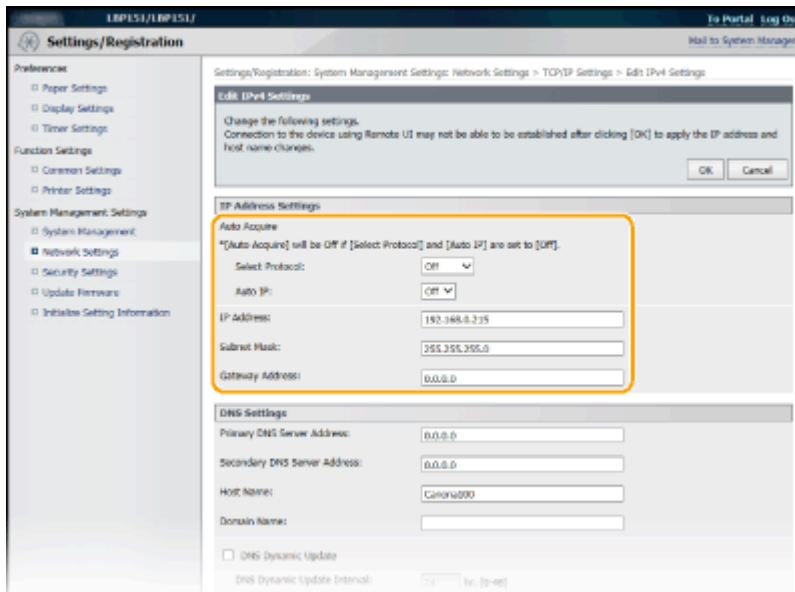


### ■ Automatically assigning an IP address

**1** In the [Select Protocol] list, select [DHCP], [BOOTP], or [RARP].

**NOTE:**

**If you do not want to use DHCP/BOOTP/RARP to assign an IP address automatically**
Select [Off]. If you select the [DHCP], [BOOTP], or [RARP] protocol when these services are unavailable, the machine will waste time and communications resources searching the network for these services.

**2** Check that [Auto IP] is set to [On].
- If [Off] is selected, change the setting to [On].

**NOTE:**

Even if Auto IP is enabled, IP addresses assigned via DHCP/BOOTP/RARP override an address obtained via Auto IP.

### ■ Manually entering an IP address

**1** Select [Off] for [Select Protocol] and [Auto IP].

**2** Set the [IP Address], [Subnet Mask], and [Gateway Address] fields.

## 6 Click [OK].

---

### NOTE

**Checking whether the settings are correct**
Make sure that the Remote UI screen can be displayed with your computer. ❍**Starting the Remote UI(P. 175)**

**If you change the IP address after installing the printer driver**
If you are using an MFNP port, and the machine and the computer are in the same subnet, then the connection will be maintained. You do not need to add a new port. If you are using a standard TCP/IP port, then you need to add a new port. ❍**Configuring Printer Ports(P. 110)**

\* If you are not sure which type of port you are using, see ❯**Checking the Printer Port(P. 320)** .

**LINKS**

❯**Setting IPv6 Addresses(P. 101)**
❯**Viewing Network Settings(P. 104)**

# Setting IPv6 Addresses

0YFA-026

Use the Remote UI to set IPv6 addresses. Before setting IPv6 addresses, make sure that the IPv4 address has been set correctly ( ▶**Viewing Network Settings(P. 104)** ). You can register up to nine of the following IPv6 addresses.

| Type | Maximum number available | Description |
|------|--------------------------|-------------|
| Link-local address | 1 | An address that is valid only within a subnet or link and cannot be used to communicate with devices beyond a router. A link-local address is set automatically when the IPv6 function of the machine is enabled. |
| Manual address | 1 | An address that is entered manually. Specify the prefix length and default router address. |
| Stateless address | 6 | An address that is generated automatically using the MAC address of the machine and a network prefix that is advertised by the router. Stateless addresses are discarded when the machine is restarted (or turned ON). |
| Stateful address | 1 | An address obtained from a DHCP server using DHCPv6. |

**1** **Start the Remote UI and log on in System Manager Mode.** ▶**Starting the Remote UI(P. 175)**

**2** **Click [Settings/Registration].**
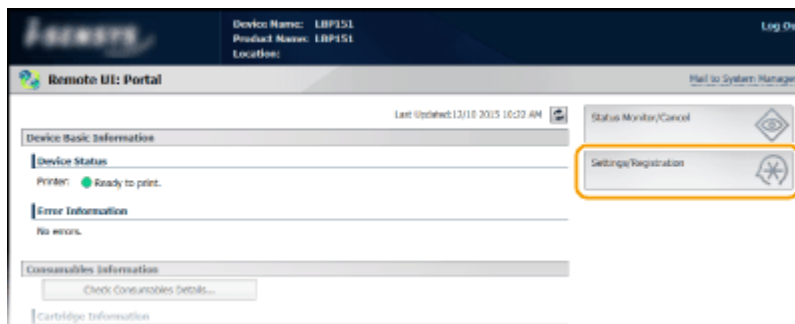


**3** **Click [Network Settings]** ▶ **[TCP/IP Settings].**
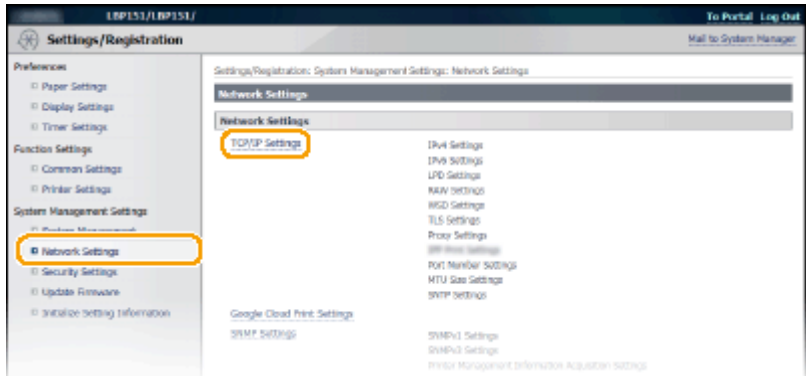
**4** Click [Edit] in [IPv6 Settings].
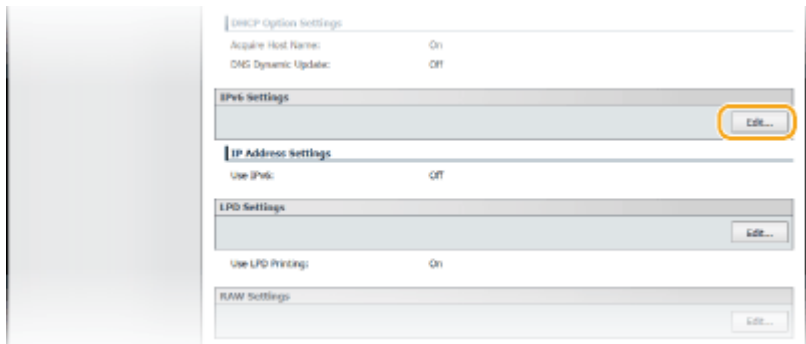


**5** Select the [Use IPv6] check box and configure the required settings.
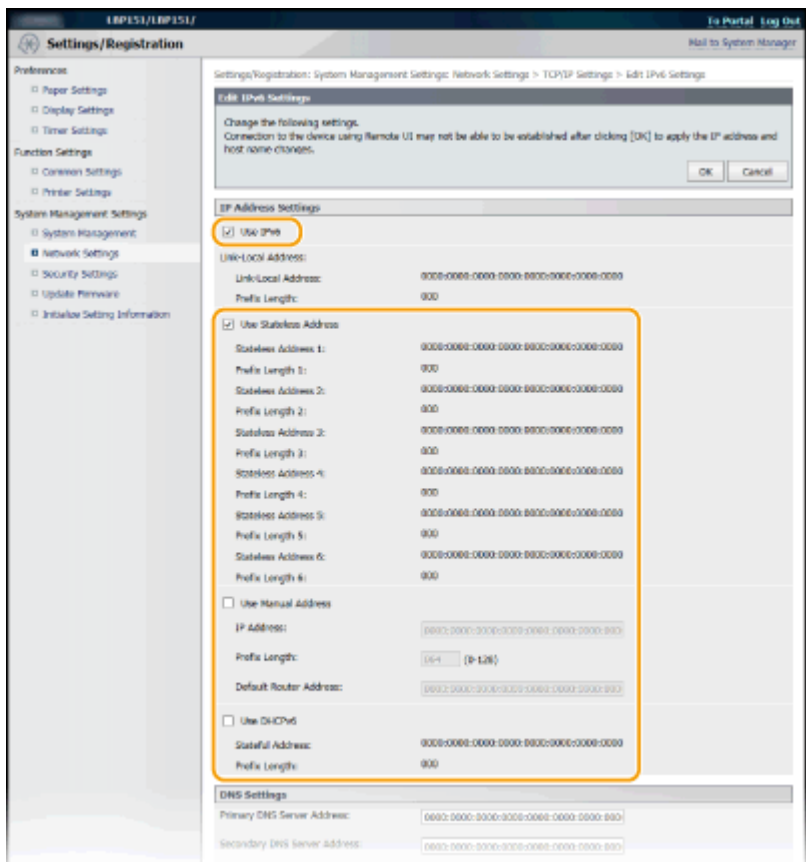


**[Use IPv6]**
Select the check box to use IPv6 on the machine. Clear the check box if you do not want to use IPv6.

**[Use Stateless Address]**

Check to use stateless addresses. Clear the check box if you do not want to use stateless addresses.

**[Use Manual Address]**
When you want to enter an IPv6 address manually, select the check box and enter values in the [IP Address], [Prefix Length], and [Default Router Address] text boxes. Clear the check box if you do not want to enter a manual address.

**[IP Address]**
Enter an IPv6 address. Addresses that start with "ff" (multicast addresses) and the loopback address (::1) cannot be entered.

**[Prefix Length]**
Enter the length (number of bits) of the network portion of the address.

**[Default Router Address]**
Specify the default router address, as necessary. Addresses that start with "ff" (multicast addresses) and the loopback address (::1) cannot be entered.

**[Use DHCPv6]**
Select the check box to use the stateful address. Clear the check box if you do not want to use the stateful address.

**6** **Click [OK].**
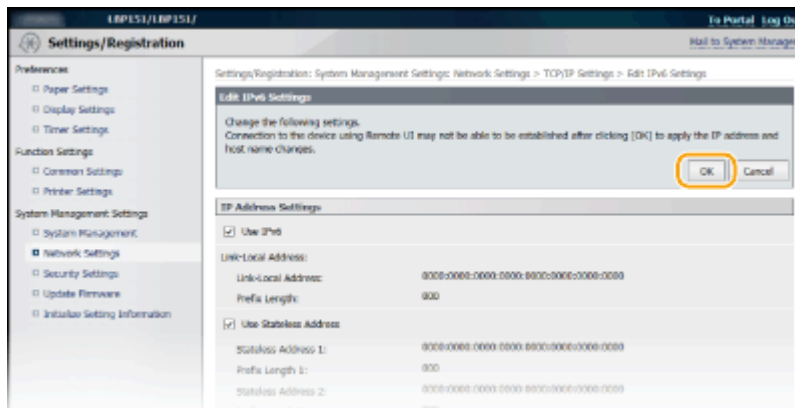


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**NOTE**

**Checking whether the settings are correct**
Make sure that the Remote UI screen can be displayed with your computer by using the IPv6 address of the machine. ◯**Starting the Remote UI(P. 175)**

**If you change IP addresses after installing the printer driver**
You need to add a new port. ◯**Configuring Printer Ports(P. 110)**

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LINKS

◯**Setting IPv4 Address(P. 98)**
◯**Viewing Network Settings(P. 104)**

# Viewing Network Settings

0YFA-027

Press this machine's ![](paper icon) (Paper) key and hold it down for 3 seconds to print a list of the machine's settings. This allows you to check IPv4 settings, the MAC address, and wired/wireless LAN settings. The setting list is formatted to print on A4 size paper. Before printing, load A4 size paper in the drawer. **○Loading Paper in the Drawer(P. 32)**
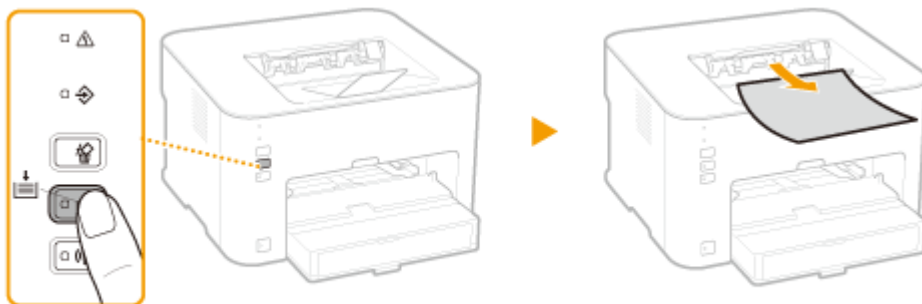


Press and hold
for 3 seconds.

**Output example:**
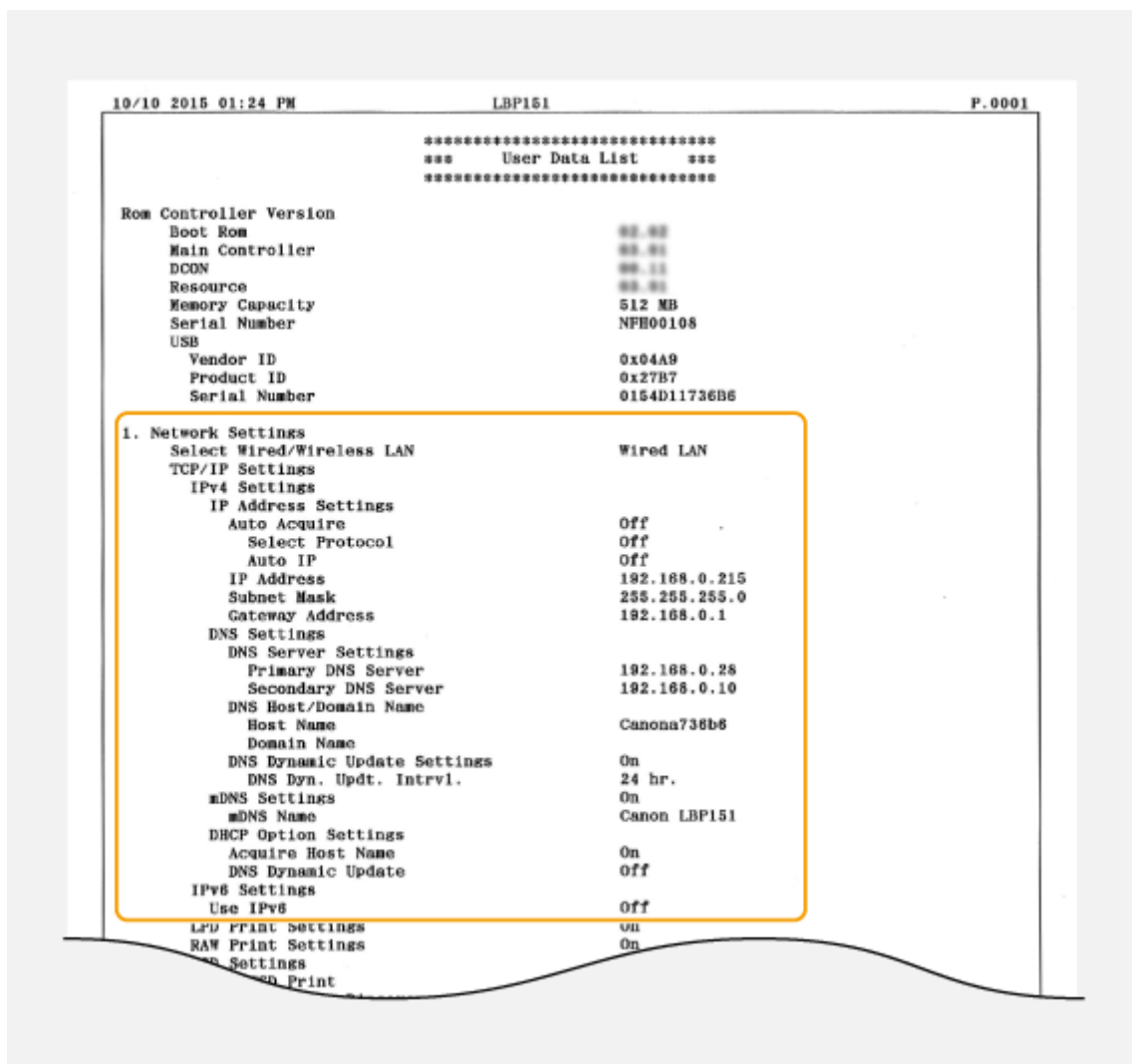
**NOTE**

**IP Address**

- The IP address is not correctly configured if it is displayed as "0.0.0.0".

- Connecting the machine to multiple switching hubs or bridges for redundancy may result in a connection failure even when the IP address is correctly configured. This problem can be solved by setting a certain interval before the machine starts communicating. **Setting a Wait Time for Connecting to a Network(P. 120)**

**Using the Printer Status Window to print a setting list**

- You can also print this setting list from the Printer Status Window. **Printing Setting Lists(P. 258)**

LINKS

**Connecting to a Wired LAN(P. 92)**
**Connecting to a Wireless LAN(P. 94)**
**Setting IPv4 Address(P. 98)**

# Configuring for Printing from a Computer

0YFA-028

When using the machine as a network printer, you can configure the protocols and ports used for printing. Before starting, make sure that you have completed all basic preparations for printing. For more information, see the Printer Driver Installation Guide.
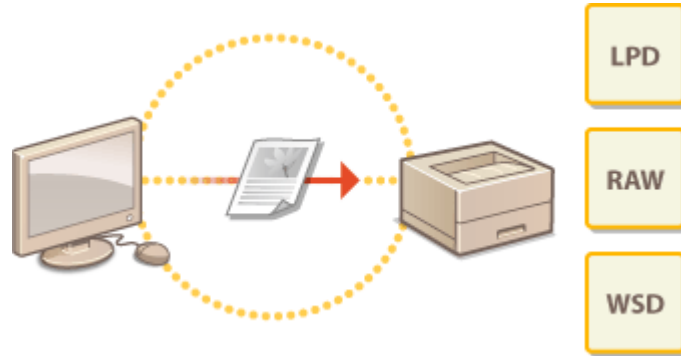


## NOTE

- Printing protocols are rules for delivering document data created on a computer to the machine. You can select them according to the printing purpose or the network environment.

- Ports are gateways for passing printing data from a computer to the machine. Incorrect port settings are often the cause when documents cannot be printed from a network computer.

**Setting Up a Print Server**

By setting up a print server on the network, you can reduce the load on the computer that you print from. This also makes it possible to install printer drivers over the network, which saves the trouble of installing the drivers on each computer by using the DVD-ROM. For information about how to set up a print server, see the Printer Driver Installation Guide.

# Configuring Printing Protocols and Web Services

0YFA-029

The following explains how to configure printing protocols for printing documents from computers. The protocols supported by the machine are LPD, RAW, and WSD (Web Services on Devices).

> **NOTE**
>
> To change protocol port numbers ❍**Changing Port Numbers(P. 146)**

**1** Start the Remote UI and log on in System Manager Mode. ❍**Starting the Remote UI(P. 175)**

**2** Click [Settings/Registration].
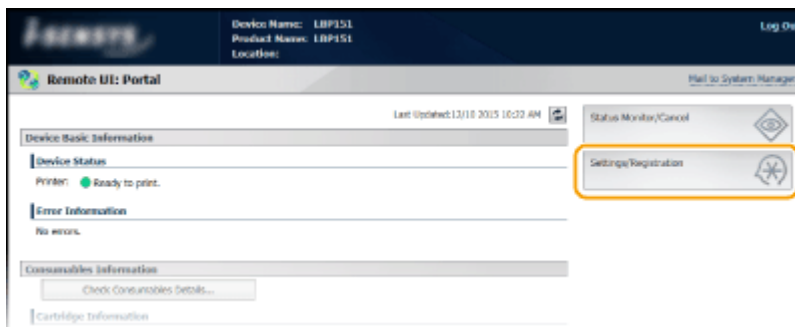


**3** Click [Network Settings] ▶ [TCP/IP Settings].
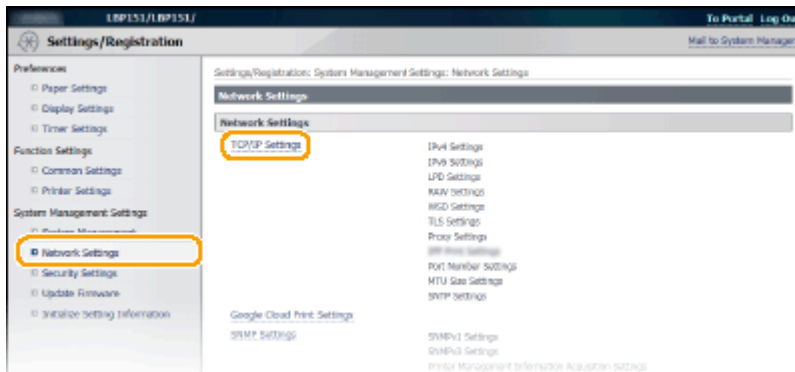


**4** Configure the printing protocols.

### ■ Configuring LPD or RAW

**1** Click [Edit] in [LPD Settings] or [RAW Settings].
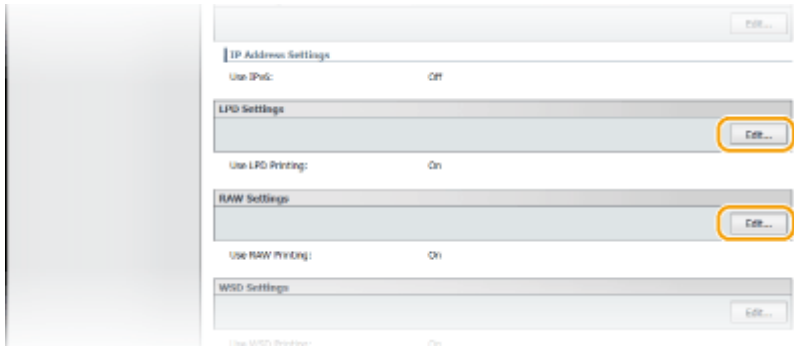
**2** **Configure the settings as necessary.**
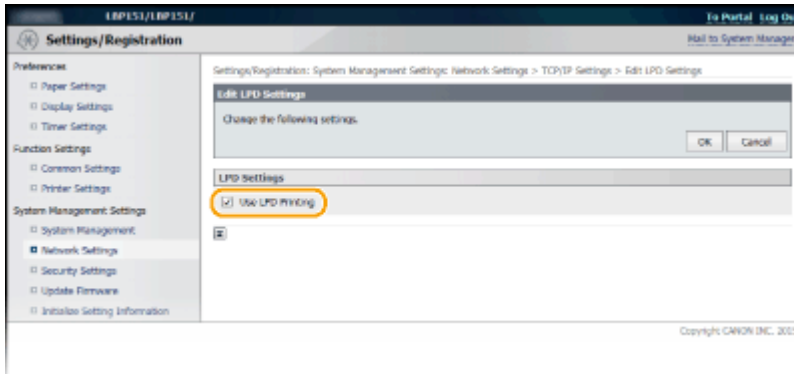


**[Use LPD Printing]**
Select the check box to print using LPD. Clear the check box if you do not want to use LPD printing.

**[Use RAW Printing]**
Select the check box to print using RAW. Clear the check box if you do not want to use RAW printing.

**3** **Click [OK].**

### ■ Configuring WSD

**1** **Click [Edit] in [WSD Settings].**
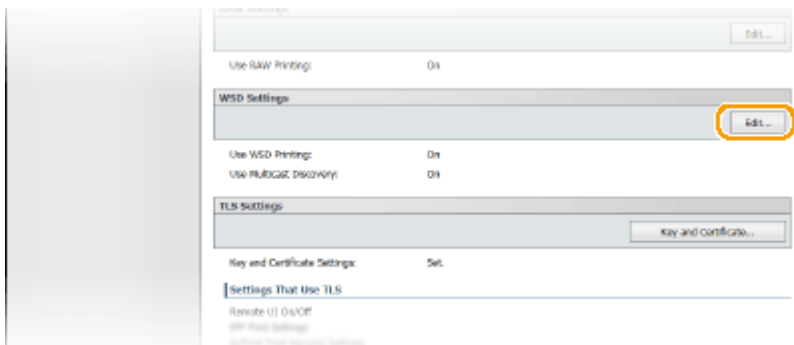


**2** **Configure the settings as necessary.**
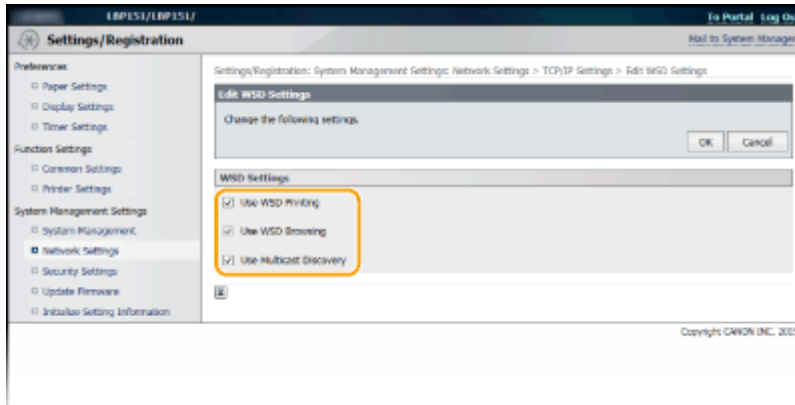
**[Use WSD Printing]**
Select the check box to print using WSD. Clear the check box if you do not want to use WSD printing.

**[Use WSD Browsing]**
Select the check box to obtain information about the machine from a computer via WSD. This check box is selected automatically when the [Use WSD Printing] check box is selected.

**[Use Multicast Discovery]**
Select the check box to set the machine to reply to multicast discovery messages. If the check box is cleared, the machine stays in sleep mode even when it receives a multicast discovery message from the network.

**3** **Click [OK].**

**NOTE**

**Setting up WSD network devices on Windows Vista/7/8**
Install the printer driver according to the procedure using WSD ports described in the Printer Driver Installation Guide.

LINKS

**Configuring Printer Ports(P. 110)**

# Configuring Printer Ports

0YFA-02A

Printing errors can occur when the print protocol settings of the machine have been changed, or when a printer has been added via the Windows printer folder. These errors are typically caused by incorrect printer port settings, for example when a computer specifies an incorrect printer port number or type in the printer driver. To fix this type of problem, configure the printer port settings on the computer.

> **IMPORTANT**
>
> To perform the following procedure, log on to your computer with an administrator account.

**1** Open the printer folder. ○**Displaying the Printer Folder(P. 316)**

**2** Right-click the icon of the machine and click [Printer properties] or [Properties].
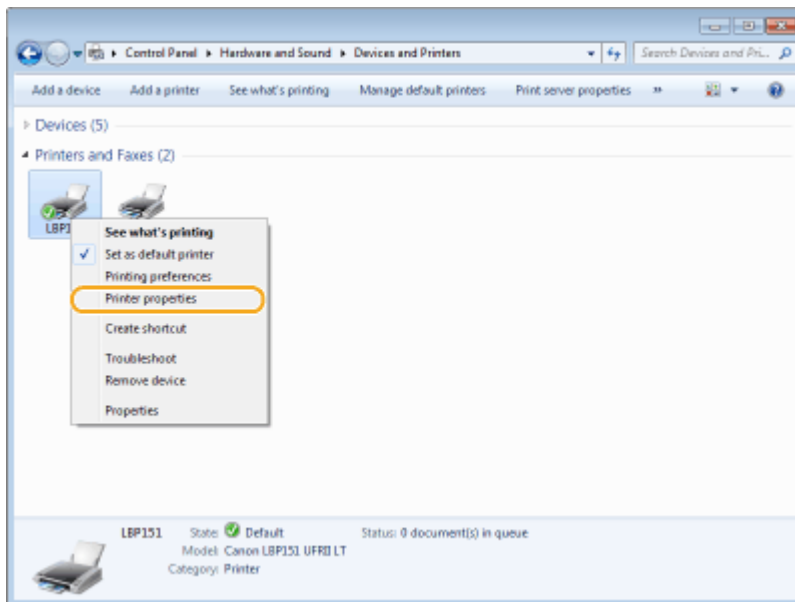


**3** Click the [Ports] tab and configure the required settings.
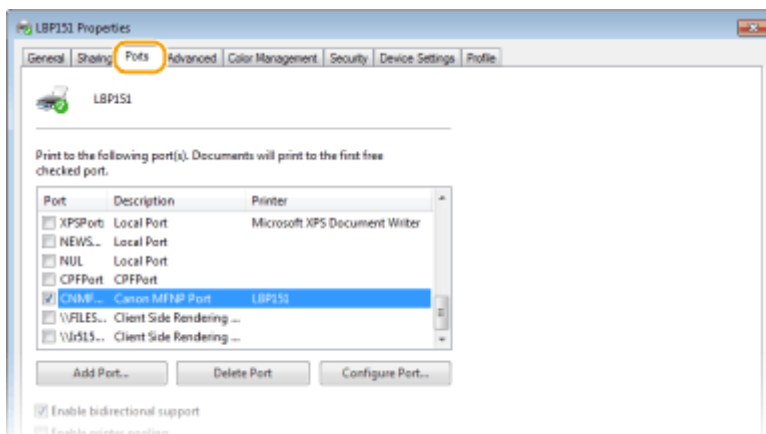
## ■ Adding a port

When an incorrect port was selected while installing a printer driver from the Windows printer folder, add a new port. There are two types of port: "MFNP Port" and "Standard TCP/IP Port." Select the port type according to your environment.

| MFNP Port<br><br>(only for IPv4 environment) | This is a port that allows the IP address of the machine to be detected automatically. Even if the IP address of the machine is changed, the connection is maintained, provided that the machine and the computer are in the same subnet. You do not need to add a new port every time the IP address is changed. If you are using the machine in an IPv4 environment, you should normally select this type of port.<br><br>**IMPORTANT:**<br><br>You can add an MFNP port only when you installed the printer driver from the supplied DVD-ROM, or when you downloaded and installed the printer driver from the Canon website. |
|---|---|
| Standard TCP/IP Port | This is a standard Windows port. When you use this type of port, you need to add a new port every time that the IP address of the machine is changed. Select this type of port when you are using the machine in an IPv6 environment and when you cannot add an MFNP port. |

Adding an MFNP port

**1** **Click [Add Port].**

**2** **Select [Canon MFNP Port] in [Available port types] and click [New Port].**
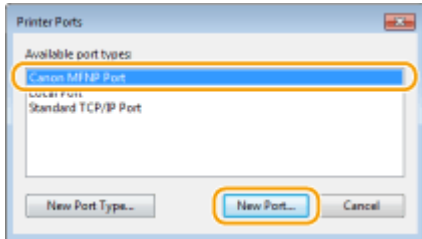
**3** **Select [Auto Detect] and select the machine when it is detected, and then click [Next].**

**NOTE:**

**If the machine is not detected**

Click [Refresh]. If the problem persists, select [IP address] or [MAC address], enter the IP address or MAC address of the machine ( ○**Viewing Network Settings(P. 104)** ) and then click [Next].
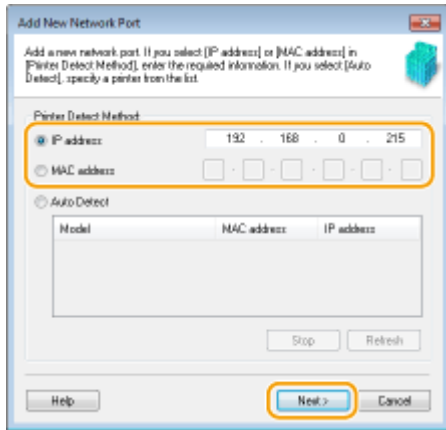
**4** Click [Add] ▶ [Finish].

**5** Click [Close].

Adding a standard TCP/IP port

**1** Click [Add Port].

**2** Select [Standard TCP/IP Port] in [Available port types] and click [New Port].
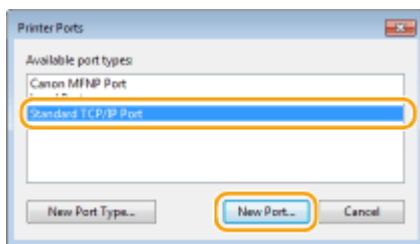


**3** Click [Next].

**4** Enter the IP address or the DNS name of the machine, and click [Next].

● The [Port Name] is entered automatically. If necessary, you can change it.
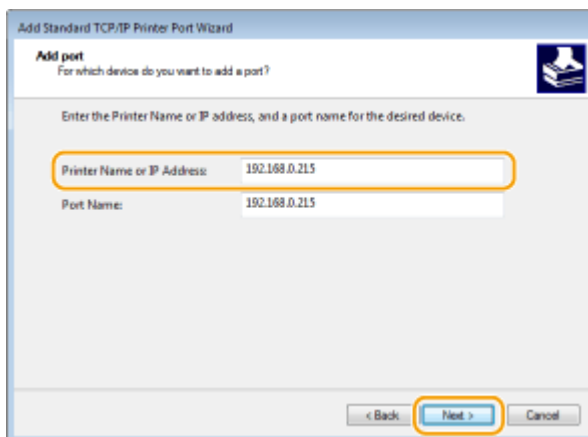


**NOTE:**

When the next screen is displayed, follow the instructions on the screen.
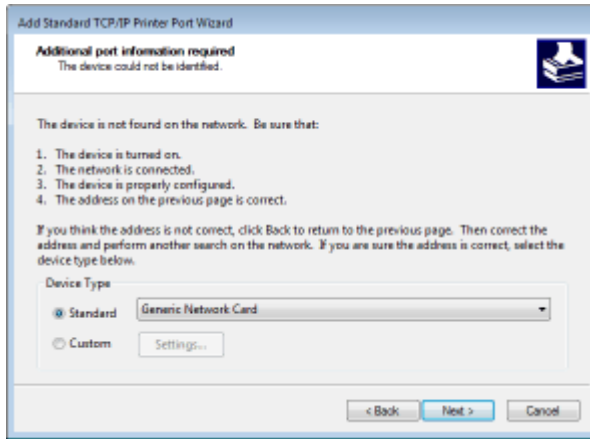
\* When you select the [Device Type], select [Canon Network Printing Device with P9100] under [Standard].

**5** Click [Finish].

**6** Click [Close].

■ **Changing the port type or number**

If the printing protocol (LPD or RAW) has been changed on the machine side ( ▶**Configuring Printing Protocols and Web Services(P. 107)** ) or the port number has been changed ( ▶**Changing Port Numbers(P. 146)** ), the corresponding settings on the computer must also be configured. This operation is not needed for WSD ports.

MFNP port

**1** Click [Configure Port].

**2** Under [Protocol Type], select [RAW] or [LPR], and change the [Port Number].
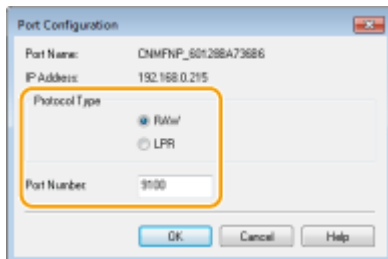


**3** Click [OK].

Standard TCP/IP port

**1** Click [Configure Port].

**2** Under [Protocol], select [Raw] or [LPR].

- If you selected [Raw], change the [Port Number].
- If you selected [LPR], enter "lp" in [Queue Name].
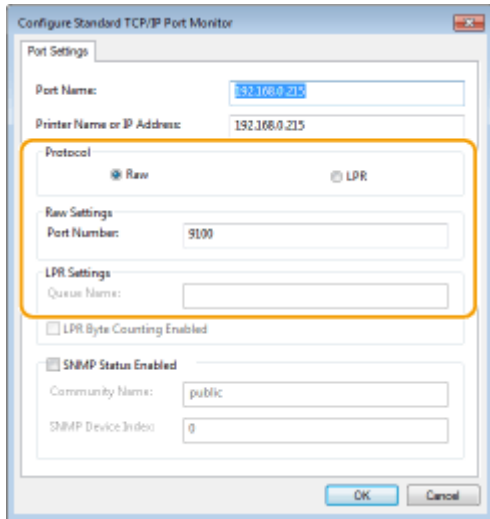
**3** **Click [OK].**

**4** **Click [Close].**

# Configuring the Machine for Your Network Environment

The size and configuration of a network varies depending on the purpose of the network. This machine has been designed to be compatible with as many network configurations as possible, and it is equipped with a variety of network technologies. Consult your network administrator and set a configuration to suit your network environment.
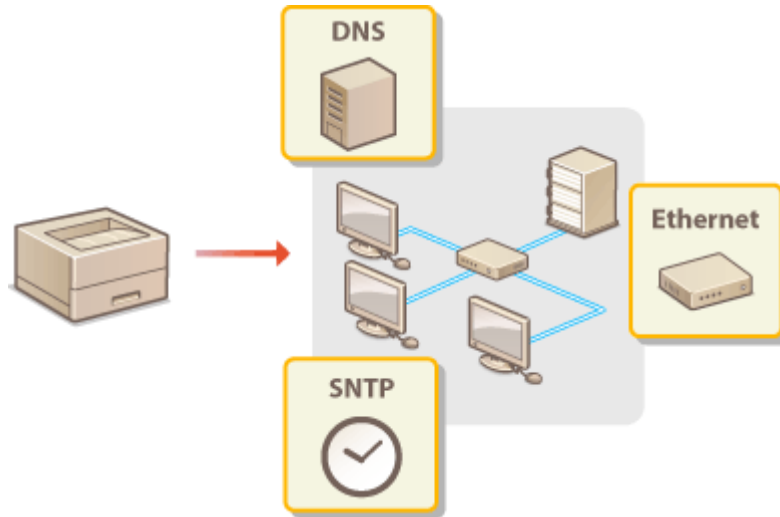
# Configuring Ethernet Settings

0YFA-02E

Ethernet is a standard for communicating data in a LAN. You can set the communication mode (Half Duplex/Full Duplex) and the Ethernet type (10BASE-T/100BASE-TX). The factory default setting, the communication mode and type of Ethernet are automatically detected. Usually, the Ethernet settings can be used as is, but use the following procedure to manually specify the settings as necessary.

**1** **Start the Remote UI and log on in System Manager Mode. ◉Starting the Remote UI(P. 175)**

**2** **Click [Settings/Registration].**
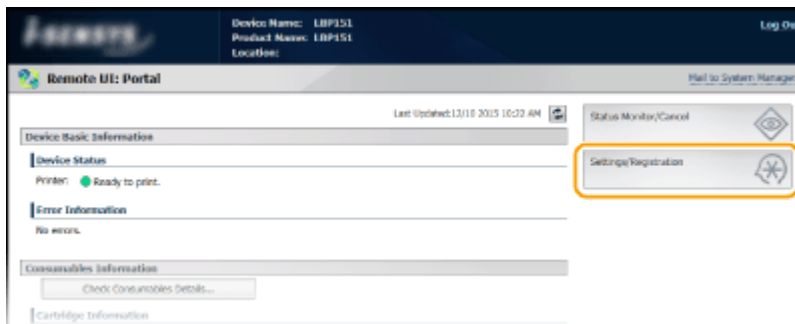


**3** **Click [Network Settings] ▶ [Ethernet Driver Settings].**



**4** **Click [Edit].**

116
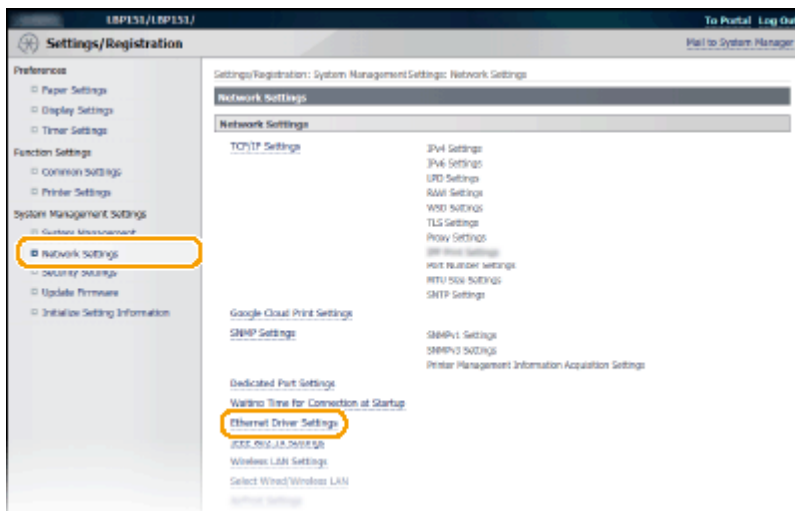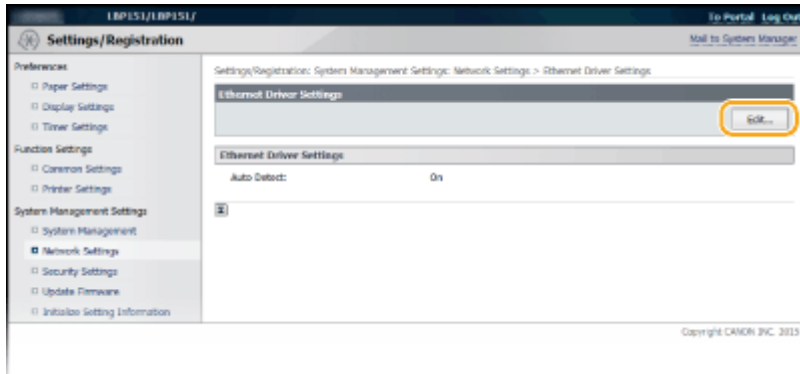
**5** Clear the [Auto Detect] check box, and then configure the Ethernet settings.
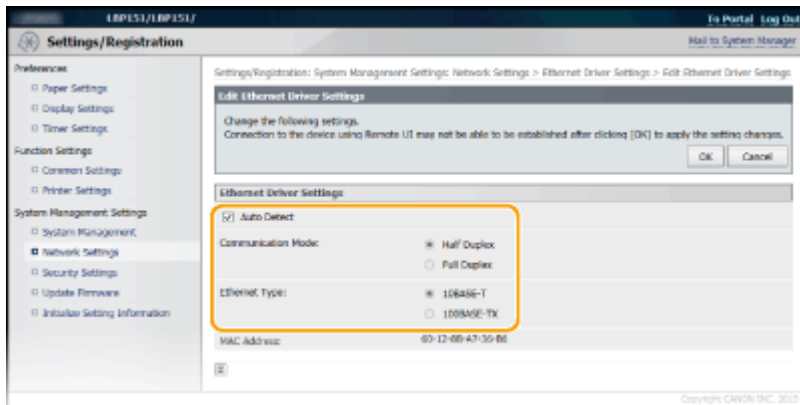


**[Auto Detect]**
Clear the check box to configure the Ethernet settings manually. Select the check box to detect the Ethernet settings automatically.

**[Communication Mode]**
Select the Ethernet communication mode.

| [Half Duplex] | Alternately sends and receives communication data. Select this when the machine is connected to a networking device using half duplex. |
| --- | --- |
| [Full Duplex] | Simultaneously sends and receives communication data. Use this setting for most environments. |

**[Ethernet Type]**
Select [10BASE-T] or [100BASE-TX] as the Ethernet type.

**6** Click [OK].

LINKS

**Changing the Maximum Transmission Unit(P. 118)**
**Setting a Wait Time for Connecting to a Network(P. 120)**

# Changing the Maximum Transmission Unit

0YFA-02F

In most Ethernet networks, the maximum size of a packet that can be sent is 1500 bytes. A packet refers to a small chunk of data. The original data is divided into packets before being sent. The maximum transmission unit (MTU) may vary on each network. Change the settings of the machine as necessary. For more information, contact your network administrator.

**1** Start the Remote UI and log on in System Manager Mode. ○**Starting the Remote UI(P. 175)**

**2** Click [Settings/Registration].
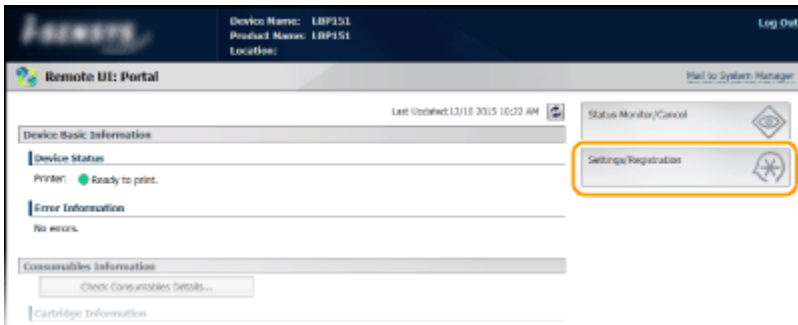


**3** Click [Network Settings] ▶ [TCP/IP Settings].
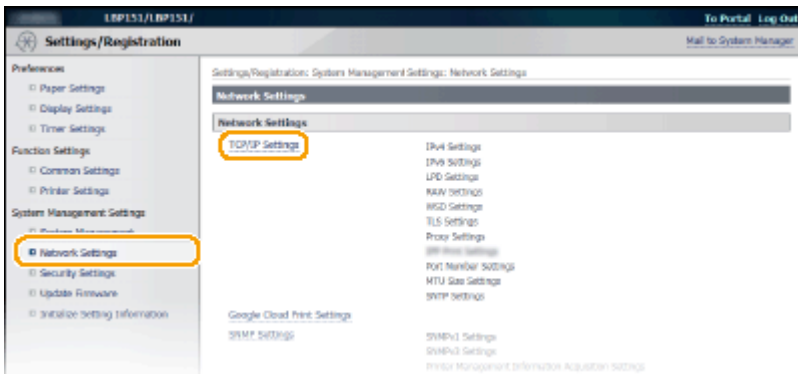


**4** Click [Edit] in [MTU Size Settings].
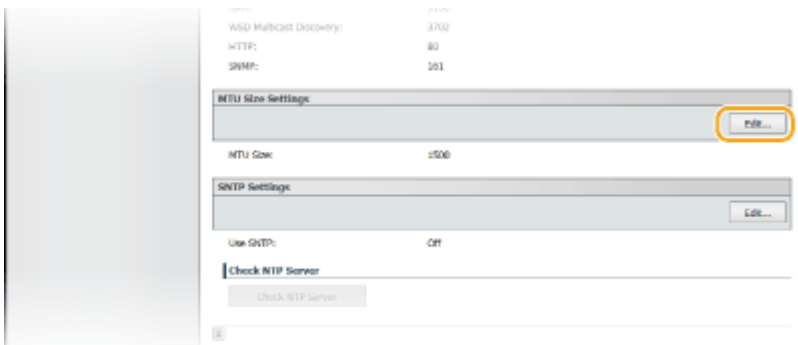


**5** Select the maximum packet size, and then click [OK].
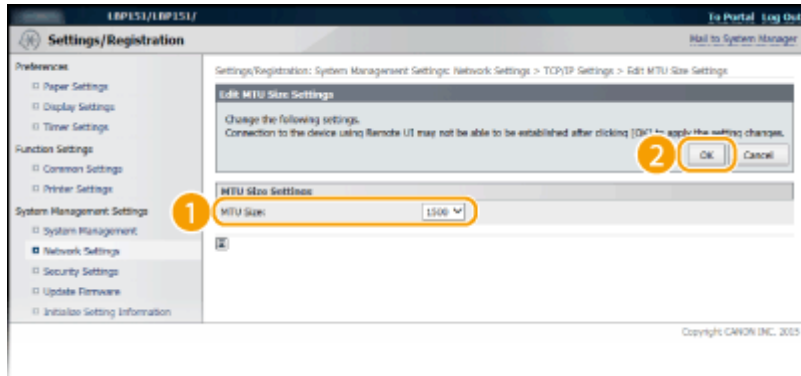
## LINKS

**Configuring Ethernet Settings(P. 116)**
**Setting a Wait Time for Connecting to a Network(P. 120)**

# Setting a Wait Time for Connecting to a Network

0YFA-02H

When a network is designed with multiple switching hubs or bridges in order to provide redundant connectivity, it must have a mechanism to prevent packets from looping. One effective solution is to define the role of each switch port. However, communication may still be disrupted for a certain time immediately after you change the network, for example by adding a new device. If this type of problem occurs, set a wait time for connecting the machine to the network.

**1** Start the Remote UI and log on in System Manager Mode. ❍Starting the Remote UI(P. 175)

**2** Click [Settings/Registration].
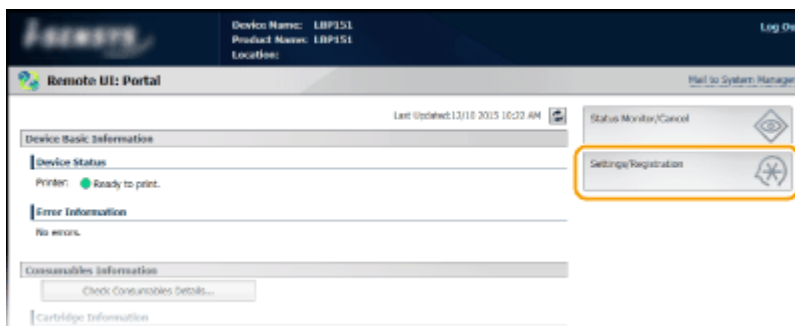


**3** Click [Network Settings] ▶ [Waiting Time for Connection at Startup].
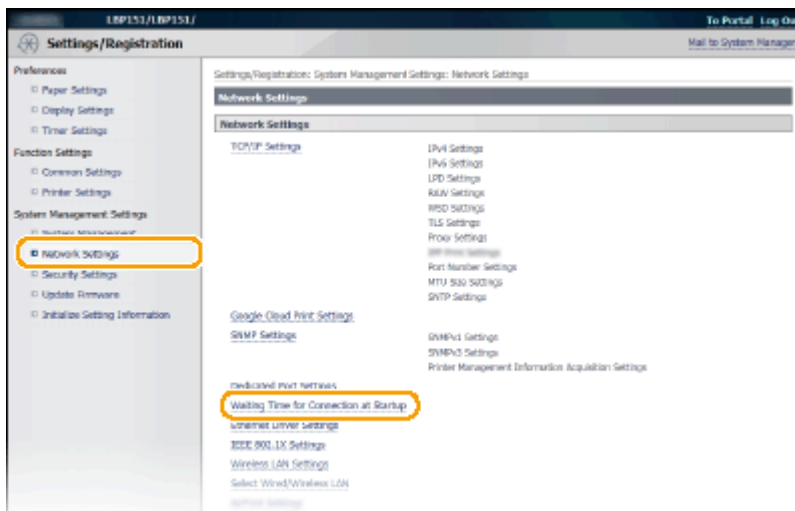


**4** Click [Edit].
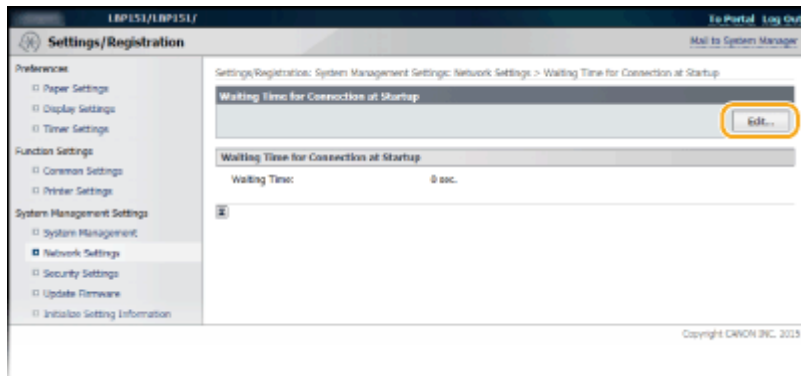
**5** **Enter the time to wait before beginning communication with the network, and then click [OK].**
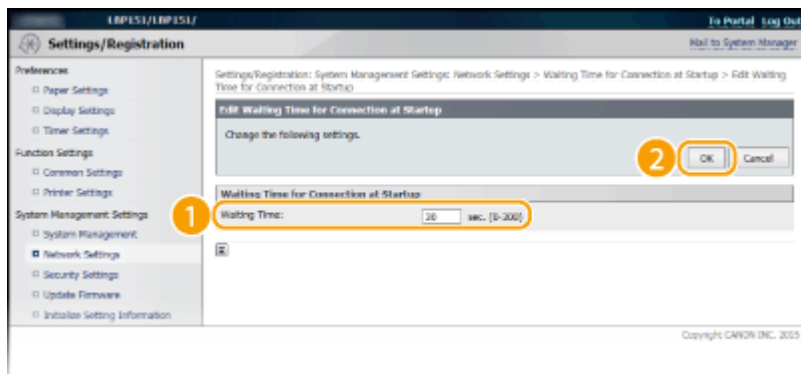


## LINKS

⦿**Configuring Ethernet Settings(P. 116)**
⦿**Changing the Maximum Transmission Unit(P. 118)**

# Configuring DNS
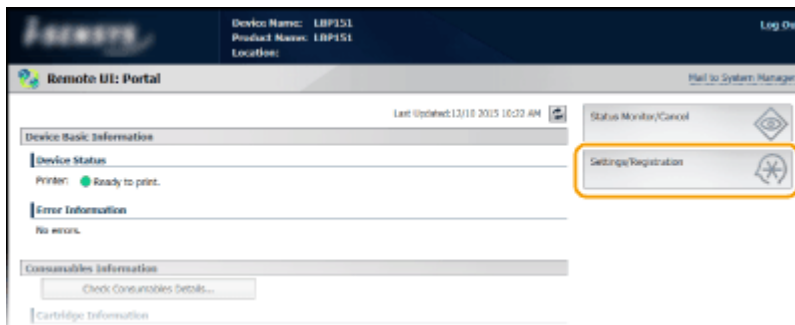
0YFA-02J

DNS (Domain Name System) provides a service for name resolution that associates a host (or domain) name with an IP address. Configure the DNS, mDNS, or DHCP option settings as necessary according to your network. Note that the procedures for configuring DNS are different for IPv4 and IPv6.



**1** **Start the Remote UI and log on in System Manager Mode.** ⊙**Starting the Remote UI(P. 175)**

**2** **Click [Settings/Registration].**



**3** **Click [Network Settings] ▶ [TCP/IP Settings].**
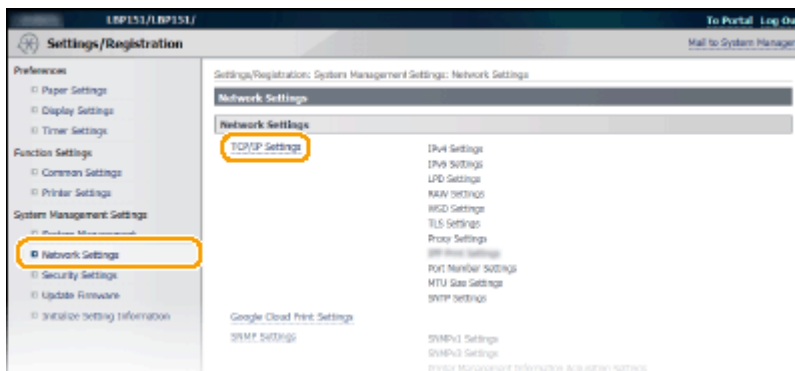


**4** **Configure the DNS settings.**

■ **Configuring IPv4 DNS settings**

**1** Click [Edit] in [IPv4 Settings].
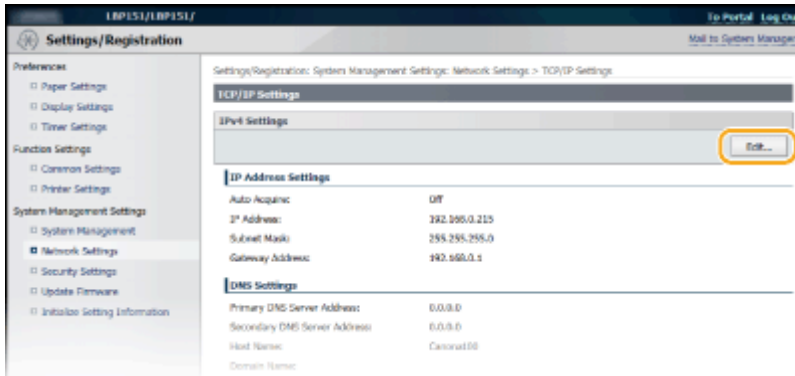
**2 Configure the IPv4 DNS settings.**



**ⓐ [DNS Settings]**

**[Primary DNS Server Address]**
Enter the IP address of the DNS server.

**[Secondary DNS Server Address]**
When there is a secondary DNS server, enter its IP address.

**[Host Name]**
Enter up to 47 alphanumeric characters for the host name of the machine that is to be registered
with the DNS server.

**[Domain Name]**
Enter up to 47 alphanumeric characters for the name of the domain the machine belongs to (such
as "example.com").

**[DNS Dynamic Update]**
Select the check box to automatically update the DNS records whenever the association between
the machine's IP address and its host name changes (for example, in a DHCP environment). To
specify the interval between updates, enter the time in hours in the [DNS Dynamic Update Interval]
text box. Clear the check box if you do not want to use dynamic updating.

**ⓑ [mDNS Settings]**

**[Use mDNS]**
Adopted by services such as Bonjour, mDNS (multicast DNS) is a protocol for associating a host
name with an IP address without using DNS. Select the check box to enable mDNS and enter the
mDNS name in the [mDNS Name] text box. Clear the check box if you do not want to use mDNS.

**ⓒ [DHCP Option Settings]**

**[Acquire Host Name]**

Select the check box to enable Option 12 to obtain the host name from the DHCP server. Clear the check box if you do not want to use this function.

**[DNS Dynamic Update]**
Select the check box to enable Option 81 to dynamically update the DNS records through the DHCP server instead of through this machine. Clear the check box if you do not want to use this function.

**3** Click [OK].
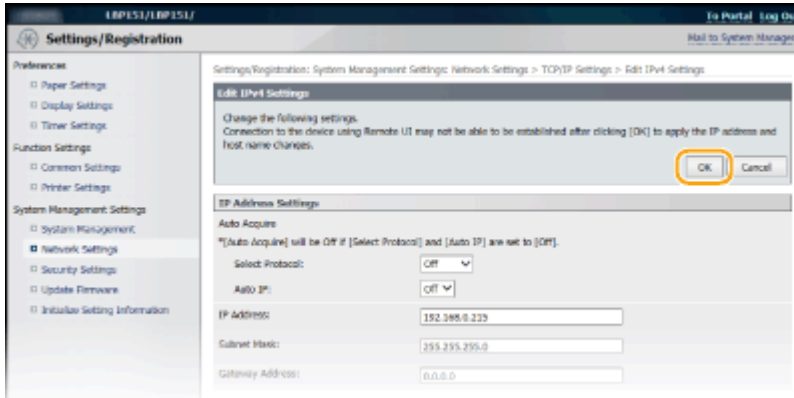


## ■ Configuring IPv6 DNS settings

**1** Click [Edit] in [IPv6 Settings].
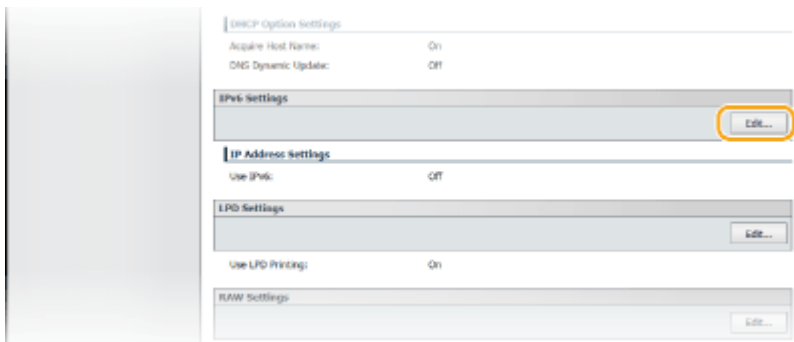


**2** Configure the IPv6 DNS settings.

- The [Use IPv6] check box must be selected to configure the settings. **❍Setting IPv6 Addresses(P. 101)**
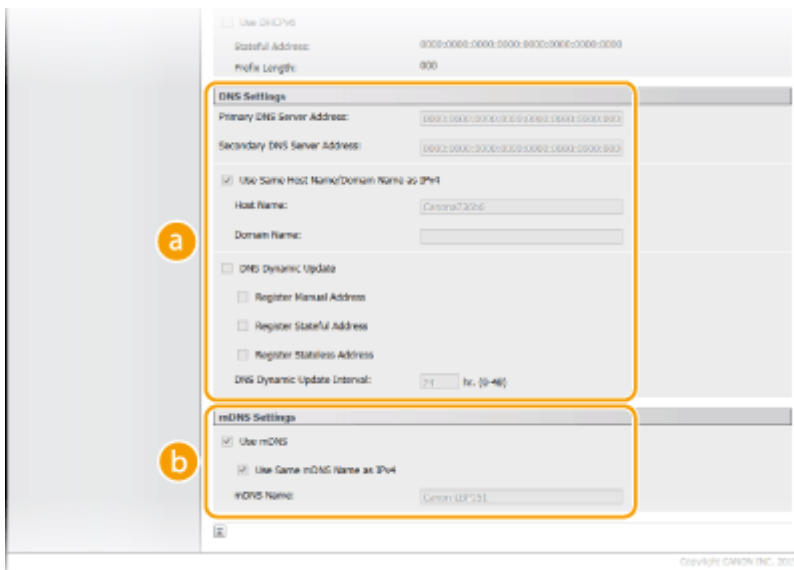


ⓐ [DNS Settings]

**[Primary DNS Server Address]**
Enter the IP address of the DNS server. Addresses that start with "ff" (multicast addresses) and the loopback address (::1) cannot be entered.

**[Secondary DNS Server Address]**
When there is a secondary DNS server, enter its IP address. Addresses that start with "ff" (multicast addresses) and the loopback address (::1) cannot be entered.

**[Use Same Host Name/Domain Name as IPv4]**
Select the check box to use the same settings as in IPv4. Clear the check box if you want to use different settings from IPv4.

**[Host Name]**
Enter up to 47 alphanumeric characters for the host name of the machine that is to be registered with the DNS server.

**[Domain Name]**
Enter up to 47 alphanumeric characters for the name of the domain the machine belongs to (such as "example.com").

**[DNS Dynamic Update]**
Select the check box to automatically update the DNS records whenever the association between the machine's IP address and its host name changes (for example, in a DHCP environment). To specify the addresses you want to register with the DNS server, select one or more of the check boxes for [Register Manual Address], [Register Stateful Address], and [Register Stateless Address]. To specify the interval between updates, enter the time in hours in the [DNS Dynamic Update Interval] text box. Clear the check box if you do not want to use dynamic updating.

**ⓑ [mDNS Settings]**

**[Use mDNS]**
Adopted by services such as Bonjour, mDNS (multicast DNS) is a protocol for associating a host name with an IP address without using DNS. Select the check box to enable mDNS. Clear the check box if you do not want to use mDNS.

**[Use Same mDNS Name as IPv4]**
Select the check box to use the same settings as in IPv4. Clear the check box and enter a name in [mDNS Name] if you want to use different settings from IPv4.

**3** Click [OK].
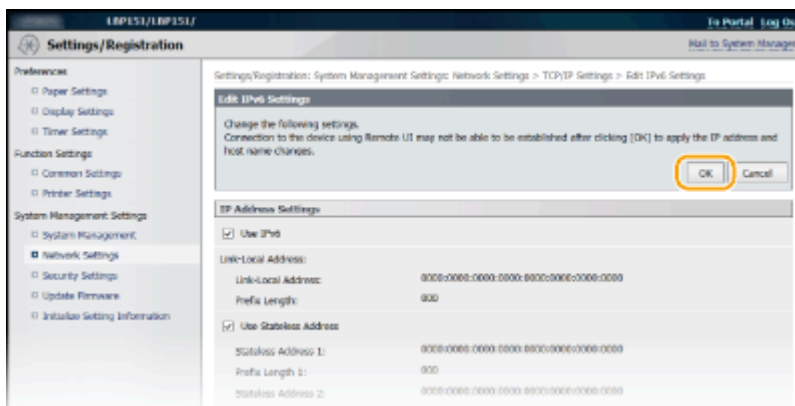


## LINKS

**◖Setting IPv4 Address(P. 98)**
**◖Setting IPv6 Addresses(P. 101)**
**◖Viewing Network Settings(P. 104)**

# Configuring SNTP

0YFA-02R
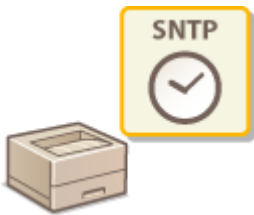
Simple Network Time Protocol (SNTP) enables you to adjust the system clock by using a time server on the network. When you use SNTP, the system checks the timer server periodically, so that the system clock is always accurate. The time is based on Coordinated Universal Time (UTC), so specify the time zone setting before configuring SNTP ( ❯**Timer Settings(P. 188)** ).

> **NOTE**
>
> The SNTP of the machine supports both NTP (version 3) and SNTP (versions 3 and 4) servers.

**1** Start the Remote UI and log on in System Manager Mode. ❯**Starting the Remote UI(P. 175)**

**2** Click [Settings/Registration].
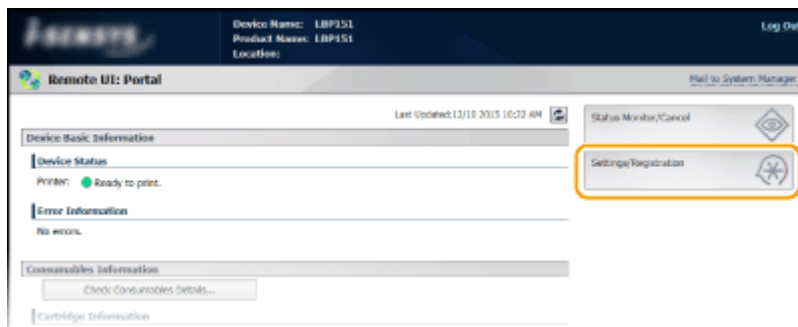
**3** Click [Network Settings] ▶ [TCP/IP Settings].
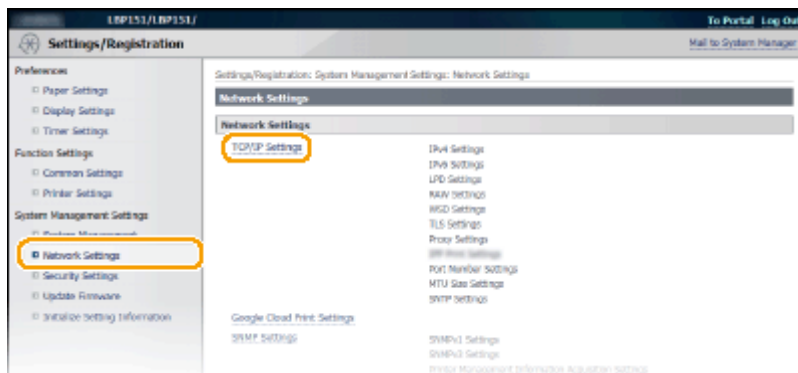
**4** Click [Edit] in [SNTP Settings].
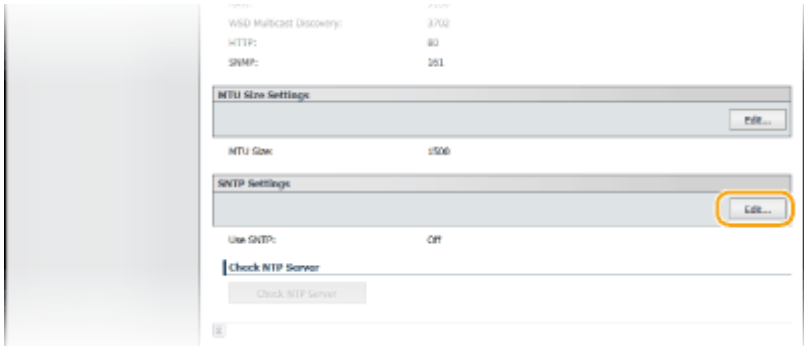
**5** Select the [Use SNTP] check box and enter the required information.
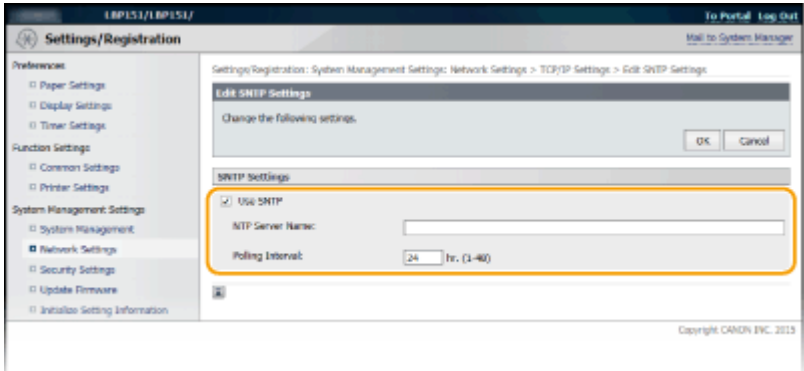


**[Use SNTP]**
Select the check box to use SNTP for synchronization. Clear the check box if you do not want to use this function.

**[NTP Server Name]**
Enter the IP address of the NTP or SNTP server. If a DNS server is available on the network, you can enter "<host name>.<domain name>" (FQDN) of up to 255 alphanumeric characters instead (example: "ntp.example.com").

**[Polling Interval]**
Enter an interval from 1 to 48 hours to specify how often to poll the time server.

**6** Click [OK].

## NOTE

**Testing communication with the NTP/SNTP server**
You can test whether the machine is communicating with the registered time server. Click [Settings/Registration] ▶ [Network Settings] ▶ [TCP/IP Settings] to display [SNTP Settings], and then click [Check NTP Server]. If a proper connection has been established, the result is displayed as shown below. (Note that this operation only checks the connection. It does not adjust the system clock.)
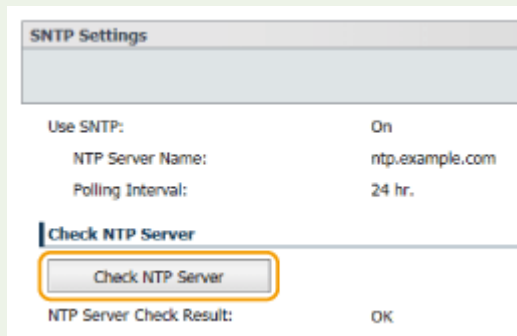
# Monitoring and Controlling the Machine with SNMP

0YFA-02S

Simple Network Management Protocol (SNMP) is a protocol for monitoring and controlling communication devices in a network by using a Management Information Base (MIB) database. The machine supports SNMPv1 and security-enhanced SNMPv3. They allow you to check the status of the machine from a computer when you print documents or use the Remote UI. You can enable either SNMPv1 or SNMPv3, or both at the same time. Specify the settings for each version to suit your network environment and the purpose of use.
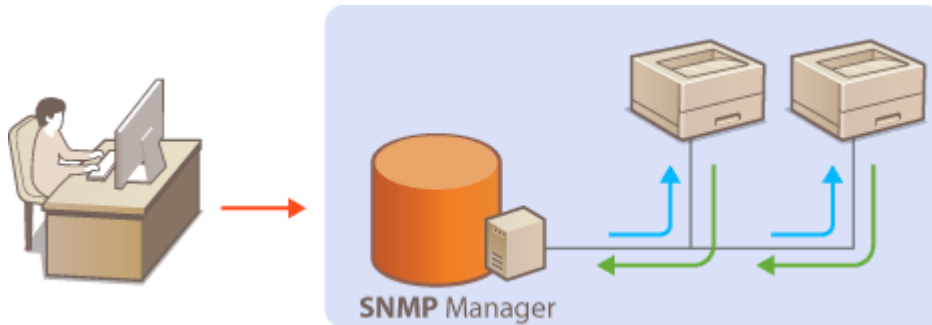


### SNMPv1

SNMPv1 uses data called a "community string" (in effect a kind of password) to define the scope of SNMP communication. Because this information is exposed to the network in plain text, your network will be vulnerable to attacks. If you want to ensure network security, disable SNMPv1 and use SNMPv3.

### SNMPv3

With SNMPv3, you can implement network device management that is protected by robust security features. Use the Remote UI to make settings. Before starting, enable TLS ( ▶**Enabling TLS Encrypted Communication for the Remote UI(P. 151)** ).

---

**NOTE:**

- The machine does not support the trap notification feature of SNMP.

- To change the SNMP port numbers ▶**Changing Port Numbers(P. 146)**

- SNMP management software enables you to configure, monitor, and control the machine remotely from the computer where the software is installed. For more information, see the instruction manuals for your management software.

---

**1** Start the Remote UI and log on in System Manager Mode. ▶**Starting the Remote UI(P. 175)**

**2** Click [Settings/Registration].

128
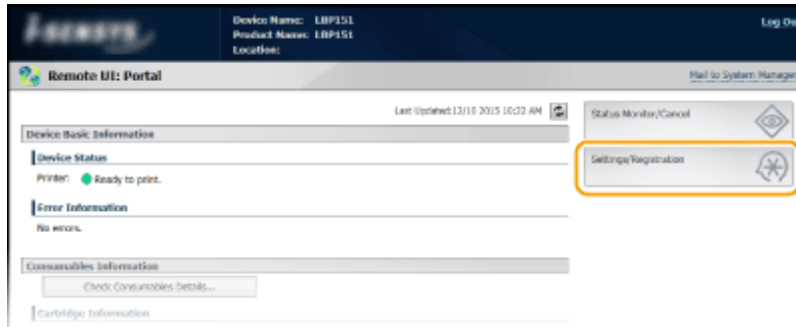
**3** Click [Network Settings] ▶ [SNMP Settings].
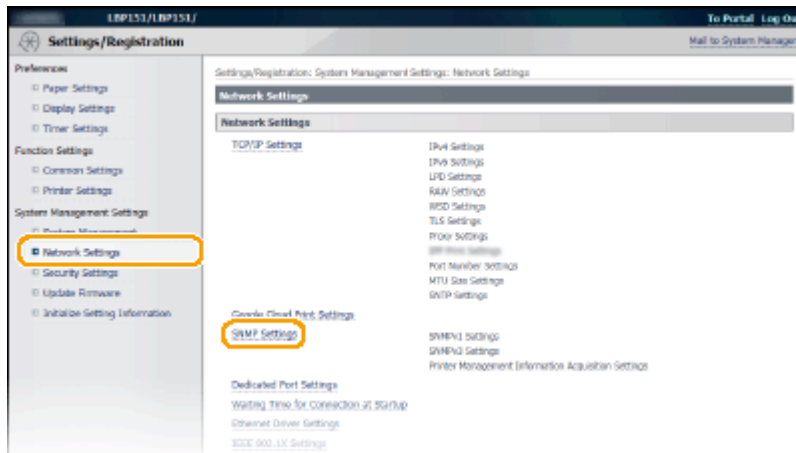


**4** Click [Edit].
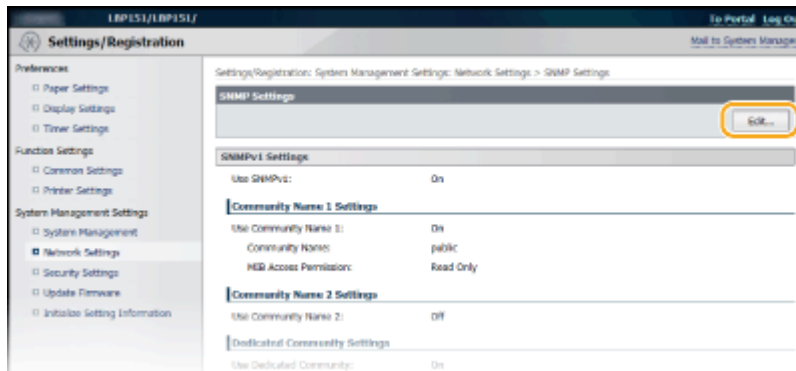


**5** Specify SNMPv1 settings.

- If you do not need to change SNMPv1 settings, proceed to the next step.
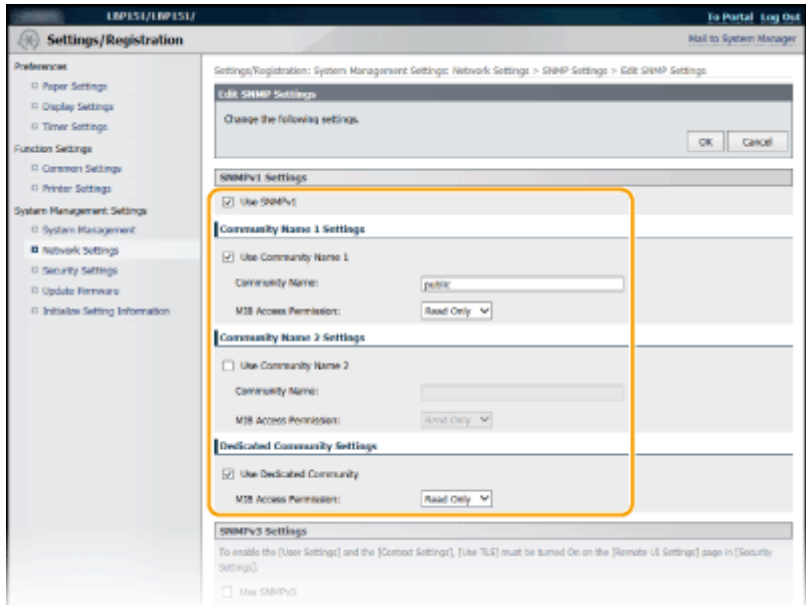
**[Use SNMPv1]**
Select the check box to enable SNMPv1. You can specify the rest of the SNMPv1 settings only when this check box is selected.

**[Use Community Name 1]/[Use Community Name 2]**
Select the check box to specify a community name. If you do not need to specify a community name, clear the check box.

**[Community Name]**
Enter up to 32 alphanumeric characters for the name of the community.

**[MIB Access Permission]**
For each community, select [Read/Write] or [Read Only] for the access privileges to MIB objects.

| [Read/Write] | Allows both viewing and changing the values of MIB objects. |
|---|---|
| [Read Only] | Allows only viewing the values of MIB objects. |

**[Use Dedicated Community]**
Dedicated Community is a preset community, intended exclusively for Administrators using Canon software. Select the check box to use Dedicated Community. If you do not need to use Dedicated Community, clear the check box.

**6** **Specify SNMPv3 settings.**

- If you do not need to change SNMPv3 settings, proceed to the next step.
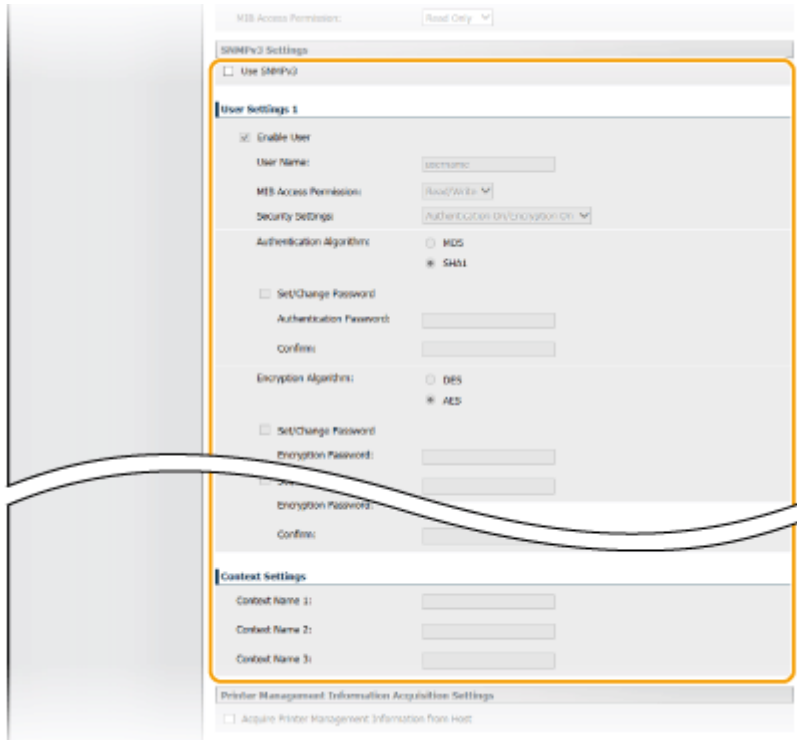
**[Use SNMPv3]**
Select the check box to enable SNMPv3. You can specify the rest of the SNMPv3 settings only when this check box is selected.

**[Enable User]**
Select the check box to enable [User Settings 1]/[User Settings 2]/[User Settings 3]. To disable user settings, clear the corresponding check box.

**[User Name]**
Enter up to 32 alphanumeric characters for the user name.

**[MIB Access Permission]**
Select [Read/Write] or [Read Only] for access privileges to MIB objects.

| [Read/Write] | Allows both viewing and changing the values of MIB objects. |
|---|---|
| [Read Only] | Allows only viewing the values of MIB objects. |

**[Security Settings]**
Select [Authentication On/Encryption On], [Authentication On/Encryption Off], or [Authentication Off/Encryption Off] for the desired combination of authentication and encryption settings.

**[Authentication Algorithm]**
When [Security Settings] has been set to [Authentication On/Encryption On] or [Authentication On/Encryption Off], select [MD5] or [SHA1] as the authentication algorithm, according to your environment.

**[Encryption Algorithm]**
When [Security Settings] has been set to [Authentication On/Encryption On], select [DES] or [AES] as the encryption algorithm, according to your environment.

**[Set/Change Password]**
To set or change the password, select the check box and enter between 6 and 16 alphanumeric characters for the password in the [Authentication Password] or [Encryption Password] text box. For confirmation, enter the same password in the [Confirm] text box. Passwords can be set independently for authentication and encryption algorithms.

**[Context Name 1]/[Context Name 2]/[Context Name 3]**
Enter up to 32 alphanumeric characters for context names. Up to three context names can be registered.

**7** **Specify printer management information acquisition settings.**

131

● With SNMP, printer management information (such as printing protocols and printer ports) can be monitored and obtained regularly from a computer on the network.
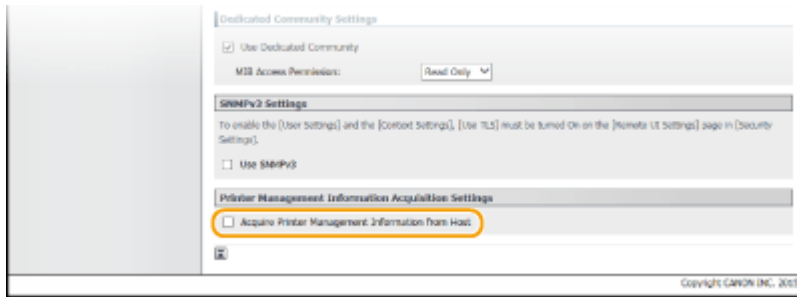


**[Acquire Printer Management Information from Host]**

Select the check box to enable monitoring of the printer management information of the machine via SNMP. To disable monitoring of the printer management information, clear the check box.

**8 Click [OK].**
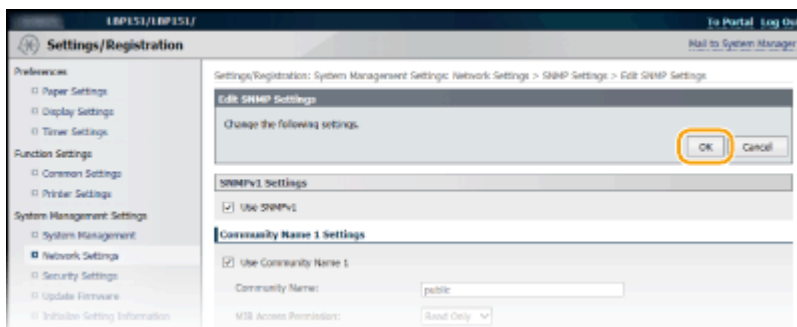


**NOTE**

**Disabling both SNMPv1 and SNMPv3**

If both versions of SNMP are disabled, some of the functions of the machine become unavailable, such as obtaining machine information via the printer driver.

**Enabling Both SNMPv1 and SNMPv3**

If both versions of SNMP are enabled, it is recommended that MIB access permission in SNMPv1 be set to [Read Only]. MIB access permission can be set independently in SNMPv1 and SNMPv3 (and for each user in SNMPv3). Selecting [Read/Write] (full access permission) in SNMPv1 negates the robust security features that characterize SNMPv3 because most of the machine settings can then be controlled with SNMPv1.

**LINKS**

**○Enabling TLS Encrypted Communication for the Remote UI(P. 151)**

# Security

# Security

0YFA-02W

Confidential information is handled by information devices everywhere, including computers and printers, and any of these devices may become a target for malicious third parties at any time. Attackers may directly gain unauthorized access to your devices, or indirectly take advantage of negligence or improper use. Either way, you may incur unanticipated losses when your confidential information is leaked. To counter these risks, this machine is equipped with a variety of security functions. Set the necessary configuration depending on your network environment.

**NOTE**

- You can configure the best security system by building an environment that inhibits access to printers on your in-house network via the Internet and using such environment together with the machine's security features. **Preventing Unauthorized Access(P. 136)**

## Establishing the Basics of Information Security
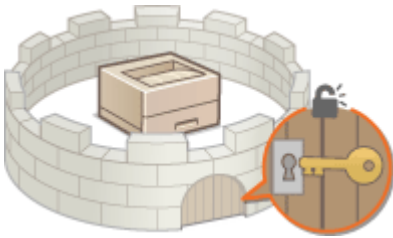
**Protecting the Machine from Unauthorized Access(P. 135)**

## Implementing Robust Security Features

**Implementing Robust Security Features(P. 150)**

# Protecting the Machine from Unauthorized Access

0YFA-02X

To prevent unauthorized third parties from accessing and using the machine, you can implement multiple security measures, such as setting system manager passwords, using firewalls, and changing port numbers.
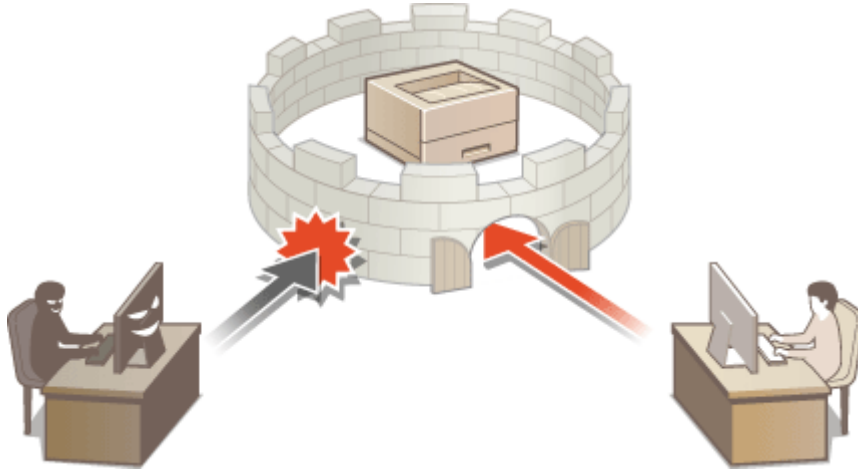
# Preventing Unauthorized Access

0YFA-03A

This section describes the security measures on how to prevent unauthorized access from the external network. This is a must-read for all users and administrators before using this machine, other printers, and multifunction machines connected to the network. In recent years, a printer/multifunction machine connected to the network can offer you a variety of useful functions, such as printing from a computer, operating from a computer using the remote function, and sending scanned documents via the Internet. On the other hand, it is essential to take security measures to reduce the security risk for information leakage, as a printer/multifunction machine has become more exposed to threats, such as unauthorized access and theft, when it is connected to the network. This section explains necessary settings you need to specify to prevent unauthorized access before using a printer/multifunction machine connected to the network.

### Security Measures to Prevent Unauthorized Access from the External Network

Assigning a Private IP Address(P. 136)
Using Firewall to Restrict Transmission(P. 137)
Specifying the TLS Encrypted Communication (P. 137)
Setting PIN to Manage Information Stored in the Printer(P. 137)

## Assigning a Private IP Address

An IP address is a numerical label assigned to each device participating in a computer network. A "global IP address" is used for the communication connecting to the Internet, and a "private IP address" is used for the communication within a local area network, such as a LAN in the company. If a global IP address is assigned, your printer/multifunction machine is open to the public and can be accessed via the Internet. Thus, the risk of information leakage due to unauthorized access from external network increases. On the other hand, if a private IP address is assigned, your printer/multifunction machine is closed to a local area network and can be accessed by only users on your local area network, such as a LAN in the company.
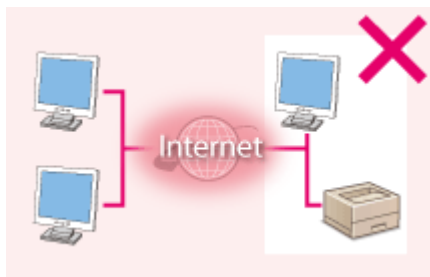


**Global IP Address**
Can be accessed from the users within a local area network
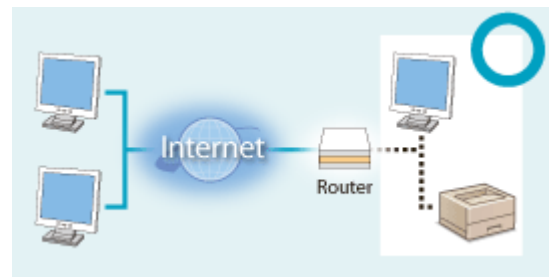
**Private IP Address**
Can be accessed from the users within a local area network

Basically, assign a private IP address to your printer/multifunction machine. Make sure to confirm the IP address, assigned to the printer/multifunction machine you are using, is a private IP address or not. A private IP address is found in one of the following ranges.

### ■ Ranges for Private IP addresses

- From 10.0.0.0 to 10.255.255.255

- From 172.16.0.0 to 172.31.255.255

- From 192.168.0.0 to 192.168.255.255

For information on how to confirm the IP address, see Setting IPv4 Address(P. 98) .

**NOTE**

- If a global IP address is assigned to a printer/multifunction machine, you can create a network environment to reduce the risk of unauthorized access by installing security software, such as a firewall that prevents

access from the external networks. If you want to assign a global IP address to and use a printer/
multifunction machine, contact your network administrator.

## Using Firewall to Restrict Transmission

A firewall is a system that prevents unauthorized access from the external networks and protects against attacks/
intrusions to a local area network. You can use a firewall on your network environment to block access from the
external network that appears to be dangerous, by restricting communication from specified IP address of the
external network. The function installed to a Canon printer/multifunction machine enables you to set up the IP
address filter. For information on how to set up an IP address filter, see ◗**Specifying IP Addresses for Firewall
Rules(P. 141)** .

## Specifying the TLS Encrypted Communication

For information on the TLS Encrypted Communication, see ◗**Implementing Robust Security Features(P. 150)** , and
on the procedures to specify, see ◗**Enabling TLS Encrypted Communication for the Remote UI(P. 151)** .

## Setting PIN to Manage Information Stored in the Printer

If a malicious third party attempts to gain unauthorized access to a printer/multifunction machine, setting PIN to
information stored in the machine will reduce the risk of information leakage. Canon printer/multifunction machine
enables you to protect various type of information by setting PIN.

### ◼ Setting PIN

- Setting PIN for the System Manager Settings
  For more information, see ◗**Setting System Manager Passwords(P. 138)** .

Listed above are some examples of security measures for preventing unauthorized access. For more information on
the other security measures, see ◗**Security(P. 134)**  and take necessary security measures for preventing
unauthorized access to suit your environment.

# Setting System Manager Passwords

0YFA-02Y

Administrator access rights are required to change machine settings from the Remote UI. After logging in as an administrator, use the following procedure to set the PIN (system manager password). The system manager password is critical to the security of the machine. Make sure that only system managers know the system manager password.

**1** Start the Remote UI and log on in System Manager Mode. ▶Starting the Remote UI(P. 175)

**2** Click [Settings/Registration].
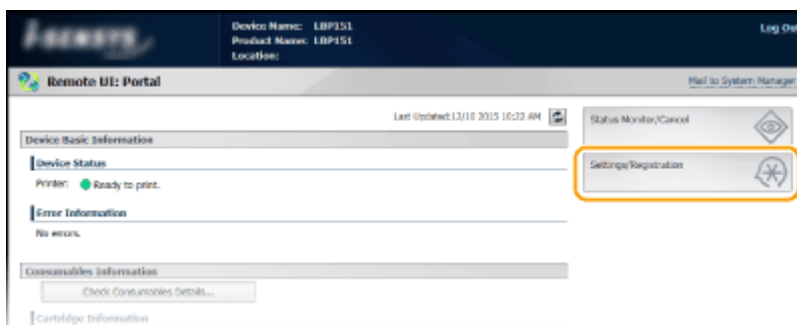


**3** Click [System Management] ▶ [Edit].
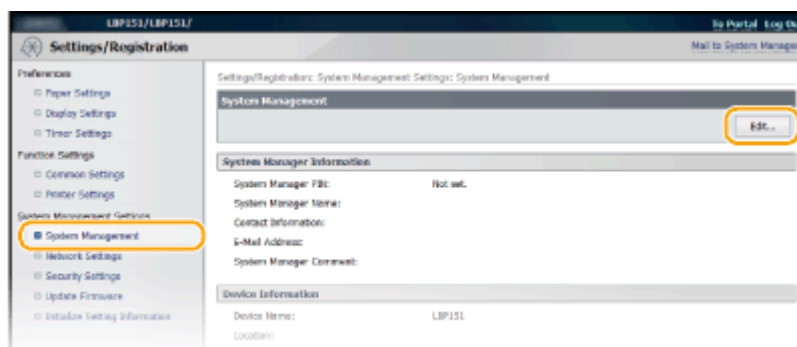


**4** Select the [Set System Manager PIN] check box and enter the PIN.
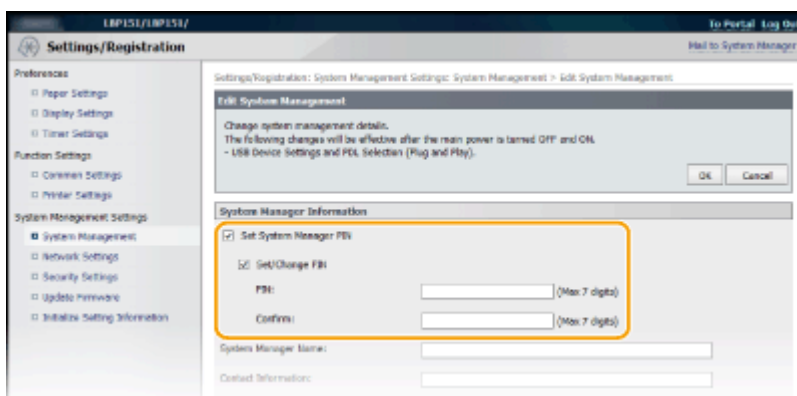


**[Set System Manager PIN]**
Select the check box to set the System Manager PIN. Clear the check box if you do not want to set the PIN.

**[Set/Change PIN]**

To set or change a PIN, select the check box and enter a number of up to 7 digits. Enter the same number in both in the [PIN] and [Confirm] text boxes.

**NOTE:**

● You cannot register a PIN that consists only of zeros, such as "00" or "0000000."

● To clear a PIN setting, select the [Set/Change PIN] check box and click [OK] with the [PIN] and [Confirm] text boxes empty.

**5** **Enter the name and contact information of the system manager as necessary, and click [OK].**



**[System Manager Name]**
Enter up to 32 alphanumeric characters for the name of the system manager.

**[Contact Information]**
Enter up to 32 alphanumeric characters for the contact information of the system manager.

**[E-Mail Address]**
Enter up to 64 alphanumeric characters for the e-mail address of the system manager.

**[System Manager Comment]**
Enter up to 32 alphanumeric characters for a comment about the system manager.

**IMPORTANT**

● Be sure to remember the PIN that you have set. If you have forgotten the PIN, contact your local authorized Canon dealer or the Canon help line.

# Restricting Communication by Using Firewalls

0YFA-030

Without proper security, unauthorized third parties can access computers and other communication devices that are connected to a network. To prevent these unauthorized accesses, specify the settings for packet filter, a feature that restricts communication to devices with specified IP addresses or MAC addresses.
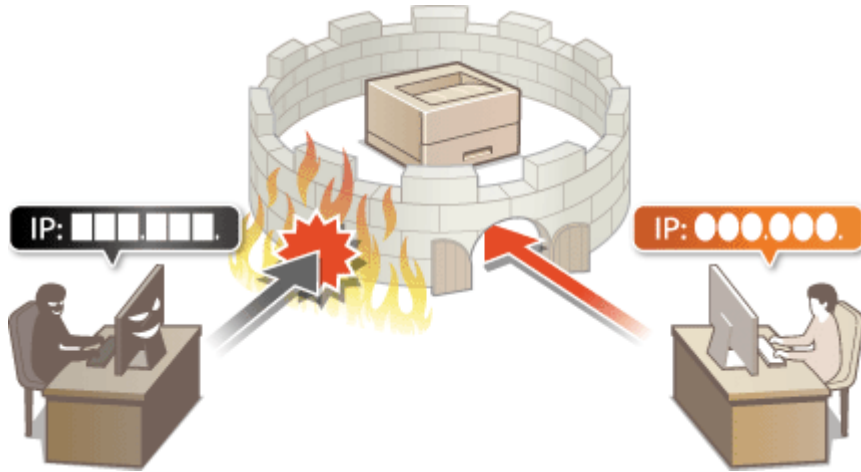
# Specifying IP Addresses for Firewall Rules

0YFA-031

You can allow only communication with devices that have the specified IP addresses and reject communication with other devices. You can specify a single IP address or a range of IP addresses.

> **NOTE**
>
> - Up to 4 IP addresses (or ranges of IP addresses) can be specified for both IPv4 and IPv6.
> - The communication protocols that can be restricted in this way are TCP, UDP, and ICMP.

**1** Start the Remote UI and log on in System Manager Mode. ○Starting the Remote UI(P. 175)

**2** Click [Settings/Registration].
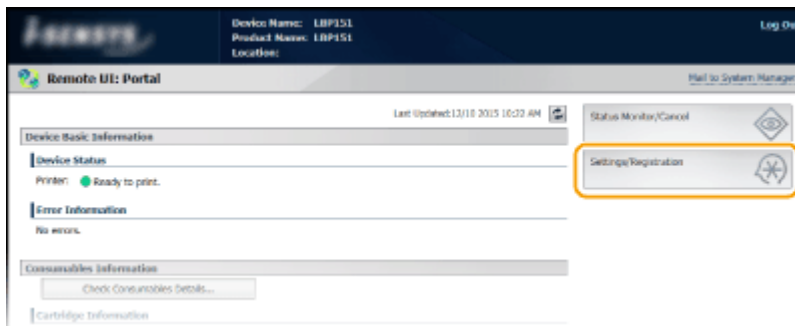


**3** Click [Security Settings] ▶ [IP Address Filter].
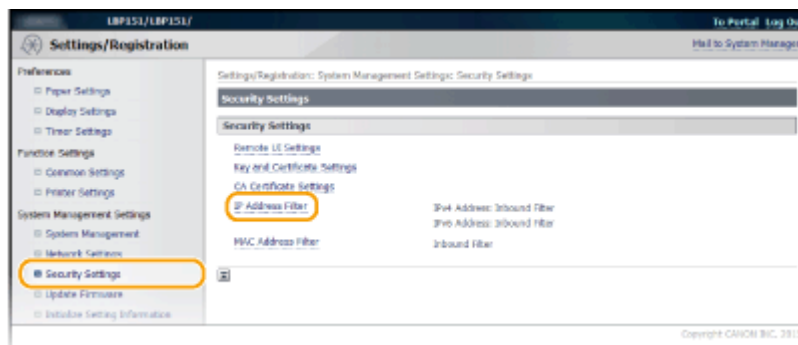


**4** Click [Edit] to specify a filter type.
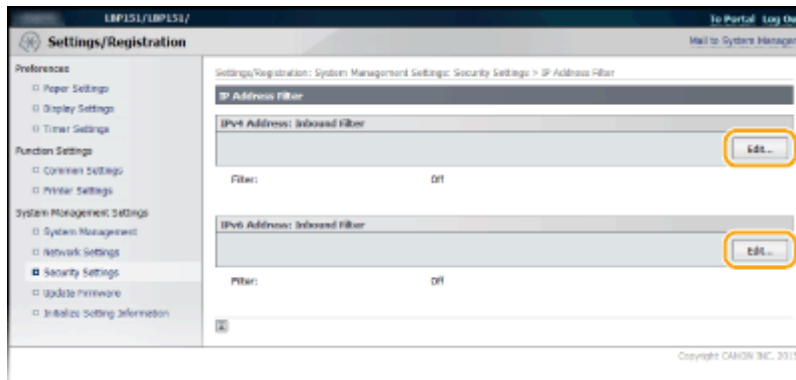
**[IPv4 Address: Inbound Filter]**
Restrict data received by the machine from a computer by specifying an IPv4 address.

**[IPv6 Address: Inbound Filter]**
Restrict data received by the machine from a computer by specifying an IPv6 address.

**5** **Specify the settings for packet filtering.**
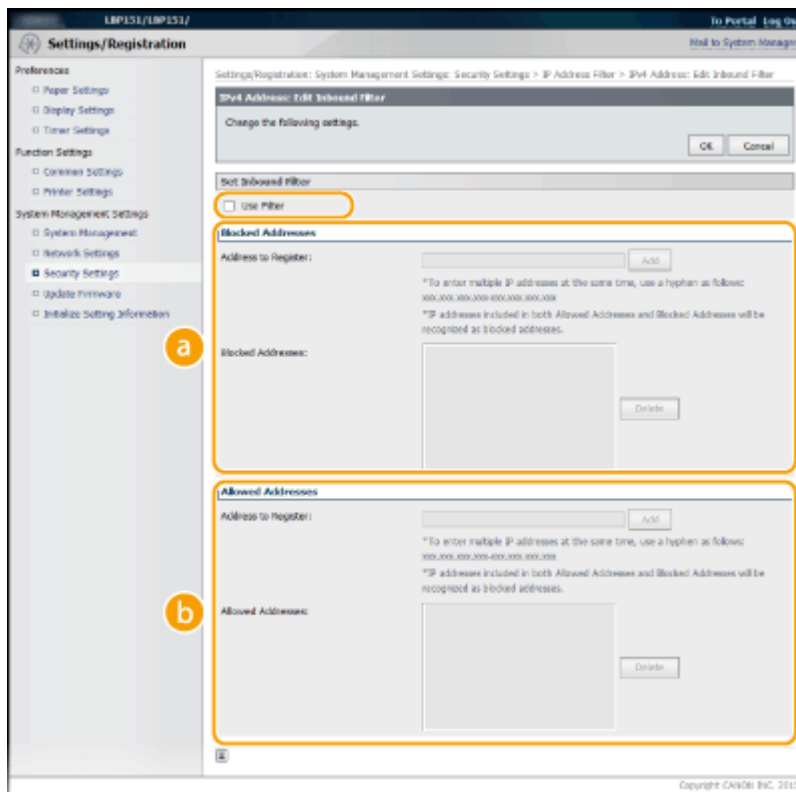


**ⓐ [Blocked Addresses]**

Register addresses to be blocked, as well as check or delete registered blocked addresses.

**ⓑ [Allowed Addresses]**

Register addresses to be allowed, as well as check or delete registered allowed addresses.

**1** **Select the [Use Filter] check box.**

**[Use Filter]**
Select the check box to restrict communication. Clear the check box to communicate without restrictions.

**2** **Specify address exceptions.**

- Enter an IP address (or a range of IP addresses) in the [Address to Register] text box and click [Add].

| Registered address | Result |
|---|---|
| [Blocked Addresses] | Restricts communication (received) with devices having their IP addresses entered for [Address to Register]. Communication is allowed with devices with any other IP addresses. |
| [Allowed Addresses] | Allows communication (received) only with devices having their IP addresses entered for [Address to Register], and restricts communication with devices with any other IP addresses. |
| Registered as both | Allows communication (received) only with devices having their IP addresses registered in [Allowed Addresses], and restricts communication with devices with any other IP addresses. However, communication is restricted for IP addresses also registered in [Blocked Addresses]. |

**NOTE:**

**Entry format for IP addresses**

- **To enter a single address (IPv4)**
  Enter numbers delimited by "." (periods) (Example: "192.168.0.10").

- **To enter a single address (IPv6)**
  Enter hexadecimal numbers delimited by ":" (colons) (Example: "fe80::10").

- **To specify a range of addresses**
  Insert a hyphen ("-") between the addresses (Examples: "192.168.0.10-192.168.0.20" "fe80::10-fe80::20").

- **To specify a range of addresses with a prefix (IPv6)**
  Enter an address, followed by a slash ("/") and a number indicating the prefix length (Examples: "fe80::1234/64").

**To delete an IP address that has been set**

Select the IP address to delete, and then click [Delete].
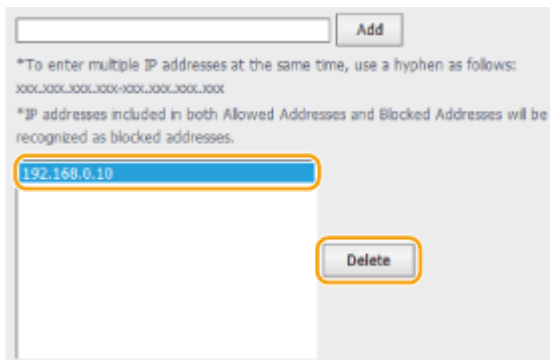


**3**  **Click [OK].**

LINKS

**Specifying MAC Addresses for Firewall Rules(P. 144)**

# Specifying MAC Addresses for Firewall Rules

0YFA-032

You can allow only communication with devices that have the specified MAC addresses and reject communication with other devices. Up to 10 MAC addresses can be specified.

> **IMPORTANT**
>
> When this machine is connected to a wireless LAN, this function cannot be used.

**1** Start the Remote UI and log on in System Manager Mode. ❯Starting the Remote UI(P. 175)

**2** Click [Settings/Registration].
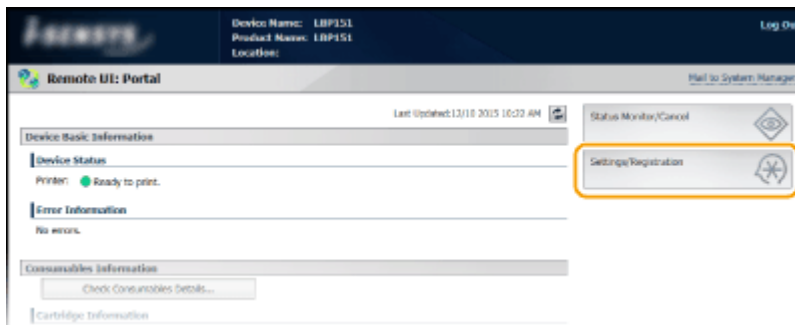


**3** Click [Security Settings] ▶ [MAC Address Filter].
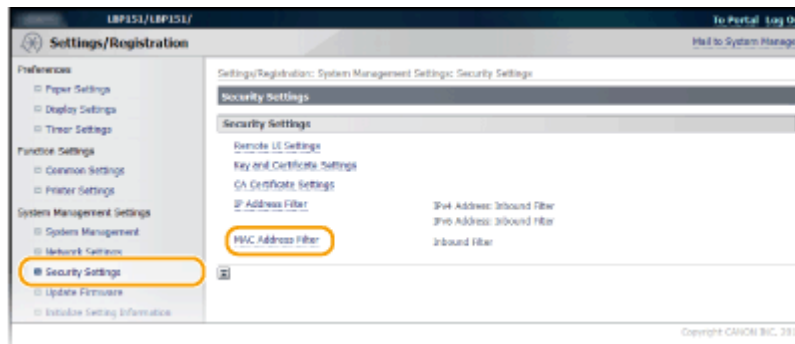


**4** Click [Edit].
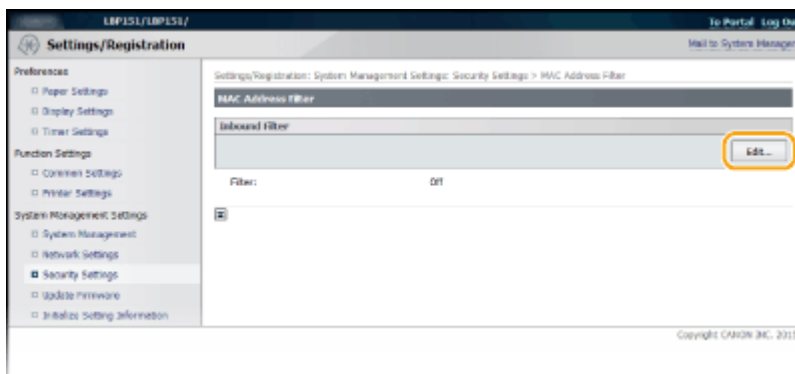
**[Inbound Filter]**
Restrict data received by the machine from a computer by specifying a MAC address.

**5** **Specify the settings for filtering.**
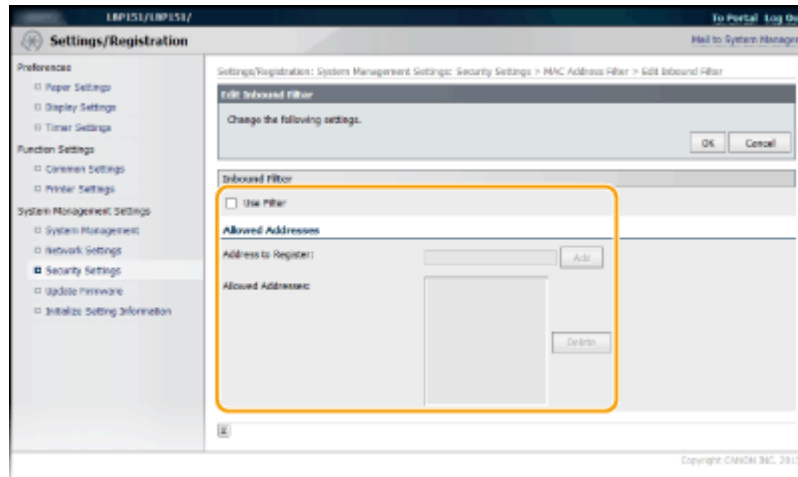


**1** **Select the [Use Filter] check box.**

**[Use Filter]**
Select the check box to restrict communication. Clear the check box to communicate without restrictions.

**2** **Specify address exceptions.**

- Enter a MAC address in the [Address to Register] text box and click [Add]. Allows communication (received) only with devices having registered MAC addresses, and restricts communication with devices with any other MAC addresses.

- When entering the address, do not delimit it with hyphens or colons.

**NOTE:**

**To delete a MAC address that has been set**

Select the MAC address to delete, and then click [Delete].
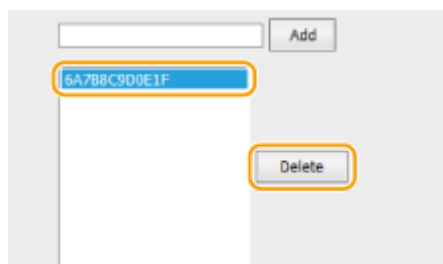


**3** **Click [OK].**

## LINKS

**Specifying IP Addresses for Firewall Rules(P. 141)**

# Changing Port Numbers

0YFA-033

Ports serve as endpoints for communicating with other devices. Typically, standard port numbers are used for major protocols, but devices that use these port numbers are vulnerable to attacks because these port numbers are well-known. To enhance security, some network administrators prefer to change the port numbers. When a port number has been changed, the new number must be shared between communicating devices, such as computers and servers. If a port number changes, set it on this machine as well.

**1** Start the Remote UI and log on in System Manager Mode. ○Starting the Remote UI(P. 175)

**2** Click [Settings/Registration].
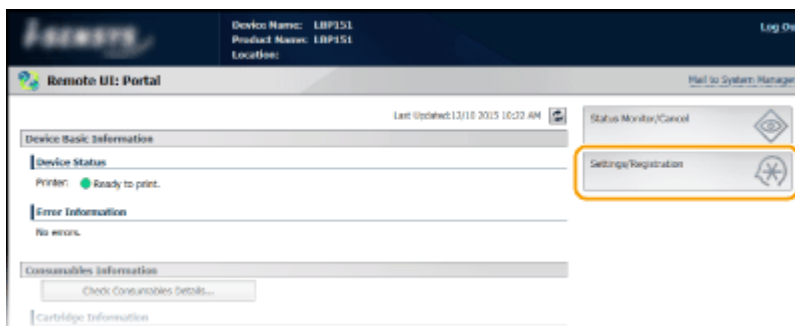
**3** Click [Network Settings] ▶ [TCP/IP Settings].
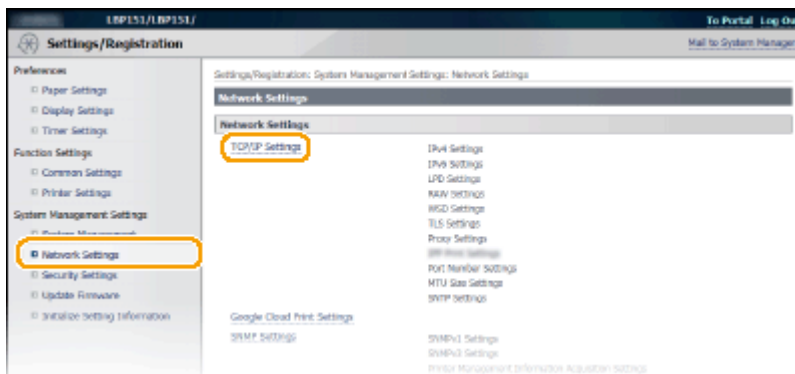
**4** Click [Edit] in [Port Number Settings].
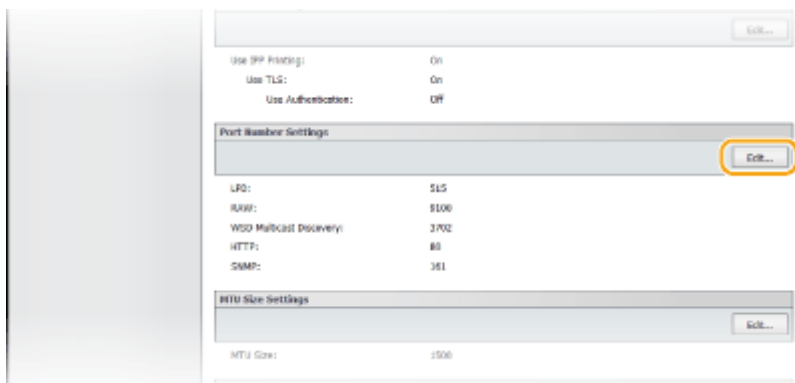
## **5** Change the port number, and click [OK].
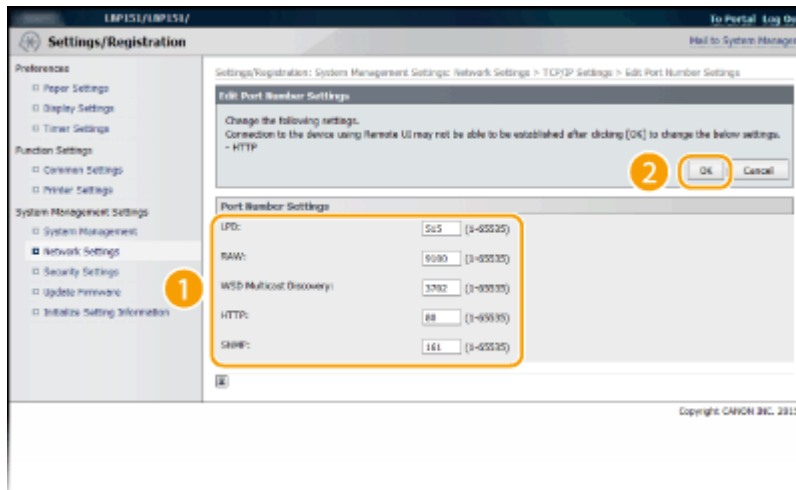


**[LPD]/[RAW]**
Change the port used for LPD printing or RAW printing. For details about each protocol, see ❍**Configuring Printing Protocols and Web Services(P. 107)** .

**[WSD Multicast Discovery]**
Change the port used for WSD multicast discovery. For details about WSD, see ❍**Configuring Printing Protocols and Web Services(P. 107)** .

**[HTTP]**
Change the port used by HTTP. HTTP is used for communications over the network, such as when you access the machine via the Remote UI.

**[SNMP]**
Change the port used by SNMP. For details about SNMP, see ❍**Monitoring and Controlling the Machine with SNMP(P. 128)** .

## LINKS

❍**Configuring Printer Ports(P. 110)**

# Setting a Proxy

0YFA-03E

A proxy (or HTTP proxy server) refers to a computer or software that carries out HTTP communication for other devices, especially when communicating with resources outside the network, such as when browsing Web sites. The client devices connect to the outside network through the proxy server, and do not communicate directly to the resources outside. Setting a proxy not only facilitates management of traffic between in-house and outside networks but also blocks unauthorized access and consolidates anti-virus protection for enhanced security. When you use Google Cloud Print to print over the Internet, you can enhance security by setting a proxy. When setting a proxy, make sure that you have the necessary proxy information, including the IP address, port number, and a user name and password for authentication.

**1** **Start the Remote UI and log on in System Manager Mode. ◯Starting the Remote UI(P. 175)**

**2** **Click [Settings/Registration].**
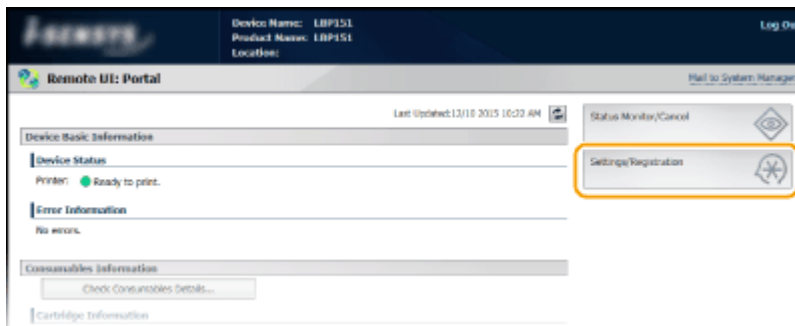


**3** **Click [Network Settings] ▶ [TCP/IP Settings].**
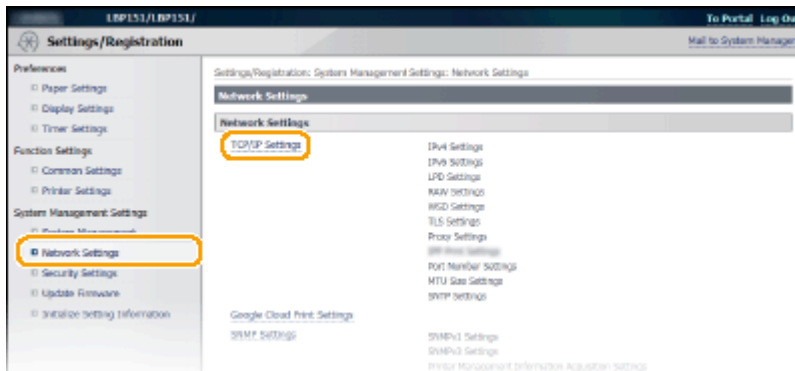


**4** **Click [Edit] in [Proxy Settings].**
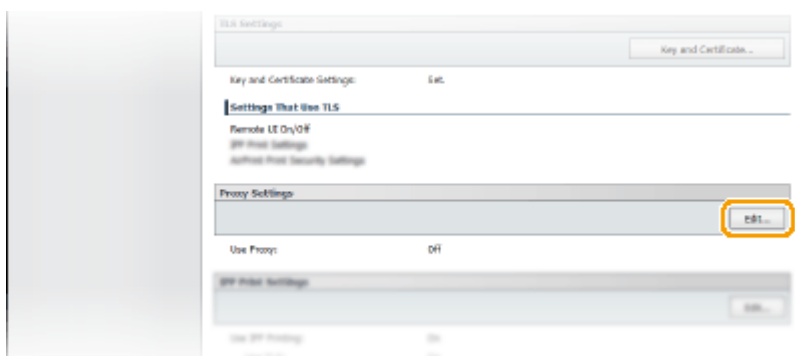
**5** Select the [Use Proxy] check box and specify the required settings.
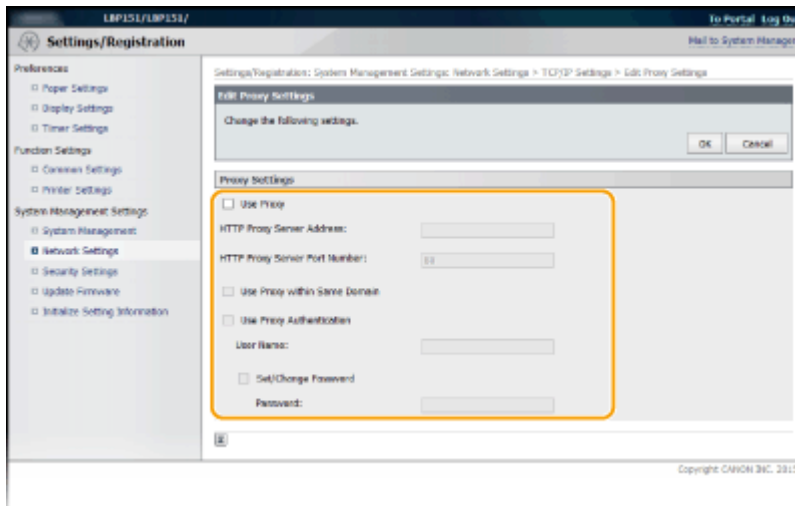


**[Use Proxy]**
Select the check box to use the specified proxy server when communicating with an HTTP server.

**[HTTP Proxy Server Address]**
Enter the address of the proxy server. Specify the IP address or host name depending on the environment.

**[HTTP Proxy Server Port Number]**
Change the port number as necessary. Enter a number between 1 and 65535.

**[Use Proxy within Same Domain]**
Select the check box to use a proxy server specified in the same domain.

**[Use Proxy Authentication]**
To enable authentication by the proxy server, select the check box and enter up to 24 alphanumeric characters for the user name in the [User Name] text box.

**[Set/Change Password]**
To set or change the password for the proxy authentication, when it is enabled, select the check box and enter up to 24 alphanumeric characters for the new password in the [Password] text box.

**6** Click [OK].

LINKS

**Using Google Cloud Print(P. 293)**

# Implementing Robust Security Features

Authorized users may incur unanticipated losses from attacks by malicious third parties, such as sniffing, spoofing, and tampering of data as it flows over a network. To protect your important and valuable information from these attacks, the machine supports the following features to enhance security and secrecy.

## TLS Encrypted Communication

TLS is a protocol for encryption for data sent over a network and is often used for communication via a Web browser or an e-mail application. TLS enables secure network communication when you access the machine from a computer via the Remote UI. **Enabling TLS Encrypted Communication for the Remote UI(P. 151)**



## IEEE 802.1X Authentication

IEEE 802.1X is a standard and mechanism for blocking unauthorized access to the network by collectively managing user authentication information. If a device tries to connect to the 802.1X network, the device must go through user authentication in order to prove that the connection is made by an authorized user. Authentication information is sent to and checked by a RADIUS server, which permits or rejects communication to the network depending on the authentication result. If authentication fails, a LAN switch (or an access point) blocks access from the outside of the network. The machine can connect to an 802.1X network as a client device. **Configuring IEEE 802.1X Authentication(P. 154)**
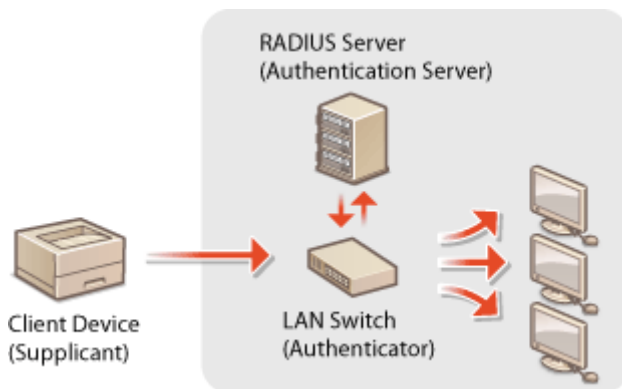


**IMPORTANT**

- The IEEE 802.1X function is only enabled when connected to a wired LAN. If the machine is connected to a wireless LAN, the function cannot be used.

## LINKS

**Configuring Settings for Key Pairs and Digital Certificates(P. 158)**

# Enabling TLS Encrypted Communication for the Remote UI

0YFA-034

You can encrypt communication between the machine and a Web browser on the computer by using Transport Layer Security (TLS). TLS is a mechanism for encrypting data sent or received over the network. TLS must be enabled when the Remote UI is used for specifying settings for IEEE 802.1X authentication (TTLS/PEAP), or SNMPv3. To use TLS for the Remote UI, you need to set a key pair and enable the TLS function. Generate or install the key pair for TLS before enabling TLS ( **Configuring Settings for Key Pairs and Digital Certificates(P. 158)** ).



**1** Start the Remote UI and log on in System Manager Mode. **Starting the Remote UI(P. 175)**

**2** Click [Settings/Registration].
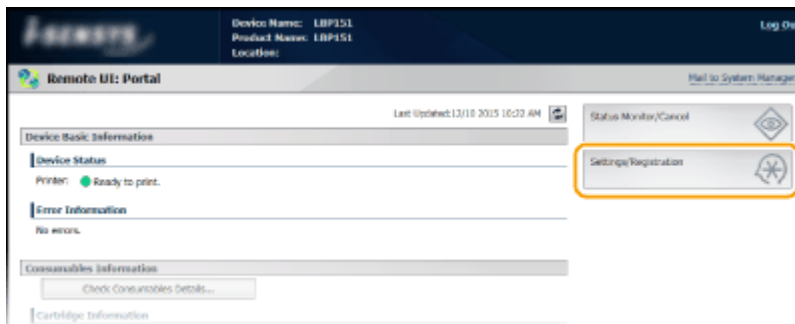


**3** Click [Network Settings] ▶ [TCP/IP Settings].
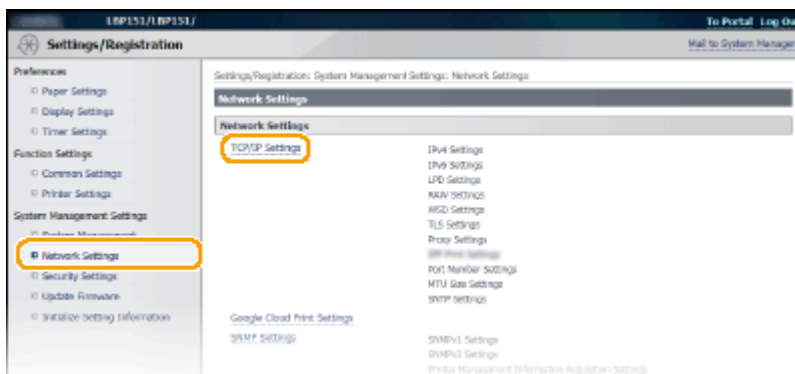


**4** Click [Key and Certificate] in [TLS Settings].
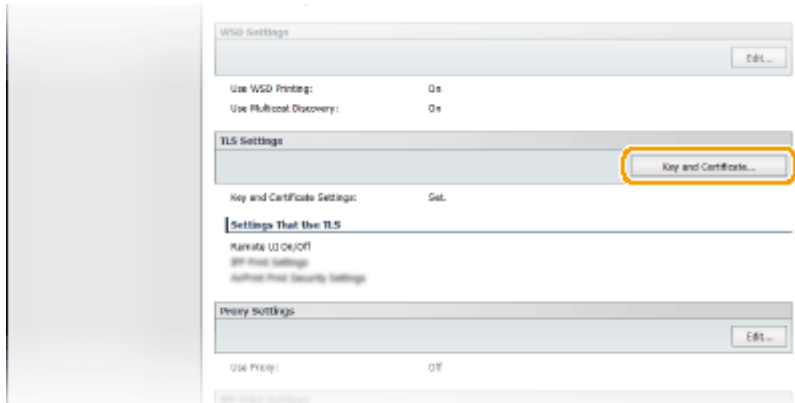
**5** **Click [Register Default Key] on the right of the key pair you want to use.**
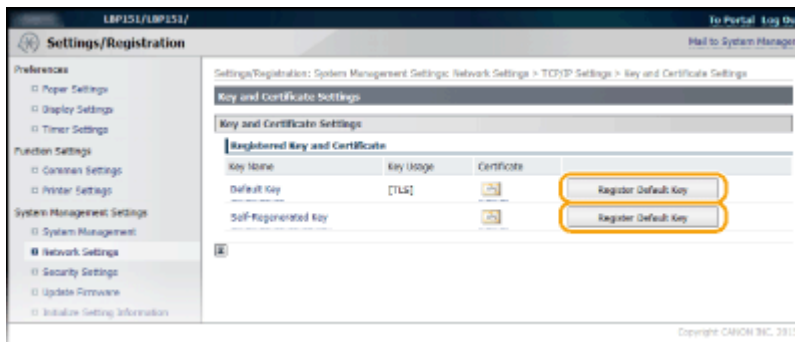


**NOTE:**

**Viewing details of a certificate**

- You can check the details of the certificate or verify the certificate by clicking the corresponding text link under [Key Name], or the certificate icon. **Verifying Key Pairs and CA Certificates(P. 171)**

**6** **Enable TLS for the Remote UI.**

**1** Click [Security Settings] ▶ [Remote UI Settings].
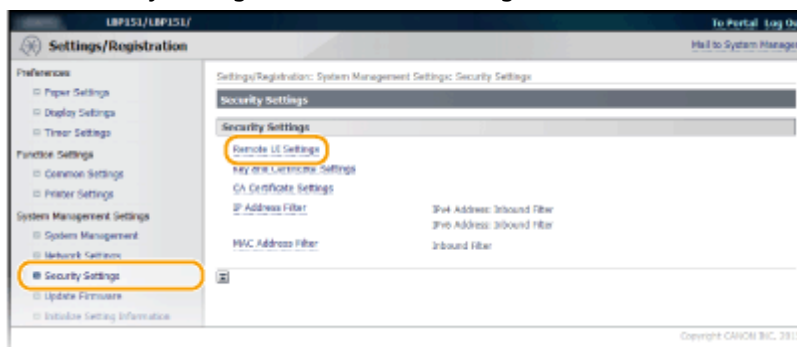


**2** Click [Edit].
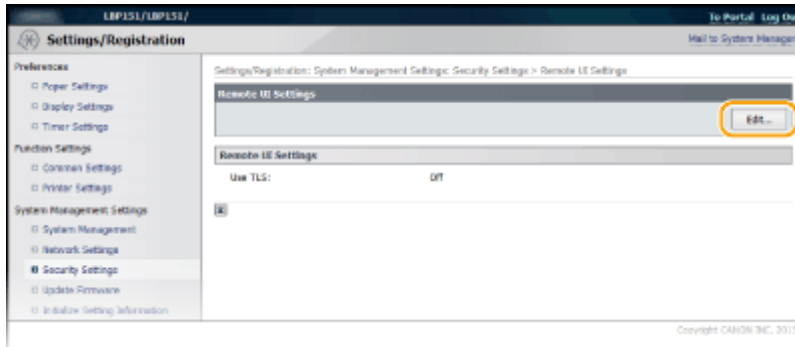
**3** Select the [Use TLS] check box and click [OK].
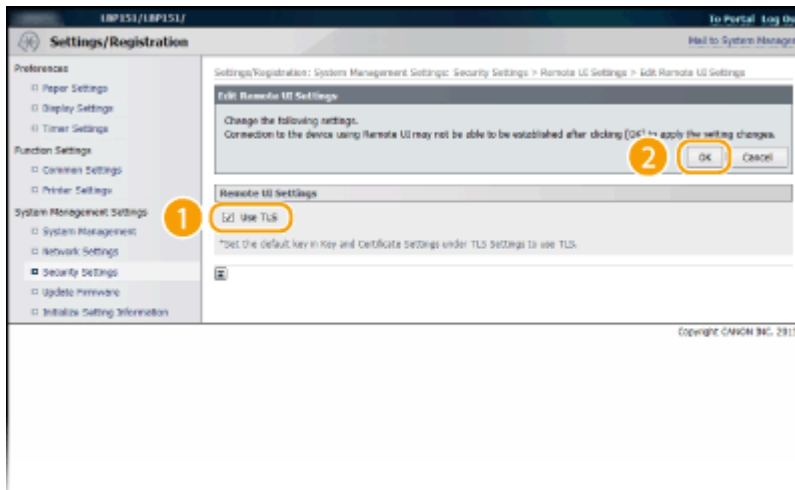


## NOTE

### Starting the Remote UI with TLS

- If you try to start the Remote UI when TLS is enabled, a security alert may be displayed regarding the security certificate. In this case, check that the correct URL is entered in the address field, and then proceed to display the Remote UI screen. **Starting the Remote UI(P. 175)**

## LINKS

**Generating Key Pairs(P. 160)**
**Using CA-issued Key Pairs and Digital Certificates(P. 167)**
**Configuring IEEE 802.1X Authentication(P. 154)**
**Monitoring and Controlling the Machine with SNMP(P. 128)**

# Configuring IEEE 802.1X Authentication

0YFA-039

The machine can connect to an 802.1X network as a client device. A typical 802.1X network consists of a RADIUS server (authentication server), LAN switch (authenticator), and client devices with authentication software (supplicants). If a device tries to connect to the 802.1X network, the device must go through user authentication in order to prove that the connection is made by an authorized user. Authentication information is sent to and checked by a RADIUS server, which permits or rejects communication to the network depending on the authentication result. If authentication fails, a LAN switch (or an access point) blocks access from the outside of the network.
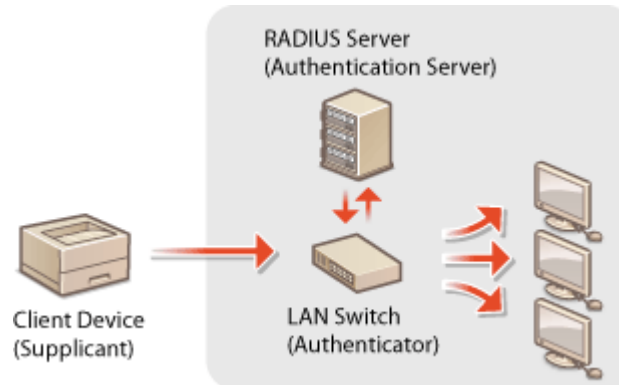


Select the authentication method from the options below. If necessary, install or register a key pair or CA certificate before configuring IEEE 802.1X authentication ( ○**Using CA-issued Key Pairs and Digital Certificates(P. 167)** ).

### TLS

The machine and the authentication server authenticate each other by mutually verifying their certificates. A key pair issued by a certification authority (CA) is required for the client authentication (when authenticating the machine). For the server authentication, a CA certificate installed via the Remote UI can be used in addition to a CA certificate preinstalled in the machine. The TLS method cannot be used with TTLS or PEAP at the same time.

### TTLS

This authentication method uses a user name and password for the client authentication and a CA certificate for the server authentication. MSCHAPv2 or PAP can be selected as the internal protocol. TTLS can be used with PEAP at the same time. Enable TLS for the Remote UI before configuring this authentication method ( ○ **Enabling TLS Encrypted Communication for the Remote UI(P. 151)** ).

### PEAP

The required settings are almost the same as those of TTLS. MS-CHAPv2 is used as the internal protocol. Enable TLS for the Remote UI before configuring this authentication method ( ○**Enabling TLS Encrypted Communication for the Remote UI(P. 151)** ).

**1** **Start the Remote UI and log on in System Manager Mode.** ○**Starting the Remote UI(P. 175)**

**2** **Click [Settings/Registration].**
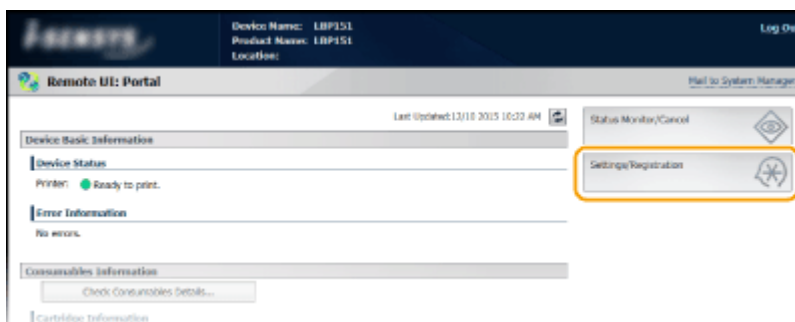
**3** Click [Network Settings] ▶ [IEEE 802.1X Settings].
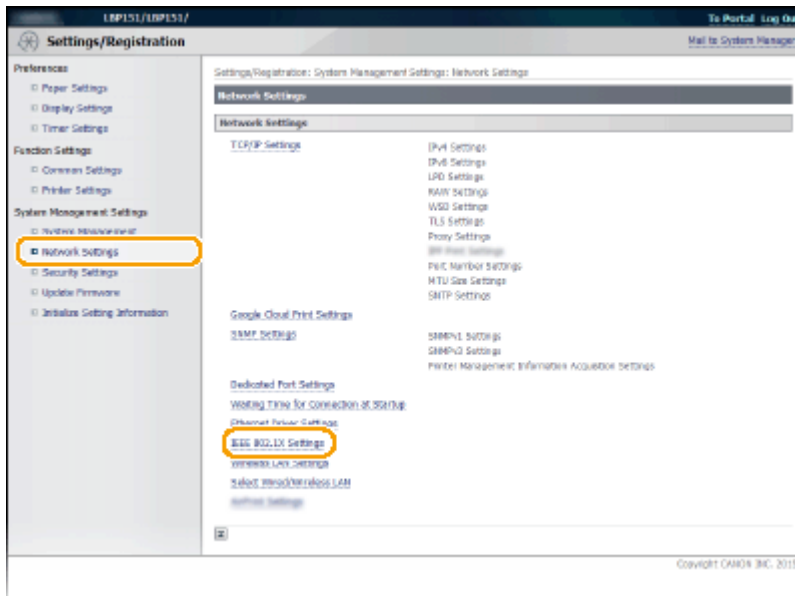


**4** Click [Edit].
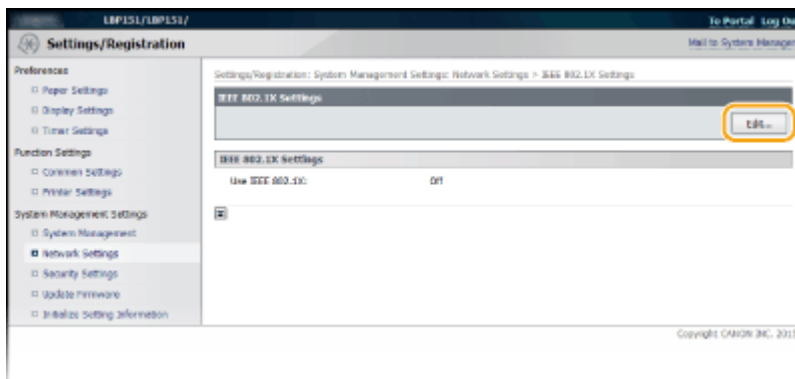


**5** Select the [Use IEEE 802.1X] check box, enter the login name in the [Login Name] text box, and specify the required settings.
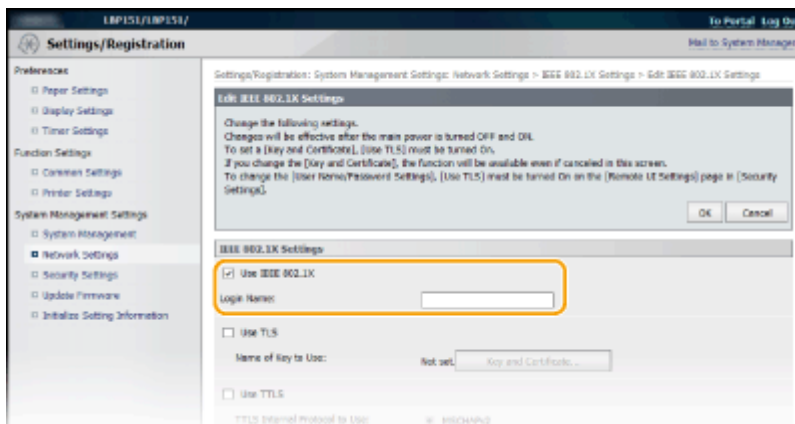


**[Use IEEE 802.1X]**
Select the check box to enable IEEE 802.1X authentication.

**[Login Name]**
Enter up to 24 alphanumeric characters for a name (EAP identity) that is used for identifying the user.

### ■ Setting TLS

**1** Select the [Use TLS] check box and click [Key and Certificate].

**2** Click [Register Default Key] on the right of the key pair you want to use for the client authentication.
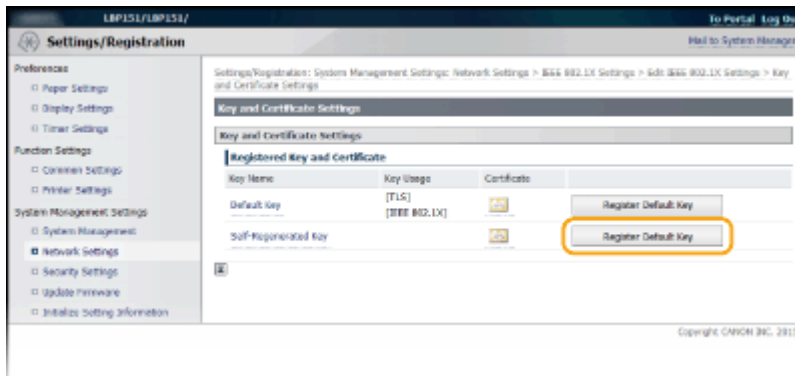


**NOTE:**

**Viewing details of a key pair or certificate**

- You can check the details of the certificate or verify the certificate by clicking the corresponding text link under [Key Name], or the certificate icon. ▶**Verifying Key Pairs and CA Certificates(P. 171)**

### ■ Setting TTLS/PEAP

**1** Select the [Use TTLS] or [Use PEAP] check box.
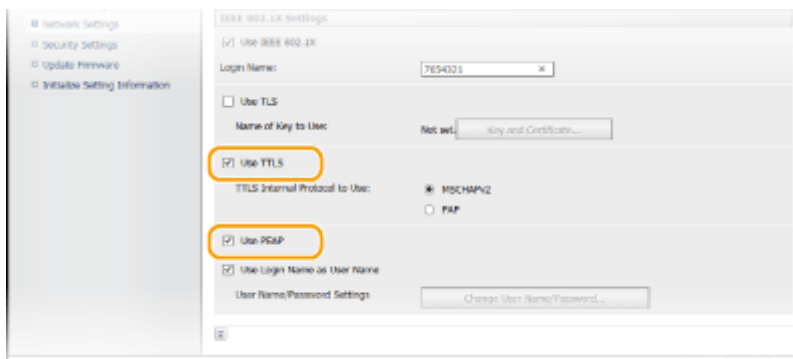


**NOTE:**

**Internal protocol for TTLS**

- You can select MSCHAPv2 or PAP. If you want to use PAP, click the [PAP] radio button.
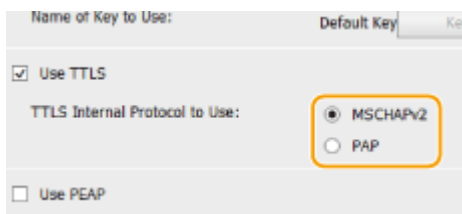


**2** Click [Change User Name/Password].

- To specify a user name other than the login name, clear the [Use Login Name as User Name] check box. Select the check box if you want to use the login name as the user name.
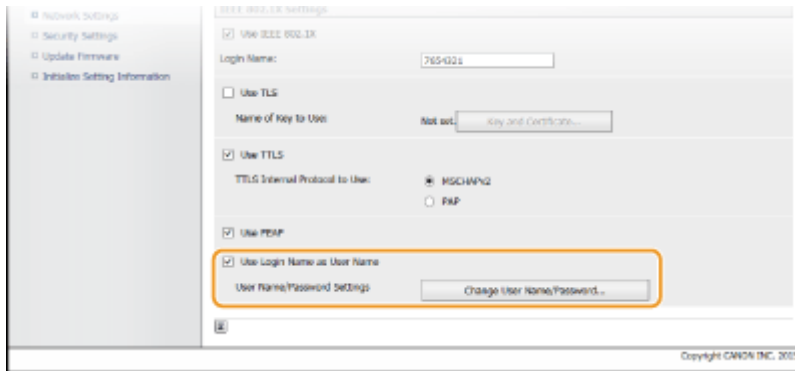
**3** Set the user name/password and click [OK].
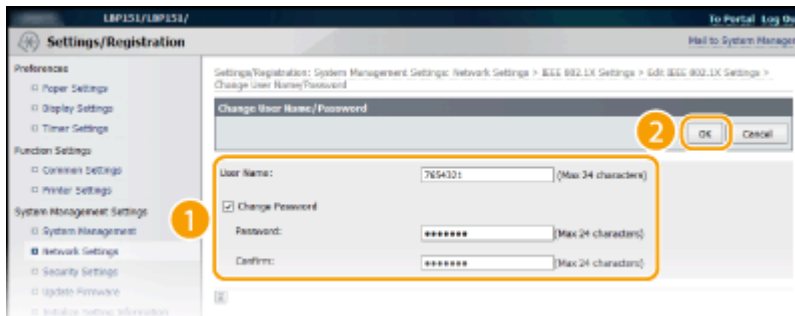


**[User Name]**
Enter up to 24 alphanumeric characters for the user name.

**[Change Password]**
To set or change the password, select the check box and enter up to 24 alphanumeric characters for the new password both in the [Password] and [Confirm] text boxes.

**6** **Click [OK].**
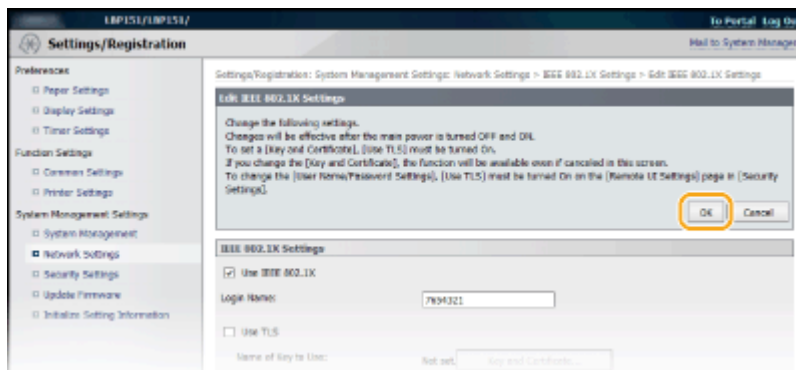


**7** **Restart the machine.**

● Turn OFF the machine, wait for at least 10 seconds, and turn it back ON.

## LINKS

**Configuring Settings for Key Pairs and Digital Certificates(P. 158)**

# Configuring Settings for Key Pairs and Digital Certificates

0YFA-035

In order to encrypt communication with a remote device, an encryption key must be sent and received over an unsecured network beforehand. This problem is solved by public-key cryptography. Public-key cryptography ensures secure communication by protecting valuable information from attacks, such as sniffing, spoofing, and tampering of data as it flows over a network.

## Key Pair

A key pair consists of a public key and a secret key, both of which are required for encrypting or decrypting data. Data can be exchanged safely, because encrypted data cannot be decrypted without the other key in a key pair. You can register up to five key pairs ( **Using CA-issued Key Pairs and Digital Certificates(P. 167)** ). Key pairs can also be generated by the machine ( **Generating Key Pairs(P. 160)** ).

## CA Certificate

Digital certificates including CA certificates are similar to other forms of identification, such as driver's licenses. A digital certificate contains a digital signature, which enables the machine to detect any spoofing or tampering of data. It is extremely difficult for third parties to abuse digital certificates. Digital certificates (including public keys) that are issued by a certificate authority (CA) are called CA certificates. You can register up to 67 CA certificates including the 62 that are preinstalled ( **Using CA-issued Key Pairs and Digital Certificates(P. 167)** ).

### ■ Key and Certificate Operating Requirements

Certificates for key pairs generated with the machine must conform to X.509v3. If you install a key pair or a CA certificate from a computer, make sure that they meet the following requirements.

| Format | • Key pair: PKCS#12[*1] |
| --- | --- |
| | • CA certificate: X.509v1 or X.509v3, DER (encoded binary), PEM |
| Files extension | • Key pair: ".p12" or ".pfx" |
| | • CA certificate: ".cer" |
| Public key algorithm (and key length) | RSA (512 bits[*2], 1024 bits, 2048 bits, or 4096 bits) |
| Certificate signature algorithm | SHA1-RSA, SHA256-RSA, SHA384-RSA[*3], SHA512-RSA[*3], MD5-RSA, MD2-RSA |
| Certificate thumbprint algorithm | SHA1 |

[*1] Requirements for the certificate contained in a key pair shall follow the operating conditions for CA certificates.

[*2] Not supported when the operating system of the communication partner device is Windows 8/Server 2012. Depending on the application of update programs, encrypted communication may also not be possible with other versions of Windows.

[*3] SHA384-RSA and SHA512-RSA are available only when the RSA key length is 1024 bits or more.

NOTE

The machine does not support use of a certificate revocation list (CRL).

# Generating Key Pairs

A key pair can be generated with the machine when it is required for encrypted communication via Transport Layer Security (TLS). You can use TLS when accessing the machine via the Remote UI. Up to five key pairs, including the preinstalled pairs, can be registered. Self-signed certificates are used with key pairs generated in "Network Communication." With a "Key and Certificate Signing Request (CSR)", you can apply for a CA-issued digital certificate for the key pair generated by the machine.

◉**Generate Network Communication Key(P. 160)**
◉**Generate Key and Certificate Signing Request (CSR)(P. 162)**

## Generate Network Communication Key

**1** **Start the Remote UI and log on in System Manager Mode.** ◉**Starting the Remote UI(P. 175)**

**2** **Click [Settings/Registration].**



**3** **Click [Security Settings] ▶ [Key and Certificate Settings].**
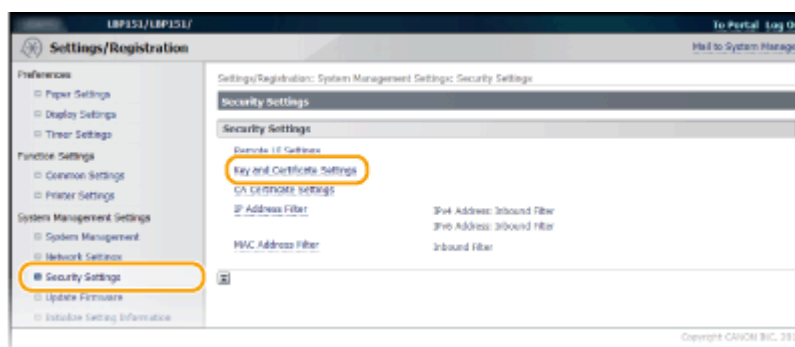


**4** **Click [Generate Key].**
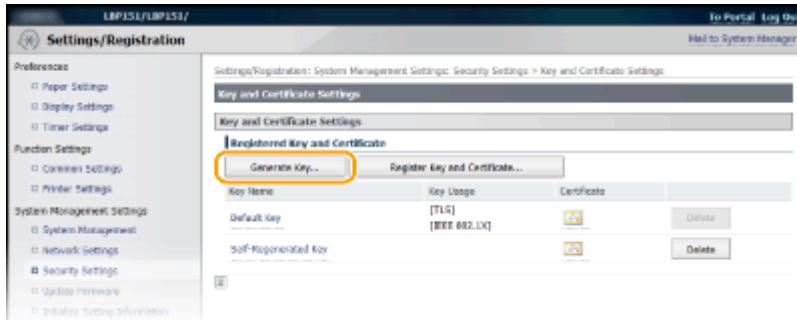
**NOTE:**

**Deleting a registered key pair**

● Click [Delete] on the right of the key pair you want to delete ▶ click [OK].

● A key pair cannot be deleted if it is currently used for some purpose, such as when [TLS] or [IEEE 802.1X] is displayed under [Key Usage]. In this case, disable the function or replace the key pair before deleting it. The preinstalled CA certificates cannot be deleted.

**5** **Select [Network Communication] and click [OK].**
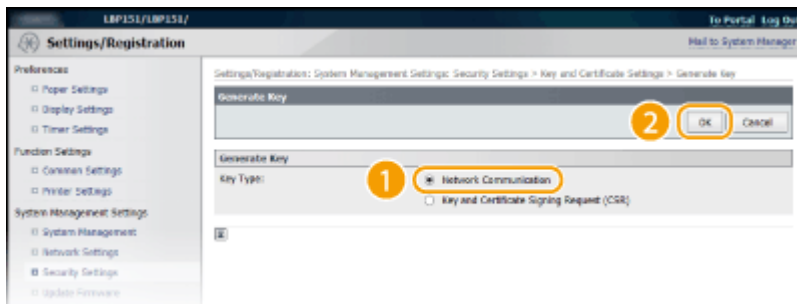


**6** **Specify settings for the key and certificate.**
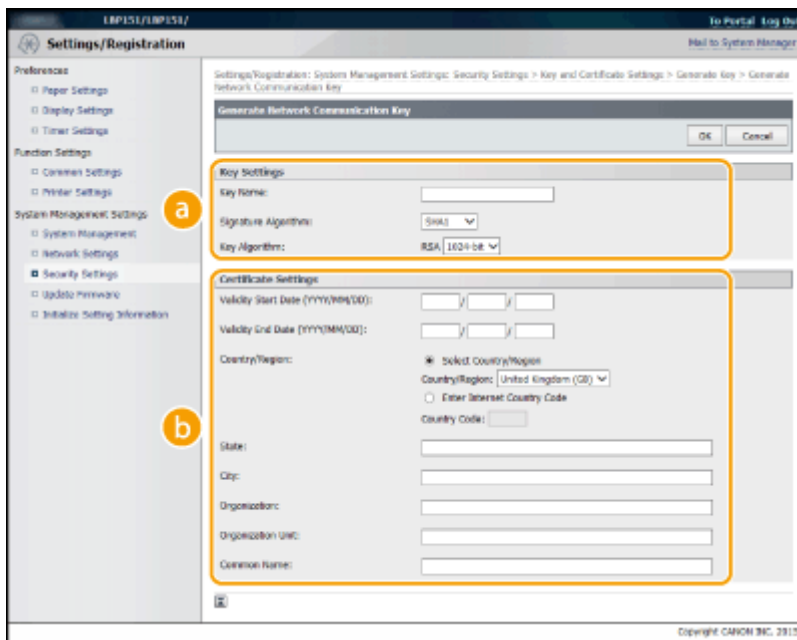


**ⓐ [Key Settings]**

  **[Key Name]**
  Enter up to 24 alphanumeric characters for naming the key pair. Set a name that will be easy for you to find later in a list.

  **[Signature Algorithm]**

Select the signature algorithm from the drop-down list.

**[Key Algorithm]**
RSA is used for generating a key pair. Select the key length from the drop-down list. The larger the number for the key length, the slower the communication. However, the security is tighter.

**NOTE:**

[512-bit] cannot be selected for the key length, if [SHA384] or [SHA512] is selected for [Signature Algorithm].

**ⓑ [Certificate Settings]**

**[Validity Start Date (YYYY/MM/DD)]**
Enter the first date of validity of the certificate in year/month/day format in the range January 1, 2000 to December 31, 2099.

**[Validity End Date (YYYY/MM/DD)]**
Enter the last date of validity of the certificate in year/month/day format in the range January 1, 2000 to December 31, 2099. A date earlier than the [Validity Start Date (YYYY/MM/DD)] cannot be set.

**[Country/Region]**
Click the [Select Country/Region] radio button and select the country/region from the drop-down list. You can also click the [Enter Internet Country Code] radio button and enter a country code, such as "US" for the United States.

**[State]/[City]**
Enter up to 24 alphanumeric characters for the location as necessary.

**[Organization]/[Organization Unit]**
Enter up to 24 alphanumeric characters for the organization name as necessary.

**[Common Name]**
Enter up to 48 alphanumeric characters for the common name of the certificate as necessary. "Common Name" is often abbreviated as "CN."

**7 Click [OK].**

- Keys for network communication may take approximately 10 to 15 minutes to generate.

- After a key pair is generated, it is automatically registered to the machine.

## Generate Key and Certificate Signing Request (CSR)

**1 Start the Remote UI and log on in System Manager Mode.**
**ⓞStarting the Remote UI(P. 175)**

**2 Click [Settings/Registration].**

**3** Click [Security Settings] ▶ [Key and Certificate Settings].
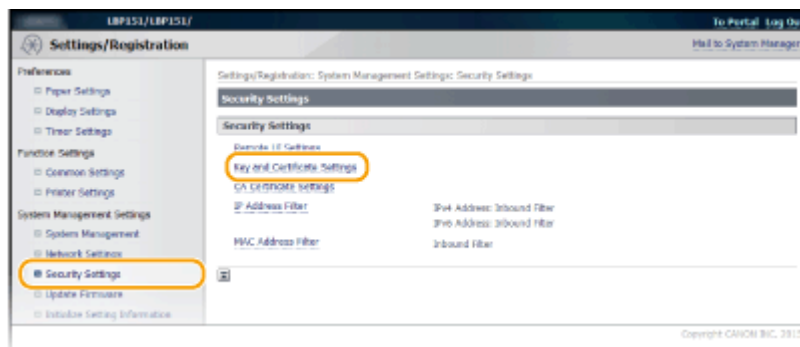


**4** Click [Generate Key].
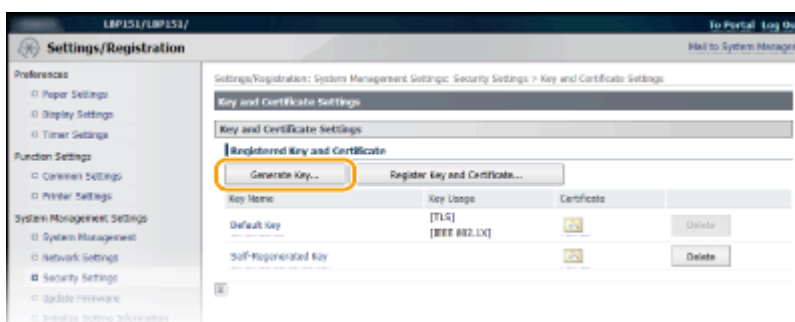


**NOTE:**

**Deleting a registered key pair**

- Click [Delete] on the right of the key pair you want to delete ▶ click [OK].

- A key pair cannot be deleted if it is currently used for some purpose, such as when [TLS] or [IEEE 802.1X], is displayed under [Key Usage]. In this case, disable the function or replace the key pair before deleting it.

**5** Select [Key and Certificate Signing Request (CSR)] and click [OK].
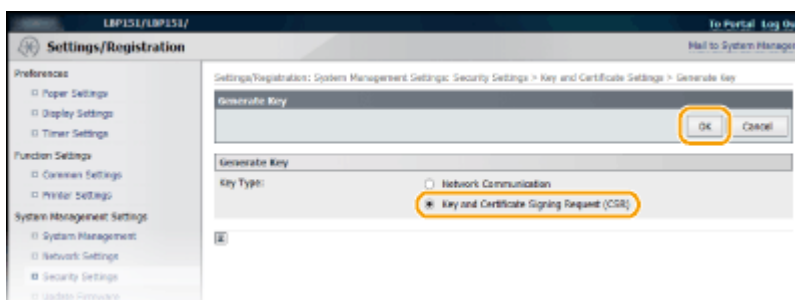


**6** Specify settings for the key and certificate.
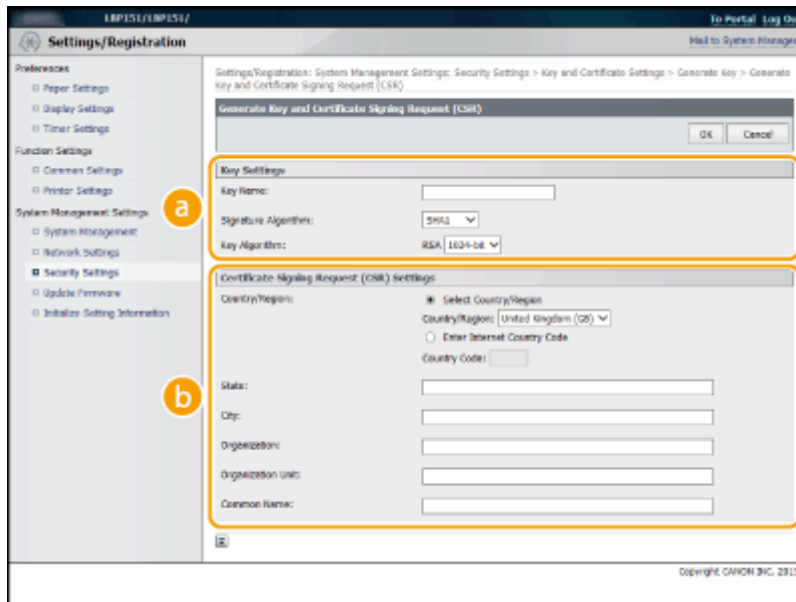
**ⓐ [Key Settings]**

> **[Key Name]**
> Enter up to 24 alphanumeric characters for naming the key pair. Set a name that will be easy for you to find later in a list.

> **[Signature Algorithm]**
> Select the signature algorithm from the drop-down list.

> **[Key Algorithm]**
> RSA is used for generating a key pair. Select the key length from the drop-down list. The larger the number for the key length, the slower the communication. However, the security is tighter.

> **NOTE:**

> [512-bit] cannot be selected for the key length, if [SHA384] or [SHA512] is selected for [Signature Algorithm].

**ⓑ [Certificate Signing Request (CSR) Settings]**

> **[Country/Region]**
> Click the [Select Country/Region] radio button and select the country/region from the drop-down list. You can also click the [Enter Internet Country Code] radio button and enter a country code, such as "US" for the United States.

> **[State]/[City]**
> Enter up to 24 alphanumeric characters for the location as necessary.

> **[Organization]/[Organization Unit]**
> Enter up to 24 alphanumeric characters for the organization name as necessary.

> **[Common Name]**
> Enter up to 48 alphanumeric characters for the common name of the certificate as necessary. "Common Name" is often abbreviated as "CN."

# 7 Click [OK].

- Key and Certificate Signing Request (CSR) may take approximately 10 to 15 minutes to generate.

# 8 Click [Store in File].

- A dialog box for storing the file appears. Choose where to store the file and click [Save].

⮕ The Key and Certificate Signing Request (CSR) file is stored on the computer.

**9** **Attach the stored file and submit the application to the certification authority.**

■Register the digital certificate issued by the certification authority.

You cannot use the key pair generated by the Certificate Signing Request (CSR) until the certificate is registered. Once the certification authority has issued the digital certificate, register it using the procedure below.

**1** **Start the Remote UI and log on in System Manager Mode. ⏵Starting the Remote UI(P. 175)**

**2** **Click [Settings/Registration].**

**3** **Click [Security Settings] ▶ [Key and Certificate Settings].**

**4** **Click [Key Name] or [Certificate] for the certificate to be registered.**
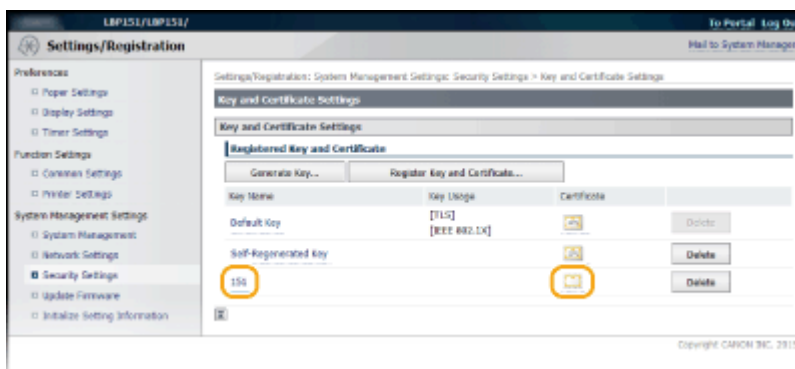


**5** **Click [Register Certificate].**
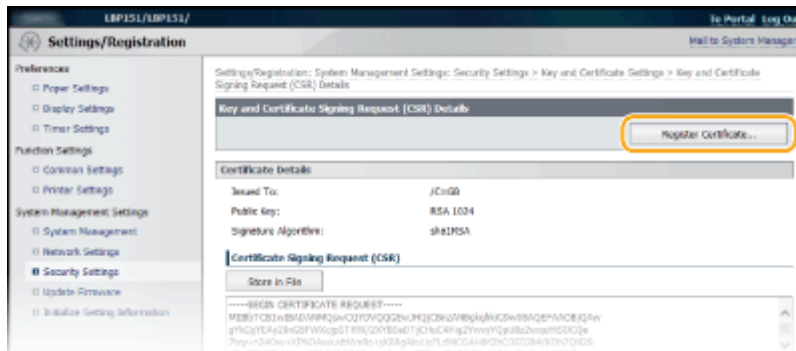
**6** Click [Browse], specify the file for the certificate signing request, and click [Register].
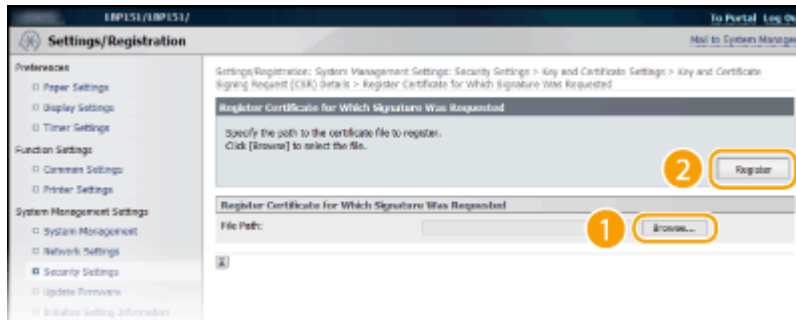


## LINKS

**Using CA-issued Key Pairs and Digital Certificates(P. 167)**
**Verifying Key Pairs and CA Certificates(P. 171)**
**Enabling TLS Encrypted Communication for the Remote UI(P. 151)**

# Using CA-issued Key Pairs and Digital Certificates

0YFA-037

Key pairs and digital certificates can be obtained from a certification authority (CA) for use with the machine. After obtaining them from a CA, you can install and register key pairs and CA certificate files on the machine by using the Remote UI. Make sure that the key pair and the certificate satisfy the requirements of the machine ( **Key and Certificate Operating Requirements(P. 158)** ). Up to 5 key pairs (including the preinstalled ones) can be registered, and up to 67 CA certificates (including the 62 preinstalled ones) can be registered.

**1** **Start the Remote UI and log on in System Manager Mode. ▶Starting the Remote UI(P. 175)**

**2** **Click [Settings/Registration].**
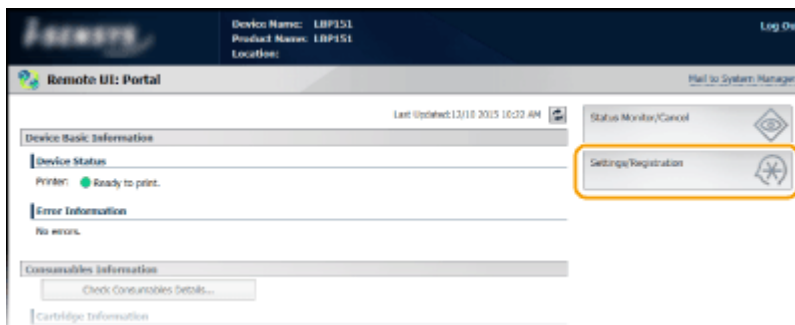
**3** **Click [Security Settings] ▶ Click [Key and Certificate Settings] or [CA Certificate Settings].**

- Click [Key and Certificate Settings] to install a key pair, or [CA Certificate Settings] to install a CA certificate.
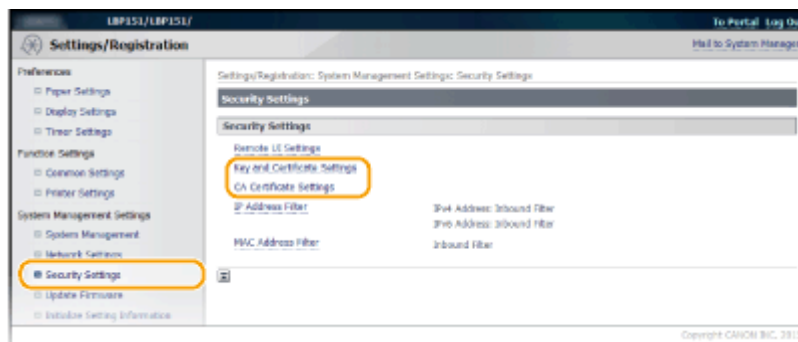
**4** **Click [Register Key and Certificate] or [Register CA Certificate].**
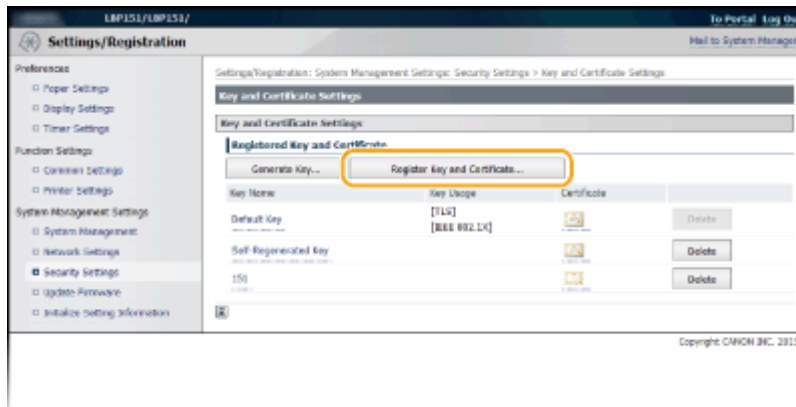
**NOTE:**

**To delete a registered key pair or CA certificate**

● On the right of the key pair or CA certificate you want to delete, click [Delete] ▶ [OK]. You cannot delete the preinstalled CA certificates.

● A key pair cannot be deleted if it is currently used for some purpose, such as when [TLS] or [IEEE 802.1X] is displayed under [Key Usage]. In this case, disable the function or replace the key pair before deleting it. The preinstalled CA certificates cannot be deleted.

**Disabling or enabling the preinstalled CA certificates**

● Click [Disable] on the right of the preinstalled CA certificate you want to disable. To enable the certificate again, click [Enable] on the right of the certificate.

## 5 Click [Install].

● You can only install one file on this machine. If another file is already installed, click [Delete] ▶ [OK] to delete the previously installed file.
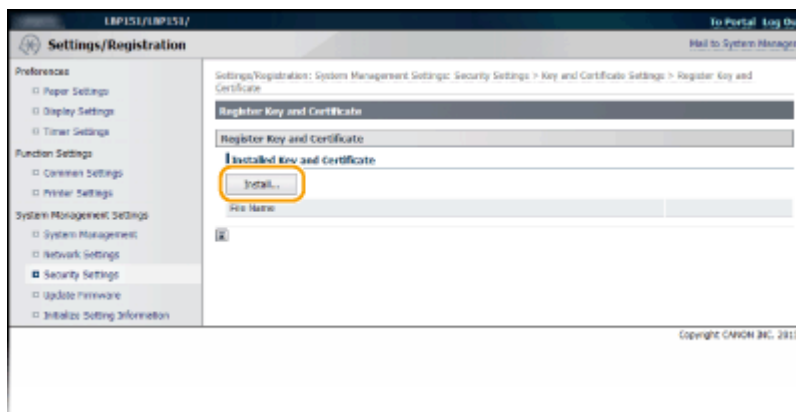


## 6 Click [Browse], specify the file to install, and click [Start Installation].
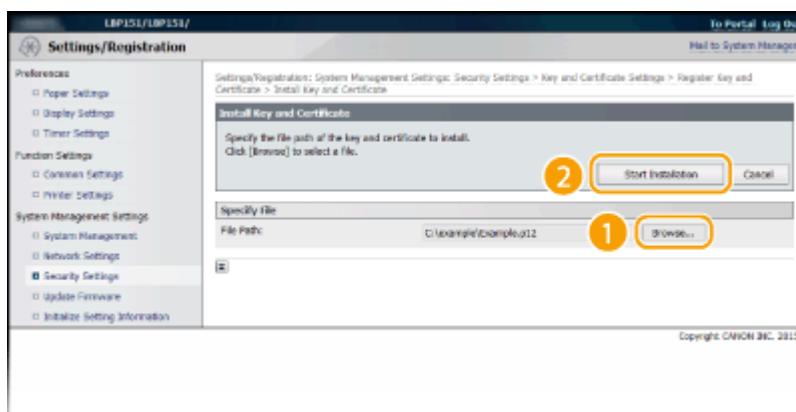
⏸▶  The key pair or CA certificate from the computer is installed in the machine.

## 7  Register the key pair or CA certificate.

### ■ Registering a key pair

**1**  **Click [Register] on the right of the key pair you want to register.**
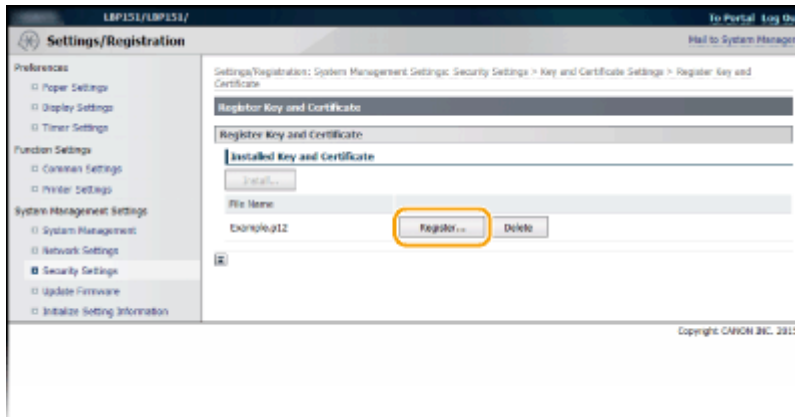


**2**  **Enter the name of the key pair and password, and then click [OK].**
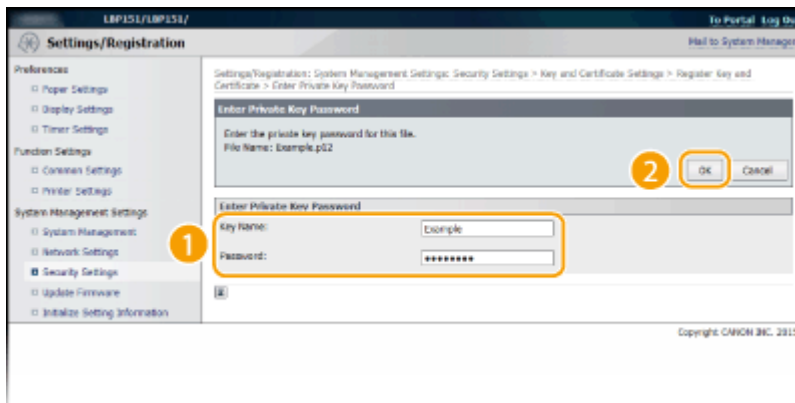


**[Key Name]**

Enter a name of up to 24 alphanumeric characters for registering the key pair in the machine. Set a name that will be easy for you to find later in a list.

**[Password]**

Enter up to 24 alphanumeric characters for the password of the secret key that is set in the file to be registered.

### ■ Registering a CA certificate
Click [Register] on the right of the CA certificate you want to register.
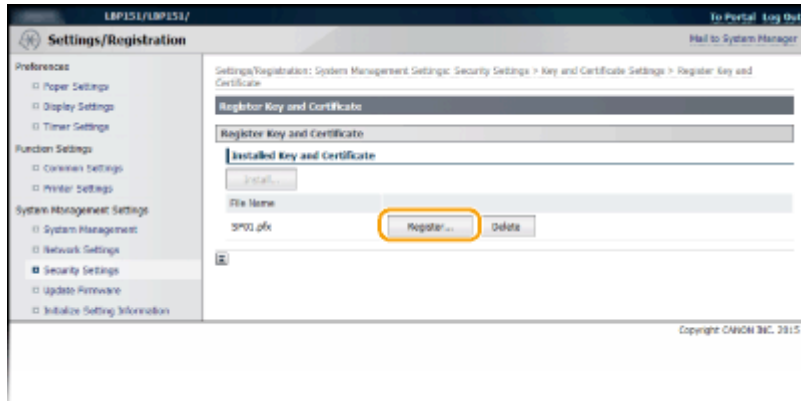
LINKS

**◯Generating Key Pairs(P. 160)**
**◯Verifying Key Pairs and CA Certificates(P. 171)**
**◯Enabling TLS Encrypted Communication for the Remote UI(P. 151)**
**◯Configuring IEEE 802.1X Authentication(P. 154)**

# Verifying Key Pairs and CA Certificates

0YFA-038

Once key pairs and CA certificates are registered, you can view their detailed information or verify their effective dates and signature.

**1** **Start the Remote UI and log on in System Manager Mode. ○Starting the Remote UI(P. 175)**

**2** **Click [Settings/Registration].**
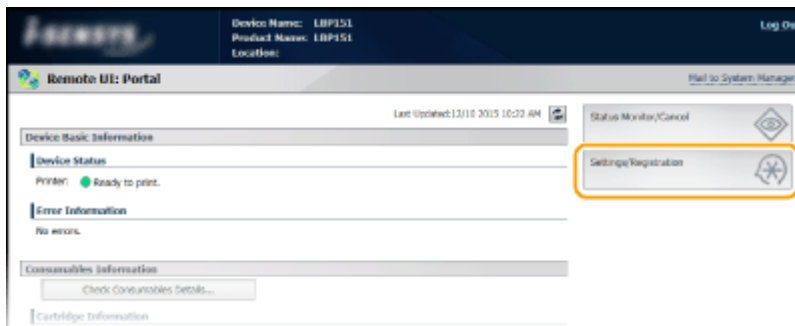


**3** **Click [Security Settings] ▶ Click [Key and Certificate Settings] or [CA Certificate Settings].**

- Click [Key and Certificate Settings] to verify a key pair, or [CA Certificate Settings] to verify a CA certificate.
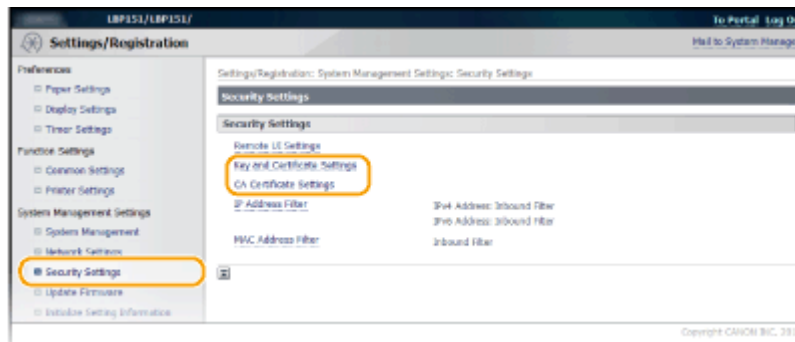


**4** **Click the icon for the key pair or CA certificate that you want to verify.**
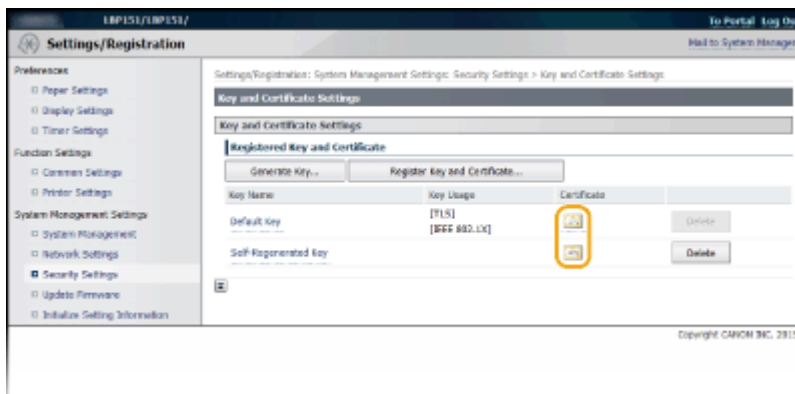
▥▶ Certificate details are displayed.

**5** **Check the certificate details, and click [Verify Certificate].**
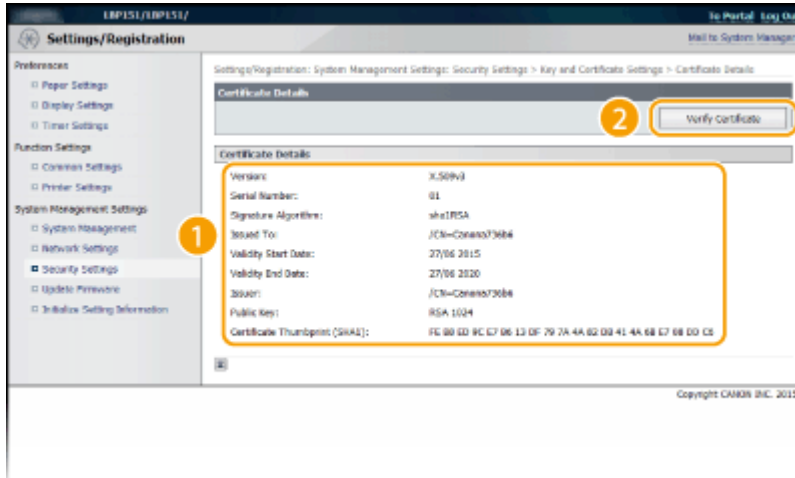


▥▶ The result from verifying the certificate is displayed as shown below.
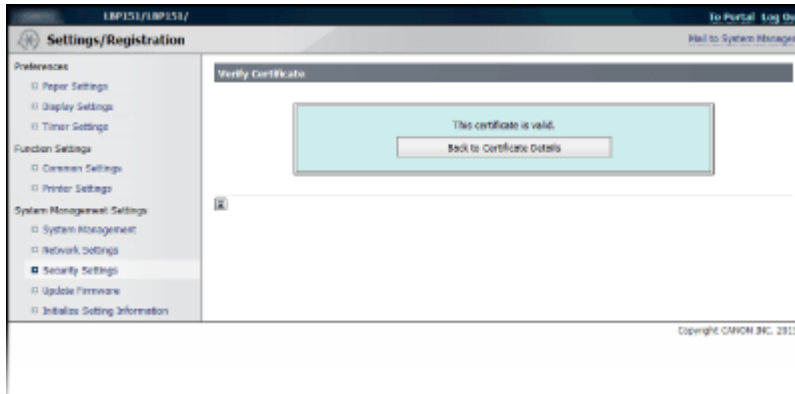


## LINKS

⬤**Generating Key Pairs(P. 160)**
⬤**Using CA-issued Key Pairs and Digital Certificates(P. 167)**

# Using the Remote UI

# Using the Remote UI

0YFA-03F

You can use a Web browser to operate the machine remotely, check the documents waiting to be printed, and check the status of the machine. You can also make network and other settings for the machine. The "Remote UI" starts when you enter the IP address of the machine in your Web browser. It is very convenient, because it allows you to operate the machine remotely without leaving your desk or installing a special application.
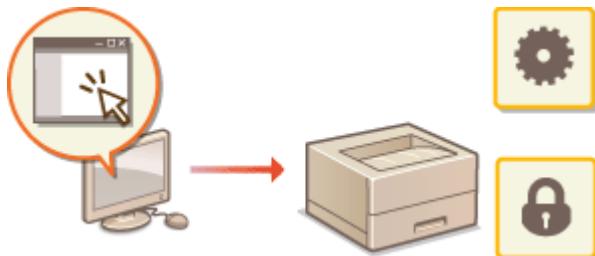
**Tasks you can do in the Remote UI**

◉**Managing Documents and Checking the Machine Status(P. 181)**
◉**Changing Machine Settings(P. 185)**

**How to use the Remote UI**

◉**Starting the Remote UI(P. 175)**
◉**Remote UI Screens(P. 178)**

## System Requirements

The following environment is required to use the Remote UI. In addition, set your Web browser to enable cookies.

### Windows

- Windows Vista/7/8
- Microsoft Internet Explorer 7.0 or later

### Mac OS

- Mac OS 10.6 or later
- Safari 3.2.1 or later

# Starting the Remote UI

0YFA-03H

To operate the machine remotely, start the Remote UI by entering the machine's IP address in your Web browser. Before starting, check the IP address that has been assigned to the machine ( **Viewing Network Settings(P. 104)** ). If you do not know the machine's IP address, ask your network administrator, or start the Remote UI from the Printer Status Window ( **Starting from the Printer Status Window(P. 176)** ).

**1** **Start the Web browser.**

**2** **Enter "http://<IP address of the machine>/" in the address field, and press the [ENTER] key.**
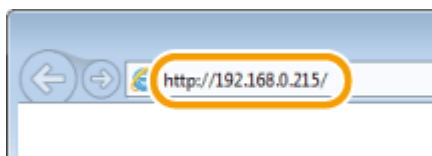


- If you are using an IPv6 address, enclose the IPv6 address with brackets (example: "http://[fe80:2e9e:fcff:fe4e:dbce]/").

**NOTE:**

**If a host name for the machine is registered with a DNS server**

Instead of <IP address of the machine>, you can enter <"host name"."domain name"> (example: "http://my_printer.example.com").

**If a security alert is displayed**

A security alert may be displayed when communication with the Remote UI is encrypted ( **Enabling TLS Encrypted Communication for the Remote UI(P. 151)** ). If there are no problems with certificate settings or TLS settings, continue browsing to the Remote UI site.

**3** **Select [System Manager Mode] or [General User Mode].**
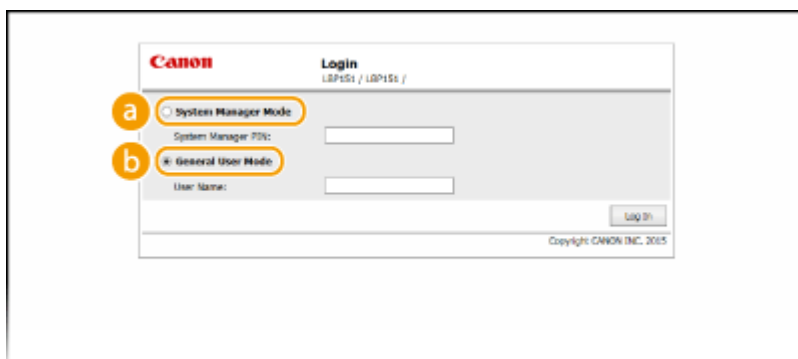


**a** **[System Manager Mode]**

You can perform all Remote UI operations and make all settings. If a PIN (system manager password) has been set, enter it in [System Manager PIN]. ( **Setting System Manager Passwords(P. 138)** ) If a PIN has not been set (factory default setting), you do not need to input anything.

**b** **[General User Mode]**

You can check the status of documents or the machine, and you can also check the settings.

**4** **Click [Log In].**

**3**    The Portal Page (main page) of the Remote UI appears. ⯈**Remote UI Screens(P. 178)**



---

### ■Starting from the Printer Status Window

If you do not know the machine's IP address, you can start the Remote UI from the Printer Status Window.

**1**   **Select the machine by clicking** 🖳 **in the system tray.**



**2**   **Click** 🌐**.**
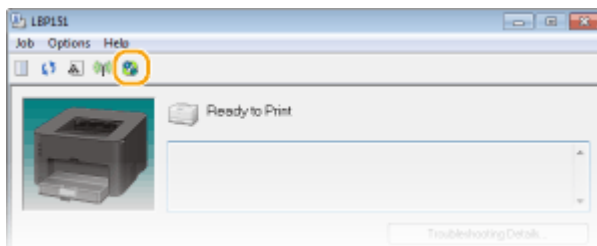


   Your Web browser starts, and the login page of the Remote UI appears.

**NOTE:**

**If a security alert is displayed**

A security alert may be displayed when communication with the Remote UI is encrypted ( ⯈**Enabling TLS Encrypted Communication for the Remote UI(P. 151)** ). If there are no problems with certificate settings or TLS settings, continue browsing to the Remote UI site.

**3**   **Select [System Manager Mode] or [General User Mode].**
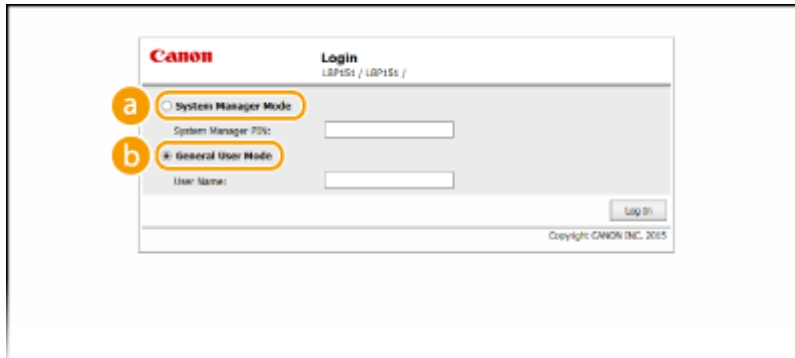
**a** **[System Manager Mode]**

You can perform all Remote UI operations and make all settings. If a PIN (system manager password) has been set, enter it in [System Manager PIN]. ( **Setting System Manager Passwords(P. 138)** ). If a PIN has not been set (factory default setting), you do not need to input anything.

**b** **[General User Mode]**

You can check print documents, check the status of the machine, and view machine settings.

**4 Click [Log In].**

The Portal Page (main page) of the Remote UI appears. **Remote UI Screens(P. 178)**
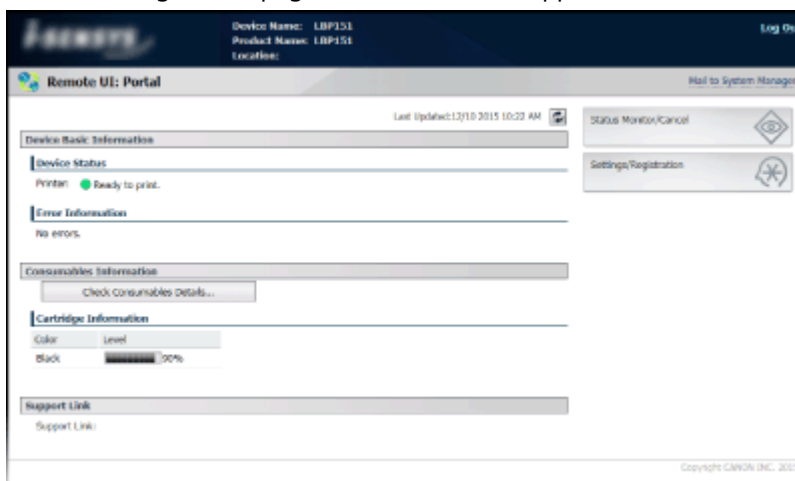
# Remote UI Screens

0YFA-03J

This section describes the main screens of the Remote UI.

◉**Portal Page (Main Page)(P. 178)**
◉**[Status Monitor/Cancel] Page(P. 179)**
◉**[Settings/Registration] Page(P. 180)**

## Portal Page (Main Page)
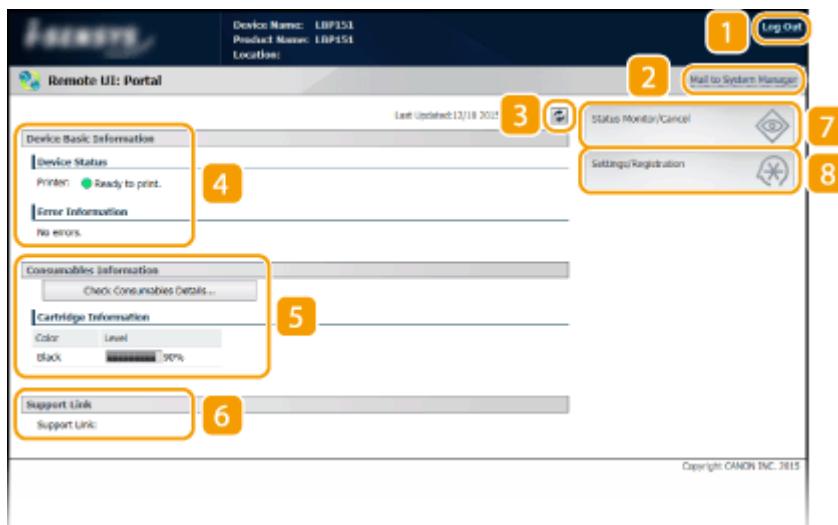


**1** **[Log Out]**

Logs out from the Remote UI and returns to the log on page.

**2** **[Mail to System Manager]**

Displays a window for creating an e-mail to the system manager. Contact information for the system manager is specified in [System Manager Information] under [System Management].

**3** **Refresh Icon**

Refreshes the current page.

**4** **Device Basic Information**

Displays the current status of the machine and error information. If an error has occurred, a link to the Error Information page is displayed.

**5** **Consumables Information**

Displays the amount remaining in the toner cartridge. Click [Check Consumables Details] to display the screen for checking consumables. ◉**Checking Consumables(P. 182)**

**6 Support Link**

Displays a link to support information, as specified in [Device Information] under [System Management].

**7 [Status Monitor/Cancel]**

Displays the [Status Monitor/Cancel] page. You can use this page to check the current printing status, cancel print processing, and view a history of print jobs.

**8 [Settings/Registration]**

Displays the [Settings/Registration] page. When you are logged on in System Manager Mode, you can use this page to change machine settings. ❏**Changing Machine Settings(P. 185)**

## [Status Monitor/Cancel] Page



**1 [To Portal]**

Returns to the Portal Page (main page).

**2 Menu**

Click an item to display the content in the page on the right. ❏**Managing Documents and Checking the Machine Status(P. 181)**

**3 Breadcrumb trail**

Indicates the series of pages you opened to display the current page. You can use this to check which page you are currently displaying.

**4 Refresh Icon**

Refreshes the current page.

**5 Top Icon**

Moves up to the top of the page when it has been scrolled out of view.

## [Settings/Registration] Page
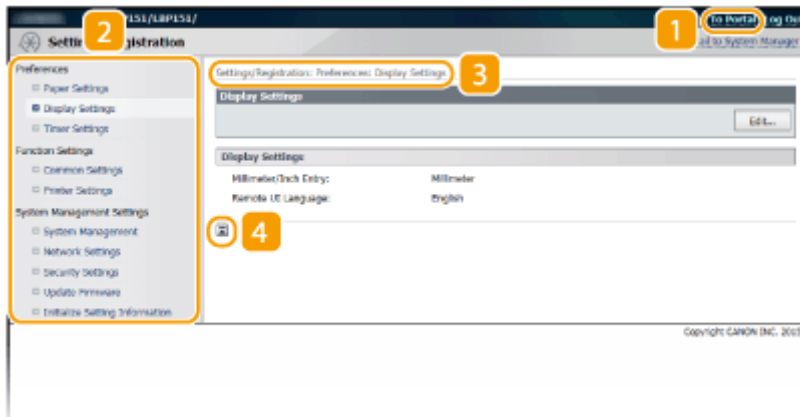


### 1 [To Portal]
Returns to the Portal Page (main page).

### 2 Menu
Click an item to display the content in the page on the right. ○**Changing Machine Settings(P. 185)**

### 3 Breadcrumb trail
Indicates the series of pages you opened to display the current page. You can use this to check which page you are currently displaying.

### 4 Top Icon
Moves up to the top of the page when it has been scrolled out of view.

### NOTE

**About [System Management Settings]**

- You can change system settings only when you have logged on in System Manager Mode.

- When you have logged on in General User Mode, only [System Management] is displayed.

# Managing Documents and Checking the Machine Status

0YFA-03K

> **NOTE**
>
> - The document file name displays only 255 characters. The printed application name may be added to the file name.

## Checking the Current Status of Print Documents

You can check a list of up to five documents that are currently printing or waiting to be printed.

Log on to the Remote UI ( ❍**Starting the Remote UI(P. 175)** ) ▶ [Status Monitor/Cancel] ▶ [Job Status]
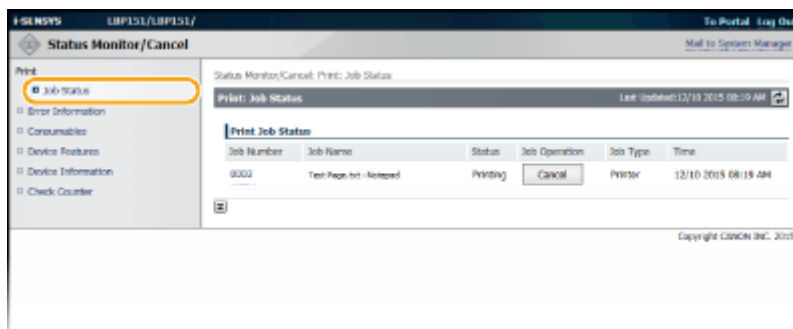


You can click [Cancel] to delete the print job for a document that is currently printing or waiting to be printed.

> **NOTE**
>
> - If you logged on in System Manager Mode, all the print documents currently printing and waiting to be printed will be listed.
>
> - If you entered your user name when you logged on in General User Mode, your user name will only be displayed on the documents that you printed.
>
> - Click [Job Number] to display detailed information about a document. For example, you can check the user name and the print page count of the document.
>
> - The print status of a User Data List which you specified in the Printer Status Window to be printed is not displayed in the Remote UI.

## Checking Error Information

When an error occurs, you can display this page by clicking the message displayed under [Error Information] on the Portal Page (main page). ❍**Portal Page (Main Page)(P. 178)**

Log on to the Remote UI ( ❍**Starting the Remote UI(P. 175)** ) ▶ [Status Monitor/Cancel] ▶ [Error Information]
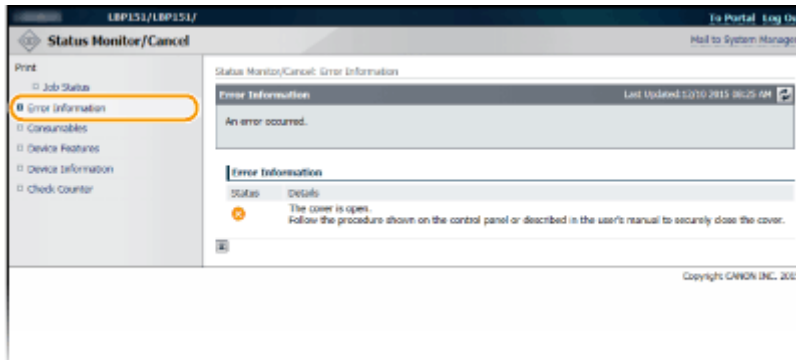


## Checking Consumables

Toner cartridge model number, and other information is displayed. You can also click [Check Consumables Details] in Portal Page (main page) to display the screen for checking consumables.

Log on to the Remote UI ( ❍**Starting the Remote UI(P. 175)** ) ▶ [Status Monitor/Cancel] ▶ [Consumables]
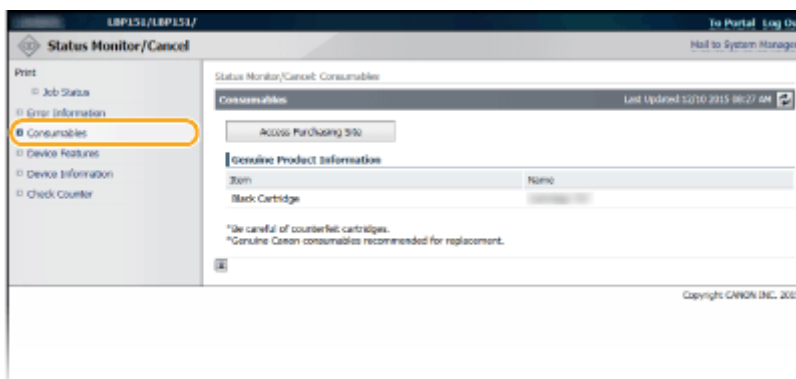


Click [Access Purchasing Site] to display the page for purchasing consumables.

## Checking the Maximum Print Speed

This page displays the maximum print speed of the machine.

|  | Log on to the Remote UI ( ▶**Starting the Remote UI(P. 175)** ) ▶ [Status Monitor/Cancel] ▶ [Device Features] |
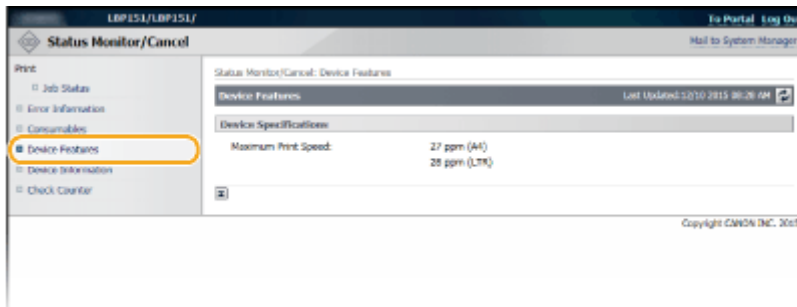


## Checking System Manager Information

This page displays information about the machine and the system manager. This information is set in [System Management] on the [Settings/Registration] page ( ▶**Changing Machine Settings(P. 185)** ).

|  | Log on to the Remote UI ( ▶**Starting the Remote UI(P. 175)** ) ▶ [Status Monitor/Cancel] ▶ [Device Information] |
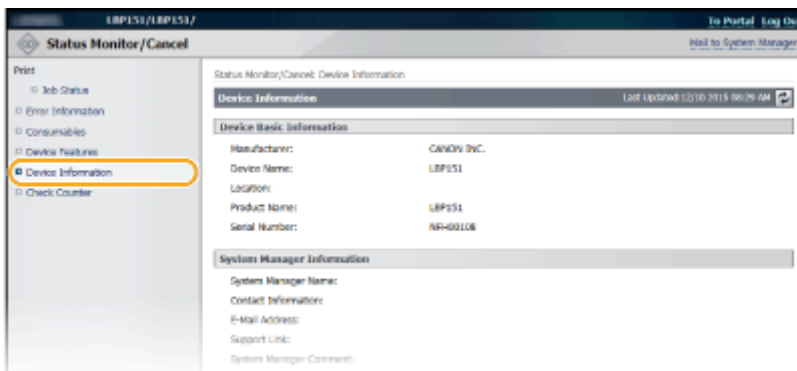


## Viewing the Page Counter Value

This page displays a total page count of the documents that have been printed.

|  | Log on to the Remote UI ( ▶**Starting the Remote UI(P. 175)** ) ▶ [Status Monitor/Cancel] ▶ [Check Counter] |
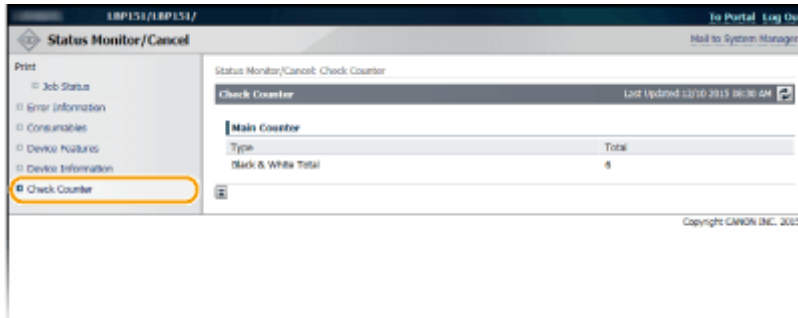
## LINKS

**○Remote UI Screens(P. 178)**

# Changing Machine Settings

0YFA-03L

You can change various machine settings from your computer by using the Remote UI. For example, you can change network and security settings.

> **NOTE**
>
> However, to change settings under [System Management Settings], you must log on in System Manager Mode.

**1** Start the Remote UI ◉Starting the Remote UI(P. 175)

**2** Click [Settings/Registration].
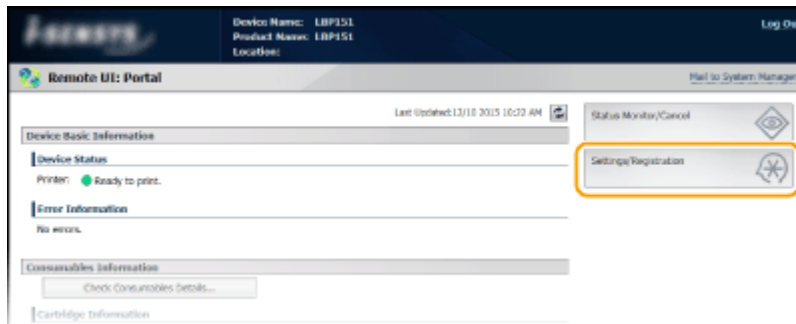


**3** Click the menu item you want to set, displaying it, and then click [Edit].
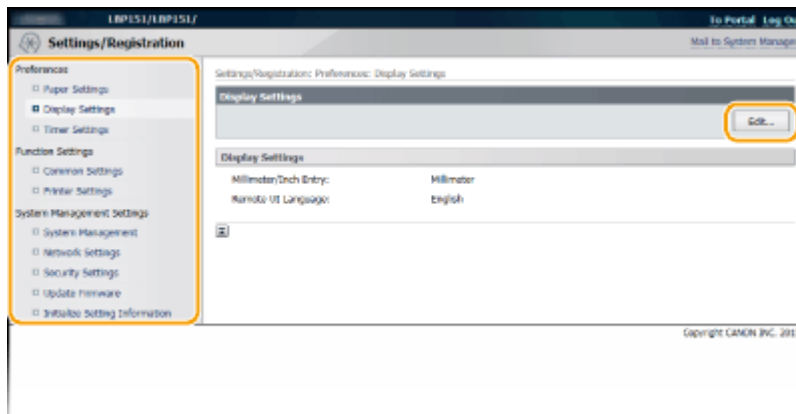


- For details about the settings menu, see ◉Setting Menu List(P. 186) .

## LINKS

◉Remote UI Screens(P. 178)

185

# Setting Menu List

0YFA-03R

This section describes the menu items that can be set using the Remote UI. Default settings are marked with a dagger ( † ).

**[Preferences] Menu**

⭕**Paper Settings(P. 186)**
⭕**Display Settings(P. 187)**
⭕**Timer Settings(P. 188)**

**[Function Settings] Menu**

⭕**Common Settings(P. 190)**
⭕**Printer Settings(P. 191)**

**[System Management Settings] Menu**

⭕**System Management(P. 197)**
⭕**Network Settings(P. 201)**
⭕**Security Settings(P. 207)**
⭕**Update Firmware(P. 208)**
⭕**Initialize Setting Information(P. 208)**

## Paper Settings

When printing from an application with which you cannot set the paper size and paper type, the document is printed with the paper size and paper type set here. When printing with Google Cloud Print, the paper type setting here is applied.

Mobile Print
  Paper Size
    Custom
        X: 76.2 mm to 216.0 mm
        Y: 127.0 mm to 356.0 mm
    A4 †
    A5
    B5
    Envelope DL
    Envelope C5
    Letter
    Legal
    Statement
    Executive
    Foolscap
    Oficio
    Envelope No. 10 (COM10)
    Envelope Monarch
    Letter (Government)
    Legal (Government)

      Legal (India)

      Foolscap (Australia)

      Oficio (Brazil)

      Oficio (Mexico)

      3x5inch

    Paper Type

      Plain (60-89 g/m2) †

      Plain L (60-89 g/m2)

      Recycled (60-89 g/m2)

      Color (60-89 g/m2)

      Heavy 1 (90-120 g/m2)

      Heavy 2 (121-163 g/m2)

      Envelope

      Bond 1 (60-90 g/m2)

      Bond 2 (91-120 g/m2)

      Bond 3 (121-163 g/m2)

      Index Card

      Labels

Log on to the Remote UI ( **Starting the Remote UI(P. 175)** ) ▶ [Settings/Registration] ▶ [Paper Settings] ▶ [Edit] ▶ Set the paper size and type ▶ [OK]
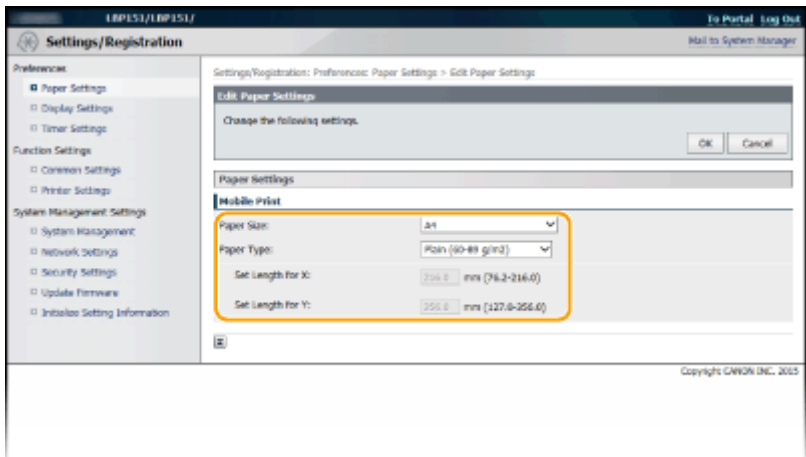


**[Paper Size]**
Specify the paper size when printing from a mobile device. If [Custom] is selected, you can specify any value for width and length.

**[Paper Type]**
Specify the paper type when printing from a mobile device.

## Display Settings

Select the display units and language for the Remote UI.

Millimeter/Inch Entry

Millimeter [†]

Inch


Remote UI Language

Czech

Danish

Dutch

English [†]

Finnish

French

German

Hungarian

Italian

Norwegian

Polish

Portuguese

Russian

Spanish

Swedish

Turkish

Log on to the Remote UI ( **Starting the Remote UI(P. 175)** ) ▶ [Settings/Registration] ▶ [Display Settings] ▶ [Edit] ▶ Select the display units and language ▶ [OK]
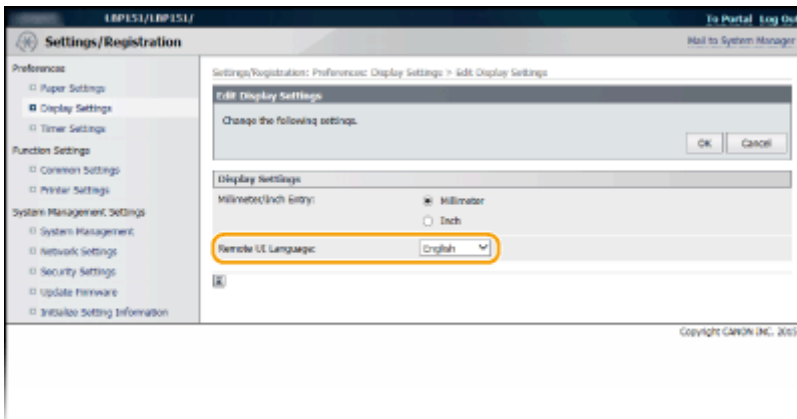


**[Millimeter/Inch Entry]**
Select the unit of measurement for the Remote UI screens.


**[Remote UI Language]**
Select the display language used for the Remote UI screens.


## Timer Settings

Specify date and time settings, including the date format and the 12- or 24-hour clock display setting. The date and time that are printed on each report and list are determined by these settings.

Date Format

MM/DD/YYYY

DD/MM YYYY †

YYYY MM/DD

Time Format

12 Hour (AM/PM) †

24 Hour

Current Date

Current Time

Time Zone

(UTC-12:00) International Date Line West to (UTC) Coordinated Universal Time † to (UTC+14:00) Christmas Island

Use Daylight Saving Time

Off

On †

Start

January to March † to December

1st to Last †

Monday to Sunday †

End

January to October † to December

1st to Last †

Monday to Sunday †

Auto Sleep Time

After 1 min. †

After 5 min.

After 10 min.

After 15 min.

After 30 min.

Auto Shutdown Time

Off
After 1 hr.

After 2 hr.
After 3 hr.
After 4 hr. †

After 5 hr.
After 6 hr.
After 7 hr.
After 8 hr.

Log on to the Remote UI ( **Starting the Remote UI(P. 175)** ) ▶ [Settings/Registration] ▶ [Timer Settings] ▶ [Edit] ▶ Item settings ▶ [OK]
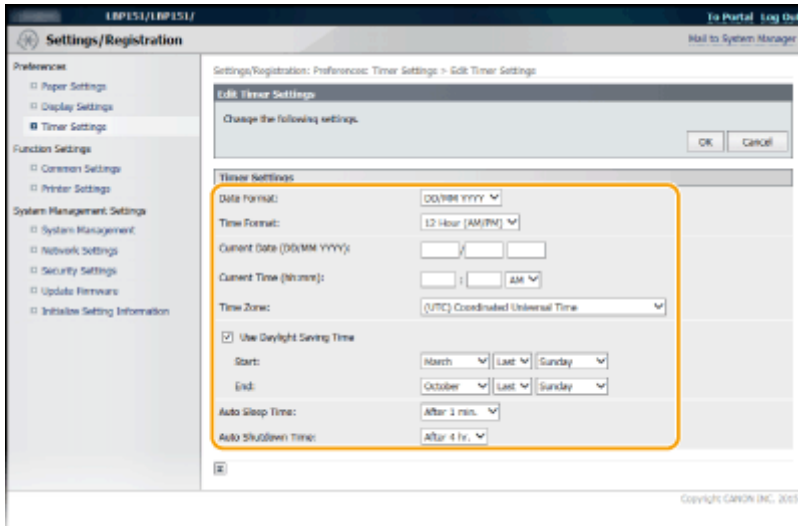
**[Date Format]**
Select the date format (order of year, month, and day).

**[Time Format]**
Select the 12- or 24-hour clock display setting.

**[Current Date/Time Settings]**
Set the current date and time.
**IMPORTANT:**
Set [Time Zone] before setting the current date and time. If the [Time Zone] setting is changed, the current date and time are also changed accordingly.

**[Time Zone]**
Set the time zone of the region where the machine will be used.
**NOTE:**
**UTC**
Coordinated Universal Time (UTC) is the primary time standard by which the world regulates clocks and time. The correct UTC time zone setting is required for Internet communications.

**[Use Daylight Saving Time]**
Enable or disable daylight saving time. If daylight saving time is enabled, specify the dates from which and to which daylight saving time is in effect.

**[Auto Sleep Time]**
The machine enters sleep mode automatically when it remains idle for a certain length of time. Specify the length of time until the machine enters auto sleep. We recommend using the factory default settings to save the most power. ◉**Setting Sleep Mode(P. 28)**

**[Auto Shutdown Time]**
You can set up the machine to automatically turn itself OFF after it remains idle for a certain length of time. This prevents wasted power consumption caused by forgetting to turn the machine OFF. Specify the length of time until the machine turns itself OFF. ◉**Setting Auto Shutdown(P. 29)**

## Common Settings

Specify this setting when you print a document on paper with logos. To print on paper with logos, you need to change how the paper loaded in the paper source is facing depending on whether you are performing 1- or 2-sided printing. However, if you change the setting to [Print Side Priority], you can just load paper in the same way (which side up or down) both for 1- and 2-sided printing (the logo side face up when using the drawer, or the logo side face down when using the multi-purpose tray). For more information, see ◉**Loading Preprinted Paper(P. 40)** .

**Switch Paper Feed Method**

Multi-Purpose Tray

　Speed Priority †

　Print Side Priority


Drawer 1

　Speed Priority †

　Print Side Priority

---

Log on to the Remote UI ( ▶**Starting the Remote UI(P. 175)** ) ▶ [Settings/Registration] ▶ [Common Settings] ▶ [Edit] ▶ Select the paper source ▶ Select [Speed Priority] or [Print Side Priority] ▶ [OK]
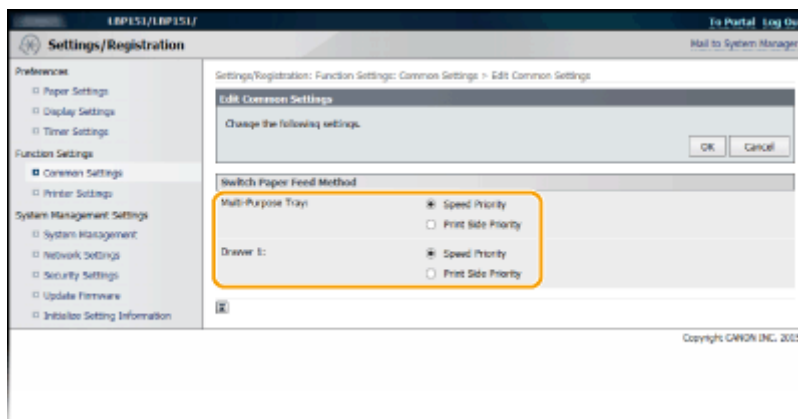


**[Speed Priority]**
When using paper that has been preprinted with a logo, you need to change how it is facing when you perform 1-sided and 2-sided printing.

**NOTE:**

- We recommend selecting [Speed Priority] if you do not need to consider which side to print on.

**[Print Side Priority]**
To print on a specific side of paper, you do not need to flip over paper in the paper source whether 1- or 2-sided printing is selected.

**NOTE:**

- If [Print Side Priority] is set for a paper source that is loaded with paper you cannot use for 2-sided printing ( ▶**Paper(P. 290)** ), [Speed Priority] is applied to the paper source instead. In this case, you need to load the paper in the same way as when [Speed Priority] is selected ( ▶**Loading Preprinted Paper(P. 40)** ).

- 1-sided printing speed may be slower when [Print Side Priority] is selected.

## Printer Settings

Specify basic printing settings and PCL printing settings.

### Custom Settings

Specify basic printing settings.

Copies
  1 † to 99

  2-Sided Printing
  Off †
  On

  Action When Paper Size Mismatch
  Force Output
  Display Error †

  Paper
  Default Paper Size
    A4 †
    A5
    B5
    Envelope DL
    Envelope C5
    Letter
    Legal
    Statement
    Executive
    Envelope No. 10 (COM10)
    Envelope Monarch
    3x5inch

  Print Quality
  Density
    17 Levels
  Toner Save
    Off †
    On

  Layout
  Binding Location
    Long Edge †
    Short Edge

  Timeout
  Timeout
    5 † to 300 (sec.)

  Mobile Print Settings
  Halftones
    Gradation †
    Error Diffusion

  Other
  Special Print Mode
    Off †
    Special Settings 1
    Special Settings 2

Log on to the Remote UI ( ▶**Starting the Remote UI(P. 175)** ) ▶ [Settings/Registration] ▶ [Printer Settings] ▶ [Edit] in [Custom Settings] ▶ Specify the necessary settings ▶ [OK]
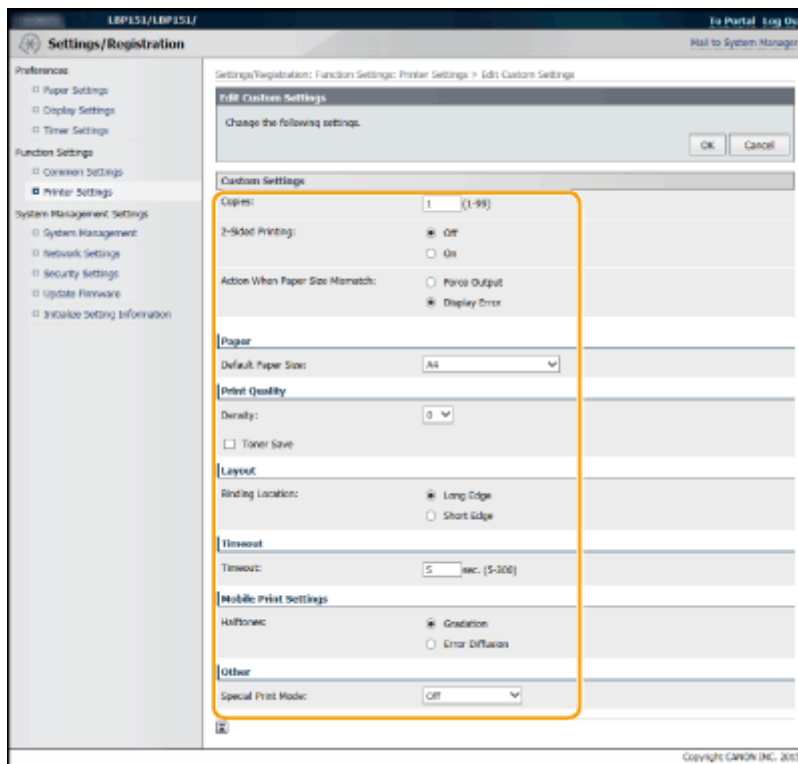


**[Copies]**
Set the number of copies to print.

**[2-Sided Printing]**
Select whether to make 2-sided printouts.

**[Action When Paper Size Mismatch]**
Select whether to go ahead with printing or to display an alert when the paper size that is loaded in the paper source and that specified in the printer driver are different.

**[Default Paper Size]**
Use this item to specify the paper size. ▶**Paper(P. 290)**

**[Density]**
Adjust the toner density.

**[Toner Save]**
You can save toner consumption. Select when you want to check the layout or other appearance characteristics before proceeding to final printing of a large job.

**[Binding Location]**
If you are binding the printouts with a binding tool such as a stapler, use this item to specify whether to bind on the long or short edge.
**[Timeout]**
Set the time period after which the current print job is automatically canceled in the case of a print data reception interruption.

**[Halftones]**
Select the image processing when printing from a mobile device with Mopria™, etc. Select [Gradation] for photos and illustrations, and [Error Diffusion] for mostly text documents for more attractive printouts.

**[Special Print Mode]**

In instances such as when a printed barcode is difficult to read, or text and image outlines are partially not printed, these problems may be improved by changing the setting of this option.

**NOTE:**

- If this option is set to [Special Settings 1], printing is at a lower density compared to when set to [Off]. Text and lines may also be faint. Images may also be partially not printed if this option is specified when printing on paper other than thin paper.

- If this option is set to [Special Settings 2], printing is at a lower density compared to when set to [Off] or [Special Settings 1]. Text and lines may also be faint.

## PCL

Specify the PCL printing settings such as page layout and print quality.

Resolution
  600 dpi †
  1200 dpi

Density Fine Adjustment
  -1 to 0 † to 1

Paper Save
  Off †
  On

  Orientation
  Portrait †
  Landscape

  Font Number
  0 † to 54

  Point Size
  4.00 to 12.00 † to 999.75

  Pitch
  0.44 to 10.00 † to 99.99

  Form Lines
  5 to 64 † to 128

  Character Code
  PC8 †
  ROMAN8
  ISOL1
  ISOL2
  ISOL5
  ISOL6
  PC775
  PC8DN
  PC850
  PC852
  PC8TK
  PC1004

WINL1

WINL2

WINL5

WINBALT

DESKTOP

PSTEXT

LEGAL

ISO4

ISO6

ISO11

ISO15

ISO17

ISO21

ISO60

ISO69

WIN30

MCTEXT
MATH8

MSPUBL

PIFONT

PSMATH

VNINTL

VNMATH

VNUS

Set Custom Paper

Off †

On

Unit of Measure

Millimeters †

Inches

X dimension

76.2 to 216.0 † (mm)

Y dimension

127.0 to 356.0 † (mm)

Append CR to LF

Yes

No †

Enlarge A4 Print Width

Off †

On

Halftones

Text

Resolution †

Gradation
Color Tone

Graphics

Resolution

    Gradation

    Color Tone †

  Image

    Resolution

    Gradation

    Color Tone †

---

Log on to the Remote UI ( **○Starting the Remote UI(P. 175)** ) ▶ [Settings/Registration] ▶ [Printer Settings] ▶ [Edit] in [PCL] ▶ Specify the necessary settings ▶ [OK]
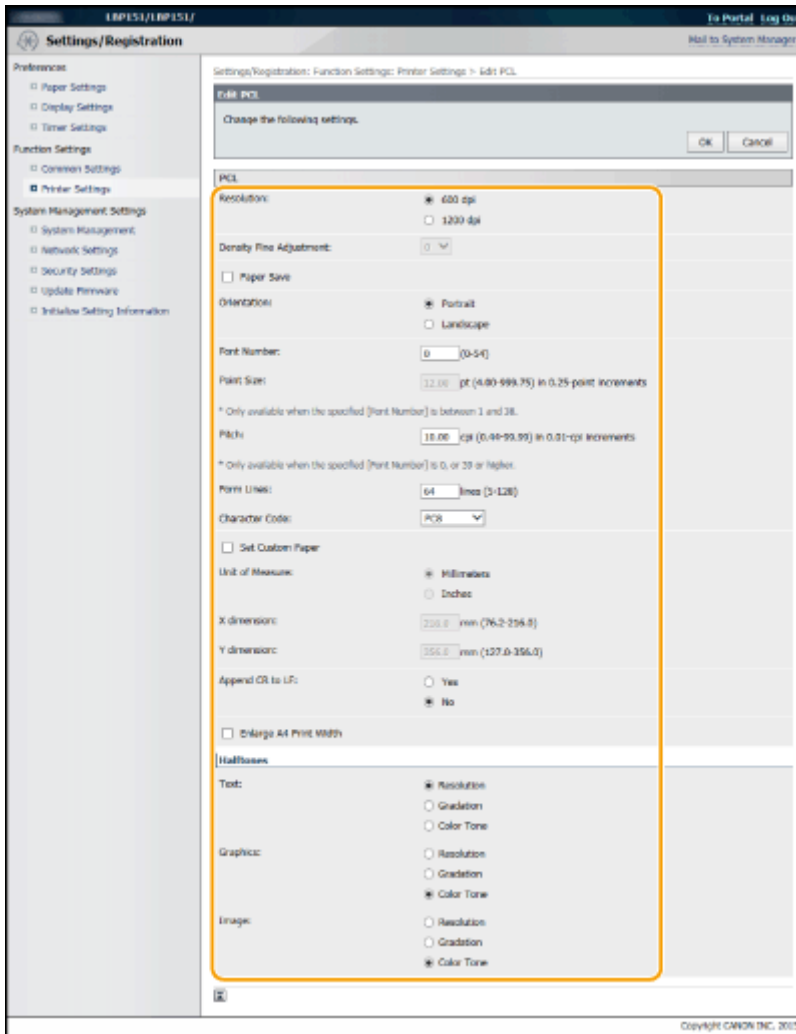


**[Resolution]**
Specify the resolution to be used for print data processing.

**[Density Fine Adjustment]**
Adjust the toner density. This setting is enabled when [1200 dpi] is set in [Resolution].

**[Paper Save]**
Specify whether to output blank pages, if any in the print data.

**[Orientation]**
Select [Portrait] (vertical orientation) or [Landscape] (horizontal orientation) for the page orientation.

**[Font Number]**
Specify the font to use by selecting a corresponding font ID number. You can print the PCL font list with font samples from the Printer Status Window. **○Printing Setting Lists(P. 258)**

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**[Point Size]**
Set the font size in points, adjustable in 0.25 increments. You can specify this setting only when a proportionally-spaced scalable font is selected in [Font Number].

**[Pitch]**
Set the font pitch, or cpi (characters per inch), adjustable in 0.01 increments. You can specify this setting only when a fixed-pitch scalable font or a bitmap font is selected in [Font Number].

**[Form Lines]**
Set the number of lines printed on one page from 5 to 128. This setting is automatically changed according to the settings specified in [Default Paper Size] and [Orientation].

**[Character Code]**
Select the character code that is most suited for the computer you send print data from. The specified setting is ignored when the character code is controlled by the font specified in [Font Number].

**[Set Custom Paper]**
Select whether to set a custom paper size. Select [On] to set the dimensions of the paper in [X dimension] and [Y dimension].

**[Unit of Measure]**
Select the unit of measurement to use to set a custom paper size.

**[X dimension]**
Specify the horizontal dimension (short edge) of the custom paper.

**[Y dimension]**
Specify the vertical dimension (long edge) of the custom paper.

**[Append CR to LF]**
Select whether to append a carriage return (CR) when the machine receives a line feed code (LF). If [Yes] is selected, the print position moves to the beginning of the next line when the machine receives an LF code. If [No] is selected, the print position moves to the next line, just under the received LF code.

**[Enlarge A4 Print Width]**
Select whether to expand the width of the printable area of A4 size paper in portrait orientation to that of LTR size.

**[Halftones]**
You can select the printing method to reproduce halftones (the intermediate range between the lighter and darker areas of an image) for optimal image quality. For each document, you can make settings by type of image.

# System Management

You can specify that a PIN (system manager password) is required when logging in to the Remote UI in System Manager Mode, and you can register information about the system manager, such as name and contact information. You can also register a name to identify this machine, and register its location.

**System Manager Information**
  Set System Manager PIN
    Off †
    On
      Set/Change PIN
        Off †
        On
          PIN/Confirm
  System Manager Name
  Contact Information
  E-Mail Address

System Manager Comment

**Device Information**

Device Name

Location

Support Link

**Consumables Supplier Information**

Purchase From

E-Mail Address

URL Specification Method

Select Country/Region †

Country/Region

Austria †
Belarus
Belgium
Czech Republic
Denmark
Egypt
Finland
France
Germany
Greece
Hungary
Ireland
Italy
Jordan
Luxembourg
Netherlands
Norway
Poland
Portugal
Russia
Saudi Arabia
Slovenia
South Africa
Spain
Sweden
Switzerland
Ukraine
United Kingdom
Others

Custom

URL

Display Button for Purchasing Consumables

Off

On †

**USB Device Settings**

Use as USB Device

Off

On †

**Product Extended Survey Program Settings**

Use Product Extended Survey Program

Off

On †

**PDL Selection (Plug and Play)**

Network

   UFR II LT †

   UFR II LT (V4)

   PCL6

USB

   UFR II LT †

   UFR II LT (V4)

   PCL6

Log on to the Remote UI in System Manager Mode ( **Starting the Remote UI(P. 175)** )
▶ [Settings/Registration] ▶ [System Management] ▶ [Edit] ▶ Item settings ▶ [OK]
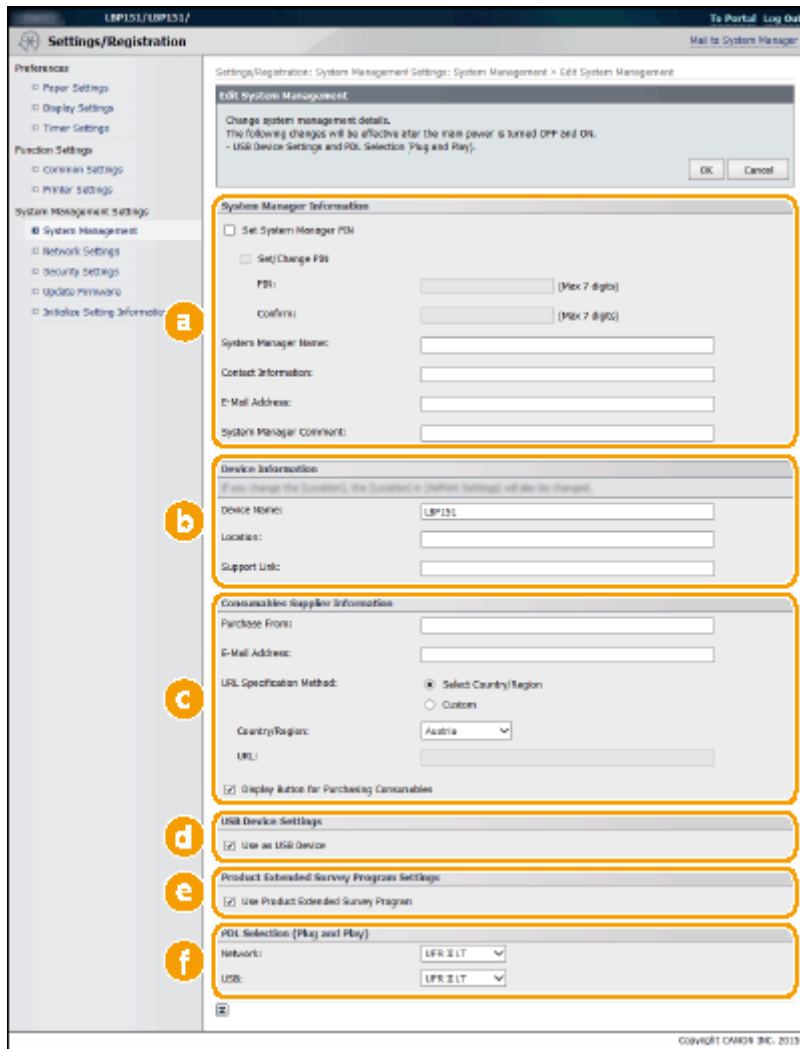


**ⓐ [System Manager Information]**

Specify the PIN and other system manager information. **Setting System Manager Passwords(P. 138)**

### ⓑ [Device Information]

**[Device Name]**
Enter up to 32 alphanumeric characters for the name of the machine.

**[Location]**
Enter up to 32 alphanumeric characters for the location of the machine.

**[Support Link]**
Enter a link to support information about the machine. The link can be up to 128 alphanumeric characters long. The link is displayed on the Portal Page (main page) of the Remote UI.

### ⓒ [Consumables Supplier Information]

Specify information on where to purchase consumables.

**[Purchase From]**
Enter up to 32 alphanumeric characters for the name of where to purchase consumables.

**[E-Mail Address]**
Enter up to 64 alphanumeric characters for the e-mail address of where to purchase consumables. If an address is specified, you can click the address to launch mail software and send e-mail.

**[URL Specification Method]**
Select a method for specifying information on where to purchase consumables. If [Custom] is selected, specify the URL of where to purchase. If [Select Country/Region] is selected, select the country or region of where to purchase.

**[Display Button for Purchasing Consumables]**
Specify whether to display the [Access Purchasing Site] button on the [Consumables] page in the Remote UI.

### ⓓ [USB Device Settings]

Specify settings as a USB device. To enable settings, you must restart the machine.

**[Use as USB Device]**
Enable or disable the USB port that is used for connecting the machine to a computer.

### ⓔ [Product Extended Survey Program Settings]

Specify settings for the Product Extended Survey Program.

**[Use Product Extended Survey Program]**
Enable or disable the Product Extended Survey Program (a program for the machine usage survey).

### ⓕ [PDL Selection (Plug and Play)]

Select a page description language so that the machine is detected as a printer that is compatible with that language when it is connected to a computer by using Plug and Play. For more information, see the Printer Driver Installation Guide. To enable settings, you must restart the machine.

**[Network]**
Select a page description language so that the machine is detected as a printer that is compatible with that language when it is detected over the network.

**[USB]**
Select a page description language so that the machine is detected as a printer that is compatible with that language when it is connected to a computer via USB.

## Network Settings

Make settings related to network functions.

### TCP/IP Settings

Specify settings for using the machine in a TCP/IP network, such as IP address settings.

### IPv4 Settings

Specify settings for using the machine in an IPv4 network. ●**Setting IPv4 Address(P. 98)**   ●**Configuring DNS(P. 122)**

---

**IP Address Settings**
  Auto Acquire
    Select Protocol
      Off
      DHCP †
      BOOTP
      RARP
    Auto IP
      Off
      On †
  IP Address
  Subnet Mask
  Gateway Address

**DNS Settings**
  Primary DNS Server Address
  Secondary DNS Server Address
  Host Name
  Domain Name
  DNS Dynamic Update
    Off †
    On
      DNS Dynamic Update Interval: 0 to 24 † to 48 (hours)

**mDNS Settings**
  Use mDNS
    Off
    On †
      mDNS Name

**DHCP Option Settings**
  Acquire Host Name
    Off
    On †
  DNS Dynamic Update
    Off †
    On

---

## IPv6 Settings

Specify settings for using the machine in an IPv6 network. ●**Setting IPv6 Addresses(P. 101)** ●**Configuring DNS(P. 122)**

**IP Address Settings**

Use IPv6

 Off†

 On

Use Stateless Address

 Off

 On†

Use Manual Address

 Off†

 On

  IP Address

  Prefix Length: 0 to 064† to 128

  Default Router Address

Use DHCPv6

 Off†

 On

**DNS Settings**

Primary DNS Server Address

Secondary DNS Server Address

Use Same Host Name/Domain Name as IPv4

 Off

 On†

Host Name

Domain Name

DNS Dynamic Update

 Off†

 On

  Register Manual Address

   Off†

   On

  Register Stateful Address

   Off†

   On

  Register Stateless Address

   Off†

   On

  DNS Dynamic Update Interval: 0 to 24† to 48 (hours)

**mDNS Settings**

Use mDNS

 Off

 On†

Use Same mDNS Name as IPv4

 Off

202

> On [†]
>
> mDNS Name

## LPD Settings

Enable or disable LPD, a printing protocol that can be used on any hardware platform or operating system. ◯ **Configuring Printing Protocols and Web Services(P. 107)**

> Use LPD Printing
>   Off
>
>   On [†]

## RAW Settings

Enable or disable RAW, a Windows specific printing protocol. ◯**Configuring Printing Protocols and Web Services(P. 107)**

> Use RAW Printing
>   Off
>
>   On [†]

## WSD Settings

Enable or disable automatic browsing and acquiring information for the machine by using the WSD protocol that is available on Windows Vista/7/8/Server 2008/Server 2012. ◯**Configuring Printing Protocols and Web Services(P. 107)**

> Use WSD Printing
>   Off
>   On [†]
>
> Use WSD Browsing
>   Off
>
>   On [†]
>
> Use Multicast Discovery
>   Off
>
>   On [†]

## TLS Settings

Specify the key pair to use when conducting TLS encrypted communication with the Remote UI. ◯**Enabling TLS Encrypted Communication for the Remote UI(P. 151)**

## Proxy Settings

Specify settings for a proxy server. ◯**Setting a Proxy(P. 148)**

## Port Number Settings

Change port numbers for protocols according to your network environment. ◯**Changing Port Numbers(P. 146)**

> LPD
>   1 to 515 [†] to 65535
>
> RAW
>   1 to 9100 [†] to 65535
>
> WSD Multicast Discovery
>   1 to 3702 [†] to 65535

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HTTP

  1 to 80 † to 65535

SNMP

  1 to 161 † to 65535

## MTU Size Settings

Select the maximum size of packets the machine sends or receives. ❍**Changing the Maximum Transmission Unit(P. 118)**

MTU Size

  1300

  1400

  1500 †

## SNTP Settings

Specify whether to acquire the time from a time server on the network. ❍**Configuring SNTP(P. 126)**

Use SNTP

  Off †

  On

    NTP Server Name

    Polling Interval: 1 to 24 † to 48 (hours)

## Google Cloud Print Settings

Specify settings for using Google Cloud Print.

## Basic Settings

Specify settings such as whether to use Google Cloud Print. ❍**Changing Google Cloud Print Settings(P. 293)**

## Registration Status

Register or deregister the machine with Google Cloud Print. ❍**Registering the Machine with Google Cloud Print(P. 295)**

## SNMP Settings

Specify the settings for monitoring and controlling the machine from a computer running SNMP-compatible software. ❍**Monitoring and Controlling the Machine with SNMP(P. 128)**

**SNMPv1 Settings**

  Use SNMPv1

    Off

    On †

      Use Community Name 1

        Off

        On †

          Community Name

          MIB Access Permission

            Read/Write

            Read Only †

      Use Community Name 2

        Off †

          On

               Community Name

               MIB Access Permission

                    Read/Write

                    Read Only †

       Use Dedicated Community

          Off

          On †

               MIB Access Permission

                    Read/Write

                    Read Only †

**SNMPv3 Settings**

  Use SNMPv3

    Off †

    On

      User Settings 1/User Settings 2/User Settings 3

      Context Settings

**Printer Management Information Acquisition Settings**

  Acquire Printer Management Information from Host

    Off †

    On

## Dedicated Port Settings

Enable or disable the dedicated port. The dedicated port is used when using the Printer Status Window to make machine settings and acquire information about the machine.

Use Dedicated Port
  Off

  On †

Log on to the Remote UI in System Manager Mode ( **Starting the Remote UI(P. 175)** ) ▶ [Settings/Registration] ▶ [Network Settings] ▶ [Dedicated Port Settings] ▶ [Edit] ▶ Select whether to use ▶ [OK]
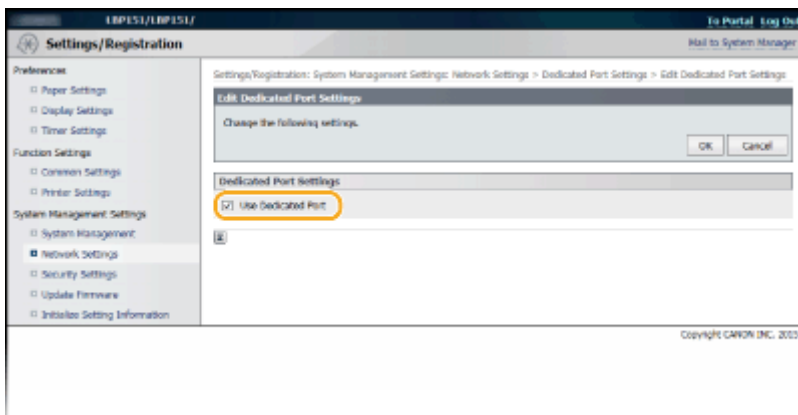
**[Use Dedicated Port]**
Select the check box to use the dedicated port. Clear the check box if you do not want to use it.

**IMPORTANT:**
If you clear the check box, the Printer Status Window cannot acquire machine information.

## Waiting Time for Connection at Startup

Specify a wait time for connecting to a network. Select the setting depending on your network environment. **Setting a Wait Time for Connecting to a Network(P. 120)**

Waiting Time
　0 † to 300 (seconds)

## Ethernet Driver Settings

You can specify the Ethernet communication mode (Half Duplex/Full Duplex) and Ethernet type (10BASE-T/100BASE-TX), and display the MAC address. **Configuring Ethernet Settings(P. 116)**

Auto Detect
　Off
　On †

Communication Mode
　Half Duplex †
　Full Duplex

Ethernet Type
　10BASE-T †
　100BASE-TX

MAC Address (Display only)

## IEEE 802.1X Settings

Specify settings when using IEEE 802.1X. **Configuring IEEE 802.1X Authentication(P. 154)**

## Wireless LAN Settings

You can check wireless LAN settings and status information. Wireless LAN settings cannot be changed from the Remote UI. Make wireless LAN settings from the computer using the MF/LBP Network Setup Tool. ( **Connecting to a Wireless LAN(P. 94)** )

Log on to the Remote UI in System Manager Mode ( **Starting the Remote UI(P. 175)** )
▶ [Settings/Registration] ▶ [Network Settings] ▶ [Wireless LAN Settings] ▶ Check settings and information

**[MAC Address]**
Displays the MAC address of the wireless LAN.

**[Wireless LAN Status]**
Displays the connection status (signal strength) of the wireless LAN.

**[Latest Error Information]**
Displays information about the latest failure to make a wireless LAN connection.

**[Channel]**
Displays the wireless LAN channel that is currently in use.

**[SSID Settings]**
Displays the SSID of the connected wireless LAN router.

**[Security Settings]**
Displays the type of encryption that is currently being applied.

**[WPA/WPA2-PSK Settings]**
Displays the current WPA/WPA2-PSK settings.

## Select Wired/Wireless LAN

Displays whether the used LAN is wireless or wired. Change settings using Network Setting Tool.

## Security Settings

Enable or disable encrypted communication via TLS and IP address packet filtering.

### Remote UI Settings

Select whether to use TLS encrypted communication. **Enabling TLS Encrypted Communication for the Remote UI(P. 151)**

| Use TLS |
| --- |
| Off † |
| On |

### Key and Certificate Settings

Register key pairs, or generate them on the machine. You can check and verify registered key pairs. **Configuring Settings for Key Pairs and Digital Certificates(P. 158)**

### CA Certificate Settings

Register a CA certificate. 62 CA certificates are preinstalled. You can check and verify registered CA certificates.
 ◯**Configuring Settings for Key Pairs and Digital Certificates(P. 158)**

### IP Address Filter

Specify whether to allow or reject packets sent to or received from devices with specified IP addresses.

#### IPv4 Address: Inbound Filter

Reject data received by the machine from a computer with a specified IPv4 address. ◯**Specifying IP Addresses for Firewall Rules(P. 141)**

| Use Filter |
| --- |
| Off † |
| On |
| Blocked Addresses |
| Allowed Addresses |

#### IPv6 Address: Inbound Filter

Reject data received by the machine from a computer with a specified IPv6 address. ◯**Specifying IP Addresses for Firewall Rules(P. 141)**

| Use Filter |
| --- |
| Off † |
| On |
| Blocked Addresses |
| Allowed Addresses |

### MAC Address Filter

Specify whether to allow or reject packets sent to or received from devices with specified MAC addresses.

#### Inbound Filter

Reject data received by the machine from a computer with a specified MAC address. ◯**Specifying MAC Addresses for Firewall Rules(P. 144)**

| Use Filter |
| --- |
| Off † |
| On |
| Allowed Addresses |

## Update Firmware

Update the machine's firmware. ◯**Updating the Firmware(P. 272)**

## Initialize Setting Information

Initializes settings and returns the machine to the factory default state.

### Initialize Menu

Returns the settings in the [Preferences] menu and [Function Settings] menu to the factory default settings. ◯ **Initializing Menu(P. 264)**

**Initialize System Management Settings**

Returns the settings in the [System Management Settings] Menu to the factory default settings. ○**Initializing System Management Settings(P. 266)**

**Initialize Key and Certificate**

Returns key and certificate settings to the factory default settings. ○**Initializing Key and Certificate Settings(P. 269)**

# Troubleshooting

# Troubleshooting

0YFA-03S

When a problem occurs, check this chapter to find out solutions before contacting Canon.

## ■ Paper Jams

If the paper jams, see ❯**Clearing Paper Jams(P. 213)** to remove the jammed paper.

## ■ A Message Appears

If the Printer Status Window displays an error message, see ❯**When an Error Message Appears(P. 218)** .

## ■ Common Problems

If you suspect that the machine is malfunctioning, see the following sections before contacting Canon.

❯**Common Problems(P. 224)**
❯**Installation/Settings Problems(P. 225)**
❯**Printing Problems(P. 228)**

## ■ Printing Results are Not Satisfactory

If printing results are not satisfactory, see ❯**When You Cannot Print Properly(P. 231)** .

## ■ When a Problem Cannot Be Solved

If a problem persists, see the following to find out where to contact. ❯**When a Problem Cannot Be Solved(P. 244)**

# Clearing Paper Jams

If paper jams, the ⚠ (Alarm) indicator flashes, and the message <Paper Jam inside Printer> and paper jam locations are displayed in the Printer Status Window. Clear the jams in the displayed order of jam locations using the procedures described in the sections referred to below. Before starting, carefully read the safety instructions in ⬤**Important Safety Instructions(P. 2)** .



- <Inside the rear cover>

    ⬤**Paper Jams Inside the Rear Cover(P. 214)**

- <Inside the top cover>

    ⬤**Paper Jams Inside the Top Cover(P. 214)**

## IMPORTANT

### When removing the jammed paper, do not turn OFF the machine
Turning OFF the machine deletes the data that is being printed.

### If paper tears
Remove all the paper fragments to prevent them from becoming jammed.

### If paper jams repeatedly

- Tap the paper stack on a flat surface to even the edges of the paper before loading it into the machine.

- Check that the paper is appropriate for the machine. ⬤**Paper(P. 290)**

- Check that no jammed paper fragments remain in the machine.

- If you use paper with a coarse surface, set [Paper Type] to [Bond 1 [60-90 g/m2]], [Bond 2 [91-120 g/m2]] or [Bond 3 [121-163 g/m2]]. ⬤**Basic Printing Operations(P. 45)**

### Do not forcibly remove jammed paper from the machine
Forcibly removing the paper may damage parts in the machine. If you are not able to remove the paper, contact your local authorized Canon dealer or the Canon help line. ⬤**When a Problem Cannot Be Solved(P. 244)**

## NOTE

If you click [Troubleshooting Details], you can display the same troubleshooting methods that are described in this manual.
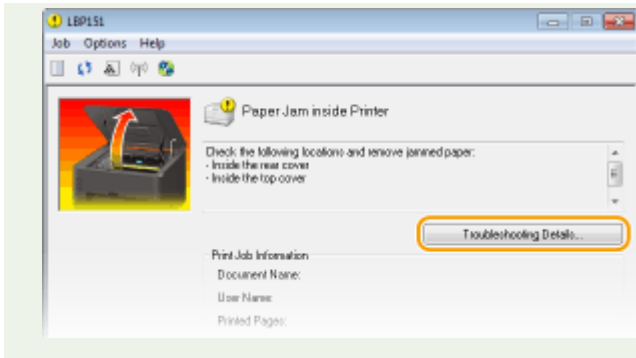
## Paper Jams Inside the Rear Cover

If the jammed paper cannot be removed easily, do not forcibly pull it out, but follow the procedure for a different paper jam location indicated by the message.

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



**2** **Gently pull out the paper.**
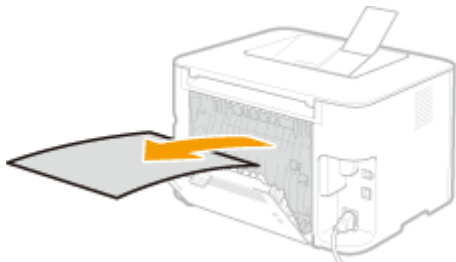


**3** **Close the rear cover.**

» **Continue to** ●**Paper Jams Inside the Top Cover(P. 214)**

## Paper Jams Inside the Top Cover

If the jammed paper cannot be removed easily, do not try to pull it out forcibly. Proceed to the next step.

**1** **Gently pull out the paper.**

**Output tray**
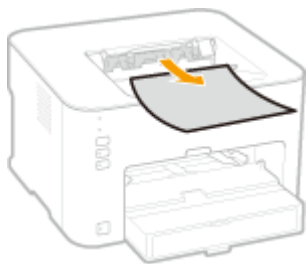
**Multi-purpose tray**

**Drawer**

- Lift the dust cover, and then pull out the paper. If there is paper loaded in the drawer, remove it before proceeding to clear paper jams.
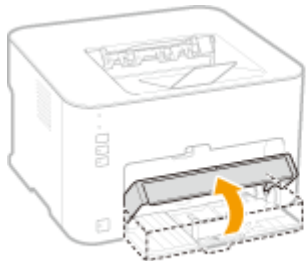
**2** **Close the paper stopper, and then open the top cover.**
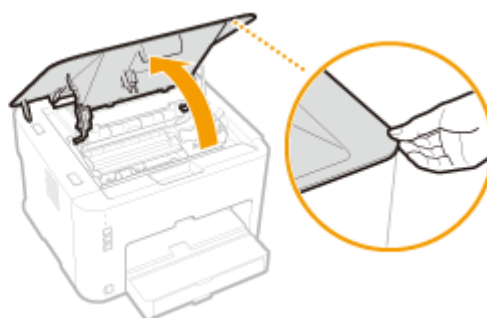
**3** **Remove the toner cartridge.**
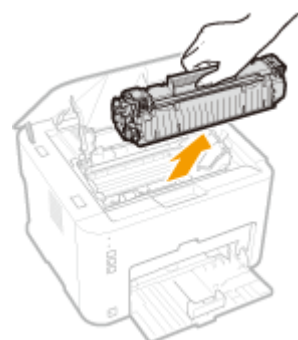
**4** **Gently pull out the document.**

**5** **Check whether paper is jammed inside the paper output guide.**

**1** **Open the paper output guide.**
- Press and hold the green button, and then pull the paper output guide toward you.
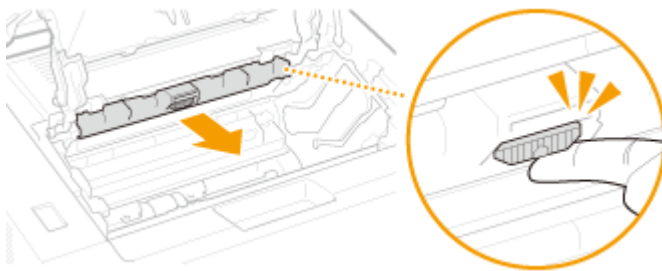


**2** **Gently pull out the paper.**
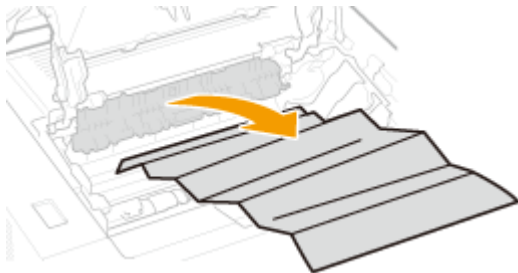


**3** **Close the paper output guide.**
- Make sure that both the left and right sides of the guide are closed firmly.



**6** **Gently pull out the paper.**

- Hold both edges of the paper, pull the leading edge of the paper down, and then pull it out.
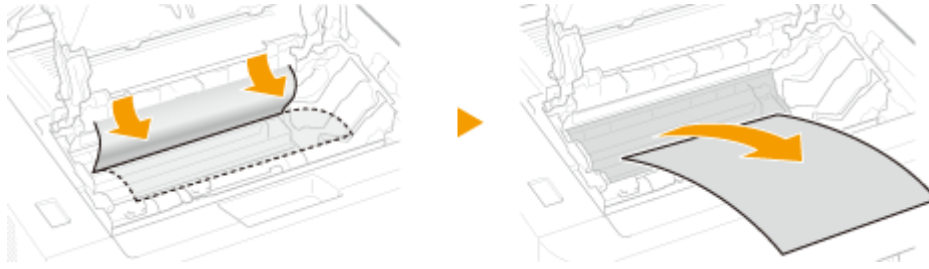
**7** **Replace the toner cartridge.**
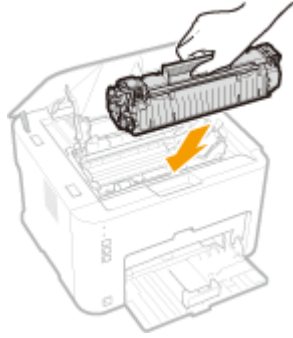


**8** **Close the top cover.**

The paper jam message disappears, and the machine is ready to print.

# When an Error Message Appears

0YFA-03W

An error message appears in the Printer Status Window when there is a problem with print processing, when the machine cannot communicate, or when some other problem prevents normal operation. See the following list for more information about error messages.

## Cannot Communicate with Printer

**In a terminal connection environment, the machine is redirected and a setting problem prevents communication.**

- If the machine has been redirected in a terminal connection environment, such as a remote desktop application or XenAPP (MetaFrame), there may be a problem with firewall or other settings that prevents communication with the machine. Check the communication settings of the server and client. For details, contact your network administrator.

## Cannot Communicate with Server

**Your computer is not connected to the print server.**

- Make the proper connection between your computer and the print server.

**The print server is not running.**

- Start the print server.

**The machine is not shared.**

- Make the proper printer sharing settings. For more information, see the Printer Driver Installation Guide.

**You lack user rights to connect to the print server.**

- Ask the administrator of the print server to change your user rights.

**[Network discovery] is not enabled. (Windows Vista/7/8/Server 2008/Server 2012)**

- Enable [Network discovery].
  ◉**Enabling [Network discovery](P. 316)**

## Cannot Establish Communication with the Cartridge

**The toner cartridge is not installed correctly.**

- Install the toner cartridge correctly.
  ◉**How to Replace Toner Cartridges(P. 256)**

**The toner cartridge is damaged.**

- Replace the toner cartridge with a new one.
  ◉**How to Replace Toner Cartridges(P. 256)**

**IMPORTANT**

- Even when this message is displayed, you can continue printing by clicking ⬛ , though the amount remaining in the toner cartridge cannot be displayed correctly.
- Problems resulting from the use of cartridges that are not Canon products are not covered under the warranty.

## Cannot Retrieve Printer Information

**[Canon LBP Bidi Service] is not enabled on the computer.**

- Set the state of bidirectional communication service (Canon LBP Bidi Service) to [Start].

**[Canon LBP Bidi Service] is not enabled on the server.**

- Set the state of bidirectional communication service (Canon LBP Bidi Service) on the server to [Start]. For more information, contact your server administrator.

### NOTE

**To Enable [Canon LBP Bidi Service]**

- Display [Computer Management], and perform the following procedure. Select [Services and Applications] ▶ [Services] ▶ Right-click [Canon LBP Bidi Service] and then click [Start].

## Check Printed Output

**The paper size specified in the printer driver is different from the size of the paper actually loaded.**

- Load paper of the specified size, and press the 🖶 (Paper) key on the machine.
  ◗**Loading Paper in the Drawer(P. 32)**
  ◗**Loading Paper in the Multi-Purpose Tray(P. 35)**

**The job may not be printed normally.**

- If you are doing 1-sided printing, you can click ⬛ to continue printing. If you continue printing and the results are not satisfactory, print the job again.
- If you are doing 2-sided printing, stop printing, and then print the job again.
  ◗**Canceling Print Jobs(P. 49)**

## Check Printer

**The toner cartridge is not set.**

- Set the toner cartridge correctly.
  ◗**How to Replace Toner Cartridges(P. 256)**

**There is paper from a paper jam left inside the machine.**

- Thoroughly check for fragments of paper that may be left inside the machine. If you find any, remove them. If the paper is difficult to remove, do not try to forcibly pull it out of the machine. Follow the instructions in the manual to remove paper.

**�Clearing Paper Jams(P. 213)**

## Communication Error

**The USB cable is not properly connected.**

- Reconnecting the USB cable may solve the problem. For more information, see the Printer Driver Installation Guide.

**The machine is not turned ON.**

- The ⏻ (Power) indicator does not light if the machine is not turned ON. Turn it ON. If the machine does not respond when you press the power switch, check to make sure that the power cord is connected correctly and then try again to turn the power ON.
  **◯Turning the Power ON(P. 26)**

## Incompatible Printer

**A printer other than this machine is connected.**

- Make the proper connection between your computer and the machine.
  **◯Connecting to a Wired LAN(P. 92)**
  **◯Connecting to a Wireless LAN(P. 94)**

> **NOTE**
>
> If you are not sure on how to make a USB connection, see the Printer Driver Installation Guide.

## Incorrect Port

**The machine is connected to an unsupported port.**

- Check the port.
  **◯Checking the Printer Port(P. 320)**

> **NOTE**
>
> **If the port you need is not available**
>
> - If you are using a network connection, configure the port. **◯Configuring Printer Ports(P. 110)**
>
> - If you are using a USB connection, reinstall the printer driver. For more information, see the Printer Driver Installation Guide.

## Insufficient Printer Memory

**The document being printed contains a page with a very large amount of data.**

- This machine cannot print the data. Click ![cancel icon] to cancel the print job.

## Network Communication Error

**The machine is not connected via the network.**

- Make the proper network connection between your computer and the machine.
  **◯Connecting to a Wired LAN(P. 92)**
  **◯Connecting to a Wireless LAN(P. 94)**

**The machine is not turned ON.**

- The ⏻ (Power) indicator does not light if the machine is not turned ON. Turn it ON. If the machine does not respond when you press the power switch, check to make sure that the power cord is connected correctly and then try again to turn the power ON.
  **◯Turning the Power ON(P. 26)**

**Communication is restricted by a firewall.**

- Ask the system manager of the machine about the problem.
  **◯Restricting Communication by Using Firewalls(P. 140)**

- If the machine cannot be accessed because of incorrect settings, use the reset button to initialize the settings.
  **◯Initializing Settings by Using the Reset Button(P. 267)**

## Non-Canon Cartridge May Be in Use

**IMPORTANT**

- Even when this message is displayed, you can continue printing by clicking ![icon] , though the print quality may deteriorate. Doing so may also result in damage to the machine.

## Now in Firmware Update Mode

**The machine is in firmware update mode.**

- The machine cannot print as it is entering firmware update mode. Print again after the firmware has been updated or after canceling firmware update mode.

**NOTE**

- Firmware update mode can be canceled before firmware is updated. Click the Printer Status Window's [Options] menu ▶ [Utility] ▶ [Enter/Cancel Firmware Update Mode] ▶ [OK].

![Enter/Cancel Firmware Update Mode dialog box showing "Cancel firmware update mode." with OK and Cancel buttons]
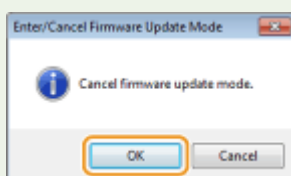
- Once a firmware update has started, firmware update mode cannot be canceled.

## Out of Paper

**No paper is loaded in the specified paper source.**

- Load the paper according to the supplementary information displayed below the message. If you loaded paper in the drawer, press the ⬇ (Paper) key on the machine.
  ◉**Loading Paper in the Drawer(P. 32)**
  ◉**Loading Paper in the Multi-Purpose Tray(P. 35)**

## Paper Jam inside Printer

**There is a paper jam inside the machine.**

- Do not try to forcibly pull jammed paper out of the machine. Follow the instructions in the manual to remove paper.
  ◉**Clearing Paper Jams(P. 213)**

## Replace Cartridge

**The toner cartridge has reached the end of its lifetime.**

- Replacing the toner cartridge with a new one is recommended.
  ◉**How to Replace Toner Cartridges(P. 256)**

**IMPORTANT**

- If ⬌ is enabled, you can click it to continue printing, but the print quality may deteriorate. Doing so may also result in damage to the machine.

## Service Error

**An error has occurred inside the machine.**

- Turn OFF the machine, wait for at least 10 seconds, and turn it back ON. If the message does not reappear, you can continue using the machine.

- If the same message reappears after you turn the power back ON, turn the power OFF, unplug the power plug from the AC power outlet and contact your local authorized Canon dealer. Make a note of the error code that is displayed, and have it ready when you contact your local authorized Canon dealer.
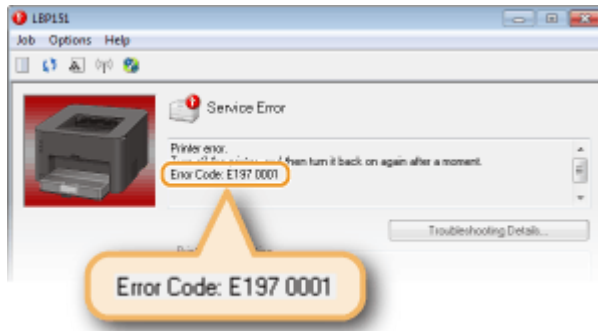
## Top Cover Open

**The top cover is not completely shut.**

- Shut the top cover firmly.
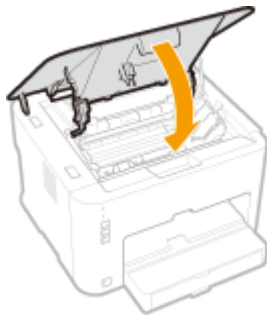


### NOTE

If the top cover will not close completely, check to make sure that the toner cartridge has been pushed all the way in.

## Updating Firmware

**The firmware is being updated.**

- Printing is not possible while the firmware is being updated. Print again after the firmware has been updated.

# Common Problems

0YFA-03X

If you encounter problems when using the machine, check the items in this section before contacting us. If the problems persist, contact your local authorized Canon dealer or the Canon help line.

## Check the Following

### ➜ Is the machine turned ON? / Is the power cord connected?

- The ⏻ (Power) indicator does not light if the machine is not turned ON. If the machine does not respond when you press the power switch, check to make sure that the power cord is connected correctly and then try again to turn the power ON.
  **⊙Turning the Power ON(P. 26)**

### ➜ Is the machine connected via wireless LAN, a LAN cable or a USB cable?

- Check whether the machine is connected correctly. In the case of wireless LAN, check whether the (Wi-Fi) indicator is lit. If it is not lit, the machine is not connected via wireless LAN.
  **⊙When the machine cannot connect to the wireless LAN(P. 226)**

### ➜ Does the Printer Status Window display an error message?

- If a problem occurs, a message is displayed in the window.
  **⊙Printer Status Window(P. 23)**
  **⊙When an Error Message Appears(P. 218)**

### If a problem persists even after checking

Click the link that corresponds to the problem.

**⊙Installation/Settings Problems(P. 225)**
**⊙Printing Problems(P. 228)**

# Installation/Settings Problems

0YFA-03Y

Together with this section, see ❯**Common Problems(P. 224)** .

❯**Problems with the Wireless/Wired LAN Connection(P. 225)**
❯**Problems with the USB Connection(P. 227)**
❯**Problems via the Print Server(P. 227)**

## Problems with the Wireless/Wired LAN Connection

### The wireless LAN and wired LAN cannot be connected at the same time.

- The wireless LAN and wired LAN cannot be connected at the same time. You can use the USB and wireless LAN or the USB and wired LAN at the same time.

### Remote UI is not displayed.

- If the machine is connected to a wireless LAN, check that the (Wi-Fi) indicator is lit and the IP address is set correctly, and then start the Remote UI again.
  ❯**Front Side(P. 16)**
  ❯**Viewing Network Settings(P. 104)**

- If the machine is connected to a wired LAN, check that the cable is connected firmly and the IP address is set correctly, and then start the Remote UI again.
  ❯**Connecting to a Wired LAN(P. 92)**
  ❯**Viewing Network Settings(P. 104)**

- Are you using a proxy server? If you are using a proxy server, add the machine's IP address to the [Exceptions] list (addresses that do not use the proxy server) in the Web browser's proxy settings dialog.

- Is communication on your computer restricted by a firewall? If the Remote UI cannot be displayed because of incorrect settings, use the reset button to initialize the settings.
  ❯**Restricting Communication by Using Firewalls(P. 140)**
  ❯**Initializing Settings by Using the Reset Button(P. 267)**

### A connection to a network cannot be established.

- The connection settings may not be set correctly. Use the MF/LBP Network Setup Tool to configure the connection settings. For more information, see the Printer Driver Installation Guide.

- When connecting to a wireless LAN, check whether the machine is properly installed and ready to connect to the network.
  ❯**When the machine cannot connect to the wireless LAN(P. 226)**

### You are unsure of the IP address that was set.

❯**Viewing Network Settings(P. 104)**

### You cannot change from wireless LAN to wired LAN.

- Did you use the MF/LBP Network Setup Tool to configure the wired LAN connection settings? If you did not, you cannot change the connection method from wireless LAN to wired LAN for this machine. When

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configuring the settings, select [Custom Setup] for the setting method. For more information, see the Printer Driver Installation Guide.

## When the machine is connected to a wired LAN connection, the LNK indicator is off.

- Use a straight-through Ethernet cable for the wired LAN connection.
- Check that the hub or router is turned ON.
- Do not connect the cable to the UP-LINK (cascade) port of the hub.
- Change the LAN cable.

## When the machine cannot connect to the wireless LAN

**1**

**Check the status of your computer**

- Have the settings of the computer and the wireless router been completed?
- Are the cables of the wireless router (including the power cord and LAN cable) correctly plugged in?
- Is the wireless router turned ON?

**If the problem persists even after checking the above:**

- Turn OFF all of the devices, and then turn them ON again.
- Wait for a while, and try again to connect to the network.

▼

**2**

**Check whether the machine is turned ON**

- The  (Power) indicator does not light if the machine is not turned ON.
- If the machine is turned ON, turn it OFF, and then turn it back ON.

▼

**3**

**Check the installation site of the machine and the wireless router**

- Is the machine too far from the wireless router?
- Are there any obstacles such as walls between the machine and the wireless router?
- Are there any appliances such as microwave ovens or digital cordless phones that emit radio waves near the machine?



50 m or less

▼

**4**
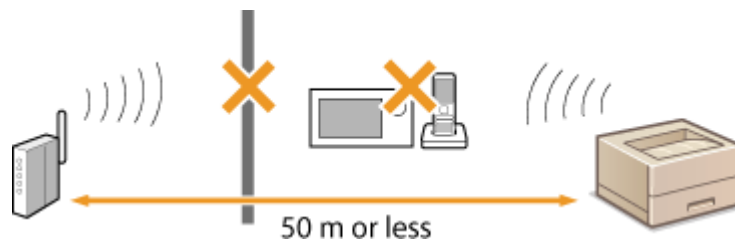
**Reset the wireless LAN settings**
 **Connecting to a Wireless LAN(P. 94)**

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> **NOTE**
>
> **When you need to manually set up the connection**
>
> If the wireless router is set up as described below, enter the required information manually.
>
> - The stealth function is enabled.
>
> - ANY connection refusal* is enabled.
>
> - The automatically generated WEP key (hexadecimal) is selected.
>
> * A function in which the wireless router refuses the connection if the SSID of the device to be connected is set to "ANY" or is blank.
>
> **When you need to change the settings of the wireless router**
>
> If the wireless router is set up as described below, change the settings of the router.
>
> - MAC address filtering is enabled.
>
> - When only IEEE 802.11n is used for the wireless communication, WEP is selected or the WPA/WPA2 encryption method is set to TKIP.

## Problems with the USB Connection

### Communication is not possible.

- Exchange the USB cable. If the USB cable is a long one, exchange it for a shorter one.

- If you are using a USB hub, connect the machine directly to your computer using a USB cable.

### The machine is registered as a modem

- The machine may be automatically registered as a modem depending on the version of the Mac operating system. If you change the settings, communication with the machine may be disrupted while settings are changed. Use the machine without changing the settings.

## Problems via the Print Server

### You cannot find the print server to connect to.

- Are the print server and computer connected correctly?

- Is the print server running?

- Do you have user rights to connect to the print server? If you are not sure, consult the print server's administrator.

- Is [Network discovery] enabled? (Windows Vista/7/8/Server 2008/Server 2012)
  ◯**Enabling [Network discovery](P. 316)**

### You cannot connect to a shared printer.

- On the network, does the machine appear among the printers of the print server? If it is not displayed, contact the network or server administrator.
  ◯**Displaying Shared Printers in the Print Server(P. 317)**

# Printing Problems

0YFA-040

Together with this section, see ◐**Common Problems(P. 224)** . For problems related to connection with the computer, see ◐**Installation/Settings Problems(P. 225)** .

## Printing results are not satisfactory, or the paper is curled or wrinkled.
◐**When You Cannot Print Properly(P. 231)**

## You cannot print.

● Can you print a Windows test page? If you can print a Windows test page, there is no problem with the machine or the printer driver. Check the print settings of your application.
◐**Printing a Test Page in Windows(P. 318)**

If you cannot print a test page, check the following according to your environment.

■ Wireless LAN connection

● Check the connection status (signal strength) of the wireless LAN.
◐**Viewing Network Settings(P. 104)**

**NOTE:**

If the connection is poor, try the following.

● Change the channel of your wireless LAN router. If you have more than one router, set the channels to be at least five channels apart.

● If you can change the radio output power of your wireless LAN router, raise the output power.

● If your computer is connected to the wireless LAN, are the computer and this machine using the same wireless LAN router SSID? If they are different, reset the wireless LAN connection settings of this machine.
◐**Viewing Network Settings(P. 104)**
◐**Checking the SSID to Which Your Computer Is Connected(P. 321)**
◐**Connecting to a Wireless LAN(P. 94)**

**NOTE:**

**When you reset wireless LAN connection settings**

● When making settings with the MF/LBP Network Setup Tool, select [Easy Setup] ▶ [My wireless LAN access point does not have a WPS button or I cannot find the button].

● As the wireless LAN router, select the one with the SSID to which the computer is connected.

● Have you selected the correct port? If there is no port to use, create a port.
◐**Checking the Printer Port(P. 320)**
◐**Configuring Printer Ports(P. 110)**

● Is communication on your computer restricted by a firewall? If the machine cannot be accessed because of incorrect settings, use the reset button to initialize the settings.
◐**Restricting Communication by Using Firewalls(P. 140)**
◐**Initializing Settings by Using the Reset Button(P. 267)**

● Disable security software and other resident software.

● Reinstall the printer driver in accordance with the Printer Driver Installation Guide.

● Can you print from other computers on the network? If you also cannot print from other computers, contact your local authorized Canon dealer or the Canon help line.

■ Wired LAN connection

● Have you selected the correct port? If there is no port to use, create a port.
   ◉**Checking the Printer Port(P. 320)**
   ◉**Configuring Printer Ports(P. 110)**

● Is communication on your computer restricted by a firewall? If the machine cannot be accessed because of incorrect settings, use the reset button to initialize the settings.
   ◉**Restricting Communication by Using Firewalls(P. 140)**
   ◉**Initializing Settings by Using the Reset Button(P. 267)**

● Disable security software and other resident software.

● Reinstall the printer driver in accordance with the Printer Driver Installation Guide.

● Can you print from other computers on the network? If you also cannot print from other computers, contact your local authorized Canon dealer or the Canon help line.

■ USB connection

● Have you selected the correct port? If there is no port to use or you are not sure, reinstall the printer driver in accordance with the Printer Driver Installation Guide. When you reinstall the printer driver, the correct port is created automatically.
   ◉**Checking the Printer Port(P. 320)**

● Disable security software and other resident software.

● Connect to another USB port on the computer.

● Delete the USB class driver, and then reinstall the printer driver. For more information, see the Printer Driver Installation Guide.

● Can you print from a USB connection to another computer? If you also cannot print from other computers, contact your local authorized Canon dealer or the Canon help line.

■ Via print server

● Can you print from the print server? If you can print from the print server, check the connection between your computer and the print server.
   ◉**Problems via the Print Server(P. 227)**

● Disable security software and other resident software.

● Reinstall the printer driver in accordance with the Printer Driver Installation Guide.

● Can you print from other computers via the print server? If you also cannot print from other computers, contact your local authorized Canon dealer or the Canon help line.

**You cannot print with Google Cloud Print.**

⬤**Using Google Cloud Print(P. 293)**

**It takes a long time before printing starts.**

● Did you print on narrow paper? After you print to narrow width paper, the machine may cool itself to maintain the print quality. As a result, it may take some time before the next job is printed. Wait until the machine is ready to print. Printing will resume when the temperature inside the machine has fallen.

**A blank sheet is output (nothing is printed).**

● Did you pull the sealing tape out when loading the toner cartridge? If you did not pull it out, remove the toner cartridge, pull the sealing tape out, and reload the toner cartridge.
⬤**How to Replace Toner Cartridges(P. 256)**

# When You Cannot Print Properly

0YFA-041

If printing results are not satisfactory, or paper creases or curls, try the following solutions. If the problems persist, contact your local authorized Canon dealer or the Canon help line.
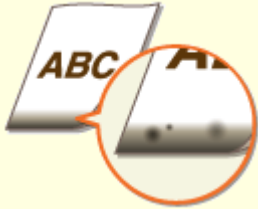
**▶Smudge Marks Appear on the Bottom Edge of Printouts(P. 233)**

**▶Streaks Appear on Printouts(P. 233)**

**▶Toner Smudges and Splatters Appear(P. 234)**

**▶Afterimages Appear in Blank Areas(P. 235)**

**▶Printouts Are Faded(P. 235)**
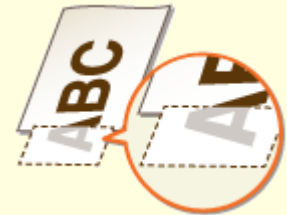
**▶A Portion of the Page Is Not Printed/Printing Position is Wrong(P. 236)**

**▶White Streaks Appear/Printing is Uneven(P. 236)**

**▶White Spots Appear(P. 237)**

**▶Black Spots Appear(P. 238)**

❭**Reverse Side of Paper is Smudged(P. 238)**



❭**Printouts Are Grayish(P. 238)**



❭**Printed Barcode Cannot Be Read(P. 239)**



❭**Paper Creases(P. 240)**



❭**Paper Curls(P. 240)**



❭**Printouts Are Skewed(P. 242)**



❭**Paper Is Not Fed/Two or More Sheets Are Fed Together(P. 242)**



❭**Paper Jams Frequently with 2-Sided Printing(P. 243)**

# Printing Results Are Not Satisfactory

0YFA-042

Grime inside the machine may affect printing results. First try cleaning the machine. ○**Cleaning the Machine(P. 248)**

## Smudge Marks Appear on the Bottom Edge of Printouts
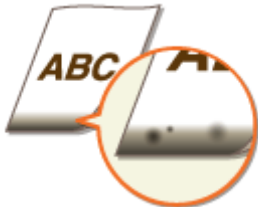


### ➔ Did you print data without margins, all the way to the edge of the page?

● This symptom occurs if a margin is set to none in the printer driver. The range that can be printed on this machine is the range inside a 5 mm margin around the edge of the paper or a 10 mm margin around the edge of envelopes. Make sure to have margins around the document to print.

**[Finishing] tab** ▶ **[Advanced Settings]** ▶ **[Expand Print Region and Print]** ▶ **[Off]**

## Streaks Appear on Printouts



### ➔ Are you using appropriate paper?

● Check the usable paper types, and replace with appropriate paper.
○**Paper(P. 290)**

● In the Printer Status Window, change the setting of [Special Print Adjustment]. The improvement effect is weakest for [Mode 1] and strongest for [Mode 4]. Try the adjustment starting with [Mode 1].
○**Displaying the Printer Status Window(P. 23)**

**[Options]** ▶ **[Device Settings]** ▶ **[Assisting Print Settings]** ▶ **[Special Print Adjustment]** ▶ **Select mode**

● In the Printer Status Window, enable [Use Special Print Adjustment D].
○**Displaying the Printer Status Window(P. 23)**

**[Options]** ▶ **[Device Settings]** ▶ **[Assisting Print Settings]** ▶ **Select the [Use Special Print Adjustment D] check box**

● In the printer driver, change the setting of [Special Print Adjustment]. The improvement effect is weakest for [Mode 1] and strongest for [Mode 4]. Try the adjustment starting with [Mode 1].

**[Finishing] tab** ▶ **[Advanced Settings]** ▶ **[Special Print Adjustment]** ▶ **Select mode**

**NOTE:**

When you select a stronger improvement effect, the overall print density becomes lighter. Also, edges may become less sharp and details may be rougher.

➔ **Toner may adhere when you replace the toner cartridge or when you leave the machine without printing for a long period.**

● In the Printer Status Window, change the setting of [Special Print Adjustment B]. The improvement effect is weakest for [Mode 1] and strongest for [Mode 3]. Try the adjustment starting with [Mode 1].
❍**Displaying the Printer Status Window(P. 23)**

**[Options]** ▶ **[Device Settings]** ▶ **[Assisting Print Settings]** ▶**[Special Print Adjustment B]** ▶ **Select mode**

**NOTE:**

When you select a stronger improvement effect, printing speed becomes slower.

## Toner Smudges and Splatters Appear



➔**Are you using appropriate paper?**

● Check the usable paper types, and replace with appropriate paper.
❍**Paper(P. 290)**

● In the Printer Status Window, enable [Use Special Print Adjustment U].
❍**Displaying the Printer Status Window(P. 23)**

**[Options]** ▶ **[Device Settings]** ▶ **[Assisting Print Settings]** ▶ **Select the [Use Special Print Adjustment U] check box**

**IMPORTANT:**

When you select this check box, print quality may be lower for some types of paper (especially thin paper) and some printing environments (especially environments with high humidity). In that case, clear the check box.

➔**Is it time to replace the toner cartridge?**

● Materials inside the toner cartridge may have deteriorated. Replace the toner cartridge.
❍**How to Replace Toner Cartridges(P. 256)**

## Afterimages Appear in Blank Areas

➡ **Are you using appropriate paper?**

- Check the usable paper types, and replace with appropriate paper.
  ❱**Paper(P. 290)**

➡ **Is it time to replace the toner cartridge?**

- Materials inside the toner cartridge may have deteriorated. Replace the toner cartridge.
  ❱**How to Replace Toner Cartridges(P. 256)**

## Printouts Are Faded

➡**Is the amount remaining in toner cartridge running low?**

- Remove the toner cartridge, shake it 5 or 6 times to evenly distribute the toner inside the cartridge, and then reload it into the machine.
  ❱**Using Up All of the Toner(P. 254)**

➡**Are you using appropriate paper?**

- Check the usable paper types, and replace with appropriate paper.
  ❱**Paper(P. 290)**

➡**Have you specified the correct paper type?**

- Specify the type of paper again, according to the type of paper that you are using.
  ❱**Basic Printing Operations(P. 45)**

**➜Are you using the machine in a special environment (in particular, a low-temperature environment)?**

● In the Printer Status Window, enable [Use Special Print Adjustment K].
  ◯**Displaying the Printer Status Window(P. 23)**

  **[Options]** ▶ **[Device Settings]** ▶ **[Assisting Print Settings]** ▶ **Select the [Use Special Print Adjustment K] check box**

## A Portion of the Page Is Not Printed/Printing Position is Wrong
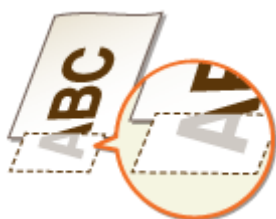


**➜Did you print data without margins, all the way to the edge of the page?**

● This symptom occurs if a margin is set to none in the printer driver. The range that can be printed on this machine is the range inside a 5 mm margin around the edge of the paper or a 10 mm margin around the edge of envelopes. Make sure to have margins around the document to print.

  **[Finishing] tab** ▶ **[Advanced Settings]** ▶ **[Expand Print Region and Print]** ▶ **[Off]**

## White Streaks Appear/Printing is Uneven



**➜ Is the amount remaining in toner cartridge running low?**

● Remove the toner cartridge, shake it 5 or 6 times to evenly distribute the toner inside the cartridge, and then reload it into the machine.
  ◯**Using Up All of the Toner(P. 254)**

**➜ Is it time to replace the toner cartridge?**

● Materials inside the toner cartridge may have deteriorated. Replace the toner cartridge.
  ◯**How to Replace Toner Cartridges(P. 256)**

➔ **Is printing sometimes uneven when printing fine lines?**

● In the Printer Status Window, enable [Use Special Print Adjustment J].
   ◗**Displaying the Printer Status Window(P. 23)**

   **[Options]▶ [Device Settings] ▶ [Assisting Print Settings] ▶Select the [Use Special Print Adjustment J] check box**

## White Spots Appear



➔ **Are you using paper that has absorbed moisture?**

● Replace with appropriate paper.
   ◗**Paper(P. 290)**

➔ **Are you using appropriate paper?**

● Check the usable paper types, and replace with appropriate paper.
   ◗**Paper(P. 290)**

➔ **Is it time to replace the toner cartridge?**

● Materials inside the toner cartridge may have deteriorated. Replace the toner cartridge.
   ◗**How to Replace Toner Cartridges(P. 256)**

➔ **Are you printing a document with strong contrasts between light and dark, and does the white appear around text or edges in an image?**

● In the Printer Status Window, change the setting of [Special Print Mode] to [Special Settings 2].
   ◗**Displaying the Printer Status Window(P. 23)**

   **[Options] ▶ [Device Settings] ▶ [Assisting Print Settings] ▶ [Special Print Mode] ▶ [Special Settings 2]**

   **NOTE:**

   ● Compared to the [Off] setting, the [Special Settings 2] setting selects lighter print density.
   ● You can also change this setting from the printer driver's [Finishing] tab ▶ [Advanced Settings] ▶ [Special Print Mode] ▶ [Special Settings 2].

## Black Spots Appear

→ **Have you cleaned the fixing unit?**

- Clean the fixing unit.
  ◉**Fixing Unit(P. 249)**

## Reverse Side of Paper is Smudged

→ **Have you loaded paper that is smaller than the size of the print data?**

- Check to make sure that the paper size matches the size of the print data.

## Printouts Are Grayish

→ **Is the machine installed in a location where it is exposed to direct sunlight?**

- Move the machine to a location where it is not exposed to direct sunlight.
  ◉**Relocating the Machine(P. 271)**

→ **Was the toner cartridge been left in direct sunlight for a long period of time?**

- Store the toner cartridge in an appropriate location for two to three hours, then try printing again. This may solve the problem. If the problem persists, replace the toner cartridge.

⊙**How to Replace Toner Cartridges(P. 256)**

## Printed Barcode Cannot Be Read

➜ **Are you trying to read a small barcode or one with thick lines?**

● Enlarge the barcode.

● In the Printer Status Window, change the setting of [Special Print Mode] to [Special Settings 1].
⊙**Displaying the Printer Status Window(P. 23)**

**[Options]** ▶ **[Device Settings]** ▶ **[Assisting Print Settings]** ▶ **[Special Print Mode]** ▶ **[Special Settings 1]**

**NOTE:**

● When you specify [Special Settings 1], printouts may be faded.

● You can also change this setting from the printer driver's [Finishing] tab ▶ [Advanced Settings] ▶ [Special Print Mode] ▶ [Special Settings 1].

# Paper Creases or Curls

0YFA-043

## Paper Creases



### ➜ Is the paper loaded correctly?

- Paper may crease when it is not loaded below the load limit guides, or when it is loaded obliquely.
  ◉**Loading Paper in the Drawer(P. 32)**
  ◉**Loading Paper in the Multi-Purpose Tray(P. 35)**

### ➜ Are you using paper that has absorbed moisture?

- Replace with appropriate paper.
  ◉**Paper(P. 290)**

- In the Printer Status Window, change the setting of [Special Print Adjustment V]. The improvement effect is weakest for [Mode 1] and strongest for [Mode 3]. Try the adjustment starting with [Mode 1].
  ◉**Displaying the Printer Status Window(P. 23)**

  [Options] ▶ [Device Settings] ▶ [Assisting Print Settings] ▶ [Special Print Adjustment V] ▶ Select mode

  **NOTE:**

  When you select a stronger improvement effect, printing speed may be slower.

### ➜ Are you using appropriate paper?

- Check the usable paper types, and replace with appropriate paper.
  ◉**Paper(P. 290)**

## Paper Curls

### ➔ Are you using paper that has absorbed moisture?

● Replace with appropriate paper.
  ❍**Paper(P. 290)**

● If you have set [Paper Type] to [Plain [60-89 g/m2]], try printing after setting [Paper Type] to [Plain L [60-89 g/m2]].
  ❍**Basic Printing Operations(P. 45)**

  **NOTE:**

  When you set [Paper Type] to [Plain L [60-89 g/m2]], printouts may appear faded because toner does not adhere adequately to the paper.

● In the Printer Status Window, change the setting of [Special Print Adjustment V]. The improvement effect is weakest for [Mode 1] and strongest for [Mode 3]. Try the adjustment starting with [Mode 1].
  ❍**Displaying the Printer Status Window(P. 23)**

  [Options] ▶ [Device Settings] ▶ [Assisting Print Settings] ▶ [Special Print Adjustment V] ▶ Select mode

  **NOTE:**

  When you select a stronger improvement effect, printing speed may be slower.

### ➔Are you using appropriate paper?

● Check the usable paper types, and replace with appropriate paper.
  ❍**Paper(P. 290)**

# Paper Is Fed Incorrectly

0YFA-044

## Printouts Are Skewed



### ➔ Are the paper guides aligned with the edges of the paper?

- If the paper guides are too loose or too tight, the printouts are skewed.
  **❍Loading Paper(P. 30)**

### ➔ Is the paper source the multi-purpose tray?

- Load the paper into the drawer.
  **❍Loading Paper in the Drawer(P. 32)**

### ➔ Are you printing on curled envelopes?

- Uncurl the envelopes, and print again.
  **❍Loading Envelopes(P. 38)**

## Paper Is Not Fed/Two or More Sheets Are Fed Together



### ➔ Is the paper loaded correctly?

- Fan the paper stack thoroughly so that the sheets are not stuck together.

- Check whether the paper is loaded correctly.
  **❍Loading Paper in the Drawer(P. 32)**
  **❍Loading Paper in the Multi-Purpose Tray(P. 35)**

- Check whether the number of sheets of paper loaded is appropriate and whether the appropriate paper is used.

◗**Paper(P. 290)**

- Check whether mixed sizes and types of paper are loaded together.

## Paper Jams Frequently with 2-Sided Printing



➜ **Does paper jam frequently especially with lightweight paper or curled paper during 2-sided printing?**

- In the Printer Status Window, enable [Use Special Print Adjustment I].
  ◗**Displaying the Printer Status Window(P. 23)**

  **[Options] ▶ [Device Settings] ▶ [Assisting Print Settings] ▶ Select the [Use Special Print Adjustment I] check box**

# When a Problem Cannot Be Solved

0YFA-045

If a problem cannot be resolved, contact your local authorized Canon dealer or the Canon help line.

> **IMPORTANT**
>
> **Do not disassemble or repair the machine yourself**
> If you disassemble or repair the machine yourself, it may not be covered by warranty.

## ■When Contacting Canon

When contacting us, have the following information ready.

- Product name (LBP151dw)
- Dealer where you purchased the machine
- Details about your problem (such as what you did, what happened as a result, and any messages that were displayed)
- Serial number (10 alphanumeric characters long, found on the label on the back side of the machine)

# Maintenance

# Maintenance

0YFA-047

This chapter describes upkeep of the machine, including how to clean the machine and print setting lists.

■ Basic Maintenance ❯**Cleaning the Machine(P. 248)**

- The machine becomes dirty ❯**Exterior(P. 248)**
- Smudge marks appear on printouts ❯**Fixing Unit(P. 249)**

■ Replacing Toner Cartridges ❯**Replacing Toner Cartridges(P. 250)**

- If you want to use all of the toner ❯**Using Up All of the Toner(P. 254)**
- How to replace toner cartridges ❯**How to Replace Toner Cartridges(P. 256)**

■ Printing Setting Lists

If you want to print a list of machine settings ❯**Printing Setting Lists(P. 258)**

■ Checking the Total Pages Printed by the Machine

If you want to check the total number of pages printed by the machine ❯**Viewing the Page Counter Value(P. 260)**

■ Checking Consumables

If you want to check information about consumables for the machine ❯**Checking Consumables(P. 261)**

■ Initializing Settings

If you want to restore settings to the factory defaults ❯**Initializing Settings(P. 263)**

■ Relocating the Machine
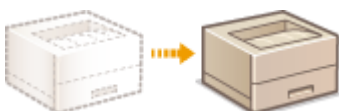
If you want to relocating the machine for maintenance or an office move ❯ **Relocating the Machine(P. 271)**

## ■ Updating the Firmware

If you want to update the firmware to the latest version ▶**Updating the Firmware(P. 272)**

# Cleaning the Machine

0YFA-048

Clean the machine regularly to prevent deterioration in printing quality and to ensure safe and trouble-free operation. Carefully read the safety instructions before you start cleaning. ○**Maintenance and Inspections(P. 8)**

**Where to Clean**

ⓐ Exterior of the machine and ventilation slots

   ○**Exterior(P. 248)**

ⓑ Internal fixing unit

   ○**Fixing Unit(P. 249)**

## Exterior

Regularly wipe the exterior of the machine to keep it in good condition. Wipe the ventilation slots regularly to keep it free of dust.

**1** **Turn OFF the machine, and unplug the power plug from the AC power outlet.**

● When you turn OFF the machine, data that is waiting to be printed is deleted.

**2** **Wipe the exterior of the machine and the ventilation slots.**

● Use a soft, well-wrung-out cloth dampened with water or a mild detergent diluted with water.

● For the location of the ventilation slots, see ○**Back Side(P. 18)** .

**3** **Wait for the exterior of the machine to dry completely.**

**4** **Plug the power cord back into the AC power outlet.**

## Fixing Unit

Dirt may adhere to the fixing unit inside the machine and cause smudges and black streaks to appear on printouts. If this occurs, proceed as follows to clean the fixing unit. Note that you cannot clean the fixing when the machine has documents waiting to be printed. To clean the fixing unit, you need normal A4 size paper. Before starting, load A4 size paper in the multi-purpose tray. ○**Loading Paper in the Multi-Purpose Tray(P. 35)**

**1** **Select the machine by clicking** 📇 **in the system tray.**

**2** **Select [Options] ▶ [Utility] ▶ [Cleaning].**
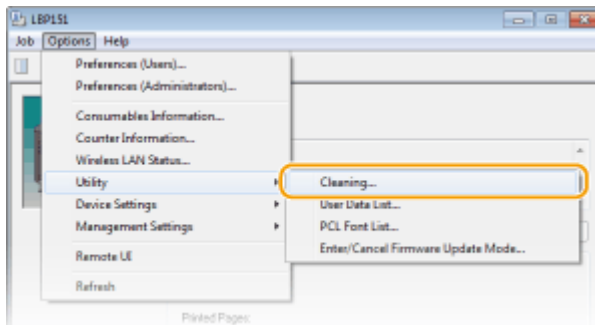
**3** **Click [OK].**
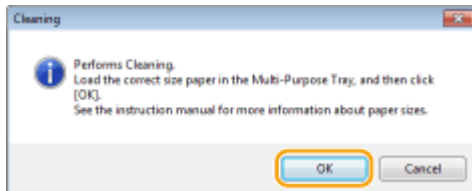
ⓘ⇒ The paper is fed slowly into the machine, and cleaning starts. The cleaning is done when the paper is completely ejected.

● Cleaning cannot be cancelled once it starts. Wait until it finishes (approx. 90 seconds).

# Replacing Toner Cartridges

<div align="right">0YFA-049</div>

When the amount remaining in the toner cartridge is low, a message is displayed in the Printer Status Window. Note that using the machine under this condition may result in poor print quality. You can also check the amount remaining in the toner cartridge in the Printer Status Window.

◉**When a Toner Cartridge Related Message Is Displayed(P. 250)**
◉**If Symptoms Like the Following Appear(P. 252)**
◉**Checking the Amount Remaining in the Toner Cartridge(P. 253)**

## ■ When a Toner Cartridge Related Message Is Displayed

The message that is displayed differs depending on amount remaining in the toner cartridge. Prepare a new toner cartridge or replace the toner cartridge depending on the message. ◉**How to Replace Toner Cartridges(P. 256)** ◉ **Consumables(P. 292)**

### <The cartridge needs to be replaced soon. >

This message notifies you that the toner cartridge needs to be replaced soon. Prepare a new toner cartridge. We recommend that you replace the toner cartridge if you see this message before you start to print a large job.



---
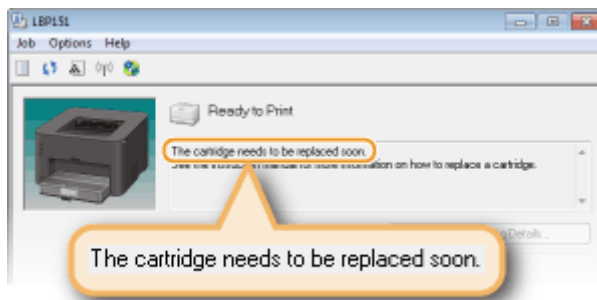
**Specifying the Toner Remaining Amount to Display the Message**

You can set the amount remaining in the toner cartridge (in %) to display the message in increments of 1%. By factory default, this is set to 10 %.

**1** Select the machine by clicking 🖼 in the system tray.



**2** Select [Options] ▶ [Device Settings] ▶ [Warning Display Details].
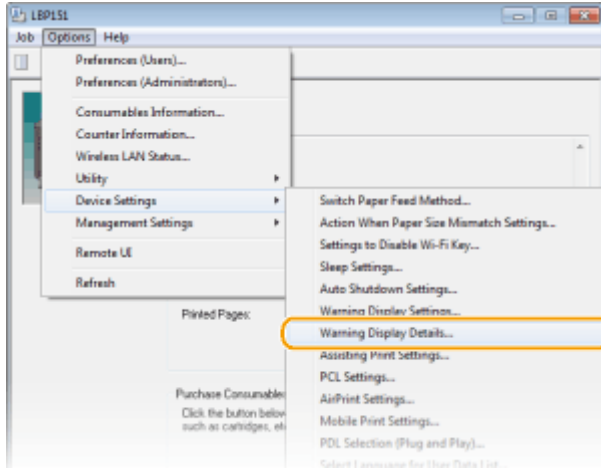
**3** In [Notify When Amount Remaining Reaches], specify the amount remaining in the toner cartridge to display the message, then click [OK].



## IMPORTANT

If you are using a toner cartridge that is not a Canon product or the amount remaining in the toner cartridge cannot be detected correctly, it is possible that no message will be displayed.

## NOTE

### Disabling Message Display
You can disable display of the message <The cartridge needs to be replaced soon.> by doing as follows: Select Printer Status Window's [Options] menu ▶ [Device Settings] ▶ Clear the [Display Cartridge Replacement Notice] check box in the [Warning Display Settings] dialog box.

## <The cartridge has reached the end of its lifetime. >

The toner cartridge has reached the end of its lifetime. Replace the toner cartridge with a new one.
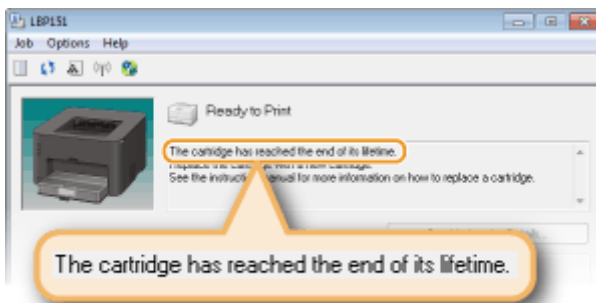


## IMPORTANT

You can continue printing when this message is displayed, but the print quality may deteriorate.

## <Non-Canon Cartridge May Be in Use>

## <The amount remaining in the cartridge cannot be displayed correctly.>



Problems resulting from the use of cartridges that are not Canon products are not covered under the warranty.
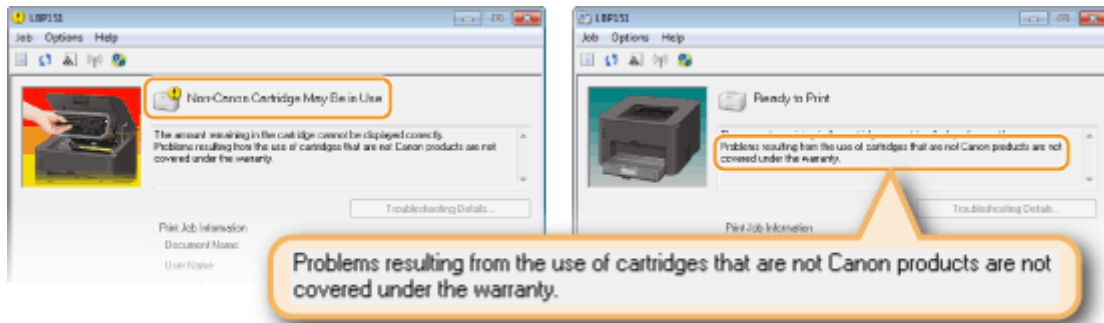
### IMPORTANT

You can continue printing when these messages are displayed, but the print quality may deteriorate. Doing so may also result in damage to the machine.

### NOTE

If you continue printing when <Non-Canon Cartridge May Be in Use> is displayed, click  .

## ■ If Symptoms Like the Following Appear

The toner cartridge is nearly empty or the materials inside the toner cartridge may be deteriorated or damaged. If any of the following symptoms appears, use them as a guide to when to replace the toner cartridge even when no message is displayed. ○**How to Replace Toner Cartridges(P. 256)**

White streaks appear          Faded            Uneven density

  

Afterimages Appear in Blank Areas        Toner smudges and splatters appear

 

White Spots Appear          Blank space becomes grayish in printouts

 

252

**NOTE**

- When, of the above symptoms, one of "White streaks appear," "Faded," and "Uneven density" appears, you may be able to continue printing for a while longer by taking the steps in ▶**Using Up All of the Toner(P. 254)** .

- If blank space becomes grayish in printouts, store the toner cartridge in an appropriate location for two to three hours, then try printing again. This may solve the problem. If the problem persists, replace the toner cartridge.

## ■ Checking the Amount Remaining in the Toner Cartridge

You can check the amount remaining in the toner cartridge in the Printer Status Window. When you are going to print a large job, it is especially recommended to check the toner remaining amount and determine whether you should prepare a replacement toner cartridge beforehand.

▶**Displaying the Printer Status Window(P. 23)** ▶ [Options] ▶ [Consumables Information] ▶ Check the toner remaining amount in [Amount Remaining in Cartridge]
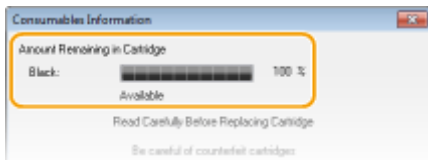
Consumables Information
Amount Remaining in Cartridge
Black:                    100 %
Available
Read Carefully Before Replacing Cartridge
Be careful of counterfeit cartridges

**NOTE**

- The displayed amount remaining in the toner cartridge can be used only as a guide and may differ from the actual amount.

**Checking from the Remote UI**

You can check the amount remaining in the toner cartridge in the Portal Page (main page) of the Remote UI.
▶**Portal Page (Main Page)(P. 178)**

LINKS

▶**Consumables(P. 292)**

# Using Up All of the Toner

Printout symptoms like the following appear when the amount remaining in the toner cartridge is low.

| White streaks appear | Faded | Uneven density |
|---|---|---|

When symptoms like these appear, take the following steps. They will allow you to use up all of the toner in the toner cartridge. You will be able to continue printing for a while longer, until the toner runs out completely. If the symptoms do not improve after you take the following steps, replace the toner cartridge ( **How to Replace Toner Cartridges(P. 256)** ). Before starting, read the safety instructions in **Maintenance and Inspections(P. 8)** and **Consumables(P. 9)** .

**1** **Close the paper stopper, and then open the top cover.**
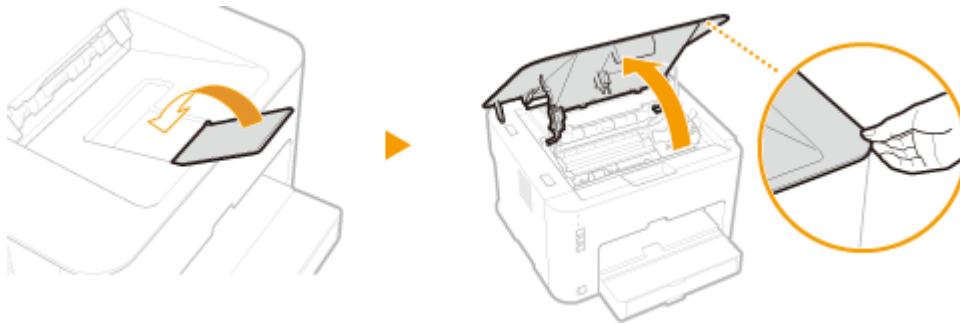
**2** **Remove the toner cartridge.**
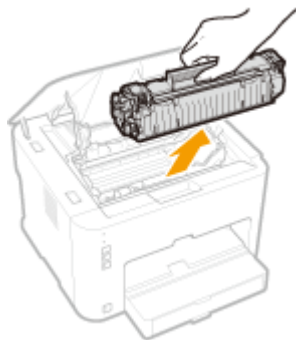
**3** **Shake the toner cartridge 5 or 6 times as shown below to evenly distribute the toner inside the cartridge.**
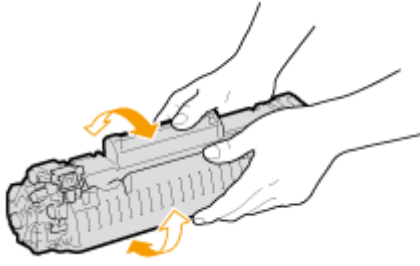
**4** **Replace the toner cartridge.**
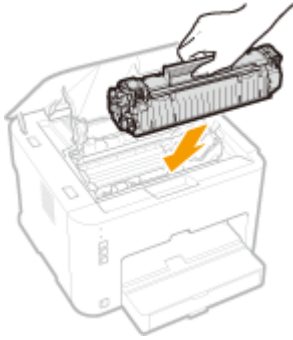
**5** **Close the top cover.**

# How to Replace Toner Cartridges

0YFA-04C

Before replacing a toner cartridge, read the precautions in ❯**Maintenance and Inspections(P. 8)** and ❯ **Consumables(P. 9)** .

**1** **Close the paper stopper, and then open the top cover.**
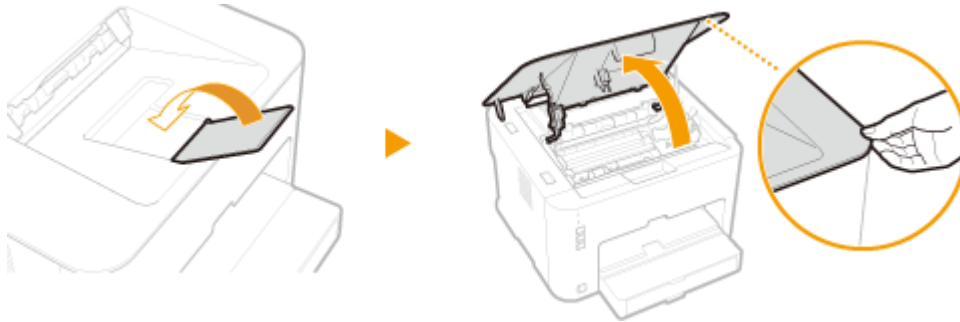
**2** **Remove the toner cartridge.**
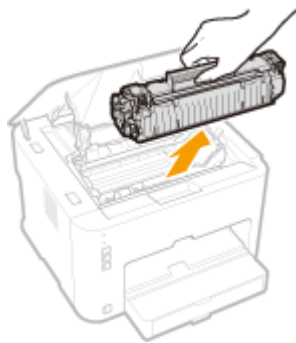
**3** **Remove the new toner cartridge from the protective bag.**

**4** **Shake the toner cartridge 5 or 6 times as shown below to evenly distribute the toner inside the cartridge, and then place it on a flat surface.**
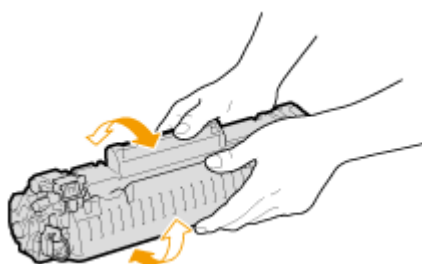
## 5 Pull the sealing tape straight out.

- The full length of the sealing tape is approximately 50 cm.
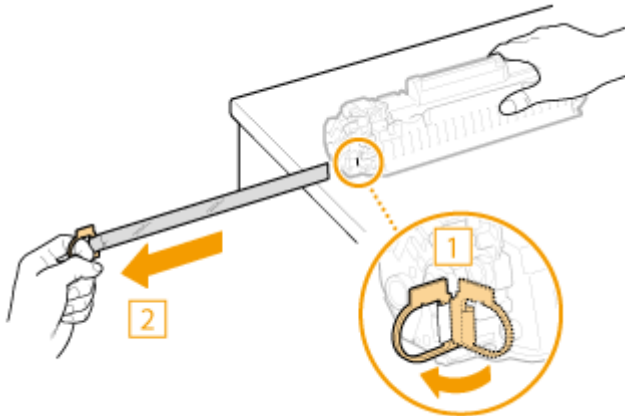


**IMPORTANT:**

**When pulling out the sealing tape**

If any sealing tape remains inside the toner cartridge, print quality may deteriorate.

- Do not pull the sealing tape at an angle. If the sealing tape breaks, you may not be able to pull it out completely.



Front View
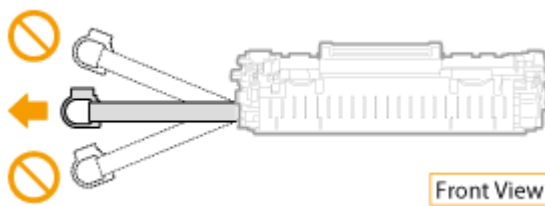
- If the sealing tape becomes stuck when pulling it out, keep pulling until it is completely removed.

## 6 Replace the toner cartridge.
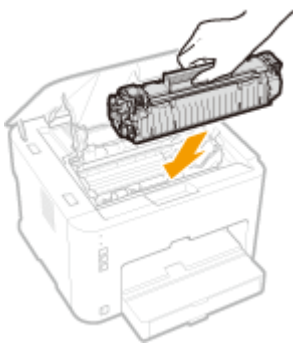


## 7 Close the top cover.

# Printing Setting Lists

0YFA-04E

You can print setting lists from the Printer Status Window. This is convenient when you want to print a list of PCL font types or a list of power saving and other configuration settings for the machine. Setting lists are formatted to print on A4 size paper. Before starting, load A4 size paper in drawer. **⊙Loading Paper in the Drawer(P. 32)**

> **NOTE**
>
> - You can also use the machine's ⏏ (Paper) key to print a User Data List. ⊙**Viewing Network Settings(P. 104)**
>
> **Setting the language to print in**
>
> - In the Printer Status Window's [Options] menu ▶ [Device Settings] ▶ [Select Language for User Data List] dialog box, you can specify the language for printing a User Data List in.

**1** **Select the machine by clicking 🖼 in the system tray.**

**2** **Select [Options] ▶ [Utility] ▶ [User Data List] or [PCL Font List].**
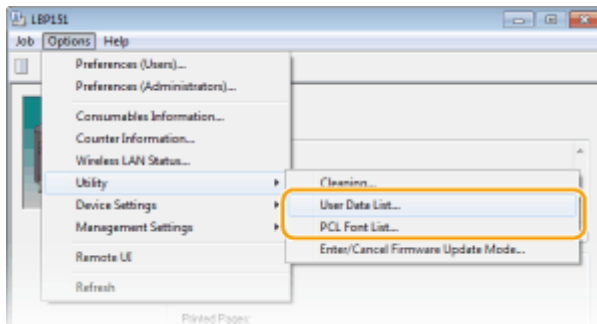
**[User Data List]**
Prints a list of the settings for all machine options, machine version information, etc.

**[PCL Font List]**
Prints font types and images that can be used with the PCL function.

**3** **Click [OK].**
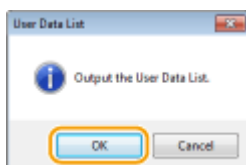
**Output example:** [User Data List]

```
10/10 2015 01:24 PM                    LBP151                              P.0001

                       ********************************
                       ***     User Data List      ***
                       ********************************

Rom Controller Version
    Boot Rom                                        02.02
    Main Controller                                 03.01
    DCON                                            00.11
    Resource                                        03.01
    Memory Capacity                                 512 MB
    Serial Number                                   NFH00108
    USB
        Vendor ID                                   0x04A9
        Product ID                                  0x27B7
        Serial Number                               0154D11736B6

1. Network Settings
    Select Wired/Wireless LAN                       Wired LAN
        TCP/IP Settings
            IPv4 Settings
                IP Address Settings
                    Auto Acquire                    Off
                        Select Protocol
                            IP
```

**Output example:** [PCL Font List]

```
                    FONTS LIST                     PAGE 001

PCL Internal Fonts

    Font Name                         Pitch/Point
    Symbol   Spacing   Style  StrokeW  Typeface   Sample

[000] Courier                         scalable
              0         0       0      4099       ABCDEFGHIJKLMNOPQRSTUVWXYZ
[001] CG Times                        scalable
              1         0       0      4101       ABCDEFGHIJKLMNOPQRSTUVWXYZ
[002] CG Times Bold                   scalable
              1         0       3      4101       ABCDEFGHIJKLMNOPQRSTUVWXYZ
[003] CG Times Italic                 scalable
              1         1       0      4101       ABCDEFGHIJKLMNOPQRSTUVWXYZ
[004] CG Times Bold Italic            scalable
              1         1       3      4101       ABCDEFGHIJKLMNOPQRSTUVWXYZ
[005] CG Omega                        scalable
              1         0       0      4113                        UVWXYZ
```

# Viewing the Page Counter Value

0YFA-04F

You can check the total number of pages that the machine has printed by viewing the page counter in the Printer Status Window.

**1** **Select the machine by clicking**  **in the system tray.**



**2** **Select [Options] ▶ [Counter Information].**
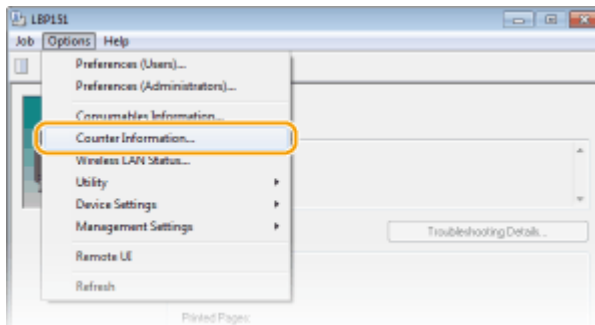


 The total number of printed pages is displayed.
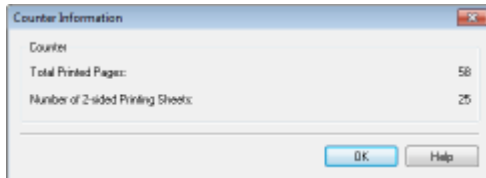
# Checking Consumables

0YFA-04U

You can check the status and model number of the toner cartridge in the Printer Status Window.

**1** **Select the machine by clicking**  **in the system tray.**



**2** **Select [Options] ▶ [Consumables Information].**
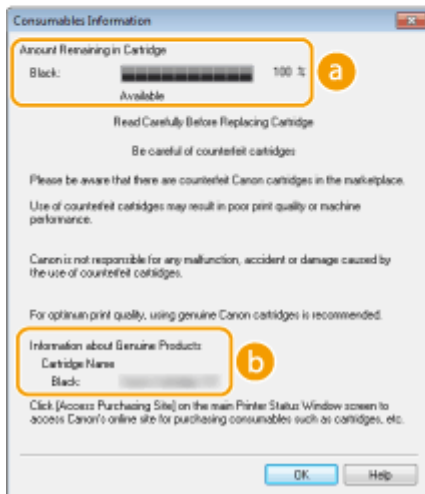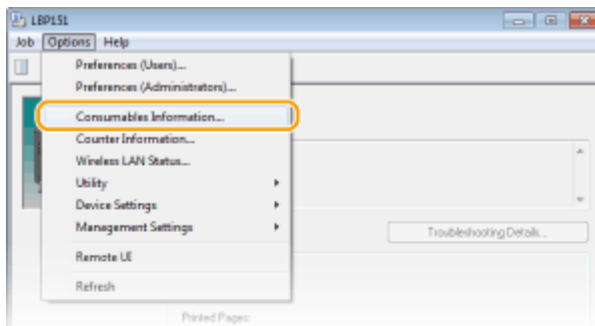


**a** **[Amount Remaining in Cartridge]**

Displays the amount remaining in the toner cartridge. Depending on your environment, other internal parts may reach the end of their lifetime before the toner runs out.

**NOTE:**

● The displayed amount remaining in the toner cartridge can be used only as a guide and may differ from the actual amount.

**b** **[Information about Genuine Products]**

The model number of the toner cartridge for the machine is displayed.

**Checking from the Remote UI**

- You can check the amount remaining in the toner cartridge in [Consumables Information] on the Portal Page (main page) of the Remote UI. ❯**Portal Page (Main Page)(P. 178)**
- You can check the model number of the toner cartridge by clicking [Check Consumables Details] in [Consumables Information] on the Portal Page (main page). ❯**Checking Consumables(P. 182)**

# Initializing Settings

0YFA-04H

You can restore the machine's settings to the factory default settings.

# Initializing Menu

0YFA-04J

You can initialize the settings of the Remote UI [Preferences] menu and [Function Settings] menu ( ⟩**Setting Menu List(P. 186)** ) to return them to the factory default settings.

**1** **Start the Remote UI and log on in System Manager Mode.** ⟩**Starting the Remote UI(P. 175)**

**2** **Click [Settings/Registration].**
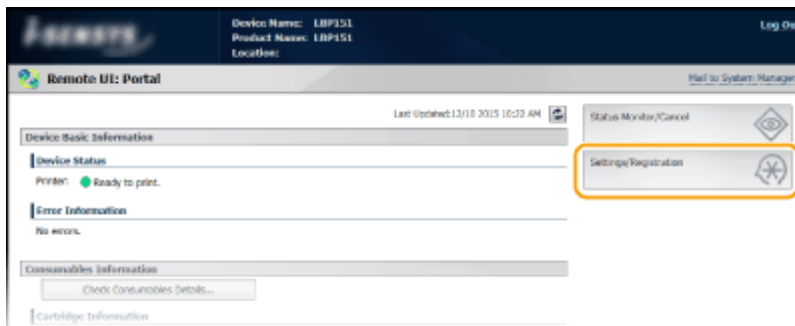


**3** **Click [Initialize Setting Information]** ▶ **[Initialize Menu].**
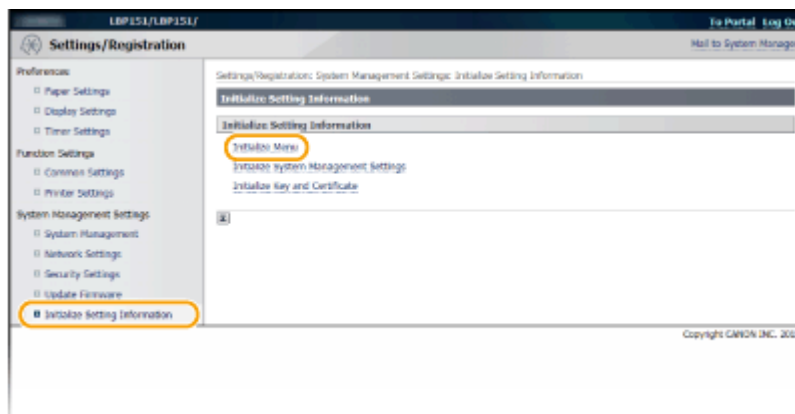


**4** **Select the settings to initialize, and then click [Initialize].**
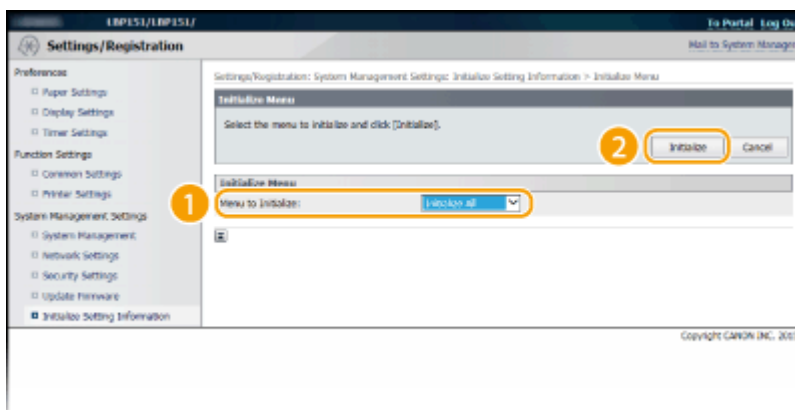


**[Menu to Initialize]**

Select the settings to initialize from the drop-down list. Select [Initialize All] to initialize all of the settings in [Display Settings], [Timer Settings], [Common Settings], and [Printer Settings] at once.

**5** **Click [OK].**

# Initializing System Management Settings

0YFA-04K

You can initialize the settings in the Remote UI [System Management Settings] menu ( ❯**Setting Menu List(P. 186)** ) to return them to the factory default settings.

> **NOTE**
>
> To initialize [Key and Certificate Settings] and [CA Certificate Settings] in [Security Settings], see ❯**Initializing Key and Certificate Settings(P. 269)** .

**1** Start the Remote UI and log on in System Manager Mode. ❯**Starting the Remote UI(P. 175)**

**2** Click [Settings/Registration].



**3** Click [Initialize Setting Information] ▶ [Initialize System Management Settings].
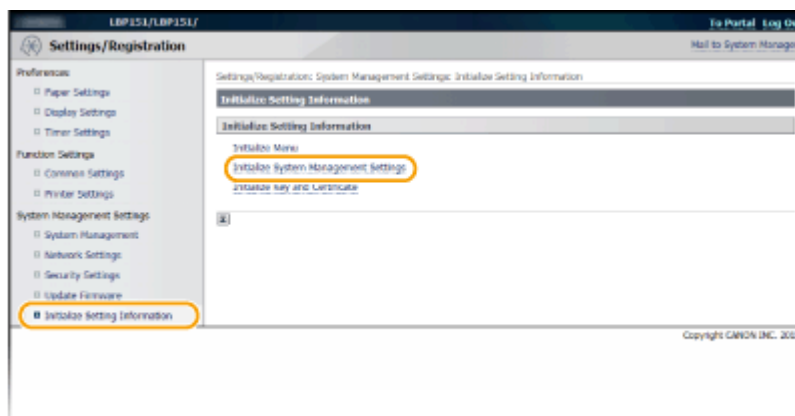


**4** Select the settings to initialize, and then click [Initialize].
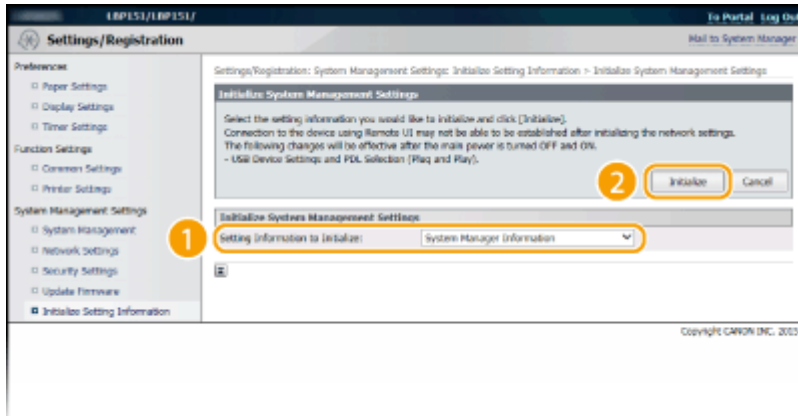
**[Setting Information to Initialize]**
Select the settings to initialize from the drop-down list. Select [Initialize All]to initialize all of the settings below together at once.

- [System Manager Information]
- [Device Information]
- [Network Settings]
- [Google Cloud Print Settings]
- [Security Settings]
- [Consumables Supplier Information]
- [USB Device Settings]
- [Product Extended Survey Program Settings]
- [PDL Selection (Plug and Play)]

**5** **Click [OK].**



**6** **If you initialized the USB device settings or PDL selection (Plug and Play), restart the machine.**

- Turn OFF the machine, wait for at least 10 seconds, and turn it back ON.

---

**Initializing Settings by Using the Reset Button**

The settings below can be initialized with the reset button on the back of the machine.

- Settings in the [Network Settings] menu ○**Network Settings(P. 201)**
- The settings below in the [Security Settings] menu ○**Security Settings(P. 207)**
  - [Remote UI Settings]
  - [IP Address Filter]
  - [MAC Address Filter]

You can initialize the settings by turning off the machine and then back on while pressing the reset button ( ⓐ ) with the tip of a pen or with a thin pin.
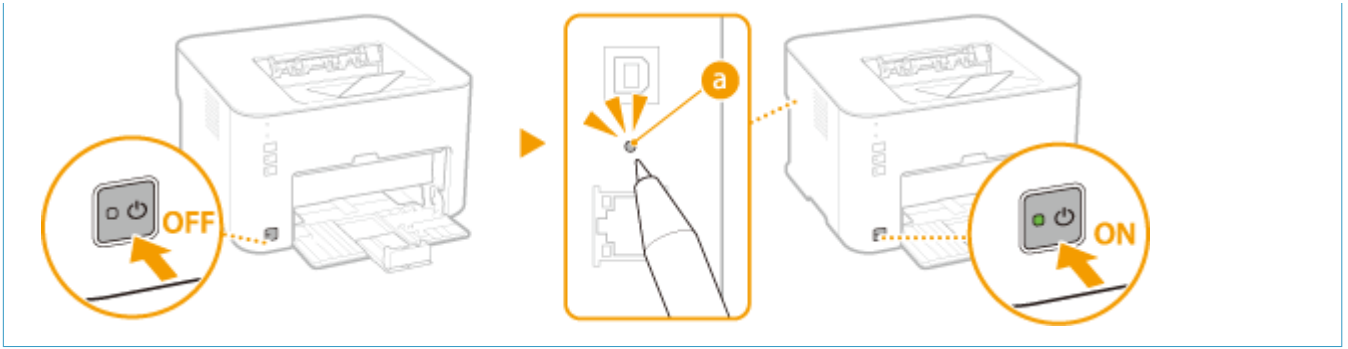
# Initializing Key and Certificate Settings

0YFA-04L

You can restore the settings of key pairs (Key and certificate settings) and CA certificates to the factory default settings. Note that any key pairs that you have registered in the machine and any CA certificates (except the preinstalled CA certificates) will be deleted by the initialization.

> **NOTE**
>
> If you perform this initialization, TLS encrypted communication requiring a key pair will not be possible. To use TLS encrypted communication, set another key pair and enable the function again.

**1** **Start the Remote UI and log on in System Manager Mode.** ◗**Starting the Remote UI(P. 175)**

**2** **Click [Settings/Registration].**
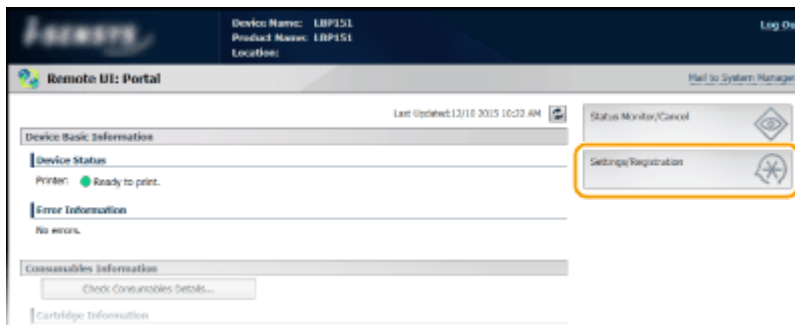


**3** **Click [Initialize Setting Information]** ▶ **[Initialize Key and Certificate].**
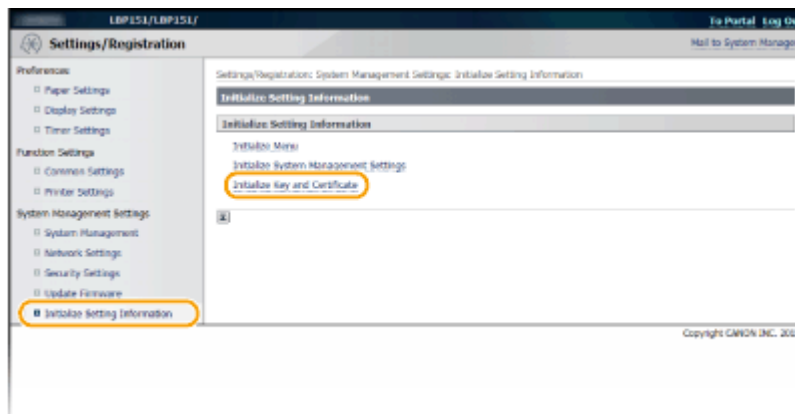


**4** **Click [Initialize].**
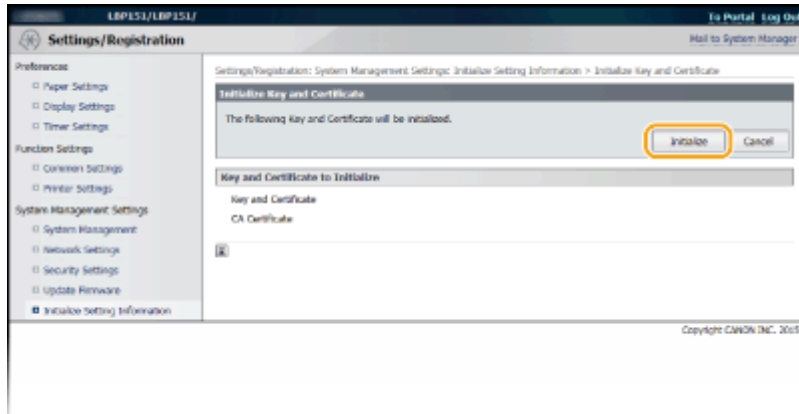
**5** **Click [OK].**
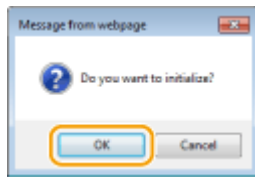


**6** **Restart the machine.**

- Turn OFF the machine, wait for at least 10 seconds, and turn it back ON.

LINKS

**Configuring Settings for Key Pairs and Digital Certificates(P. 158)**

# Relocating the Machine

0YFA-04R

The machine is heavy. To avoid injury, be sure to follow the procedure below when moving the machine. Also be sure to read the safety instructions before you begin. ○**Important Safety Instructions(P. 2)**

**1** **Turn OFF the machine and computer.**

- When you turn OFF the machine, data that is waiting to be printed is deleted.

**2** **Disconnect the cables and cord from the machine in numerical order as in the illustration below.**

- Whether or not a USB cable ( 3 ) and LAN cable ( 4 ) are connected depends on your environment.



1 Power plug

2 Power cord

3 USB cable

4 LAN cable
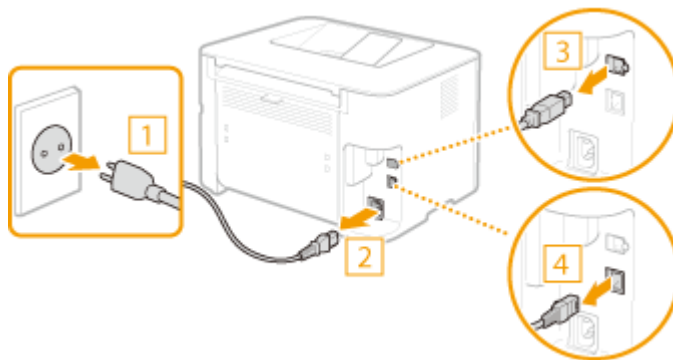
**3** **If you will be transporting the machine across a long distance, remove the toner cartridge. ○How to Replace Toner Cartridges(P. 256)**

**4** **Close the drawer, paper stopper, and all similar parts, and carry the machine to its new location.**

- To carry the machine, grasp it on both sides with the front side facing you.



**5** **Carefully place the machine at its new location.**

- For the procedure to follow after moving the machine, see the "Getting Started". ○**Manuals Included with the Machine(P. 298)**

# Updating the Firmware

0YFA-04W

Select a method for updating the firmware according to how the machine is installed. Check the version of the machine's firmware and update over the Internet from the machine, or update from a computer to which firmware is downloaded.

**Updating over the Internet(P. 272)**
**Updating from a Computer(P. 274)**

## Updating over the Internet

Check whether the machine's firmware is the latest version and update via the Internet.

> **NOTE**
>
> - The firmware cannot be updated while the machine is printing or there is print data waiting to be printed.
> - The machine cannot print or perform any other operations while the firmware is being updated. The machine also will not enter sleep mode.

**1** **Start the Remote UI and log on in System Manager Mode. Starting the Remote UI(P. 175)**

**2** **Click [Settings/Registration].**
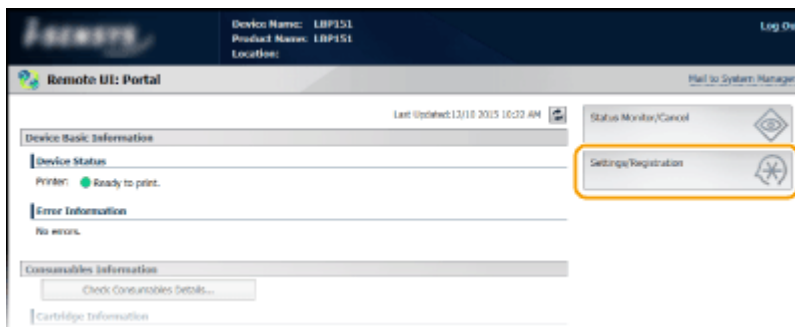


**3** **Click [Update Firmware].**

- You can check the version, etc. of the current firmware.
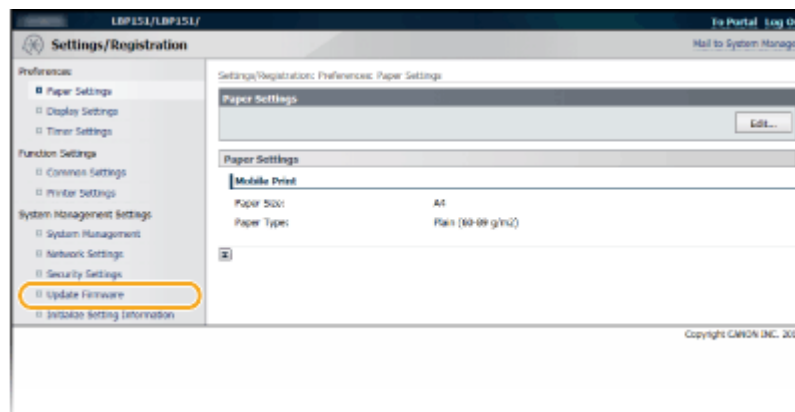
**4** **Click [Start] in [Via Internet].**
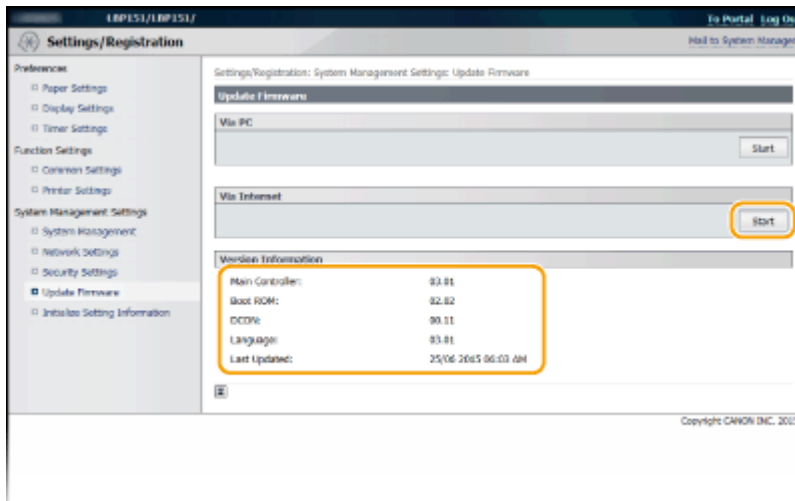


➠ The machine starts checking for the latest firmware.

**5** **Read "Confirm Conditions of Use", select the [Accept] check box, and click [OK].**

**6** **Click [OK].**

➠ Firmware download begins.

● To cancel downloading of the firmware, click [Cancel].

**7** **After the firmware has been downloaded, it is updated and the machine automatically starts up again.**

**IMPORTANT:**

● A firmware update cannot be canceled once it has started.

● During a firmware update, all 3 of the ⚠ (Alarm), ⬦ (Job), and 📄 (Paper) indicators flash. Do not turn the power OFF until the update is completed.
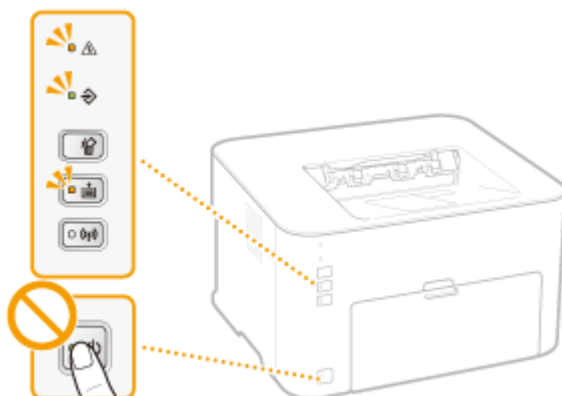
## Updating from a Computer

When you have downloaded the latest firmware from the Canon website, use the utility software "User Support Tool" to update firmware from the computer. For the method for updating firmware from a computer, see the "User Support Tool Operation Guide" included with the firmware.

### Placing the Machine in Update Standby

Log on to the Remote UI ( **Starting the Remote UI(P. 175)** ) ▶ [Settings/Registration] ▶ [Update Firmware] ▶ [Start] in [Via PC] ▶ [OK]

# Appendix

# Appendix

0YFA-04X

This chapter contains technical specifications of this machine, instructions on how to use the e-Manual, disclaimers, copyright information, and other information that you may need. Refer to it as required.

# Feature Highlights

0YFA-04Y

Give the features that are described in this section a try. The features are grouped under three headings: "Going Green and Saving Money," "Improving Efficiency," and "So Much More."

# Going Green and Saving Money

0YFA-050

Easy on the environment,
easy on your wallet

There are lots of ways to cut back on paper, toner, power, and expenses.
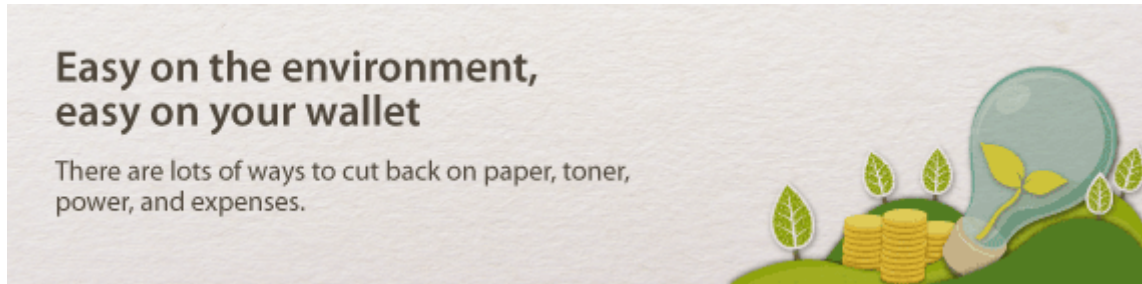
**01**   **Print Multiple Pages on a Single Sheet**

When there are many pages in a document, the printout can be inconveniently bulky - hard to carry around and store, and also hard to read. But there is a solution. Print multiple pages onto one sheet! This allows you to save paper and make your documents slimmer and easier to handle.

For more information about this function, see **Printing Multiple Pages onto One Sheet(P. 61)** .

**02**   **Sleep Mode**

You can save power by setting the machine to enter sleep mode automatically whenever it has not been used for a while. You don't need to turn OFF the power each time, but you can still have the machine minimize its power consumption. The auto shutdown function can boost the savings, by automatically turning OFF the machine if it remains idle for a longer time. These convenient functions work in the background to save power and money every day.

To save power by putting the machine into sleep mode: **Setting Sleep Mode(P. 28)**

To configure the machine to be automatically turned OFF: **Setting Auto Shutdown(P. 29)**

**03**   **Save Toner**

To economize on toner, you can use draft mode for drafts and test printouts. Or you can switch between modes according to purpose, using normal mode for beautiful photos and draft mode for company documents that do not require presentation quality.

For more information about this function, see ○**Saving Toner(P. 73)** .

# Improving Efficiency

## Little things that save lots of time

Here are some simple operations that can make complicated tasks more efficient.
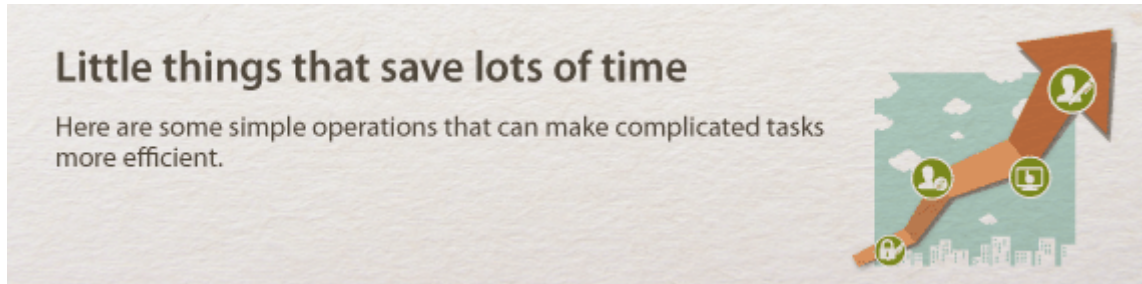
**01** **Remote Management with Printer Status Window and Remote UI**

The Printer Status Window and Remote UI allow you to manage the machine remotely from the computer at your desk. You can monitor the state of the machine from your computer, and also check error information. Whenever a printing error occurs, the Printer Status Window appears automatically to notify you with easy to understand messages and animations. Save time and trouble by eliminating trips between your desk and the machine. The Remote UI makes it simple to configure the machine, including the many network setting items.
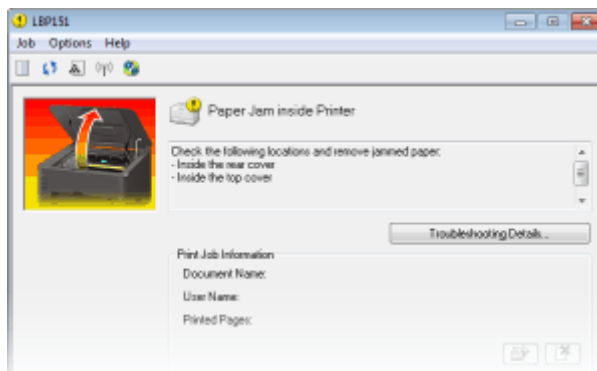
For more information about the Printer Status Window, see **Printer Status Window(P. 23)** .

For more information about the Remote UI, see **Using the Remote UI(P. 174)** .

**02** **Register Favorite Settings and Call Them Up at Any Time**

Everyone in the office uses the printer. If you register the most popular settings as the default settings, you can use them right away. You can also register frequently used combinations of print settings as "profiles." Then you can call up your favorite settings in a single operation, by selecting a profile instead of selecting each setting every time you print.
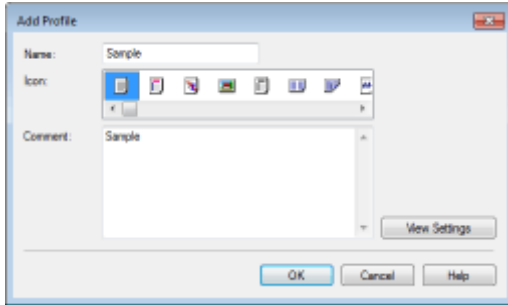
To change default print settings: ❍**Changing Default Settings(P. 82)**

To register combinations of frequently used print settings as "profiles": ❍**Registering Combinations of Frequently Used Print Settings(P. 80)**

**03**   **Save Time with Shortcuts**

When you have a number of documents to print, it would be convenient to print them all with one operation. Canon PageComposer allows you to combine multiple documents and print them all at once. It is an easy way to save time and work more efficiently.
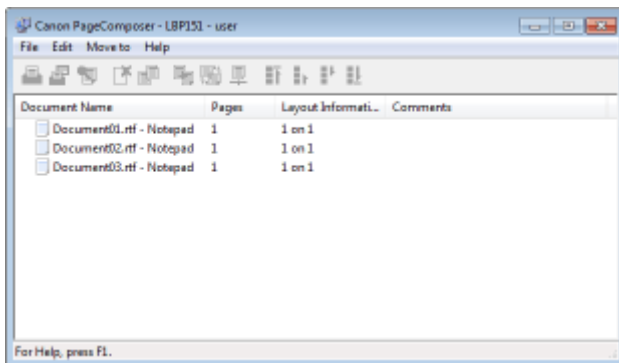


For more information about this function, see ❍**Combining and Printing Multiple Documents(P. 75)** .

**04**   **Make Print Settings Quickly with Intuitive Operation**
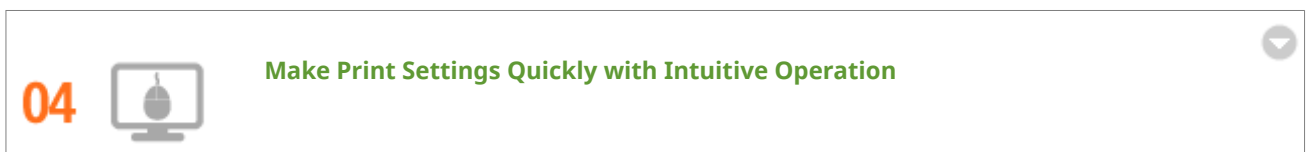
You can easily specify the page layout as well as binding position, switching between 1-sided and 2-sided printing, etc. intuitively on the preview image in the printer driver. The simple click-operation allows you to conveniently make settings while viewing how settings are applied.
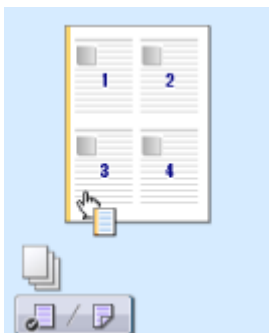
For more information about this function, see ▶**Basic Printing Operations(P. 45)** .

# So Much More
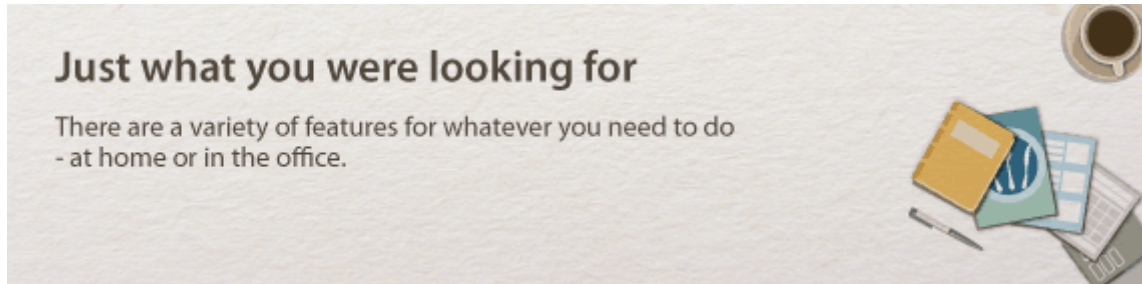
**Just what you were looking for**

There are a variety of features for whatever you need to do - at home or in the office.

---

**01** **Using a smartphone/tablet**

At times such as when you want to quickly print out a proposal you completed on a tablet while travelling to a business destination, Canon Mobile Application comes in handy.

PCless, quick, and easy! An even broader range of possibilities for work/play with functionality made for this age of speed.

For more information about this function, see **Can Be Used Conveniently with a Mobile Device(P. 85)** .

---

**02** **Easy Printing with Google Cloud Print**

Hook up to Google Cloud Print with your laptop or cell phone, send your data, and out come your printed documents. With this machine, Google Cloud Print, and your mobile device, print whenever you want from wherever you want.

For more information about this function, see **Using Google Cloud Print(P. 293)** .

---

**03** **Keep Your Printouts Private**

For personal information and sensitive documents that you want to keep private, you can print watermarks such as "CONFIDENTIAL" or "TOP SECRET." In addition to these standard watermarks, you can also design your own watermarks.

For more information about this function, see **Printing Watermarks(P. 69)** .
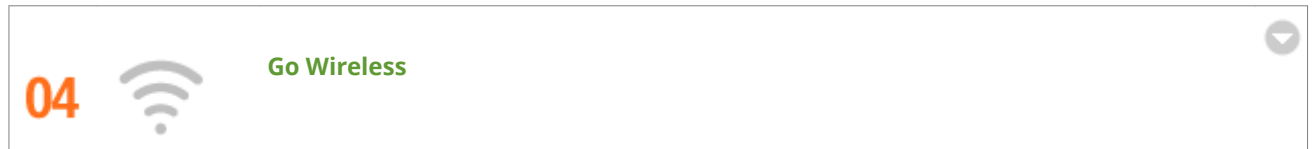
**Go Wireless**

No cables, easy installation, simple maintenance. If you've got a WPS wireless LAN router, bypass the settings process altogether and be ready to go before you know it. Enjoy the kind of clutter-free and easy to use document system that you can only get from wireless. Compatible with IEEE 802.11b/g/n for stress-free wireless, and also supports WEP and WPA/WPA2-PSK (TKIP/AES-CCMP) for tighter security.

For more information about this function, see **Connecting to a Wireless LAN(P. 94)** .

**Make Posters**

Blow up a regular one-sheet printout and make an exceptionally large poster. A large poster will be printed out on nine sheets. Put them together in a 3x3 grid, and voila!
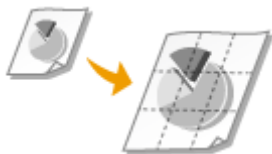
For more information about this function, see **Printing Posters(P. 63)** .

**Make Booklets**

Sometimes your documents deserve better presentation than a staple in the upper-left corner. Making booklets is easy. The print driver will take care of the page positioning for you. All you have to do is fold the pages and staple them along the middle.

For more information about this function, see ❯**Printing Booklet(P. 64)** .

**07** **Automatically Collate Meeting Handouts**

When you print multiple copies of a multi-page document, you can use the collate function to print one copy after another with all of the pages in the correct order. This is convenient when preparing handouts for meetings or presentations.

For more information about this function, see ❯**Collating Printouts by Page(P. 59)** .

# Specifications

0YFA-053

Due to continuing product enhancements, the specifications of this machine are subject to change without notice.

◆**Machine Specifications(P. 287)**
◆**Wireless LAN Specifications(P. 289)**
◆**Paper(P. 290)**

# Machine Specifications

0YFA-054

○Hardware Specifications(P. 287)
○Software Specifications(P. 288)

## Hardware Specifications

| | |
|---|---|
| **Type** | Desktop page printer |
| Printing System | Semiconductor laser + dry-type electrophotographic system |
| **Toner Fixing System** | On-demand fixing system |
| **Print Speed** *1<br><br>(Plain paper (60 to 89 g/m²), A4 continuous printing) | • 1-sided printing: 27 pages/minute<br>• 2-sided printing: 15 pages/minute (7.7 sheets/minute) |
| **Warm-Up Time** *2<br><br>(from power ON until machine enters standby) | 15 seconds or less |
| **Recovery Time** *3<br><br>(recovery from sleep mode to standby) | 1.0 second or less |
| **First Print Time** *3<br><br>(A4 printing) | Approx. 8 seconds |
| **Acceptable Paper Stock** | ○Paper(P. 290) |
| Paper Capacity | • Drawer: Approx. 250 sheets<br>• Multi-purpose tray: 1 sheet |
| **2-Sided Printing** | A4, Legal, Letter, Oficio, Oficio (Brazil), Oficio (Mexico), Legal (India), Foolscap |
| **Paper Output** | Face down |
| **Output Capacity** *4<br><br>(Output tray) | Approx. 100 sheets |
| **Noise**<br><br>(measured in accordance with ISO 7779, declared noise emission in accordance with ISO 9296) | **LwAd (declared A-weighted sound power level (1 B = 10 dB))**<br>• During standby: Inaudible[5]<br>• During printing: 6.6 B or less (1-sided)<br>• During printing: 6.5 B or less (2-sided)<br><br>**LpAm (declared A-weighted sound pressure level (bystander position))**<br>• During standby: Inaudible[5]<br>• During printing: 52 dB (1-sided)<br>• During printing: 51 dB (2-sided) |
| **Environmental Conditions**<br><br>(machine only) | **Operating Environment**<br>• Temperature: 10 to 30 °C<br>• Humidity: 20 to 80% RH (no condensation) |
| Host Interface | • USB interface: Hi-Speed USB/USB |

| | |
|---|---|
| | • Network interface:<br>Shared 10BASE-T/100BASE-TX (RJ-45) Full Duplex/Half Duplex<br>IEEE 802.11b/g/n |
| User Interface | • LED indicators: 5<br>• Operation keys/buttons: 4 |
| **Power** | 220 to 240 V (± 10 %), 50/60 Hz (± 2 Hz) |
| **Power Consumption** *6<br><br>(20 °C) | • Maximum: 1,120 W or less<br>• During operation: Approx. 260 W<br>• During standby:<br>Approx. 2.6 W (USB connection)<br>Approx. 2.7 W (wired LAN connection)<br>Approx. 3.2 W (wireless LAN connection)<br>• During sleep mode:<br>Approx. 1.1 W (USB connection)<br>Approx. 1.2 W (wired LAN connection)<br>Approx. 1.8 W (wireless LAN connection)<br>• When the power switch is turned OFF: 0.5 W or less |
| **Consumables** | **⊙Consumables(P. 292)** |
| **Weight**<sup>*7</sup> | Approx. 8.6 kg |

[*1] Print speed may be slower depending on the output resolution, paper size, paper type, paper orientation, and number of copies printed.

[*2] May vary depending on conditions of use (installation environment, etc.).

[*3] May vary depending on the output environment.

[*4] May vary depending on the installation environment and type of paper used.

[*5] Indicates that the sound pressure level of each bystander position is below the ISO 7779 absolute criteria for the background noise level.

[*6] Even if the machine is turned OFF, a slight amount of power is still consumed while the power plug is plugged into the AC power outlet. To stop power consumption completely, unplug the power plug from the AC power outlet.

[*7] The value indicates the mass of the main unit including toner cartridges.

## Software Specifications

| Printing Software | UFR II LT, PCL6 |
|---|---|
| Printable Area | **⊙Printable Range(P. 291)** |

# Wireless LAN Specifications

0YFA-055

| Standards | IEEE 802.11b/g/n |
|---|---|
| Transmission Scheme | DS-SS system, OFDM system |
| Frequency Range | 2,412 to 2,472 MHz |
| Maximum Radio-Frequency Power Transmitte | 15.98 dBm |
| Communication Mode | Infrastructure mode |
| **Security** | WEP, WPA-PSK (TKIP/AES-CCMP), WPA2-PSK (TKIP/AES-CCMP) |
| Connection Method | WPS (Wi-Fi Protected Setup), Manual setup |

# Paper

0YFA-056

## ■ Supported Paper Sizes

Paper sizes that can be loaded in the drawer and multi-purpose tray are listed below.

**A4** (210.0 mm x 297.0 mm) *1
**B5** (182.0 mm x 257.0 mm)
**A5** (148.0 mm x 210.0 mm)
**Letter** (215.9 mm x 279.4 mm) *1
**Legal** (215.9 mm x 355.6 mm) *1
**Executive** (184.1 mm x 266.7 mm)
**Statement** (139.7 mm x 215.9 mm)
**Oficio** (215.9 mm x 317.5 mm) *1
**Oficio (Brazil)** (216.0 mm x 355.0 mm) *1
**Oficio (Mexico)** (216.0 mm x 341.0 mm) *1
**Envelope Monarch** (98.4 mm x 190.5 mm) *2
**Envelope No. 10 (COM10)** (104.7 mm x 241.3 mm)
**Envelope DL** (110.0 mm x 220.0 mm)
**Envelope C5** (162.0 mm x 229.0 mm)
**Letter (Government)** (203.2 mm x 266.7 mm)
**Legal (Government)** (203.2 mm x 330.2 mm)
**Legal (India)** (215.9 mm x 342.9 mm) *1
**Foolscap** (215.9 mm x 330.2 mm) *1
**Foolscap (Australia)** (206.0 mm x 337.0 mm)
**3x5inch** (76.2 mm x 127.0 mm) *2
**Custom** *3

*1 Automatic 2-sided printing is available without replacing paper.

*2 You can load Envelope Monarch and 3x5inch only in the multi-purpose tray.

*3 The following sizes are available:
- Drawer: width 76.2 to 216.0 mm x length 210.0 to 356.0 mm
- Multi-purpose tray: width 76.2 to 216.0 mm x length 127.0 to 356.0 mm

## ■ Paper Source Capacity by Paper Type

Chlorine-free paper can be used with this machine.

| Paper Type | | Drawer | Multi-Purpose Tray |
|---|---|---|---|
| Plain paper *1 | 60 to 80 g/m² *2 | Approx. 250 sheets | 1 sheet |
| | 80 to 90 g/m² *2 | Approx. 170 sheets | 1 sheet |
| Heavy paper | 90 to 105 g/m² *2 | Approx. 170 sheets | 1 sheet |
| | 105 to 163 g/m² | Approx. 100 sheets | 1 sheet |
| Bond paper | 60 to 163 g/m² | Approx. 100 sheets | 1 sheet |

| Paper Type | Drawer | Multi-Purpose Tray |
|---|---|---|
| Labels *3 | Approx. 100 sheets | 1 sheet |
| Envelope | Approx. 20 sheets | 1 sheet |
| Index Card | — | 1 sheet |

*1 Recycled paper and Color paper can be used.

*2 Automatic 2-sided printing is available without replacing paper.
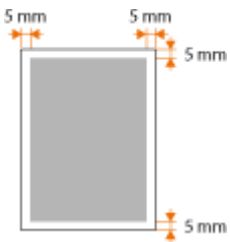
*3 Use A4 or Letter size only.

## ■Machine Settings for Paper Types

**�‣Loading Paper(P. 30)**

## ■Printable Range

The printable range is indicated in gray. Envelopes require a 10 mm margin on the top, bottom, left, and right.

# Consumables

0YFA-057

The following is a guide to the estimated replacement time for the consumables used in this machine. Purchase consumables at your local authorized Canon dealer. Observe safety and health precautions when storing and handling consumables ( **Consumables(P. 9)** ).

> **NOTE**
>
> Depending on the installation environment, printing paper size, or document type, you may need to replace consumables before the end of the estimated lifetime.

## ■ Toner Cartridges
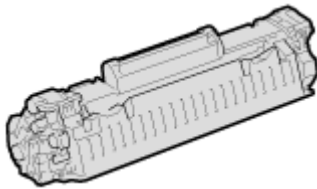
**Supplied Toner Cartridges**

The average yield* of the toner cartridge that comes with the machine is 1,700 sheets.

* The average yield is based on "ISO/IEC 19752" (the global standard related to "Method for the determination of toner cartridge yield for monochromatic electrophotographic printers and multi-function devices that contain printer components" issued by ISO [International Organization for Standardization]) when printing A4 size paper with the default print density setting.

**Replacement Toner Cartridges**

For optimum print quality, using Canon genuine toner cartridges is recommended.

| Canon Genuine Toner Cartridge | Average yield of toner cartridge * |
|---|---|
| Canon Cartridge 737 | 2,400 sheets |

**Genuine Supplies**

For optimum print quality, using Canon genuine Toner, Cartridge and Parts is recommended.

> **NOTE**
>
> When replacing toner cartridges **How to Replace Toner Cartridges(P. 256)**

## LINKS

**Replacing Toner Cartridges(P. 250)**

# Using Google Cloud Print

0YFA-05C

Google Cloud Print is a service that enables a user who has a Google account to print from applications such as Google Docs™ or Gmail™ via a smartphone, tablet, or computer connected to the Internet. Unlike conventional printing from a computer, Google Cloud Print enables you to print without using a printer driver. For example, if you want to print an e-mail or files that are attached to an e-mail, you can print just by using Gmail for mobile. You will find your printouts when you go to the machine.



◉**Checking the Machine Settings(P. 293)**
◉**Changing Google Cloud Print Settings(P. 293)**
◉**Registering the Machine with Google Cloud Print(P. 295)**

**IMPORTANT**

- When registering the machine or when using Google Cloud Print to print documents, you must be able to connect the machine to the Internet. You are also responsible for paying all Internet connection fees.

- You may not be able to use this function in some countries or regions.

**NOTE**

To use Google Cloud Print, a Google account is required. If you do not have one, access Google Web site to create your account.

## Checking the Machine Settings

Before setting up Google Cloud Print, check the following:

- Make sure that the machine is assigned an IPv4 address and connected to a computer over a network. ◉ **Connecting to a Wireless LAN(P. 94)** ◉**Connecting to a Wired LAN(P. 92)**
- Make sure that the date and time and the time zone settings are correct. ◉**Timer Settings(P. 188)**

## Changing Google Cloud Print Settings

Enable the Google Cloud Print function of the machine. You can also disable the Google Cloud Print function of the machine.

**1** Start the Remote UI and log on in System Manager Mode. ◉**Starting the Remote UI(P. 175)**

**2** Click [Settings/Registration].
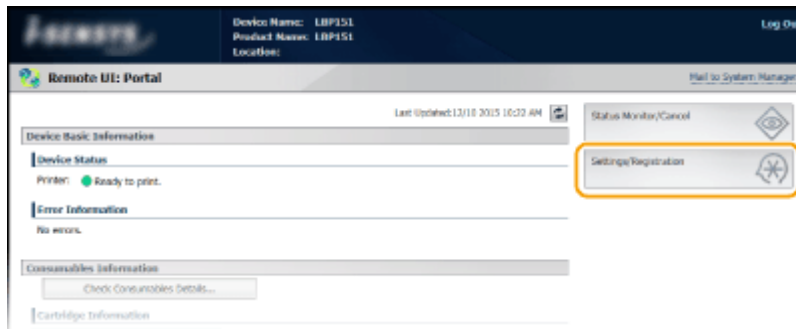
**3** Click [Network Settings] ▶ [Google Cloud Print Settings].
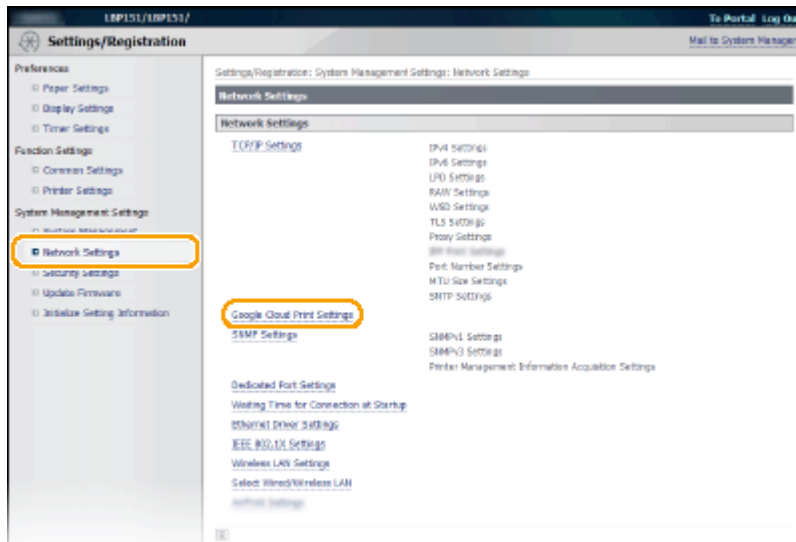


**4** Click [Edit] in [Basic Settings].
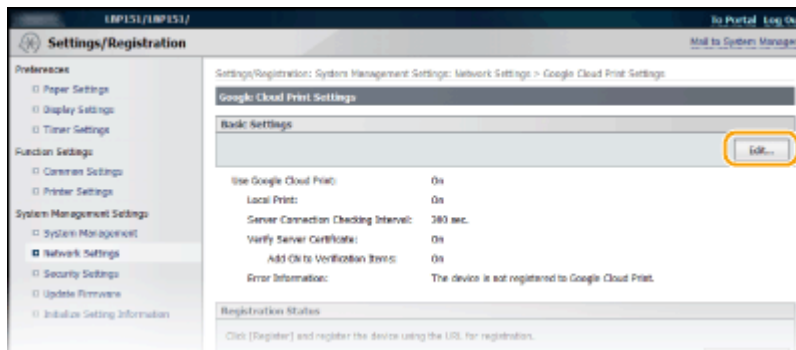


**5** Specify the required settings, and click [OK].
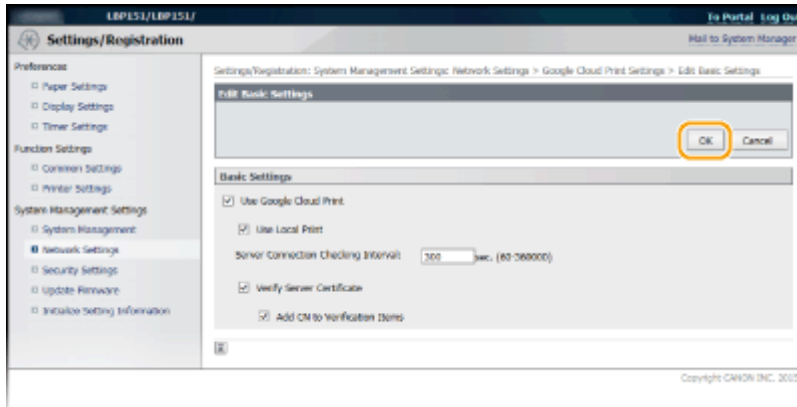
Appendix



## Registering the Machine with Google Cloud Print

Registering the machine with Google Cloud Print allows you to print from anywhere.

**1** **Start the Remote UI and log on in System Manager Mode. ❯Starting the Remote UI(P. 175)**

**2** **Click [Settings/Registration].**
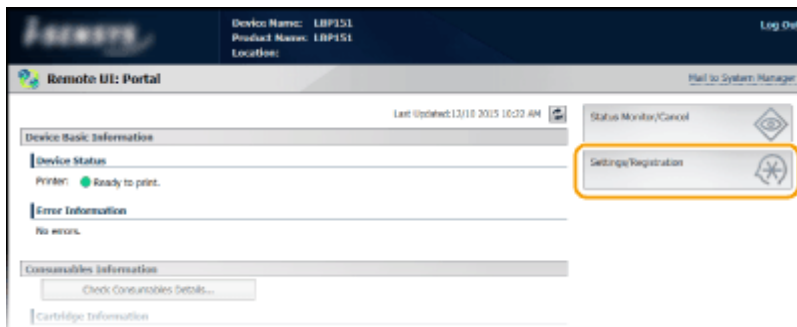


**3** **Click [Network Settings] ▶ [Google Cloud Print Settings].**
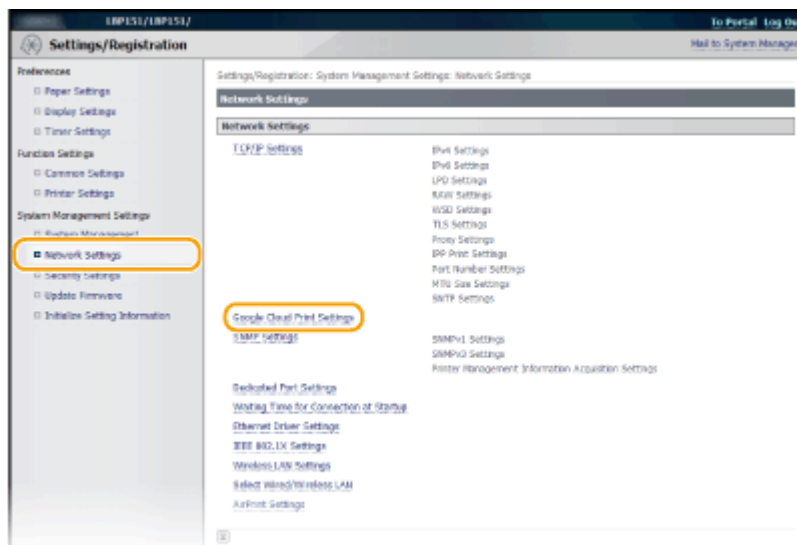


**4** **Click [Register] in [Registration Status].**

295
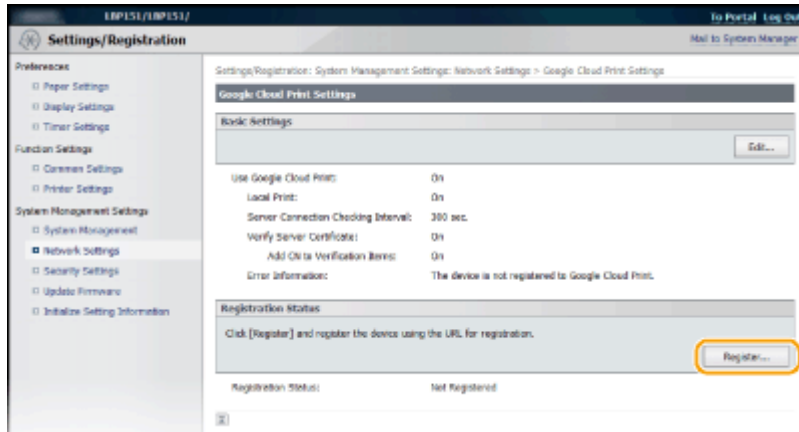
**NOTE:**

**If [Register] is unavailable**

You need to enable Google Cloud Print. Click [Edit], select the [Use Google Cloud Print] check box, and then click [OK].

**To reregister the machine**

To reregister the machine if the owner of the machine has changed or for other reasons, unregister the machine and register it again.

**5** **Click the link of the URL displayed for [URL for Registration].**
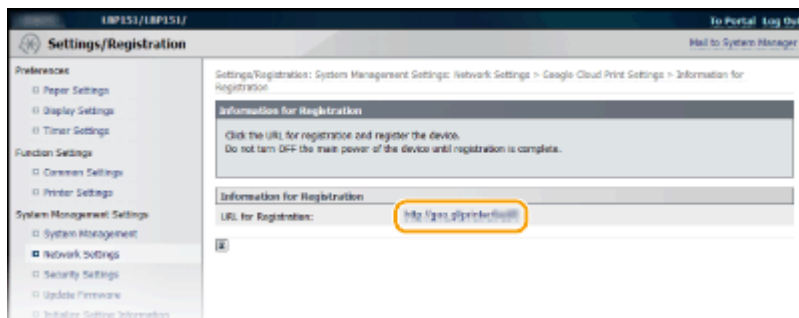


**6** **Follow the on-screen instructions to register the machine.**

➠ You can print from a Google Cloud Print compatible application such as Google Chrome™, Gmail, or Google Docs.

**NOTE:**

Access the Google Cloud Print Web site for information about the latest applications that support Google Cloud Print.

**NOTE**

**Registering from a mobile device or Google Chrome**

You can also register the machine from a mobile device or Google Chrome. The  (Paper) indicator lights up before completion of the registration. Press the  (Paper) key within 60 seconds to complete the registration.
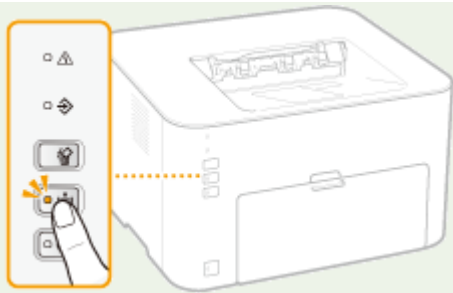
- For the registration procedure, see the instruction manual for your mobile device or the Google Cloud Print Web site.

# Manuals Included with the Machine

0YFA-05E

The manuals listed below are included with the machine. Refer to them as necessary.

| Getting Started | | Read this manual first. It contains easy to understand explanations of everything you need to do to set up the machine, from removing the packing materials to configuring the settings. It also explains basic maintenance. |
| --- | --- | --- |
| | | This manual has descriptions in the following languages.<br>Bulgarian, Croatian, Estonian, Greek, Latvian, Lithuanian, Persian, Romanian, Slovakian, Slovenian, Ukrainian |
| e-Manual<br>(This Manual) | | This manual describes all the functions of the machine. It is designed for viewing in a Web browser. You can browse information by category or enter a keyword to search for pages on a specific topic. **Using the e-Manual(P. 299)** |
| Printer Driver<br>Installation Guide | | This manual describes how to install the printer drivers and the software on the supplied DVD-ROM. |

# Using the e-Manual

0YFA-05F

The e-Manual is a manual that can be viewed on your computer. It describes all of the functions of the machine. You can search for information about what you want to do, or enter a keyword to quickly find the page you are looking for. You can use the e-Manual by installing it on your computer, or start the e-Manual directly from the DVD-ROM. **Installing the e-Manual(P. 300)**

## How to Find the Topic You Are Looking For

You can find the page you are looking for using the following three methods.

### Search the contents

You can find the page you are looking for by selecting a topic from the [Contents] tab on the left side of the screen, or by selecting a chapter icon from the icons next to the topics.
**Top Page(P. 307)**
**Topic Page(P. 309)**

### Search by keyword

You can search by entering keywords, such as "envelope" or "toner cartridge." Pages containing the keywords are displayed. You can also enter phrases such as "load paper." The search will find topics containing all of the words in the phrase (AND search).
**Search Tab(P. 310)**

### Search the site map

Click [Site Map] on the top part of the screen to display a list of all the e-Manual topics. From there you can find the topic you are looking for.
**Site Map(P. 311)**

---

**NOTE**

**System Requirements**

- To use the e-Manual, one of the following Web browsers is required. The content of the e-Manual may not display correctly if a browser not listed below is used.

  **Windows:**
  Internet Explorer 8.0/9.0/10.0/11.0
  Firefox 24.x ESR/26.x/29.x/30.x/31.x/31.x ESR/32.x/33.x/34.x/35.x/36.x/37.x/38.x/39.x

  **Mac OS:**
  Safari 7.x/8.x
  Firefox 24.x ESR/26.x/29.x/30.x/31.x/31.x ESR/32.x/33.x/34.x/35.x/36.x/37.x/38.x/39.x

- The CD-ROM/DVD-ROM provided for this product may include manuals in PDF format. If you do not have access to Adobe Reader to view the manuals in PDF format, try other programs such as PDF Preview developed by Vivid Document Imaging Technologies.

# Installing the e-Manual

0YFA-05H

Install the e-Manual on your computer by using the DVD-ROM that comes with the machine.

**1** **Insert the supplied DVD-ROM into the drive on the computer.**

**2** **Click [Custom Installation].**
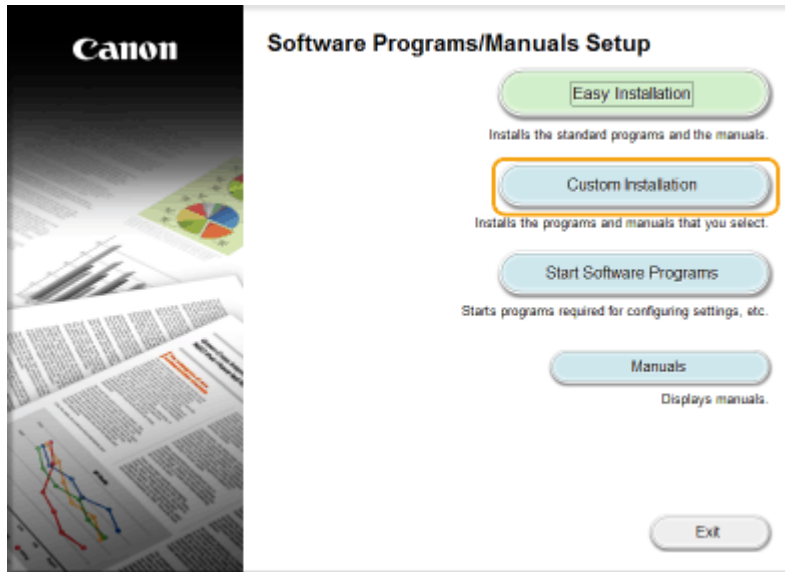


**NOTE:**

- If the above screen does not appear ◉**Displaying the [Software Programs/Manuals Setup] Screen(P. 318)**
- If [AutoPlay] is displayed, click [Run MInst.exe].

**3** **Clear all the check boxes except for [e-Manual], and click [Install].**
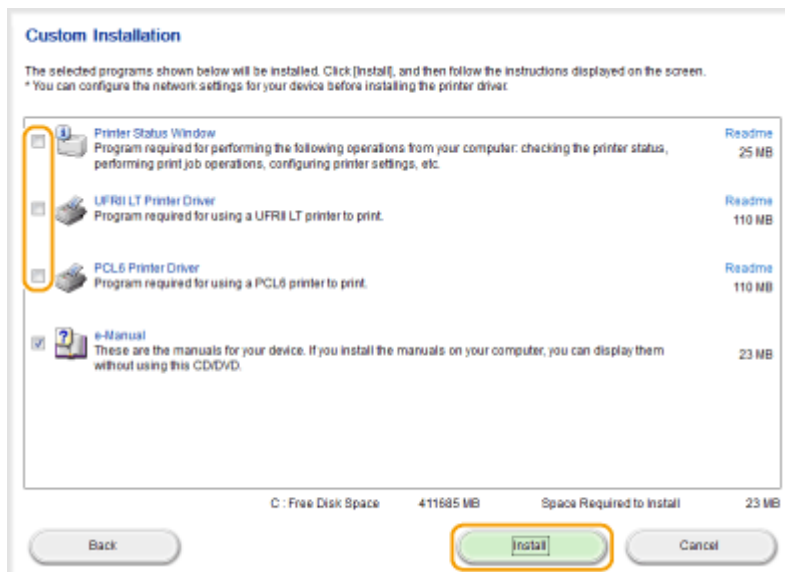
**4** **Read the License Agreement and click [Yes] to agree.**



**5** **Click [Install].**

- If you want to change the installation destination, click [Browse] and select your desired location.
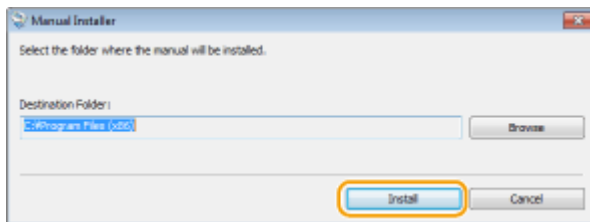


The installation begins.

**6** **Click [Exit].**
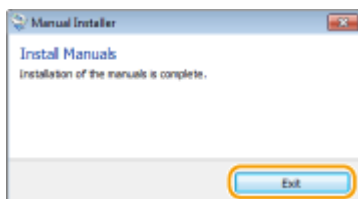


**7** **Click [Next] ▶ [Exit].**
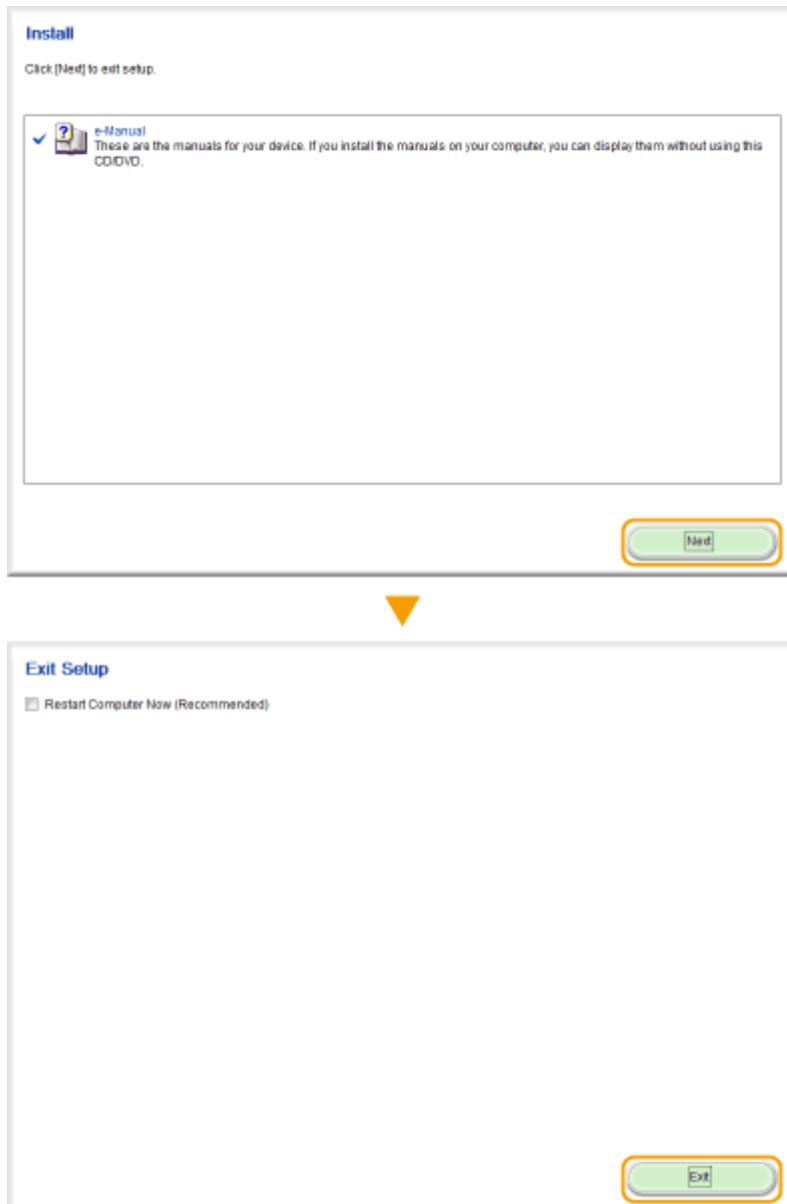
## ■ Viewing the e-Manual

Double-click the shortcut icon of the e-Manual on the desktop.



> **NOTE**
>
> **If a security warning message appears**
> Click [Allow blocked content].
>
> 
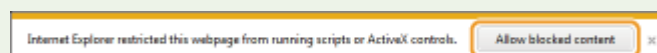
**Viewing the e-Manual Directly from the DVD-ROM**

**1** **Insert the supplied DVD-ROM into the drive on the computer.**

- If the [Software Programs/Manuals Setup] screen does not appear ● **Displaying the [Software Programs/Manuals Setup] Screen(P. 318)**

- If [AutoPlay] is displayed, click [Run MInst.exe].

**2** **Click [Manuals].**

**3** **Click [e-Manual].**

# Uninstalling the e-Manual

0YFA-05J

You can remove the e-Manual from the computer to restore the computer to the same state it was in before the e-Manual was installed.

**1** **Insert the supplied DVD-ROM into the drive on the computer.**

**2** **Click [Start Software Programs].**

**Software Programs/Manuals Setup**

Easy Installation
Installs the standard programs and the manuals.

Custom Installation
Installs the programs and manuals that you select.

Start Software Programs
Starts programs required for configuring settings, etc.
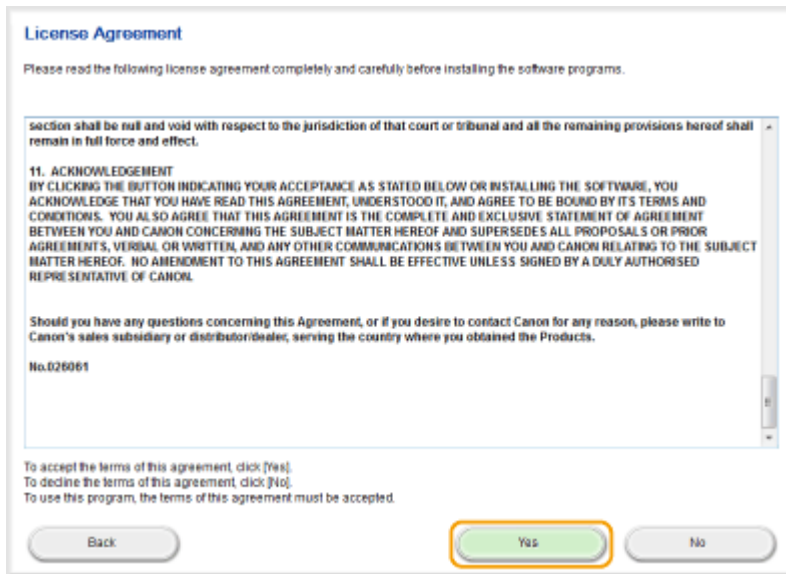
Manuals
Displays manuals.
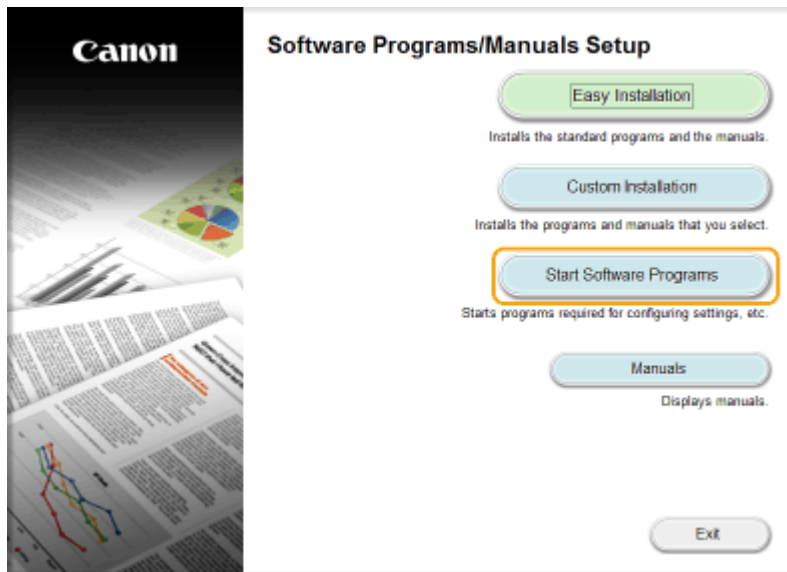
Exit

**NOTE:**

- If the above screen does not appear ●**Displaying the [Software Programs/Manuals Setup] Screen(P. 318)**
- If [AutoPlay] is displayed, click [Run MInst.exe].

**3** **Click [Start] for [Manual Uninstaller].**

**Start Software Programs**

Starts programs from the CD/DVD. Click [Start] to the right of the program you want to start.

MF/LBP Network Setup Tool
Configures printer settings in order to connect to the network.
Readme
Start

Manual Uninstaller
The manuals installed by this setup will be uninstalled.
Start

Back    Cancel
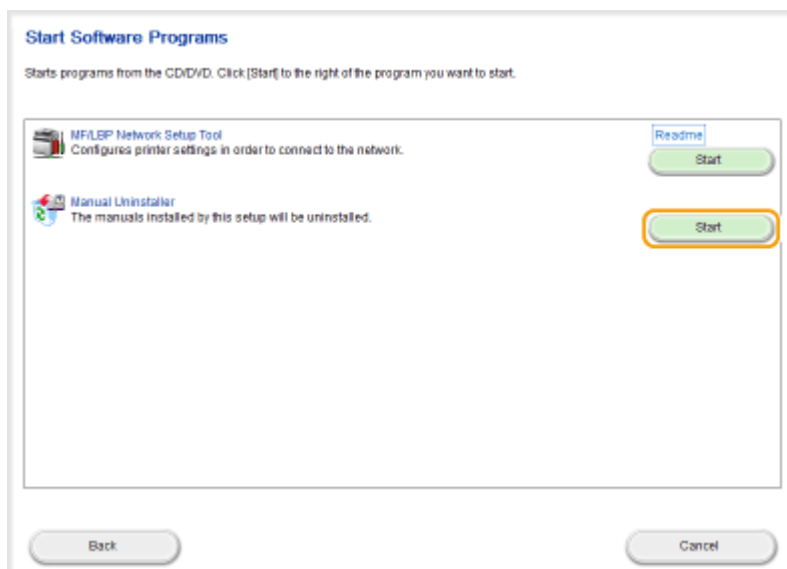
**4** **Click [Next].**
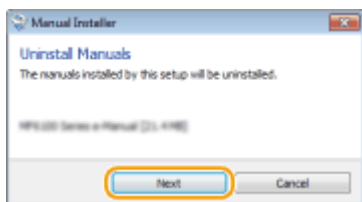


⏸▶ The uninstall begins.

**5** **Click [Exit].**
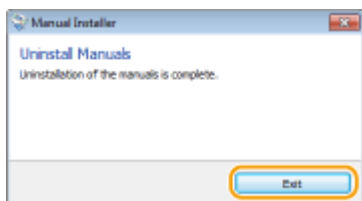


**6** **Click [Back] ▶ [Exit].**
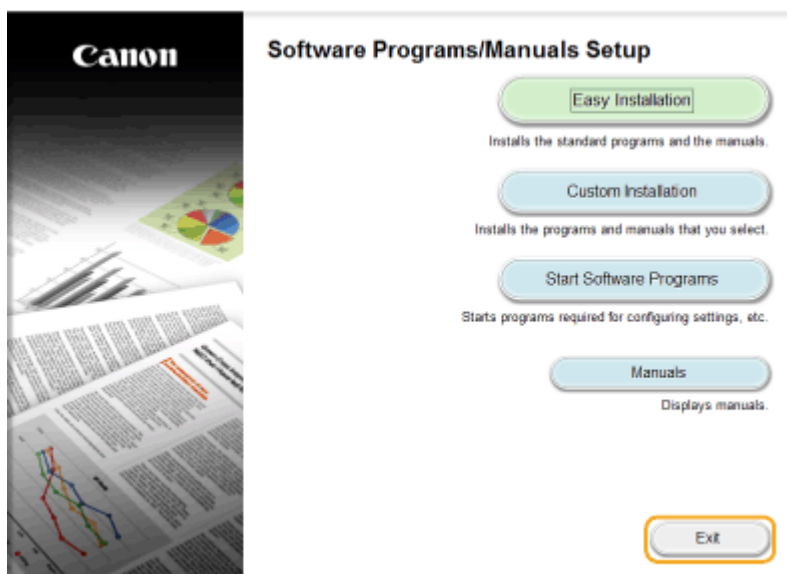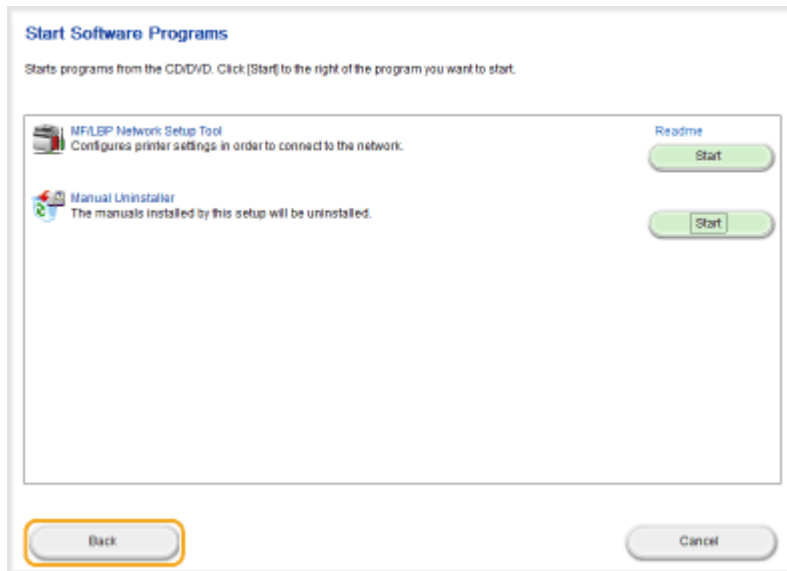
# Screen Layout of the e-Manual

The e-Manual is divided into different screens, and the content of each screen varies.

## Top Page

This page appears when the e-Manual is started.



### ⓐ Canon

Click to return to the top page from any other page.

### ⓑ [Contents] tab/[Search] tab

Click to toggle the display between the [Contents] tab and [Search] tab.

### ⓒ Contents

Displays the titles of chapters ( ⓵ ). Place the mouse pointer over one of the titles to display the topics in that chapter on the right. Click a topic to display its page.

**d** **[Top]**

Click to return to the top page from any other page.

**e** **[Site Map]**

Click to display the titles of all e-Manual topics.

**f** **[Help]**

Click to display information on how to view the e-Manual, how to perform a search, and other information.

**g** **[Print]**

Click to print the currently displayed topic page.

**h** **Feature Highlights**

This page provides a variety of practical examples of ways to use the machine. Click ⬜ / ⬜ / ⬜ to toggle the display of practical examples by category, or click the sliding display for more information about each category. The sliding display can be stopped by moving the pointer onto it. ▶**Feature Highlights(P. 308)**

**i** **[Quick Help]/[Troubleshooting]/[Maintenance]**

Click to view how to solve problems or maintain the machine.

**j** **[For Mac OS Users]**

Click to view precautions when using Mac OS.

**k** **[Notice]**

Click to view important information you should know when using the machine.

**l** **[Office Locations]**

Click to display contact information for any inquiries about the machine.

## Feature Highlights

This page provides a variety of practical examples of ways to use the machine.

**ⓐ** ▼ / ▲
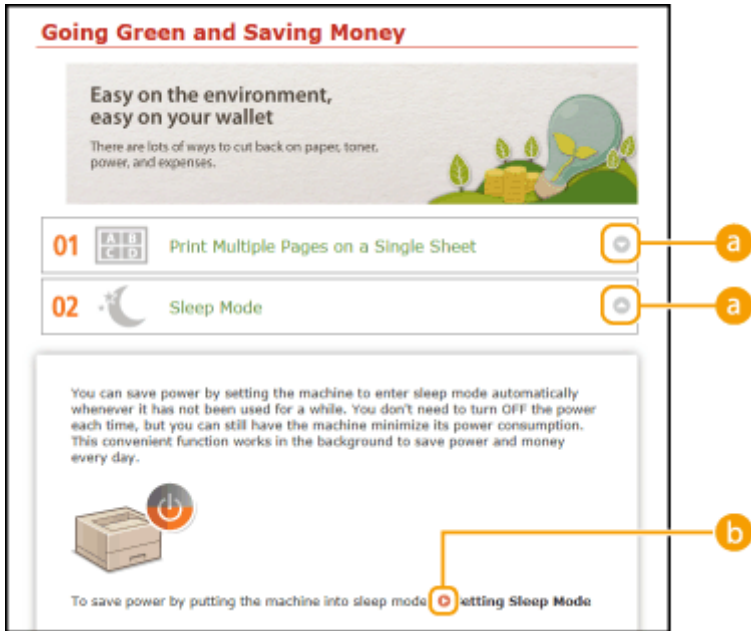
Click to expand the window to show the information. Click again to collapse the window.

**ⓑ** ▶

Click to display the corresponding topic page.

## Topic Page

Topic pages contain information about how to configure and use the machine.
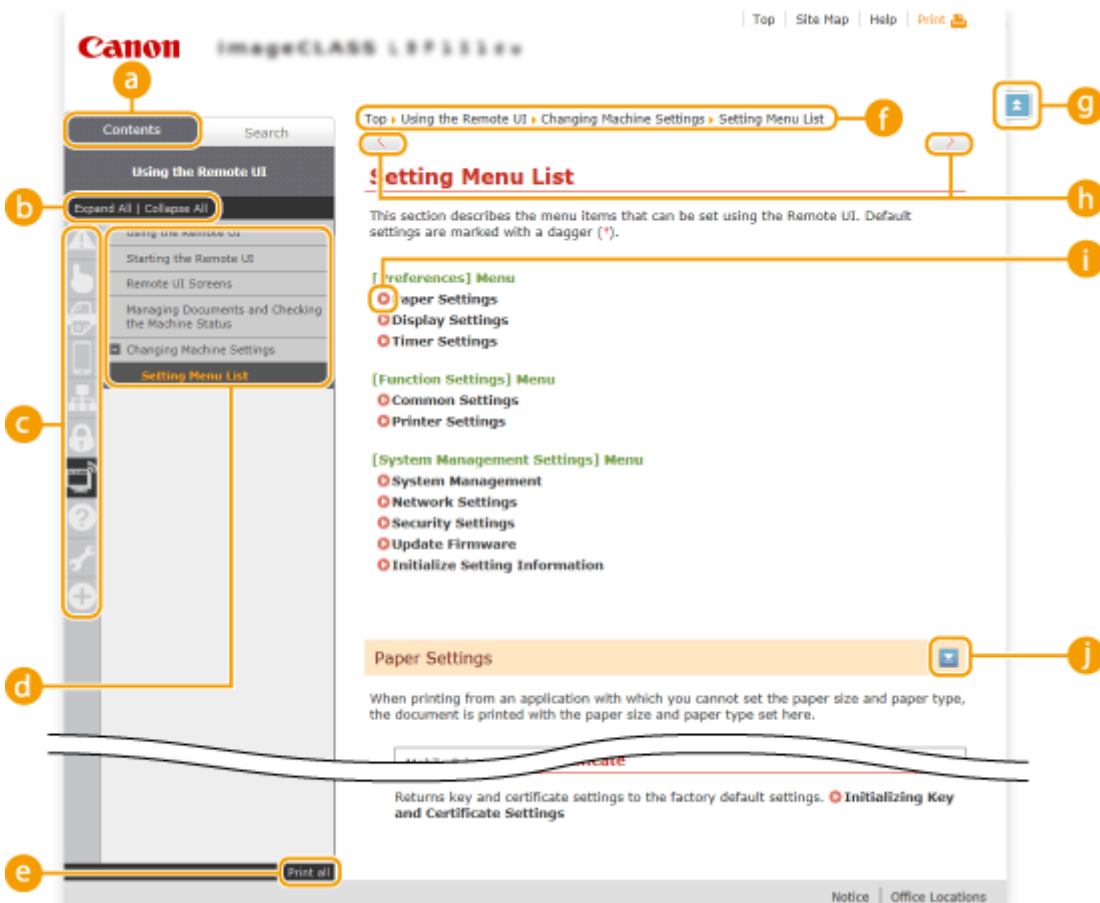


**ⓐ** **[Contents]**

Chapter icons and topic titles are displayed in this tab.

**b** **[Expand All]/[Collapse All]**

Click [Expand All] to display all of the subsections of all topics. Click [Collapse All] to close all of the subsections of all the topics.

**c** **Chapter icons**

Click a chapter icon to navigate to the top of the corresponding chapter.

**d** **Topics**

Displays the topics of the selected chapter. If "+" is displayed on a topic, clicking it displays the subsections of that topic. Click "-" to close an expanded topic.

**e** **[Print all]**

All pages of the selected chapter are opened in a separate window. You can print them as necessary.

**f** **Navigation**

This shows which chapter topic you are currently viewing.

**g**

Click to return to the page top.

**h** /

Click to display the previous or next topic.

**i**

Click to jump to the corresponding page. To return to the previous page, click the "Back" button on your Web browser.

**j**

Click to display hidden detailed descriptions. Click again to close the detailed descriptions.

## Search Tab

This tab contains a text box to perform a search and find the page you are looking for.
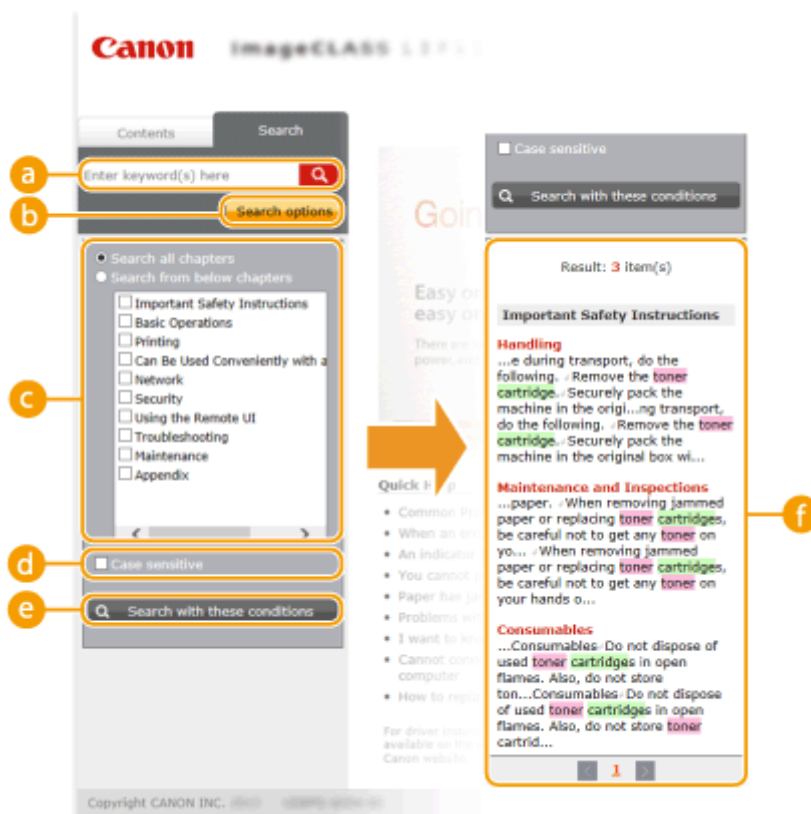
**ⓐ [Enter keyword(s) here]**

Enter one or more keywords and click 🔍 to display the search results in a results list. You can enter a phrase to find pages that contain all of the words in the phrase. To find the exact phrase, enclose it in double quotation marks.

**ⓑ [Search options]**

Click to specify search conditions such as the scope of the search and case sensitivity.

**ⓒ Search scope selector**

You can use this to select the individual chapters to search. This allows you to search more efficiently, when you can predict the chapters containing the topic that you are looking for.

**ⓓ Search options selector**

Select the check box to make your search case-sensitive.

**ⓔ [Search with these conditions]**

ⓒ and ⓓ specify the conditions. After setting them, press this to perform the search and display the results in the [Result] list.

**ⓕ Result list**

This displays pages that contain the specified keywords. From the results, locate the page you are looking for and click the topic title of the page. If the results cannot be displayed on one page, click ◁ / ▷ or a page number to display the results on the corresponding page.

## Site Map

This page displays the titles of all topics in the e-Manual.
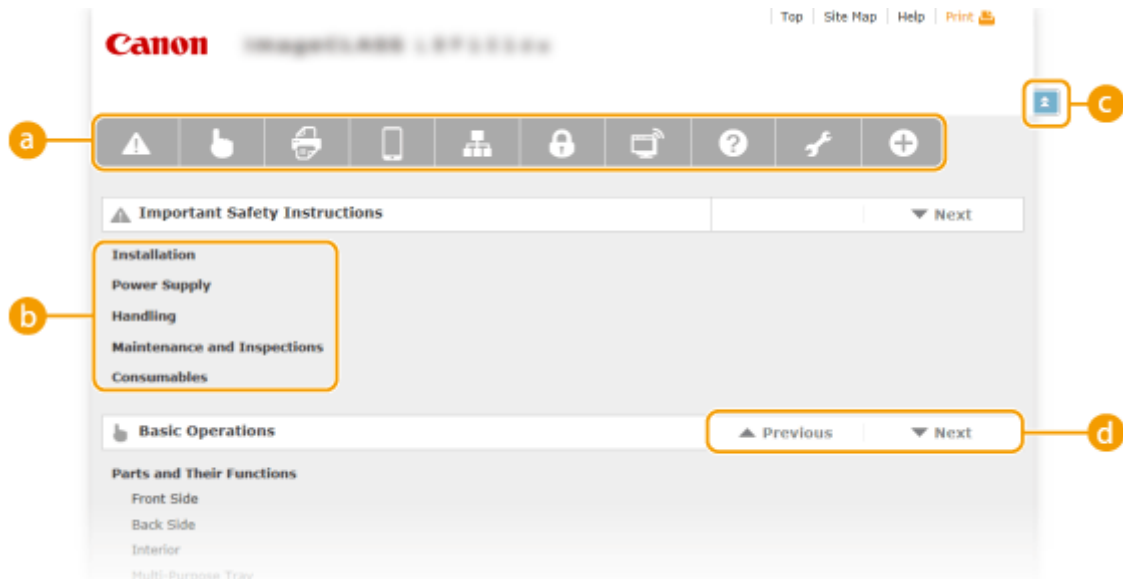
**ⓐ Chapter icons**

Click to jump to the table of contents of the selected chapter.

**ⓑ Topic titles**

Displays titles and topics. Click a title to jump to the corresponding topic page.

**ⓒ** 🔼

Click to return to the page top.

**ⓓ** 🔼 / 🔽

Click to go to the previous or next chapter.

# Viewing the e-Manual

0YFA-05L

## Marks

Cautions regarding safety, restrictions and cautions regarding the handling of the machine, useful tips, and other information are indicated using the marks below.

| | |
|---|---|
| **⚠ WARNING** | Indicates a warning concerning operations that may lead to death or injury to persons if not performed correctly. To use the machine safely, always pay attention to these warnings. |
| **⚠ CAUTION** | Indicates a caution concerning operations that may lead to injury to persons if not performed correctly. To use the machine safely, always pay attention to these cautions. |
| 🚫 | Indicates an operation that must not be performed. Read these items carefully, and make sure not to perform the described operations. |
| **IMPORTANT** | Indicates operational requirements and restrictions. Be sure to read these items carefully to operate the machine correctly and avoid damage to the machine or property. |
| **NOTE** | Indicates a clarification of an operation, or contains additional explanations for a procedure. |
| **TIPS** | Indicates useful functions or tips for using the machine. |

## Keys

Keys on the machine and buttons on the computer display are indicated with the following notations:

| Type | Example notation in the e-Manual |
|---|---|
| Machine key | 📥 (Paper) key |
| Buttons and other text interfaces on the computer display | [Preferences] |

## Computer screens

Depending on the operating system you are using, the appearance of the displays in this manual may differ slightly from the displays that you see. Also, the appearance of printer drivers and software may differ depending on their version.

## Illustrations

Depending on the country or region, the shape of power cord plugs and AC power outlets may differ from those shown in the illustrations of the e-Manual.

# Manual Display Settings

0YFA-05Y

# Other

This section describes basic Windows operations and includes disclaimers, copyright information, and other information.

# Basic Windows Operations

0YFA-05S

## ■ Displaying [Computer] or [My Computer]

**Windows Vista/7/Server 2008**
[Start] ▶ select [Computer].

**Windows 8/Server 2012**
Right-click the lower-left corner of the screen ▶ select [File Explorer] ▶ [Computer] or [This PC].

**Windows 8.1/Server 2012 R2**
Right-click [Start] ▶ select [File Explorer] ▶ [Computer] or [This PC].

**Windows Server 2003**
[Start] ▶ select [My Computer].

## ■ Displaying the Printer Folder

**Windows Vista**
[Start] ▶ select [Control Panel] ▶ [Printer].

**Windows 7/Server 2008 R2**
[Start] ▶ select [Devices and Printers].

**Windows 8/Server 2012**
Right-click the lower-left corner of the screen ▶ select [Control Panel] ▶ [View devices and printers].

**Windows 8.1/Server 2012 R2**
Right-click [Start] ▶ select [Control Panel] ▶ [View devices and printers].

**Windows Server 2003**
[Start] ▶ select [Printers and Faxes].

**Windows Server 2008**
[Start] ▶ select [Control Panel] ▶ double-click [Printers].

## ■ Enabling [Network discovery]

If you are using Windows Vista/7/8/Server 2008/Server 2012, enable [Network discovery] to view the computers on your network.

**Windows Vista**
[Start] ▶ select [Control Panel] ▶ [View network status and tasks] ▶ under [Network discovery], select [Turn on network discovery].

**Windows 7/Server 2008 R2**
[Start] ▶ select [Control Panel] ▶ [View network status and tasks] ▶ [Change advanced sharing settings] ▶ select [Turn on network discovery] under [Network discovery].

**Windows 8/Server 2012**
Right-click the lower-left corner of the screen ▶ select [Control Panel] ▶ [View network status and tasks] ▶ [Change advanced sharing settings] ▶ select [Turn on network discovery] under [Network discovery].

**Windows 8.1/Server 2012 R2**
Right-click [Start] ▶ select [Control Panel] ▶ [View network status and tasks] ▶ [Change advanced sharing settings] ▶ select [Turn on network discovery] under [Network discovery].

**Windows Server 2008**
[Start] ▶ select [Control Panel] ▶ double-click [Network and Sharing Center] ▶ select [Turn on network discovery] under [Network discovery].

## ■ Displaying Shared Printers in the Print Server

**1** **Open [Windows Explorer] or [File Explorer].**

**Windows Vista/7/Server 2003/Server 2008**
[Start] ▶ select [All Programs] or [Programs] ▶ [Accessories] ▶ [Windows Explorer].

**Windows 8/Server 2012**
Right-click the lower-left corner of the screen ▶ select [File Explorer].

**Windows 8.1/Server 2012 R2**
Right-click [Start] ▶ select [File Explorer].

**2** **Select a print server from [Network] or [My Network Places].**

- To check a computer on the network, you may need to enable [Network discovery] ( ▶**Enabling [Network discovery](P. 316)** ) or search for the computer on the network.
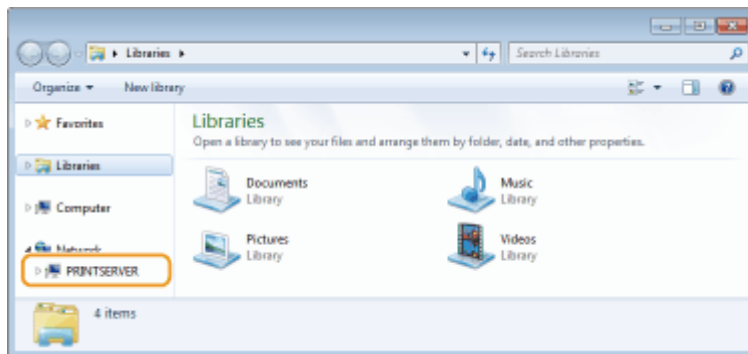


⇒ The shared printers are displayed.
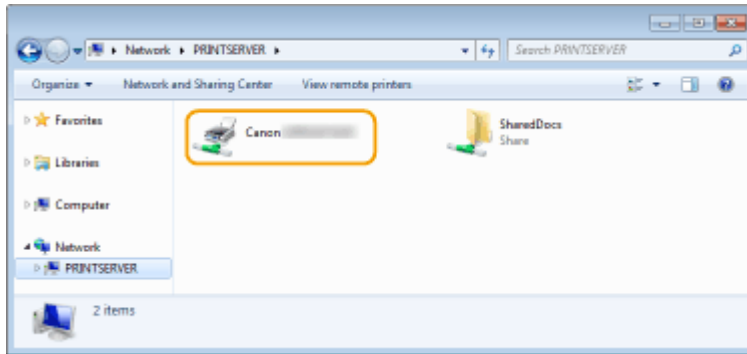
## Displaying the [Software Programs/Manuals Setup] Screen

If your computer does not display the [Software Programs/Manuals Setup] screen after inserting the supplied DVD-ROM, follow the procedure below. The DVD-ROM drive name is indicated as "D:" in this manual. The DVD-ROM drive name may differ depending on the computer you are using.

**Windows Vista/7/Server 2008**
[Start] ▶ enter "D:\MInst.exe" in [Search programs and files] or [Start Search] ▶ press the [ENTER] key.

**Windows 8/Server 2012**
Right-click the lower-left corner of the screen ▶ [Run] ▶ enter "D:\MInst.exe" ▶ click [OK].

**Windows 8.1/Server 2012 R2**
Right-click [Start] ▶ [Run] ▶ enter "D:\MInst.exe" ▶ click [OK].

**Windows Server 2003**
[Start] ▶ [Run] ▶ enter "D:\MInst.exe" ▶ click [OK].

## Printing a Test Page in Windows

You can check whether the printer driver is operational by printing a test page in Windows.

**1** **Load A4 size paper in the drawer or multi-purpose tray.**
 ◉**Loading Paper in the Drawer(P. 32)**
 ◉**Loading Paper in the Multi-Purpose Tray(P. 35)**

**2** **Display the printer folder.** ◉**Displaying the Printer Folder(P. 316)**

**3** **Right-click the icon of the machine and click [Printer properties] or [Properties].**
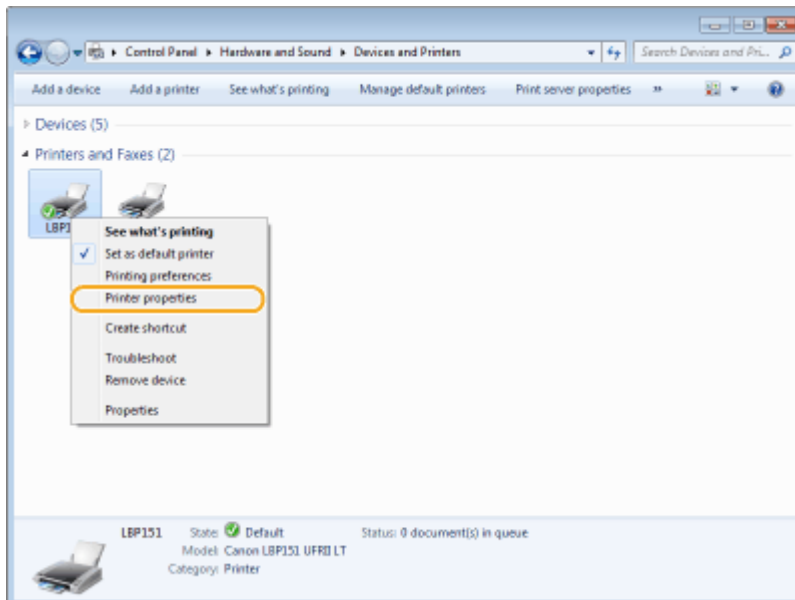
**4** In the [General] tab, click [Print Test Page].
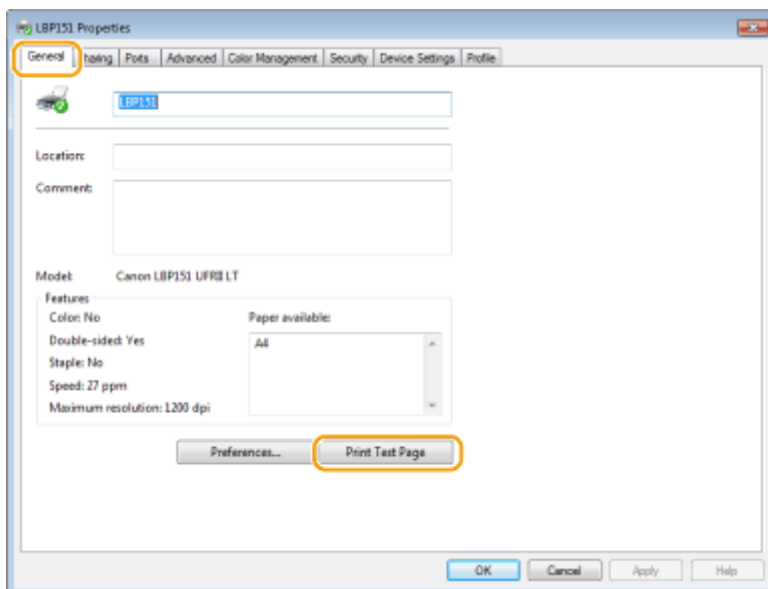


▶ Windows prints the test page.

## ■ Checking the Bit Architecture

If you are not sure whether your computer is running 32-bit or 64-bit Windows, follow the procedure below to check.

**1** Display [Control Panel].

**Windows Vista/7/Server 2008**
[Start] ▶ select [Control Panel].

**Windows 8/Server 2012**
Right-click the lower-left corner of the screen ▶ select [Control Panel].

**Windows 8.1/Server 2012 R2**

Right-click [Start] ▶ select [Control Panel].

## **2** Display [System].

**Windows Vista/7/8/Server 2008 R2/Server 2012**
Click [System and Security] or [System and Maintenance] ▶ [System].

**Windows Server 2008**
Double-click [System].

## **3** Check the bit architecture.

**32-bit operating systems**
[32-bit Operating System] is displayed.

**64-bit operating systems**
[64-bit Operating System] is displayed.
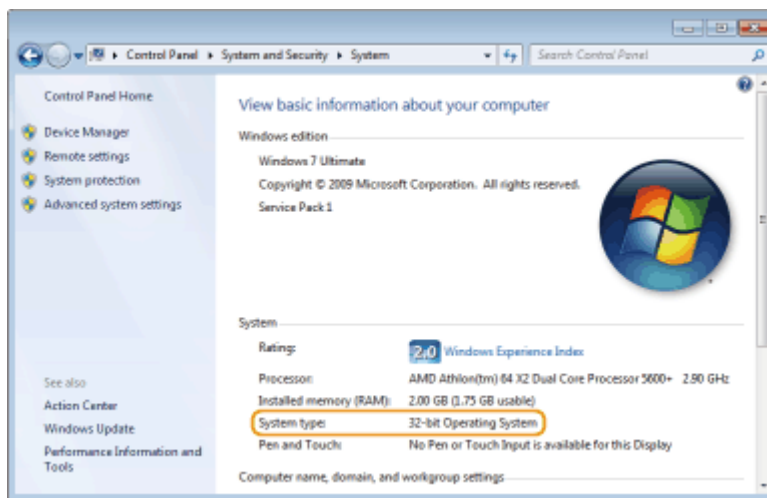


■ Checking the Printer Port

**1** Open the printer folder. ⊙**Displaying the Printer Folder(P. 316)**

**2** Right-click your printer icon and click [Printer properties] or [Properties].
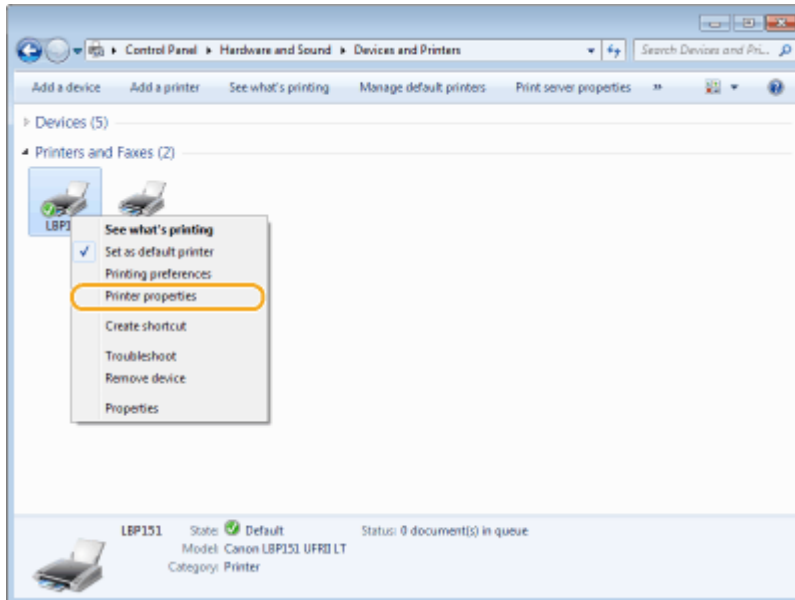
**3** **Check the port settings.**

- Click the [Ports] tab.
- Make sure that the correct port is selected for the printer.
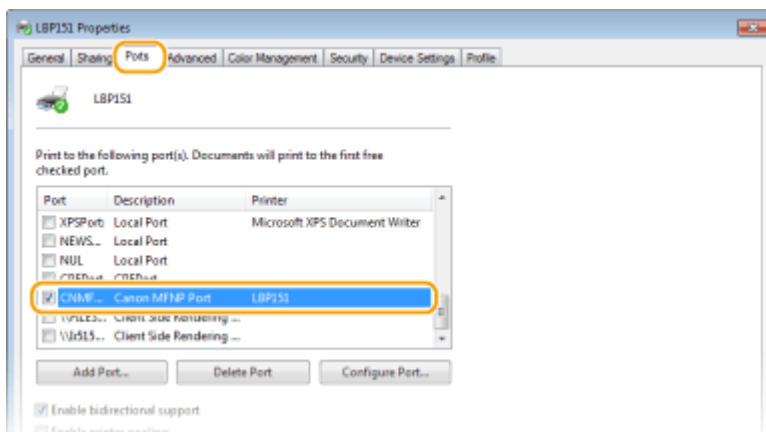


### NOTE

**If you are using a network connection and have changed the machine's IP address**

If the [Description] of the selected port is [Canon MFNP Port], and the machine and the computer are on the same subnet, then the connection will be maintained. You do not need to add a new port. If it is [Standard TCP/IP Port], you need to add a new port. ●**Configuring Printer Ports(P. 110)**

## ■ Checking the SSID to Which Your Computer Is Connected

If your computer is connected to a wireless LAN network, click ![icon], ![icon] or ![icon] in the system tray to display the SSID of the connected wireless LAN router.

# For Mac OS Users

<div align="right">0YFA-05U</div>

Your machine may have not come with a driver for Mac OS depending on when you purchased the machine. The drivers are uploaded to the Canon website when they become needed. Check the operating system of your computer and download the appropriate driver from the Canon website. For the driver installation procedure and how to operate the driver, see the "Printer Driver Guide for Macintosh".

In the e-Manual and Printer Driver Installation Guide, methods to operate in the Windows environment are explained as examples. To view how to use the driver and utility for Mac OS, see the following guide or help.

| Object | Reference |
|---|---|
| Installing the driver | Printer Driver Guide for Macintosh |
| How to use the driver functions | Driver Help |

## ■ Displaying the Driver Guide

Double-click the following HTML file in the [SFP] folder on the supplied DVD-ROM.

**Printer Driver Guide for Macintosh**

[SFP] - [Documents] - [XXXXXX]* - [GUIDE] - [index.html]

* For [XXXXXX], select your desired language.

## ■ Displaying the Driver Help

Click [ ? ] on the driver.

# Notice

## ■Third Party Services and Software

**Third Party Software**  (PDF)

## ■Product Name

Safety regulations require the product's name to be registered.
In some regions where this product is sold, the following name(s) in parentheses ( ) may be registered instead.
LBP151dw (F169000)

## ■EMC requirements of EC Directive

This equipment conforms with the essential EMC requirements of EC Directive. We declare that this product conforms with the EMC requirements of EC Directive at nominal mains input 230 V, 50 Hz although the rated input of the product is 220 to 240 V, 50/60 Hz. Use of shielded cable is necessary to comply with the technical EMC requirements of EC Directive.

## ■Laser Safety

This product is confirmed as a Class 1 laser product in IEC60825-1:2007 and EN60825-1:2007.
CLASS 1 LASER PRODUCT
LASER KLASSE 1
APPAREIL À LASER DE CLASSE 1
APPARECCHIO LASER DI CLASSE 1
PRODUCTO LÁSER DE CLASE 1
APARELHO A LASER DE CLASSE 1
LUOKAN 1 LASER-TUOTE
LASERPRODUKT KLASS 1
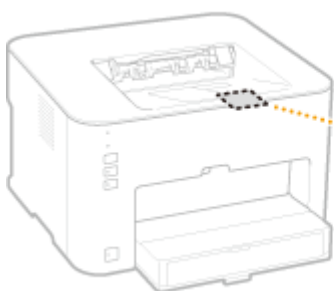
The laser beam can be harmful to human bodies. Since radiation emitted inside the product is completely confined within protective housings and external covers, the laser beam cannot escape from the machine during any phase of user operation. Read the following remarks and instructions for safety.

- Never open covers other than those instructed in the manuals for this machine.

> **⚠ CAUTION**
>
> Use of controls, adjustments, or performance of procedures other than those specified in this manual may result in hazardous radiation exposure.

## ■International ENERGY STAR Program

As an ENERGY STAR® Partner, Canon Inc. has determined that this product meets the ENERGY STAR Program for energy efficiency.

The International ENERGY STAR Office Equipment Program is an international program that promotes energy saving through the use of computers and other office equipment.

The program backs the development and dissemination of products with functions that effectively reduce energy consumption. It is an open system in which business proprietors can participate voluntarily.

The targeted products are office equipment, such as computers, displays, printers, facsimiles, and copiers. The standards and logos are uniform among participating nations.

## ■WEEE Directive

Only for European Union and EEA (Norway, Iceland and Liechtenstein)

These symbols indicate that this product is not to be disposed of with your household waste, according to the WEEE Directive (2012/19/EU), the Battery Directive (2006/66/EC) and/or national legislation implementing those Directives. If a chemical symbol is printed beneath the symbol shown above, in accordance with the Battery Directive, this indicates that a heavy metal (Hg = Mercury, Cd = Cadmium, Pb = Lead) is present in this battery or accumulator at a concentration above an applicable threshold specified in the Battery Directive.

This product should be handed over to a designated collection point, e.g., on an authorized one-for-one basis when you buy a new similar product or to an authorized collection site for recycling waste electrical and electronic equipment (EEE) and batteries and accumulators. Improper handling of this type of waste could have a possible impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. Your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources.

For more information about the recycling of this product, please contact your local city office, waste authority, approved scheme or your household waste disposal service or visit **www.canon-europe.com/weee**, or **www.canon-europe.com/battery**.

## ■IPv6 Ready Logo

The protocol stack included in this machine has obtained the IPv6 Ready Logo Phase-1 established by the IPv6 Forum.

## ■Product Information required by COMMISSION REGULATION (EU) No 801/2013 amending Regulation (EC) No 1275/2008

Power consumption of the product in networked standby if wired network ports are connected and all wireless network ports are activated (if they are available at the same time).

| Model Name | Power consumption of the product in networked standby |
|---|---|
| LBP151dw | 1.9 W |

**NOTE**

The above value(s) are the actual values for single machine, chosen arbitrarily, and may therefore vary from the value of the machine in use. Optional network ports are not connected and/or activated in the measurement.

## ■Legal Limitations on the Usage of Your Product and the Use of Images

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- Stock Certificates
- Motor Vehicle Licenses and Certificates of Title
- Copyrighted Works/Works of Art without Permission of Copyright Owner

## ■Wireless LAN Regulatory Information

### Regulatory information for users in Jordan

LBP151dw includes approved Wireless LAN Module (Model name: AW-NM383).

Contains Wireless LAN Module approved by TRC/SS/2014/38

### Regulatory information for users in UAE

LBP151dw includes approved Wireless LAN Module (Model name: AW-NM383).

TRA
REGISTERED No: ER0126617/14
DEALER No: DA0060877/11

### Нормативная информация для пользователей в России

Подтверждение соответствия Минкомсвязи России:
Декларация соответствия № Д-РД-2695 от 27.01.2014 года, действительна до 27.01.2020 года, зарегистрирована в Федеральном агентстве связи 30.01.2014 года

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