



**LBP252dw / LBP251dw**

# **User's Guide**

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# Important Safety Instructions

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## **Important Safety Instructions**

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0W20-000

The content described in this chapter is for the prevention of damage to property and injury to users of the machine and others. Before using this machine, read this chapter and follow the instructions to properly use this machine. Do not perform any operations not described in this manual. Canon will not be responsible for any damages resulting from use not described in this manual, improper use, or repair/changes not performed by Canon or a third party authorized by Canon.

# Installation

OW20-001

To use this machine safely and comfortably, 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, 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.
- When installing and removing the optional accessories, be sure to turn OFF the power, unplug the power plug, and then disconnect all the interface cables and power cord from the machine. Otherwise, the power cord or interface cables may be damaged, resulting in a fire or electrical shock.
- Do not use near any medical equipment. Radiowaves emitted from this machine may interfere with medical equipment, which may cause a malfunction and result in serious 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.

- Unstable location
- 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, or between the paper drawers. Doing so may result in injury.

## IMPORTANT

### Do not install in the following locations that may result in damage

- 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, etc. during normal use. Although sensitivity to ozone, etc. may vary, this amount is not harmful. Ozone, etc. may be more noticeable during extended use or long production runs, especially in poorly ventilated rooms. It is recommended that the room where the machine operates be appropriately ventilated to maintain a comfortable working environment. 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

- Set the machine at a distance of 50 m or less from the wireless LAN router.
- Do not set machine in a location where any object blocks communication. 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 emit 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

OW20-002

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 machine to an uninterruptible power source.
- If plugging 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 into the auxiliary outlet on a computer.

### Other precautions

- Electrical noise may cause this machine to malfunction or lose data.

# Handling

0W20-003

## 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 which may result in a fire or electrical shock.



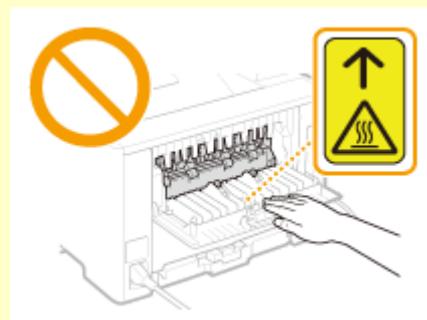
- Place the machine where children will not come in contact with the power cord and other cables or internal and electrical parts. Failure to do so may result in unexpected accidents.
- Do not use flammable sprays near this machine. If flammable substances come into contact with electrical parts inside 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.

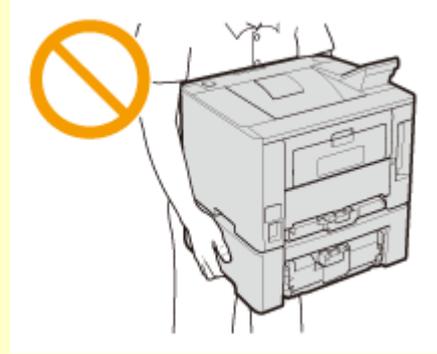
## CAUTION

- Do not place heavy objects on this machine as they may fall, resulting in injury.
- For your safety, please unplug the power cord 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.
- 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.



## CAUTION

- Do not carry the machine with the paper drawers or the optional paper feeder installed. Otherwise, the paper drawer may fall and result in injury.



## Laser beam

- This machine is classified as a Class 1 Laser Product under IEC60825-1:2007 and EN60825-1:2007. The laser beam can be harmful to the human body. The laser beam is confined within protective housings and external covers, so there is no danger of the laser beam escaping during normal machine operation. For safety, never open covers other than those indicated in this manual.
- If you operate the machine in manners other than the control, adjustment, and operating procedures prescribed in this manual, this may result in hazardous radiation exposure. If the laser beam should escape and enter your eyes, exposure may cause damage to your eyes.

## IMPORTANT

### When transporting the machine

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

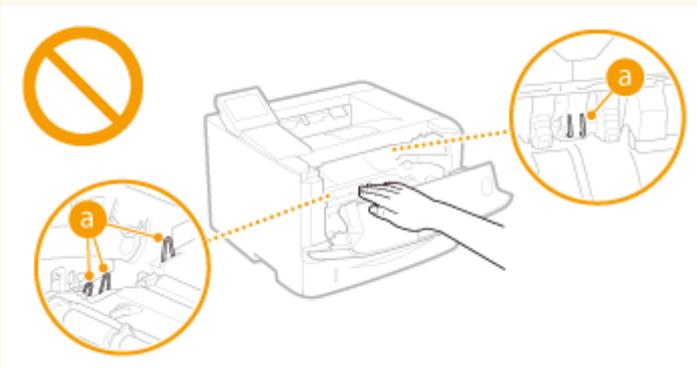
- Remove the toner cartridges.
- Securely pack the machine in the original box with packing materials.

### 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 in the caution label attached to this machine.
- Avoid shaking or applying shock to this machine.
- 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 (  ) inside the machine. Doing so may result in damage to the machine.



## Important Safety Instructions

- To prevent a paper jam, do not turn OFF the power, open/close the covers, and load/unload the paper when printing.

## Maintenance and Inspections

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0W20-004

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. 348)** . If the problem cannot be resolved or you feel the machine requires an inspection, see **▶When a Problem Cannot Be Solved(P. 388)** .

### 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 damage. Check the machine for rust, dents, scratches, cracks, or excessive heat generation. Use of poorly-maintained equipment 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 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

OW20-005

### 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 to ignite, and result in burns or fire.
- If you accidentally spill or scatter toner, carefully wipe up the loose toner with a damp, soft cloth and avoid inhaling any toner dust. Do not use a vacuum cleaner that is not equipped with safety measures to prevent dust explosions to clean up loose toner. 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

- The toner cartridge generates a low level magnetic flux. If you are using a cardiac pacemaker and feel abnormalities, please move away from the toner cartridge and consult your physician immediately.

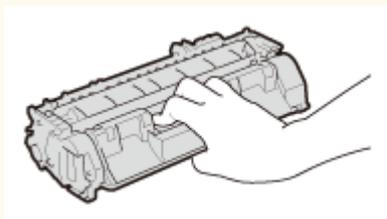
### CAUTION

- 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 with cold water and consult a physician.
- Use caution so that toner does not come into contact with your skin. If it should, wash with soap and cold water. If there is any irritation on your skin, consult a physician immediately.
- Keep the 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.

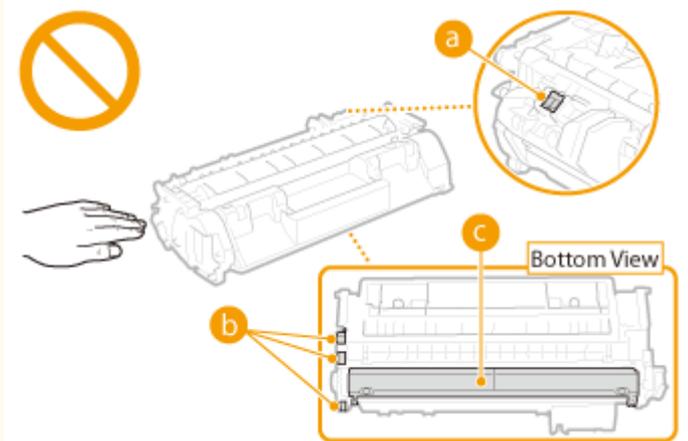
### IMPORTANT

#### Handling the toner cartridge

- Be sure to hold the toner cartridge using the handle.



- Do not touch the toner cartridge memory (a) or the electrical contacts (b). To avoid scratching the surface of the drum inside the machine or exposing it to light, do not open the drum protective shutter (c).



- Do not remove the toner cartridge from this machine or from the protective bag unnecessarily.
- The toner cartridge is a magnetic product. Do not move it close to products susceptible to magnetism including floppy disks and disk drives. Doing so may result in data corruption.

### Storing the toner cartridge

- Store in the following environment to ensure safe and satisfactory use.  
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 will solidify and may 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 will adversely affect the print quality of toner cartridges.

### 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](http://canon.com/counterfeit) .

### Availability period of repairing parts and toner cartridges

- The repairing parts and toner cartridges for the 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. They are required when transporting this machine.
- The packing materials may be changed in form or placement, or may be added or removed without notice.

## Important Safety Instructions

- Dispose of the removed sealing tape according to local regulations.

### **When disposing of a used toner cartridge**

- 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

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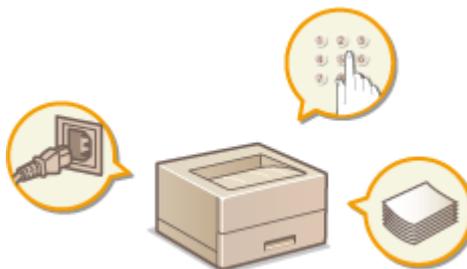
# Basic Operations

0W20-006

This chapter describes basic operations, such as how to use the operation panel or how to load the paper, that are frequently performed to use the functions of the machine.

## ■ Parts and Their Functions

This section describes the exterior and interior parts of the machine and their functions, as well as how to use the keys on the operation panel and how to view the display. [▶Parts and Their Functions\(P. 16\)](#)



## ■ Using the Operation Panel

This section describes how to use the keys on the operation panel to perform various operations, such as adjusting and checking the settings. [▶Using the Operation Panel\(P. 30\)](#)



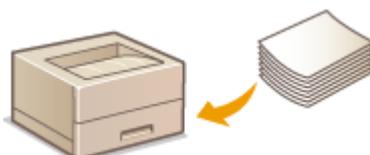
## ■ Logging on to the Machine

This section describes how to log on when a logon screen is displayed. [▶Logging on to the Machine\(P. 34\)](#)



## ■ Loading Paper

This section describes how to load the paper into the paper drawer and multi-purpose tray. [▶Loading Paper\(P. 35\)](#)



## ■ Saving Energy

This section describes how to reduce power consumption. ▶ **Saving Energy(P. 61)**



## ■ Setting Auto Shutdown Time

This section describes how to enable the <Auto Shutdown Time> setting. ▶ **Setting Auto Shutdown Time(P. 66)**

## Parts and Their Functions

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0W20-007

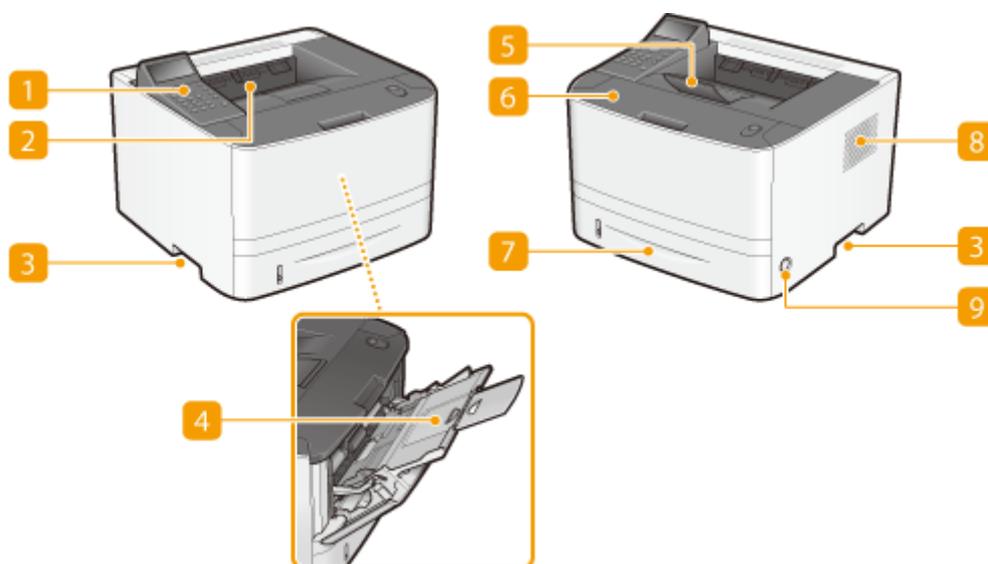
This section describes the parts of the machine (exterior, front and back side, and interior) and how they function. In addition to describing the parts of the machine used for such basic operations as loading paper and replacing the toner cartridges, this section also describes the keys on the operation panel and display. Read this section for tips on how to use the machine properly.



- ▶ **Front Side(P. 17)**
- ▶ **Back Side(P. 19)**
- ▶ **Interior(P. 21)**
- ▶ **Multi-Purpose Tray(P. 22)**
- ▶ **Paper Drawer(P. 23)**
- ▶ **Operation Panel(P. 24)**

## Front Side

0W20-008



### 1 Operation panel

The operation panel consists of numeric keys, a display, status indicators, etc. You can perform all the operations and specify settings from the operation panel. ▶ **Operation Panel(P. 24)** ▶ **Display(P. 27)**

### 2 Output tray

Printed paper is output to the output tray.

### 3 Lift handles

Hold the lift handles when carrying the machine. ▶ **Relocating the Machine(P. 402)**

### 4 Multi-purpose tray

Load the paper into the multi-purpose tray when you want to temporarily use a type of paper different from that which is loaded in the paper drawer. ▶ **Loading Paper in the Multi-Purpose Tray(P. 41)**

### 5 Paper stopper

Open the paper stopper to prevent paper in the output tray from falling.

### 6 Front cover

Open the front cover when replacing the toner cartridge or clearing paper jams. ▶ **How to Replace Toner Cartridges(P. 400)** ▶ **Clearing Jams(P. 350)**

### 7 Paper drawer

Load the type of paper you frequently use into the paper drawer. ▶ **Loading Paper in the Paper Drawer(P. 37)**

### **8 Ventilation slots**

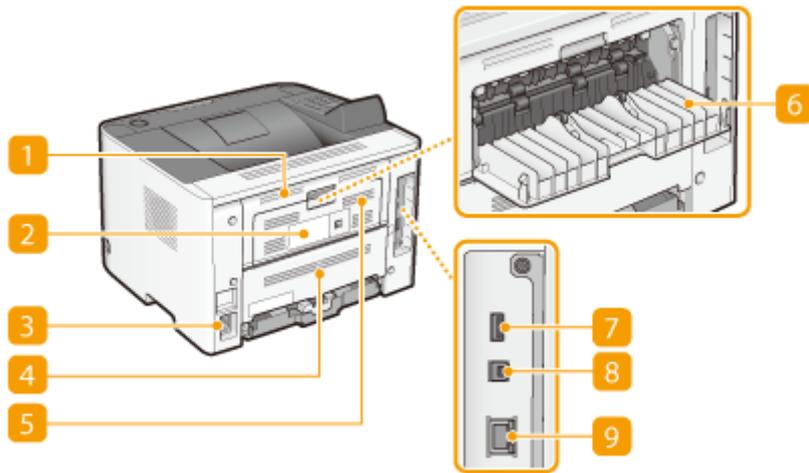
Air from inside the machine is vented out to cool down the inside of the machine. Note that placing objects in front of the ventilation slots prevents ventilation. ▶ **Installation(P. 3)**

### **9 Power switch**

Turns the power ON or OFF. To restart the machine, turn OFF the machine, wait for at least 10 seconds, and turn it back ON.

## Back Side

0W20-009



### 1 Upper rear cover

Open the upper rear cover when clearing paper jams. ▶ **Clearing Jams(P. 350)**

### 2 Rating label

The label shows the serial number, which is needed when making inquiries about the machine. ▶ **When a Problem Cannot Be Solved(P. 388)**

### 3 Power socket

Connect the power cord.

### 4 Lower rear cover

Open the lower rear cover to set the paper size switch lever or remove jammed paper. ▶ **Interior(P. 21)** ▶ **Clearing Jams(P. 350)**

### 5 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)**

### 6 Sub-output tray

When using a paper type that easily curls such as labels, or envelopes, you can reduce curl by opening this tray. ▶ **Paper Curls(P. 385)**

### 7 USB port (for USB device connection)

Connect a USB memory device when exporting or importing the settings of the machine.

**8 USB port (for computer connection)**

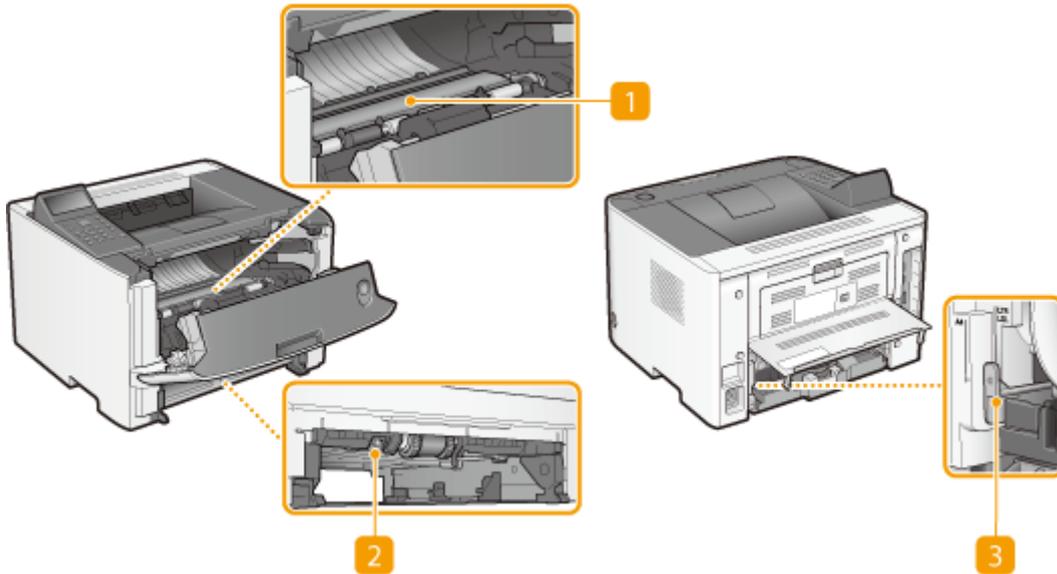
Connect a USB cable when connecting the machine and a computer.

**9 LAN port**

Connect a LAN cable when connecting the machine to a wired LAN router, etc. ▶ **Connecting to a Wired LAN(P. 135)**

# Interior

0W20-00A



## 1 Transport guide

If there is a paper jam inside the machine, raise the transport guide to remove the jammed paper. ▶  
**Clearing Jams(P. 350)**

## 2 Duplex transport guide

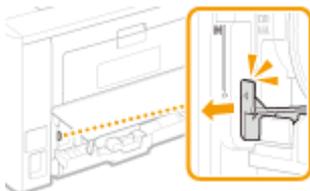
If paper has jammed during 2-sided printing, lower the duplex transport guide to remove the jammed paper.  
 ▶**Clearing Jams(P. 350)**

## 3 Paper size switch lever

Before starting 2-sided printing, change the position of this lever properly to match the size of the paper to print on.

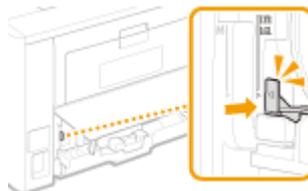
### A4 size

Pull the lever towards you.



### Letter/Legal size

Push the lever away from you.



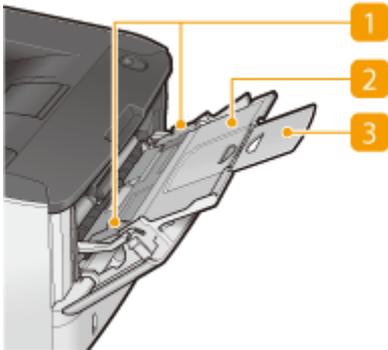
## NOTE

- In addition to A4, Letter, and Legal sizes, some other paper sizes can be used for 2-sided printing ( ▶ **Paper(P. 440)** ). When using those paper sizes, set the paper size switch lever in the same position as that for Letter/Legal size.

## Multi-Purpose Tray

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0W20-00C



### **1 Paper guides**

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

### **2 Paper tray**

Pull out the paper tray when loading paper.

### **3 Tray extension**

Open the tray extension when loading large paper.

## LINKS

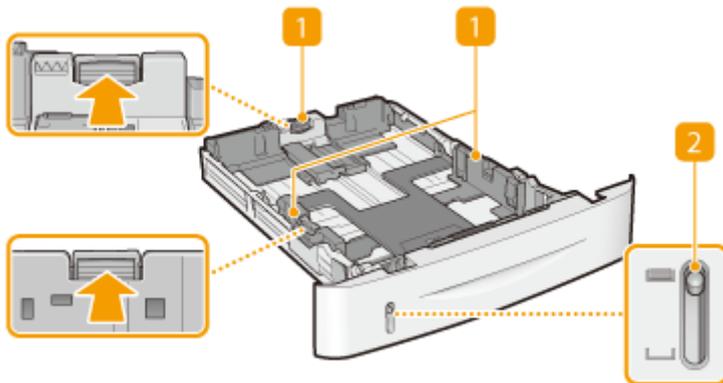
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**▶ Loading Paper in the Multi-Purpose Tray(P. 41)**

# Paper Drawer

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0W20-00E



## 1 Paper guides

Adjust the paper guides to exactly the size of the loaded paper to ensure that paper is fed straight into the machine. Press the lock release levers that are marked with arrows in the illustrations to release the locks and slide the paper guides.

## 2 Paper level indicator

Indicates the remaining amount of paper. The mark moves downward as the remaining amount of paper decreases.

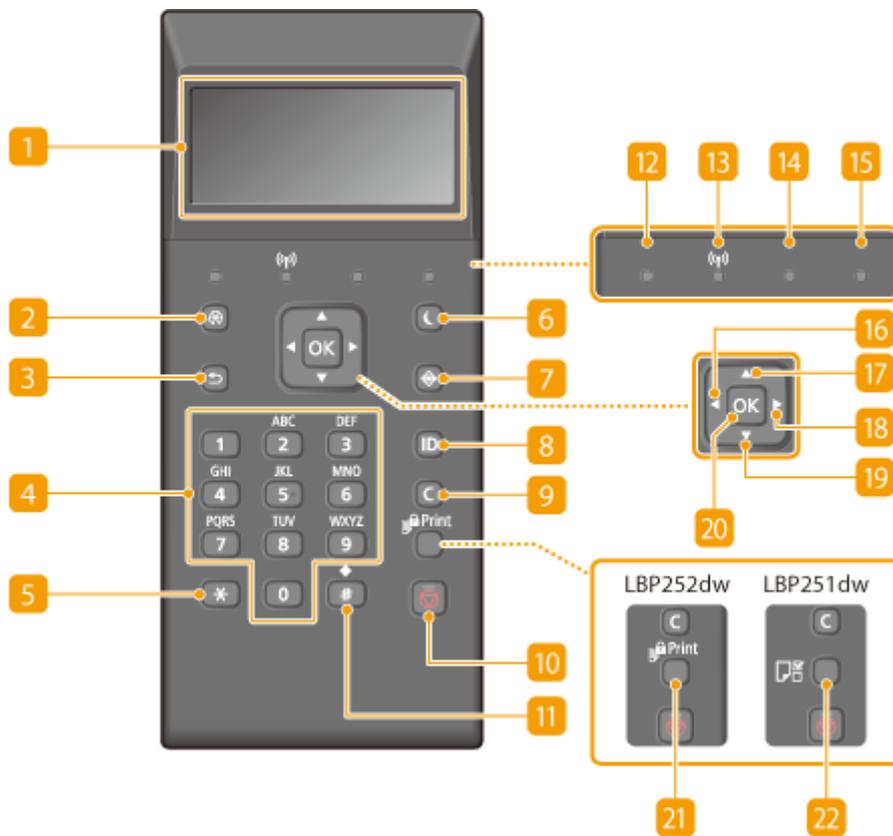
## LINKS

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▶ **Loading Paper in the Paper Drawer(P. 37)**

# Operation Panel

0W20-00F



## 1 Display

Displays the current printing or other operation status, error information, amount remaining in the toner cartridge, etc. [▶Display\(P. 27\)](#)

## 2 Menu key

Displays the Setup menu. You can specify settings of the machine. [▶Setting Menu List\(P. 287\)](#)

## 3 Back key

Press to return to the previous screen. If you press this key when specifying settings, for example, the settings are not applied and the display returns to the previous screen.

## 4 Numeric keys ([0]-[9] keys)

Press to enter numbers and text. [▶Entering Text\(P. 32\)](#)

## 5 [\*] key

Press to switch the type of text that is entered.

**6 Energy Saver key**

Press to put the machine into sleep mode. The display is turned OFF and the Main Power indicator lights up when the machine is in sleep mode. Press the key again to exit sleep mode. ▶ **Entering Sleep Mode(P. 62)**

**7 Status Monitor key**

Press to check the status of printing, to view the usage history, or to view the network settings such as the IP address of the machine. You can also check the status of the machine, such as the remaining amounts of paper and the amount remaining in the toner cartridge, or whether any errors occurred. ▶ **Display(P. 27)**

**8 [ID] key**

Press after entering the ID and PIN to log on when Department ID Management is enabled. After you finish using the machine, press this key again to log off. ▶ **Logging on to the Machine(P. 34)**

**9 Clear key**

Press to delete the entered numbers and text.

**10 Stop key**

Press to cancel the current operation, including printing.

**11 [#] key**

Press to enter symbols such as "@" or "/".

**12 Processing/Data indicator**

Blinks while printing or other operation is being performed. Lights up when there are documents waiting to be processed.

**13 Wi-Fi indicator**

Lights up when the machine is connected to wireless LAN.

**14 Error indicator**

Blinks or lights up when an error such as a paper jam occurs.

**15 Main Power indicator**

Lights when the machine is turned ON.

**16 [ ◀ ] key**

When specifying settings, press to return to the previous screen. When entering numbers, press to move the cursor to the left.

**17 [ ▲ ] key**

When specifying settings, press to select the item immediately above the currently selected item. When changing setting values, press to increase a value.

**18 [ ▶ ] key**

When specifying settings, press to proceed to the next screen. When entering numbers, press to move the cursor to the right.

**19 [ ▼ ] key**

When specifying settings, press to select the item immediately below the currently selected item. When changing setting values, press to decrease a value.

**20 [OK] key**

Press to apply settings or specified details.

**21 Secure Print key (LBP252dw)**

Press to print secured documents. ▶ **Printing a Document Secured by a PIN (Secure Print) (LBP252dw) (P. 109)**

**22 Paper Settings key (LBP251dw)**

Press to specify paper sizes and types. ▶ **Specifying Paper Size and Type(P. 50)**

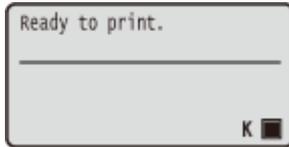
LINKS

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▶ **Using the Operation Panel(P. 30)**

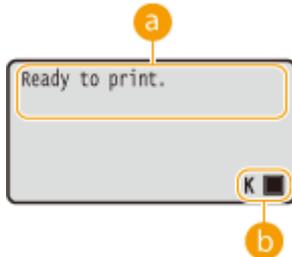
# Display

0W20-085



The display shows the printing status and the screens for specifying settings. It also shows error messages and the amount remaining in the toner cartridge.

## Main Screen



### a Status indication

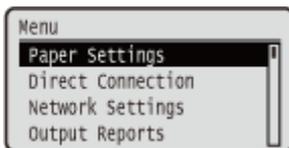
Displays the current status or operation mode of the machine.

### b Amount remaining in the toner cartridge

Indicates stepwise decreases of the amount remaining in the toner cartridge.

## <Menu> Screen

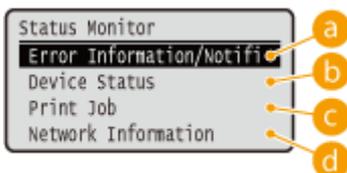
When you press , the <Menu> screen is displayed. On this screen, you can start specifying general machine settings such as <Preferences> or <Timer Settings>, as well as many of the settings for printing, such as paper settings and density adjustment.



### Setting Menu List(P. 287)

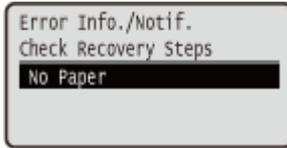
## <Status Monitor> Screen

When you press , a screen is displayed that enables you to check the status of document that is being printed, as well as the status of the machine (amount remaining in the toner cartridge, etc.) or the network setting information such as the IP address of the machine.



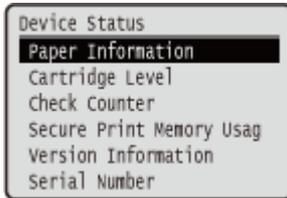
### a <Error Information/Notification>

Displays the details of any errors that occurred.  **When an Error Message Appears(P. 357)**



## b <Device Status>

Displays the status of the machine, such as the amount of paper or the amount remaining in the toner cartridge.



### <Paper Information>

Displays whether paper is loaded in each paper source.

### <Cartridge Level>

Displays the amount remaining in the toner cartridge.

### <Check Counter>

Displays the total number of pages printed by this machine.

▶ **Viewing the Counter Value(P. 416)**

### <Secure Print Memory Usage> (LBP252dw)

Displays the amount of memory currently used for storing secured document data. ▶ **Printing a Document Secured by a PIN (Secure Print) (LBP252dw)(P. 109)**

### <Version Information>

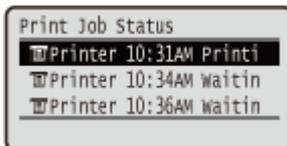
Displays firmware version information.

### <Serial Number>

Displays the serial number.

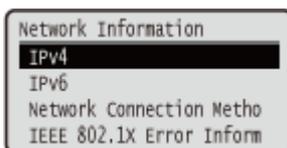
## c <Print Job>

Displays the status of the current print job.



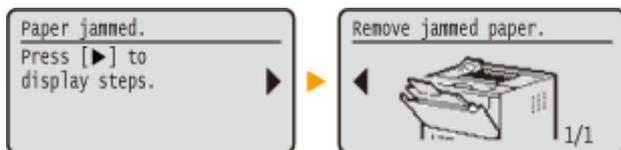
## d <Network Information>

Displays the network settings such as the IP address of the machine and status such as the condition of wireless LAN communications. ▶ **Viewing Network Settings(P. 161)**



## When an Error Occurs

In some cases when an error occurs, instructions on how to respond to the error are displayed. Follow the on-screen instructions to solve the problem. The screen displayed when a paper jam occurs is shown below as an example. ▶ **When an Error Message Appears(P. 357)**



LINKS

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▶ Using the Operation Panel(P. 30)

## Using the Operation Panel

OW20-086

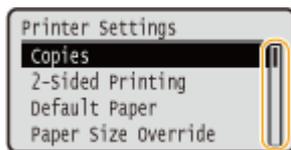
Use the keys shown below to specify settings and adjust values.



### Using ▲ / ▼

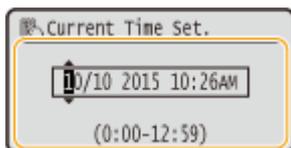
#### ■ Scrolling the Screen

The scroll bar is displayed on the right side of the screen when not all of the information fits on one screen. If the scroll bar is displayed, use ▲ / ▼ to scroll up or down. The text and background colors of an item are inverted when it is selected.



#### ■ Changing a Setting Value

Use ▲ / ▼ to enter values. If an icon such as below is displayed at the upper left of the screen, you can enter values directly using the numeric keys. ▶ **Entering Text(P. 32)**



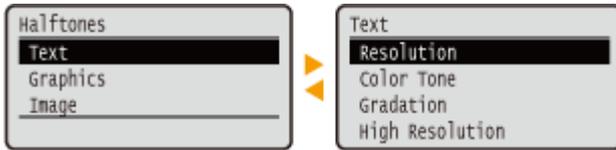
#### NOTE:

Values in ( ) displayed below the entry box are the enterable value range.

### Using ◀ / ▶

#### ■ Proceeding to the Next Screen/Returning to the Previous Screen

Press ▶ to proceed to the next screen. Press ◀ to return to the previous screen.

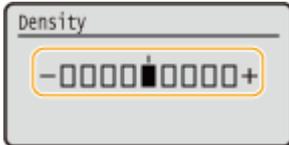


**NOTE:**

You can also proceed to the next screen by pressing **OK**, and return to the previous screen by pressing **↶**.

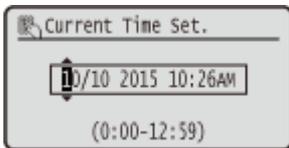
**■ Changing Setting Values**

Use **↶** / **↷** to adjust the setting on the scale.



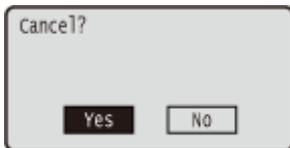
**■ Moving the Cursor**

Use **↶** / **↷** to enter text and values. **▶ Entering Text(P. 32)**



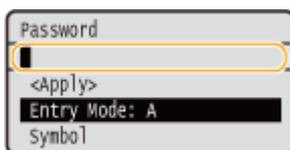
**Using **OK****

Press **OK** to apply a setting.



**Using the Numeric Keys**

Use the numeric keys to enter text and values. **▶ Entering Text(P. 32)**



**TIPS**

- You can change a variety of display-related settings, such as the scrolling speed or display language: **▶ Display Settings(P. 303)**

## Entering Text

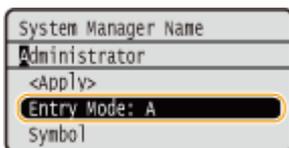
OW20-087

Use the numeric keys to enter text and values.



### Switching the Type of Text

Press **\*** to switch the type of text that is entered.



#### NOTE

- You can also select <Entry Mode> and press **OK** to switch the type of text.

### Types of Text That Can Be Entered

Text that can be entered is listed below.

Key	A	a	12
<b>1</b>	@ . - _ /		1
<b>2</b>	ABC	abc	2
<b>3</b>	DEF	def	3
<b>4</b>	GHI	ghi	4

<b>5</b>	JKL	jkl	5
<b>6</b>	MNO	mno	6
<b>7</b>	PQRS	pqrs	7
<b>8</b>	TUV	tuv	8
<b>9</b>	WXYZ	wxyz	9
<b>0</b>	(Not available)		0
<b>#</b>	(space) -. * # ! " ; : ; ^ ` _ = /   ' ? \$ @ % & + \ ~ ( ) [ ] { } < >		(Not available)

## NOTE

- Press **#** or select <Symbol> and press **OK** when the type of text that is entered is <A> or <a> to display enterable symbols in the screen. Use **▲** / **▼** / **◀** / **▶** to select the symbol you want to enter, and press **OK**.

## Deleting Text

One character is deleted each time **C** is pressed. Press and hold **C** to delete all of the entered text.

## Moving the Cursor (Entering a Space)

Press **◀** or **▶** to move the cursor. To enter a space, move the cursor to the end of the text, and press **▶**.

## Example of Entering Text and Numbers

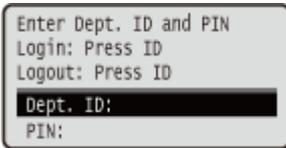
**Example:** "Canon-1"

- 1 Press **\*** repeatedly until <A> is selected.
- 2 Press **2** repeatedly until the letter "C" is selected.
- 3 Press **\*** repeatedly until <a> is selected.
- 4 Press **2** repeatedly until the letter "a" is selected.
- 5 Press **6** repeatedly until the letter "n" is selected.
- 6 Press **6** repeatedly until the letter "o" is selected.
- 7 Press **6** repeatedly until the letter "n" is selected.
- 8 Press **1** repeatedly until the symbol "-" is selected.
- 9 Press **\*** repeatedly until <12> is selected.
- 10 Press **1**.
- 11 Select <Apply> and press **OK**.

# Logging on to the Machine

OW20-00L

If Department ID Management is enabled or System Manager IDs are enabled, you must log on before using the machine. When the logon screen appears, use the procedure below to enter the department ID and PIN.



## 1 Enter an ID.

- 1 Use ▲ / ▼ to select <Department ID> or <System Manager ID>, and press **OK**.
- 2 Enter an ID using the numeric keys, and press **OK**.



- If no PIN is registered, proceed to step 3.

## 2 Enter the PIN.

- 1 Select <PIN>, and press **OK**.
- 2 Enter an ID using the numeric keys, and press **OK**.

## 3 Press **ID**.

- The logon screen will be changed to the main screen.
- After you finish using the machine, press **ID** again to display the logon screen.

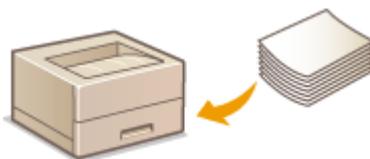
### LINKS

- ◀ [Setting the Department ID Management\(P. 209\)](#)
- ◀ [Setting the System Manager ID\(P. 207\)](#)

## Loading Paper

0W20-00R

You can load the paper into the paper drawer or multi-purpose tray. Load the paper you usually use into the paper drawer. The paper drawer is convenient when using large amounts of paper. Use the multi-purpose tray when you temporarily use size or type of paper that is not loaded in the paper drawer. See **Paper(P. 440)** for available paper sizes.



### Paper Type and Setting for the Machine

See the table below to specify the paper settings according to the type and weight of the paper to load into the paper source. For more information about how to specify the paper settings on the machine, see **Specifying Paper Size and Type(P. 50)**. For the amount of paper that can be loaded in each paper source, see **Paper(P. 440)**.

Paper Type	Paper Weight	Paper Setting on the Machine
Plain paper	60 to 89 g/m <sup>2</sup>	<Plain>
	60 to 69 g/m <sup>2</sup>	<Plain L> *1
Recycled paper	60 to 89 g/m <sup>2</sup>	<Recycled>
Color paper	60 to 89 g/m <sup>2</sup>	<Color>
Heavy paper	90 to 150 g/m <sup>2</sup>	<Heavy 1>
	151 to 163 g/m <sup>2</sup>	<Heavy 2>
Envelope	—	<Envelope>
Label	—	<Labels>

\*1 Specify <Plain L> as the paper type if printouts come out curled with <Plain> specified.

### 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 printed by a thermal transfer printer
- Highly textured paper
- Glossy paper

#### Paper handling and storage

- Store the paper on a flat surface.

- Keep the paper wrapped in its original package to protect the paper from moisture or dryness.
- Do not store the paper in such a way that may cause it to curl or fold.
- Do not store the paper vertically or stack too much paper.
- Do not store the 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 emit from the paper output area, or water droplets may form around the paper output area. There is nothing unusual about any of these occurrences, which occur when the heat generated from fixing toner on the paper causes moisture in the paper to evaporate (most likely to occur at low room temperatures).

### LINKS

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▶ [Registering a Custom Paper Size\(P. 57\)](#)

# Loading Paper in the Paper Drawer

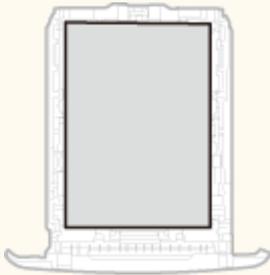
0W20-00S

Load the paper that you usually use in the paper drawer. When you want to print on paper that is not loaded in the paper drawer, load the paper in the multi-purpose tray. **▶ Loading Paper in the Multi-Purpose Tray (P. 41)**

## IMPORTANT

### Make sure to load paper in portrait orientation

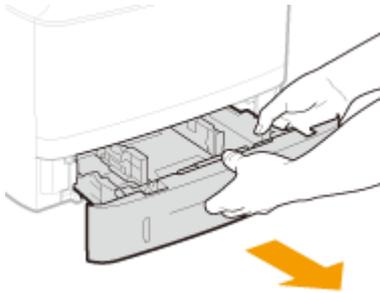
- Paper cannot be loaded in landscape orientation. Make sure to load the paper in portrait orientation, as shown in the illustrations below.



## NOTE

- Follow the procedure below when loading paper into the optional paper feeder.

### 1 Pull out the paper drawer.

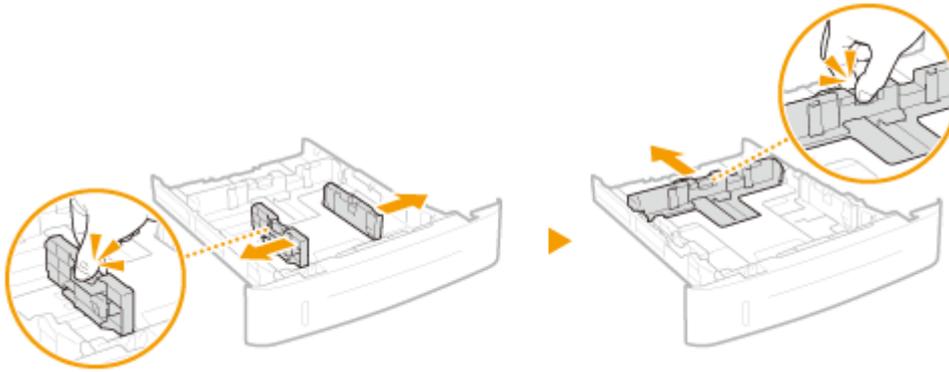


#### IMPORTANT:

- Make sure to hold the paper drawer with both hands, and pull it out gently. Otherwise, you may damage the paper drawer by dropping it, if it slides out too easily.

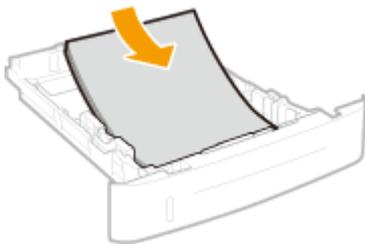
### 2 Slide the paper guides apart.

- Press the lock release lever to slide the paper guides outward.



**3 Load the paper so that the edge of the paper stack is aligned against the front side of the paper drawer.**

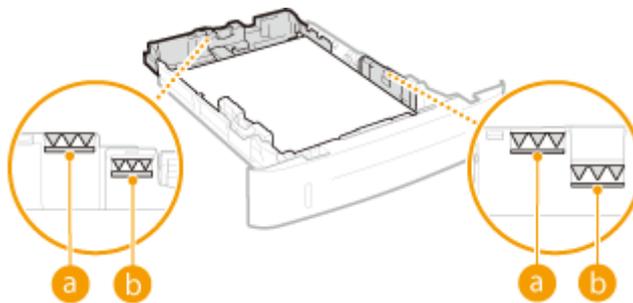
- Load the paper in portrait orientation (with the short edge toward the machine), with the print side face down. Paper cannot be loaded in landscape orientation.
- Fan the paper stack well, and tap it on a flat surface to align the edges.



**IMPORTANT:**

**Do not exceed the load limit line when loading paper**

- Make sure that the paper stack does not exceed the load limit line (a or b). Loading too much paper can cause paper jams.



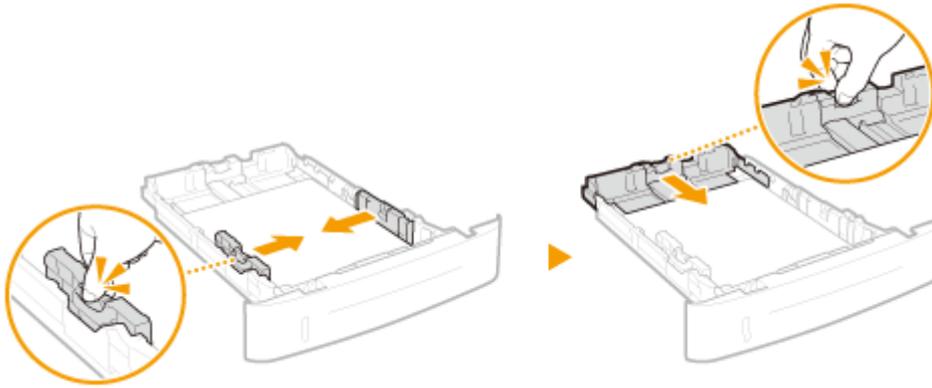
- a For A5 or larger paper size
- b For paper size smaller than A5

**NOTE:**

- When loading paper with a logo, see ▶ **Loading Preprinted Paper(P. 46)** .

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

- Press the lock release lever and slide the paper guides inward until they are aligned securely against the edges of the paper.



**IMPORTANT:**

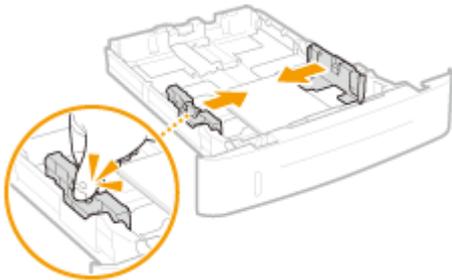
Align the paper guides securely against the edges of the paper

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

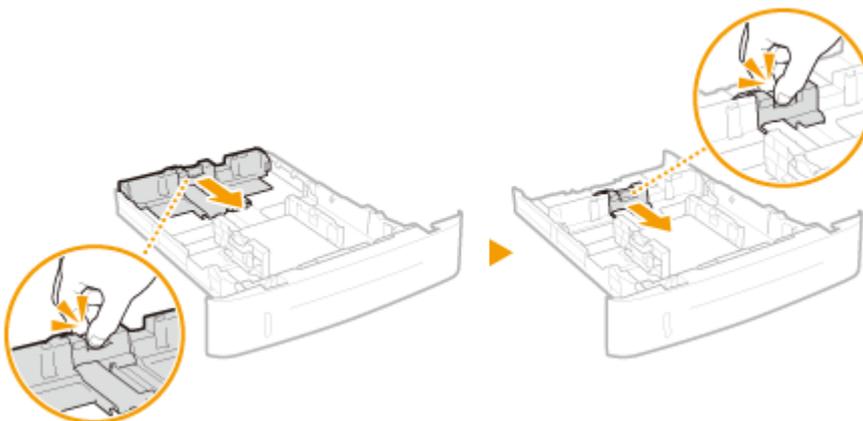
**■ When loading paper with length shorter than A5 size length**

When loading A6 size paper or other paper with length shorter than 210 mm, slide the paper guide on the rear side toward the front side and beyond its position for A5 size paper.

- 1 Align the paper guides on the left and right sides against the edges of the paper.
  - Press the lock release lever and slide the paper guides inward until they are aligned securely against the edges of the paper.



- 2 Align the paper guide on the rear side against the edge of the paper.
  - Press the lock release lever and slide the paper guide toward the front side and beyond its position for A5 size paper until it is securely aligned against the edge of the paper.



**5 Insert the paper drawer into the machine.**

- When you insert the paper drawer with <Notify to Check Paper Settings> set to <On>, a confirmation screen is displayed. **🔔 Notify to Check Paper Settings(P. 343)**

**» Continue to ▶ Specifying Paper Size and Type in the Paper Drawer(P. 51)****IMPORTANT:****When changing the paper size or type**

- The factory default settings for paper size and type are <A4> and <Plain>, respectively. If you load a different size or type of paper into the machine, make sure to change the settings. If you do not change the settings, the machine cannot print properly.

**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 ( ▶ **Loading Paper in the Multi-Purpose Tray(P. 41)** ), with the side to print face up (previously printed side face down).

- Load one sheet of paper each time you print.
- You can use only the paper printed with this machine.
- You cannot print on the side that has previously been printed on.

**LINKS**

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**▶ Paper(P. 440)****▶ Notify to Check Paper Settings(P. 343)**

# Loading Paper in the Multi-Purpose Tray

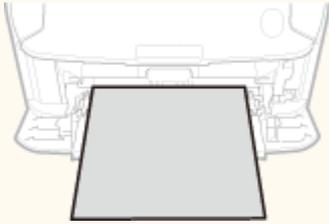
0W20-00U

When you want to print on paper that is not loaded in the paper drawer, load the paper in the multi-purpose tray. Load the paper that you usually use in the paper drawer. **▶ Loading Paper in the Paper Drawer (P. 37)**

## IMPORTANT

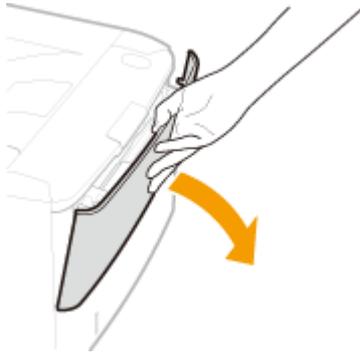
### Make sure to load paper in portrait orientation

- Paper cannot be loaded in landscape orientation. Make sure to load the paper in portrait orientation, as shown in the illustrations below.



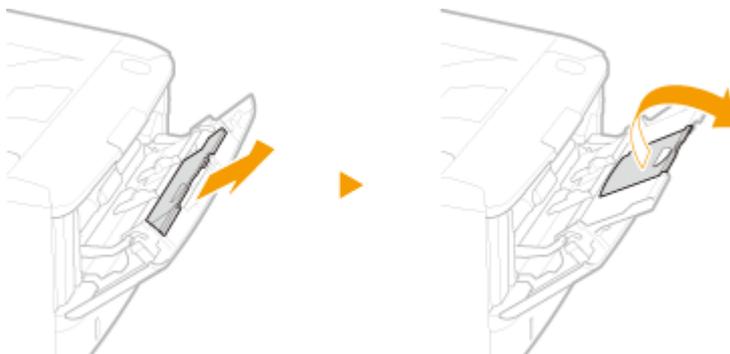
### 1 Open the cover.

- Hold the top center of the cover to open it.



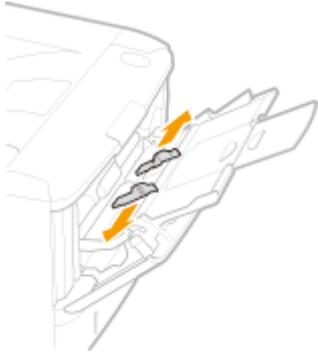
### 2 Pull out the paper tray and the tray extension.

- Pull out the tray extension when loading large paper.



### 3 Spread the paper guides apart.

- Slide the paper guides outward.



#### 4 Insert the paper into the multi-purpose tray until the paper stops.

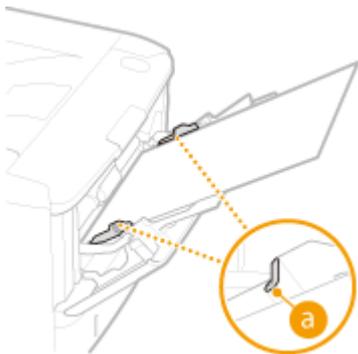
- Load the paper in portrait orientation (with the short edge toward the machine), with the print side face up. Paper cannot be loaded in landscape orientation.
- Fan the paper stack well, and tap it on a flat surface to align the edges.



#### IMPORTANT:

Do not exceed the load limit guide when loading paper

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

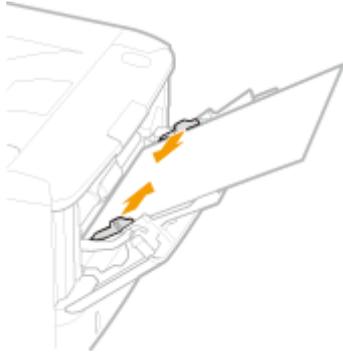


#### NOTE:

- When loading envelopes or paper with a logo, see [▶ Loading Envelopes \(P. 44\)](#) or [▶ Loading Preprinted Paper \(P. 46\)](#).

#### 5 Align the paper guides against the edges of the paper.

- Slide the paper guides inward until they are aligned securely against the edges of the paper.



**IMPORTANT:**

**Align the paper guides securely against the edges of the paper**

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

» Continue to [▶ Specifying Paper Size and Type in the Multi-Purpose Tray \(P. 53\)](#)

**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).

- Load one sheet of paper each time you print.
- You can use only the paper printed with this machine.
- You cannot print on the side that has previously been printed on.

LINKS

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[▶ Paper \(P. 440\)](#)

# Loading Envelopes

0W20-00W

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. Note that envelopes cannot be loaded in the paper drawer.

🔗 [Before Loading Envelopes\(P. 44\)](#)

🔗 [Loading Envelopes in the Multi-Purpose Tray\(P. 45\)](#)

## NOTE

- This section describes how to load envelopes in the orientation you want, as well as procedures that you need to complete before loading envelopes. For a description of the general procedure for loading envelopes in the multi-purpose tray, see 🔗 [Loading Paper in the Multi-Purpose Tray\(P. 41\)](#).

## Before Loading Envelopes

Follow the procedure below to prepare the envelopes before loading.

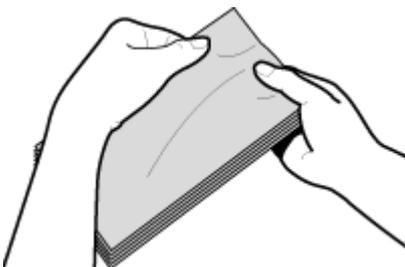
### 1 Close the flap of each envelope.



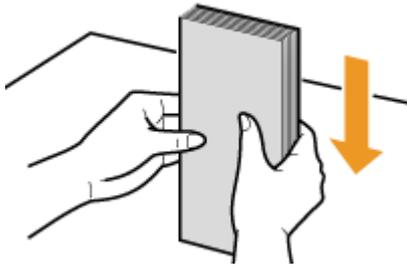
### 2 Flatten them to release any remaining air, and make sure that the edges are pressed tightly.



### 3 Loosen any stiff corners of the envelopes and flatten any curls.



**4 Align the edges of the envelope on a flat surface.**

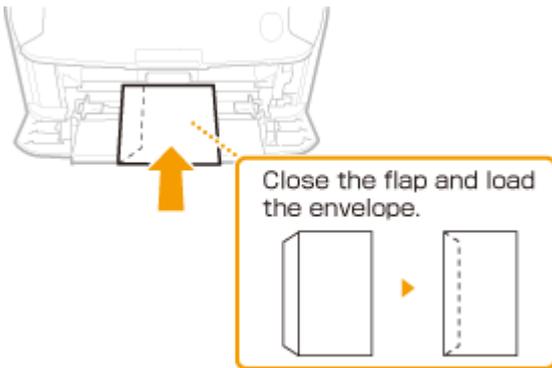


### Loading Envelopes in the Multi-Purpose Tray

Load the envelopes Monarch, COM10, DL, or ISO-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.

**NOTE**

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



## Loading Preprinted Paper

0W20-00X

When you use paper that has been preprinted with a logo, pay attention to the orientation of the paper when loading. Load the paper properly so that printing is performed on the correct side of the paper with a logo.



▶ [Making 1-Sided Printouts on Paper with Logos\(P. 46\)](#)

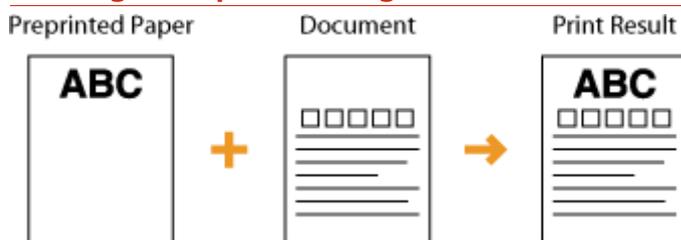
▶ [Making 2-Sided Printouts on Paper with Logos\(P. 47\)](#)

### NOTE

- This section mainly describes how to load preprinted paper with the proper facing and orientation. For a description of the general procedure for loading paper in the paper drawer or multi-purpose tray, see ▶ [Loading Paper in the Paper Drawer\(P. 37\)](#) or ▶ [Loading Paper in the Multi-Purpose Tray\(P. 41\)](#).

## Making 1-Sided Printouts on Paper with Logos

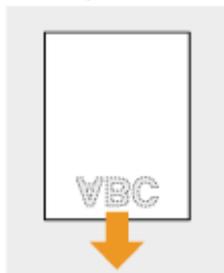
### Printing on Paper with Logos in Portrait Orientation



#### When loading the paper in the paper drawer

Load the paper with the logo side (the side to print the document) face down.

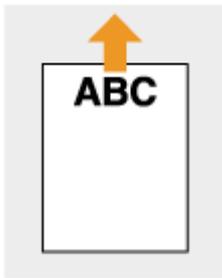
Loading Orientation



#### When loading the paper in the multi-purpose tray

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

Loading Orientation



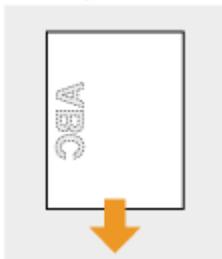
**Printing on Paper with Logos in Landscape Orientation**



**When loading the paper in the paper drawer**

Load the paper with the logo side (the side to print the document) face down.

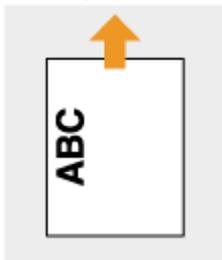
Loading Orientation



**When loading the paper in the multi-purpose tray**

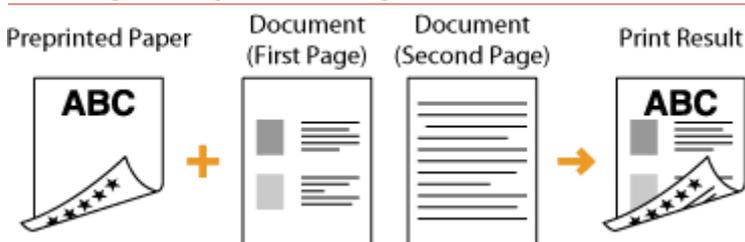
Load the paper with the logo side (the side to print the document) face up.

Loading Orientation



**Making 2-Sided Printouts on Paper with Logos**

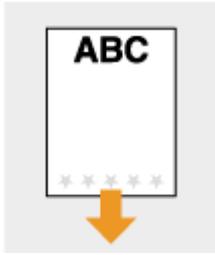
**Printing on Paper with Logos in Portrait Orientation**



**When loading the paper in the paper drawer**

Load the paper with the front logo side (the side to print the first page of the document) face up.

Loading Orientation



**When loading the paper in the multi-purpose tray**

Load the paper with the front logo side (the side to print the first page of the document) face down.

Loading Orientation



**Printing on Paper with Logos in Landscape Orientation**

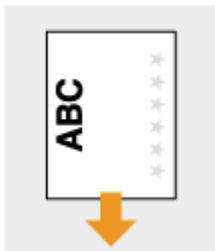
---



**When loading the paper in the paper drawer**

Load the paper with the front logo side (the side to print the first page of the document) face up.

Loading Orientation



**When loading the paper in the multi-purpose tray**

Load the paper with the front logo side (the side to print the first page of the document) face down.

Loading Orientation



## NOTE

### The <Switch Paper Feed Method> setting

- When you print on preprinted paper, you need to change the facing of the paper to load each time you switch between 1-sided and 2-sided printing. However, if <Switch Paper Feed Method> is set to <Print Side Priority>, the facing that you use for loading preprinted paper for 2-sided printing (logo side face up for paper drawer or down for multi-purpose tray) can also be used for 1-sided printing. This setting is especially useful if you frequently perform both 1-sided and 2-sided printing.  **Switch Paper Feed Method(P. 311)**

## Specifying Paper Size and Type

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0W20-00Y

You must specify the paper size and type settings to match the paper that is loaded. Make sure to change the paper settings when you load the paper that is different from the previously loaded paper.

### **IMPORTANT**

- If the setting does not match the size and type of loaded paper, a paper jam or printing error may occur.

# Specifying Paper Size and Type in the Paper Drawer

0W20-010

## NOTE

- To specify a custom paper size, you need to register that size before hand. [▶Registering a Custom Paper Size\(P. 57\)](#)

## 1 Display the <Paper Settings> screen.

### ■LBP252dw

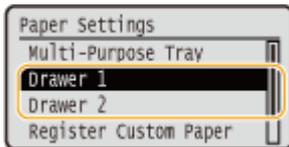
Press  ► use ▲ / ▼ to select <Paper Settings> ► press .

### ■LBP251dw

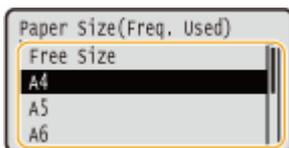
Press  ().

## 2 Select <Drawer 1> or <Drawer 2>, and press .

- <Drawer 2> is displayed only when the optional paper feeder is installed.



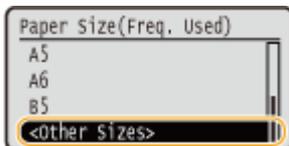
## 3 Select the paper size, and press .



### NOTE:

#### If the loaded paper size is not displayed

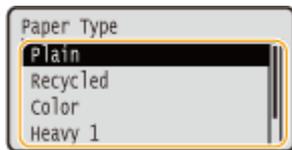
- Select <Other Sizes>, and press .



#### About <Free Size>

- If you frequently change sizes of paper to load, you can specify <Free Size>, which saves you the trouble of changing the paper size setting each time you print. You can make a setting so that an error message will be displayed when the paper size set in the printer driver is rather different from the size of the loaded paper. [▶Barcode Adjustment Mode\(P. 316\)](#)

## 4 Select the paper type, and press .



## LINKS

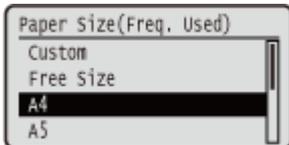
---

- ▶ **Loading Paper in the Paper Drawer(P. 37)**
- ▶ **Limiting the Paper Sizes Displayed(P. 60)**
- ▶ **Paper(P. 440)**
- ▶ **Notify to Check Paper Settings(P. 343)**

# Specifying Paper Size and Type in the Multi-Purpose Tray

0W20-011

The screen shown here is displayed when paper is loaded in the multi-purpose tray. Follow the on-screen instructions to specify settings that match the size and type of the loaded paper.

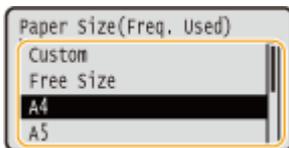


## NOTE

### If the screen shown above is not displayed when paper is loaded

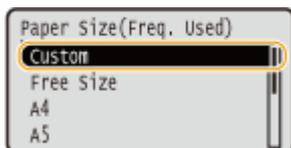
- If you always load the same paper in the multi-purpose tray, you can skip the paper setting operations by registering the paper size and type as the default setting. When the default setting is registered, however, the screen shown above is not displayed. To display the screen, select <Specify When Loading Paper> (▶ **Registering Default Paper Settings for the Multi-Purpose Tray (P. 55)**).

- Use ▲ / ▼ to select the paper size, and press **OK**.

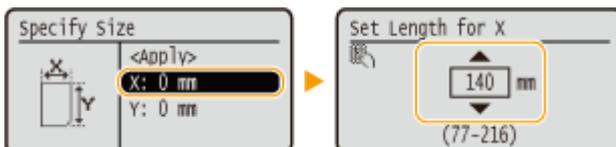


### ■ When loading custom size paper

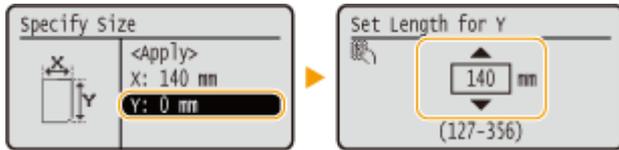
- Select <Custom>, and press **OK**.



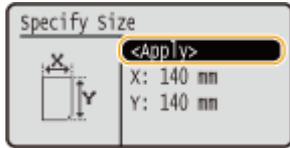
- Specify the length of the <X> (shorter) side.
  - Select <X>, and press **OK**.
  - Input the length of the <X> side using ▲ / ▼ or the numeric keys, and press **OK**.



- Specify the length of the <Y> (longer) side.
  - Select <Y>, and press **OK**.
  - Input the length of the <Y> side, and press **OK**.



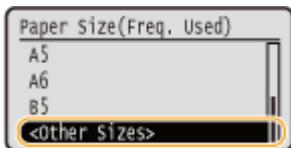
- 4 Select <Apply>, and press **OK**.



**NOTE:**

**If the loaded paper size is not displayed**

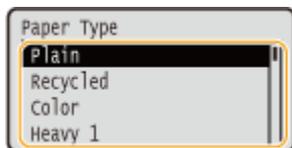
- Select <Other Sizes>, and press **OK**.



**About <Free Size>**

- If you specify <Free Size>, you can save the trouble of changing the paper size setting each time you print. You can make a setting so that an error message will be displayed when the paper size set in the printer driver is rather different from the size of the loaded paper. **▶Action When Free Paper Size Mismatch(P. 313)**

- 2 Select the paper type, and press **OK**.



**LINKS**

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- ▶ **Loading Paper in the Multi-Purpose Tray(P. 41)**
- ▶ **Limiting the Paper Sizes Displayed(P. 60)**
- ▶ **Paper(P. 440)**

# Registering Default Paper Settings for the Multi-Purpose Tray

0W20-012

You can register default paper settings for the multi-purpose tray. Registering default settings can save yourself the effort of having to specify the settings each time you load the same paper into the multi-purpose tray.

## NOTE

- After the default paper setting is registered, the paper setting screen is not displayed when paper is loaded, and the same setting is always used. If you load a different paper size or type without changing the paper settings, the machine may not print properly. To avoid this problem, select <Specify When Loading Paper> in step 3, and then load the paper.

## 1 Display the <Paper Settings> screen.

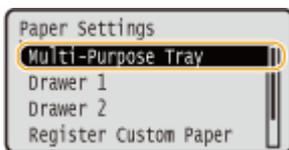
### ■ LBP252dw

Press  use  /  to select <Paper Settings> ► press .

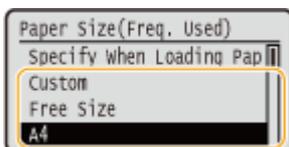
### ■ LBP251dw

Press  ().

## 2 Select <Multi-Purpose Tray>, and press .

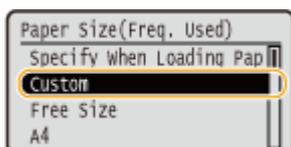


## 3 Select the paper size, and press .



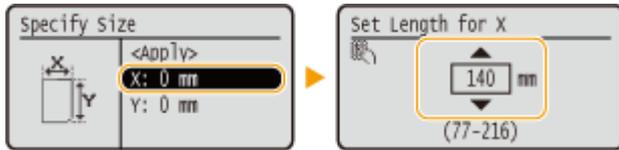
### ■ Registering a custom paper size

#### 1 Select <Custom>, and press .



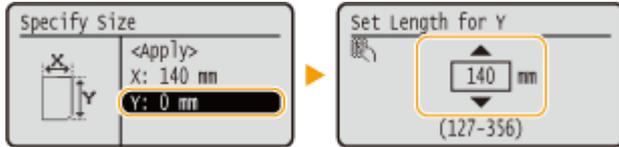
#### 2 Specify the length of the <X> (shorter) side.

- Select <X>, and press .
- Input the length of the <X> side using  /  or the numeric keys, and press .

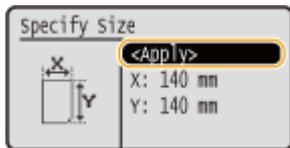


### 3 Specify the length of the <Y> (longer) side.

- Select <Y>, and press **OK**.
- Input the length of the <Y> side, and press **OK**.



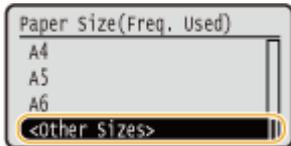
### 4 Select <Apply>, and press **OK**.



#### NOTE:

#### If the loaded paper size is not displayed

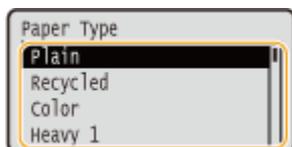
- Select <Other Sizes>, and press **OK**.



#### About <Free Size>

- If you frequently change sizes of paper to load, you can specify <Free Size>, which saves you the trouble of changing the paper size setting each time you print. You can make a setting so that an error message will be displayed when the paper size set in the printer driver is rather different from the size of the loaded paper. **▶Action When Free Paper Size Mismatch(P. 313)**

### 4 Select the paper type, and press **OK**.



#### LINKS

- ▶Loading Paper in the Multi-Purpose Tray(P. 41)
- ▶Limiting the Paper Sizes Displayed(P. 60)
- ▶Paper(P. 440)

# Registering a Custom Paper Size

OW20-013

You can register up to three frequently used custom paper sizes.

## 1 Display the <Paper Settings> screen.

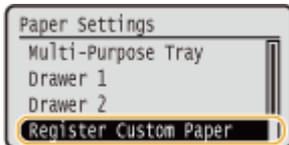
### ■ LBP252dw

Press ► use ▲ / ▼ to select <Paper Settings> ► press .

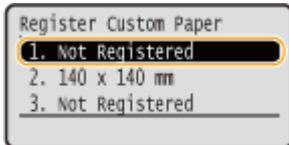
### ■ LBP251dw

Press ().

## 2 Select <Register Custom Paper>, and press .



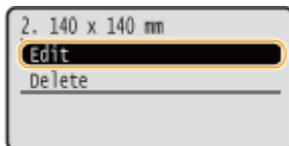
## 3 Select <Not Registered>, and press .



- If paper sizes <1> to <3> have already been registered, either change or delete the setting to continue. The procedures for changing and deleting these settings are described below.

### ■ Changing a setting

- 1 Select the registered size you want to change, and press .
- 2 Select <Edit>, press , and proceed to step 4.



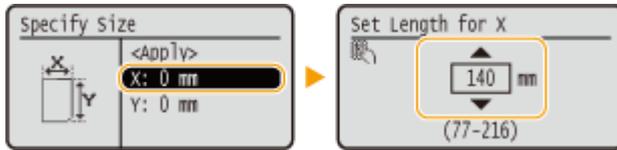
### ■ Deleting a setting

- 1 Select the registered size you want to delete, and press .
- 2 Select <Delete>, and press .
- 3 Select <Yes>, and press .

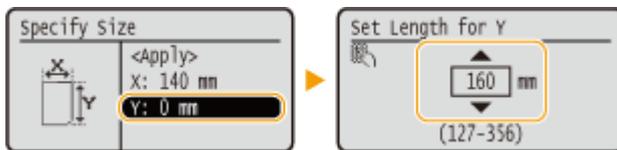


## 4 Specify the paper size.

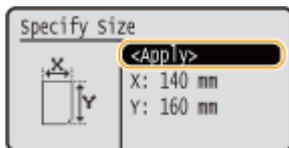
- 1 Select <X>, and press **OK**.
  - Select <X>, and press **OK**.
  - Input the length of the <X> side using ▲ / ▼ or the numeric keys, and press **OK**.



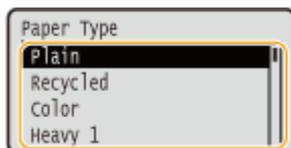
- 2 Specify the length of the <Y> (longer) side.
  - Select <Y>, and press **OK**.
  - Input the length of the <Y> side, and press **OK**.



- 3 Select <Apply>, and press **OK**.



## 5 Select the paper type, and press **OK**.

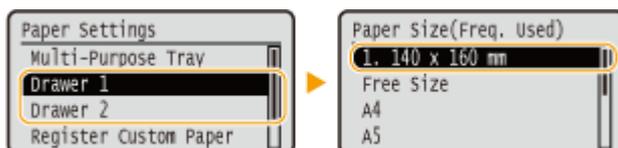


### Selecting a Registered Custom Paper Setting

The paper sizes that are registered in the procedure above are displayed on the screen for selecting the paper size.

#### ■ When selecting the paper size for the paper drawer

On the screen to specify the size of the paper that is loaded in the paper drawers, the registered paper sizes are displayed. **▶ Specifying Paper Size and Type in the Paper Drawer(P. 51)**

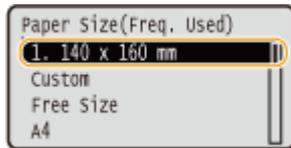


#### NOTE:

- Of the registered paper sizes, only those that can be loaded in a paper drawer are displayed. **▶ Paper(P. 440)**

### ■ When selecting the paper size for the multi-purpose tray

When paper is loaded in the multi-purpose tray, the screen for selecting the paper size for the multi-purpose tray is displayed. The registered paper sizes are displayed on this screen. [▶ Specifying Paper Size and Type in the Multi-Purpose Tray\(P. 53\)](#)



#### NOTE:

- The registered paper sizes are displayed when you set the default paper settings for the multi-purpose tray. From the screen, you can select one of the displayed sizes as the default paper size for the multi-purpose tray. [▶ Registering Default Paper Settings for the Multi-Purpose Tray\(P. 55\)](#)

#### LINKS

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- ▶ [Loading Paper in the Paper Drawer\(P. 37\)](#)
- ▶ [Loading Paper in the Multi-Purpose Tray\(P. 41\)](#)

# Limiting the Paper Sizes Displayed

OW20-014

You can ensure that only frequently used paper sizes are shown in the screen for selecting the paper size setting.

## 1 Display the <Paper Settings> screen.

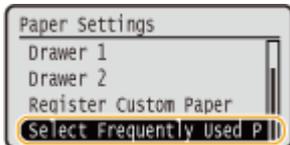
### ■ LBP252dw

Press  use  /  to select <Paper Settings> ► press .

### ■ LBP251dw

Press  ().

## 2 Select <Select Frequently Used Paper Sizes>, and press .

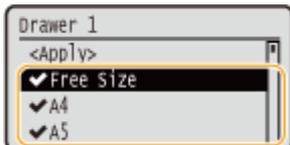


## 3 Select <Multi-Purpose Tray>, <Drawer 1> or <Drawer 2>, and press .

- <Drawer 2> is displayed only when the optional paper feeder is installed.

## 4 Clear the check boxes for the paper sizes you do not want to be displayed.

- Select a paper size and press  to clear the check box.
- Ensure that only the check boxes for the paper sizes you use frequently are selected.



### NOTE:

- To display the paper sizes whose check boxes have been cleared, select <Other Sizes> in the paper size selection screen.

## 5 Select <Apply>, and press .

## LINKS

- ◉ Specifying Paper Size and Type in the Paper Drawer(P. 51)
- ◉ Specifying Paper Size and Type in the Multi-Purpose Tray(P. 53)
- ◉ Registering Default Paper Settings for the Multi-Purpose Tray(P. 55)

## Saving Energy

---

0W20-015

You can save energy by making a setting so that the machine automatically enters the power saving state (sleep mode) or automatically turns OFF if no operation is performed for a certain period of time or that the machine is automatically turned OFF at a fixed time on each day of the week.



- ▶ **Entering Sleep Mode(P. 62)**
- ▶ **Powering OFF at a Fixed Time(P. 64)**
- ▶ **Setting Auto Shutdown Time(P. 66)**

## Entering Sleep Mode

0W20-016

The sleep mode function reduces the amount of power consumed by the machine by disabling power flow to the operation panel. If no operations will be performed on the machine for a while, such as during a lunch break, you can save power simply by pressing  on the operation panel. You can also use the Auto Sleep Time setting to automatically put the machine into sleep mode if it remains idle for a specified length of time.



### NOTE

#### When in sleep mode

- When the machine enters sleep mode, the display turns OFF and the Main Power indicator turns ON.

#### Situations in which the machine does not enter sleep mode

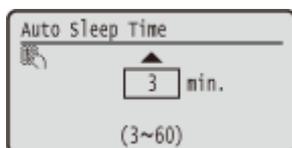
- When the machine is in operation
- When the Processing/Data indicator is lit up or blinking
- When the machine is performing an operation such as adjustment or cleaning
- When a paper jam occurs
- When the menu screen is displayed
- When an error message is displayed on the screen (There are some exceptions. The machine sometimes enters sleep mode when error messages are displayed.)
- When the SSID/network key screen for Direct Connection is displayed.
- When settings data is being imported/exported

#### When You Want to Set the Auto Sleep Timer

The factory default setting for the amount of time that elapses before the machine enters auto sleep mode is 3 minutes (the user setting range is 3 to 60 minutes). We recommend using the factory default settings to save the most power. If you want to change the amount of time that elapses before the machine enters auto sleep mode, follow the procedure below.



 ▶ <Timer Settings> ▶  ▶ <Auto Sleep Time> ▶  ▶ Set the amount of time that elapses before the machine automatically enters sleep mode ▶ 



## **Exiting Sleep Mode**

---

Press any key on the operation panel.

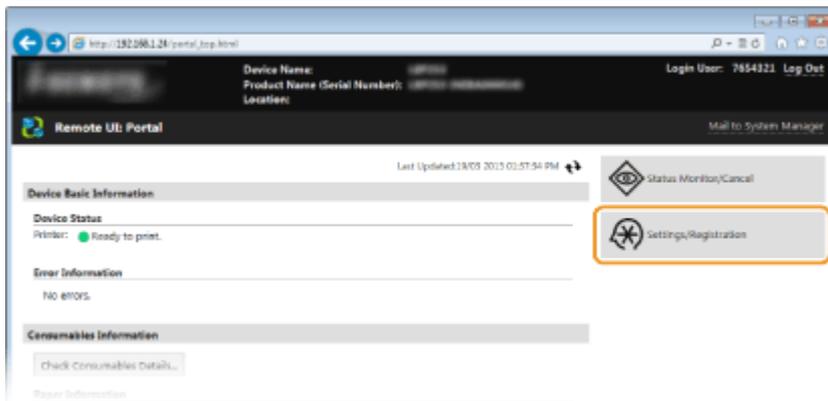
## Powering OFF at a Fixed Time

0W20-017

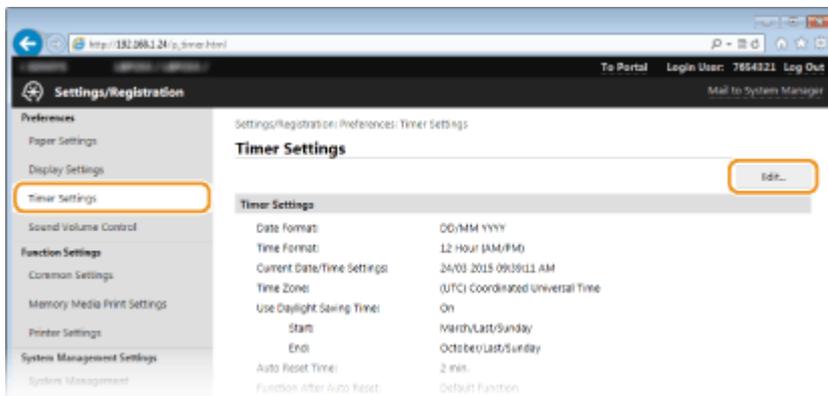
You can make a setting so that the power is automatically turned OFF at a specified time on each day of the week. This allows you to avoid useless power consumption that may occur due to failure to turn OFF the power. By default, this function is disabled.

**1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 270)**

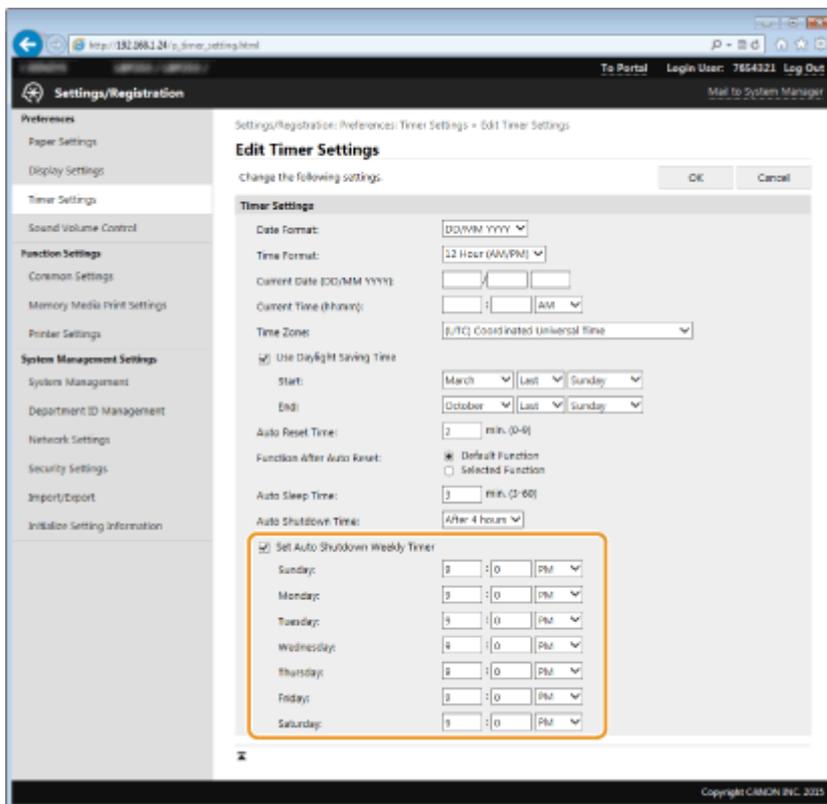
**2 Click [Settings/Registration].**



**3 Click [Timer Settings] ▶ [Edit].**



**4 Select the check box for [Set Auto Shutdown Weekly Timer], and set the time to turn OFF the power.**



### [Set Auto Shutdown Weekly Timer]

Selecting the check box allows you to set the time to turn OFF the power on each day of the week.

### [Sunday] to [Saturday]

Enter the desired time to turn OFF the power. For any day of the week, leaving the time field blank means that the auto shutdown function is disabled for that day.

## 5 Click [OK].

### NOTE

#### If the power is not turned OFF automatically at the specified time

- When the Processing/Data indicator is lit up or blinking
- When the menu screen or Check Counter screen is displayed
- When settings data is being imported/exported
- When the firmware is being updated

If the power cannot be turned OFF automatically at the specified time, a retry will be performed up to ten times at intervals of one minute. If the power cannot be turned OFF even after ten retries, auto shutdown will be impossible for that day.

## Setting Auto Shutdown Time

0W20-018

By enabling this setting, you can set the machine to automatically shut down. The machine automatically turns OFF after the specified period of idle time has elapsed since entering the sleep mode. You can cut electric power consumption at night and on holidays if you forget to turn OFF the machine.



### IMPORTANT

#### Before setting <Auto Shutdown Time>

When the <Auto Shutdown Time> setting is enabled, the machine may automatically shut down even if you are operating the machine from the Remote UI. A malfunction may occur, particularly if the machine shuts down while data is being imported. When you import data using the Remote UI, set <Auto Shutdown Time> to <0> (Off) in advance.

### NOTE

- The default setting is 4 hours.
- If any setting of the [Timer Settings] is changed from the Remote UI while the machine is in the sleep mode, the timer for the <Auto Shutdown Time> setting is reset to the beginning. The machine automatically shuts down after the specified period of idle time has elapsed since the timer was reset.

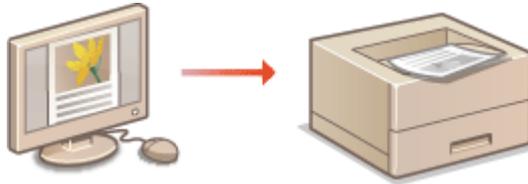
# Printing

<b>Printing</b> .....	68
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<b>Canceling Prints</b> .....	75
<b>Checking the Printing Status and Log</b> .....	78
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# Printing

0W20-019

You can print a document made with an application on your computer by using the printer driver. There are useful settings on the printer driver, such as enlarging/reducing and 2-sided printing, that enable you to print your documents in various ways. Before you can use this function, you need to complete some procedures, such as installing the printer driver on your computer. For more information, see Printer Driver Installation Guide.

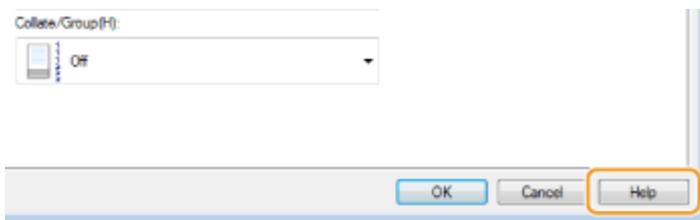


## NOTE

- If you are a Mac user, see Canon UFR II/UFRII LT Printer Driver Guide for installing the printer drivers and Printer Driver's Help for using print functions ( **▶ For Mac OS Users(P. 481)** ).
- 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 UFR II printer driver. The available print settings vary depending on the printer driver. For more information, click [Help] on each printer driver screen.

## About the Printer Driver Help

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



## ■ To Use Optional Accessories

If the optional paper feeder (drawer 2) is attached to the machine, perform the following operation on the printer driver.

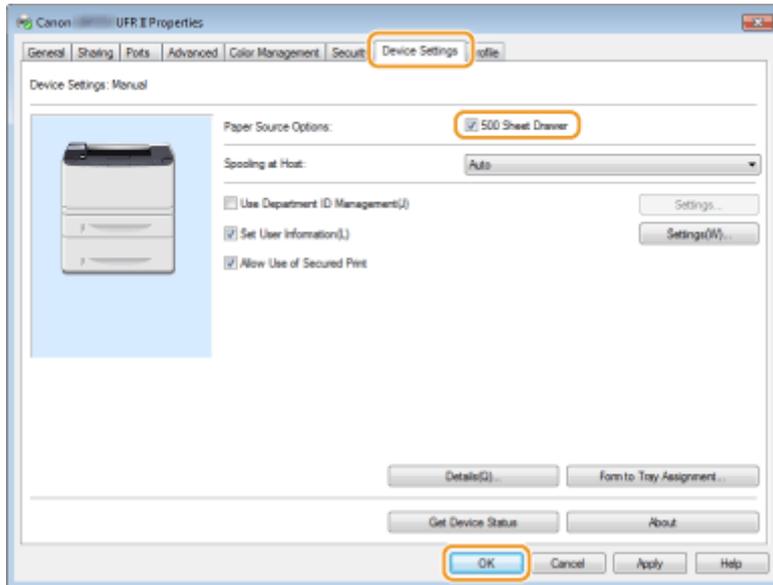
## IMPORTANT

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



Open the printer folder ( **▶ Displaying the Printer Folder(P. 474)** ) ▶ Right-click your printer icon ▶ [Printer Properties] or [Properties] ▶ [Device Settings] tab ▶ Select the [500 Sheet Drawer] check box ▶ [OK]

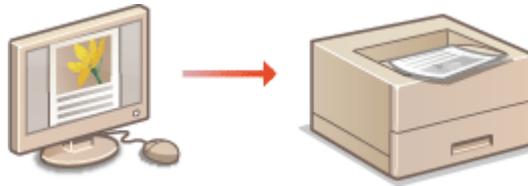
# Printing



# Basic Printing Operations

OW20-01A

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



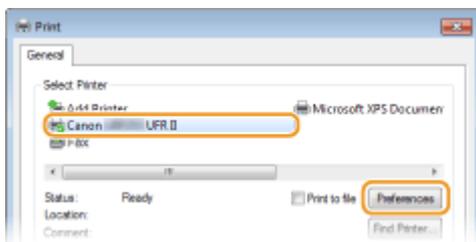
## NOTE

- Before printing, specify the paper size and type for the paper loaded in the paper source.
- ▶ **Loading Paper(P. 35)**
- ▶ **Specifying Paper Size and Type(P. 50)**

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

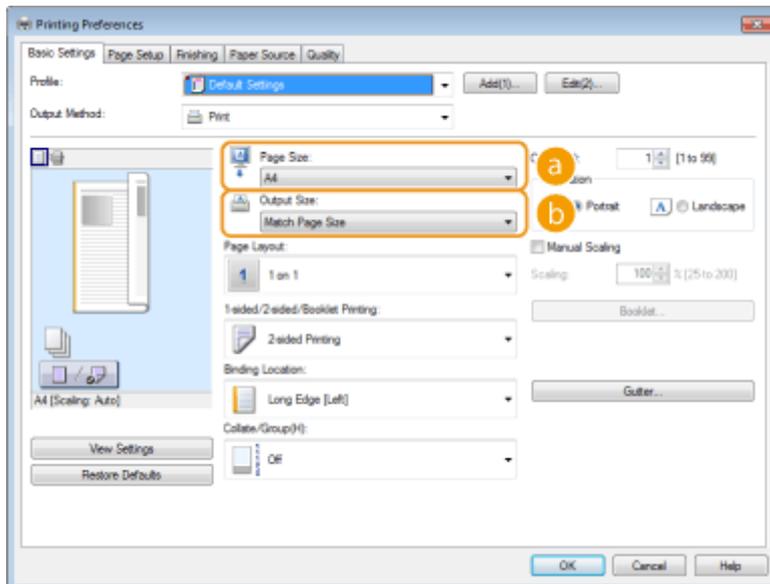
- How to display the print dialog box differs for each application. For more information, see the instruction manual for the application you are using.

### 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.

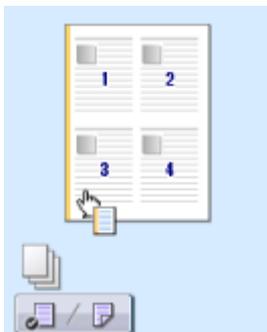
**b [Output Size]**

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. 82)**

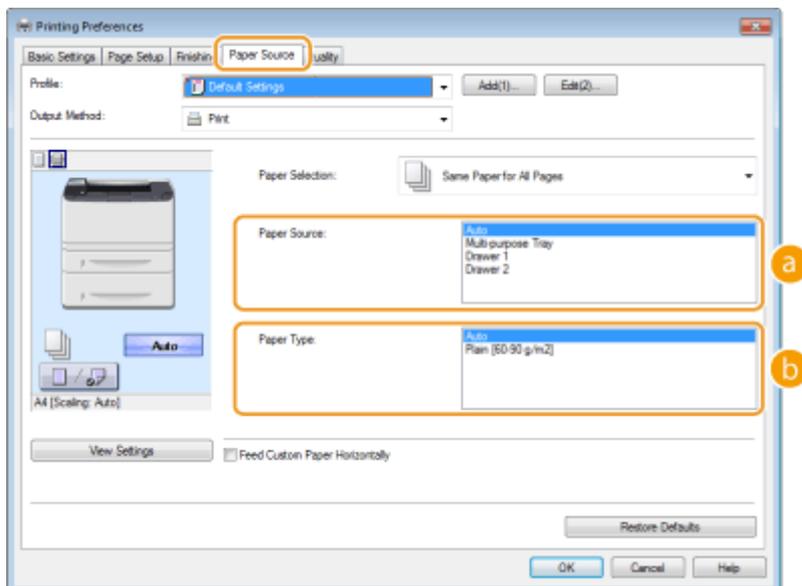
**TIPS**

**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.



**4 Click the [Paper Source] tab, and specify the paper source and paper type.**



**a [Paper Source]**

Select the paper source from which paper is fed.

Setting Value	Paper Source
Auto	The paper source is automatically selected according to the specified size and type of the paper to print on and the settings configured in the machine.
Multi-Purpose Tray	Paper is fed from the multi-purpose tray.
Drawer 1	Paper is fed from the paper drawer of the machine.
Drawer 2	Paper is fed from the optional paper feeder.

**b [Paper Type]**

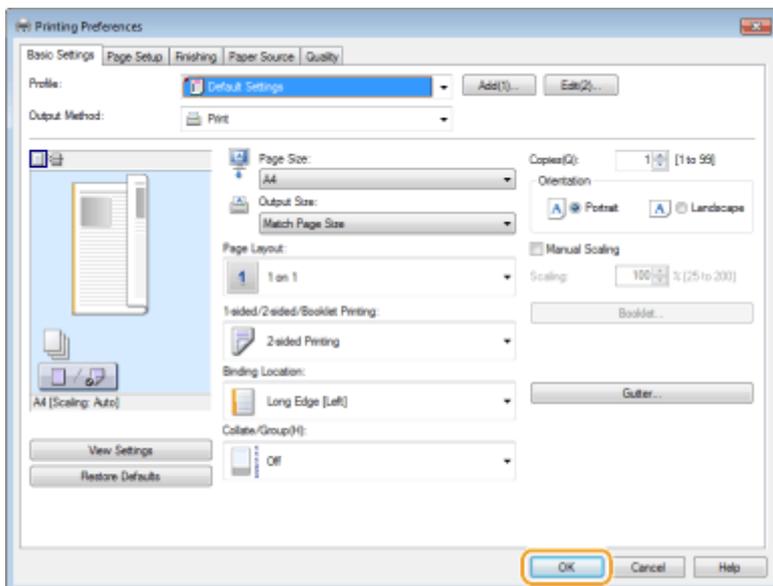
Specify the setting according to the type and basis weight of the paper to print on. **▶Loading Paper(P. 35)**

**5 Specify other print settings as necessary. ▶Various Print Settings(P. 80)**

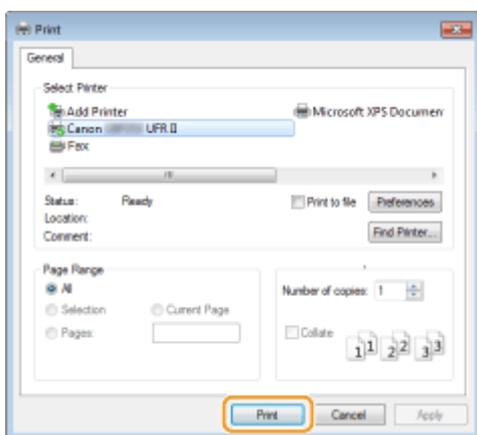
**NOTE:**

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.

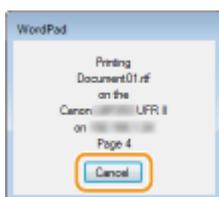
**6 Click [OK].**



**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 Prints(P. 75)**

**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

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- ▶ **Checking the Printing Status and Log(P. 78)**

# Canceling Prints

You can cancel printing from your computer or on the operation panel of the machine.

- ▶ **From a Computer(P. 75)**
- ▶ **From the Operation Panel(P. 76)**

## From a Computer

You can cancel printing from the printer icon displayed on the system tray on the desktop.

### 1 Double-click the printer icon.

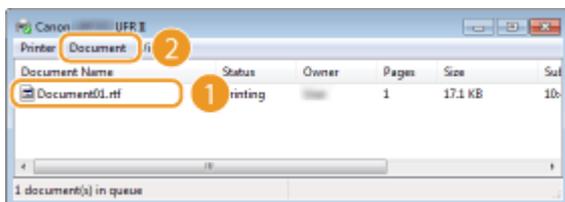


#### NOTE:

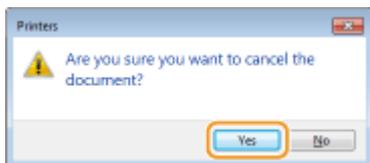
#### When the printer icon is not displayed

- Open the printer folder ( ▶ **Displaying the Printer Folder(P. 474)** ), right-click your printer icon, and click [See what's printing] (or double-click the icon of the printer driver for the machine).

### 2 Select the document you want to cancel, and click [Document] ▶ [Cancel].



### 3 Click [Yes].



- Printing of the selected document is canceled.

#### NOTE

- Several pages may be output after you cancel printing.

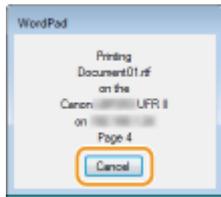
#### TIPS

#### Canceling from the Remote UI

- You can cancel printing from the [Job Status] page on the Remote UI: ▶ **Checking Current Status of Print Documents(P. 275)**

## Canceling from an application

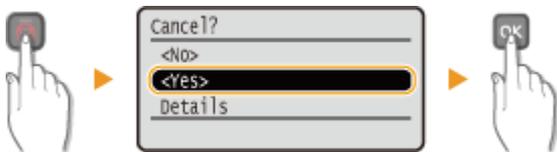
- On some applications, a screen like shown below appears. You can cancel printing by clicking [Cancel].



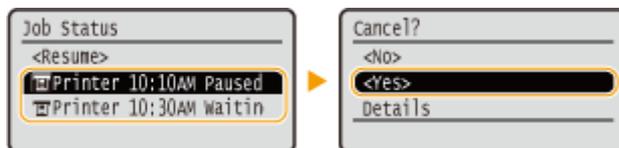
## From the Operation Panel

Cancel printing using or .

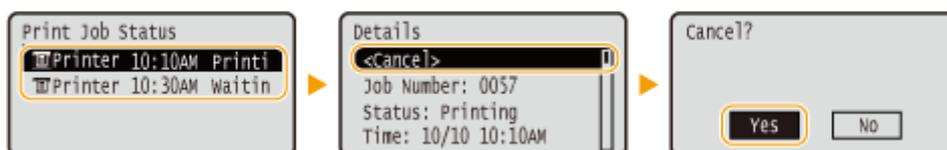
### ■ Press to Cancel



### If the Screen Displays a List of Documents When is Pressed



### ■ Check the Print Job Status before Canceling



## NOTE

- Several pages may be output after you cancel printing.

## LINKS

---

- ▶ **Basic Printing Operations(P. 70)**
- ▶ **Checking the Printing Status and Log(P. 78)**

# Checking the Printing Status and Log

OW20-01E

You can check the current print statuses and the logs for printed documents.

## IMPORTANT

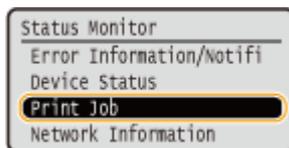
- When <Display Job Log> is set to <Off>, you cannot check the communication logs. [▶ Display Job Log\(P. 341\)](#)

## Useful in the Following Cases

- When your documents are not printed for a long time, you may want to see the waiting list of the documents waiting to be printed.
- When you cannot find your printouts that you thought had been printed, you may want to see whether an error has occurred.

**1** Press .

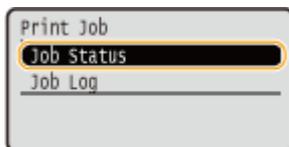
**2** Use  /  to select <Print Job>, and press .



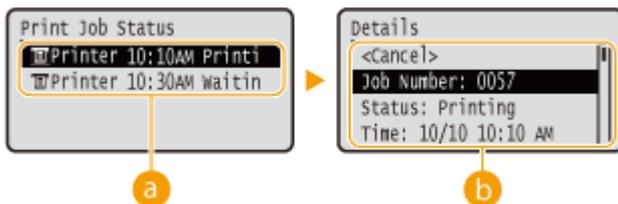
**3** Check the print statuses or logs.

### ■ To check the print statuses

**1** Select <Job Status>, and press .



**2** Select the document whose status you want to check, and press .



**a** <Print Job Status>

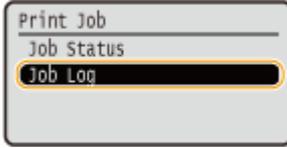
Displays a list of the documents that are being processed or are waiting to be processed.

**b** <Details>

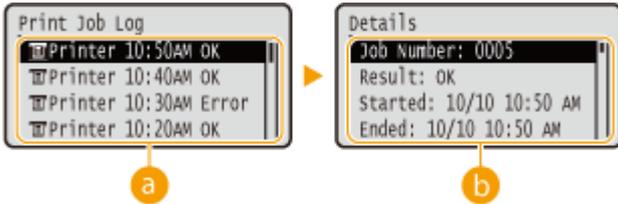
Displays detailed information about the document selected from the list.

### ■ To check the print logs

- 1 Select <Print Job Log>, and press **OK**.



- 2 Select the document whose log you want to check, and press **OK**.



#### a <Print Job Log>

Displays a list of the documents that were printed. <OK> is displayed when a document was printed successfully, and <Error> is displayed when a document failed to be printed because it was canceled or there was some error.

#### b <Details>

Displays detailed information about the document selected from the list. The displayed document name or user name may not reflect the actual document or user name.

#### NOTE:

**If the <Result> column shows a three-digit number**

This number represents an error code. See **▶When an Error Code Appears(P. 366)**.

### LINKS

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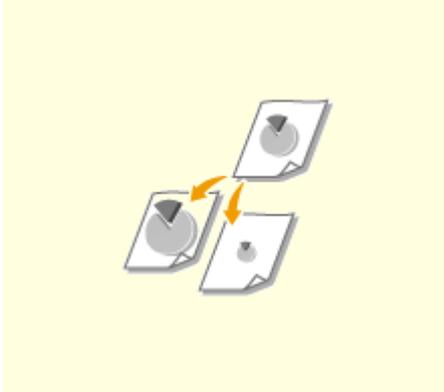
▶ **Basic Printing Operations(P. 70)**

▶ **Canceling Prints(P. 75)**

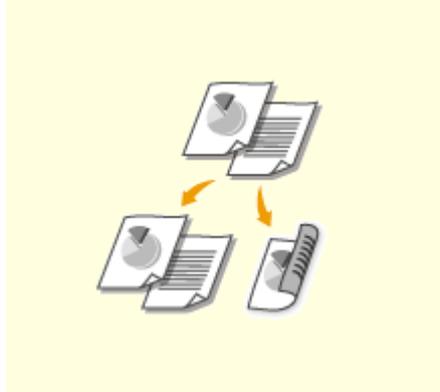
## Various Print Settings

0W20-01F

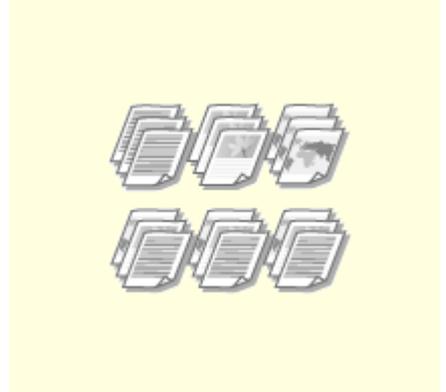
There are a variety of settings to suit your needs, such as Enlarged/Reduced and 2-sided Printing.



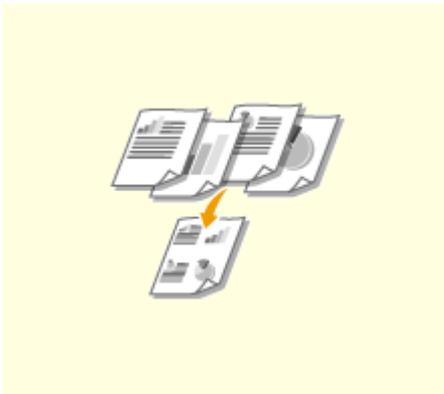
▶ **Enlarging or Reducing(P. 82)**



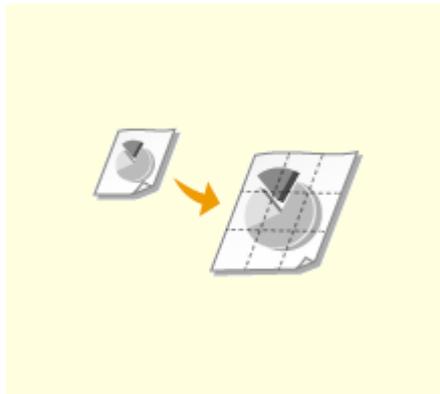
▶ **Switching 1-Sided and 2-Sided Printing(P. 84)**



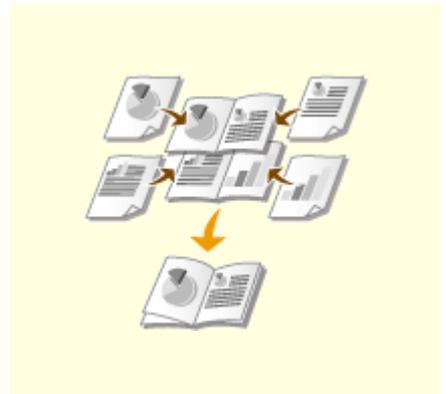
▶ **Collating Printouts by Page(P. 86)**



▶ **Printing Multiple Pages onto One Sheet(P. 88)**



▶ **Printing Posters(P. 90)**



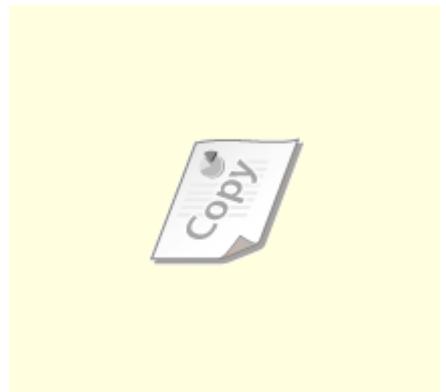
▶ **Printing Booklet(P. 91)**



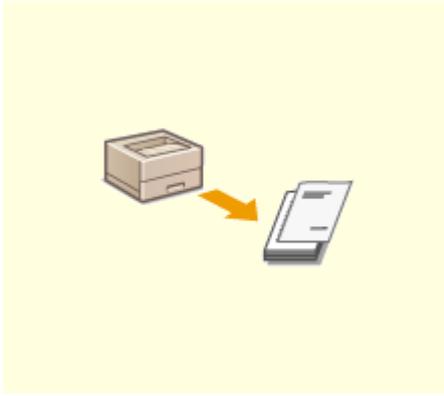
▶ **Printing Borders(P. 93)**



▶ **Printing Dates and Page Numbers(P. 94)**



▶ **Printing Watermarks(P. 96)**



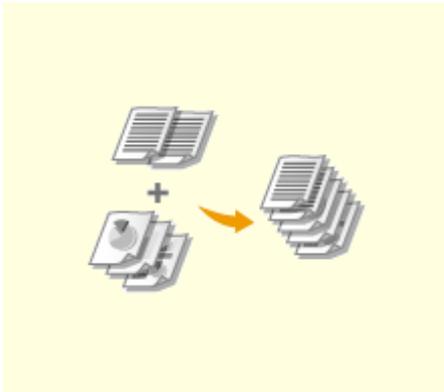
▶ **Printing Specific Pages onto Different Paper(P. 98)**



▶ **Selecting Document Type(P. 100)**



▶ **Saving Toner(P. 102)**



▶ **Combining and Printing Multiple Documents(P. 104)**



▶ **Configuring Printer Settings on the Machine(P. 108)**

## Enlarging or Reducing

0W20-01H



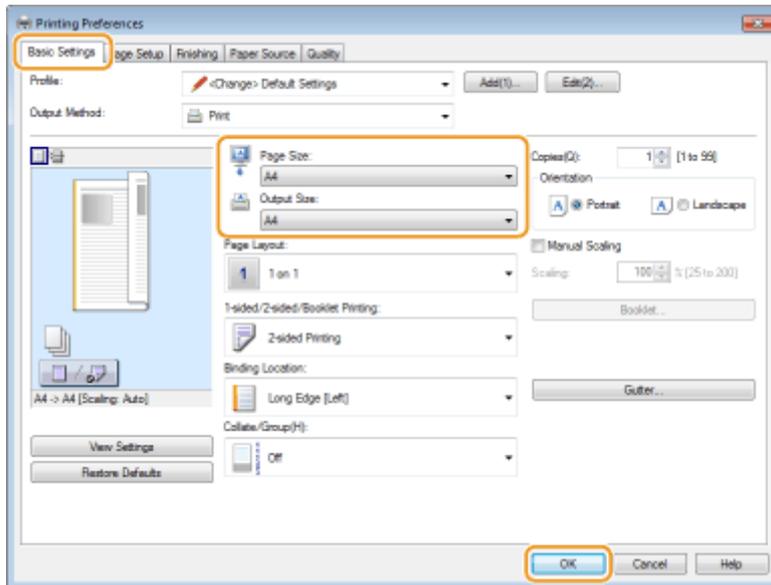
You can make enlarged or reduced printouts by using a preset print ratio, such as A5 to A4, or a custom print ratio that you set in increments of 1%.

### 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.



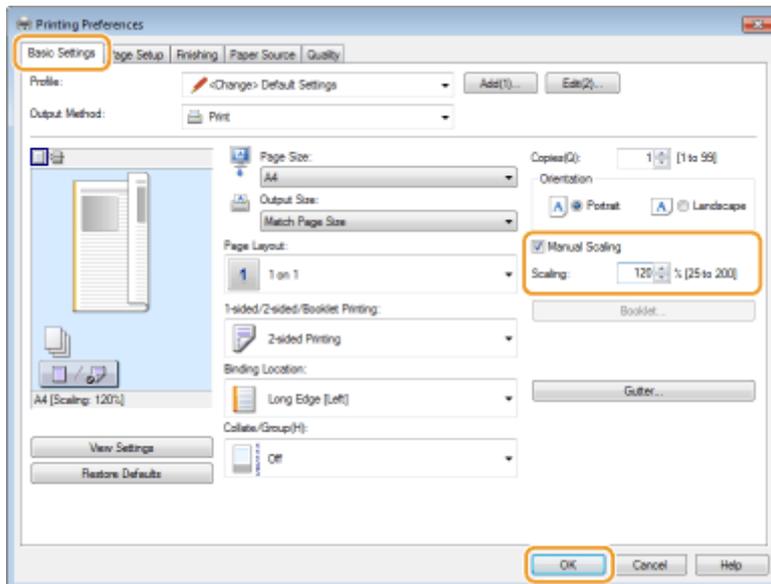
[Basic Settings] tab ► Select the document size in [Page Size] ► Select the paper size in [Output Size] ► [OK]



### 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\(P. 70\)](#)

# Switching 1-Sided and 2-Sided Printing

0W20-01J



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

## IMPORTANT

### Make sure that the paper size switch lever is set properly

- When performing 2-sided printing, improper setting of the paper size switch lever can cause misfeeds or paper jams. When performing 2-sided printing, make sure that the paper size switch lever is set properly for the size of the paper to be used. **▶Interior(P. 21)**

### Make sure that the sub-output tray is closed

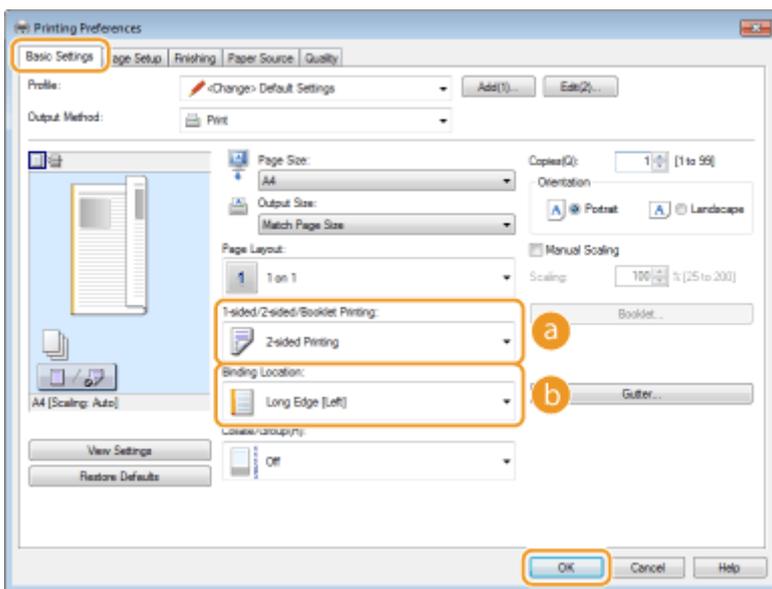
- When the sub-output tray is open, you cannot perform 2-sided printing. When performing 2-sided printing, always make sure that the sub-output tray is closed. **▶Back Side(P. 19)**

## NOTE

- 2-sided printing may not be available with some sizes and types of paper. **▶Paper(P. 440)**



[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]



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

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

**NOTE:**

- For [Booklet Printing], see [▶Printing Booklet\(P. 91\)](#) .

**b [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].

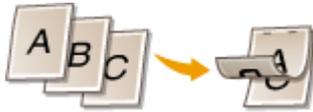
**[Long Edge [Left]]**

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\(P. 70\)](#)
- ▶[Printing Multiple Pages onto One Sheet\(P. 88\)](#)
- ▶[Printing Booklet\(P. 91\)](#)

# Collating Printouts by Page

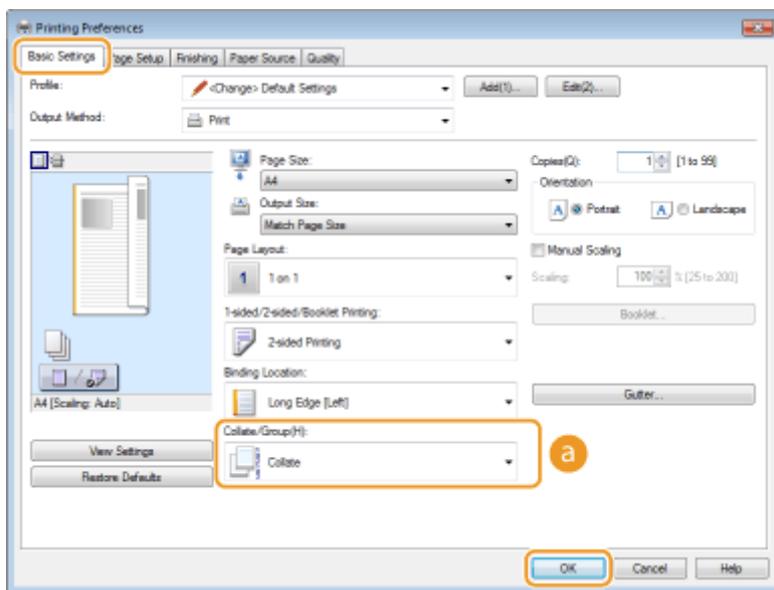
OW20-01K



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]



## a [Collate/Group]

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

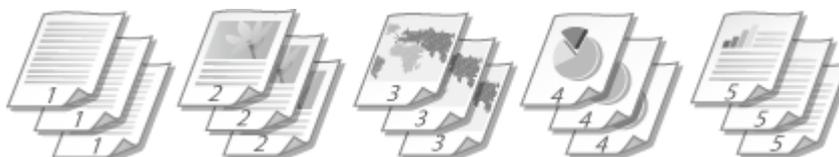
### [Collate]

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

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▶ **Basic Printing Operations(P. 70)**

## Printing Multiple Pages onto One Sheet

OW20-01L



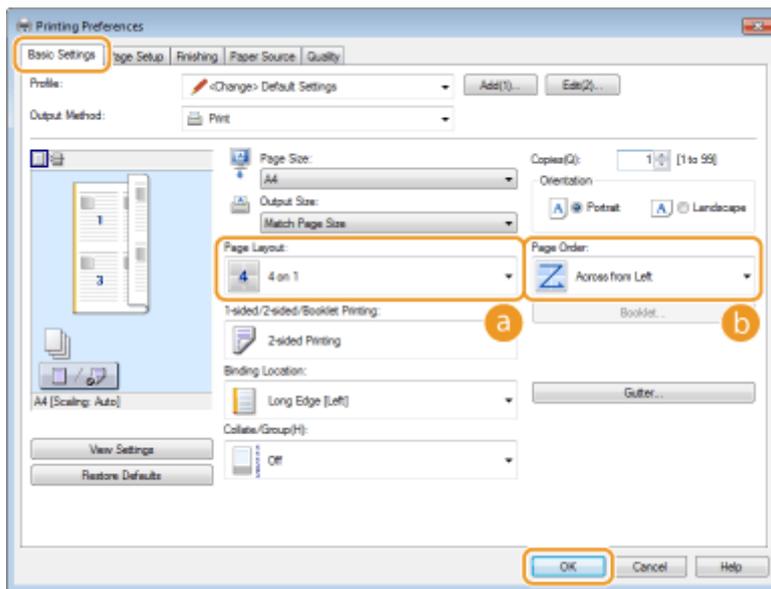
You can print multiple pages onto a single sheet. For example, you can print four or nine pages onto a single sheet by using [4 on 1] or [9 on 1]. Use this function if you want to save paper or to view your document in thumbnails.

### NOTE

- To save more paper, combine this setting with 2-sided printing. [Switching 1-Sided and 2-Sided Printing\(P. 84\)](#)



[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]



### a [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\(P. 90\)](#).
- Printing may not be performed properly if you combine this setting with an application setting for collating printouts.

**b [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.

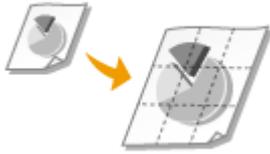
**LINKS**

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- ▶ **Basic Printing Operations(P. 70)**
- ▶ **Switching 1-Sided and 2-Sided Printing(P. 84)**

## Printing Posters

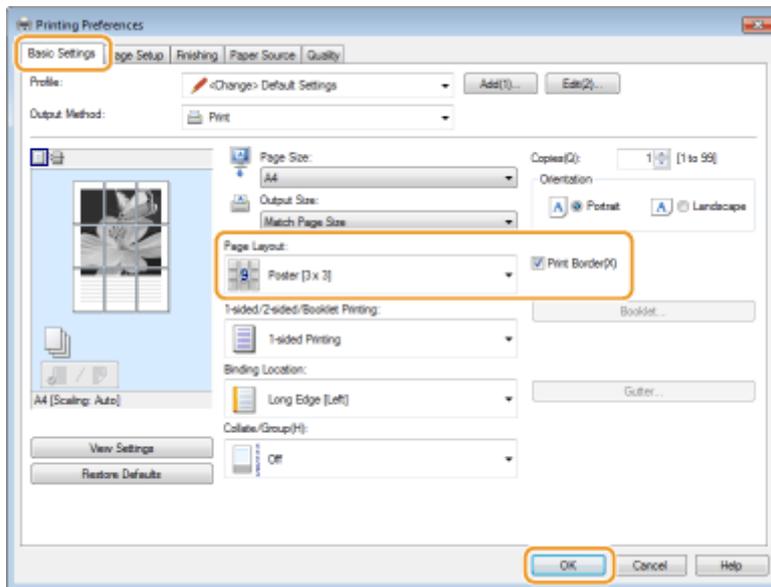
OW20-01R



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\(P. 70\)](#)
- [Enlarging or Reducing\(P. 82\)](#)

# Printing Booklet

OW20-01S



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.

## IMPORTANT

### Make sure that the paper size switch lever is set properly

- When performing booklet printing, improper setting of the paper size switch lever can cause misfeeds or paper jams. When performing booklet printing, make sure that the paper size switch lever is set properly for the size of the paper to be used. **Interior(P. 21)**

### Make sure that the sub-output tray is closed

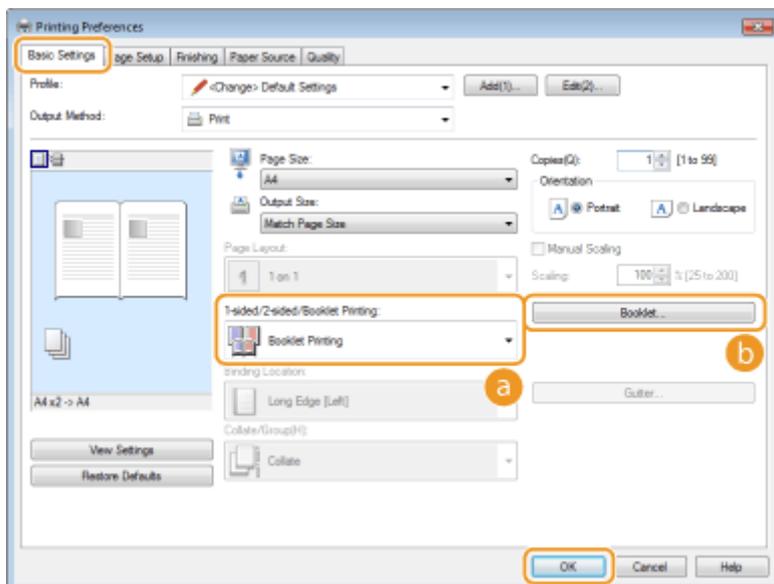
- When the sub-output tray is open, you cannot perform booklet printing. When performing booklet printing, always make sure that the sub-output tray is closed. **Back Side(P. 19)**

## 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. 440)**.



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



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

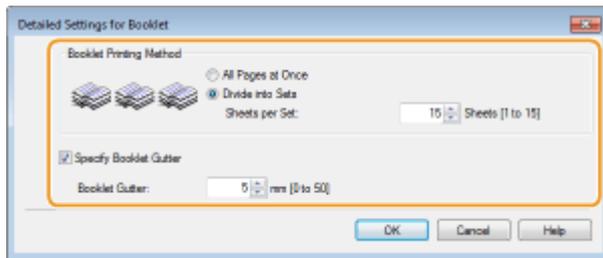
Select [Booklet Printing].

**NOTE:**

- For [1-sided Printing] and [2-sided Printing], see [Switching 1-Sided and 2-Sided Printing\(P. 84\)](#) .

**b [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\(P. 70\)](#)

# Printing Borders

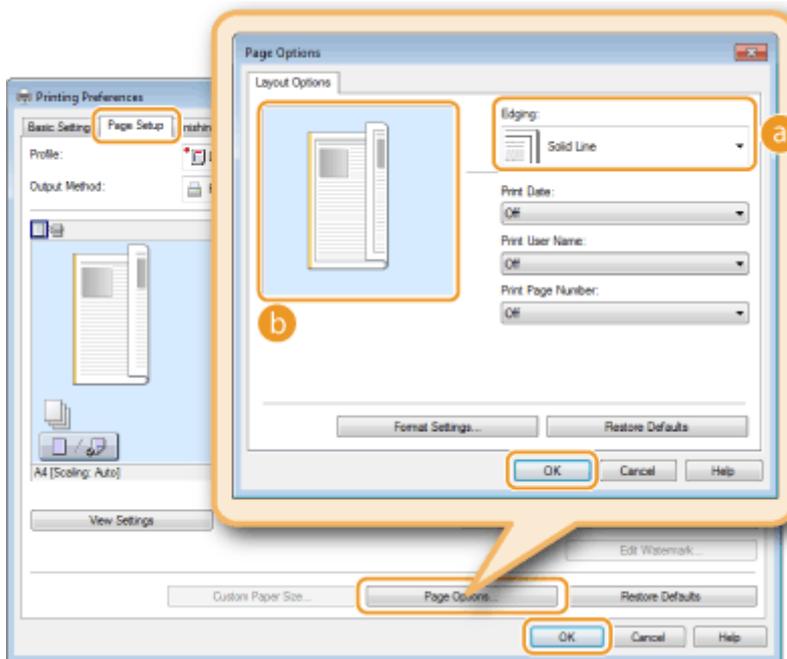
0W20-01U



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]



## a [Edging]

Select the border type.

## b Preview

Displays a preview with the selected border.

## LINKS

- **Basic Printing Operations(P. 70)**
- **Printing Dates and Page Numbers(P. 94)**
- **Printing Watermarks(P. 96)**

## Printing Dates and Page Numbers

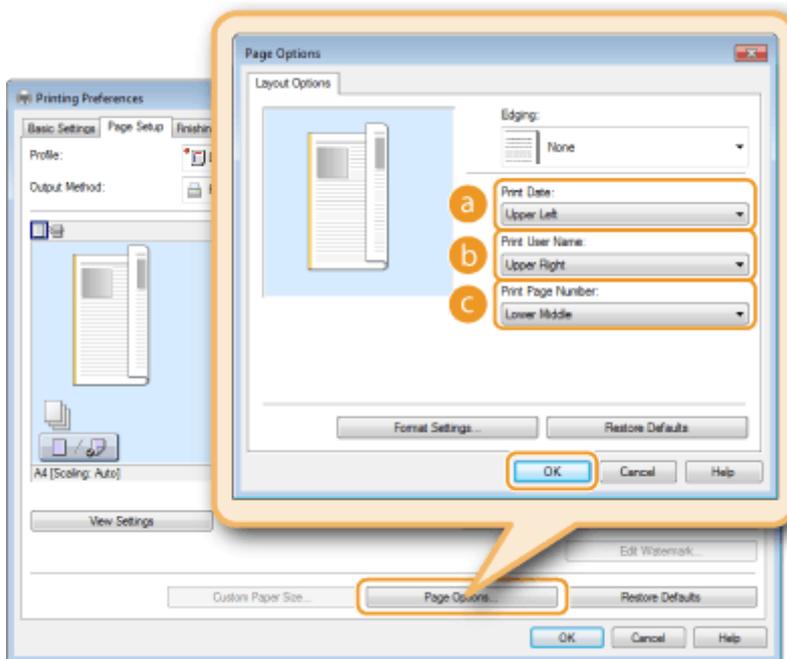
0W20-01W



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]



### a [Print Date]

Specify the position to print the print date.

### b [Print User Name]

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

### c [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

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- ▶ **Basic Printing Operations(P. 70)**
- ▶ **Printing Borders(P. 93)**
- ▶ **Printing Watermarks(P. 96)**

# Printing Watermarks

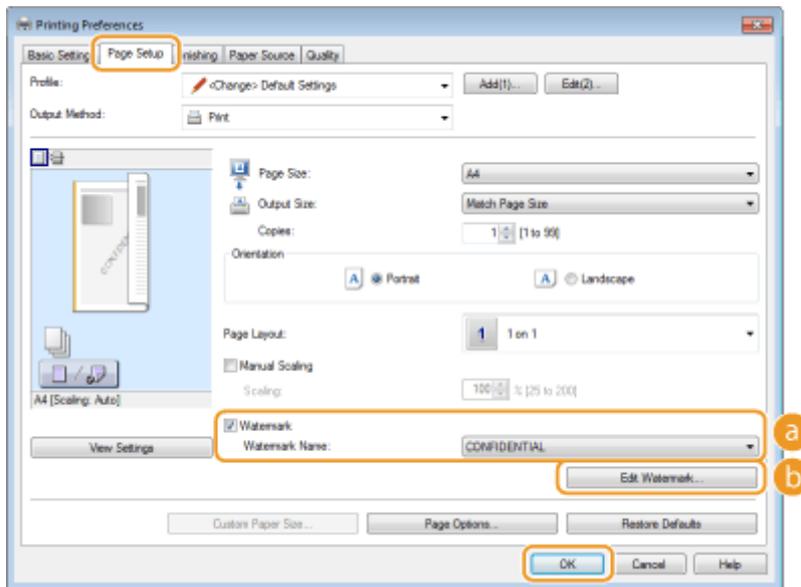
OW20-01X



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 a watermark from [Watermark Name] ▶ [OK]

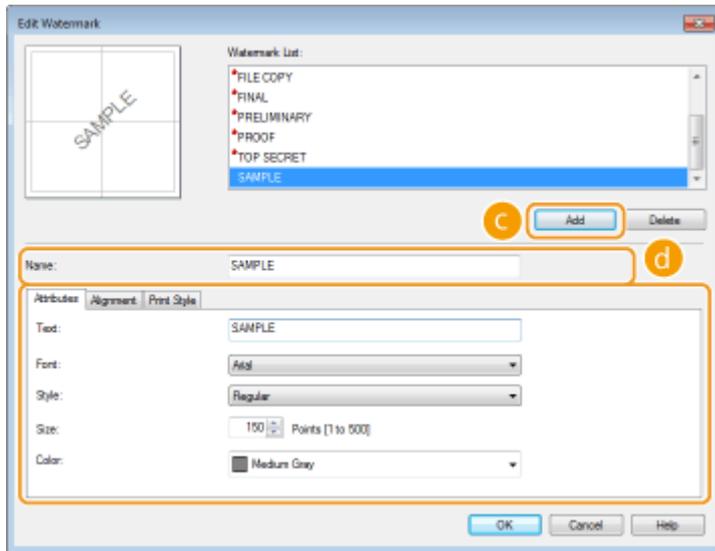


## a [Watermark]/[Watermark Name]

Select the [Watermark] check box to display the list of the watermarks in the [Watermark Name] drop-down list. Select a watermark from the menu.

## b [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.

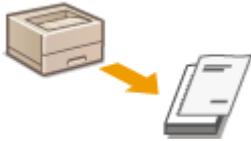
LINKS

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- ▶ **Basic Printing Operations(P. 70)**
- ▶ **Printing Borders(P. 93)**
- ▶ **Printing Dates and Page Numbers(P. 94)**

# Printing Specific Pages onto Different Paper

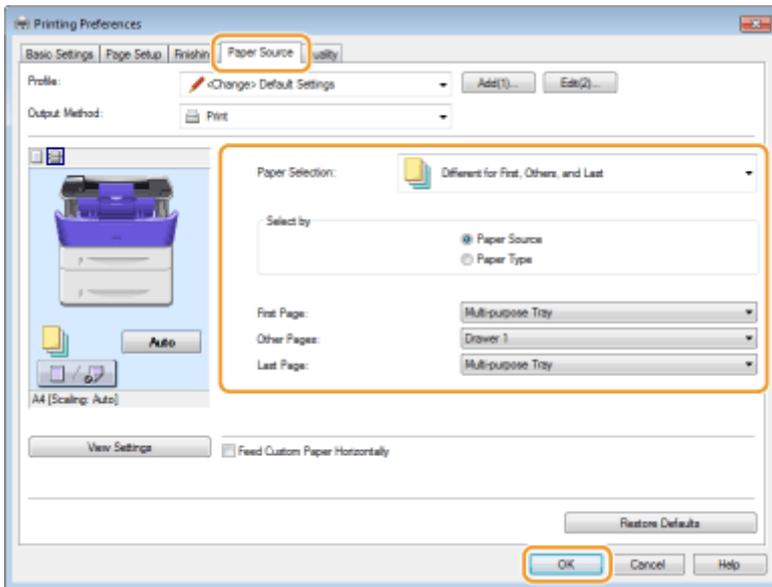
0W20-01Y



You can print specific pages of a document, such as when you want to print the cover of a booklet on colored paper. In this case, load colored paper for the cover in the multi-purpose tray and load plain paper for the body pages in the paper drawer, and then specify the paper settings on the printer driver.



[Paper Source] tab ▶ Select the pages to print on different paper and the paper source loaded with the paper from [Paper Selection] ▶ [OK]



## **a** [Paper Selection]

Specify which pages should be printed on different paper, and select which paper source should be used to feed paper for each page.

[Same Paper for All Pages]	Prints all of the pages on the same paper, and does not print any specific pages on different paper. All the pages are printed on paper specified in [Paper Source].
[Different for First, Others, and Last]	You can use different paper for the first page, body pages, and last page, respectively. For example, you can specify the paper in the multi-purpose tray for [First Page], the paper in the paper drawer for [Other Pages] (body pages), and the paper in the multi-purpose tray for [Last Page]. Also, selecting [Paper Type] in [Select by] enables you to specify the paper type used for printing rather than the paper source.
[Different for First, Second, Others, and Last]	You can also specify the paper for the following page of the cover as well as specifying the paper in [Different for First, Others, and Last]. Also, selecting [Paper Type] in [Select by] enables you to specify the paper type used for printing rather than the paper source.

[Different for Cover and Others]	Specify the settings for booklet printing (  <b>Printing Booklet(P. 91)</b> ). You can specify different paper for the cover and body pages, respectively. For example, you can specify the paper in the multi-purpose tray for [Cover Page] and the paper in the paper drawer for [Other Pages] (body pages).
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LINKS

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 **Basic Printing Operations(P. 70)**

## Selecting Document Type

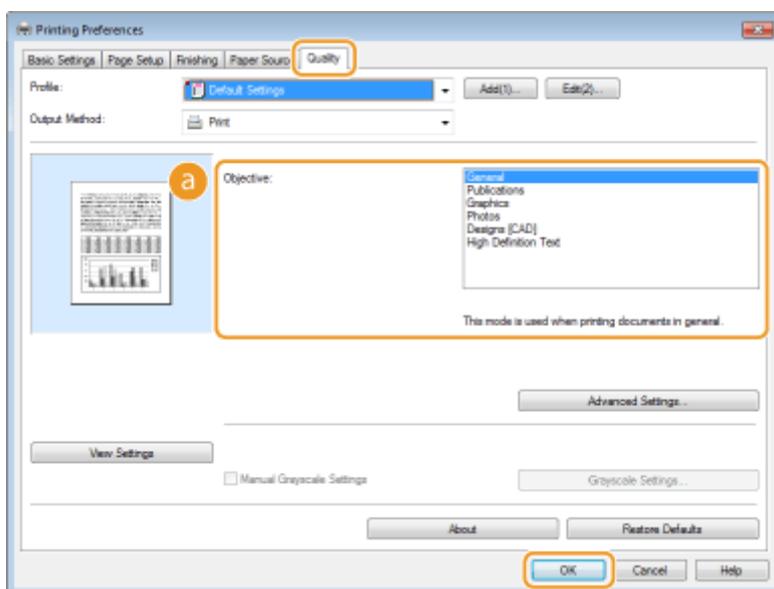
OW20-020



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]



### **a** [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:**

## Printing

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

### LINKS

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▶ **Basic Printing Operations(P. 70)**

# Saving Toner

OW20-021



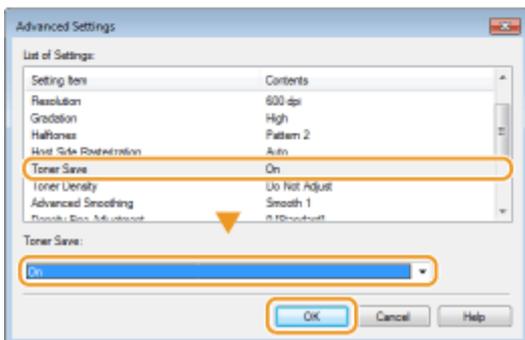
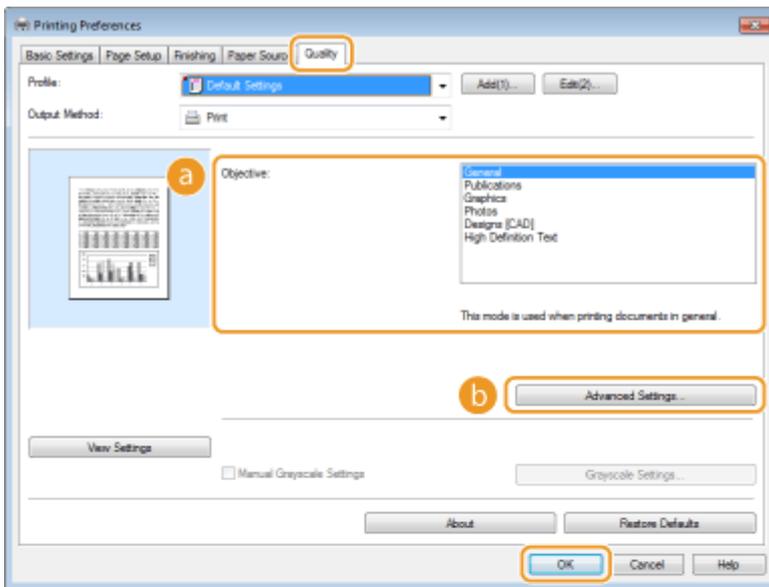
You can set the printer driver to print documents using less toner.

## 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]



### a [Objective] ▶ Selecting Document Type(P. 100)

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

## **b [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**

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**▶ Basic Printing Operations(P. 70)**

# Combining and Printing Multiple Documents

OW20-022

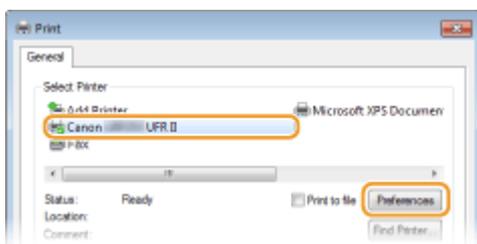


By using Canon PageComposer, you can combine multiple documents into one print job and print the job with specified print settings. This function, for example, enables you to combine documents made with different applications and print all of the pages in the same paper size.

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

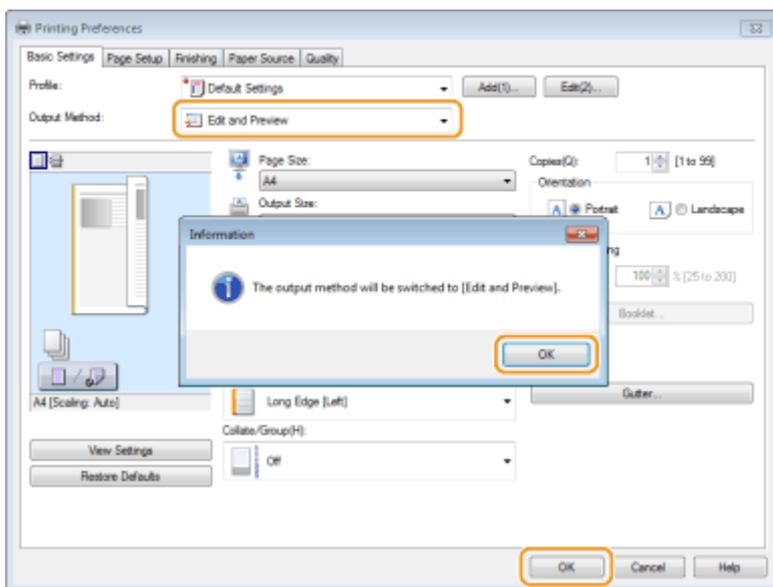
- How to display the print dialog box differs for each application. For more information, see the instruction manual for the application you are using.

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

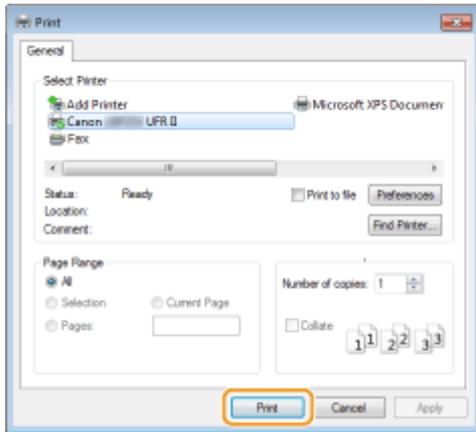


## 3 Select [Edit and Preview] in [Output Method].

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



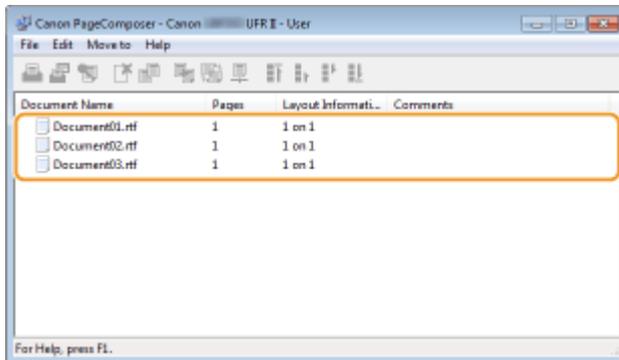
## 4 Click [Print] or [OK].



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

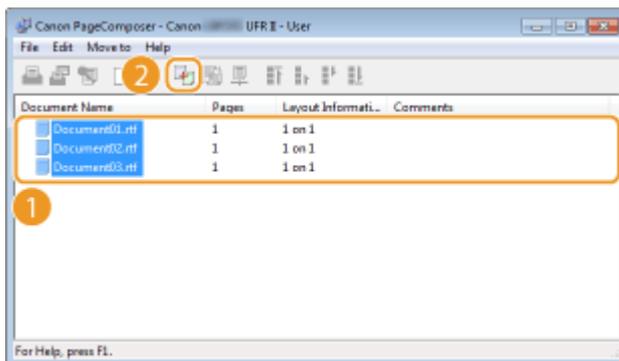
## 5 Repeat steps 1 to 4 for the documents you want to combine.

- The documents are added to the Canon PageComposer.



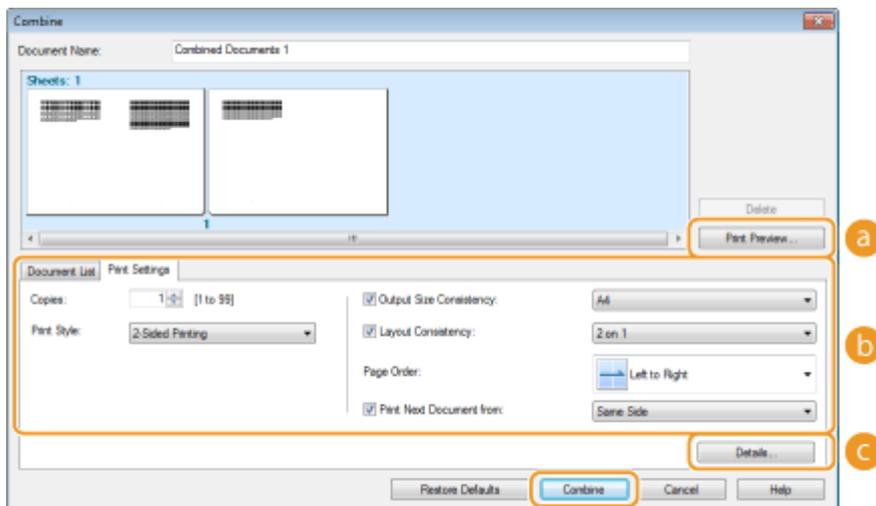
## 6 From the [Document Name] list, select the documents to combine, and click .

- 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.

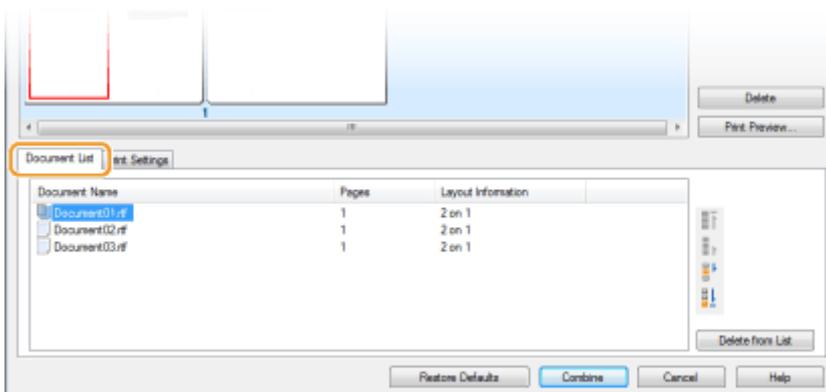


**a [Print Preview]**

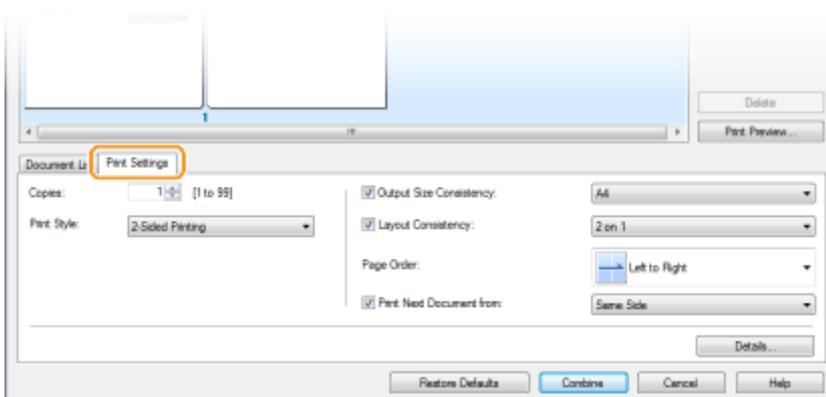
Displays a preview of the document to be printed.

**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.



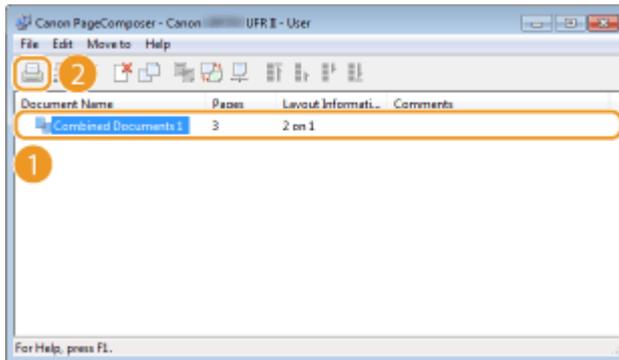
**NOTE:**

- 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 Prints\(P. 75\)](#) .

## LINKS

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- [▶Basic Printing Operations\(P. 70\)](#)

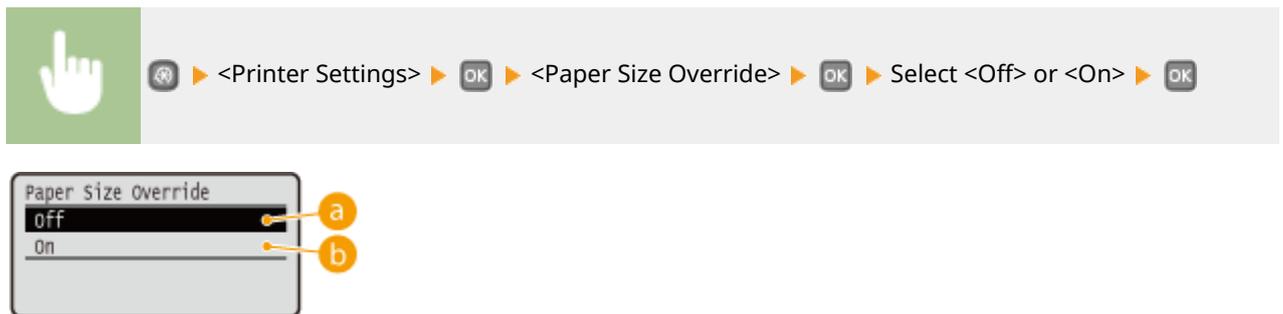
# Configuring Printer Settings on the Machine

0W20-023

When you print a document from a computer, you can specify many print settings, such as the number of copies or 1-sided/2-sided printing, in the application you used to make the document or on the printer driver. However, the <Paper Size Override> setting described below can only be specified on the machine.

## ■ <Paper Size Override>

Select whether to switch between printing on A4 and Letter size paper if one of these paper sizes is loaded but the other is not. For example, if you are printing a Letter size document but only A4 paper is loaded in the machine, the machine will print your document on A4 paper.



### a <Off>

Does not perform paper size substitution. Printing stops and an error message is displayed when the machine runs out of the paper that has been specified.

### b <On>

Performs paper size substitution. However, if no paper to substitute is loaded in any paper sources, the substitution cannot be performed.

## ■ Other Printer Settings

There are other printer settings you can specify on the operation panel of the machine. These settings are applied only for PS/PCL printing. ▶ **Printer Settings(P. 313)**

### NOTE

#### Priority of settings

When a particular setting can be specified either on the machine, or in an application or on the printer driver, the settings made in the application or on the printer driver will override those specified on the machine.

### LINKS

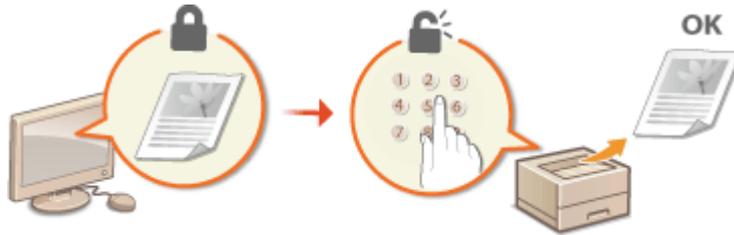
- ▶ **Basic Printing Operations(P. 70)**
- ▶ **Various Print Settings(P. 80)**

## Printing a Document Secured by a PIN (Secure Print)

LBP252dw

0W20-024

By setting a PIN to a document when printing from a computer, the document is held in the memory of the machine, and is not printed until the correct PIN is entered on the operation panel of the machine. This function is called "Secure Print," and the document that is protected by a PIN is called a "secured document." Using Secure Print keeps printouts of confidential documents from being left unattended. Before you can use this function, you need to complete some procedures. **▶Preparing for Using Secure Print(P. 110)**



## Preparing for Using Secure Print

OW20-025

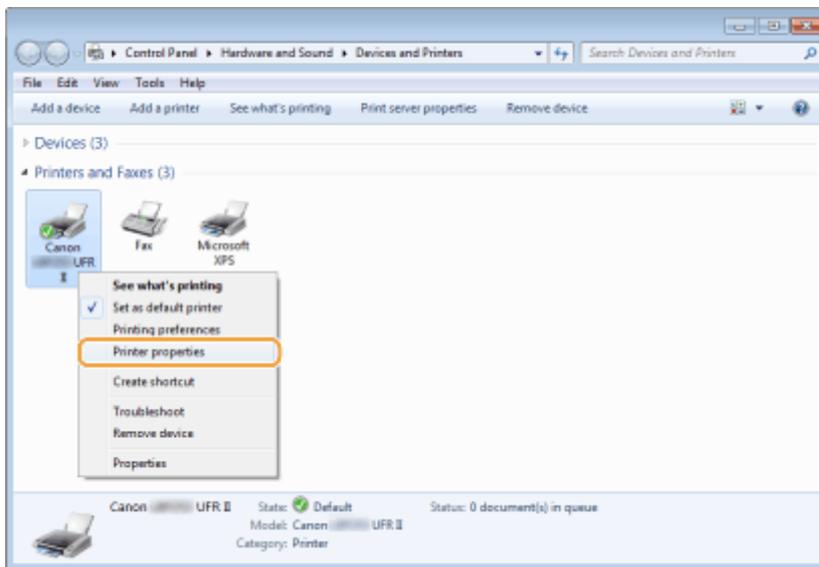
Make sure that Secure Print is enabled on the printer driver.

### IMPORTANT

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

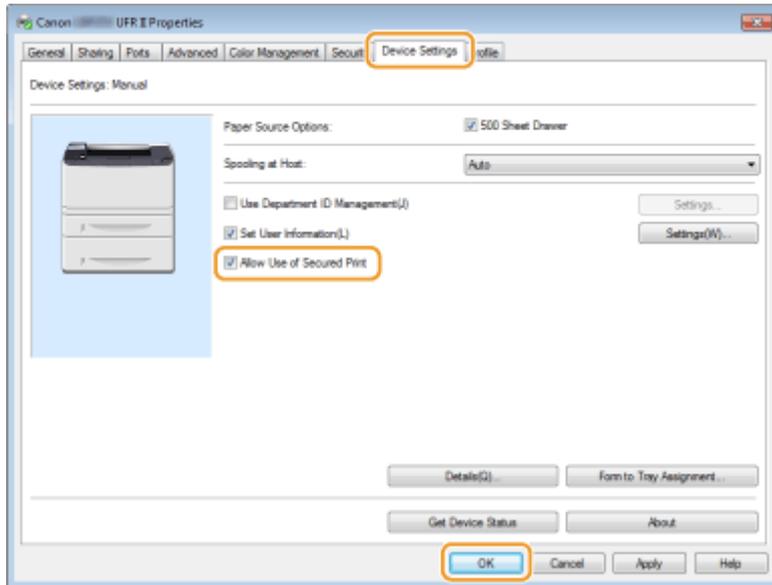
**1** Open the printer folder. ▶ **Displaying the Printer Folder(P. 474)**

**2** Right-click your printer icon and click [Printer properties] or [Properties].



**3** Click the [Device Settings] tab and make sure that the [Allow Use of Secured Print] check box is selected.

- If the check box is selected, Secure Print is enabled.
- If the check box is not selected, select it and click [OK].



## LINKS

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▶ **Printing via Secure Print(P. 112)**

# Printing via Secure Print

OW20-026

This section describes how to print a document from an application as a secured document. The first part of this section describes how to send a secured document to the machine, and the second part of this section describes how to print the secured document on the machine.

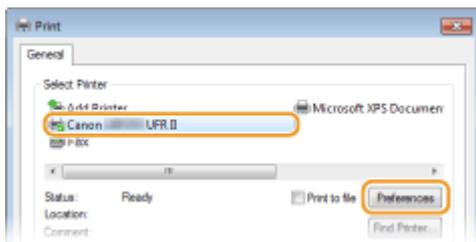
- ▶ **Sending a Secured Document from a Computer to the Machine(P. 112)**
- ▶ **Printing Out Secured Documents(P. 114)**
- ▶ **Changing the Valid Time Period for Secured Documents(P. 115)**

## Sending a Secured Document from a Computer to the Machine

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

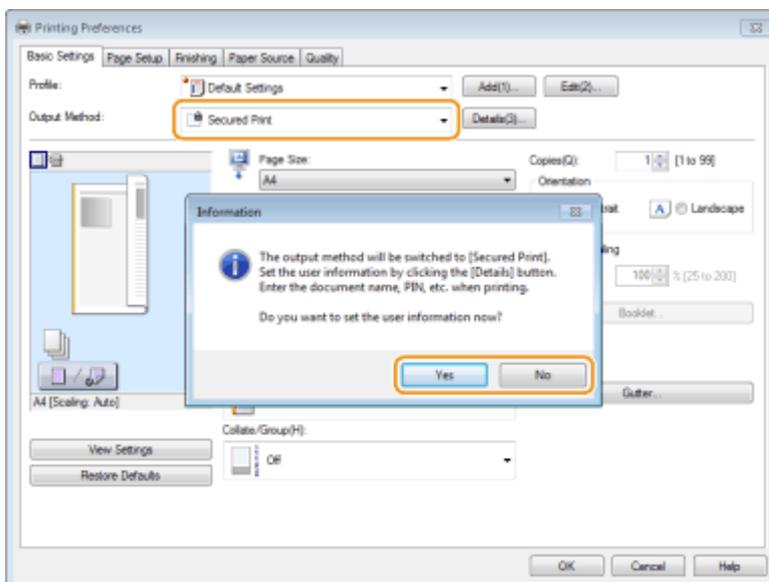
- How to display the print dialog box differs for each application. For more information, see the instruction manual for the application you are using.

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



### 3 Select [Secured Print] in [Output Method].

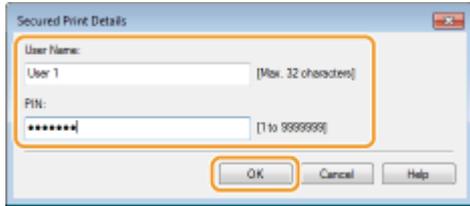
- Click [Yes] or [No] on the [Information] pop-up screen.
- If you want to use the same user name and PIN every time, click [Yes]. To change the user name and PIN every time, click [No].



**■ If you selected [Yes]**

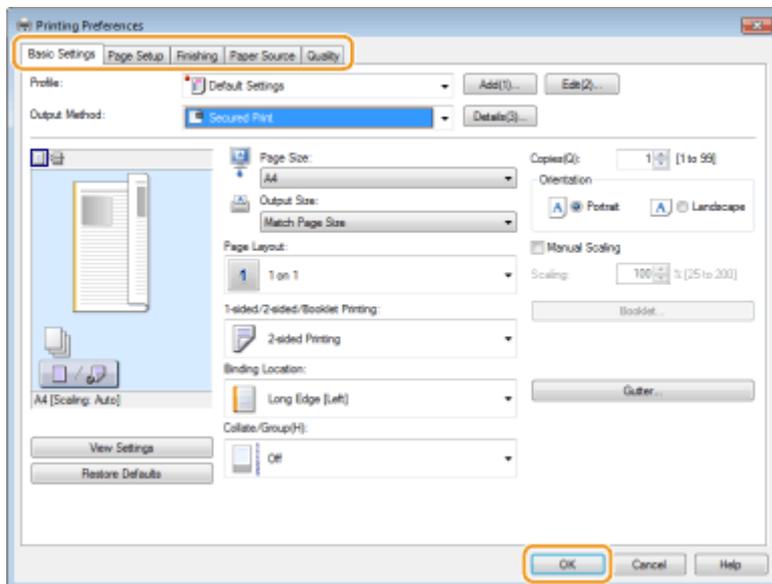
Enter the user name for [User Name] and PIN for [PIN], and click [OK].

- The computer name (logon name) of your computer is displayed in [User Name]. if you want to change the user name, enter up to 32 alphanumeric characters for a new user name.
- Enter the PIN of up to seven digits.

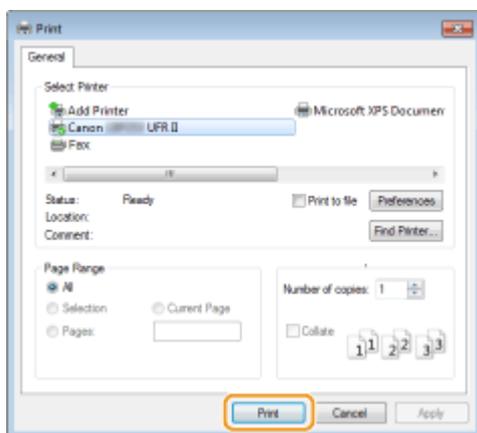


**4 Specify the print settings, and click [OK].**

- Click the [Basic Settings], [Page Setup], [Finishing], [Paper Source], or [Quality] tabs to specify the print settings on each screen as necessary. **➤ Various Print Settings(P. 80)**



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



- After the secured document is sent to the machine, it is held in the memory of the machine waiting to be printed.

**■If you selected [No] at step 3**

Enter the [Document Name], [User Name], and [PIN] and click [OK].

- The document name is automatically set based on the information from the application. If you want to change the document name, enter up to 32 alphanumeric characters for a new document name.
- The computer name (logon name) of your computer is displayed in [User Name]. If you want to change the user name, enter up to 32 alphanumeric characters for a new user name.
- Enter the [PIN] of up to seven digits.



## Printing Out Secured Documents

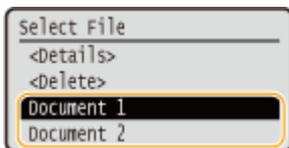
After you send the secured document to the machine, print it out within 30 minutes. After that, the secured document will be deleted from the memory of the machine and can no longer be printed.

### NOTE

- If secured documents are left unprinted, they occupy the memory and may prevent the machine from printing even ordinary (not secured) documents. Make sure that you print your secured documents as soon as you can.
- You can check how much memory is being used for secured documents.
  - ▶ <Device Status> ▶ <Secure Print Memory Usage>
- You can change the valid time period for secured documents. ▶ **Changing the Valid Time Period for Secured Documents(P. 115)**

**1** Press (Print).

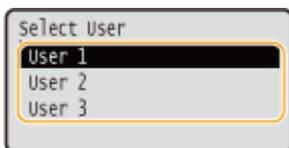
**2** Use ▲ / ▼ to select the secured document to print, and press .



### NOTE:

**If the <Select User> screen is displayed**

- If secured documents from two or more users are being held in memory, the <Select User> screen is displayed prior to the <Select File> screen. Select your user name, and press .



### 3 Enter the PIN using numeric keys, and then press **OK**.



- Printing starts.
- If you want to cancel printing, press <Cancel> ► **OK** ► <Yes> ► **OK**.

## Changing the Valid Time Period for Secured Documents

The machine at purchase is set to delete secured documents 30 minutes after receiving them unless they are printed, but you can change this setting.

### 1 Press **ⓘ**.

### 2 Use ▲ / ▼ to select <System Management Settings>, and press **OK**.

- If the logon screen appears, enter the correct ID and PIN using numeric keys, and then press **ID**. ► **Logging on to the Machine**(P. 34)

### 3 Select <Secure Print Settings>, and press **OK**.

### 4 Select <On>, and press **OK**.

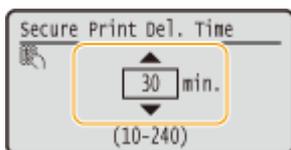
#### NOTE:

#### Disabling Secure Print

- Select <Off> and press **OK**, and restart the machine.

### 5 Specify how long the machine holds secured documents, and press **OK**.

- Use ▲ / ▼ or the numeric keys to enter the time.
- The secured document is erased from the memory of the machine when the time specified here elapses.



### 6 Restart the machine.

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

## LINKS

► **Preparing for Using Secure Print**(P. 110)

▶ **Checking the Printing Status and Log(P. 78)**

## Configuring Print Settings to Your Needs

0W20-027

You can register combinations of settings as "Profiles" to suit your different printing needs. Also, you can register the settings that you frequently use as the default setting. Once the default setting is set, the registered settings are automatically displayed on the printer driver screen, and you can skip the operations to specify the print settings and print immediately.



When I print highly confidential documents, I put a "TOP SECRET" watermark on them.



Specify "TOP SECRET" for a watermark and register it as a "Profile." Just select this "Profile" when you need it. ▶

**Registering Combinations of Frequently Used Print Settings(P. 118)**



To save printing costs, I always print each two pages on one page.



Specify [2 on 1] as the user default in the printer driver. The next and following print jobs will be performed so that each two pages are shrunk and printed on one page. ▶ **Changing Default Settings(P. 120)**

# Registering Combinations of Frequently Used Print Settings

OW20-028

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.

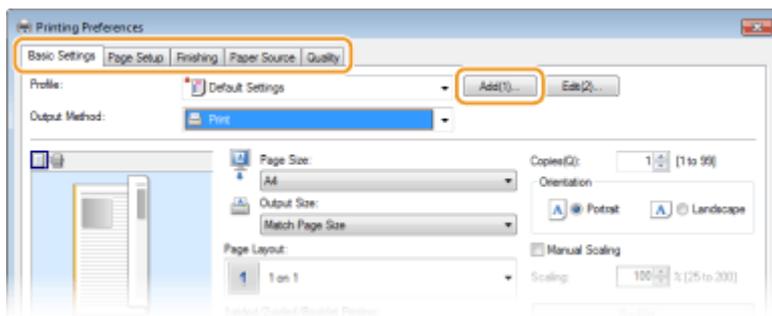
▶ **Registering a Profile(P. 118)**

▶ **Selecting a Profile(P. 119)**

## Registering a Profile

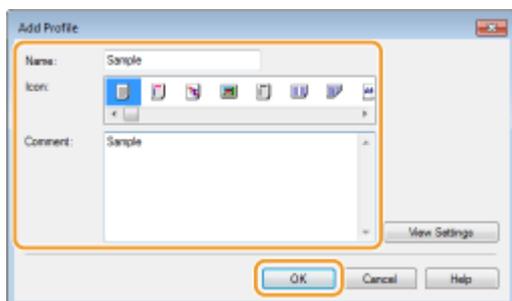
### 1 Change the settings that you want to register as a profile, and click [Add].

- Click the [Basic Settings], [Page Setup], [Finishing], [Paper Source], or [Quality] tabs to specify the print settings on each screen as necessary. ▶ **Various Print Settings(P. 80)**



### 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.



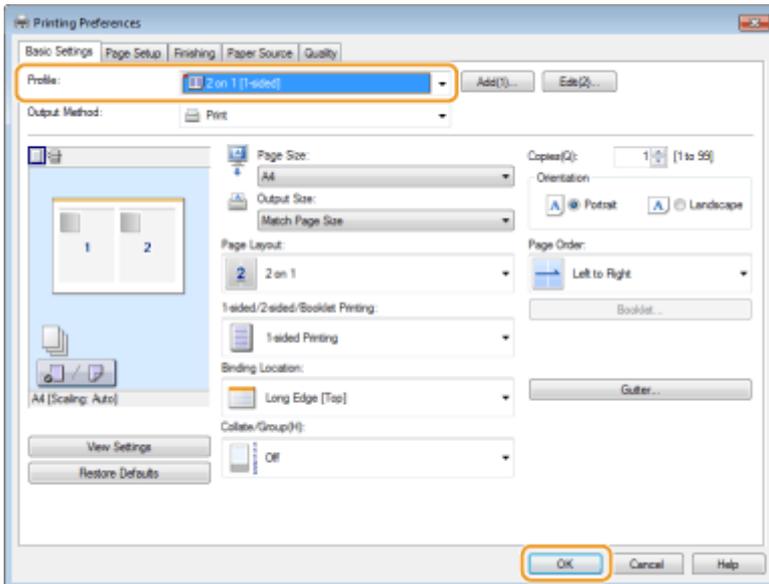
## NOTE

### 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. 70)**
- ▶ **Changing Default Settings(P. 120)**

## Changing Default Settings

0W20-029

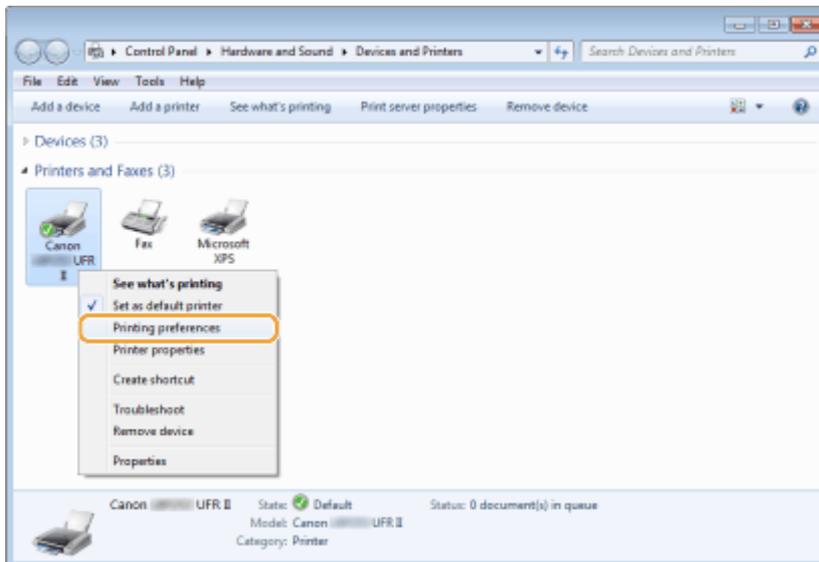
The default settings are the settings that are first displayed whenever you open the print settings screen of the printer driver, but you can change them. For example, if you want to print all documents in such manner that each two pages are shrunk and printed on one page, specify [2 on 1] as the user 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.

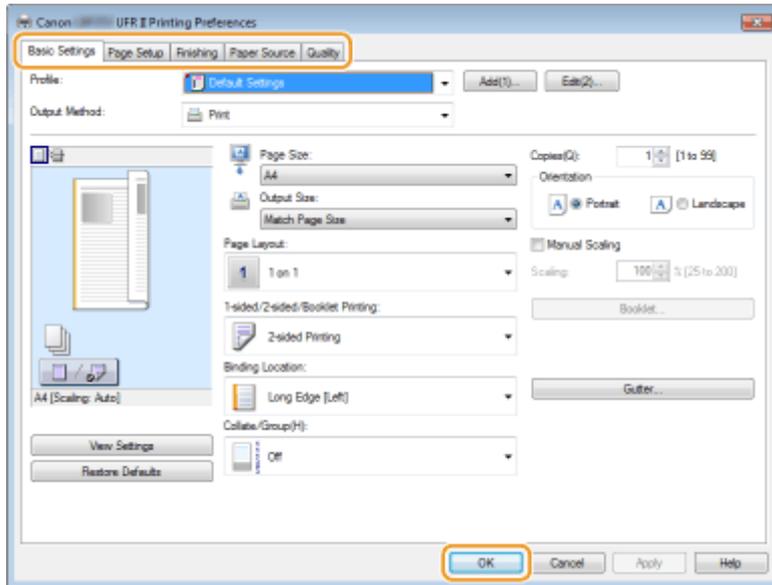
**1** Open the printer folder. ▶ **Displaying the Printer Folder(P. 474)**

**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], [Paper Source], or [Quality] tabs to specify the print settings on each screen as necessary. ▶ **Various Print Settings(P. 80)**



## LINKS

- ▶ **Basic Printing Operations(P. 70)**
- ▶ **Registering Combinations of Frequently Used Print Settings(P. 118)**

# Can Be Used Conveniently with a Mobile Device

<b>Can Be Used Conveniently with a Mobile Device</b> .....	123
<b>Connecting to a Mobile Device</b> .....	124
Make Direct Connection (Access Point Mode) .....	125
<b>Making the Best Use of the Machine by Utilizing Applications</b> .....	127
<b>Managing the Machine Remotely</b> .....	129

## Can Be Used Conveniently with a Mobile Device

---

0W20-02E

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. You can also use a mobile device to operate the machine remotely, check the printing status, and change machine's settings.



- ▶ **Connecting to a Mobile Device(P. 124)**
- ▶ **Making the Best Use of the Machine by Utilizing Applications(P. 127)**
- ▶ **Managing the Machine Remotely(P. 129)**

## Connecting to a Mobile Device

---

0W20-02F

When connecting the machine to a mobile device, you can select whether to connect by wireless LAN or Direct Connection. Select the connection method that better suits your environment and devices.

### ■ 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. 136)**



### ■ Making Direct Connection

Connect the mobile device and the machine directly without using a wireless LAN router. Even where no wireless LAN environment is available, you can quickly connect the machine and a mobile device. **▶Make Direct Connection (Access Point Mode)(P. 125)**



#### IMPORTANT:

- When Direct Connection has been established, you can use neither a wired LAN nor a wireless LAN via router.

## Make Direct Connection (Access Point Mode)

0W20-02H

Even in an environment without wireless LAN router, you can connect your mobile device and the machine without going through difficult settings when you use "Access Point Mode," which allows you to wirelessly and directly connect your mobile device to the machine.



### Using the Machine in Direct Connection (in Access Point Mode)

Follow these steps to establish a connection using Access Point Mode.



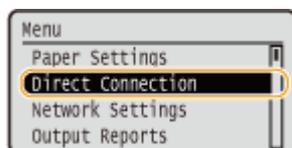
#### 1 Put the machine into Access Point Mode.

- Set <Enable Direct Connection> to <On>.
- ▶ **Enable Direct Connection(P. 292)**



#### 2 Put the machine into a connection waiting state.

- Press ▶ use ▲ / ▼ to select <Enable Direct Connection> ▶ press . The machine enters the state in which you can connect your mobile device to the machine.

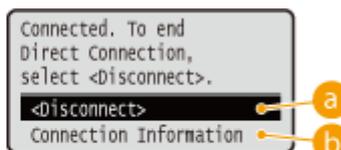
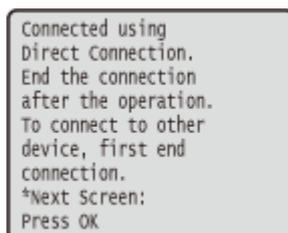


#### 3 Connecting from a mobile device

- Based on the SSID and network key displayed in the display, make wireless LAN connection settings for connecting to the machine.

#### NOTE:

- The screen below appears in the display during the connection process.



**a** <Disconnect>

Can Be Used Conveniently with a Mobile Device

Stops the Direct Connection procedure. When printing or other desired operation is complete, select this item to terminate the connection.

**b** <Connection Information>

You can view the information on the Direct Connection being proceeding.

## IMPORTANT

- When the machine is in Direct Connection mode, it is possible that you cannot connect to the Internet depending on your mobile device.
- Direct Connection is only possible as a one-to-one connection between the machine and a single mobile device. You cannot connect 2 or more mobile devices to the machine at a time.
- If wireless connection from the mobile device is not performed within 5 minutes while the SSID and network key are displayed, the connection waiting state terminates.
- If while in communication by Direct Connection, a duration when there is no data transmission between the machine and the mobile device lasts for some time, the communication may terminate.
- The machine's SSID and network key are changed each time the Direct Connection procedure is started.
- While in Direct Connection, sleep mode is not as effective at saving power.

# Making the Best Use of the Machine by Utilizing Applications

---

0W20-02K

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 AirPrint

You can print from an Apple device without the need to download the dedicated application or install the dedicated driver. **▶Using AirPrint(P. 445)**



## ■ 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. 452)**



## ■ Printing with Mopria™

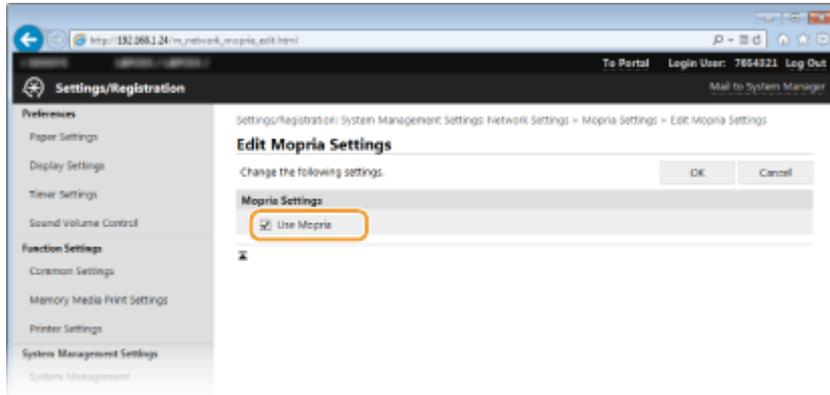
This machine also supports Mopria™. Using Mopria™ allows you to print with printers of different models from different manufacturers by using common operations and common settings. For example, assume that Mopria™ compatible printers of different models from different manufacturers are installed in your 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> .



## Viewing Mopria™ Settings



Log on to the Remote UI in System Manager Mode ( ▶ **Starting Remote UI(P. 270)** ) ▶ [Settings/Registration] ▶ [Network Settings] ▶ [Mopria Settings] ▶ [Edit] ▶ Check that the [Use Mopria] check box is selected ▶ [OK]



## Managing the Machine Remotely

0W20-02L

You can use the Remote UI from a Web browser installed on your mobile device. This allows you to check the machine's status and specify machine's settings from your mobile device.



### Supported Browsers

The browsers compatible with the Remote UI for mobile devices are the following.

#### For Android OS

- Chrome

#### For iOS

- Safari

## Starting Remote UI with a Mobile Device

Enter the IP address of the machine into the Web browser and start the Remote UI. Check the IP address set to the machine in advance ( [▶Viewing Network Settings\(P. 161\)](#) ). If you have any questions, ask your Network Administrator.

**1 Start the Web browser on your mobile device.**

**2 Enter "http://(the IP address of the machine)/" in the address field.**

- If you want to use an IPv6 address, enclose the IPv6 address with brackets (example: http://[fe80::2e9e:fcff:fe4e:dbce]/).

#### NOTE:

- Some items of the Remote UI are not displayed in its "Smartphone Version." If you want to check all items, see the "PC Version."

### LINKS

[▶Using Remote UI\(P. 269\)](#)

# Network

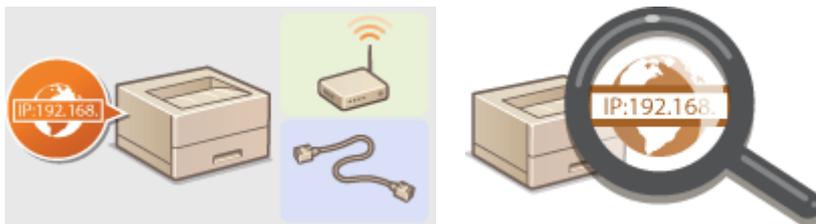
<b>Network</b> .....	131
<b>Connecting to a Network</b> .....	132
Selecting Wired LAN or Wireless LAN .....	134
Connecting to a Wired LAN .....	135
Connecting to a Wireless LAN .....	136
Setting Up Connection Using WPS Push Button Mode .....	138
Setting Up Connection Using WPS PIN Code Mode .....	140
Setting Up Connection by Selecting a Wireless Router .....	143
Setting Up Connection by Specifying Detailed Settings .....	146
Checking the SSID and Network Key .....	150
Setting IP Addresses .....	153
Setting IPv4 Address .....	154
Setting IPv6 Addresses .....	157
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<b>Configuring the Machine for Printing from a Computer</b> .....	164
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Configuring Printer Ports .....	168
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Configuring SNTP .....	188
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# Network

0W20-02R

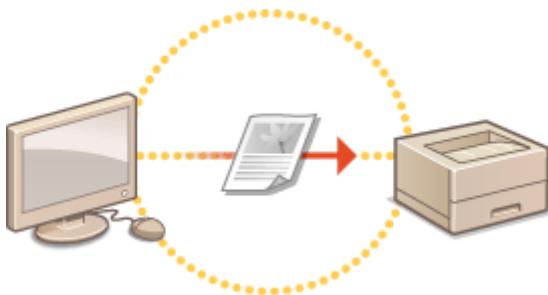
The machine has been designed for flexibility of use across a variety of environments, and it includes advanced technologies in addition to basic network features. Do not worry if you are not a network expert, because the machine has also been designed for convenience and ease of use. Relax and proceed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

## ■ Connecting to a Computer/Viewing the Machine's Network Settings



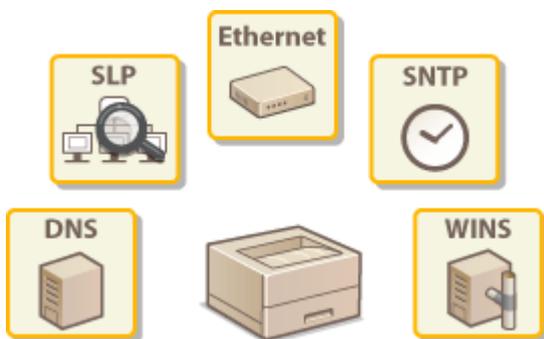
- ▶ Connecting to a Network(P. 132)
- ▶ Viewing Network Settings(P. 161)

## ■ Configuring for Printing



- ▶ Configuring the Machine for Printing from a Computer(P. 164)

## ■ Customizing the Machine for More Convenient Network Experience



- ▶ Configuring the Machine for Your Network Environment(P. 176)

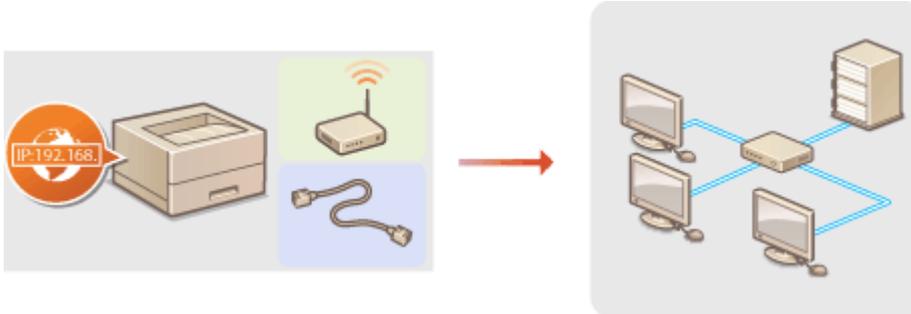
### Direct Connection to a mobile device

- You can directly communicate with the machine from your mobile device without the need to configure difficult network settings. ▶ Make Direct Connection (Access Point Mode)(P. 125)

## Connecting to a Network

OW20-02S

When connecting the machine to a wired or wireless local area network (LAN), you need to set an IP address unique to the selected network. Select "wired" or "wireless" depending on your communication environment and networking 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

- The machine cannot connect to both wired and wireless LANs at the same time.
- The machine does not come with a LAN cable or router. Have them ready as necessary.
- For more information about your networking devices, see the instruction manuals for the devices or contact your manufacturer.

### ■ Before You Start

Follow these steps to connect the machine to a network.



#### Check your computer settings.

- Make sure that the computer is correctly connected to the network. 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 method (half-duplex/full-duplex) or the Ethernet type (10BASE-T/100BASE-TX/1000BASE-T) ( [▶Configuring Ethernet Settings\(P. 177\)](#) ). For more information, contact your Internet service provider or Network Administrator.
- To check the MAC address of the machine.
  - ▶[Viewing the MAC Address for Wired LAN\(P. 162\)](#)
  - ▶[Viewing the MAC Address and Information for Wireless LAN\(P. 162\)](#)

- To connect to an IEEE 802.1X network, see ▶ **Configuring IEEE 802.1X Authentication(P. 248)** .



2



**Select wired or wireless LAN.**

- ▶ **Selecting Wired LAN or Wireless LAN(P. 134)**



3



**Connect to a wired or wireless LAN.**

- Proceed to the section that corresponds to the setting you selected in step 2.
- ▶ **Connecting to a Wired LAN(P. 135)**
- ▶ **Connecting to a Wireless LAN(P. 136)**



4



**Set the IP address as necessary.**

- At the time of purchase, the machine is set to automatically acquire an IP address. Change this setting if you want to use a specific IP address.
- ▶ **Setting IP Addresses(P. 153)**

## Selecting Wired LAN or Wireless LAN

---

0W20-02U

After you decide on wired or wireless LAN to connect the machine to the computer, select wired LAN or wireless LAN using the operation panel. Note that if you change the setting from <Wired LAN> to <Wireless LAN> or vice versa, you will need to uninstall the printer driver installed on your computer and then reinstall it. For more information, see the Printer Driver Installation Guide.

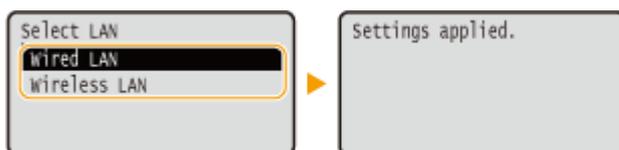
**1** Press .

**2** Use  /  to select <Network Settings>, and press .

- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press  .   
**Logging on to the Machine(P. 34)**

**3** Select <Network Settings>, and press .

**4** Select <Wired LAN> or <Wireless LAN>, and press .



### LINKS

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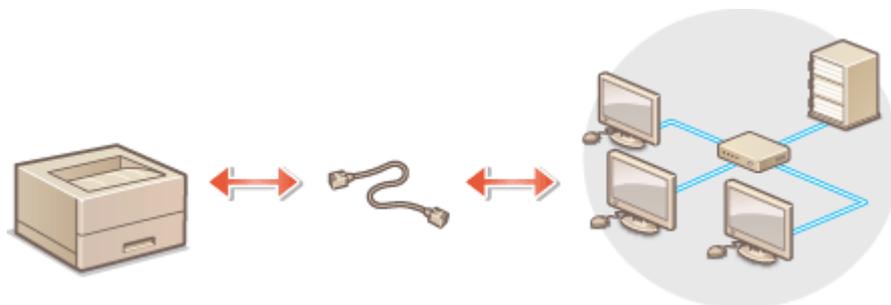
- ▶ **Connecting to a Network(P. 132)**
- ▶ **Connecting to a Wired LAN(P. 135)**
- ▶ **Connecting to a Wireless LAN(P. 136)**

## Connecting to a Wired LAN

---

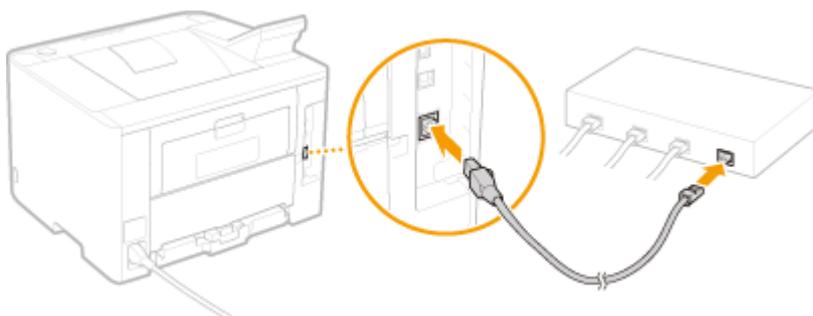
0W20-02W

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



### 1 Connect a LAN cable.

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



### 2 Wait approximately 2 minutes.

- While you wait, the IP address is set automatically.

#### NOTE:

- You can set the IP address manually. [▶Setting IP Addresses\(P. 153\)](#)

#### LINKS

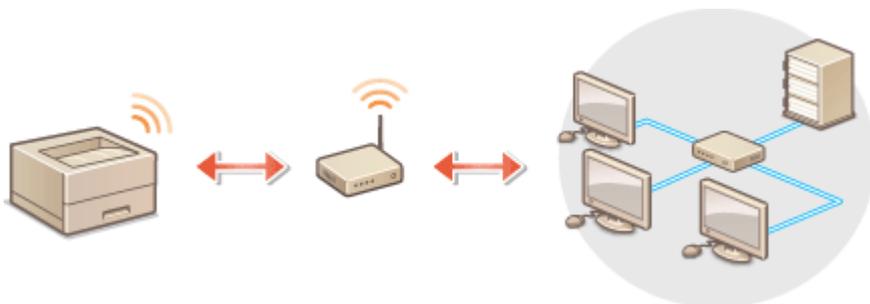
---

- [▶Connecting to a Network\(P. 132\)](#)

## Connecting to a Wireless LAN

0W20-02X

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), configuring your network is automatic and easy. If your networking devices do not support automatic configuration, or if you want to specify authentication and encryption settings in detail, you need to manually set up the connection. Make sure that your computer is correctly connected to the network.



▶ **Setting Up Connection Using WPS(P. 136)**

▶ **Manually Setting Up Connection(P. 137)**

### IMPORTANT

#### 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

The wireless LAN security that is supported by the machine is listed below. For the wireless security compatibility of your wireless router, see the instruction manuals for your networking devices or contact your manufacturer.

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

### NOTE

#### Required devices for wireless LAN connection

- The machine does not come with a wireless router. Have the router ready as necessary.
- The wireless router must conform to IEEE 802.11b/g/n and be able to communicate in 2.4 GHz frequency band. For more information, see the instruction manuals for your networking devices or contact your manufacturer.

## Setting Up Connection Using WPS

When using WPS, two modes are available: push button mode and PIN code mode.

## ■ Push Button Mode

Find the WPS mark shown below on the package of your wireless router. Also make sure that there is a WPS button on your networking device. [▶Setting Up Connection Using WPS Push Button Mode\(P. 138\)](#)



## ■ PIN Code Mode

Some WPS routers do not support the push button mode. If WPS PIN code mode is mentioned on the package or in the instruction manuals of your networking device, set up the connection by entering the PIN code. [▶Setting Up Connection Using WPS PIN Code Mode\(P. 140\)](#)

### NOTE

- If the wireless router is set to use WEP authentication, you may not be able to set up connection using WPS.

## Manually Setting Up Connection

When manually setting up a wireless connection, you can either select a wireless router or manually enter the required information. Regardless of the method, make sure that you have the required setup information, including the SSID and network key ( [▶Checking the SSID and Network Key\(P. 150\)](#) ).

## ■ Selecting a Wireless Router

Select this setup option if you need to manually set up the connection but want to complete the setup as easily as possible. [▶Setting Up Connection by Selecting a Wireless Router\(P. 143\)](#)

## ■ Manually Entering the Setup Information

If you want to specify security settings in detail, such as authentication and encryption settings, manually enter the SSID and network key to set up the connection. [▶Setting Up Connection by Specifying Detailed Settings\(P. 146\)](#)

### LINKS

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[▶Connecting to a Network\(P. 132\)](#)

[▶Selecting Wired LAN or Wireless LAN\(P. 134\)](#)

# Setting Up Connection Using WPS Push Button Mode

OW20-02Y

If your wireless router supports WPS push button mode, you can easily set up a connection with a WPS button.

## IMPORTANT

- How to operate the wireless router may vary on each device. See the instruction manuals for your networking device for help.

**1** Press .

**2** Use  /  to select <Network Settings>, and press .

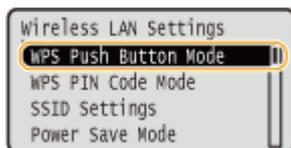
- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press  . **Logging on to the Machine(P. 34)**

**3** Select <Wireless LAN Settings>, and press .

- If the <Do you want to enable the wireless LAN?> message is displayed, select <Yes>, and press .

**4** Read the message that is displayed, and press .

**5** Select <WPS Push Button Mode>, and press .



**6** Select <Yes>, and press .

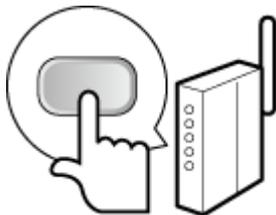


⇒ A PIN code is generated.

**7** Press and hold the WPS button on the wireless router.

The button must be pressed within 2 minutes after performing step 6.

- Depending on the networking device, you may need to press and hold the button for 2 seconds or longer. See the instruction manuals for your networking device for help.



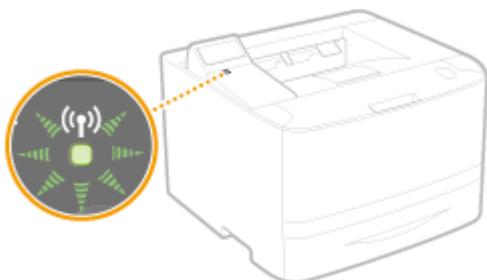
**NOTE:**

**If an error message is displayed during setup**

- Press **OK** and return to step 5.

**8 Check that the Wi-Fi indicator is blinking on the operation panel.**

- The Wi-Fi indicator blinks when a wireless router is detected.



- When the setup is completed, the screen below is displayed, and approximately 2 seconds later, the Wi-Fi indicator lights up.



- Wait approximately 2 minutes until the IP address settings of the machine are completed.

**IMPORTANT:**

**Signal strength**

- When more than one wireless router is available for connection, the machine connects to the device with the strongest signal. Signal strength is measured using RSSI (Received Signal Strength Indication).

**NOTE**

**Reducing power consumption**

- You can set the machine to enter <Power Save Mode> based on signals emitted from the wireless router. **▶ Power Save Mode (P. 291)**

**If the IP address of the machine has changed**

- In a DHCP environment, the IP address of the machine may be changed automatically. If this happens, the connection is maintained as long as the machine and the computer belong to the same subnet.

**LINKS**

- ▶ **Connecting to a Wireless LAN(P. 136)**

# Setting Up Connection Using WPS PIN Code Mode

0W20-030

If your wireless router supports WPS PIN code mode, generate a PIN code with the machine and register the code to the networking device.

## IMPORTANT

- How to operate the wireless router may vary on each device. See the instruction manuals for your networking device for help.

### From a Computer

#### 1 Access your wireless router from a computer and display the screen for entering a WPS PIN code.

- For more information, see the instruction manuals for your networking device.

### From the Operation Panel

#### 2 Press .

#### 3 Use ▲ / ▼ to select <Network Settings>, and press .

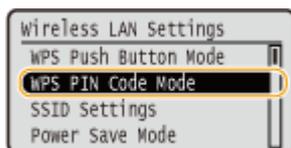
- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press  . **Logging on to the Machine(P. 34)**

#### 4 Select <Wireless LAN Settings>, and press .

- If the <Do you want to enable the wireless LAN?> message is displayed, select <Yes>, and press .

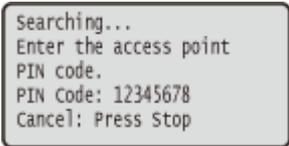
#### 5 Read the message that is displayed, and press .

#### 6 Select <WPS PIN Code Mode>, and press .



#### 7 Select <Yes>, and press .

⇒ A PIN code is generated.



 From a Computer

**8 Register the generated PIN code to the wireless router.**

- Register the PIN code on the setup screen displayed in step 1.
- The PIN code must be registered within 10 minutes after pressing  with <Yes> selected in step 7.

**NOTE:**

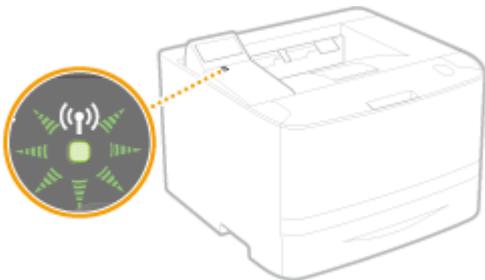
**If an error message is displayed during setup**

- Press  and return to step 6.

 From the Operation Panel

**9 Check that the Wi-Fi indicator is blinking on the operation panel.**

- The Wi-Fi indicator blinks when a wireless router is detected.



- When the setup is completed, the screen below is displayed, and approximately 2 seconds later, the Wi-Fi indicator lights up.



- Wait approximately 2 minutes until the IP address settings of the machine are completed.

**IMPORTANT:**

**Signal strength**

- When more than one wireless router is available for connection, the machine connects to the device with the strongest signal. Signal strength is measured using RSSI (Received Signal Strength Indication).

**NOTE**

**Reducing power consumption**

- You can set the machine to enter <Power Save Mode> based on signals emitted from the wireless router.  **Power Save Mode (P. 291)**

### If the IP address of the machine has changed

- In a DHCP environment, the IP address of the machine may be changed automatically. If this happens, the connection is maintained as long as the machine and the computer belong to the same subnet.

### LINKS

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▶ **Connecting to a Wireless LAN(P. 136)**

# Setting Up Connection by Selecting a Wireless Router

OW20-031

You can search the wireless routers (or access points) available for connection and select one from the display of the machine. For the network key, enter a WEP key or PSK. Before selecting a wireless router, check and write down the required setup information, including the SSID and network key ( ▶ **Checking the SSID and Network Key(P. 150)** ).

## NOTE

### Security settings

- If the wireless connection is set up by selecting a wireless router, the WEP authentication method is set to <Open System> or the WPA/WPA2 encryption method is set to <Auto> (AES-CCMP or TKIP). If you want to select <Shared Key> for WEP authentication or <AES-CCMP> for WPA/WPA2 encryption, you need to set up the connection using the manual entry method ( ▶ **Setting Up Connection by Specifying Detailed Settings(P. 146)** ).

**1** Press .

**2** Use ▲ / ▼ to select <Network Settings>, and press .

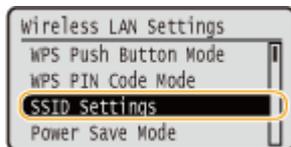
- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press  . ▶ **Logging on to the Machine(P. 34)**

**3** Select <Wireless LAN Settings>, and press .

- If the <Do you want to enable the wireless LAN?> message is displayed, select <Yes>, and press .

**4** Read the message that is displayed, and press .

**5** Select <SSID Settings>, and press .



**6** Select <Select Access Point>, and press .

- The machine starts searching for available wireless routers.



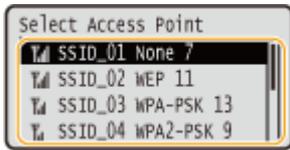
### NOTE:

If <Cannot find the access point.> is displayed

- See **▶When an Error Message Appears(P. 357)** .

## 7 Select a wireless LAN router, and press **OK**.

- Select the router whose SSID matches the one that you have written down.



**NOTE:**

**If your wireless router is not found**

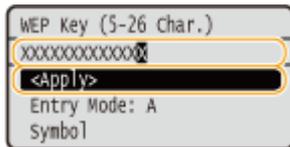
- Check whether the machine is properly installed and ready to connect to the network. **▶Installation/ Settings Problems(P. 369)**

## 8 Enter the network key that you have written down.

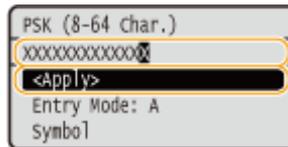
- Enter the network key using the numeric keys, select **<Apply>**, and press **OK**.

**▶Entering Text(P. 32)**

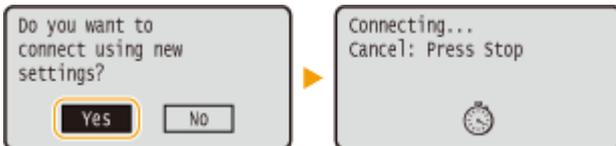
**WEP**



**WPA-PSK or WPA2-PSK**



## 9 Select **<Yes>**, and press **OK**.



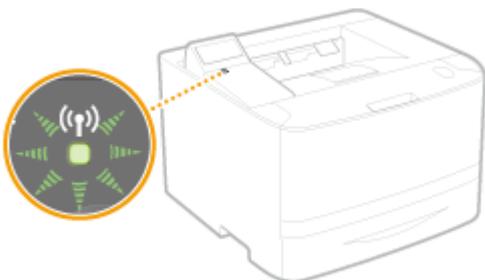
**NOTE:**

**If an error message is displayed during setup**

- Press **OK**, check whether the network key is correct, and return to step 5.

## 10 Check that the Wi-Fi indicator is blinking on the operation panel.

- The Wi-Fi indicator blinks when a wireless router is detected.



- When the setup is completed, the screen below is displayed, and approximately 2 seconds later, the Wi-Fi indicator lights up.



- Wait approximately 2 minutes until the IP address settings of the machine are completed.

**IMPORTANT:****Signal strength**

- When more than one wireless router is available for connection, the machine connects to the device with the strongest signal. Signal strength is measured using RSSI (Received Signal Strength Indication).

**NOTE****Reducing power consumption**

- You can set the machine to enter <Power Save Mode> based on signals emitted from the wireless router. ▶  
**Power Save Mode (P. 291)**

**If the IP address of the machine has changed**

- In a DHCP environment, the IP address of the machine may be changed automatically. If this happens, the connection is maintained as long as the machine and the computer belong to the same subnet.

**LINKS**

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- ▶ **Connecting to a Wireless LAN(P. 136)**

## Setting Up Connection by Specifying Detailed Settings

0W20-032

If you want to specify the security settings in detail or cannot establish the wireless connection using the other procedures, manually enter all the required information for the wireless LAN connection. Before specifying detailed settings, check and write down the required information, including the SSID, network key, and wireless security protocols ( [▶Checking the SSID and Network Key\(P. 150\)](#) ).

**1** Press .

**2** Use  /  to select <Network Settings>, and press .

- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press  . [▶ Logging on to the Machine\(P. 34\)](#)

**3** Select <Wireless LAN Settings>, and press .

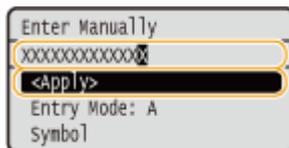
- If the <Do you want to enable the wireless LAN?> message is displayed, select <Yes>, and press .

**4** Read the message that is displayed, and press .

**5** Select <SSID Settings> ▶ <Enter Manually>.

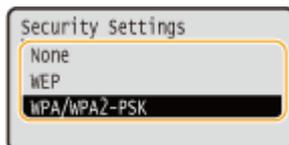
**6** Enter the SSID that you have written down.

- Enter the SSID using the numeric keys, select <Apply>, and press  . [▶ Entering Text\(P. 32\)](#)



**7** Specify the security settings based on the information that you have written down.

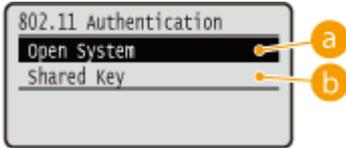
- If you do not need to specify the security settings, select <None>, and press .



### ■ Using WEP

**1** Select <WEP>, and press .

**2** Select an authentication method, and press .



**a <Open System>**

Sets open system authentication, which is also called "open authentication."

**b <Shared Key>**

Uses the WEP key as a password.

**NOTE:**

**When <Open System> is selected**

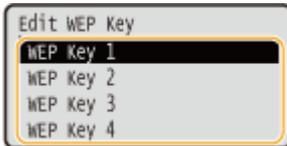
- When connecting to a wireless LAN, the machine experiences an authentication error if the shared key authentication is set on the wireless router. If this happens, the machine automatically changes the setting to <Shared Key> and retries the connection.

**3** Select <Edit WEP Key>, and press **OK**.



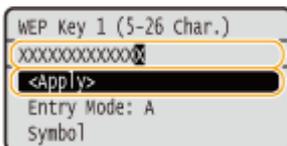
**4** Select the WEP key (1 to 4) you want to edit, and press **OK**.

- Up to four WEP keys can be registered.



**5** Enter the network key that you have written down.

- Enter the network key using the numeric keys, select <Apply>, and press **OK**. **▶ Entering Text(P. 32)**



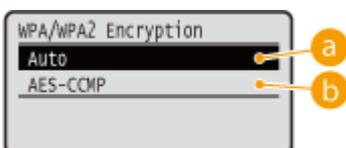
**6** Select <Select WEP Key>, and press **OK**.

**7** Select the WEP key you have edited, and press **OK**.

**■ Using WPA-PSK or WPA2-PSK**

**1** Select <WPA/WPA2-PSK>, and press **OK**.

**2** Select an encryption method, and press **OK**.



**a <Auto>**

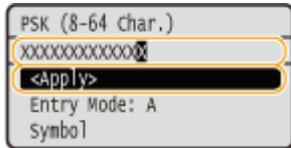
Sets the machine to automatically select AES-CCMP or TKIP to match the setting of the wireless router.

**b <AES-CCMP>**

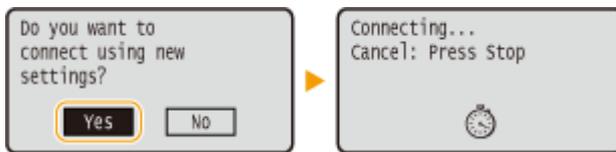
Sets AES-CCMP as the encryption method.

**3** Enter the network key that you have written down.

- Enter the network key using the numeric keys, select <Apply>, and press **OK**. **▶ Entering Text(P. 32)**



**8** Select <Yes>, and press **OK**.



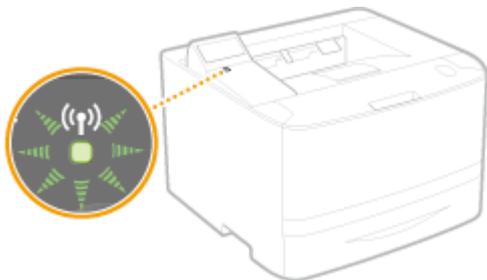
**NOTE:**

**If an error message is displayed during setup**

- Press **OK**, check whether the specified settings are correct, and return to step 5.

**9** Check that the Wi-Fi indicator is blinking on the operation panel.

- The Wi-Fi indicator blinks when a wireless router is detected.



- When the setup is completed, the screen below is displayed, and approximately 2 seconds later, the Wi-Fi indicator lights up.



- Wait approximately 2 minutes until the IP address settings of the machine are completed.

**IMPORTANT:**

**Signal strength**

- When more than one wireless router is available for connection, the machine connects to the device with the strongest signal. Signal strength is measured using RSSI (Received Signal Strength Indication).

**NOTE**

### Reducing power consumption

- You can set the machine to enter <Power Save Mode> based on signals emitted from the wireless router. ▶  
**Power Save Mode (P. 291)**

### If the IP address of the machine has changed

- In a DHCP environment, the IP address of the machine may be changed automatically. If this happens, the connection is maintained as long as the machine and the computer belong to the same subnet.

## LINKS

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- ▶ **Connecting to a Wireless LAN(P. 136)**

## Checking the SSID and Network Key

0W20-033

When manually setting up a wireless connection, you need to specify the SSID and network key of your wireless router. The SSID and network key may be indicated on these networking devices. Check your devices and write down the necessary information before setting up the connection. For more information, see the instruction manuals for your networking devices or contact your manufacturer.

SSID	A name given for identifying a specific wireless LAN. Some other terms used for SSID include "access point name" and "network name."
Network Key	A keyword or password used for encrypting data or authenticating a network. Some other terms used for network key include "encryption key," "WEP key," "WPA/WPA2 passphrase," and "preshared key (PSK)."
Wireless Security Protocols (Authentication/Encryption)	When manually setting up a wireless connection by specifying detailed settings, you need to specify security settings. Check the following information: <ul style="list-style-type: none"> <li>• Security types (WEP/WPA-PSK/WPA2-PSK)</li> <li>• Authentication method (Open System/Shared Key)</li> <li>• Encryption method (TKIP/AES-CCMP)</li> </ul>

### ■ Checking the SSID and Network Key from a Computer

The SSID or the network key may have been changed. If you do not know the SSID or the network key, you can check them by using the Canon MF/LBP Wireless Setup Assistant included with the provided DVD-ROM. The Canon MF/LBP Wireless Setup Assistant can be used on a computer connected to a wireless LAN.

#### NOTE

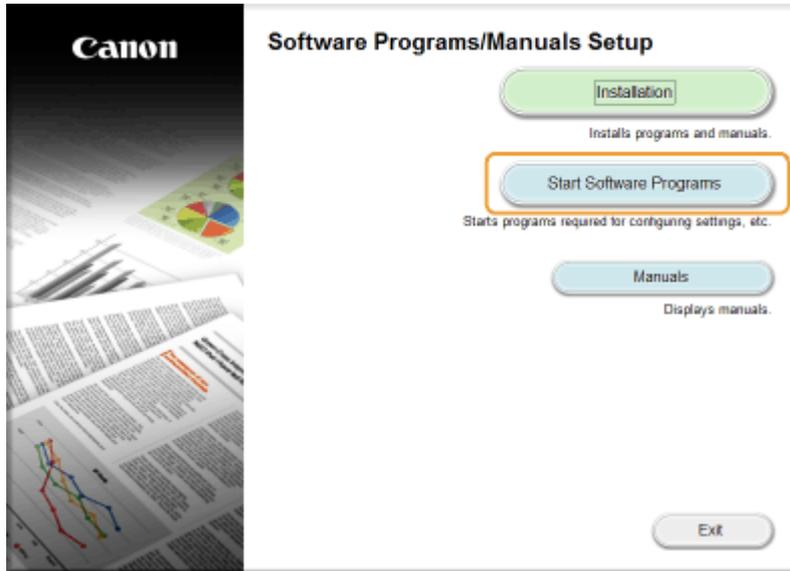
##### If you are a Mac OS user

- The provided DVD-ROM that comes with the machine does not contain the Canon MF/LBP Wireless Setup Assistant for Macintosh. It is available from the following Canon Web site: <http://www.canon.com/>

### 1 Insert the provided DVD-ROM into the drive on the computer.

- Select a language and click [OK] if you are prompted to do so.

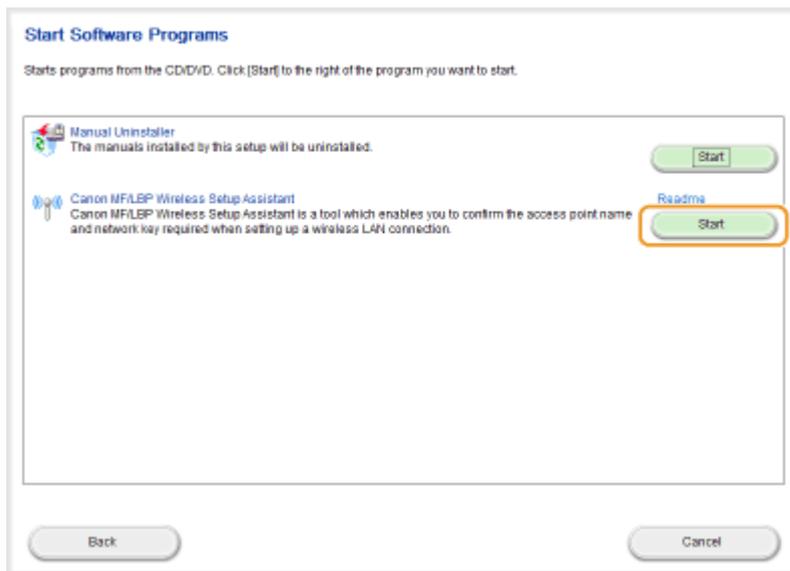
### 2 Click [Start Software Programs].



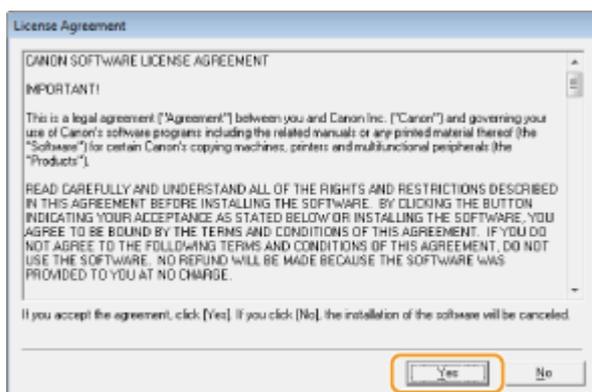
**NOTE:**

- If the above screen is not displayed ▶ **Displaying the [Software Programs/Manuals Setup] Screen(P. 476)**
- If [AutoPlay] is displayed, click [Run MInst.exe].

**3 Click [Start] for [Canon MF/LBP Wireless Setup Assistant].**

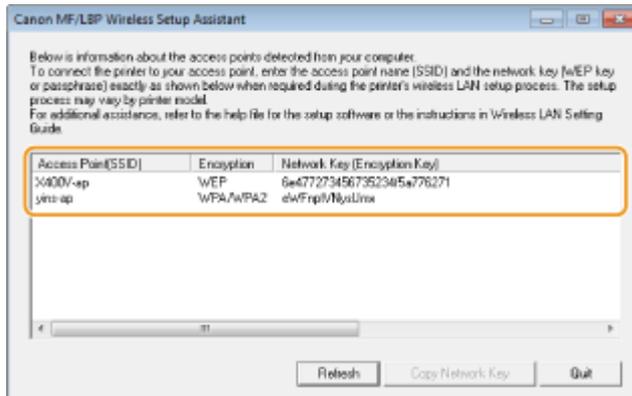


**4 Read the License Agreement and click [Yes] to agree.**



## 5 Check the information displayed for the wireless router.

- Write down the necessary information. If you do not know what information is necessary, write down all the information that is displayed.



### NOTE:

#### If wireless routers are not found

- Click [Refresh]. If nothing happens, check that the settings are correctly configured on the computer and the wireless router.

### LINKS

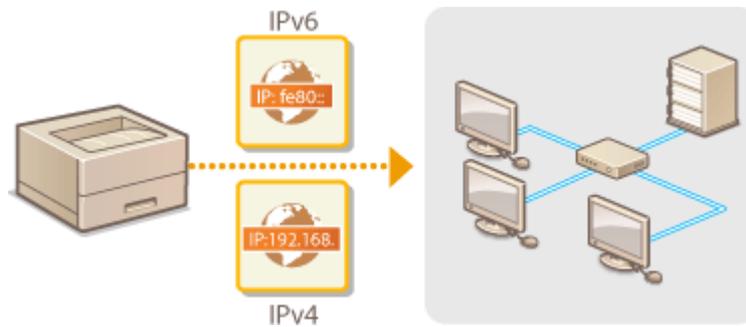
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- ▶ [Connecting to a Wireless LAN\(P. 136\)](#)
- ▶ [Setting Up Connection by Selecting a Wireless Router\(P. 143\)](#)
- ▶ [Setting Up Connection by Specifying Detailed Settings\(P. 146\)](#)

## Setting IP Addresses

0W20-034

Connecting the machine to a network requires a unique network IP address. Two versions of IP addresses are available: IPv4 and IPv6. Configure these settings depending on the network environment. To use IPv6 addresses, you need to properly configure the IPv4 address settings.



# Setting IPv4 Address

OW20-035



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\(P. 135\)](#) ). You can test the network connection if necessary.

- ▶[Setting IPv4 Address\(P. 154\)](#)
- ▶[Testing the Network Connection\(P. 156\)](#)

## Setting IPv4 Address

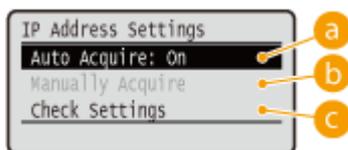
**1** Press .

**2** Use  /  to select <Network Settings>, and press .

- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press  . [▶ Logging on to the Machine\(P. 34\)](#)

**3** Select <TCP/IP Settings> ▶ <IPv4 Settings> ▶ <IP Address Settings>.

**4** Configure IP address settings.



**a** <Auto Acquire>

Select to automatically assign an IP address via DHCP protocol. When <Auto Acquire: On> is displayed, automatic addressing is enabled.

**b** <Manually Acquire>

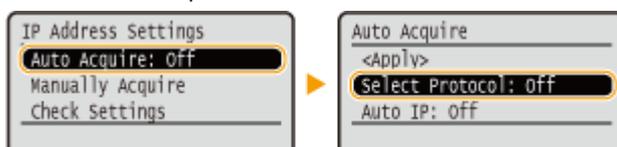
Select to configure the IP address settings by manually entering an IP address. In order to select this option, <Auto Acquire> must be set to <Off>.

**c** <Check Settings>

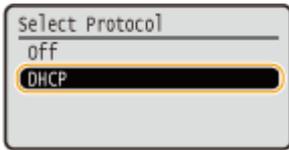
Select when you want to view the current IP address settings.

### ■ Automatically assigning an IP address

**1** Select <Auto Acquire> ▶ <Select Protocol>.



- 2 Select <DHCP>, and press **OK**.



**NOTE:**

**If you do not want to use DHCP/BOOTP/RARP to assign an IP address**

- Select <Off>, and press **OK**. If you select <DHCP> and press **OK** when these services are unavailable, the machine will waste time and communications resources searching the network for these services.

- 3 Check that <Auto IP> is set to <On>.
  - If <Off> is selected, change the setting to <On>.

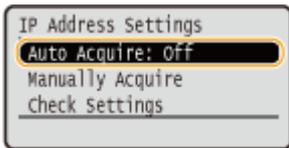
- 4 Select <Apply>, and press **OK**.

**NOTE:**

- IP addresses assigned via DHCP override the address obtained via Auto IP.

**Manually entering an IP address**

- 1 Check that <Auto Acquire> is set to <Off>.

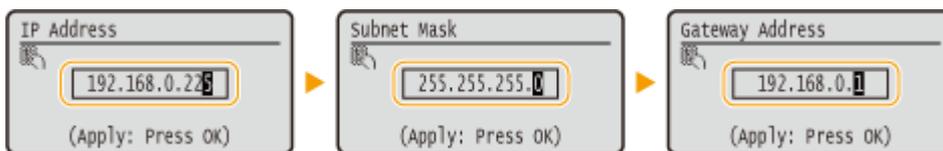


- If <On> is displayed, select <Auto Acquire>, press **OK**, and set both <Select Protocol> and <Auto IP> to <Off>.

- 2 Select <Manually Acquire>, and press **OK**.

- 3 Specify the IP address, subnet mask, and gateway address (or default gateway).

- Specify the settings in the following order: <IP Address> ► <Subnet Mask> ► <Gateway Address>.
- Enter each setting using the numeric keys, and press **OK**.



**5 Restart the machine.**

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

**NOTE**

**Checking whether the settings are correct**

- Make sure that the Remote UI screen can be displayed with your computer ( **Starting Remote UI(P. 270)** ). If a computer is not available, you can check the connection by using the operation panel ( **Testing the Network Connection(P. 156)** ).

### If you changed the IP address after installing the printer driver

- If you are using an 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 you are using a standard TCP/IP port, then you need to add a new port. [▶Configuring Printer Ports\(P. 168\)](#)

\* If you are not sure which type of port you are using, see [▶Checking the Printer Port\(P. 478\)](#) .

## Testing the Network Connection

**1** Press .

**2** Use  /  to select <Network Settings>, and press .

- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press  . [▶ Logging on to the Machine\(P. 34\)](#)

**3** Select <TCP/IP Settings> ▶ <IPv4 Settings> ▶ <PING Command>.

**4** Enter the IPv4 address of another device on the network, and press .



- If a proper connection has been established, the result is displayed as shown above.

### LINKS

- ▶[Setting IPv6 Addresses\(P. 157\)](#)
- ▶[Viewing Network Settings\(P. 161\)](#)
- ▶[Configuring WINS\(P. 186\)](#)

# Setting IPv6 Addresses

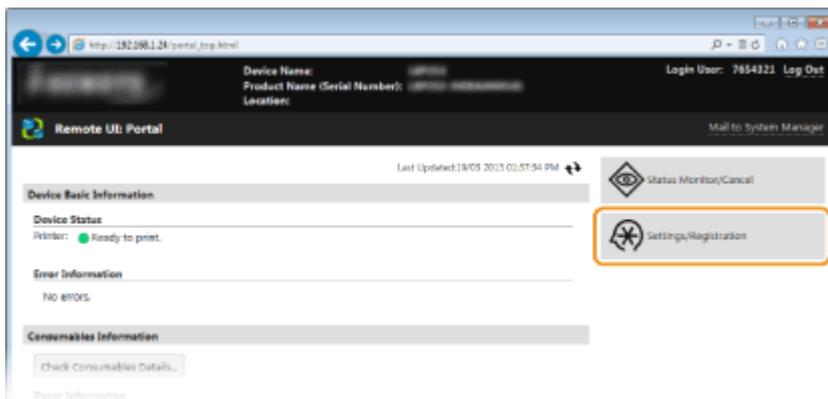
OW20-036



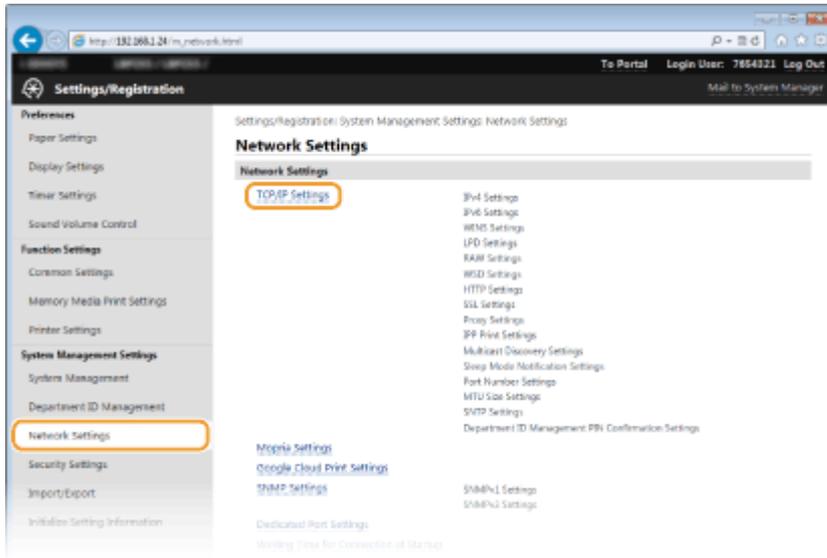
The IPv6 addresses of the machine can be configured via the Remote UI. Before setting IPv6 addresses, check the IPv4 address settings ( ▶ **Viewing IPv4 Settings(P. 161)** ). You need to set the correct IPv4 settings to use IPv6 addresses. The machine can use up to nine of the following IPv6 addresses:

Type	Maximum number available	Description
Link-local address	1	An address that is only valid within a subnet or link and cannot be used to communicate with devices beyond a router. A link-local address is automatically set when the IPv6 function of the machine is enabled.
Manual address	1	An address that is entered manually. When using this address, 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 the 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.

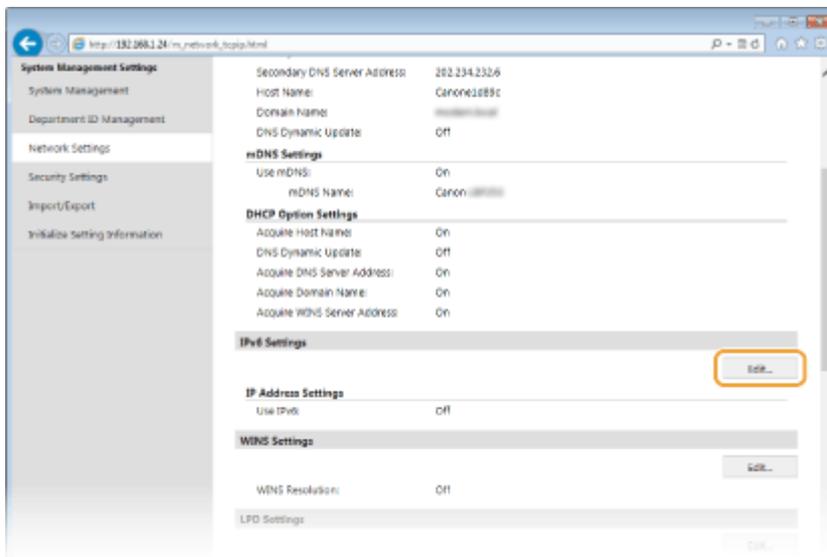
- 1 Start the Remote UI and log on in System Manager Mode. ▶ **Starting Remote UI(P. 270)**
- 2 Click [Settings/Registration].



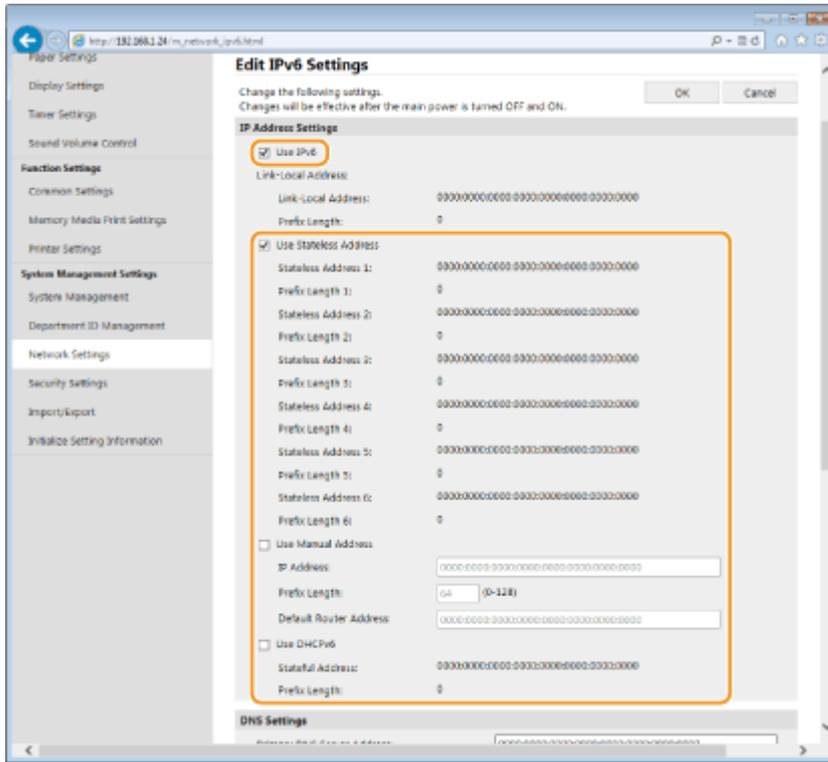
- 3 Click [Network Settings] ▶ [TCP/IP Settings].



**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 enable IPv6 on the machine. When not using IPv6, clear the check box.

**[Use Stateless Address]**

Select the check box when using a stateless address. When not using a stateless address, clear the check box.

**[Use Manual Address]**

When you want to manually enter an IPv6 address, select the check box and enter the IP address, prefix length, and default router address in the corresponding text boxes.

**[IP Address]**

Enter an IPv6 address. Addresses that start with "ff" (or multicast address) cannot be entered.

**[Prefix Length]**

Enter a number that indicates how many bits are available for the network address.

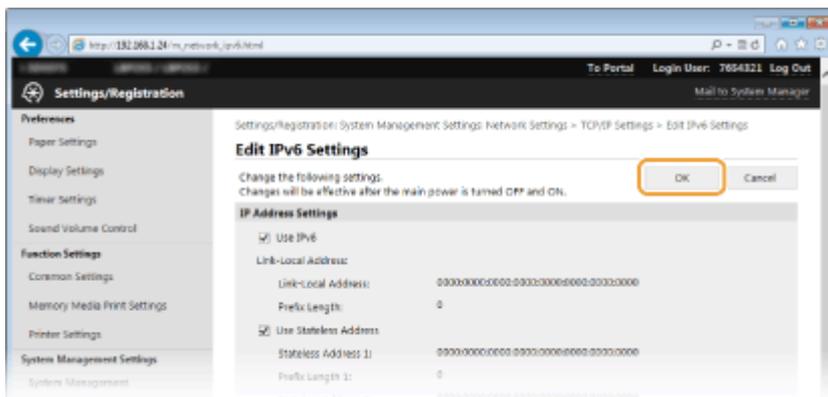
**[Default Router Address]**

Specify the IPv6 address of the default router as necessary. Addresses that start with "ff" (or multicast address) cannot be entered.

**[Use DHCPv6]**

Select the check box when using a stateful address. When not using DHCPv6, clear the check box.

**6 Click [OK].**



## 7 Restart the machine.

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

### 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 Remote UI\(P. 270\)](#)

#### Selecting settings from the operation panel

- IPv6 settings can also be accessed by pressing  on the operation panel. [▶IPv6 Settings\(P. 294\)](#)

#### If you changed the IP address after installing the printer driver

- You need to add a new port. [▶Configuring Printer Ports\(P. 168\)](#)

### LINKS

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[▶Setting IPv4 Address\(P. 154\)](#)

[▶Viewing Network Settings\(P. 161\)](#)

# Viewing Network Settings

OW20-037

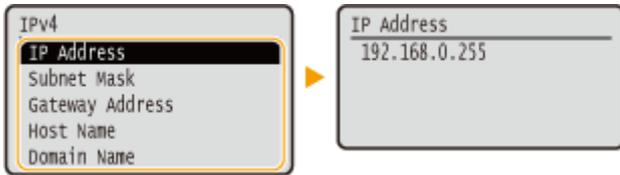
- ▶ Viewing IPv4 Settings(P. 161)
- ▶ Viewing IPv6 Settings(P. 161)
- ▶ Viewing the MAC Address for Wired LAN(P. 162)
- ▶ Viewing the MAC Address and Information for Wireless LAN(P. 162)

## NOTE

- The IP address is not correctly configured if it is displayed as "0.0.0.0".
- Connecting the machine to a switching hub or bridge 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. 180)**
- You can print a list of the current network settings. ▶ **User Data List/System Manager Data List(P. 411)**

## Viewing IPv4 Settings

 ▶ <Network Information> ▶  ▶ <IPv4> ▶  ▶ Select the setting to view ▶  ▶ Check the settings



## Viewing IPv6 Settings

 ▶ <Network Information> ▶  ▶ <IPv6> ▶  ▶ Select the setting to view ▶  ▶ Check the settings



## Viewing the MAC Address for Wired LAN

1 Press .

2 Use ▲ / ▼ to select <Network Settings>, and press .

- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press  .   
Logging on to the Machine(P. 34)

3 Select <Ethernet Driver Settings>, and press .



## Viewing the MAC Address and Information for Wireless LAN

1 Press .

2 Use ▲ / ▼ to select <Network Settings>, and press .

- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press  .   
Logging on to the Machine(P. 34)

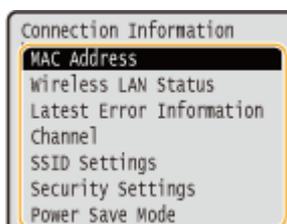
3 Select <Wireless LAN Settings>, and press .

- If the <Do you want to enable the wireless LAN?> message is displayed, select <Yes> and press .

4 Read the message that is displayed, and press .

5 Select <Connection Information>, and press .

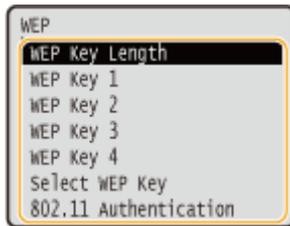
6 Select the setting to view, and press .



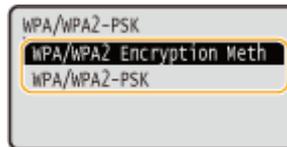
## ■ Viewing WEP and WPA/WPA2-PSK information

- 1 Select <Security Settings>, and press **OK**.
- 2 Confirm the current security setting, and press **OK**.
  - If the security settings are not configured, <None> is displayed.
- 3 Select the setting to view, and press **OK**.

### WEP



### WPA/WPA2-PSK



### NOTE:

- <Wireless LAN Status> and <Latest Error Information> can be viewed from **ⓘ**. Press **ⓘ** ▶ <Network Information> ▶ <Network Connection Method> ▶ <Connect. Info.> and select the setting to view.

## LINKS

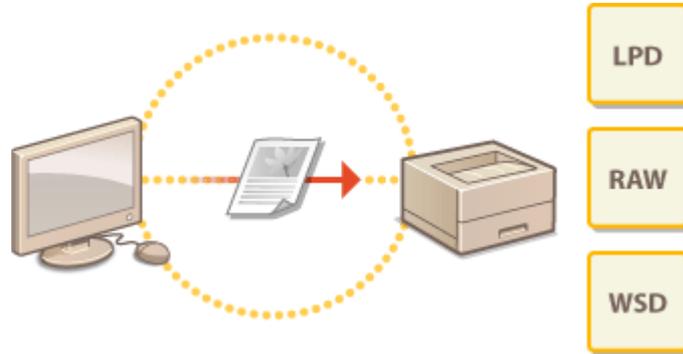
---

- ▶ **Connecting to a Wireless LAN(P. 136)**
- ▶ **Setting IPv4 Address(P. 154)**
- ▶ **Setting IPv6 Addresses(P. 157)**
- ▶ **Configuring DNS(P. 181)**

## Configuring the Machine for Printing from a Computer

0W20-039

When using the machine as a network printer, you can configure the protocols and ports used for printing and create a print server for the machine. Before configuring the machine for printing from a computer, perform the basic setup procedures, including the printer driver installation. 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, and can be selected according to the printing purpose or the network environment.
- Ports are gateways for passing document data from a computer to the printer. Incorrect port settings are often the cause when documents cannot be printed from a network computer.

# Configuring Printing Protocols and WSD Functions

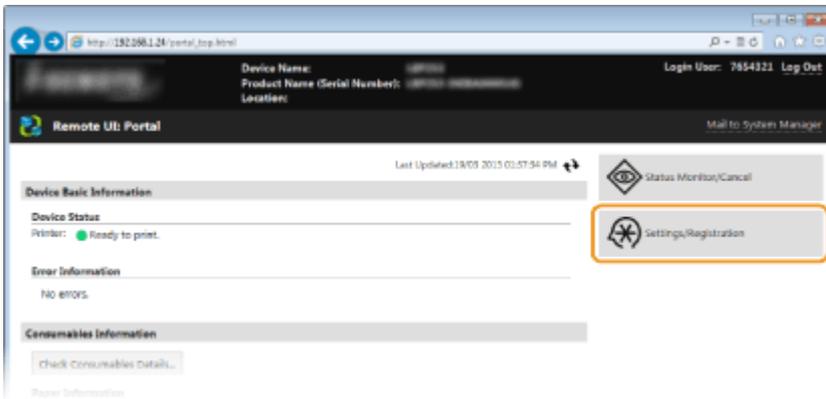
OW20-03A

Configure the protocols that are used for printing documents from a networked computer. The protocols supported by the machine include LPD, RAW, and WSD (Web Services on Devices).

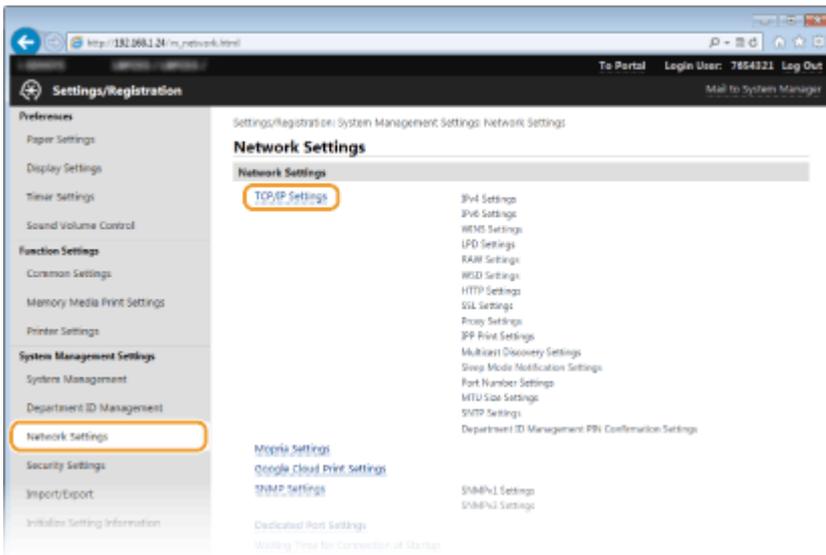
## NOTE

- To change protocols' port numbers, see [▶ Changing Port Numbers\(P. 226\)](#) .

- 1 Start the Remote UI and log on in System Manager Mode. [▶ Starting Remote UI\(P. 270\)](#)
- 2 Click [Settings/Registration].



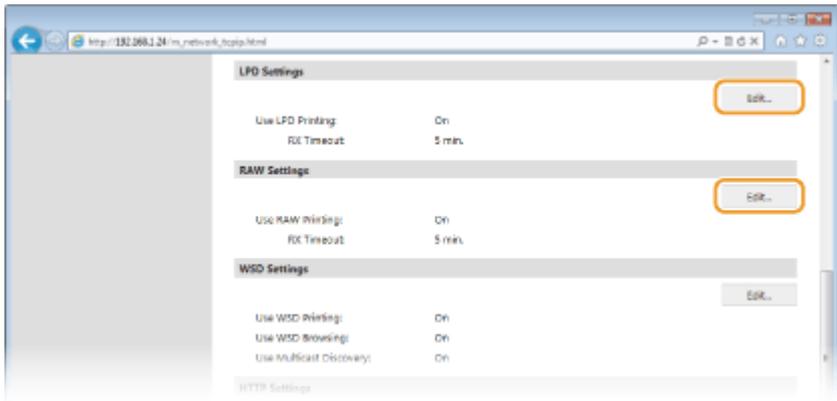
- 3 Click [Network Settings] ▶ [TCP/IP Settings].



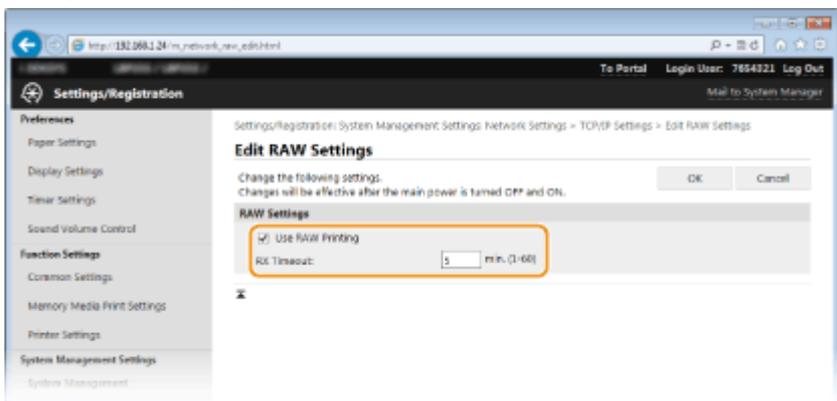
- 4 Configure printing protocols.

### ■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 via LPD. When not using LPD printing, clear the check box.

#### [Use RAW Printing]

Select the check box to print via RAW. When not using RAW printing, clear the check box.

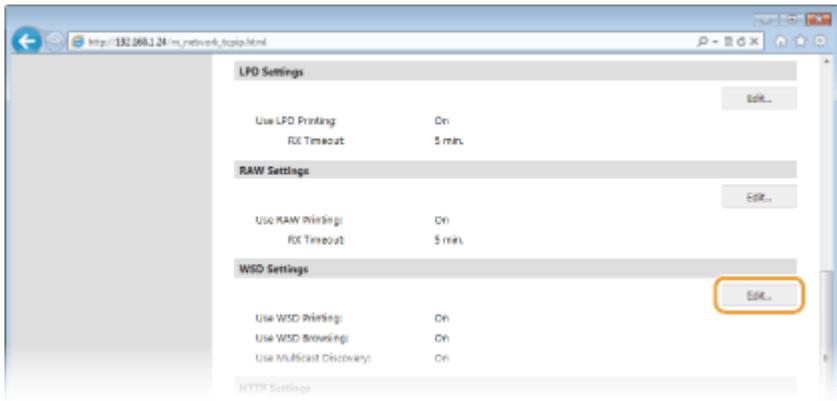
#### [RX Timeout]

Set a value between 1 and 60 (minutes) as the restart wait time for data reception. If data reception does not resume within the set time, printing is canceled.

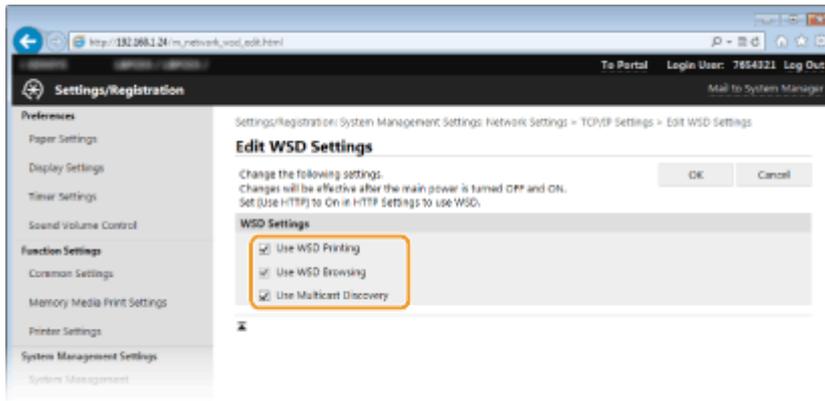
- 3 Click [OK].

### ■Configuring WSD

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



## 2 Configure the settings as necessary.



### [Use WSD Printing]

Select the check box to print via WSD. When not using WSD printing, clear the check box.

### [Use WSD Browsing]

Select the check box to obtain information about the machine from a computer via WSD. This check box is automatically selected 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 multicast discovery messages are flowing on the network.

## 3 Click [OK].

## 5 Restart the machine.

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

## NOTE

### Selecting settings from the operation panel

- LPD, RAW, and WSD settings can also be accessed by pressing  on the operation panel.
  - ▶ **LPD Settings(P. 295)**
  - ▶ **RAW Settings(P. 296)**
  - ▶ **WSD Settings(P. 296)**

### Setting up WSD network devices on Windows Vista/7/8

- The WSD printer can be added from the printer folder. Open the printer folder ( ▶ **Displaying the Printer Folder(P. 474)** ) ▶ click [Add a device] or [Add a printer] and follow the on-screen instructions. For more information about how to install the printer driver for the WSD network printer, see Printer Driver Installation Guide.

## LINKS

- ▶ **Configuring Printer Ports(P. 168)**

# Configuring Printer Ports

0W20-03C

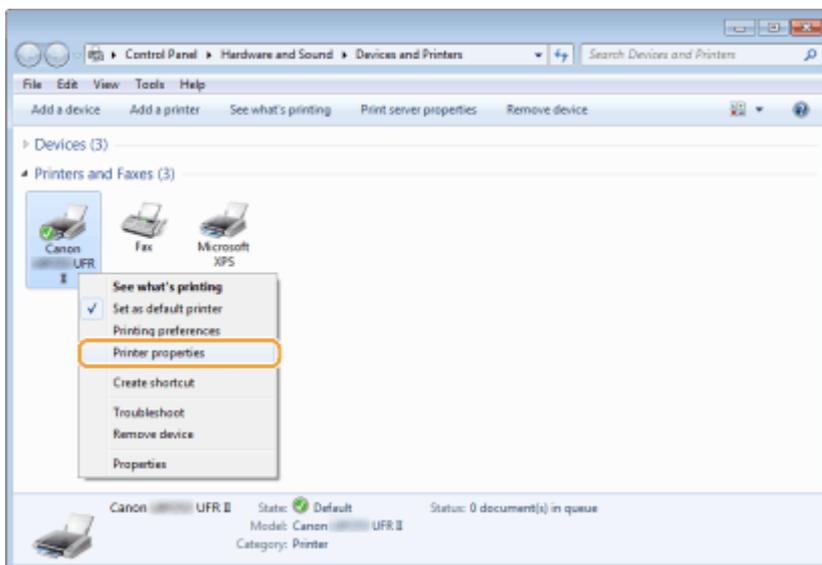
Printing errors can occur when the IP address of the machine has been changed, or when a printer has been added via the Windows printer folder. These errors are typically caused by incorrect printer port settings. For example, an incorrect port number or port type may have been specified. In such situations, your attempt to print fails because the document data cannot reach the machine. To fix this type of problem, configure the printer port settings on the computer.

## IMPORTANT

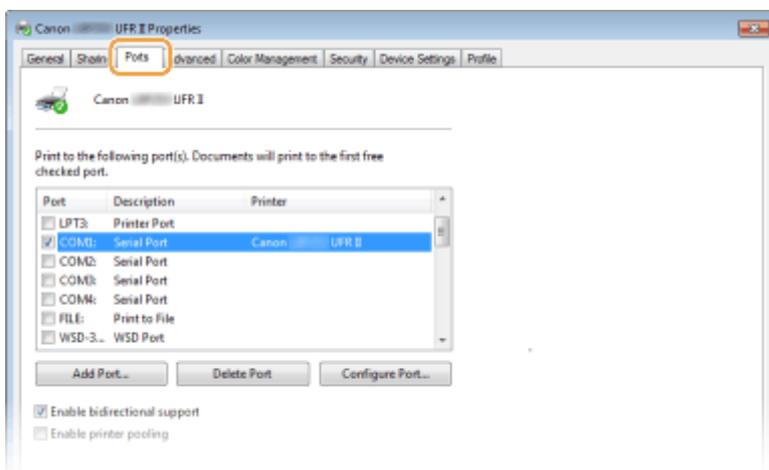
- To perform the following procedure, log on to your computer with an administrator account.

**1** Open the printer folder. ▶ **Displaying the Printer Folder(P. 474)**

**2** Right-click your printer icon and click [Printer properties] or [Properties].



**3** Click the [Ports] tab and configure the required settings.



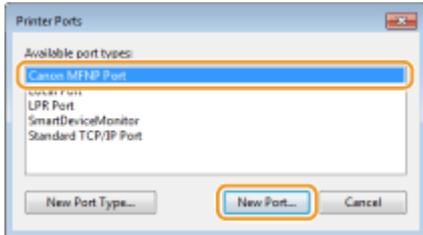
**■ Adding a port**

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.

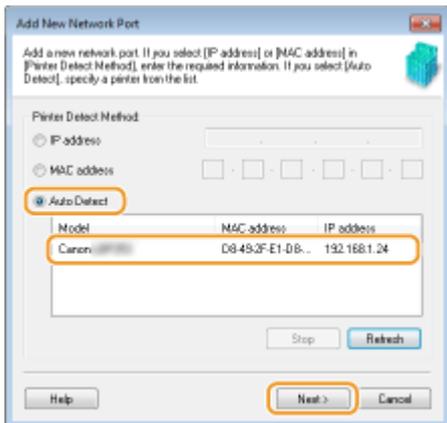
<p>MFNP Port (only for IPv4 environment)</p>	<p>This is a port that allows the IP address of the machine to be detected automatically. Even if the IP address of the machine is changed, the connection is maintained, provided that the machine and the computer are in the same subnet. You do not need to 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.</p> <p><b>IMPORTANT:</b></p> <p>You can add an MFNP port only when you installed the printer driver from the provided DVD-ROM, or when you downloaded and installed the printer driver from the Canon website.</p>
<p>Standard TCP/IP Port</p>	<p>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.</p>

**Adding an MFNP port**

- 1 Click [Add Port].
- 2 Select [Canon MFNP Port] in [Available port types] and click [New Port].



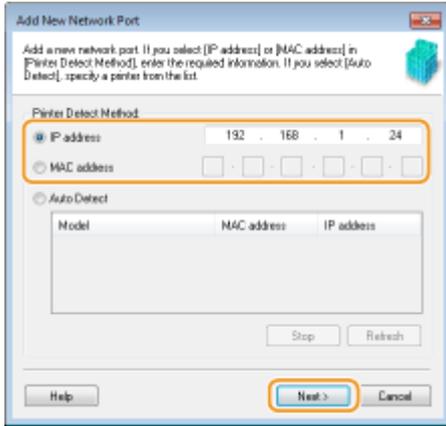
- 3 Select [Auto Detect] and select the machine when it is detected, and then click [Next].



**NOTE:**

**If the machine is not detected**

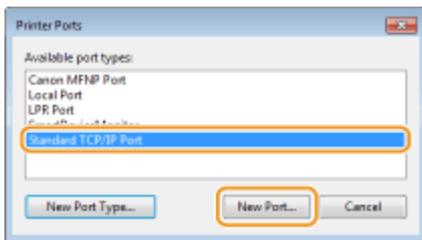
Click [Refresh]. If the problem persists, select [IP address] or [MAC address], enter the IP address or MAC address of the machine ( **▶ Viewing Network Settings(P. 161)** ) and then click [Next].



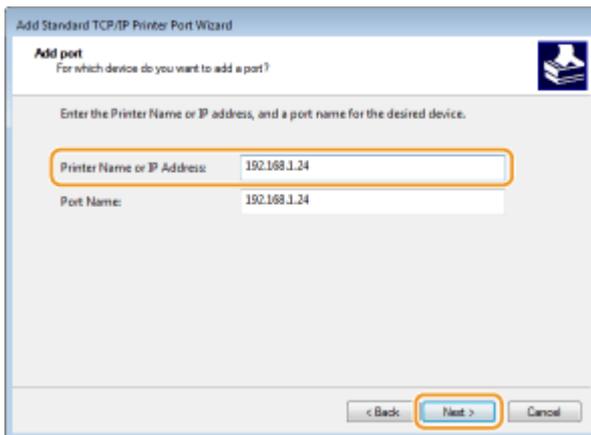
- 4 Click [Add] ► [Finish].
- 5 Click [Close].

Adding a standard TCP/IP port

- 1 Click [Add Port].
- 2 Select [Standard TCP/IP Port] in [Available port types] and click [New Port].

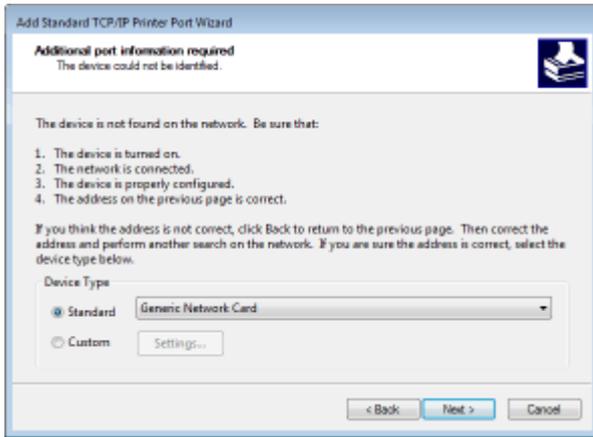


- 3 Click [Next].
- 4 Enter the IP address or the DNS name of the machine, and click [Next].
  - The [Port Name] is entered automatically. If necessary, you can change it.



**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 WSD Functions\(P. 165\)](#) ) or the port number has been changed ( [▶Changing Port Numbers\(P. 226\)](#) ), the corresponding settings on the computer must also be configured. This operation is not needed for WSD ports.

#### MFNP port

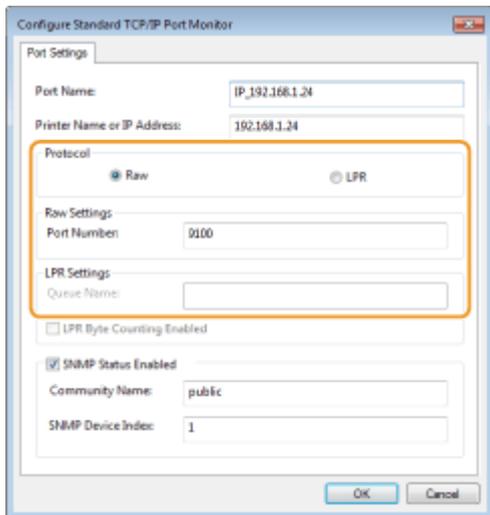
- 1 Click [Configure Port].
- 2 Under [Protocol Type], select [RAW] or [LPR], and change the [Port Number].



- 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].

## LINKS

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▶ **Setting Up Print Server(P. 173)**

# Setting Up Print Server

OW20-03E

With a print server, you can reduce the load on the computer that you print from. The print server also enables each computer to install printer drivers over the network, which saves you the trouble of installing the drivers on each computer by using the DVD-ROM. To set up a computer on the network as a print server, configure the settings for sharing the printer.

## IMPORTANT

- To perform the following procedure, log on to your computer with an administrator account.
- You may be unable to install drivers over the network depending on the operating system and the bit architecture (32-bit or 64-bit) of the print server and client computers.
- When implementing a print server in a domain environment, consult your Network Administrator.

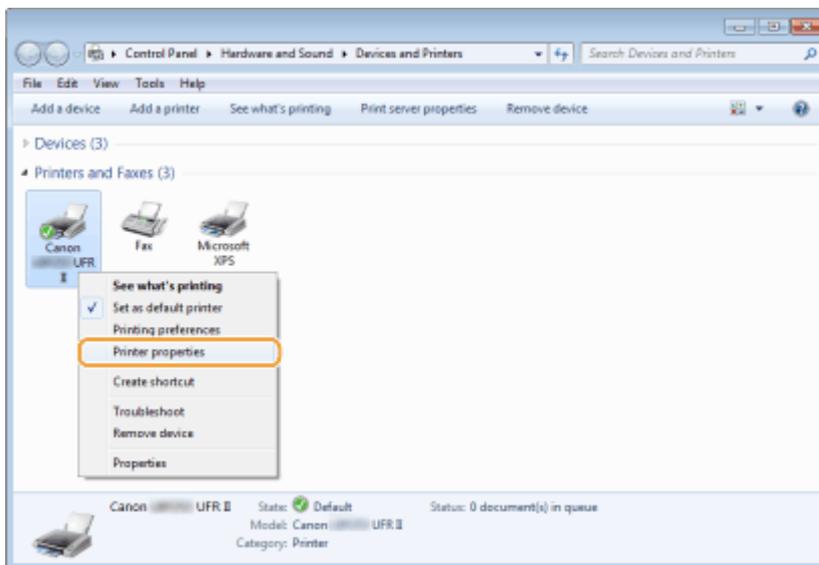
## NOTE

### To carry out Department ID Management when using a print server

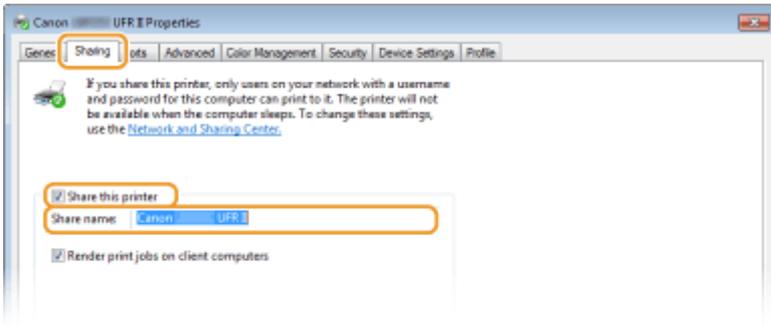
- Canon Driver Information Assist Service must be added during the printer driver installation. For more information, see the Printer Driver Installation Guide.

**1** Open the printer folder. ▶ **Displaying the Printer Folder(P. 474)**

**2** Right-click your printer icon and click [Printer properties] or [Properties].



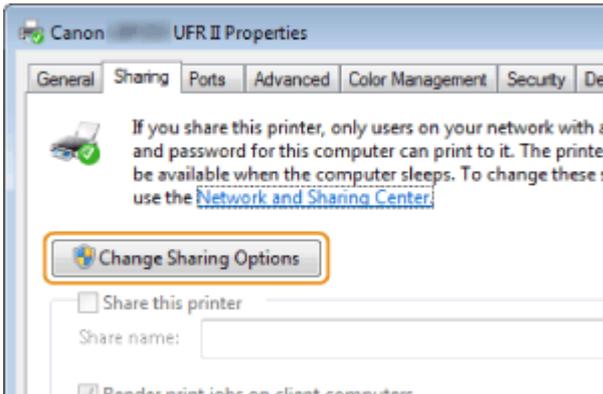
**3** Click the [Sharing] tab, select [Share this printer], and enter the share name of the machine.



**NOTE:**

**When [Change Sharing Options] is displayed**

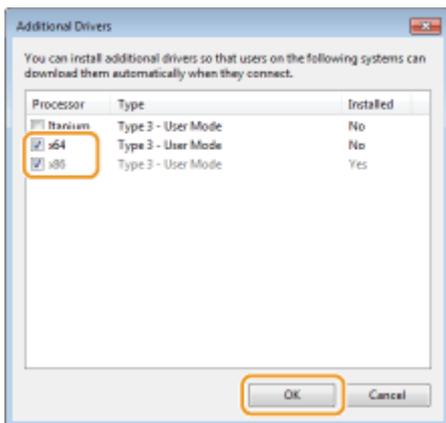
- Click [Change Sharing Options].



**4 Install additional drivers as necessary.**

- This operation is required if you want to install printer drivers in other computers running a different bit architecture via the print server.

- 1 Click [Additional Drivers].
- 2 Select the check box for the bit architecture that other computers are running, and click [OK].



- Select additional drivers from the following, according to the operating system of the print server.

Print server	Select the check box for
32-bit operating systems	[x64]
64-bit operating systems	<ul style="list-style-type: none"> <li>• <b>Windows Server 2003</b> [Windows 2000, Windows XP and Windows Server 2003] under [Version]</li> <li>• <b>Windows Vista/7/8/Server 2008/Server 2012</b></li> </ul>

	[x86] under [Processor]
--	-------------------------

**NOTE:**

- If you do not know whether your Windows Vista/7/8/Server 2008/Server 2012 is a 32-bit or 64-bit operating system, see [▶Checking the Bit Architecture\(P. 477\)](#) .
- 3** Insert the provided DVD-ROM into the drive on the computer, click [Browse] to specify the folder that contains printer drivers, and then click [OK].
    - If the print server runs a 32-bit operating system, select [DRIVERS] ▶ [x64] ▶ [Driver] folders on the provided DVD-ROM.
    - If the print server runs a 64-bit operating system, select [DRIVERS] ▶ [32bit] ▶ [Driver] folders on the provided DVD-ROM.
  - 4** Follow the on-screen instructions to install the additional drivers.

**5** Click [OK].**■ Installing Printer Drivers on a Computer via the Print Server**

- 1** Locate the shared printer in the print server. [▶Displaying Shared Printers in the Print Server\(P. 475\)](#)
- 2** Double-click the shared printer.
- 3** Follow the on-screen instructions to install the printer drivers.

**LINKS**

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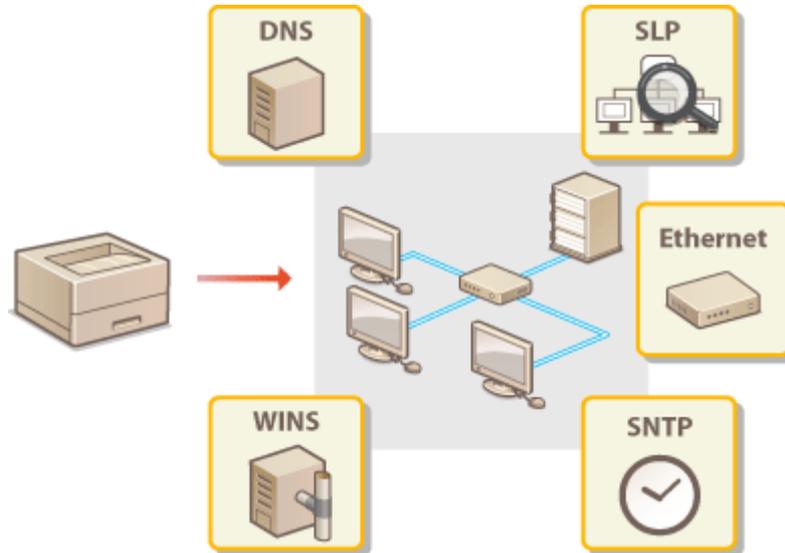
[▶Printing\(P. 68\)](#)

## Configuring the Machine for Your Network Environment

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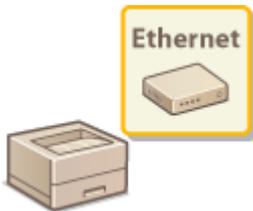
OW20-03F

The configuration of a network varies depending on the purpose of the network. The machine has been designed to be compatible with as many network configurations as possible, and it is equipped with a variety of technologies. Consult your Network Administrator and set a configuration to suit your network environment.



# Configuring Ethernet Settings

0W20-03H



Ethernet is a standard for communicating data in a local area network (LAN). You can set the communication mode (half-duplex/full-duplex) and the Ethernet type (10BASE-T/100BASE-TX/1000BASE-T). In general, the machine can be used without changing the defaults ( **Ethernet Driver Settings(P. 299)** ), but you can change these settings to suit your network environment.

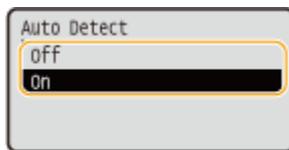
**1** Press .

**2** Use  /  to select <Network Settings>, and press .

- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press  . **Logging on to the Machine(P. 34)**

**3** Select <Ethernet Driver Settings>  <Auto Detect>.

**4** Select whether to configure Ethernet settings automatically or manually.



## ■ Configuring Ethernet settings automatically

Select <On> and press  . The machine detects and automatically sets the communication mode and the Ethernet type that can be used.

## ■ Configuring Ethernet settings manually

**1** Select <Off>, and press .

**2** Select the communication mode.

- Select <Communication Mode>    Select <Half Duplex> or <Full Duplex>  



### **a** <Half Duplex>

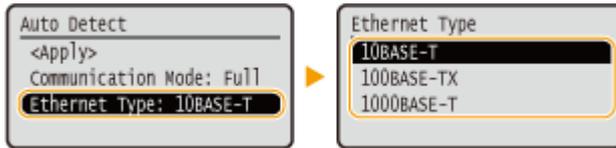
Alternately sends and receives communication data. Select when the machine is connected to a networking device using half duplex.

### **b** <Full Duplex>

Simultaneously sends and receives communication data. Use this setting for most environments.

**3** Select the Ethernet type.

- Select <Ethernet Type> ►  ► Select the Ethernet type ► 

**NOTE:**

- When <Communication Mode> is set to <Half Duplex>, you cannot select <1000BASE-T>.

**4** Select <Apply>, and press .**5** Restart the machine.

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

**LINKS**

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- ▶ [Changing the Maximum Transmission Unit\(P. 179\)](#)
- ▶ [Setting a Wait Time for Connecting to a Network\(P. 180\)](#)

# Changing the Maximum Transmission Unit

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0W20-03J

In most Ethernet networks, the maximum size of a packet that can be sent is 1500 bytes. A packet refers to a chunk of data into which the original data is divided 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.

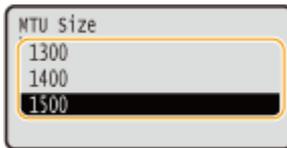
**1** Press .

**2** Use  /  to select <Network Settings>, and press .

- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press  .   
Logging on to the Machine(P. 34)

**3** Select <TCP/IP Settings>  <MTU Size>.

**4** Select the MTU, and press .



**5** Restart the machine.

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

## LINKS

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 [Configuring Ethernet Settings\(P. 177\)](#)

 [Setting a Wait Time for Connecting to a Network\(P. 180\)](#)

## Setting a Wait Time for Connecting to a Network

OW20-03K

When a network is designed to enjoy redundant connectivity with multiple switching hubs or bridges, 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 several tens of seconds immediately after you change the way that network devices are connected, or if you add a new device. If this type of problem occurs, set a wait time for connecting to the network.

**1** Press .

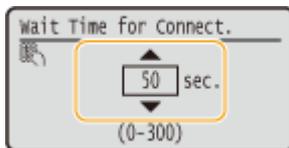
**2** Use  /  to select <Network Settings>, and press .

- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press  .   
Logging on to the Machine(P. 34)

**3** Select <Waiting Time for Connection at Startup>, and press .

**4** Enter the wait time in seconds, select <Apply>, and press .

- Use  /  or the numeric keys to enter the time.



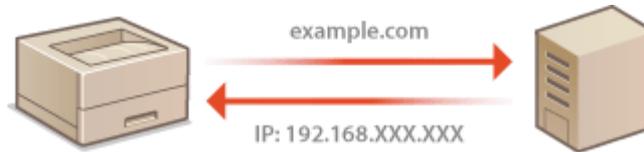
### LINKS

-  [Configuring Ethernet Settings\(P. 177\)](#)
-  [Changing the Maximum Transmission Unit\(P. 179\)](#)

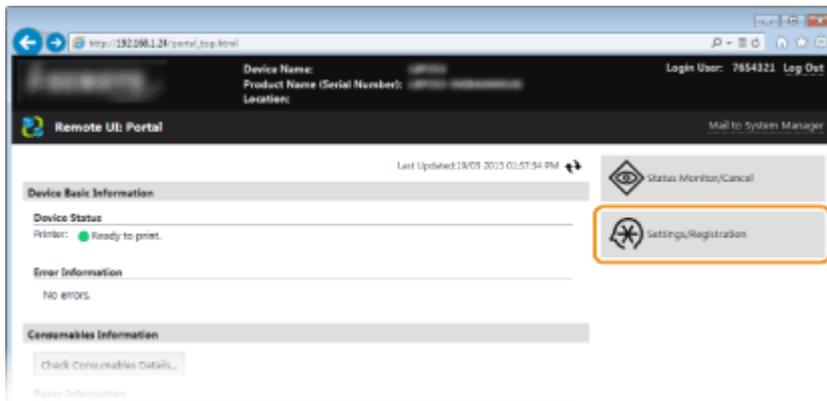
# Configuring DNS

0W20-03L

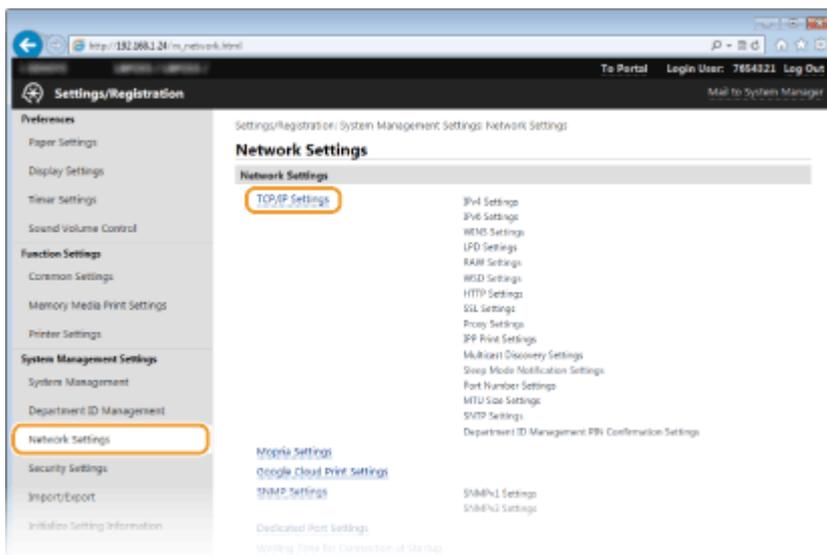
DNS (Domain Name System) provides a service for name resolution that associates a host (or domain) name with an IP address. Configure the DNS, mDNS, or DHCP option settings as necessary. Note that the procedures for configuring DNS are different for IPv4 and IPv6.



- 1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 270)
- 2 Click [Settings/Registration].



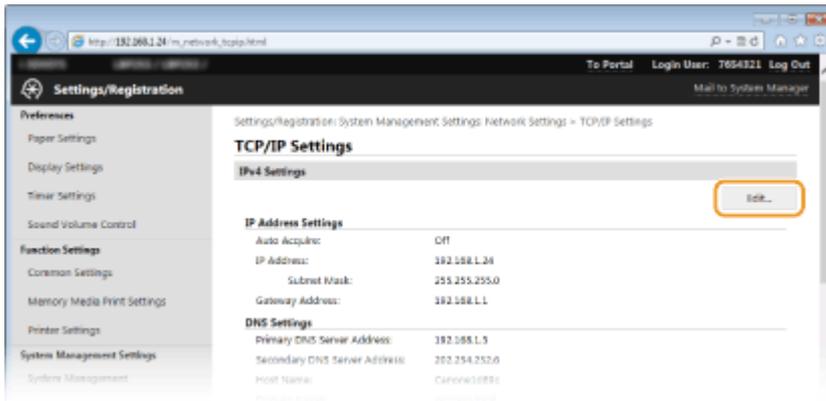
- 3 Click [Network Settings] ▶ [TCP/IP Settings].



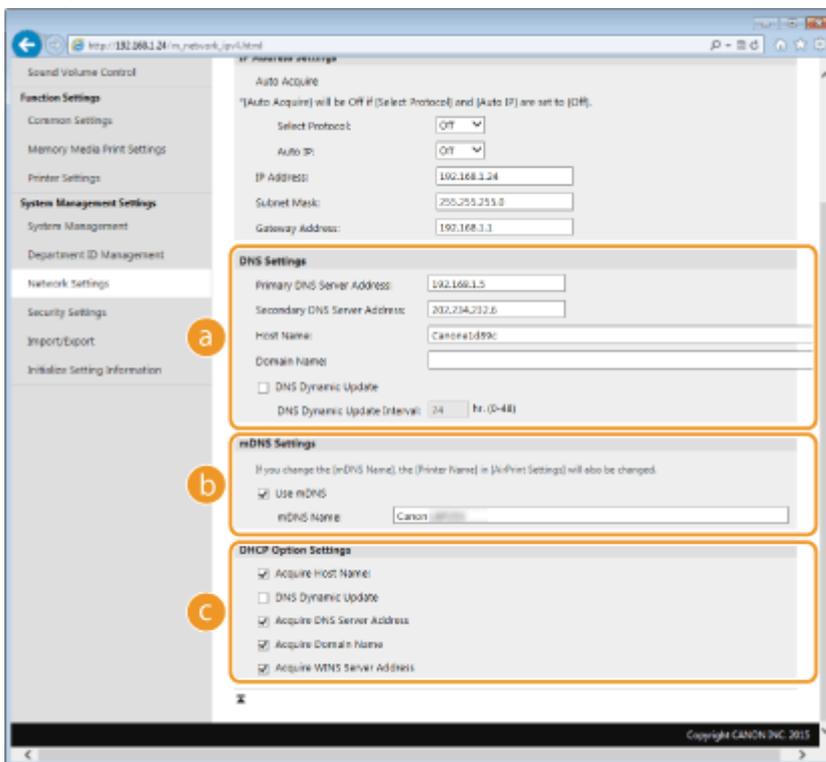
- 4 Configure DNS settings.

## ■ Configuring IPv4 DNS

1 Click [Edit] in [IPv4 Settings].



2 Configure IPv4 DNS settings.



### a [DNS Settings]

**[Primary DNS Server Address]**

Enter the IP address of a DNS server.

**[Secondary DNS Server Address]**

Enter the IP address of a secondary DNS server, if any.

**[Host Name]**

Enter up to 47 alphanumeric characters for the host name of the machine that is to be registered to 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 dynamically update the DNS records whenever the machine's IP address is changed. When specifying the interval between updates, enter the time in hours in the [DNS Dynamic Update Interval] text box.

**b [mDNS Settings]**

**[Use mDNS]**

Adopted by 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.

**c [DHCP Option Settings]**

**[Acquire Host Name]**

Select the check box to enable Option 12 to obtain the host name from the DHCP server.

**[DNS Dynamic Update]**

Select the check box to enable Option 81 to dynamically update the DNS records through the DHCP server.

**[Acquire DNS Server Address]**

Select the check box to enable Option 6 to obtain a DNS server address from the DHCP server.

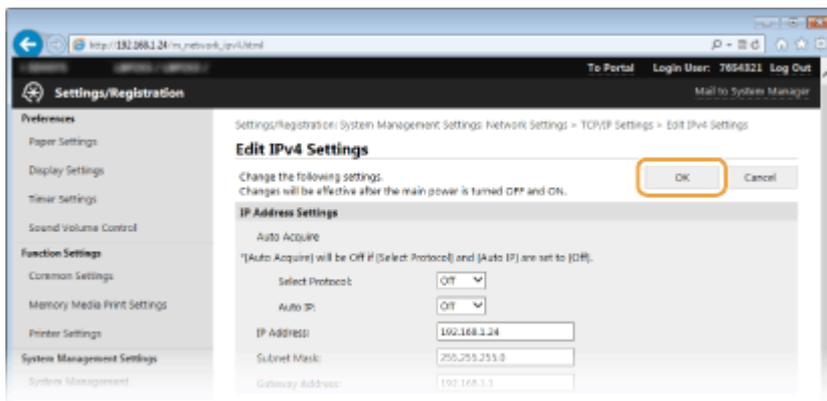
**[Acquire Domain Name]**

Select the check box to enable Option 15 to obtain a domain name from the DHCP server.

**[Acquire WINS Server Address]**

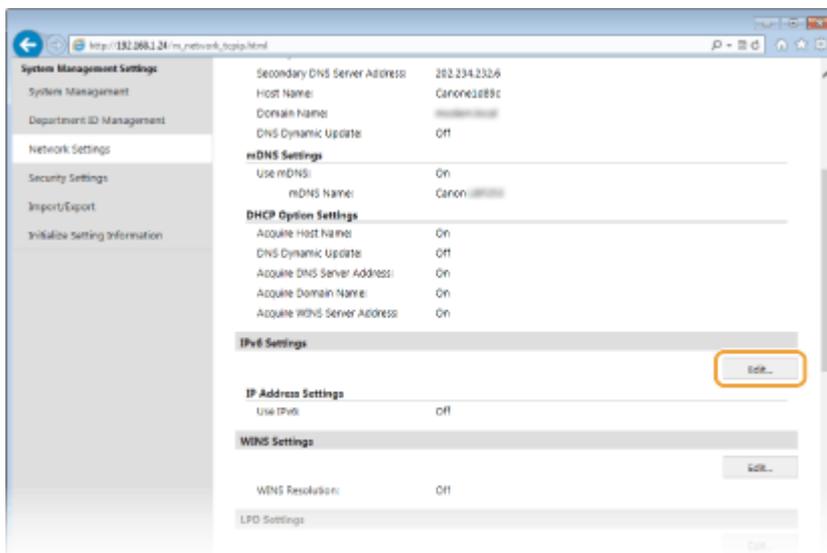
Select the check box to enable Option 44 to obtain a WINS server address from the DHCP server.

**3** Click [OK].



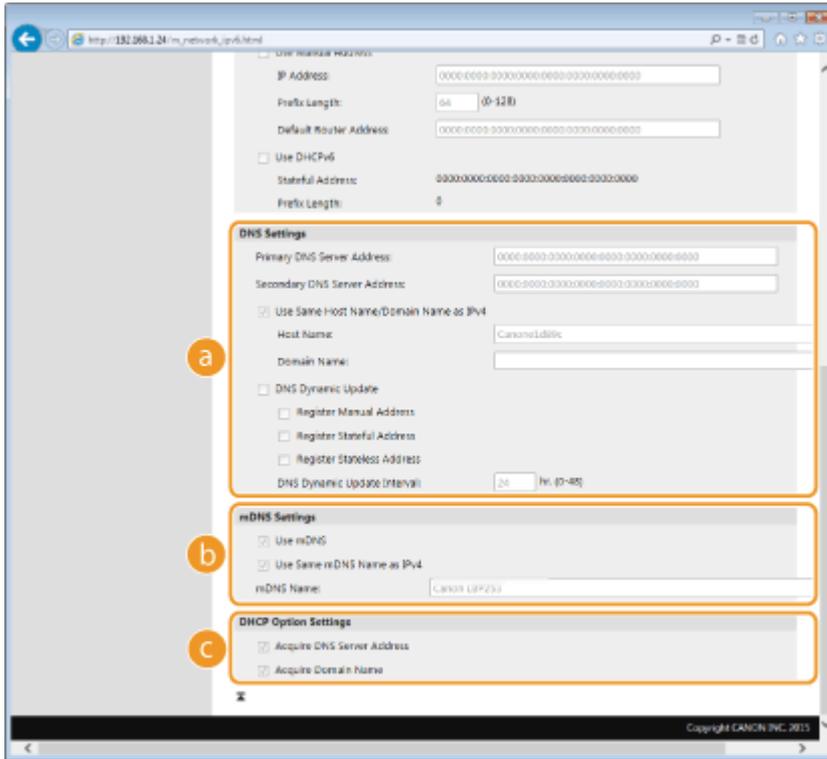
**■ Configuring IPv6 DNS**

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



**2** Configure IPv6 DNS settings.

- The [Use IPv6] check box must be selected to configure the settings. **▶Setting IPv6 Addresses(P. 157)**



**a [DNS Settings]**

**[Primary DNS Server Address]**

Enter the IP address of a DNS server. Addresses that start with "ff" (or multicast address) cannot be entered.

**[Secondary DNS Server Address]**

Enter the IP address of a secondary DNS server, if any. Addresses that start with "ff" (or multicast address) cannot be entered.

**[Use Same Host Name/Domain Name as IPv4]**

Select the check box to use the same host and domain names as in IPv4.

**[Host Name]**

Enter up to 47 alphanumeric characters for the host name of the machine that is to be registered to 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 dynamically update the DNS records whenever the machine's IP address is changed. To specify the type(s) of addresses you want to register to the DNS server, select the check box for [Register Manual Address], [Register Stateful Address], or [Register Stateless Address]. To specify the interval between updates, enter the time in hours in the [DNS Dynamic Update Interval] text box.

**b [mDNS Settings]**

**[Use mDNS]**

Adopted by 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.

**[Use Same mDNS Name as IPv4]**

Select the check box to use the same mDNS name as in IPv4. To set a different name, clear the check box and enter the mDNS name in the [mDNS Name] text box.

### **C [DHCP Option Settings]**

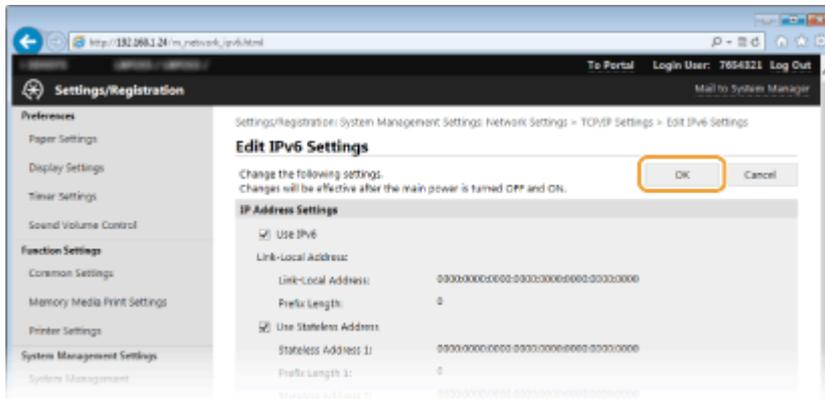
#### **[Acquire DNS Server Address]**

Select the check box to enable Option 23 to obtain a DNS server address from the DHCP server.

#### **[Acquire Domain Name]**

Select the check box to enable Option 24 to obtain a domain name from the DHCP server.

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



### **5** Restart the machine.

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

## **NOTE**

### **Selecting settings from the operation panel**

- DNS settings can also be accessed by pressing  on the operation panel. [▶ IPv4 Settings\(P. 292\)](#) [▶ IPv6 Settings\(P. 294\)](#)

## **LINKS**

- ▶ [Setting IPv4 Address\(P. 154\)](#)
- ▶ [Setting IPv6 Addresses\(P. 157\)](#)
- ▶ [Viewing Network Settings\(P. 161\)](#)

# Configuring WINS

OW20-03R

Windows Internet Name Service (WINS) is a name resolution service that associates a NetBIOS name (a computer or printer name in an SMB network) with an IP address. To enable WINS, the WINS server must be specified.

## IMPORTANT

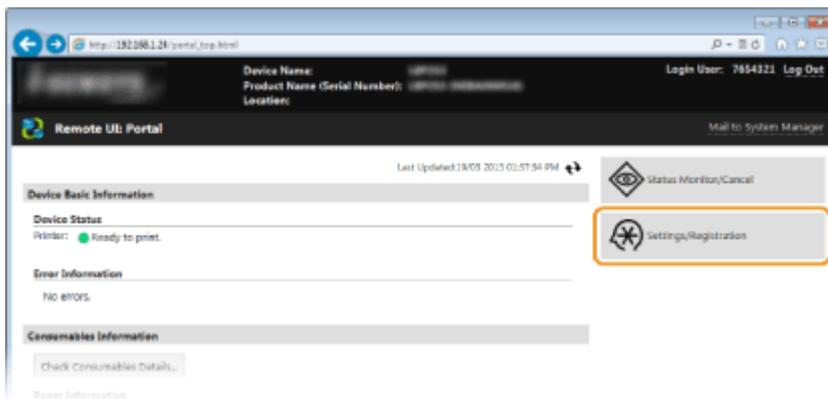
- The function is not available in an IPv6 network.

## NOTE

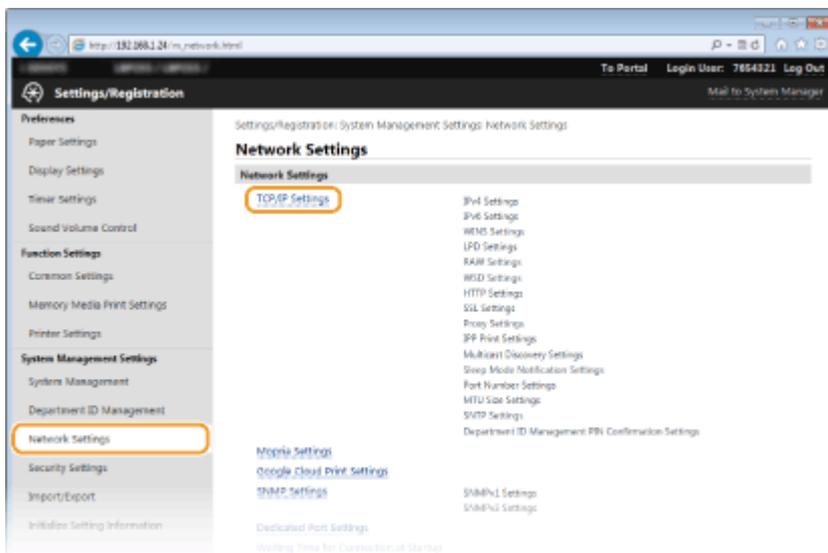
- The machine's NetBIOS name will be registered to the WINS server as "letters Canon followed by the last six digits of the MAC address," and its work group name, as "WORKGROUP."

**1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 270)**

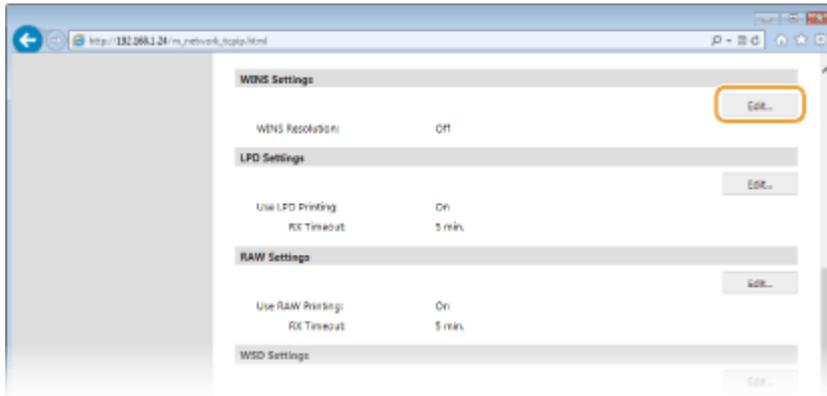
**2 Click [Settings/Registration].**



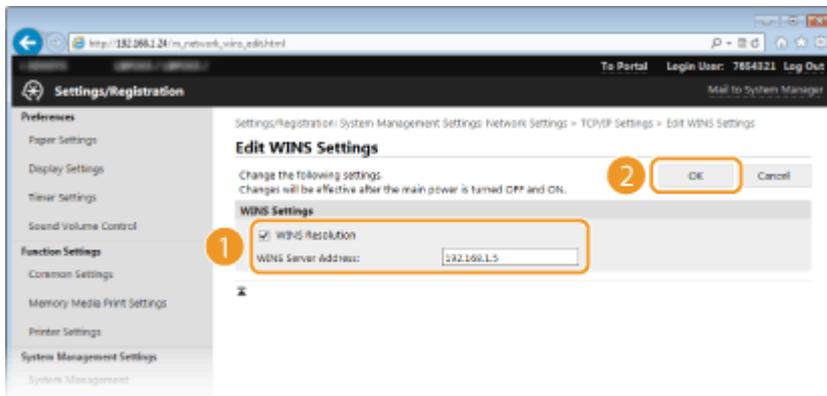
**3 Click [Network Settings] ▶ [TCP/IP Settings].**



#### 4 Click [Edit] in [WINS Settings].



#### 5 Select the [WINS Resolution] check box, specify the required settings, and click [OK].



##### [WINS Resolution]

Select the check box to use WINS for name resolution. When not using WINS, clear the check box.

##### [WINS Server Address]

Enter the IP address of the WINS server.

##### IMPORTANT:

- If the IP address of the WINS server is obtained from a DHCP server, the obtained IP address overrides the IP address entered in the [WINS Server Address] text box.

#### 6 Restart the machine.

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

### NOTE

#### Selecting settings from the operation panel

- WINS settings can also be accessed by pressing  on the operation panel.  **WINS Settings(P. 295)**

### LINKS

-  **Setting IPv4 Address(P. 154)**

# Configuring SNTP

0W20-03S

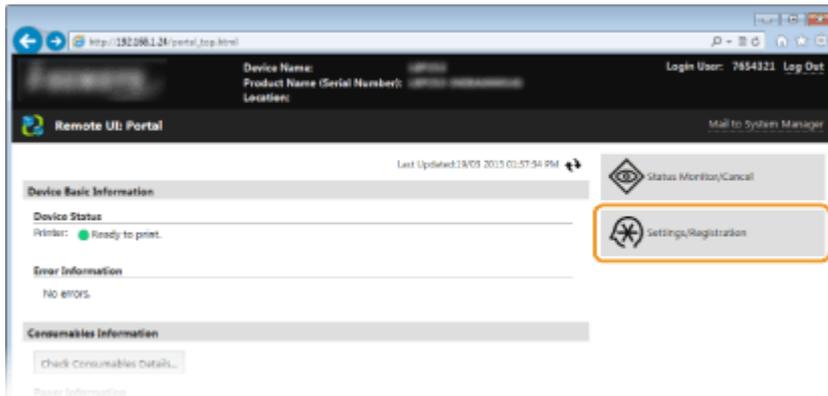


Simple Network Time Protocol (SNTP) enables you to adjust the system clock by using the time server on the network. When you use SNTP, the system checks the time server periodically, so that the system clock is always accurate. The time is adjusted based on Coordinated Universal Time (UTC), so specify the time zone setting before configuring SNTP ( ▶ **Date/Time Settings(P. 307)** ). SNTP settings can be specified via the Remote UI.

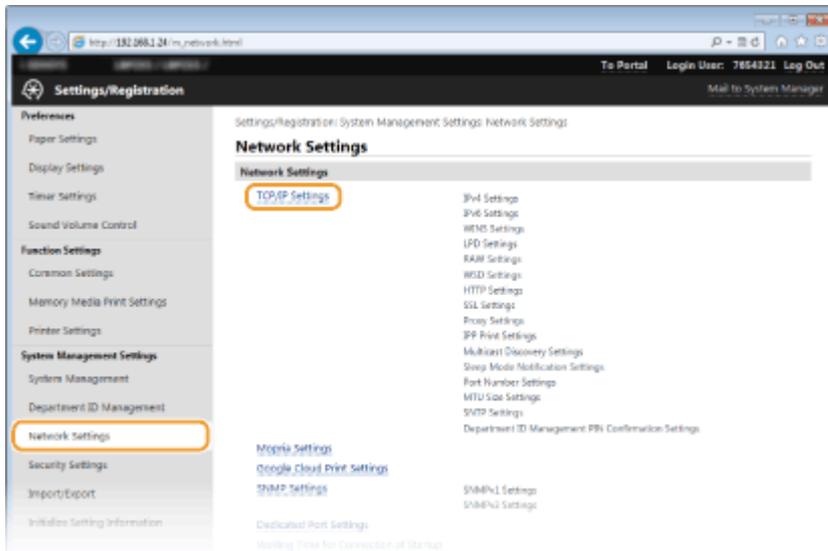
## NOTE

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

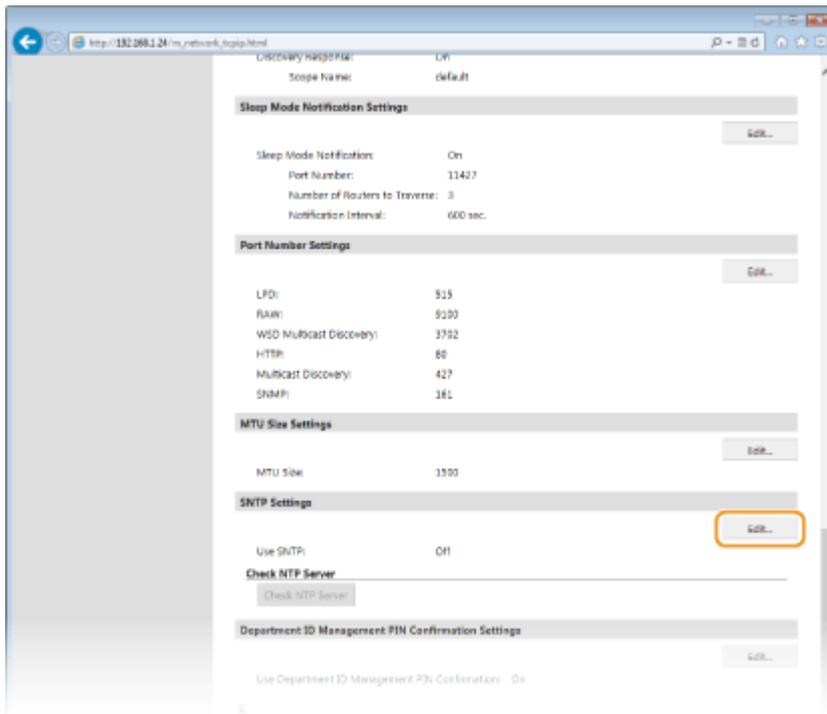
- 1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 270)**
- 2 Click [Settings/Registration].**



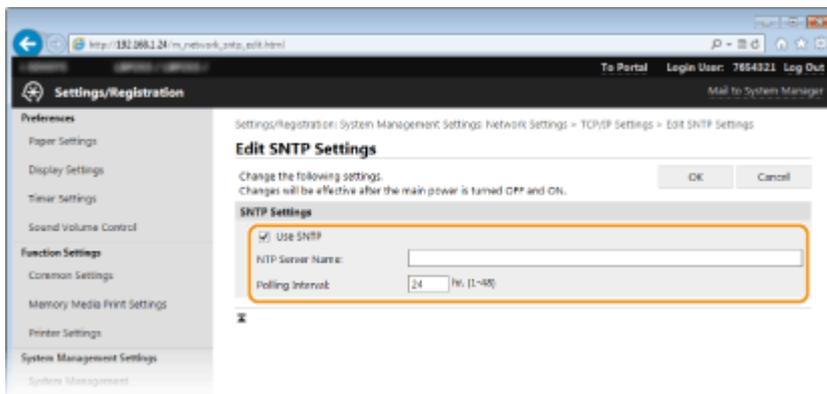
- 3 Click [Network Settings] ▶ [TCP/IP Settings].**



#### 4 Click [Edit] in [SNTP Settings].



#### 5 Select the [Use SNTP] check box and specify the required settings.



#### [Use SNTP]

Select the check box to use SNTP for synchronization. If you do not want to use SNTP, clear the check box.

#### [NTP Server Name]

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

#### [Polling Interval]

Specify the interval between one synchronization and the next. Specify an interval from 1 to 48 hours.

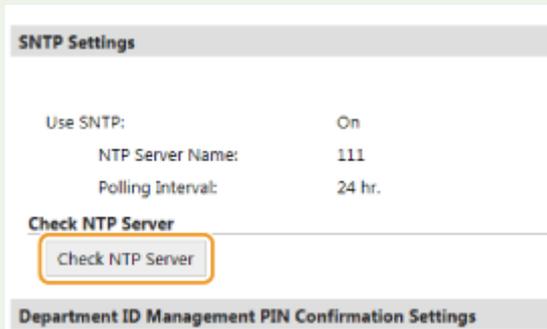
#### 6 Click [OK].

#### 7 Restart the machine.

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

**NOTE****Testing communication with the NTP/SNTP server**

- You can view communication status with the registered server by clicking [Settings/Registration] ► [Network Settings] ► [TCP/IP Settings] and then clicking [Check NTP Server] in [SNTP Settings] that appears. If a proper connection has been established, the result is displayed as shown below. Note that this operation does not adjust the system clock.



The screenshot displays the 'SNTP Settings' configuration window. It includes a table for settings and a button to test the connection.

SNTP Settings	
Use SNTP:	On
NTP Server Name:	111
Polling Interval:	24 hr.

**Check NTP Server**

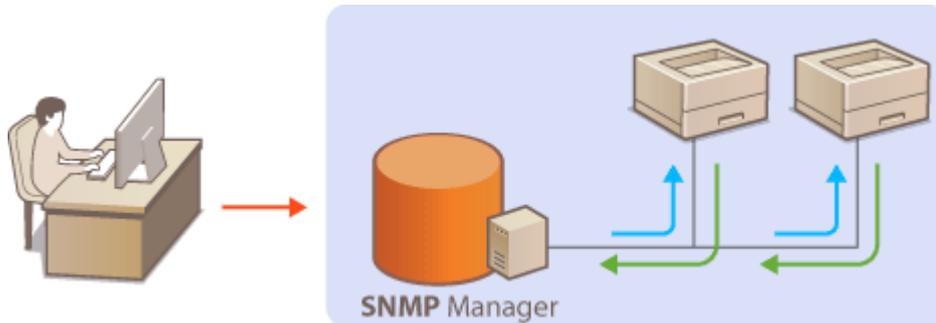
Check NTP Server

Department ID Management PIN Confirmation Settings

# Monitoring and Controlling the Machine with SNMP

0W20-03U

Simple Network Management Protocol (SNMP) is a protocol for monitoring and controlling communication devices in a network by using Management Information Base (MIB). The machine supports SNMPv1 and security-enhanced SNMPv3. You can 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 information called "community" 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

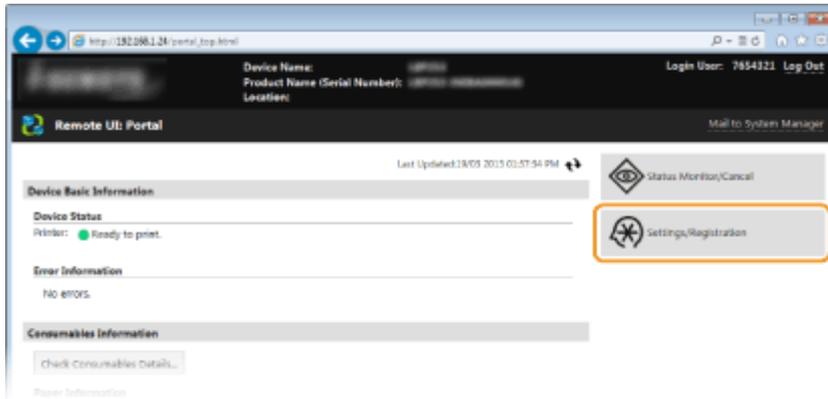
With SNMPv3, you can implement network device management that is protected by robust security features. Note that SSL must be enabled for the Remote UI before configuring SNMPv3 ( [▶Enabling SSL Encrypted Communication for the Remote UI\(P. 235\)](#) ).

### NOTE

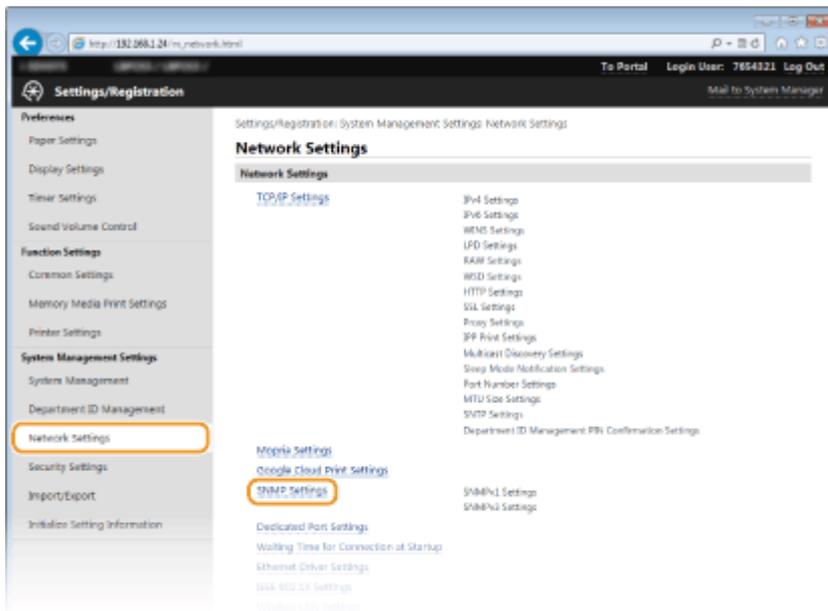
- The machine does not support the trap notification feature of SNMP.
- To change the port number of SNMP, see [▶Changing Port Numbers\(P. 226\)](#) .
- SNMP management software, when installed on a computer on the network, enables you to configure, monitor, and control the machine remotely from the computer. For more information, see the instruction manuals for your management software.

**1 Start the Remote UI and log on in System Manager mode. [▶Starting Remote UI\(P. 270\)](#)**

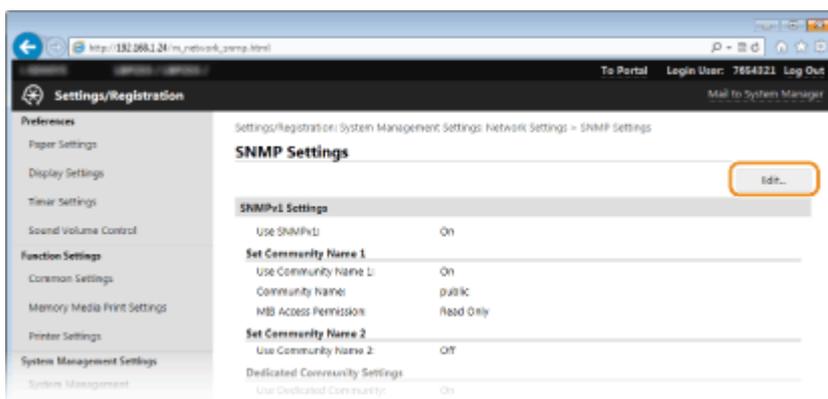
**2 Click [Settings/Registration].**



**3** Click [Network Settings] ► [SNMP Settings].

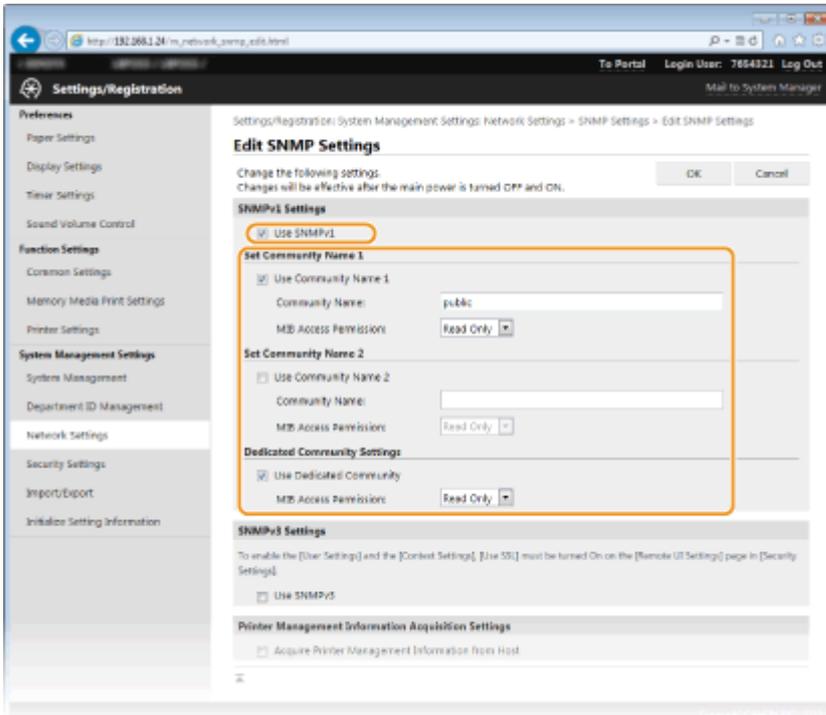


**4** Click [Edit].



**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 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.

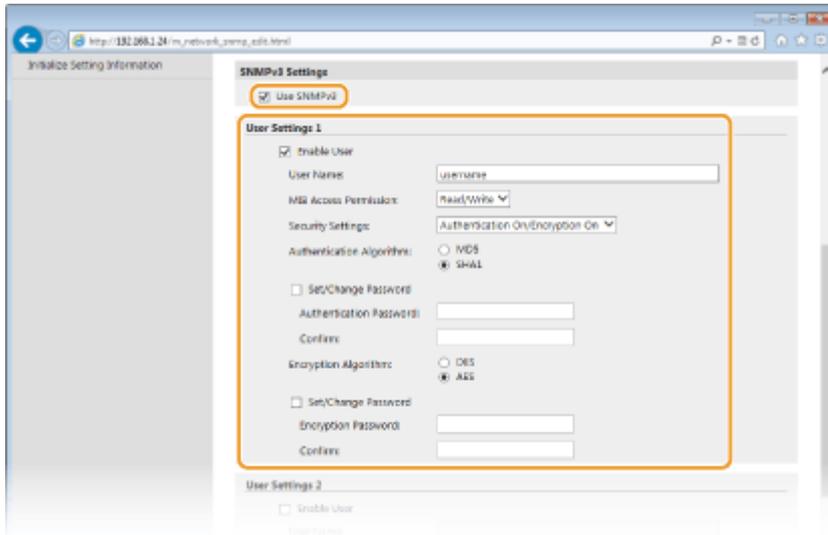
[Read/Write]	Permits both viewing and changing the values of MIB objects.
[Read Only]	Permits only viewing the values of MIB objects.

**[Use Dedicated Community]**

Dedicated Community is a preset community, intended exclusively for Administrators using Canon software, such as imageWARE Enterprise Management Console. 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 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 the access privileges to MIB objects.

[Read/Write]	Permits both viewing and changing the values of MIB objects.
[Read Only]	Permits 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]**

Click the [Authentication On/Encryption On] or [Authentication On/Encryption Off] for [Security Settings] for the algorithm that corresponds to your environment.

**[Encryption Algorithm]**

Click the [Authentication On/Encryption On] for [Security Settings] for the algorithm that corresponds to your environment.

**[Set/Change Password]**

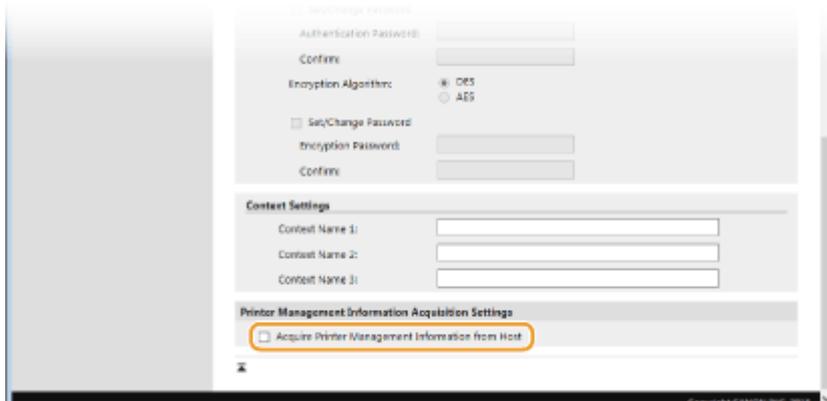
To set or change the password, select the check box and enter between 8 and 16 alphanumeric characters for the password in the [Authentication Password] or [Encryption Password] text box. For confirmation, enter the same password in the [Confirm] text box. Passwords can be set independently for authentication and encryption algorithms.

**[Context Name 1]/[Context Name 2]/[Context Name 3]**

Enter up to 32 alphanumeric characters for the context name. Up to three context names can be registered.

**7 Specify Printer Management Information Acquisition Settings.**

- With SNMP, the 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].

**9** Restart the machine.

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

### 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.

#### Using the operation panel

- You can enable or disable the SNMP settings by pressing  on the operation panel. **▶SNMP Settings(P. 298)**

#### 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 SSL Encrypted Communication for the Remote UI(P. 235)**

# Configuring Settings for Device Management Software

0W20-03W

You can facilitate the collection and management of various information about networked devices by implementing device management software, such as imageWARE Enterprise Management Console\*, into the network. Information such as device settings and error logs is retrieved and distributed via the server computer. If the machine is connected to such a network, imageWARE Enterprise Management Console searches the network for the machine by using protocols such as Service Location Protocol (SLP) to gather information from the machine, including the power status. SLP settings can be specified via the Remote UI. This section also describes how to configure communication settings for the imageWARE Enterprise Management Console plug-ins.

\* For more information about imageWARE Enterprise Management Console, contact your local authorized Canon dealer.

- ▶ **Configuring SLP Communication with Device Management Software(P. 196)**
- ▶ **Configuring Settings for Device Settings Management(P. 199)**

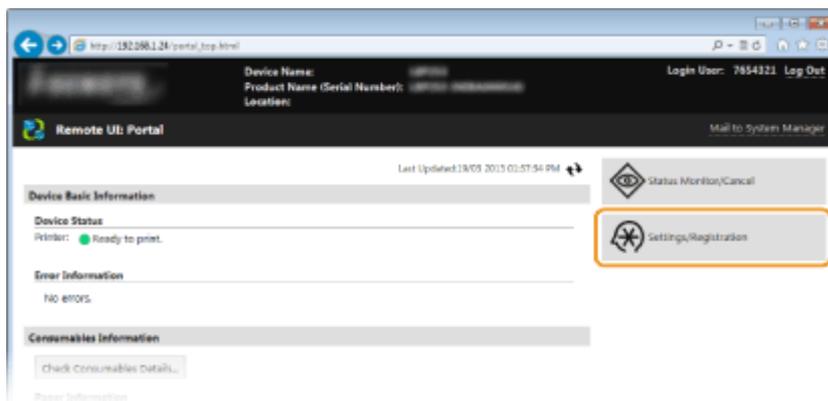
## NOTE

### To use imageWARE Enterprise Management Console plug-ins

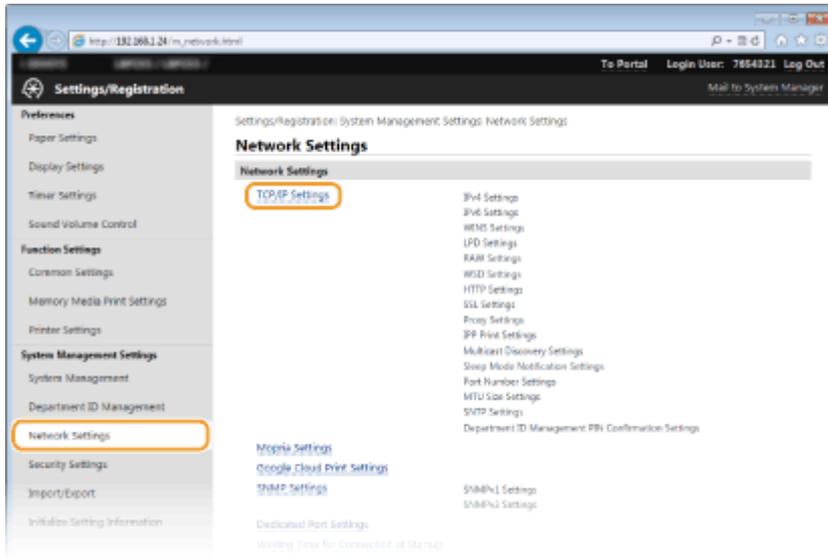
- You need to enable dedicated port settings and SNMP settings. For SNMP settings, set [MIB Access Permission] to [Read/Write] for both SNMPv3 and SNMPv1. plug-in. ▶ **Dedicated Port Settings (P. 298)** ▶ **Monitoring and Controlling the Machine with SNMP(P. 191)**

## Configuring SLP Communication with Device Management Software

- 1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 270)**
- 2 Click [Settings/Registration].**



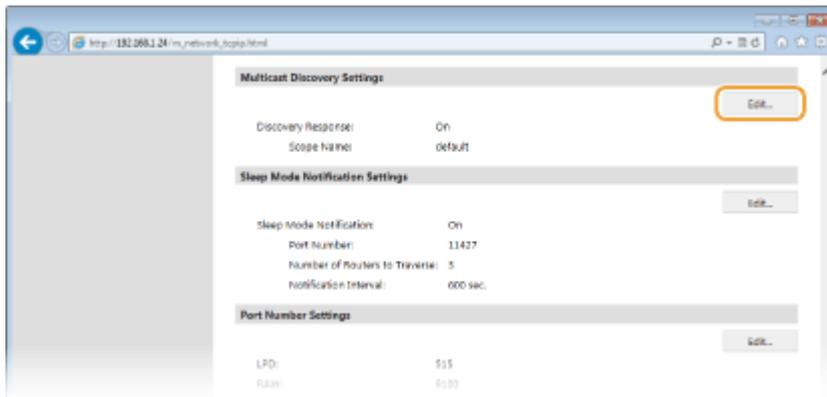
- 3 Click [Network Settings] ▶ [TCP/IP Settings].**



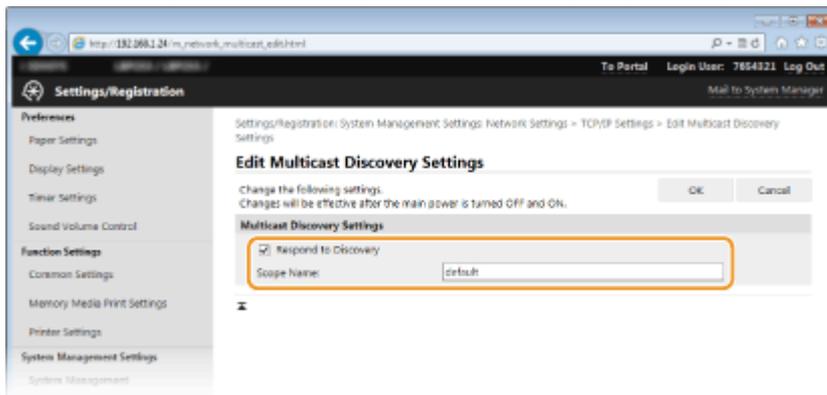
#### 4 Specify SLP settings.

##### ■ Specifying multicast device discovery

- 1 Click [Edit] in [Multicast Discovery Settings].



- 2 Select the [Respond to Discovery] check box and specify the required settings.



#### **[Respond to Discovery]**

Select the check box to set the machine to respond to device management software multicast discovery packets and enable monitoring by device management software.

#### **[Scope Name]**

To include the machine into a specific scope, enter up to 32 characters for the scope name.

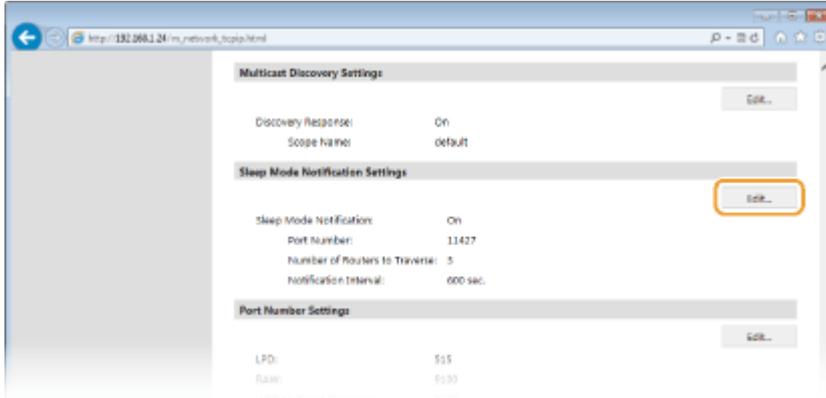
3 Click [OK].

**NOTE:**

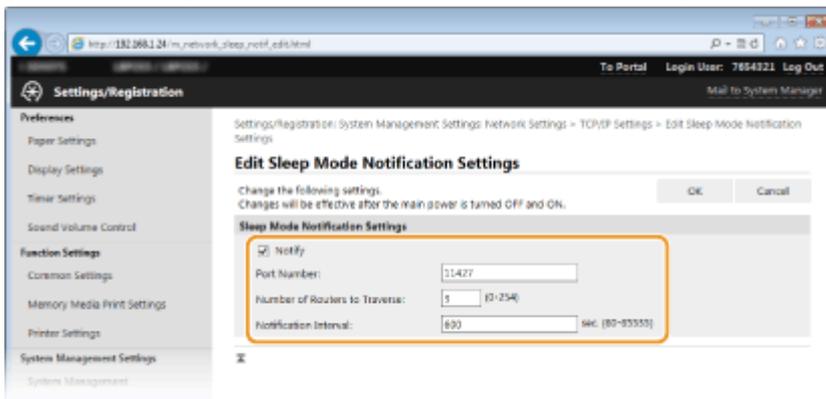
- To change the port number for multicast discovery, see [Changing Port Numbers\(P. 226\)](#) .

**■ Notifying a device management software of the power status of the machine**

1 Click [Edit] in [Sleep Mode Notification Settings].



2 Select the [Notify] check box and specify the required settings.



**[Notify]**

Select the check box to notify a device management software of the power status of the machine. When [Notify] is selected, you can expect the machine to avoid unnecessary communication during sleep mode and reduce the total power consumption.

**[Port Number]**

Change the port number for this function according to the network environment.

**[Number of Routers to Traverse]**

Specify how many routers the notification packets can pass. Enter a number from 0 to 254.

**[Notification Interval]**

Specify how often the machine notifies a device management software of its power status. Enter a number in seconds from 60 to 65535.

3 Click [OK].

**5 Restart the machine.**

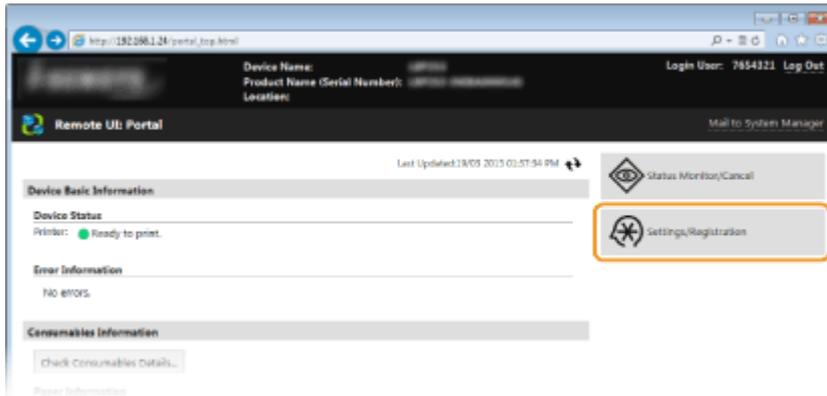
- Turn OFF the machine, wait for at least 10 seconds, and turn it back ON.

## Configuring Settings for Device Settings Management

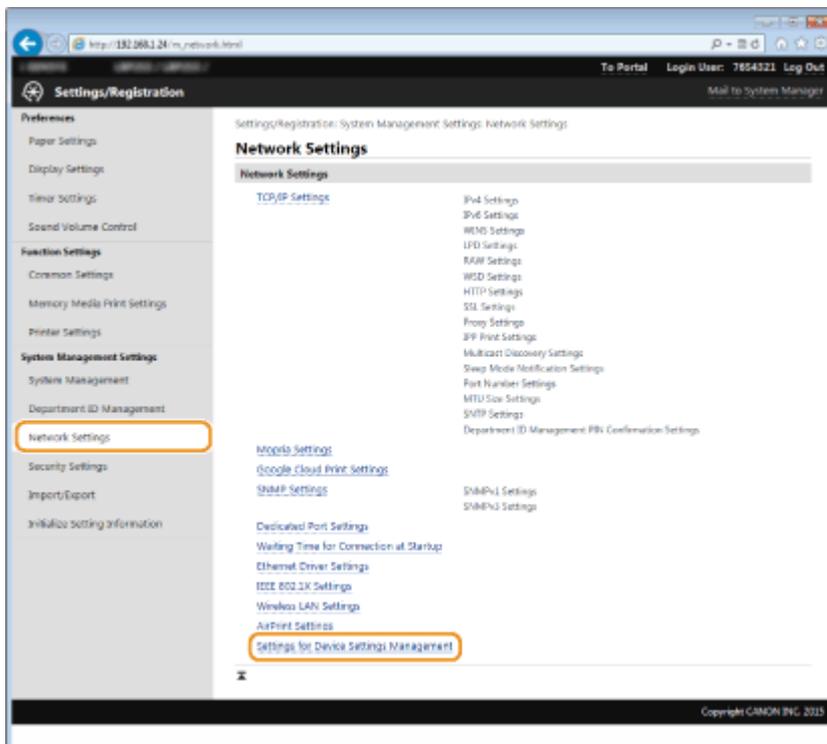
Configure settings so that communication with an imageWARE Enterprise Management Console plug-in is enabled. Use of a plug-in allows you to manage the machine's settings from the imageWARE Enterprise Management Console.

**1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 270)**

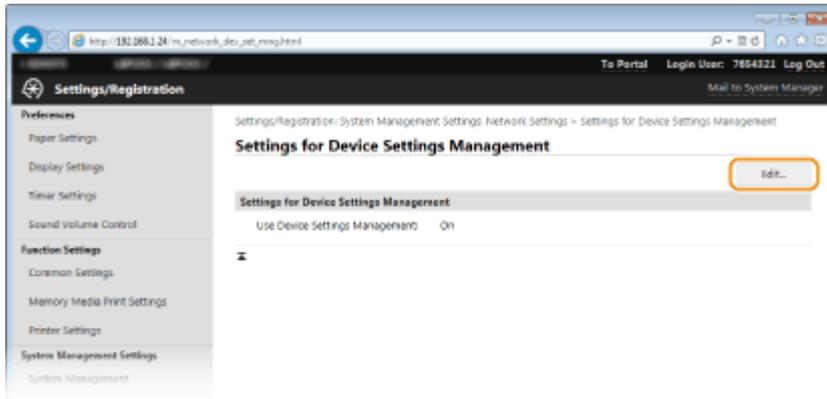
**2 Click [Settings/Registration].**



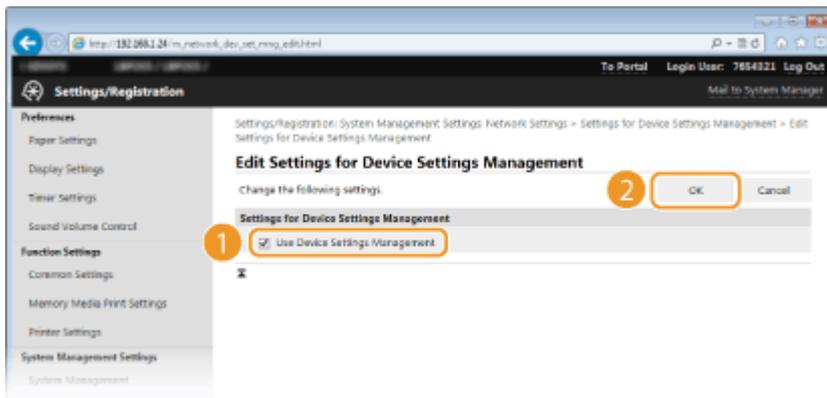
**3 Click [Network Settings] ▶ [Settings for Device Settings Management].**



**4 Click [Edit]**



## 5 Select the [Use Device Settings Management] check box and click [OK].



### [Use Device Settings Management]

If the check box is cleared, the machine cannot be recognized as a device that is to be managed from the plug-in.

## NOTE

### Using the operation panel

- You can also configure settings for device settings management from  on the operation panel.  **Device Settings Management On/Off (P. 300)**

## LINKS

-  **Entering Sleep Mode(P. 62)**

# Security

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# Security

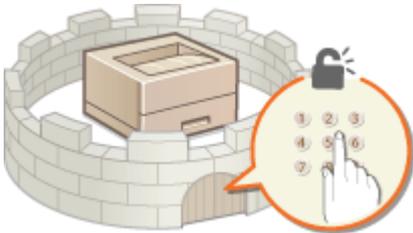
0W20-03X

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 anytime. 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, the 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. 204)**

### ■ Establishing the Basics of Information Security



#### ▶ Protecting the Machine from Unauthorized Access(P. 203)

### ■ Preparing for Risks from Negligence or Misuse



#### ▶ Restricting the Machine's Functions(P. 230)



#### ▶ Printing a Document Secured by a PIN (Secure Print) (LBP252dw)(P. 109)

### ■ Implementing Robust Security Features



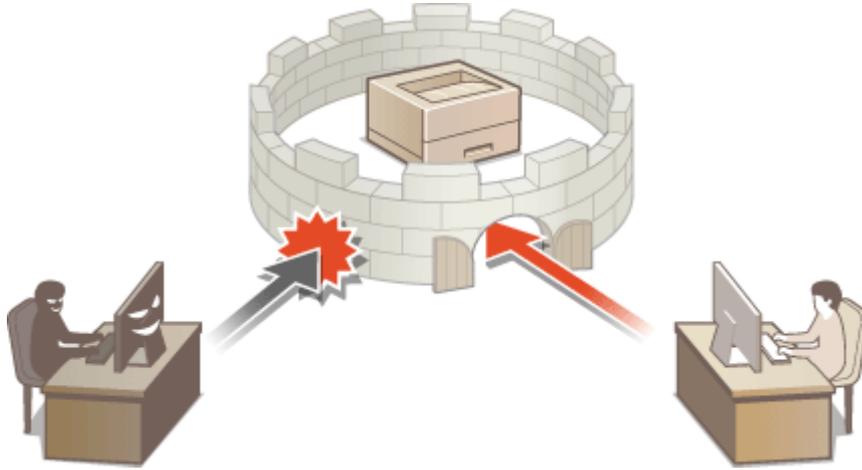
#### ▶ Implementing Robust Security Features(P. 234)

## Protecting the Machine from Unauthorized Access

---

0W20-03Y

Prevent unauthorized third parties from accessing and using the machine. You can implement multiple security measures, such as managing user access privileges, using firewalls, and changing port numbers.



# Preventing Unauthorized Access

OW20-040

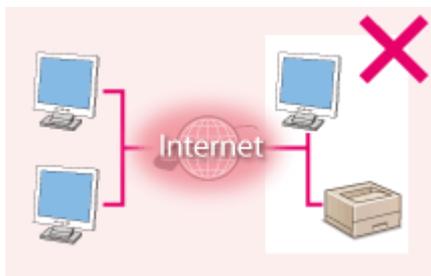
This section describes the security measures on how to prevent unauthorized access from the external network. This is a must-read for all users and administrators before using this machine, other printers, and multifunction machines connected to the network. In recent years, a printer/multifunction machine 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. 204)**
- ▶ **Using Firewall to Restrict Transmission(P. 205)**
- ▶ **Specifying the SSL Encrypted Communication (P. 205)**
- ▶ **Setting PIN to Manage Information Stored in the Printer(P. 205)**

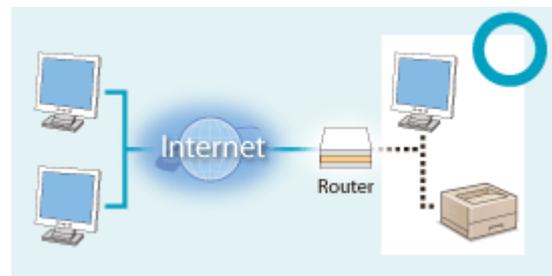
### Assigning a Private IP Address

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. 154)** .

#### 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\(P. 219\)](#) .

## Specifying the SSL Encrypted Communication

For information on the SSL Encrypted Communication, see [▶Implementing Robust Security Features\(P. 234\)](#) , and on the procedures to specify, see [▶Enabling SSL Encrypted Communication for the Remote UI\(P. 235\)](#) .

## 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 to Each Function

- Setting PIN for Using Remote UI  
For more information, see [▶Setting a Remote UI PIN\(P. 216\)](#) .
- Setting PIN for the System Manager Settings  
For more information, see [▶Setting the System Manager ID\(P. 207\)](#) .

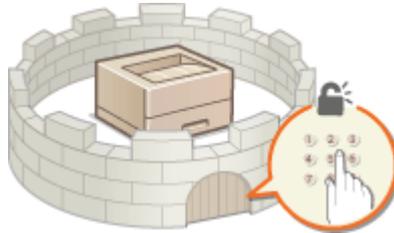
Listed above are some examples of security measures for preventing unauthorized access. For more information on the other security measures, see [▶Security\(P. 202\)](#) and take necessary security measures for preventing unauthorized access to suit your environment.

## Setting Access Privileges

---

OW20-041

Protect the machine from unauthorized access by only allowing users with access privileges to use the machine. Access privileges are set separately for system administrators, general users, and the Remote UI. When privileges are set, the user must enter an ID and PIN to print or change settings.



Department ID accounts are divided into two types: System Manager ID, which is intended exclusively for Administrators, and Department ID for general users. A System Manager ID can be defined as an account with full access privileges, while a user Department ID is an account for print management. And by setting a Remote UI Access PIN, you can restrict use of the Remote UI.

### System Manager ID

---

System Manager ID is an account with full access privileges. If you specify a System Manager ID, you need to log on to the machine using the System Manager ID information in order to access <Network Settings> or <System Management Settings>. Set the System Manager ID when you need different access privilege levels for Administrators and general users. Only one System Manager ID can be registered.

#### ▶ Setting the System Manager ID(P. 207)

### Department ID (Department ID Management)

---

You can specify access privileges for a user (or group of users) by registering a Department ID. You can register multiple Department IDs. If a user tries to operate the machine when Department IDs are enabled, a logon screen is displayed, and the user must enter their own Department ID and PIN to use the machine. Also, the details of the past use of the machine can be collected for each Department ID, which helps manage the machine.

#### ▶ Setting the Department ID Management(P. 209)

### Remote UI PIN (Remote UI Access PIN)

---

This is a PIN for using the Remote UI. Only users who know the PIN can access the Remote UI.

#### ▶ Setting a Remote UI PIN(P. 216)

# Setting the System Manager ID

OW20-042

This is a PIN for using the Remote UI. Only users who know the PIN can access the Remote UI. You can also set a PIN for the System Manager ID. If this ID is enabled, you can access <Network Settings> and <System Management Settings> only when the System Manager ID and PIN have been entered correctly. The System Manager ID settings information is critical to the security of the machine, so make sure that only Administrators know the System Manager ID and PIN.

**1** Press .

**2** Use  /  to select <System Management Settings>, and press .

### NOTE:

If the System Manager ID has already been set

- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press   **Logging on to the Machine(P. 34)**

**3** Select <System Manager Information Settings>  <System Manager ID and PIN>.

**4** Specify the System Manager ID and PIN.

- Specify the <System Manager ID>, and then specify the <System Manager PIN>.
- Enter a number of up to seven digits using the numeric keys, and press .
- When <PIN (Confirm)> is displayed, enter the PIN once again to confirm.

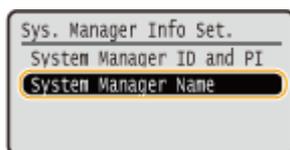


### NOTE:

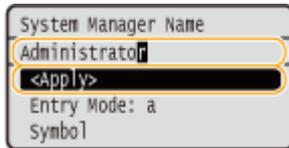
- You cannot register an ID or PIN that consists only of zeros, such as "00" or "0000000".
- To cancel the System Manager ID and PIN settings, clear the information you entered in  and press  with the fields blank.

## ■ Setting the System Manager Name

**1** Select <System Manager Name>, and press .



**2** Enter up to 32 characters for the System Manager Name, select <Apply>, and press   **Entering Text(P. 32)**



## 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.

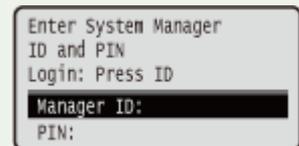
## NOTE

### Configuring settings via the Remote UI

- Start the Remote UI and log on in System Manager Mode. Click [Settings/Registration] ► [System Management] ► [Security Settings] ► [Edit] and specify the necessary settings on the displayed screen.
- By using the Remote UI, you can register a variety of information, including contact information, Administrator comments, the installation location of the machine, as well as to the settings that you can register by using the operation panel. The registered information can be viewed on the [Device Information] page of the Remote UI. ► **Checking System Manager Information(P. 278)**

### Logging on to the machine

- If you try to access <Network Settings> or <System Management Settings> when only the System Manager ID is enabled, the following logon screen is displayed:
- You must also enter the System Manager ID and PIN to log on using the Remote UI in System Manager mode. ► **Starting Remote UI(P. 270)**



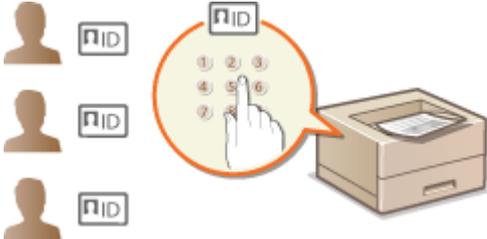
## LINKS

- **Setting Access Privileges(P. 206)**
- **Setting the Department ID Management(P. 209)**

# Setting the Department ID Management

OW20-043

You can control access to the machine by using multiple IDs for multiple users or groups. If a user tries to operate the machine when Department ID Management is enabled, a logon screen is displayed, and the user must enter their own Department ID and PIN to use the machine. Department ID Management provides recorded details of the past use of the machine for each Department ID. To configure Department ID Management, register department IDs as necessary and then enable Department ID Management function. Additional settings are required if you want to enable Department ID Management for printing from a computer.

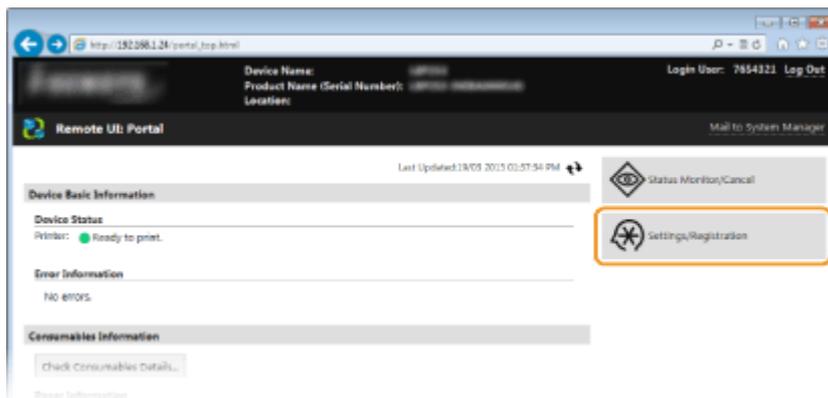


- ▶ **Registering/Editing Department ID and PIN(P. 209)**
- ▶ **Enabling the Department ID Management(P. 211)**
- ▶ **Setting the Department ID Management for Printing from the Computer(P. 213)**
- ▶ **Blocking Jobs When Department ID Is Unknown(P. 214)**

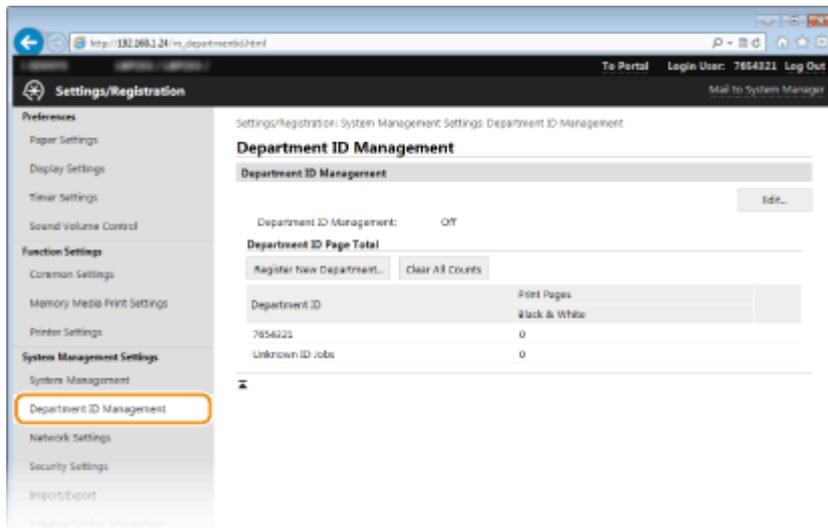
## Registering/Editing Department ID and PIN

Register a Department ID and set a PIN for it. Up to 300 Department IDs can be registered.

- 1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 270)**
- 2 Click [Settings/Registration].**

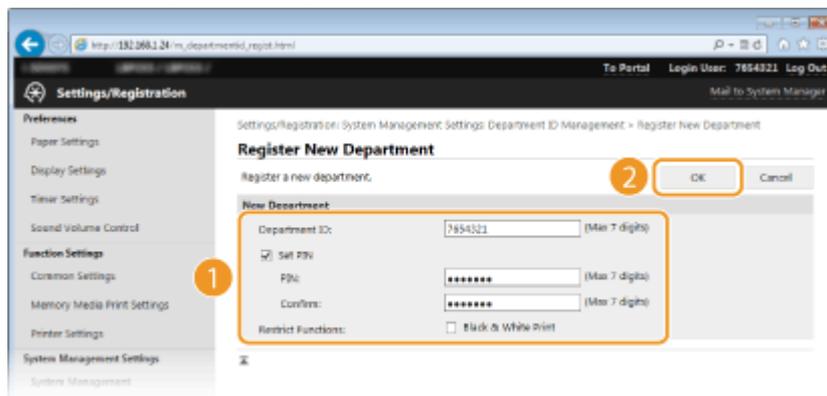


- 3 Click [Department ID Management] and register or edit Department IDs.**



## ■ Registering a Department ID

- 1 Click [Register New Department].
- 2 Specify the required settings and click [OK].



### [Department ID]

Enter a number of up to seven digits for the Department ID.

### [Set PIN]

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

### IMPORTANT:

Select the check box for [Black & White Print] under [Restrict Functions] to make it impossible to print with the machine.

## ■ Editing the settings of the registered Department ID

- 1 Click the corresponding text link under [Department ID] to edit.
- 2 Change the settings as necessary and click [OK].

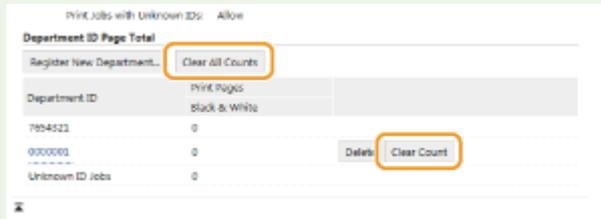
### NOTE:

#### Deleting a Department ID

- Click [Delete] on the right of the Department ID you want to delete ► click [OK].

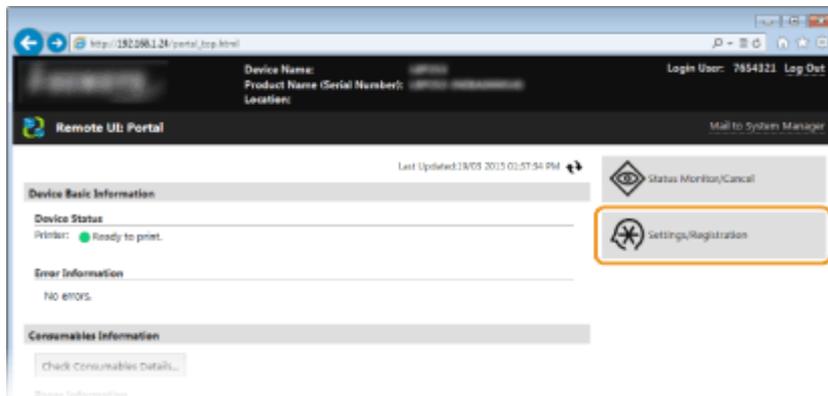
**NOTE****[Department ID Page Total]**

- You can check the total number of printed pages for each Department ID.
- If you want to return the counts to zero, click the corresponding text link under [Department ID] and click [Clear Count] ► [OK]. If you want to return the counts of all Department IDs to zero, click [Clear All Counts] ► [OK].

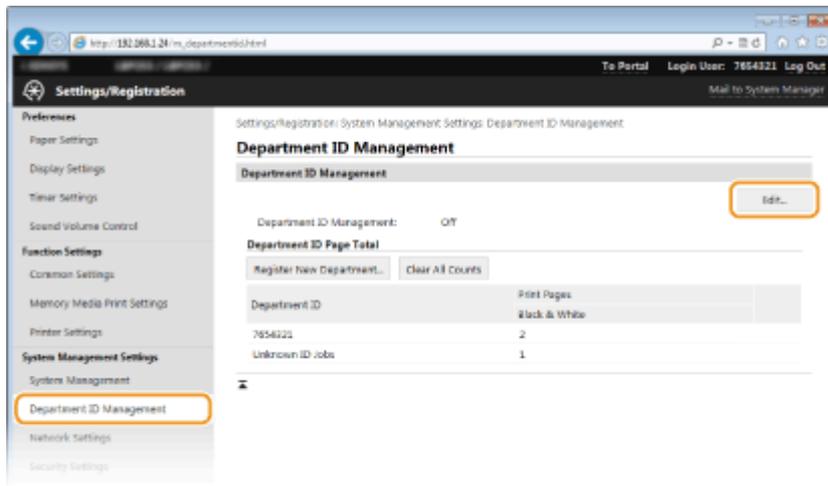
**Enabling the Department ID Management**

After you register as many Department IDs as necessary, enable Department ID Management.

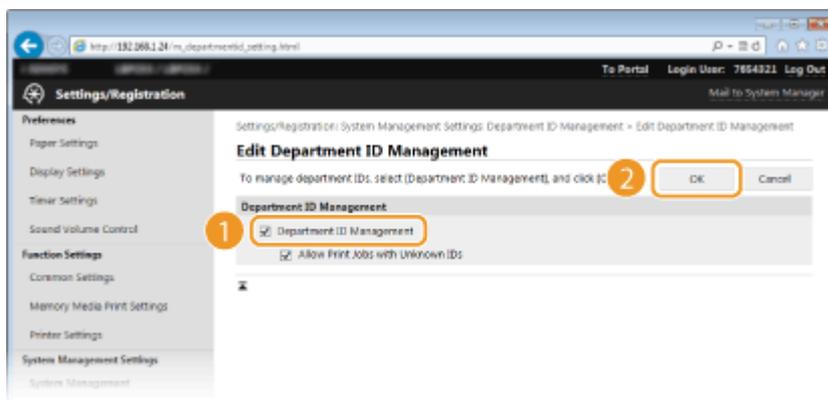
- 1 Start the Remote UI and log on in System Manager Mode. ► Starting Remote UI(P. 270)**
- 2 Click [Settings/Registration].**



- 3 Click [Department ID Management] ► [Edit].**



#### 4 Select the [Department ID Management] check box and click [OK].



#### [Department ID Management]

Select the check box to enable Department ID Management. If you do not want to use Department ID Management, clear the check box.

#### NOTE:

- For information on the [Allow Print Jobs with Unknown IDs] check box, see [▶Blocking Jobs When Department ID Is Unknown\(P. 214\)](#).

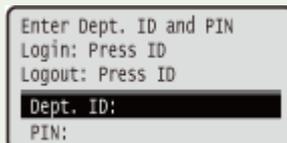
## NOTE

### Using the operation panel

- You can also switch Department ID Management On/Off by pressing  on the operation panel. [▶ Department ID Management On/Off\(P. 338\)](#)

### Logging on to the machine

- When you try to operate the machine when Department ID Management is enabled, the following logon screen is displayed:



## Setting the Department ID Management for Printing from the Computer

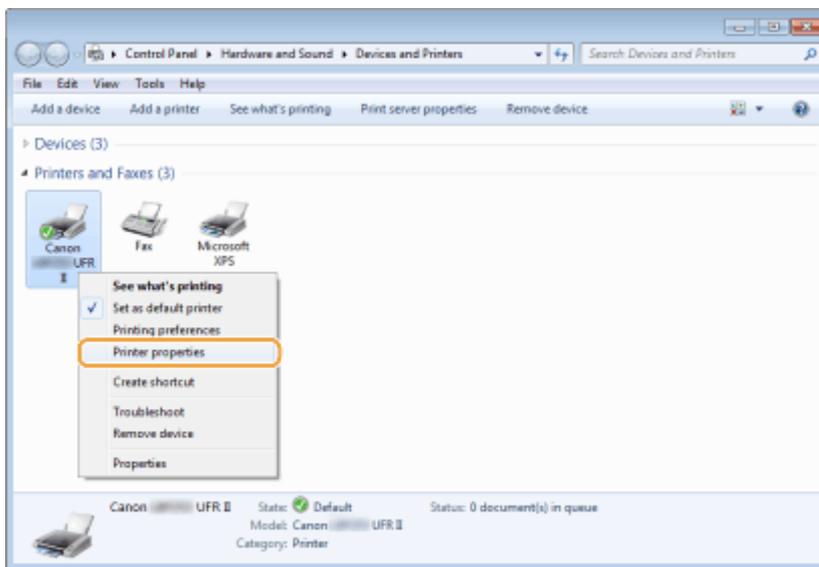
If you want to enable Department ID Management for printing from a computer, you need to specify settings by using the printer driver you already installed on the computer. Specify the Department ID and PIN as necessary.

### IMPORTANT

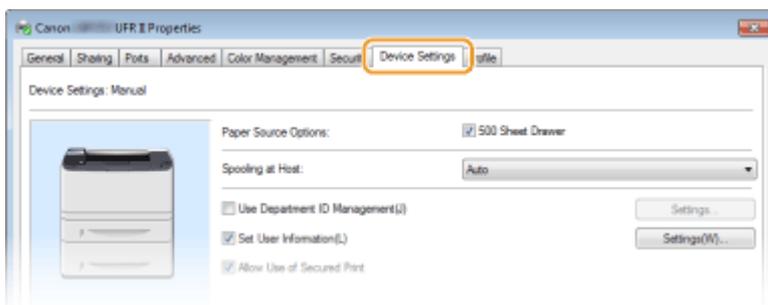
- To perform the following procedure, log on to your computer with an administrator account.

**1** Open the printer folder. ▶ **Displaying the Printer Folder(P. 474)**

**2** Right-click your printer icon and click [Printer properties] or [Properties].

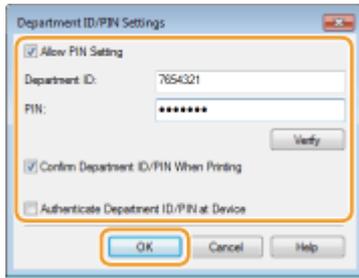


**3** Click the [Device Settings] tab and specify the required settings.



**1** Select the [Use Department ID Management] check box and click [Settings] on the right of it.

**2** Specify the settings as necessary and click [OK].

**[Allow PIN Settings]**

Select the check box to enable the PIN setting.

**[Department ID]**

Enter a number of up to seven digits for the Department ID.

**[PIN]**

Enter a number of up to seven digits for the PIN if it is set for the Department ID.

**[Verify]**

Click to verify that the correct ID and PIN are entered. This function is not available if the machine and the computer are connected via a USB or WSD (Web Services on Devices) port.

**[Confirm Department ID/PIN When Printing]**

Select the check box to display the [Confirm Department ID/PIN] pop-up screen each time you print from a computer.

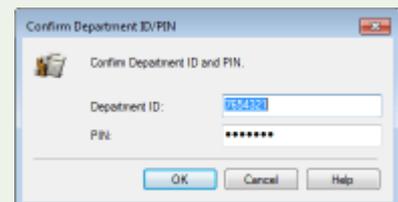
**[Authenticate Department ID/PIN at Device]**

Select the check box if the machine and the computer are connected via a USB or WSD port.

**3** Click [OK].

**NOTE****Logging on to the machine**

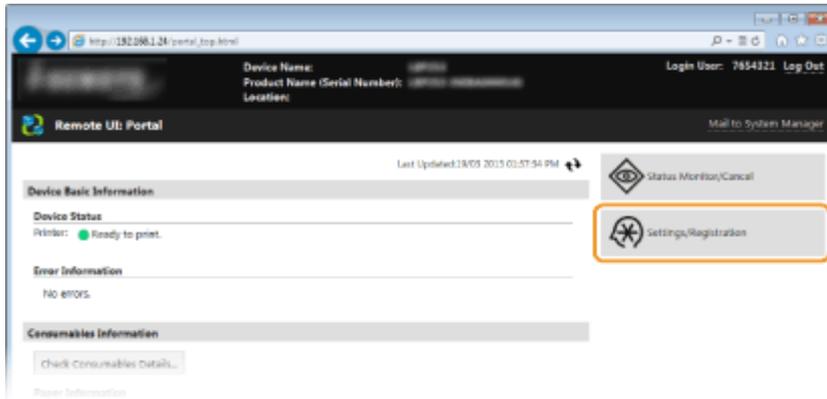
- When you try to print from a computer when Department ID Management is enabled, the following pop-up screen is displayed (unless the [Confirm Department ID/PIN When Printing] check box is cleared):

**Blocking Jobs When Department ID Is Unknown**

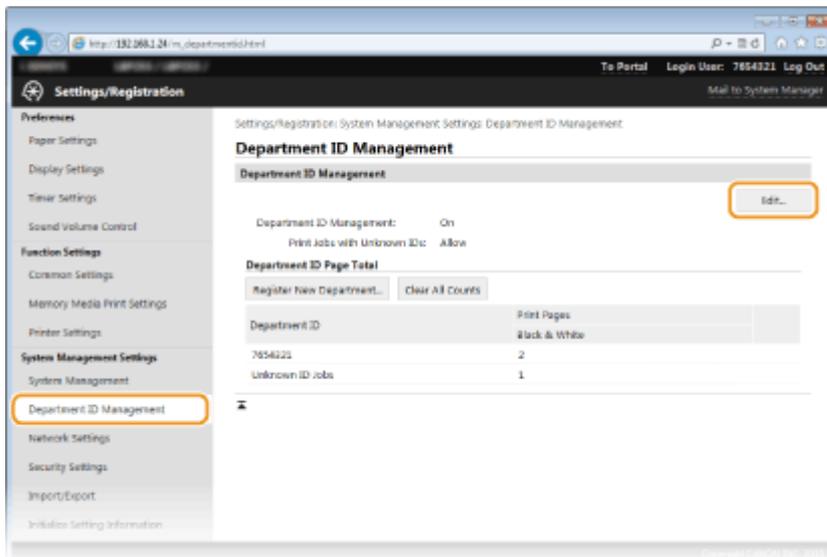
The factory default settings are such that even when Department ID Management is enabled, you can print from a computer without entering an ID and PIN. If you want to change this so that printing is not possible unless an ID and PIN are entered, use the following procedure.

**1** Start the Remote UI and log on in System Manager Mode. Starting Remote UI(P. 270)

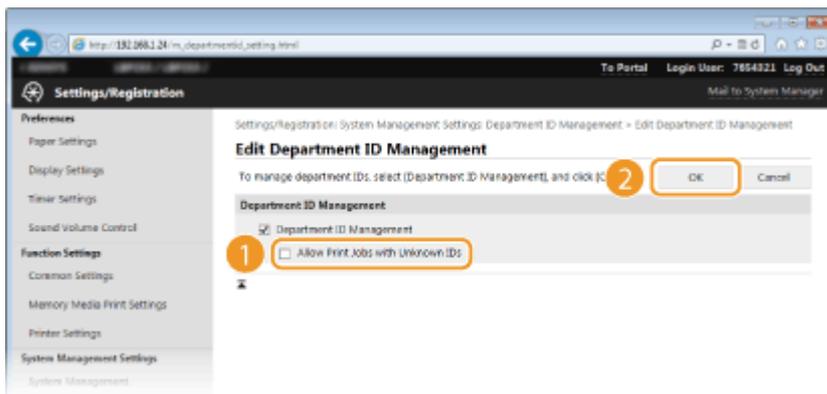
**2** Click [Settings/Registration].



**3** Click [Department ID Management] ► [Edit].



**4** Clear the [Allow Print Jobs with Unknown IDs] check box and click [OK].



## LINKS

- ▶ Setting Access Privileges(P. 206)
- ▶ Setting the System Manager ID(P. 207)

# Setting a Remote UI PIN

OW20-044

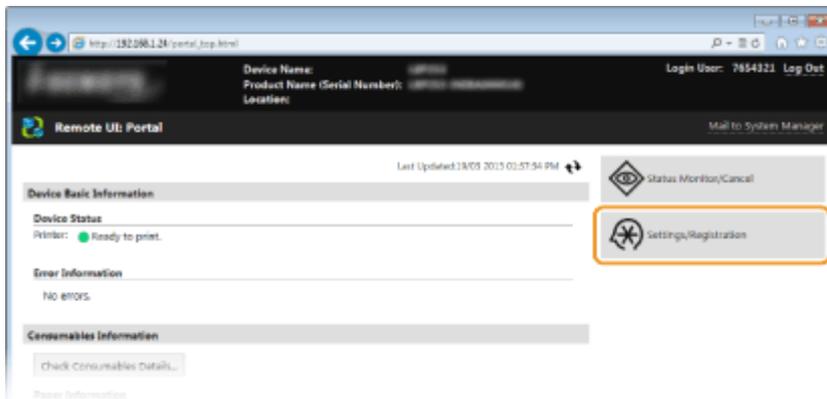
You can set a PIN for access to the Remote UI. All users use a common PIN.

## NOTE

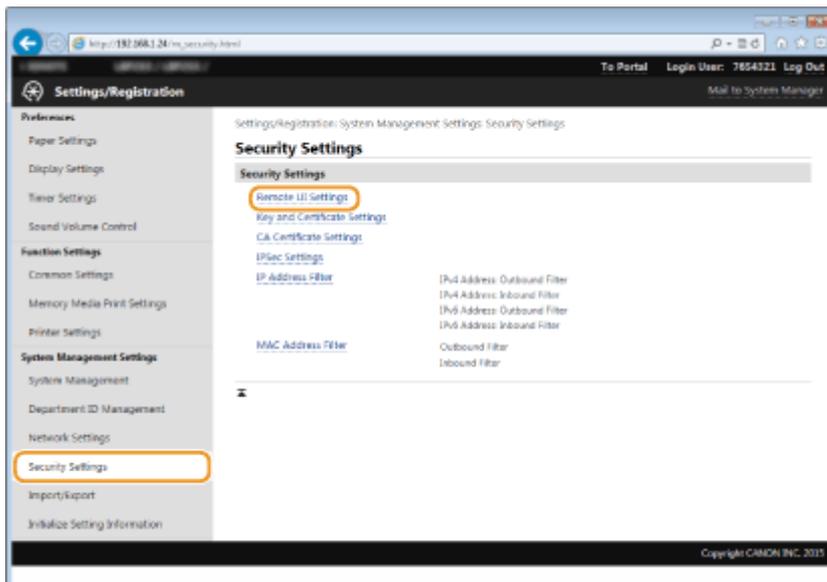
- When Department ID Management is enabled, setting here is not required. ▶ **Setting the Department ID Management(P. 209)**

**1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 270)**

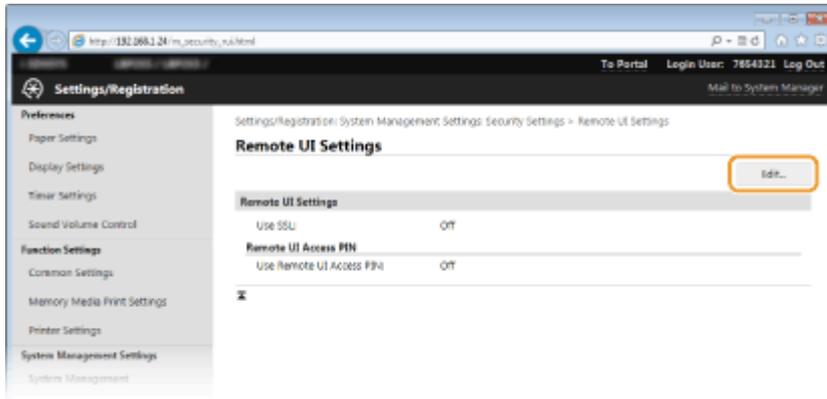
**2 Click [Settings/Registration].**



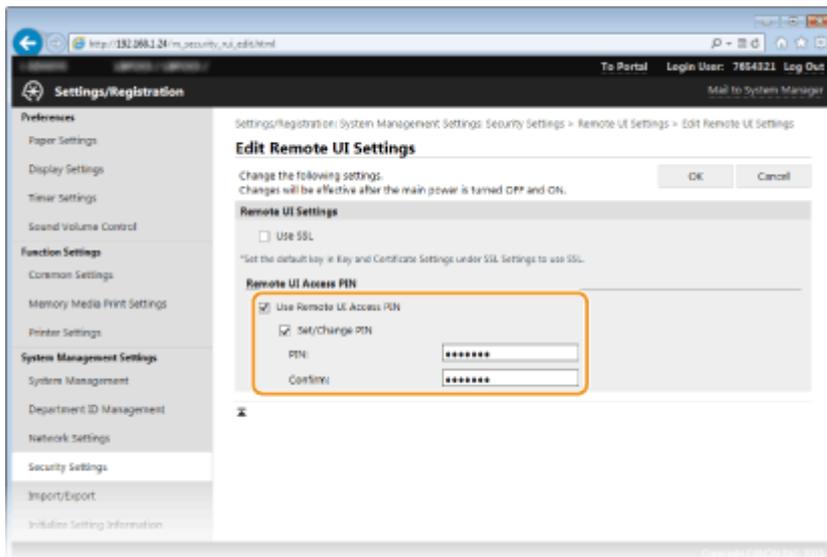
**3 Click [Security Settings] ▶ [Remote UI Settings].**



**4 Click [Edit].**



## 5 Select the [Use Remote UI Access PIN] check box and specify the PIN.



### [Use Remote UI Access PIN]

If you select this check box, you must enter a PIN to access the Remote UI.

### [Set/Change PIN]

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

## 6 Click [OK].

### NOTE

#### Using the operation panel

- You can also set a Remote UI Access PIN by pressing  on the operation panel. [▶ Remote UI Settings\(P. 341\)](#)

#### If Remote UI settings are initialized

- The Remote UI Access PIN is also initialized. After an initialization, reset the PIN. [▶ Initializing Menu\(P. 423\)](#)

### LINKS

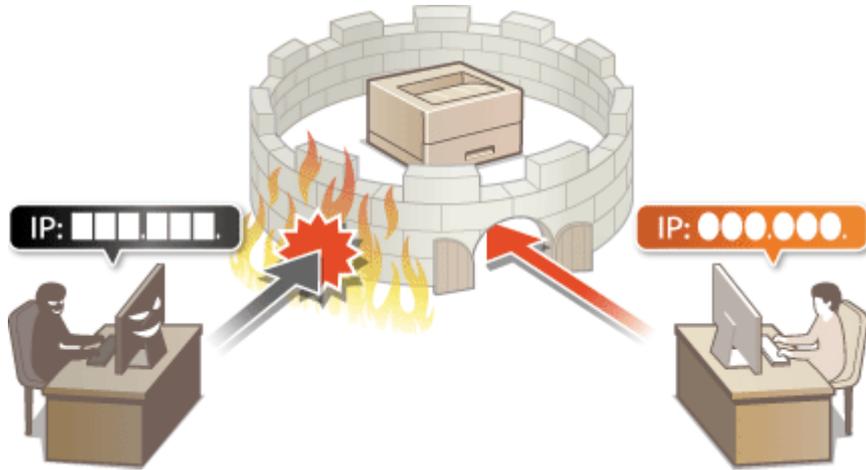
- [▶ Setting Access Privileges\(P. 206\)](#)
- [▶ Setting the System Manager ID\(P. 207\)](#)

## Restricting Communication by Using Firewalls

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OW20-045

Without proper security, unauthorized third parties can access computers and other communication devices that are connected to a network. To prevent this unauthorized access, 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

OW20-046

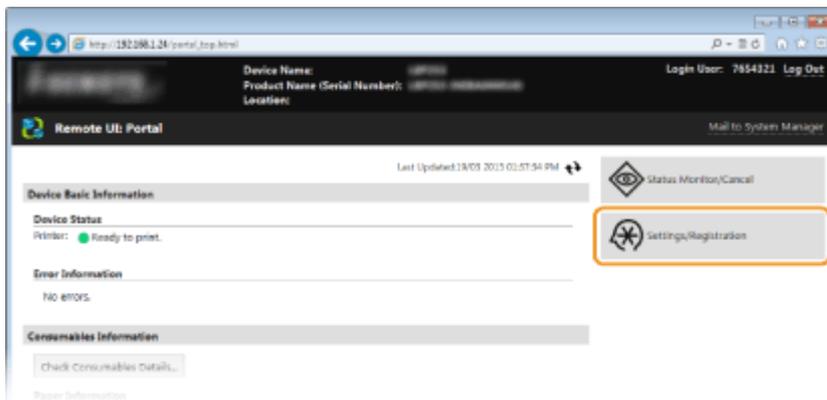
You can either limit communication to only devices with specified IP addresses, or block devices with specified IP addresses but permit other communications. You can specify a single IP address or a range of IP addresses.

## NOTE

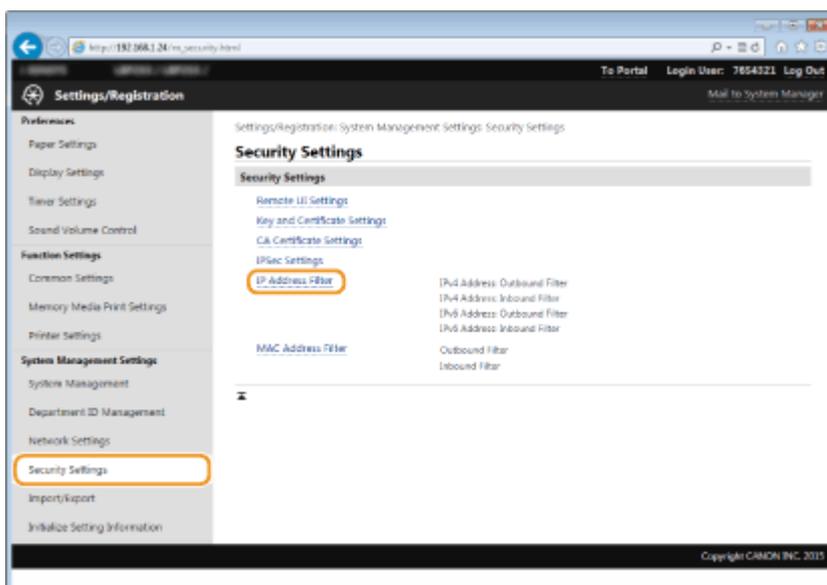
- Up to 16 IP addresses (or ranges of IP addresses) can be specified for both IPv4 and IPv6.
- The packet filters described in this section control communications over TCP, UDP, and ICMP.

**1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 270)**

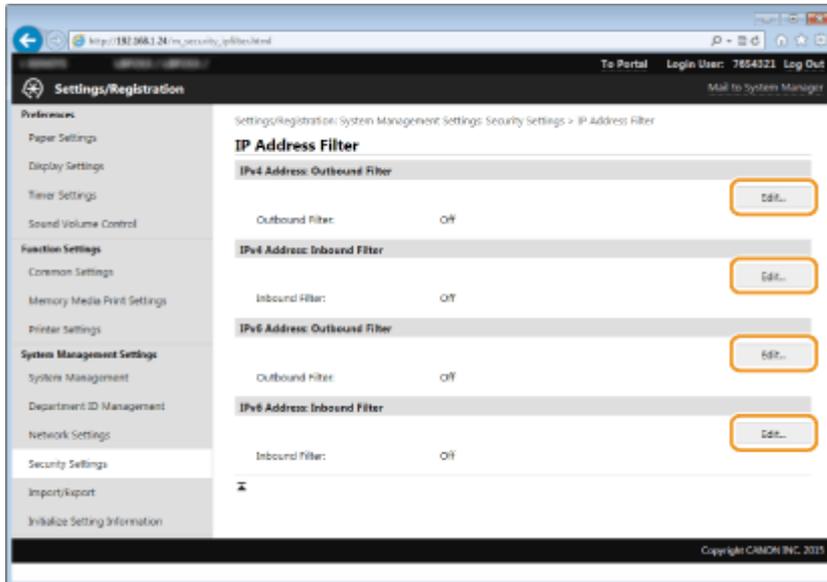
**2 Click [Settings/Registration].**



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



**4 Click [Edit] for the filter type that you want to use.**



#### [IPv4 Address: Outbound Filter]

Select to restrict sending data from the machine to a computer by specifying IPv4 addresses.

#### [IPv4 Address: Inbound Filter]

Select to restrict receiving data from the machine to a computer by specifying IPv4 addresses.

#### [IPv6 Address: Outbound Filter]

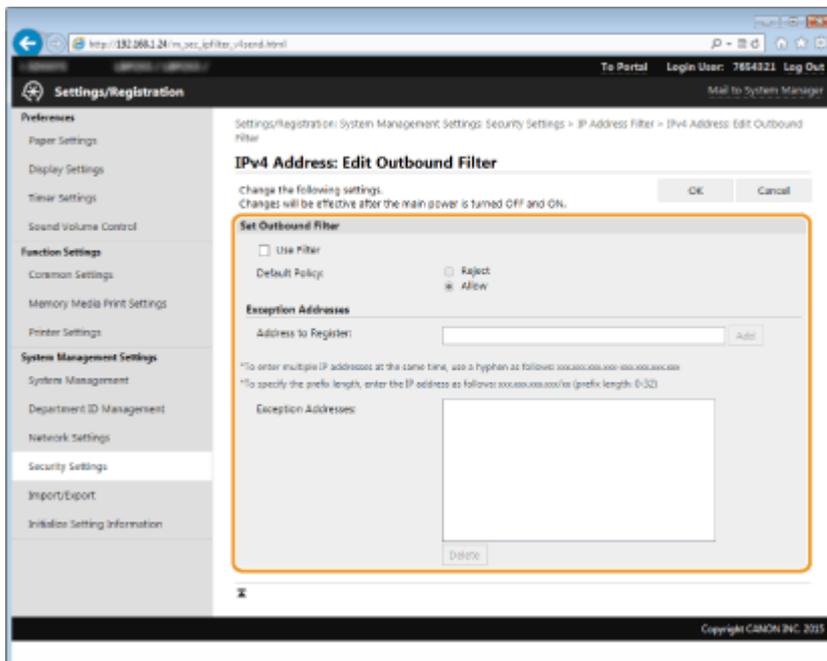
Select to restrict sending data from the machine to a computer by specifying IPv6 addresses.

#### [IPv6 Address: Inbound Filter]

Select to restrict receiving data from the machine to a computer by specifying IPv6 addresses.

## 5 Specify the settings for packet filtering.

- Select the default policy to allow or reject the communication of other devices with the machine, and then specify IP addresses for exceptions.



- 1 Select the [Use Filter] check box and click the [Reject] or [Allow] radio button for the [Default Policy].

#### [Use Filter]

Select the check box to restrict communication. Clear the check box to disable the restriction.

**[Default Policy]**

Select the precondition to allow or reject the communication of other devices with the machine.

[Reject]	Select to pass communication packets only when they are sent to or received from devices whose IP addresses are entered in [Exception Addresses]. Communications with other devices are prohibited.
[Allow]	Select to block communication packets when they are sent to or received from devices whose IP addresses are entered in [Exception Addresses]. Communications with other devices are permitted.

**2** Specify address exceptions.

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

**IMPORTANT:**

**Check for entry errors**

- If IP addresses are incorrectly entered, you may be unable to access the machine from the Remote UI, in which case you need to set <IPv4 Address Filter> or <IPv6 Address Filter> to <Off>. **▶IPv4 Address Filter(P. 339)** **▶IPv6 Address Filter(P. 339)**

**NOTE:**

**Entry form for IP addresses**

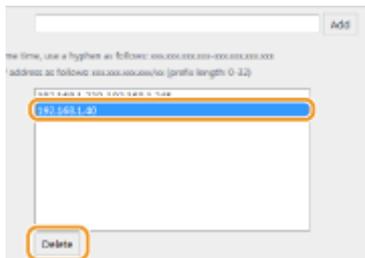
	Description	Example
Entering a single address	<b>IPv4:</b> Delimit numbers with periods.	192.168.0.10
	<b>IPv6:</b> Delimit alphanumeric characters with colons.	fe80::10
Specifying a range of addresses	Insert a hyphen between the addresses.	192.168.0.10-192.168.0.20
Specifying a range of addresses with a prefix	Enter the address, followed by a slash and a number indicating the prefix length.	192.168.0.32/27 fe80::1234/64

**When [Reject] is selected for an outbound filter**

- Outgoing multicast and broadcast packets cannot be filtered.

**Deleting an IP address from exceptions**

- Select an IP address and click [Delete].



**3** Click [OK].

**6** Restart the machine.

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

**NOTE****Using the operation panel**

- You can also enable or disable IP address filtering by pressing  on the operation panel. [▶ IPv4 Address Filter\(P. 339\)](#) [▶ IPv6 Address Filter\(P. 339\)](#)

**LINKS**

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- ▶ [Specifying MAC Addresses for Firewall Rules\(P. 223\)](#)

# Specifying MAC Addresses for Firewall Rules

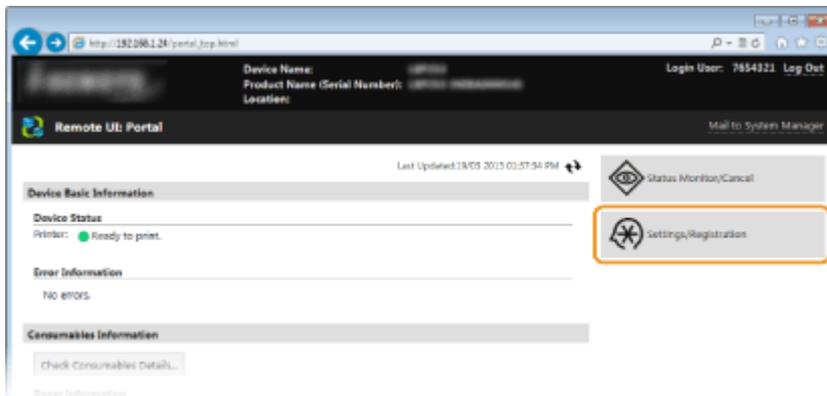
OW20-047

You can limit communication to only devices with specified MAC addresses, or block devices with specified MAC addresses but permit other communications. Up to 32 MAC addresses can be specified.

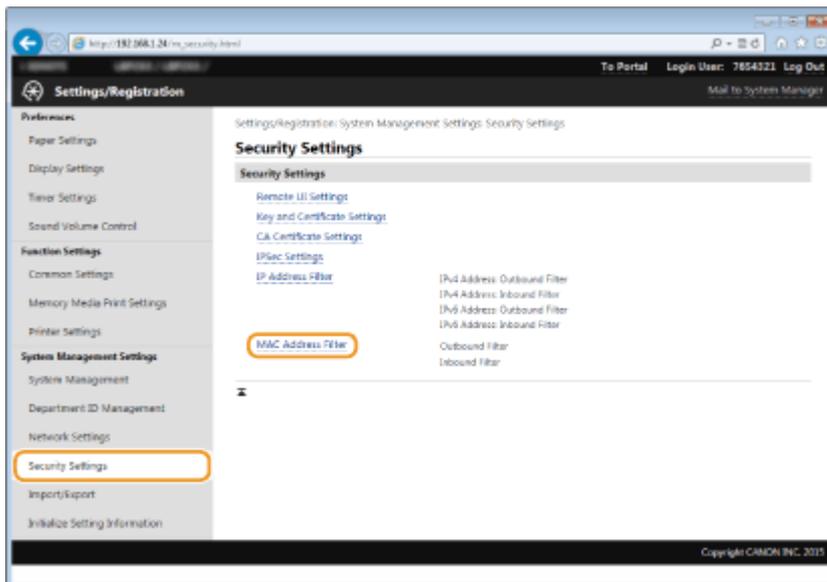
## IMPORTANT

- This function is unavailable when the machine is connected to a wireless LAN.

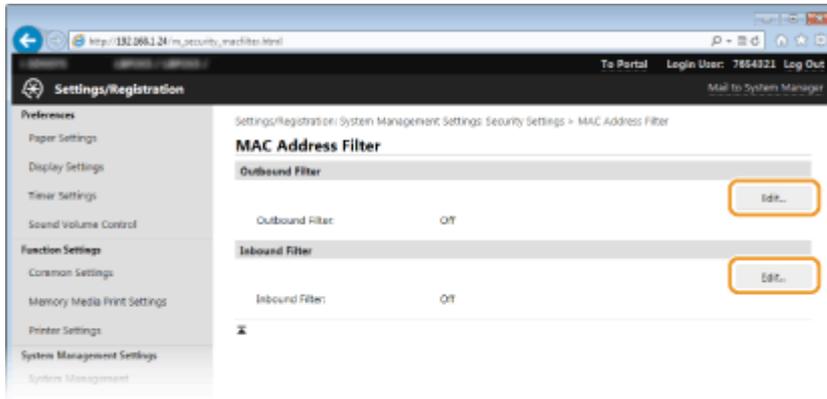
- 1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 270)
- 2 Click [Settings/Registration].



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



- 4 Click [Edit] for a filter type.



**[Outbound Filter]**

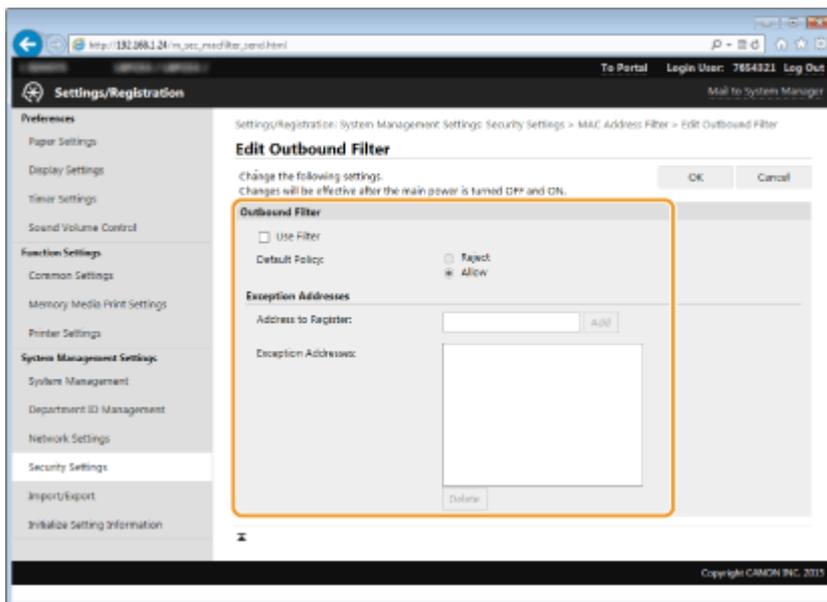
Select to restrict sending data from the machine to a computer by specifying MAC addresses.

**[Inbound Filter]**

Select to restrict receiving data from the machine to a computer by specifying MAC addresses.

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

- Select the precondition (default policy) to allow or reject the communication of other devices with the machine, and then specify MAC addresses for exceptions.



- 1 Select the [Use Filter] check box and click the [Reject] or [Allow] radio button for the [Default Policy].

**[Use Filter]**

Select the check box to restrict communication. Clear the check box to disable the restriction.

**[Default Policy]**

Select the precondition to allow or reject other devices to communicate with the machine.

[Reject]	Select to pass communication packets only when they are sent to or received from devices whose MAC addresses are entered in [Exception Addresses]. Communications with other devices are prohibited.
[Allow]	Select to block communication packets when they are sent to or received from devices whose MAC addresses are entered in [Exception Addresses]. Communications with other devices are permitted.

- 2 Specify address exceptions.

- Enter the MAC address in the [Address to Register] text box and click [Add].
- You do not need to delimit the address with hyphens or colons.

**IMPORTANT:****Check for entry errors**

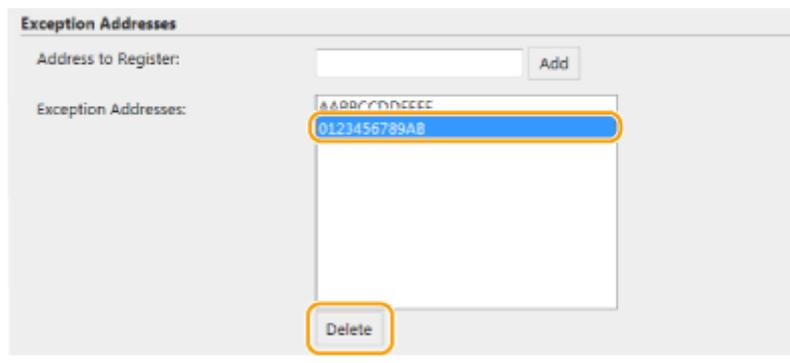
- If MAC addresses are incorrectly entered, you may become unable to access the machine from the Remote UI, in which case you need to set <MAC Address Filter> to <Off>. ▶ **MAC Address Filter(P. 340)**

**NOTE:****When [Reject] is selected for an outbound filter**

- Outgoing multicast and broadcast packets cannot be filtered.

**Deleting a MAC address from exceptions**

- Select a MAC address and click [Delete].



- 3 Click [OK].

**6 Restart the machine.**

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

**NOTE****Using the operation panel**

- You can also enable or disable MAC address filtering by pressing  on the operation panel. ▶ **MAC Address Filter(P. 340)**

**LINKS**

- ▶ **Specifying IP Addresses for Firewall Rules(P. 219)**

# Changing Port Numbers

0W20-048

Ports serve as endpoints for communicating with other devices. Typically, conventional 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, your Network Administrator may change the port numbers. When a port number has been changed, the new number must be shared with the communicating devices, such as computers and servers. Specify the port number settings depending on the network environment.

## NOTE

- To change the port number for proxy server, see [▶Setting a Proxy\(P. 228\)](#).

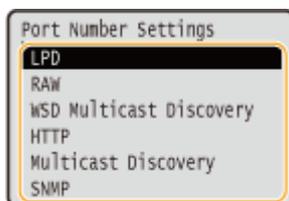
**1** Press .

**2** Use  /  to select <Network Settings>, and press .

- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press . [▶ Logging on to the Machine\(P. 34\)](#)

**3** Select <TCP/IP Settings>  <Port Number Settings>.

**4** Select a port, and press .



## NOTE:

### Learning more about the ports

- <LPD>/<RAW>/<WSD Multicast Discovery> [▶Configuring Printing Protocols and WSD Functions\(P. 165\)](#)
- <HTTP> [▶Disabling HTTP Communication\(P. 232\)](#)
- <SNMP> [▶Monitoring and Controlling the Machine with SNMP\(P. 191\)](#)
- <Multicast Discovery> [▶Configuring Settings for Device Management Software\(P. 196\)](#)

**5** Enter the port number using the numeric keys, and press .



**6** Restart the machine.

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

LINKS

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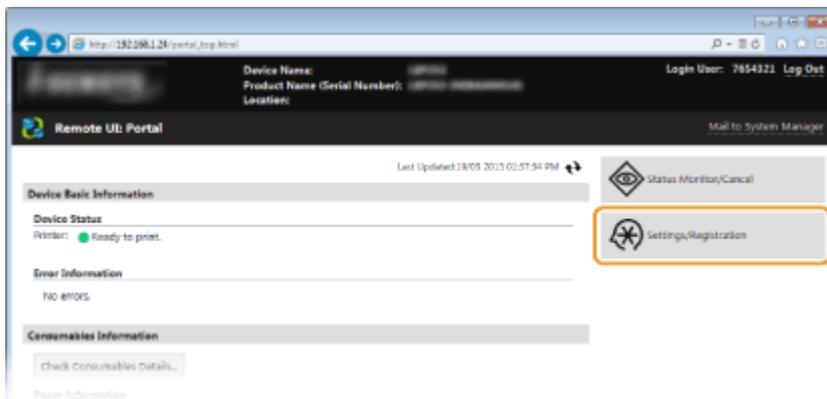
▶ **Configuring Printer Ports(P. 168)**

# Setting a Proxy

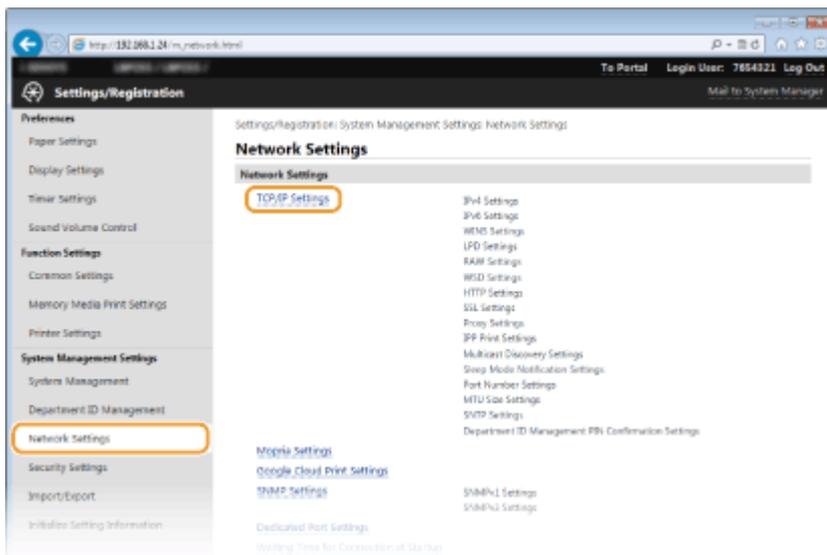
OW20-049

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.

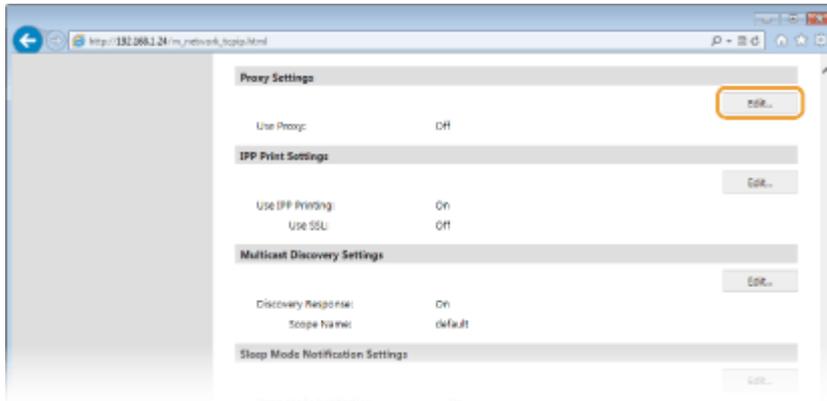
- 1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 270)
- 2 Click [Settings/Registration].



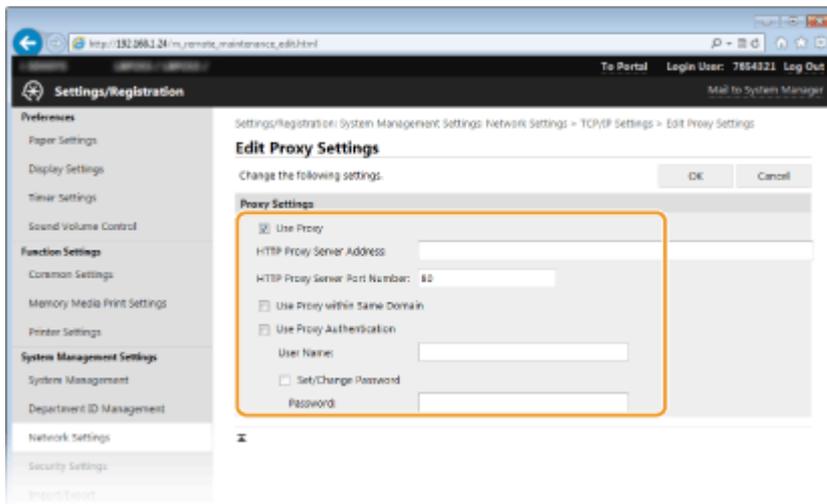
- 3 Click [Network Settings] ▶ [TCP/IP Settings].



- 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 also use the specified proxy server for communication with devices 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. 452)

## Restricting the Machine's Functions

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0W20-04A

Some of the functions of the machine may rarely be used or provide opportunities for misuse. For security purposes, the machine can be set to limit its capabilities by partially or completely disabling these functions.

### Restricting USB Functions

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- ▶ **Restricting USB Functions(P. 231)**

### Disabling HTTP Communication and Remote Management

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- ▶ **Disabling HTTP Communication(P. 232)**
- ▶ **Disabling Remote UI(P. 233)**

## Restricting USB Functions

0W20-04C

You can disable the USB port for computer connection located on the back side of the machine.



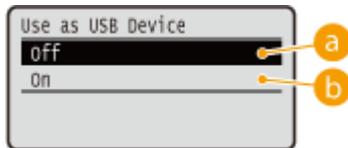
**1** Press .

**2** Use  /  to select <System Management Settings>, and press .

- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press   **Logging on to the Machine(P. 34)**

**3** Select <Use as USB Device>, and press .

**4** Select <Off>, and press .



**a** <Off>

Disables the USB port of the machine.

**b** <On>

Enables the USB port of the machine.

**5** Restart the machine.

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

# Disabling HTTP Communication

OW20-04E

HTTP is used for communications over the network, such as when you access the machine via the Remote UI. If you are using a USB connection or are otherwise not using HTTP, you can disable HTTP to block malicious third-party intrusions via the unused HTTP port.

## IMPORTANT

Disabling HTTP disables some of the network capabilities, such as the Remote UI, WSD printing., and printing with Google Cloud Print.

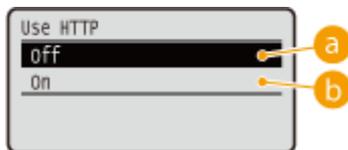
**1** Press .

**2** Use  /  to select <Network Settings>, and press .

- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press  .   
Logging on to the Machine(P. 34)

**3** Select <TCP/IP Settings>  <Use HTTP>.

**4** Select <Off>, and press .



**a** <Off>

Disables HTTP communication.

**b** <On>

Enables HTTP communication.

## LINKS

-  [Using Remote UI\(P. 269\)](#)
-  [Changing Port Numbers\(P. 226\)](#)
-  [Configuring Printing Protocols and WSD Functions\(P. 165\)](#)
-  [Using Google Cloud Print\(P. 452\)](#)

## Disabling Remote UI

0W20-04F

The Remote UI is useful because the machine settings can be specified by using a Web browser on a computer. To use the Remote UI, the machine must be connected to a computer over the network. If the machine is connected to a computer via USB, or if you do not need to use the Remote UI, you might want to disable the Remote UI to reduce the risk of having your machine controlled remotely over the network by malicious third parties.



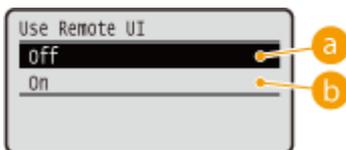
**1** Press **Ⓜ**.

**2** Use **▲ / ▼** to select **<System Management Settings>**, and press **OK**.

- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press **ID** . **▶**  
Logging on to the Machine(P. 34)

**3** Select **<Remote UI Settings>** ▶ **<Use Remote UI>**.

**4** Select **<Off>**, and press **OK**.



**a** **<Off>**

Disables the Remote UI.

**b** **<On>**

Enables the Remote UI.

**5** Restart the machine.

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

### LINKS

▶ **Using Remote UI(P. 269)**

▶ **Disabling HTTP Communication(P. 232)**

# Implementing Robust Security Features

0W20-04H

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.

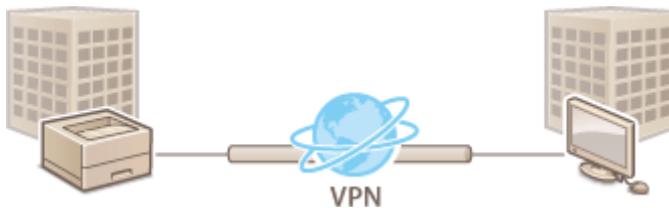
## SSL Encrypted Communication

SSL 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. SSL enables secure network communication when you access the machine from a computer via the Remote UI. [▶Enabling SSL Encrypted Communication for the Remote UI\(P. 235\)](#)



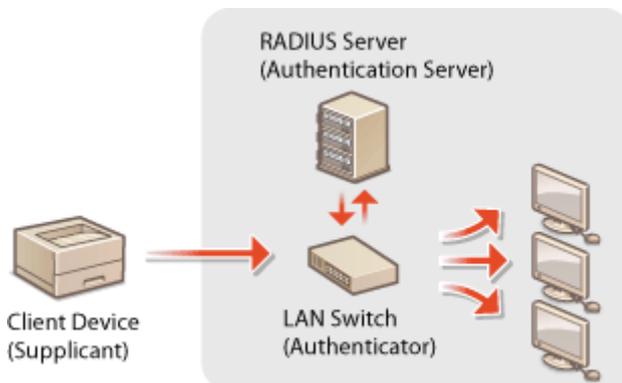
## IPSec Communication

While SSL only encrypts data used on a specific application, such as a Web browser or an e-mail application, IPSec encrypts the whole (or payloads of) IP packets. This enables IPSec to offer a more versatile security system than SSL. [▶Configuring IPSec Settings\(P. 239\)](#)



## 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\(P. 248\)](#)



## LINKS

[▶Configuring Settings for Key Pairs and Digital Certificates\(P. 253\)](#)

# Enabling SSL Encrypted Communication for the Remote UI

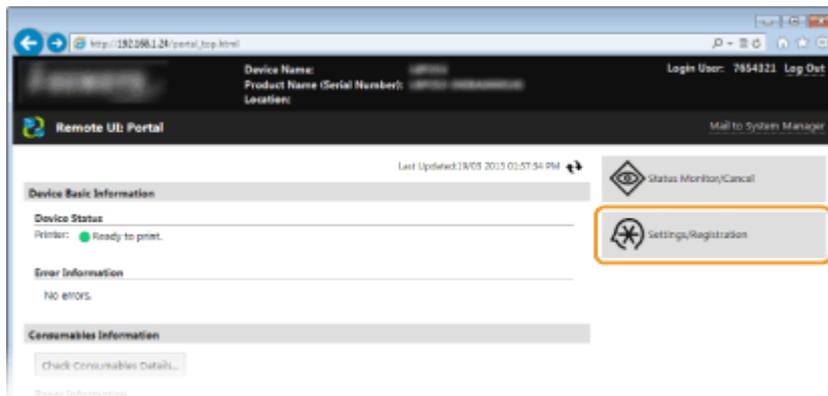
0W20-04J

You can encrypt communication between the machine and a Web browser on the computer by using Secure Sockets Layer (SSL). SSL is a mechanism for encrypting data sent or received over the network. SSL must be enabled when the Remote UI is used for specifying settings for IPsec (Pre-Shared Key Method), IEEE 802.1X authentication (TTLS/PEAP), or SNMPv3. To use SSL for the Remote UI, you need to set a key pair and enable the SSL function. Generate or install the key pair for SSL before enabling SSL ( [▶ Configuring Settings for Key Pairs and Digital Certificates\(P. 253\)](#) ).

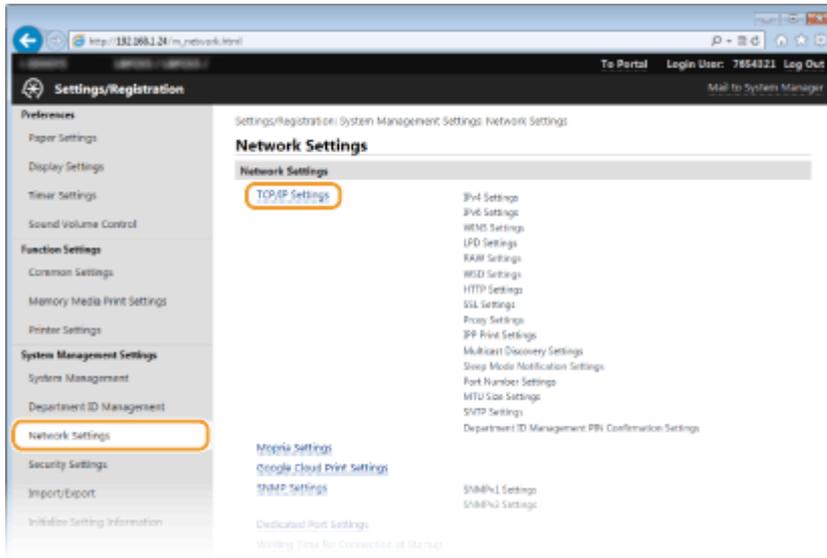


**1** Start the Remote UI and log on in System Manager Mode. [▶ Starting Remote UI\(P. 270\)](#)

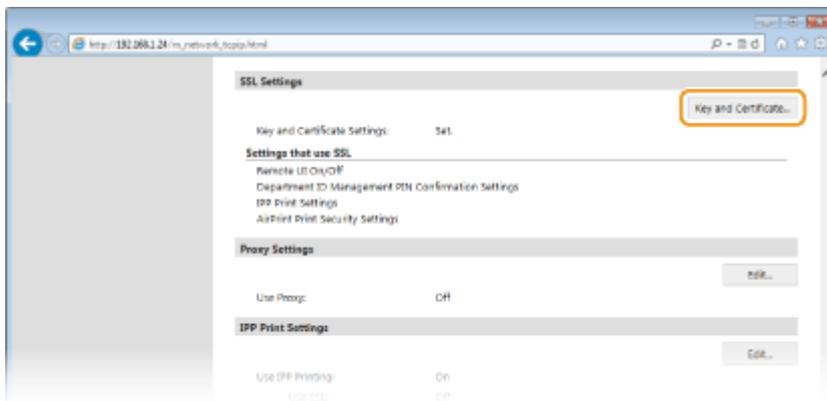
**2** Click [Settings/Registration].



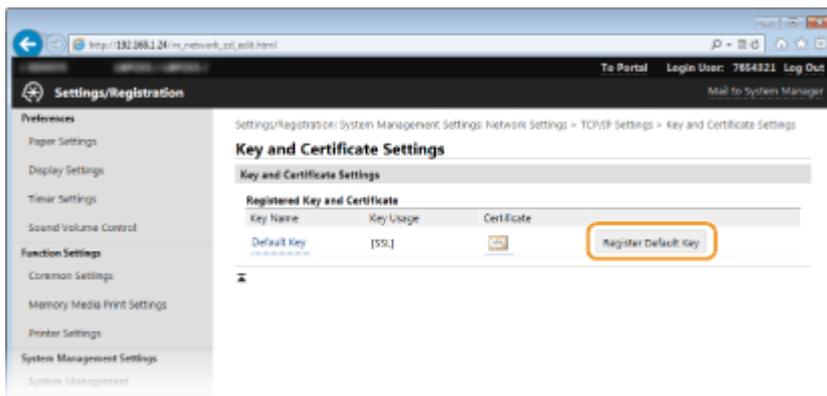
**3** Click [Network Settings] ▶ [TCP/IP Settings].



#### 4 Click [Key and Certificate] in [SSL Settings].



#### 5 Click [Register Default Key] on the right of the key pair you want to use.



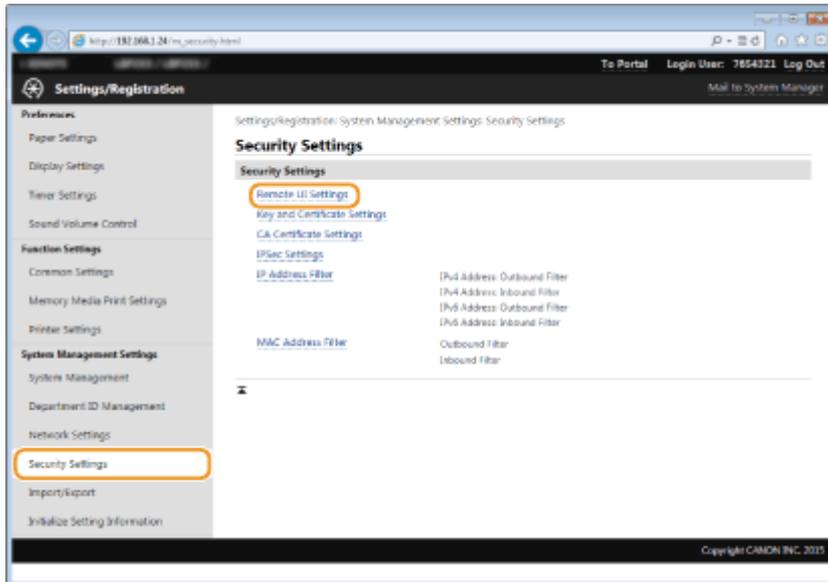
#### NOTE:

##### Viewing details of a certificate

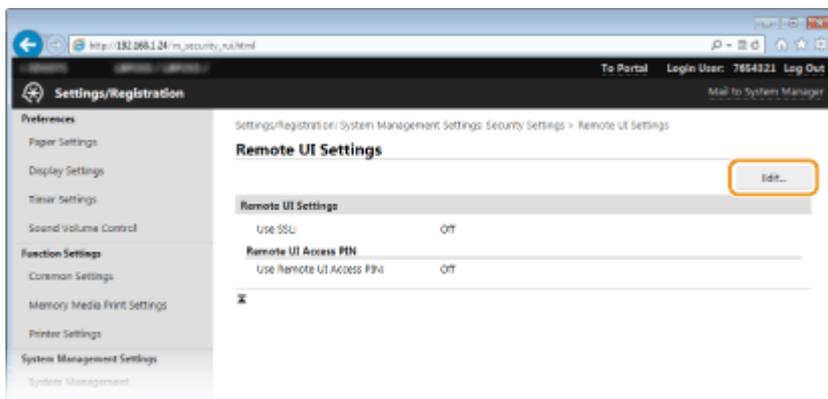
- You can check the details of the certificate or verify the certificate by clicking the corresponding text link under [Key Name], or the certificate icon. **▶ Verifying Key Pairs and Digital Certificates(P. 266)**

#### 6 Enable SSL for the Remote UI.

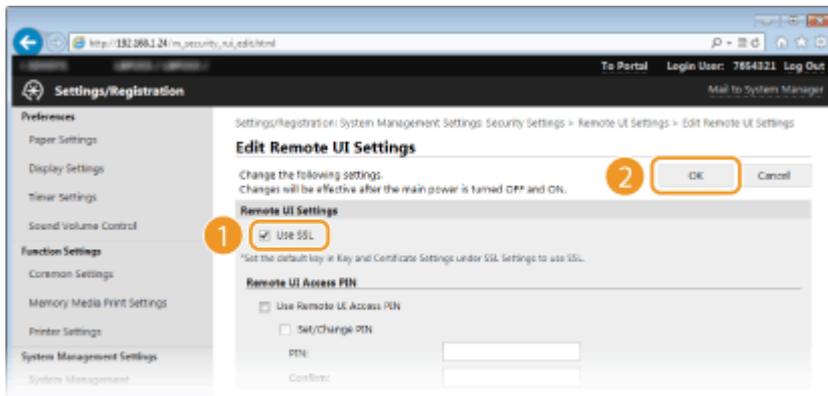
- 1 Click [Security Settings] ▶ [Remote UI Settings].



2 Click [Edit].



3 Select the [Use SSL] check box and click [OK].



7 Restart the machine.

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

## NOTE

### Using the operation panel

- You can also enable or disable SSL encrypted communication by pressing  on the operation panel.  **Use SSL(P. 338)**

### Starting the Remote UI with SSL

- If you try to start the Remote UI when SSL 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 Remote UI\(P. 270\)](#)

### LINKS

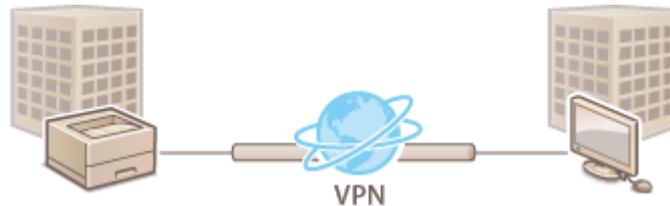
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- ▶[Generating Key Pairs\(P. 254\)](#)
- ▶[Using CA-issued Key Pairs and Digital Certificates\(P. 262\)](#)
- ▶[Configuring IPsec Settings\(P. 239\)](#)
- ▶[Configuring IEEE 802.1X Authentication\(P. 248\)](#)
- ▶[Monitoring and Controlling the Machine with SNMP\(P. 191\)](#)

## Configuring IPsec Settings

0W20-04K

Internet Protocol Security (IPsec or IPsec) is a protocol suite for encrypting data transported over a network, including Internet networks. While SSL only encrypts data used on a specific application, such as a Web browser or an e-mail application, IPsec encrypts either whole IP packets or the payloads of IP packets, offering a more versatile security system. The IPsec of the machine works in transport mode, in which the payloads of IP packets are encrypted. With this feature, the machine can connect directly to a computer that is in the same virtual private network (VPN). Check the system requirements and set the necessary configuration on the computer before you configure the machine.



### System Requirements

IPsec that is supported by the machine conforms to RFC2401, RFC2402, RFC2406, and RFC4305.

Operating system	Windows Vista/7/8/Server 2003/Server 2008/Server 2012	
Connection mode	Transport mode	
Key exchange protocol	IKEv1 (main mode)	
	Authentication method	<ul style="list-style-type: none"> <li>• Pre-shared key</li> <li>• Digital signature</li> </ul>
	Hash algorithm (and key length)	<ul style="list-style-type: none"> <li>• HMAC-SHA1-96</li> <li>• HMAC-SHA2 (256 bits or 384 bits)</li> </ul>
	Encryption algorithm (and key length)	<ul style="list-style-type: none"> <li>• 3DES-CBC</li> <li>• AES-CBC (128 bits, 192 bits, or 256 bits)</li> </ul>
	Key exchange algorithm/group (and key length)	Diffie-Hellman (DH) <ul style="list-style-type: none"> <li>• Group 1 (768 bits)</li> <li>• Group 2 (1024 bits)</li> <li>• Group 14 (2048 bits)</li> </ul>
ESP	Hash algorithm	HMAC-SHA1-96
	Encryption algorithm (and key length)	<ul style="list-style-type: none"> <li>• 3DES-CBC</li> <li>• AES-CBC (128 bits, 192 bits, or 256 bits)</li> </ul>
	Hash algorithm/encryption algorithm (and key length)	AES-GCM (128 bits, 192 bits, or 256 bits)
AH	Hash algorithm	HMAC-SHA1-96

### NOTE

#### IPsec functional restrictions

- IPsec supports communication to a unicast address (or a single device).
- The machine cannot use both IPsec and DHCPv6 at the same time.
- IPsec is unavailable in networks in which NAT or IP masquerade is implemented.

### Using IPSec with IP address filter

- IP address filter settings are applied before the IPSec policies.
- ▶ **Specifying IP Addresses for Firewall Rules(P. 219)**

## Configuring IPSec Settings

Before using IPSec for encrypted communication, you need to register security policies (SP). A security policy consists of the groups of settings described below. Up to 10 policies can be registered. After registering policies, specify the order in which they are applied.

### Selector

Selector defines conditions for IP packets to apply IPSec communication. Selectable conditions include IP addresses and port numbers of the machine and the devices to communicate with.

### IKE

IKE configures the IKEV1 that is used for key exchange protocol. Note that instructions vary depending on the authentication method selected.

#### [Pre-Shared Key Method]

A key of up to 24 alphanumeric characters can be shared with the other devices. Enable SSL for the Remote UI before specifying this authentication method ( ▶ **Enabling SSL Encrypted Communication for the Remote UI(P. 235)** ).

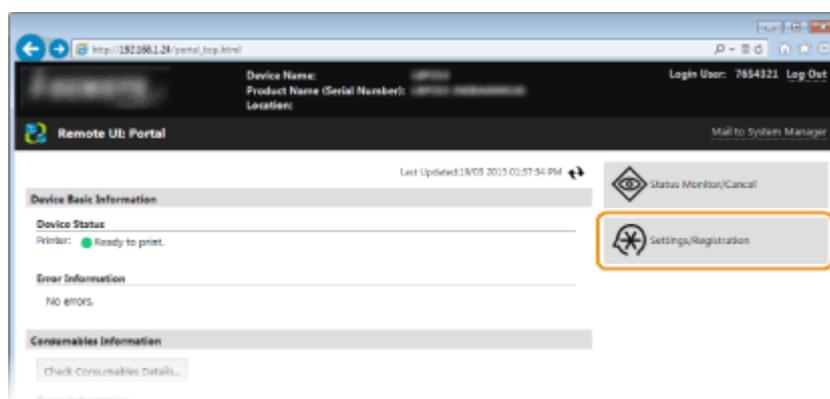
#### [Digital Signature Method]

The machine and the other devices authenticate each other by mutually verifying their digital signatures. Generate or install the key pair beforehand ( ▶ **Using CA-issued Key Pairs and Digital Certificates(P. 262)** ).

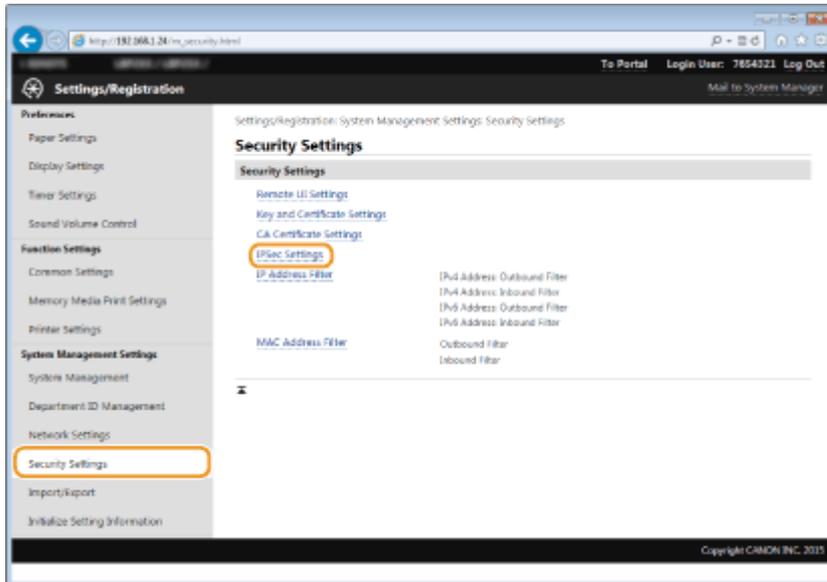
### AH/ESP

Specify the settings for AH/ESP, which is added to packets during IPSec communication. AH and ESP can be used at the same time. You can also select whether or not to enable PFS for tighter security.

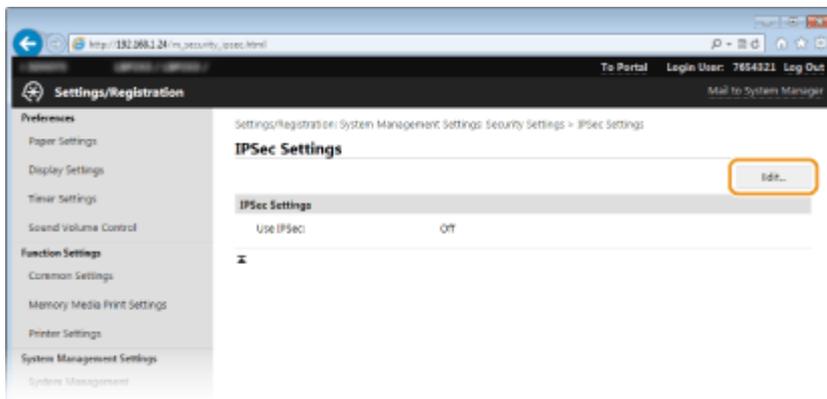
- 1 Start the Remote UI and log on in System Manager Mode. ▶ **Starting Remote UI(P. 270)**
- 2 Click [Settings/Registration].



- 3 Click [Security Settings] ▶ [IPSec Settings].

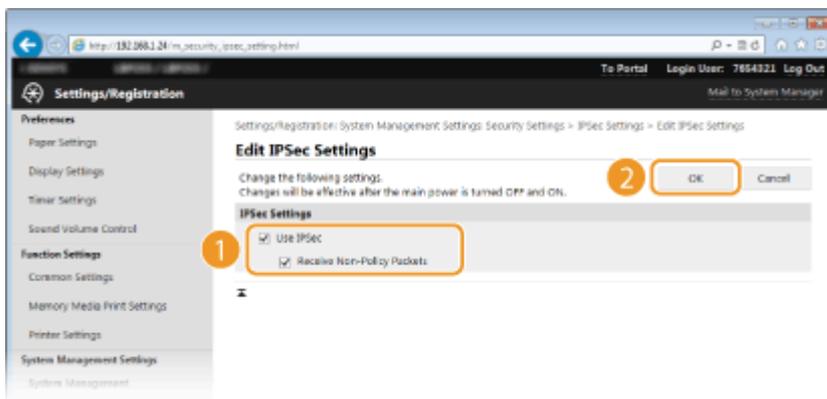


#### 4 Click [Edit].

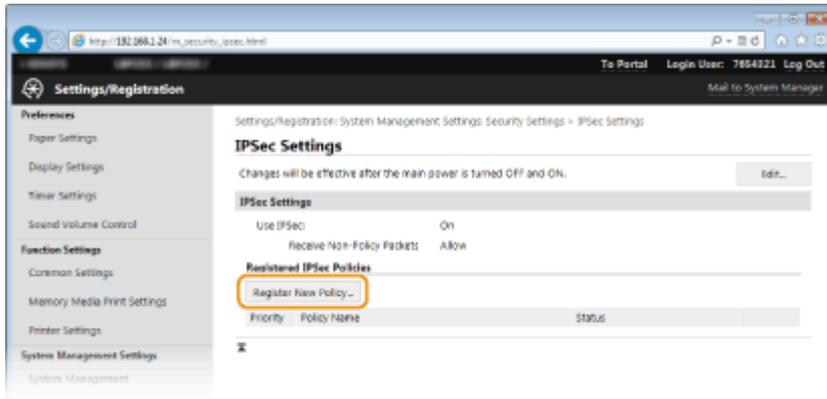


#### 5 Select the [Use IPSec] check box and click [OK].

- If you want the machine to only receive packets that match one of the security policies that you define in the steps below, clear the [Receive Non-Policy Packets] check box.

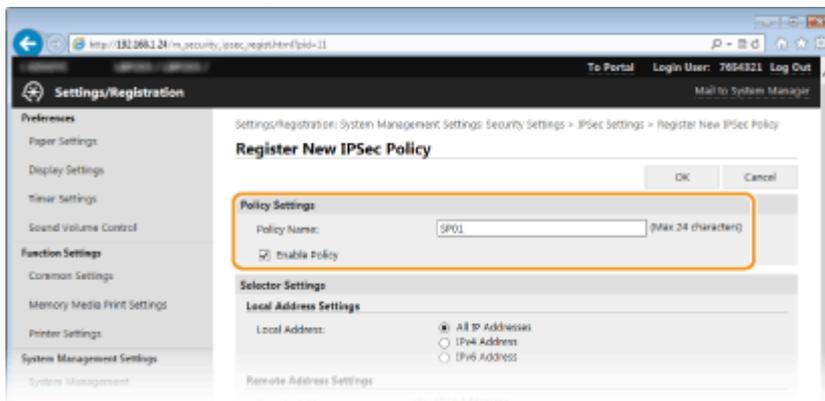


#### 6 Click [Register New Policy].

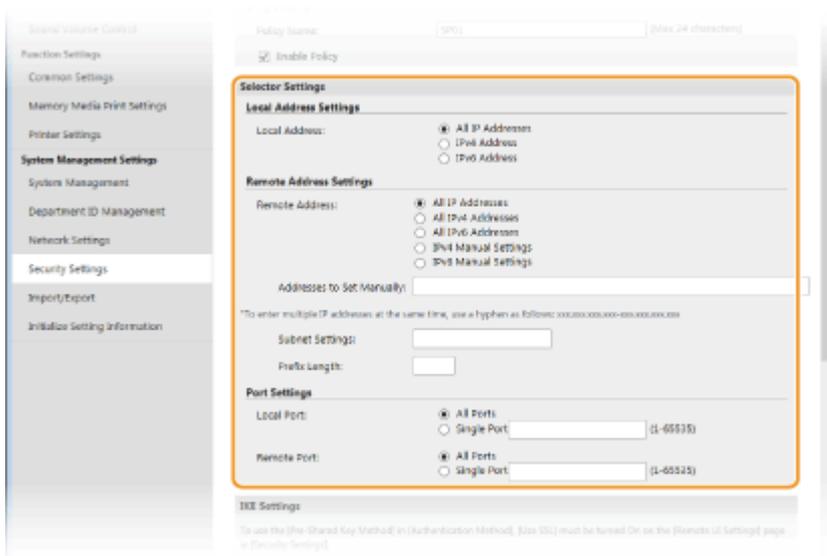


## 7 Specify the Policy Settings.

- 1 In the [Policy Name] text box, enter up to 24 alphanumeric characters for a name that is used for identifying the policy.
- 2 Select the [Enable Policy] check box.



## 8 Specify the Selector Settings.



### [Local Address]

Click the radio button for the type of IP address of the machine to apply the policy.

[All IP Addresses]	Select to use IPsec for all IP packets.
--------------------	---

[IPv4 Address]	Select to use IPsec for all IP packets that are sent to or from the IPv4 address of the machine.
[IPv6 Address]	Select to use IPsec for all IP packets that are sent to or from an IPv6 address of the machine.

**[Remote Address]**

Click the radio button for the type of IP address of the other devices to apply the policy.

[All IP Addresses]	Select to use IPsec for all IP packets.
[All IPv4 Addresses]	Select to use IPsec for all IP packets that are sent to or from IPv4 addresses of the other devices.
[All IPv6 Addresses]	Select to use IPsec for all IP packets that are sent to or from IPv6 addresses of the other devices.
[IPv4 Manual Settings]	Select to specify a single IPv4 address or a range of IPv4 addresses to apply IPsec. Enter the IPv4 address (or the range) in the [Addresses to Set Manually] text box.
[IPv6 Manual Settings]	Select to specify a single IPv6 address or a range of IPv6 addresses to apply IPsec. Enter the IPv6 address (or the range) in the [Addresses to Set Manually] text box.

**[Addresses to Set Manually]**

If [IPv4 Manual Settings] or [IPv6 Manual Settings] is selected for [Remote Address], enter the IP address to apply the policy. You can also enter a range of addresses by inserting a hyphen between the addresses.

**NOTE:****Entering IP addresses**

	Description	Example
Entering a single address	<b>IPv4:</b> Delimit numbers with periods.	192.168.0.10
	<b>IPv6:</b> Delimit alphanumeric characters with colons.	fe80::10
Specifying a range of addresses	Insert a hyphen between the addresses.	192.168.0.10-192.168.0.20

**[Subnet Settings]**

When manually specifying IPv4 address, you can express the range by using the subnet mask. Enter the subnet mask using periods to delimit numbers (example:"255.255.255.240").

**[Prefix Length]**

Specifying the range of IPv6 addresses manually also allows you to specify the range using prefixes. Enter a range between 0 and 128 as the prefix length.

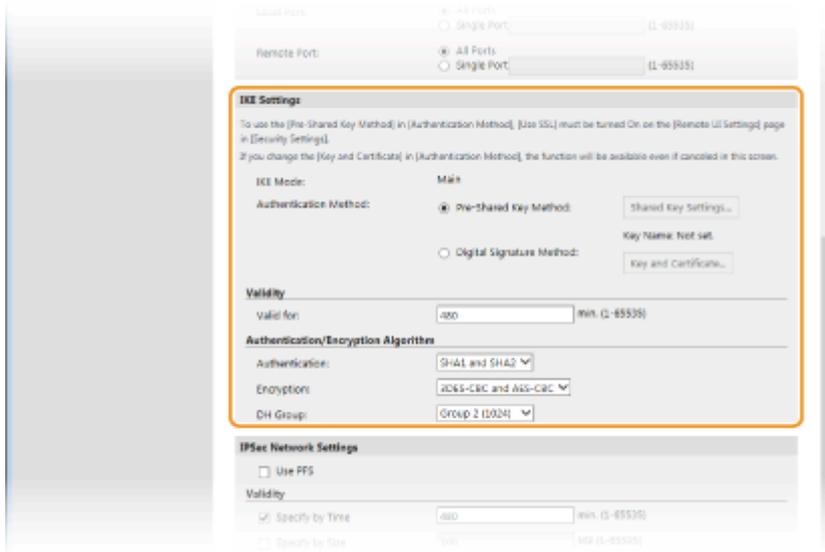
**[Local Port]/[Remote Port]**

If you want to create separate policies for each protocol, such as HTTP or RAW, enter the appropriate port number for the protocol to determine whether to use IPsec.

**IMPORTANT:****IPsec is not applied to the following packets**

- Loopback, multicast, and broadcast packets
- IKE packets (using UDP on port 500)
- ICMPv6 neighbor solicitation and neighbor advertisement packets

**9 Specify the IKE Settings.**

**[IKE Mode]**

The mode used for the key exchange protocol is displayed. The machine supports the main mode, not the aggressive mode.

**[Authentication Method]**

Select [Pre-Shared Key Method] or [Digital Signature Method] for the method used when authenticating the machine. You need to enable SSL for the Remote UI before selecting [Pre-Shared Key Method] ( **▶ Enabling SSL Encrypted Communication for the Remote UI(P. 235)** ). You need to generate or install a key pair before selecting [Digital Signature Method] ( **▶ Configuring Settings for Key Pairs and Digital Certificates(P. 253)** ).

**[Valid for]**

Specify how long a session lasts for IKE SA (ISAKMP SA). Enter the time in minutes.

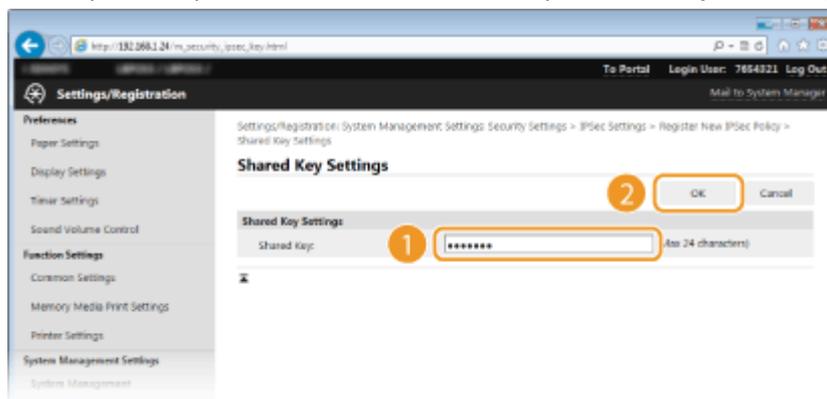
**[Authentication]/[Encryption]/[DH Group]**

Select an algorithm from the drop-down list. Each algorithm is used in the key exchange.

[Authentication]	Select the hash algorithm.
[Encryption]	Select the encryption algorithm.
[DH Group]	Select the Diffie-Hellman group, which determines the key strength.

## ■ Using a pre-shared key for authentication

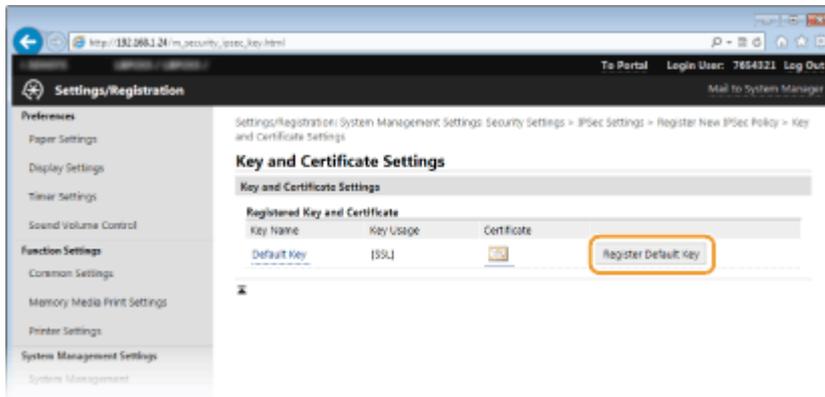
- 1 Click the [Pre-Shared Key Method] radio button for [Authentication Method] and then click [Shared Key Settings].
- 2 Enter up to 24 alphanumeric characters for the pre-shared key and click [OK].



- 3 Specify the [Valid for] and [Authentication]/[Encryption]/[DH Group] settings.

## ■ Using a key pair and preinstalled CA certificates for authentication

- 1 Click the [Digital Signature Method] radio button for [Authentication Method] and then click [Key and Certificate].
- 2 Click [Register Default Key] on the right of a key pair you want to use.



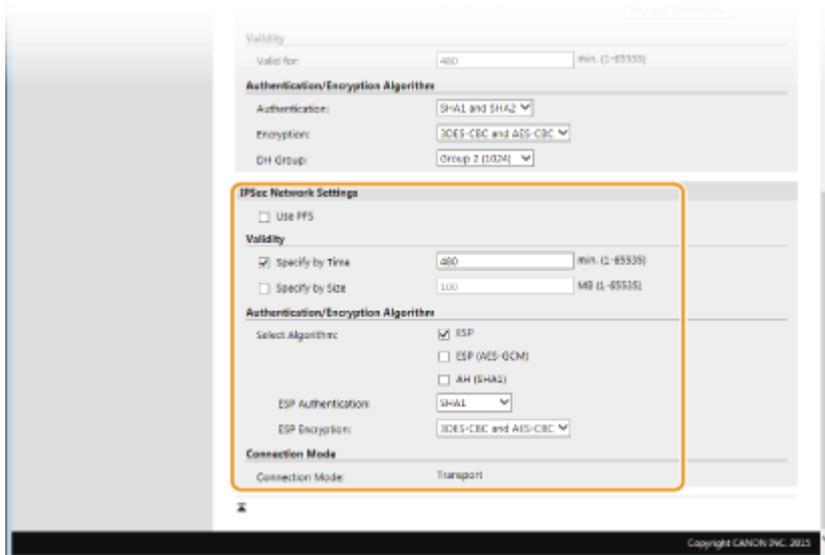
### NOTE:

#### 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 Digital Certificates\(P. 266\)](#)

- 3 Specify the [Valid for] and [Authentication]/[Encryption]/[DH Group] settings.

## 10 Specify the IPsec Network Settings.



### [Use PFS]

Select the check box to enable Perfect Forward Secrecy (PFS) for IPsec session keys. Enabling PFS enhances the security while increasing the load on the communication. Make sure that PFS is also enabled for the other devices.

### [Specify by Time]/[Specify by Size]

Set the conditions for terminating a session for IPsec SA. IPsec SA is used as a communication tunnel. Select either or both of the check boxes as necessary. If both check boxes are selected, the IPsec SA session is terminated when either of the conditions has been satisfied.

[Specify by Time]	Enter a time in minutes to specify how long a session lasts.
[Specify by Size]	Enter a size in megabytes to specify how much data can be transported in a session.

**[Select Algorithm]**

Select the [ESP], [ESP (AES-GCM)], or [AH (SHA1)] check box(es) depending on the IPSec header and the algorithm used. AES-GCM is an algorithm for both authentication and encryption. If [ESP] is selected, also select algorithms for authentication and encryption from the [ESP Authentication] and [ESP Encryption] drop-down lists.

[ESP Authentication]	To enable the ESP authentication, select [SHA1] for the hash algorithm. Select [Do Not Use] if you want to disable the ESP authentication.
[ESP Encryption]	Select the encryption algorithm for ESP. You can select [NULL] if you do not want to specify the algorithm, or select [Do Not Use] if you want to disable the ESP encryption.

**[Connection Mode]**

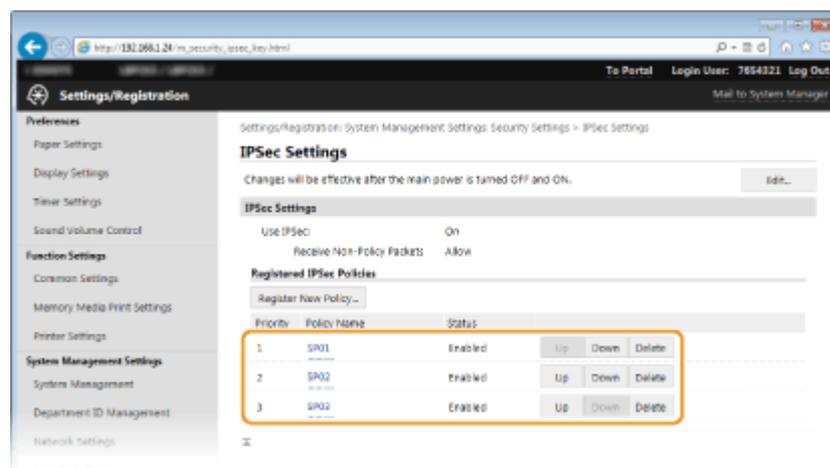
The connection mode of IPSec is displayed. The machine supports transport mode, in which the payloads of IP packets are encrypted. Tunnel mode, in which whole IP packets (headers and payloads) are encapsulated is not available.

**11 Click [OK].**

- If you need to register an additional security policy, return to step 6.

**12 Arrange the order of policies listed under [Registered IPSec Policies].**

- Policies are applied from one at the highest position to the lowest. Click [Up] or [Down] to move a policy up or down the order.

**NOTE:****Editing a policy**

- Click the corresponding text link under [Policy Name] for the edit screen.

**Deleting a policy**

- Click [Delete] on the right of the policy name you want to delete ► click [OK].

**13 Restart the machine.**

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

**NOTE**

### Using the operation panel

- You can also enable or disable IPSec communication by pressing  on the operation panel. [▶ Use IPSec\(P. 339\)](#)

### LINKS

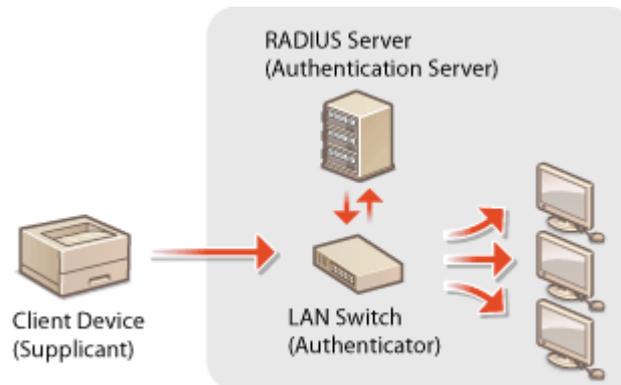
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- ▶ [Configuring Settings for Key Pairs and Digital Certificates\(P. 253\)](#)
- ▶ [IPSec Policy List\(P. 413\)](#)

## Configuring IEEE 802.1X Authentication

OW20-04L

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\(P. 262\)](#) ).

### 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.

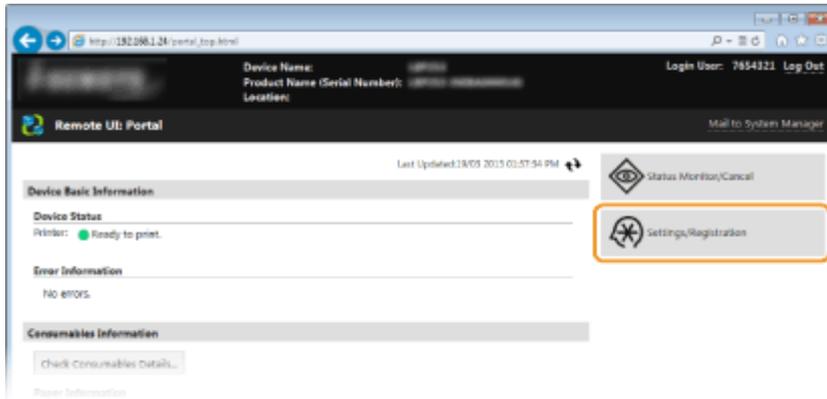
### TTLS

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 SSL for the Remote UI before configuring this authentication method ( [Enabling SSL Encrypted Communication for the Remote UI\(P. 235\)](#) ).

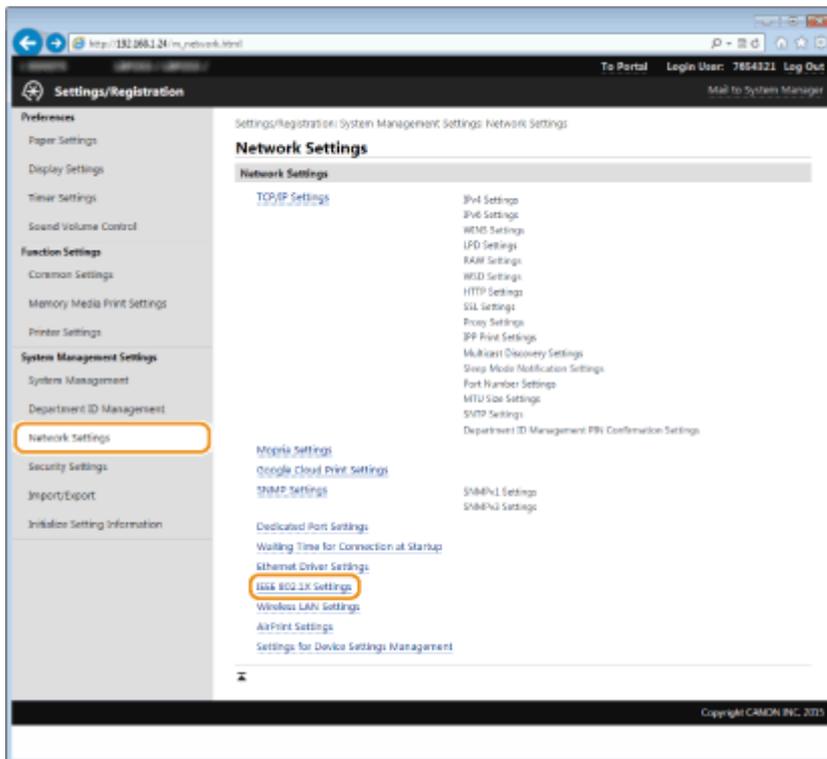
### PEAP

The required settings are almost the same as those of TTLS. MS-CHAPv2 is used as the internal protocol. Enable SSL for the Remote UI before configuring this authentication method ( [Enabling SSL Encrypted Communication for the Remote UI\(P. 235\)](#) ).

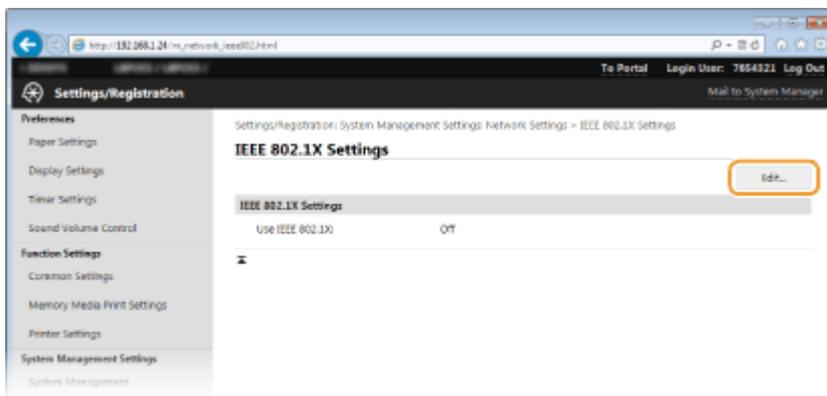
- 1 Start the Remote UI and log on in System Manager Mode. [Starting Remote UI\(P. 270\)](#)
- 2 Click [Settings/Registration].



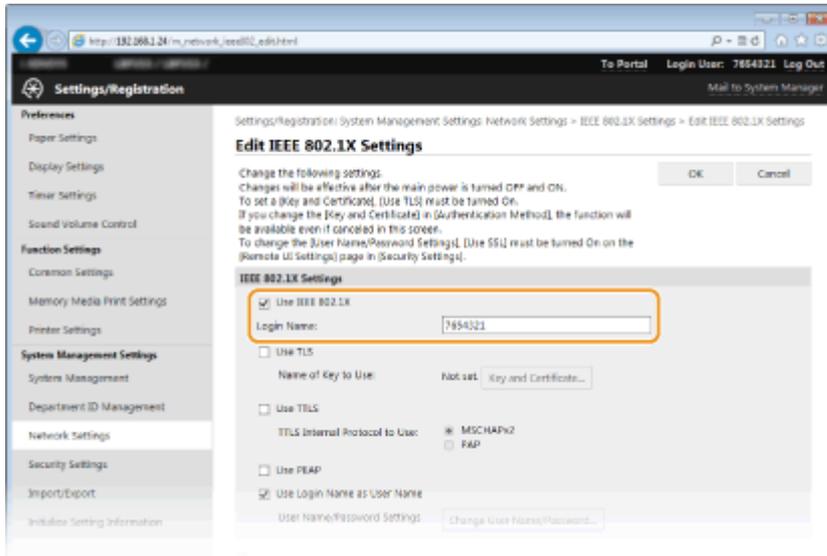
**3** Click [Network Settings] ► [IEEE 802.1X Settings].



**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]

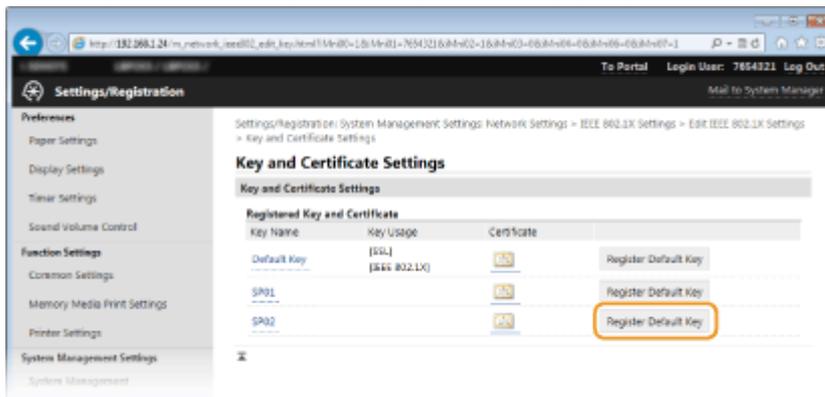
Select the check box to enable IEEE 802.1X authentication.

### [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.



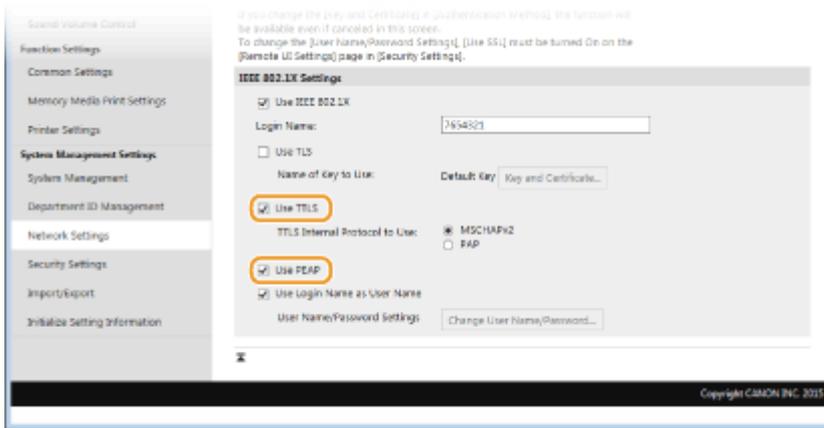
### NOTE:

#### 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 Digital Certificates(P. 266)**

## ■ Setting TTLS/PEAP

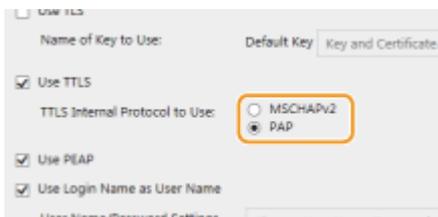
- 1 Select the [Use TTLS] or [Use PEAP] check box.



**NOTE:**

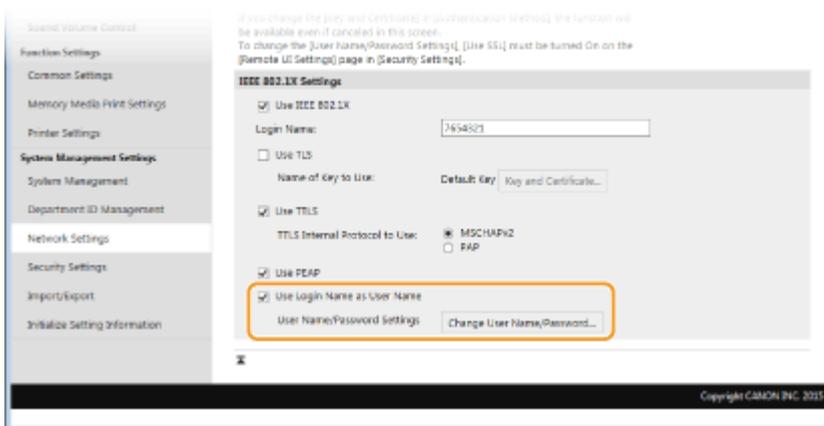
**Internal protocol for TTLS**

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

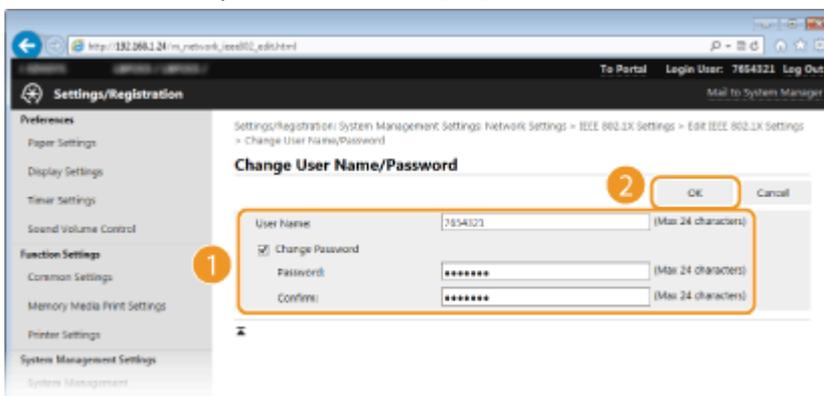


**2** Click [Change User Name/Password].

- 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].

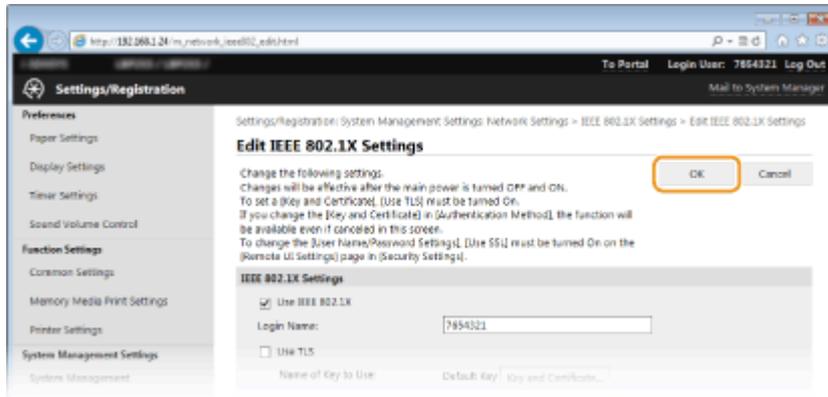


**[User Name]**

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.

**NOTE****Using the operation panel**

- You can also enable or disable IEEE 802.1X authentication by pressing  on the operation panel.  **IEEE 802.1X Settings(P. 299)**

**LINKS**

-  **Configuring Settings for Key Pairs and Digital Certificates(P. 253)**

# Configuring Settings for Key Pairs and Digital Certificates

0W20-04R

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 important and 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. Because data that has been encrypted with one of the key pair cannot be returned to its original data form without the other, public-key cryptography ensures secure communication of data over the network. Up to five key pairs, including the preinstalled pairs, can be registered ( [▶Using CA-issued Key Pairs and Digital Certificates\(P. 262\)](#) ). For SSL encrypted communication, a key pair can be generated for the machine ( [▶Generating Key Pairs\(P. 254\)](#) ).

## 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. A digital certificate that contains a public key of a certification authority (CA) is referred to as a CA certificate. CA certificates are used for verifying the device the machine is communicating with for features such as printing with Google Cloud Print or IEEE 802.1X authentication. Up to 67 CA certificates can be registered, including the 62 certificates that are preinstalled in the machine ( [▶Using CA-issued Key Pairs and Digital Certificates\(P. 262\)](#) ).

### ■ Key and Certificate Requirements

The certificate contained in a key pair generated with the machine conforms 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	<ul style="list-style-type: none"> <li>• Key pair: PKCS#12<sup>*1</sup></li> <li>• CA certificate: X.509v1 or X.509v3, DER (encoded binary)</li> </ul>
File extension	<ul style="list-style-type: none"> <li>• Key pair: ".p12" or ".pfx"</li> <li>• CA certificate: ".cer"</li> </ul>
Public key algorithm (and key length)	RSA (512 bits, 1024 bits, 2048 bits, or 4096 bits)
Certificate signature algorithm	SHA1-RSA, SHA256-RSA, SHA384-RSA <sup>*2</sup> , SHA512-RSA <sup>*2</sup> , MD5-RSA, or MD2-RSA
Certificate thumbprint algorithm	SHA1

<sup>\*1</sup> Requirements for the certificate contained in a key pair are pursuant to CA certificates.

<sup>\*2</sup> 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

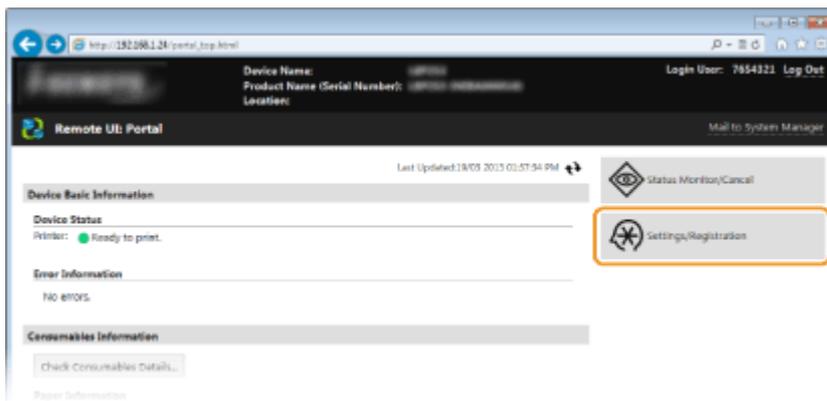
OW20-04S

A key pair can be generated with the machine when it is required for encrypted communication via Secure Sockets Layer (SSL). You can use SSL 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.

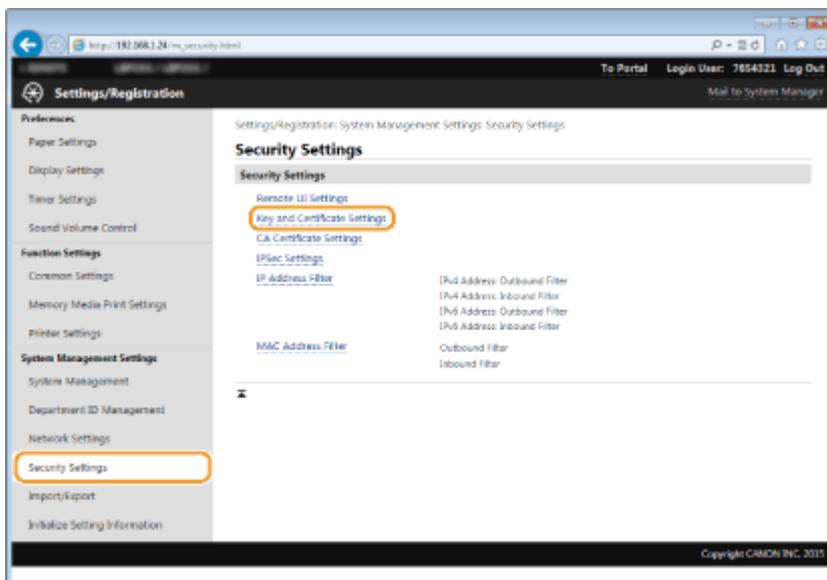
- ▶ **Generate Network Communication Key(P. 254)**
- ▶ **Generate Key and Certificate Signing Request (CSR)(P. 257)**

## Generate Network Communication Key

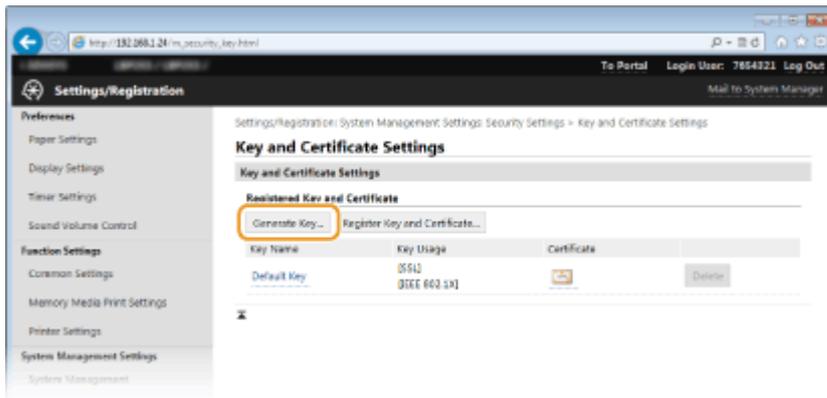
- 1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 270)**
- 2 Click [Settings/Registration].**



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



#### 4 Click [Generate Key].

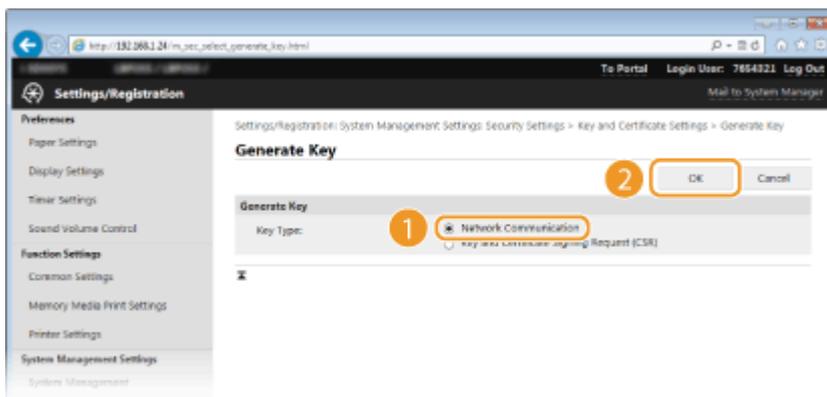


#### NOTE:

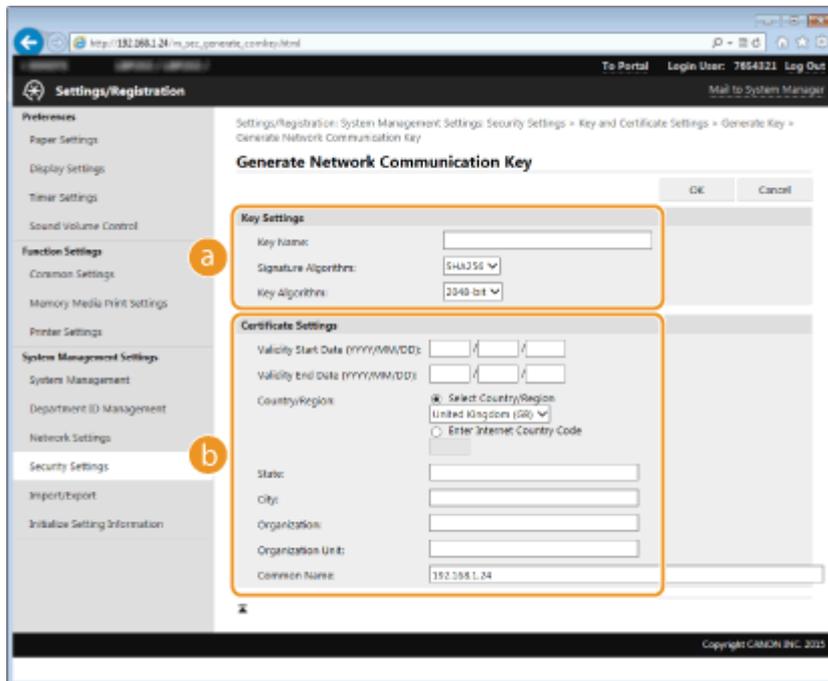
##### Deleting a registered key pair

- 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 "SSL" 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 [Network Communication] and click [OK].



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



### a [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].

### b [Certificate Settings]

#### [Validity Start Date (YYYY/MM/DD)]

Enter the validity start date of the certificate in the range between 01/01/2000 and 31/12/2037, in the order of: year, month, day.

#### [Validity End Date (YYYY/MM/DD)]

Enter the validity end date of the certificate in the range between 01/01/2000 and 31/12/2037, in the order of: year, month, day. A date earlier than [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].

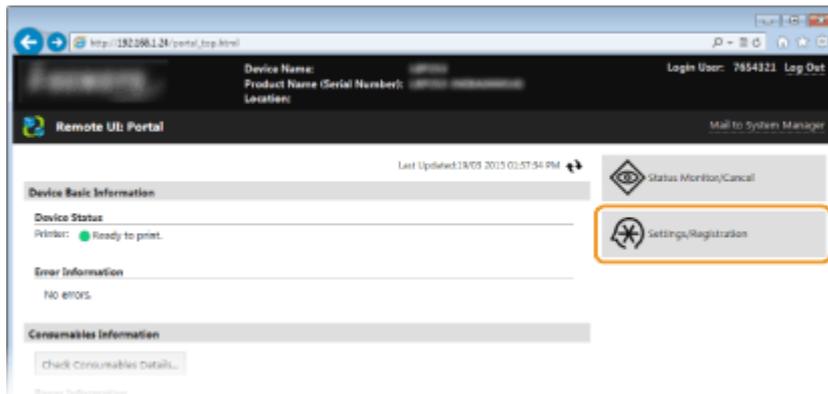
- Keys for network communication may take approximately 10 to 15 minutes to generate.
- After a key pair is generated, it is automatically registered to the machine.

## Generate Key and Certificate Signing Request (CSR)

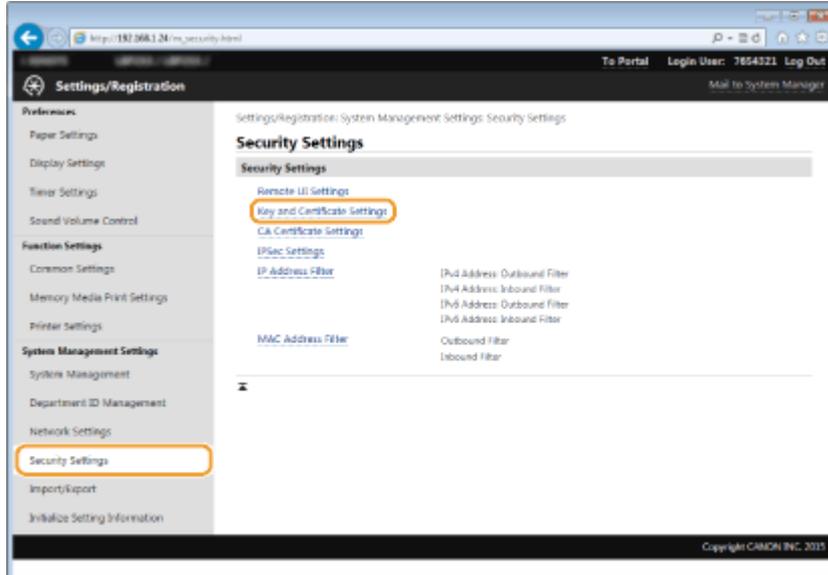
### 1 Start the Remote UI and log on in System Manager Mode.

▶ Starting Remote UI(P. 270)

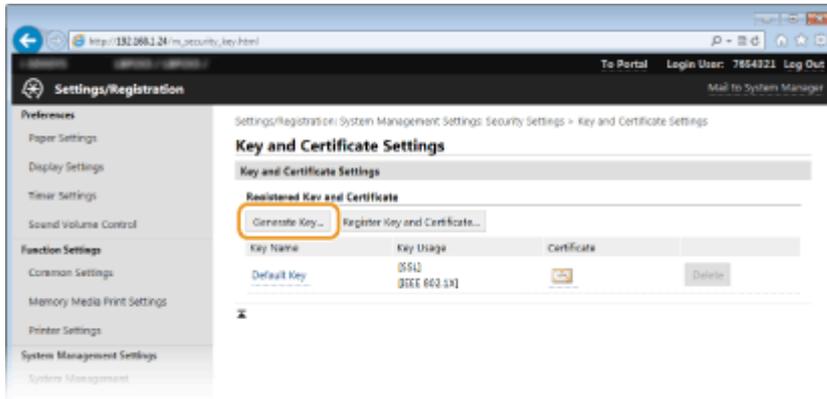
### 2 Click [Settings/Registration].



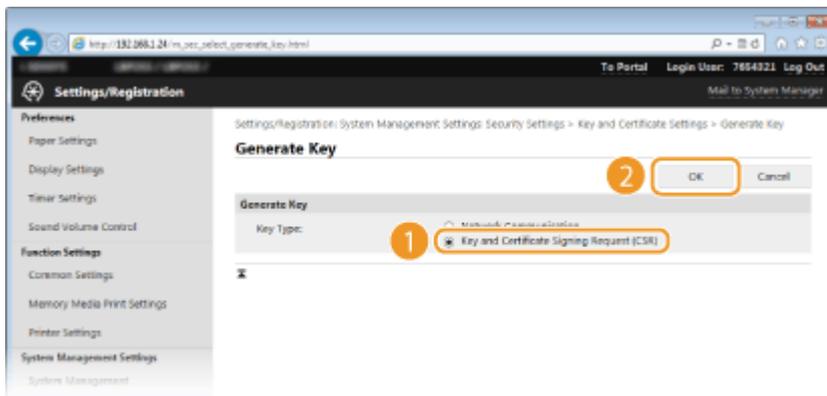
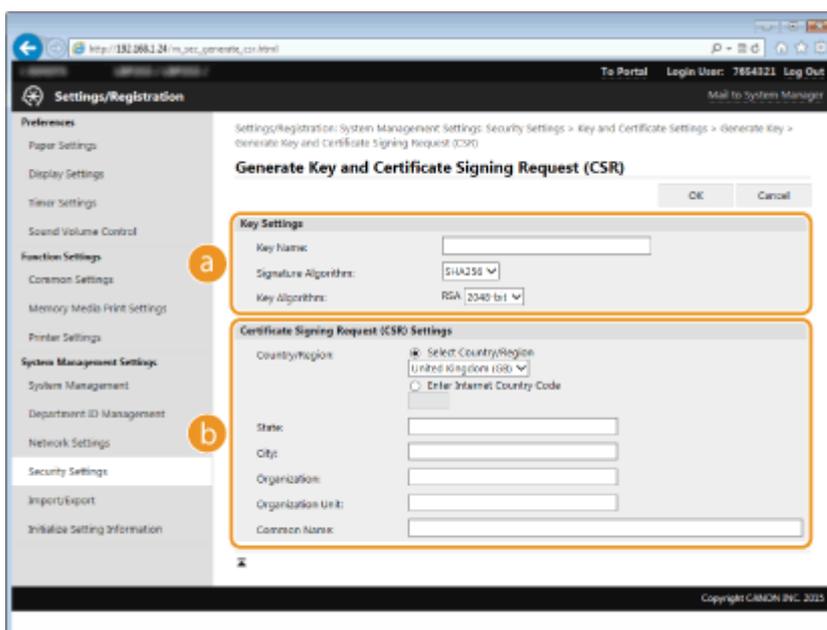
### 3 Click [Security Settings] ▶ [Key and Certificate Settings].



### 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 "SSL" 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.****a [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].

**b [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]**

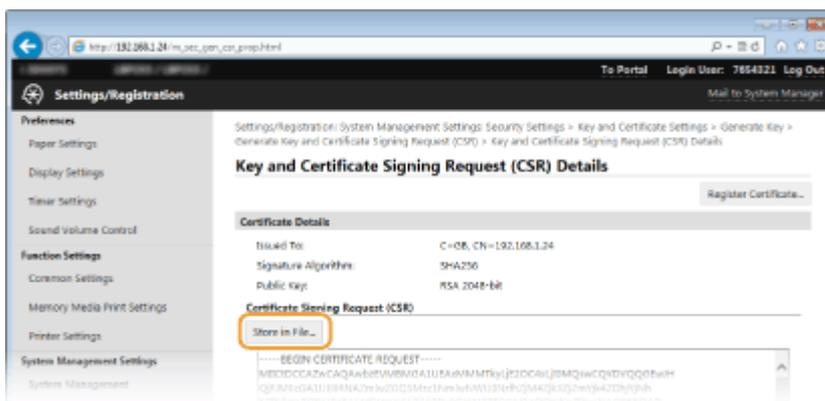
Enter up to 48 alphanumeric characters for the common name of the certificate as necessary. "Common Name" is often abbreviated as "CN."

**7 Click [OK].**

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

**8 Click [Store in File].**

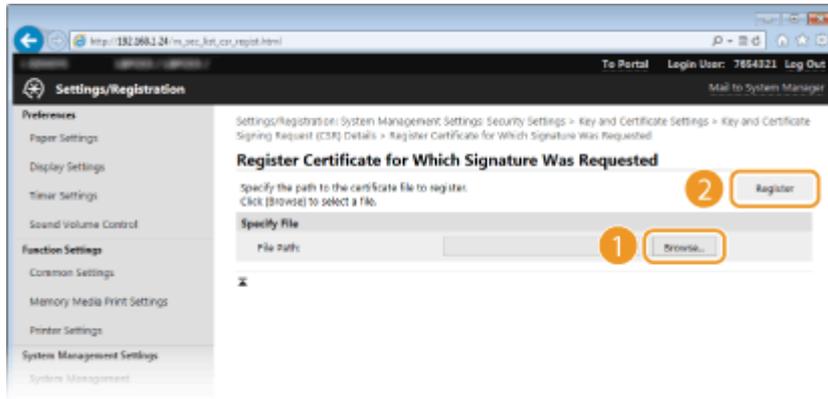
- A dialog box for storing the file appears. Choose where to store the file and click [Save].



⇒ 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.**





## LINKS

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- ▶ [Using CA-issued Key Pairs and Digital Certificates\(P. 262\)](#)
- ▶ [Verifying Key Pairs and Digital Certificates\(P. 266\)](#)
- ▶ [Enabling SSL Encrypted Communication for the Remote UI\(P. 235\)](#)
- ▶ [Configuring IPsec Settings\(P. 239\)](#)

# Using CA-issued Key Pairs and Digital Certificates

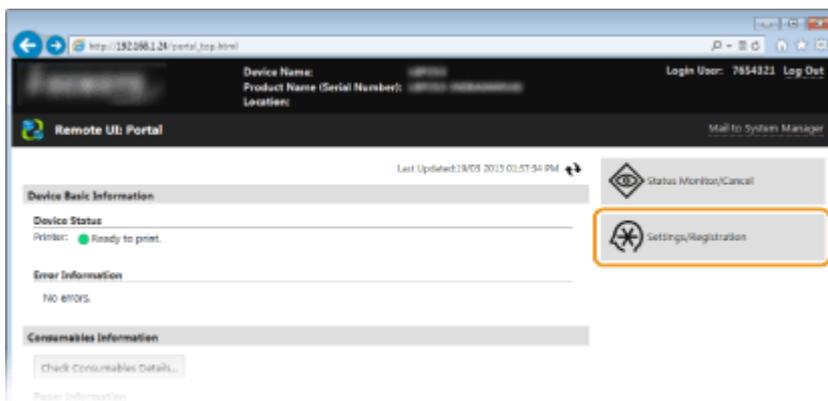
0W20-04U

Key pairs and digital certificates can be obtained from a certification authority (CA) for use with the machine. You can store and then register these files by using the Remote UI. Make sure that the key pair and the certificate satisfy the requirements of the machine ( [▶Key and Certificate Requirements\(P. 253\)](#) ). 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.



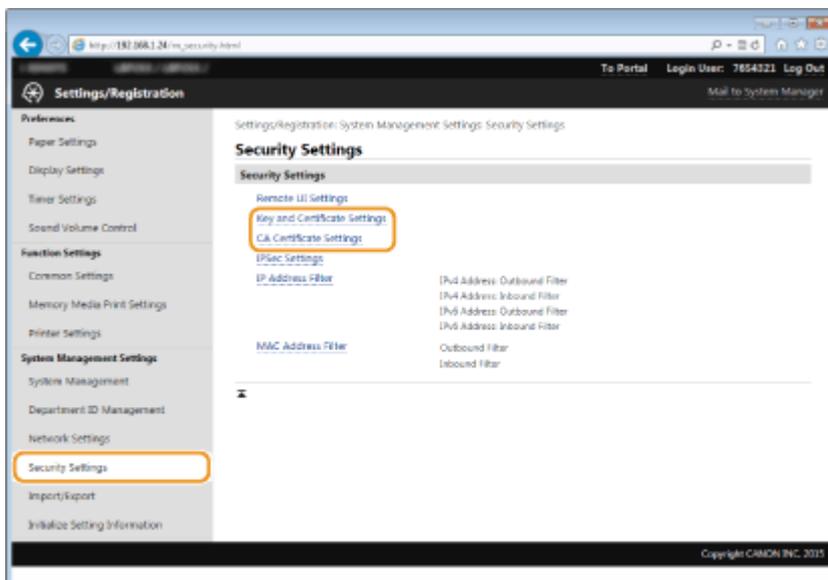
**1** Start the Remote UI and log on in System Manager Mode. [▶Starting Remote UI\(P. 270\)](#)

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

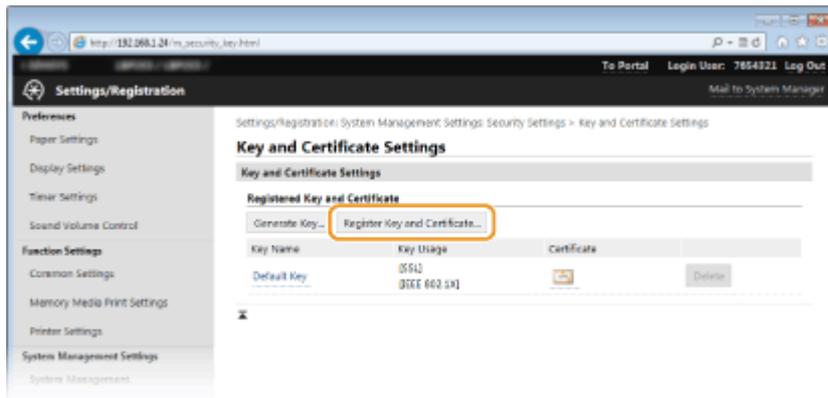


**3** Click [Security Settings] ▶ [Key and Certificate Settings] or [CA Certificate Settings].

- 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:

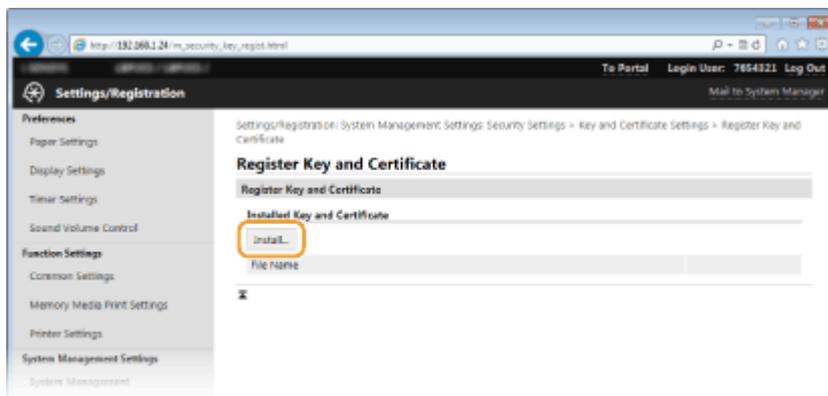
##### Deleting a registered key pair or CA certificate

- Click [Delete] on the right of the key pair or CA certificate you want to delete ► click [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 "[SSL]" 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 certificate 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].

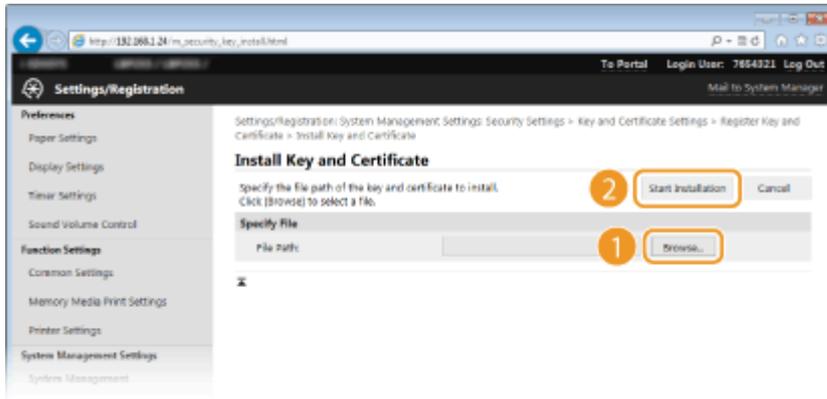


#### NOTE:

##### Deleting a key pair or CA certificate

- Click [Delete] on the right of the file you want to delete, and then click [OK].

#### 6 Click [Browse], specify the file to install, and click [Start Installation].

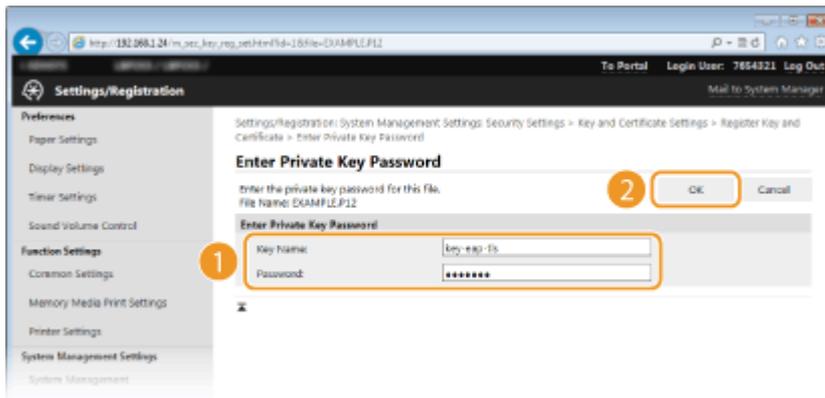


- The key pair or CA certificate is installed in the machine.

## 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]

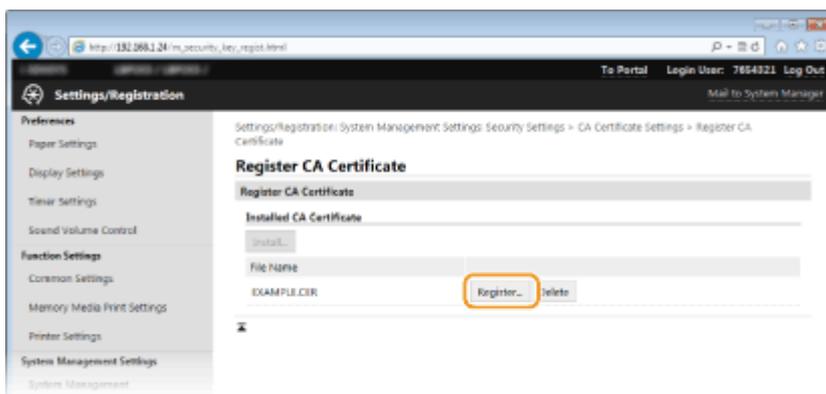
Enter up to 24 alphanumeric characters for the name of the key pair to be registered.

#### [Password]

Enter up to 24 alphanumeric characters for the password of the private key set for the file to be registered.

### ■ Registering a CA certificate

Click [Register] on the right of the CA certificate you want to register.



## LINKS

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- ▶ **Generating Key Pairs(P. 254)**
- ▶ **Verifying Key Pairs and Digital Certificates(P. 266)**
- ▶ **Enabling SSL Encrypted Communication for the Remote UI(P. 235)**
- ▶ **Configuring IPSec Settings(P. 239)**
- ▶ **Configuring IEEE 802.1X Authentication(P. 248)**

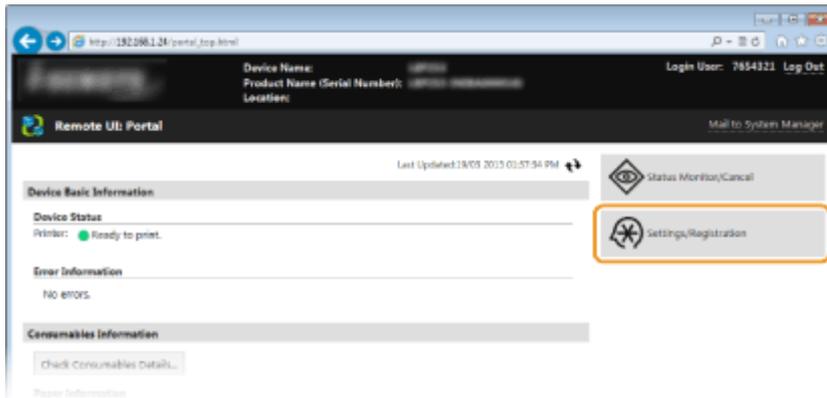
# Verifying Key Pairs and Digital Certificates

0W20-04W

Once key pairs and CA certificates are registered, you can view their detailed information or verify them for validity and signature.

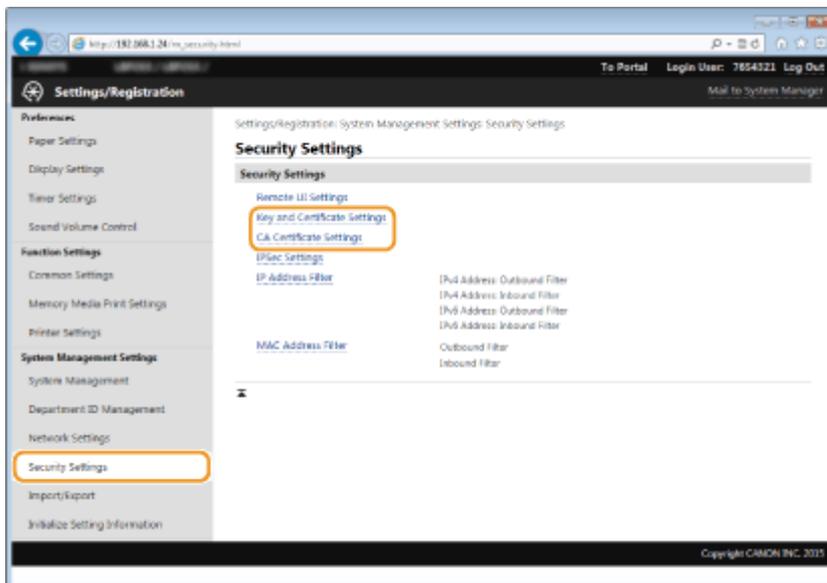
**1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 270)**

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

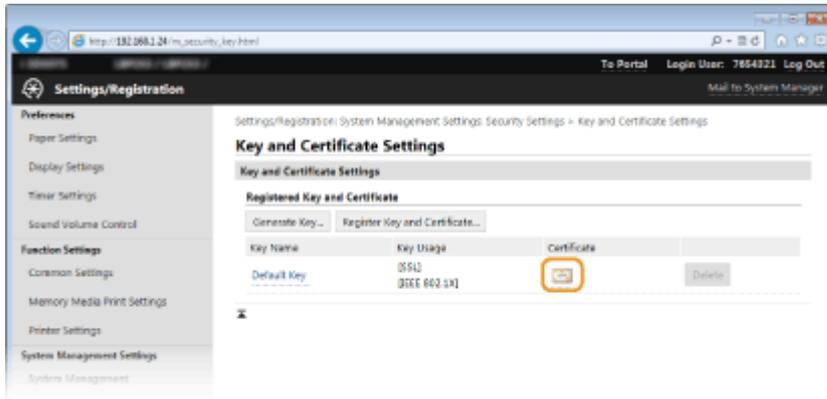


**3 Click [Security Settings] ▶ [Key and Certificate Settings] or [CA Certificate Settings].**

- Click [Key and Certificate Settings] to verify a key pair, or [CA Certificate Settings] to verify a CA certificate.

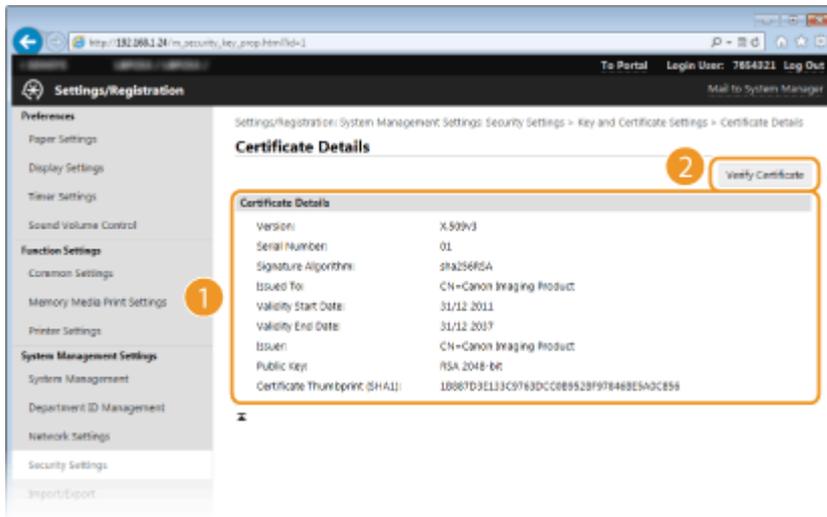


**4 Click the icon for the key pair or certificate that you want to verify.**

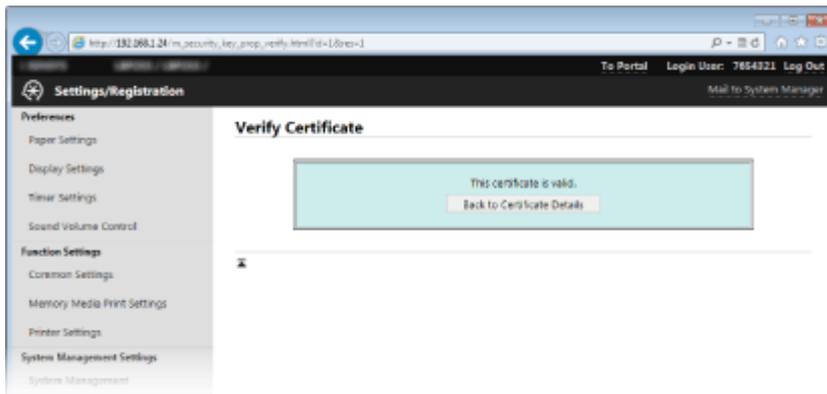


- Certificate details can be viewed on this screen.

## 5 Check the details of the certificate, and click [Verify Certificate].



- The result from verifying the certificate is displayed as shown below.



## LINKS

- ▶ Generating Key Pairs(P. 254)
- ▶ Using CA-issued Key Pairs and Digital Certificates(P. 262)

# Using Remote UI

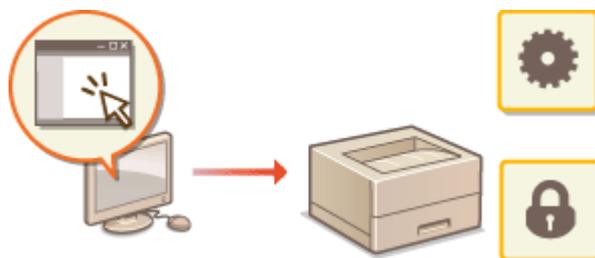
<b>Using Remote UI</b> .....	269
<b>Starting Remote UI</b> .....	270
<b>Remote UI Screens</b> .....	272
<b>Managing Documents and Checking the Machine Status</b> .....	275
<b>Setting Up Menu Options from Remote UI</b> .....	279
<b>Saving/Loading Registered Data</b> .....	281
Saving Registered Data .....	282
Loading Registered Data .....	284

# Using Remote UI

---

0W20-04X

Using a Web browser to operate the machine remotely, you can check the documents waiting to be printed or the status of the machine. You can also make some settings for the machine. You can do this without leaving your desk, making system management easier.



## Functions of the Remote UI

- ▶ **Managing Documents and Checking the Machine Status(P. 275)**
- ▶ **Setting Up Menu Options from Remote UI(P. 279)**
- ▶ **Saving/Loading Registered Data(P. 281)**

## Basics of the Remote UI

- ▶ **Starting Remote UI(P. 270)**
- ▶ **Remote UI Screens(P. 272)**

## System Requirements

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The following environment is required to use the Remote UI. In addition, set the Web browser to enable Cookies.

### Windows

- Windows Vista/7/8
- Microsoft Internet Explorer 9.0 or later

### Mac

- Mac OS X 10.5.8 or later (except for Classic environment)
- Safari 5.0.6 or later

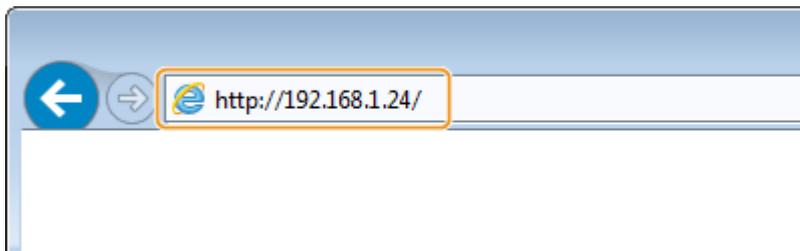
# Starting Remote UI

OW20-04Y

To operate remotely, you need to input the IP address of the machine into a Web browser and start the Remote UI. Check the IP address set to the machine in advance ( [▶Viewing Network Settings\(P. 161\)](#) ). If you have any questions, ask your Network Administrator.

## 1 Start the Web browser.

## 2 Enter "http://(the IP address of the machine)/" in the address field, and press the [ENTER] key.



- If you want to use an IPv6 address, enclose the IPv6 address with brackets (example: http://[fe80::2e9e:fcff:fe4e:dbce]/).

### NOTE:

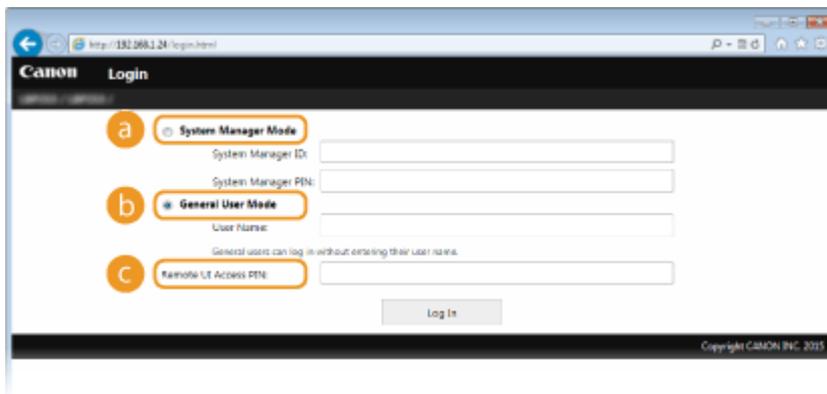
#### If a security alert is displayed

- A security alert may be displayed when the Remote UI communication is encrypted ( [▶Enabling SSL Encrypted Communication for the Remote UI\(P. 235\)](#) ). When certificate settings or SSL settings have no errors, continue browsing the Web site.

## 3 Log on to the Remote UI.

### ■When the Department ID Management is disabled

Select [System Manager Mode] or [General User Mode].



#### **a** [System Manager Mode]

You can perform all the Remote UI operations and settings. Enter the appropriate ID in [System Manager ID] and PIN in [System Manager PIN] ( [▶Setting the System Manager ID\(P. 207\)](#) ). If [System Manager ID] is not set, you do not need to input anything.

#### **b** [General User Mode]



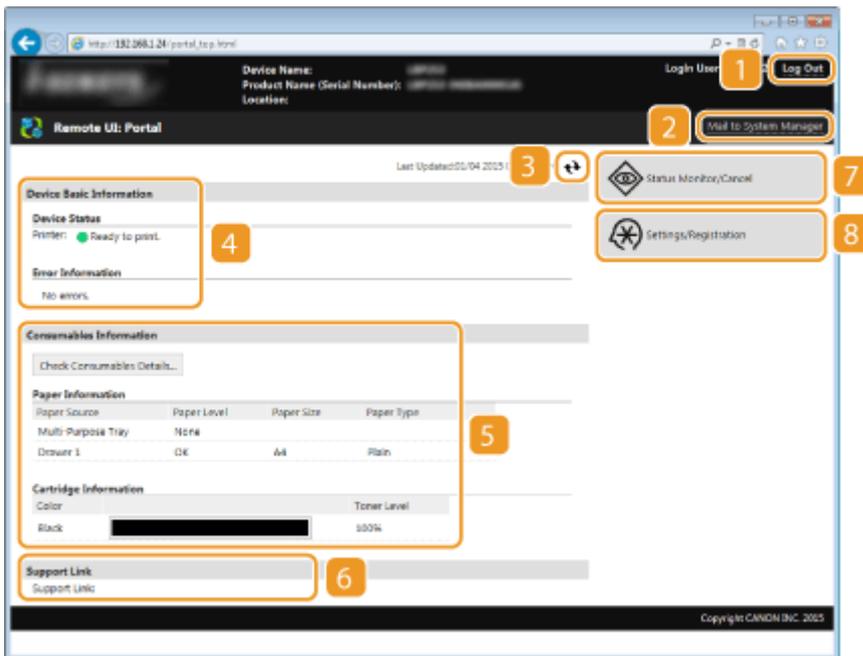
# Remote UI Screens

OW20-050

This section describes the typical screens of the Remote UI.

- ▶ **Portal Page (Main Page)(P. 272)**
- ▶ **[Status Monitor/Cancel] Page(P. 273)**
- ▶ **[Settings/Registration] Page(P. 274)**

## Portal Page (Main Page)



### 1 [Log Out]

Logs off from the Remote UI. The Login page will be displayed.

### 2 [Mail to System Manager]

Displays a window for creating an e-mail to the system manager specified in [System Manager Information] under [System Management].

### 3 Refresh Icon

Refreshes the currently displayed page.

### 4 Device Basic Information

Displays the current status of the machine and error information. If an error has occurred, the link to the Error Information page will be displayed.

### 5 Consumables Information

Displays paper information and the amount remaining in the toner cartridge.

## 6 Support Link

Displays the support link specified in [Device Information] under [System Management].

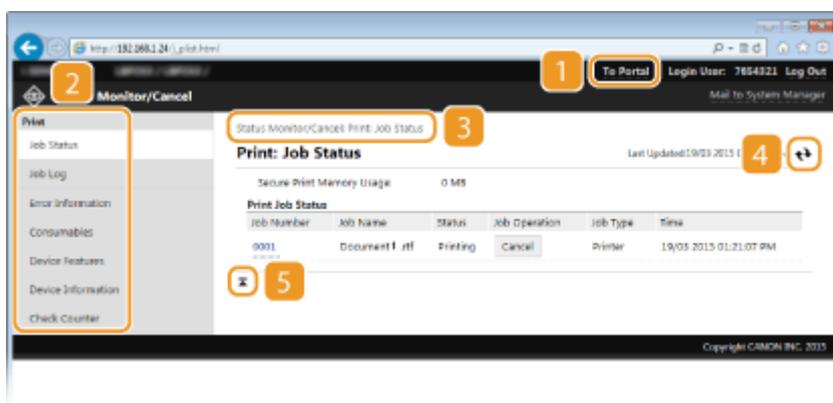
## 7 [Status Monitor/Cancel]

Displays [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 [Settings/Registration] page. When you have logged on in System Manager Mode, you can change the settings items and save/load the registered data. ▶ **Setting Up Menu Options from Remote UI(P. 279)**

## [Status Monitor/Cancel] Page



### 1 [To Portal]

Returns to Portal Page (main page).

### 2 Menu

Click an item, and the content is displayed in the right page. ▶ **Managing Documents and Checking the Machine Status(P. 275)**

### 3 Breadcrumb Trail

Indicates the series of pages you opened to display the currently displayed page. You can check what page is currently displayed.

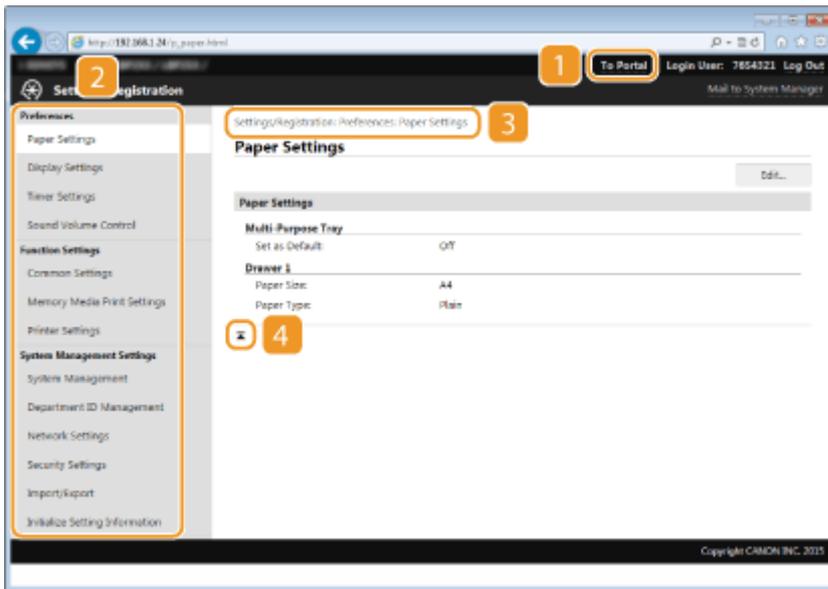
### 4 Refresh Icon

Refreshes the currently displayed page.

### 5 Top Icon

Moves the scroll box up to the top of the page when the page is scrolled down.

## [Settings/Registration] Page



### 1 [To Portal]

Returns to Portal Page (main page).

### 2 Menu

Click an item, the content is displayed in the right page. ▶ **Setting Up Menu Options from Remote UI(P. 279)**

### 3 Breadcrumb Trail

Indicates the series of pages you opened to display the currently displayed page. You can check what page is currently displayed.

### 4 Top Icon

Moves the scroll box up to the top of the page when the page is scrolled down.

## NOTE

### System Management Settings

- You can only set [System Management Settings] when you have logged on in System Manager Mode.
- When you have logged on in General User Mode, only [System Management] will be displayed.

# Managing Documents and Checking the Machine Status

0W20-051

- ▶ **Checking Current Status of Print Documents(P. 275)**
- ▶ **Checking History of Documents(P. 276)**
- ▶ **Checking Error Information(P. 276)**
- ▶ **Checking Consumables(P. 276)**
- ▶ **Checking Device Specifications(P. 277)**
- ▶ **Checking System Manager Information(P. 278)**
- ▶ **Checking Print Total Counter(P. 278)**

## NOTE

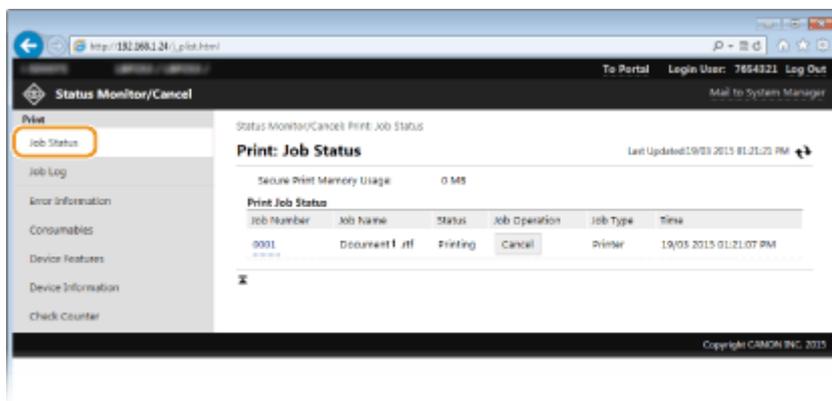
- As for document file name, up to 256 characters are displayed depending on the type of character. The printed application name may be added to the file name.

## Checking Current Status of Print Documents

The list of the documents currently printing or waiting to be printed is displayed.



Log on to the Remote UI ( ▶ **Starting Remote UI(P. 270)** ) ▶ [Status Monitor/Cancel] ▶ [Job Status]



You can delete a document job by clicking [Cancel].

## NOTE

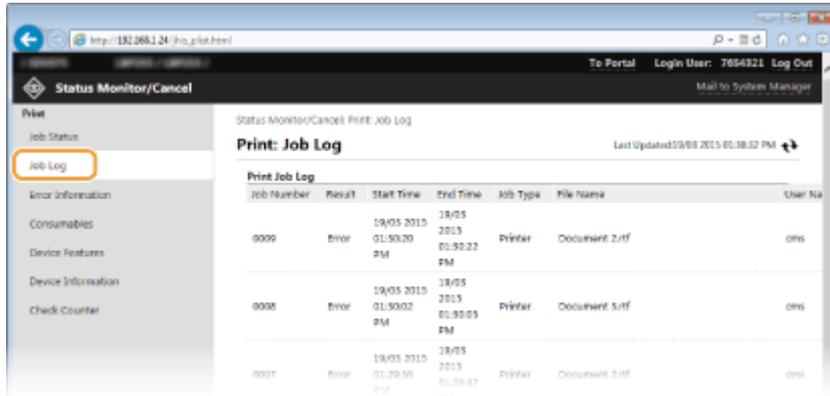
- Regardless of the Department ID Management setting, all the print documents currently printing and waiting to be printed will be listed.
- If you entered your user name when you logged on in General User Mode, your user name will only be displayed on the documents that you printed.
- Click [Job Number] on the paused documents and secure documents to display detailed information. You can check the user name and the page count of the printed document.

## Checking History of Documents

The history of print is displayed up to 128 jobs.



Log on to the Remote UI ( [▶ Starting Remote UI\(P. 270\)](#) ) ▶ [Status Monitor/Cancel] ▶ [Job Log]

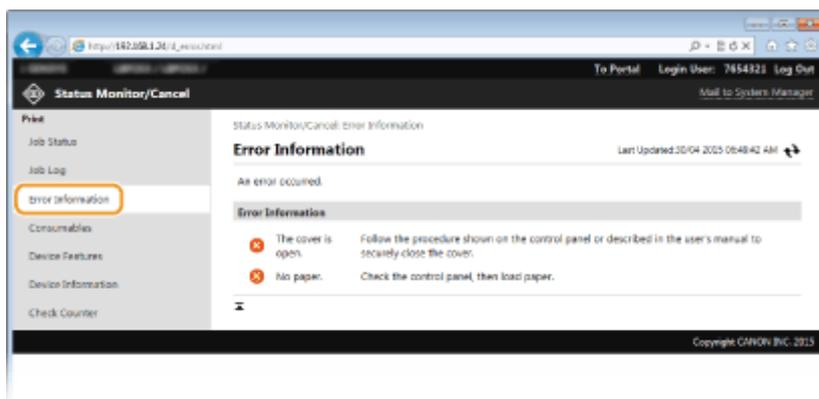


## Checking Error Information

When an error occurs, this page will be displayed by clicking the message displayed under [Error Information] on Portal Page (main page). [▶ Portal Page \(Main Page\)\(P. 272\)](#)



Log on to the Remote UI ( [▶ Starting Remote UI\(P. 270\)](#) ) ▶ [Status Monitor/Cancel] ▶ [Error Information]

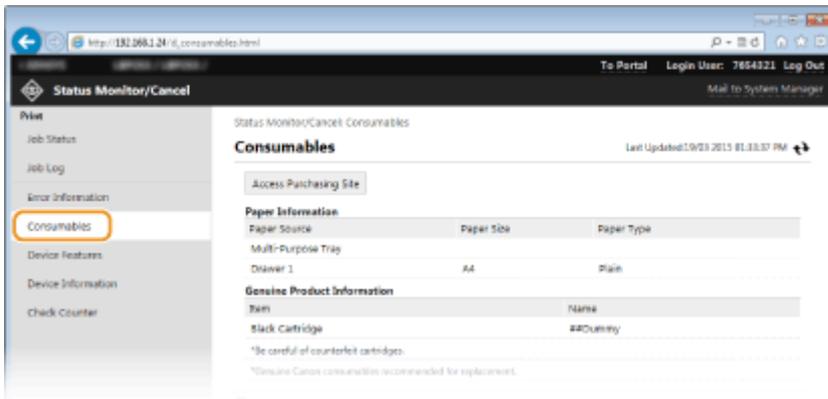


## Checking Consumables

Paper size and paper type for the paper source, toner cartridge model number, etc. are displayed. You can also click [Check Consumables Details] in the Portal Page (main page) to display the screen for checking consumables.



Log in to the Remote UI ( [▶ Starting Remote UI\(P. 270\)](#) ) ▶ [Status Monitor/Cancel] ▶ [Consumables]



Click [Access Purchasing Site] to display the page for purchasing consumables.

## NOTE

### When [Access Purchasing Site] is not displayed

On the operation panel, set <Display Consumables Purchase Button (RUI)> to <On>.

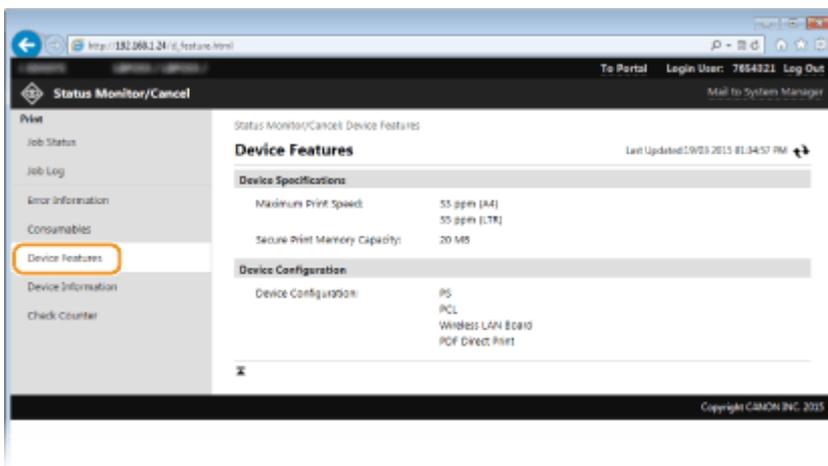
[▶ Display Consumables Information \(RUI/Toner Status\)\(P. 342\)](#)

## Checking Device Specifications

Information including maximum print speed and machine's hardware features is displayed.



Log on to the Remote UI ( [▶ Starting Remote UI\(P. 270\)](#) ) ▶ [Status Monitor/Cancel] ▶ [Device Features]

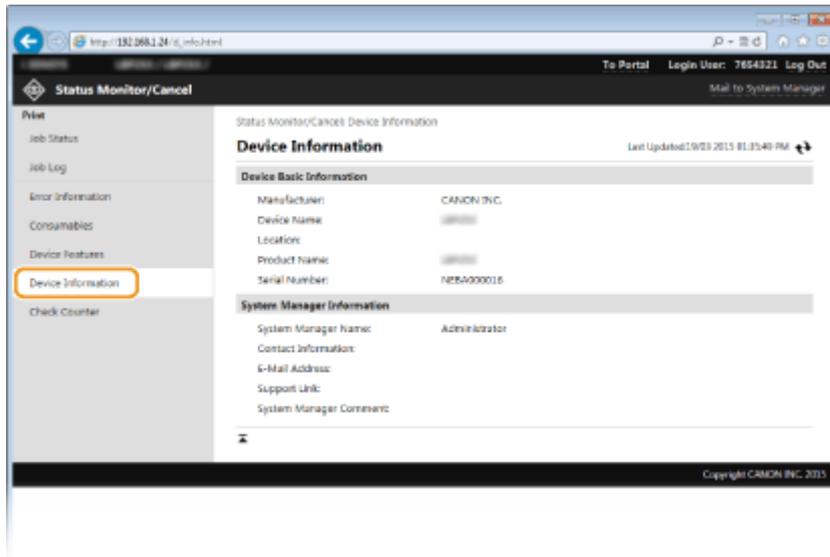


## Checking System Manager Information

Information about the machine and the system manager is displayed. This information is set in [System Management] on the [Settings/Registration] page. [▶System Management Settings\(P. 337\)](#)



Log on to the Remote UI ( [▶Starting Remote UI\(P. 270\)](#) ) ▶ [Status Monitor/Cancel] ▶ [Device Information]

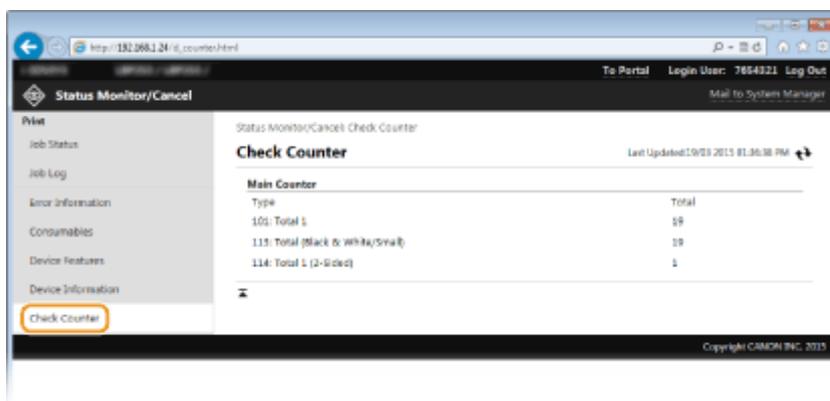


## Checking Print Total Counter

The total number of pages that have been printed is displayed.



Log on to the Remote UI ( [▶Starting Remote UI\(P. 270\)](#) ) ▶ [Status Monitor/Cancel] ▶ [Check Counter]



### LINKS

[▶Remote UI Screens\(P. 272\)](#)

# Setting Up Menu Options from Remote UI

0W20-052

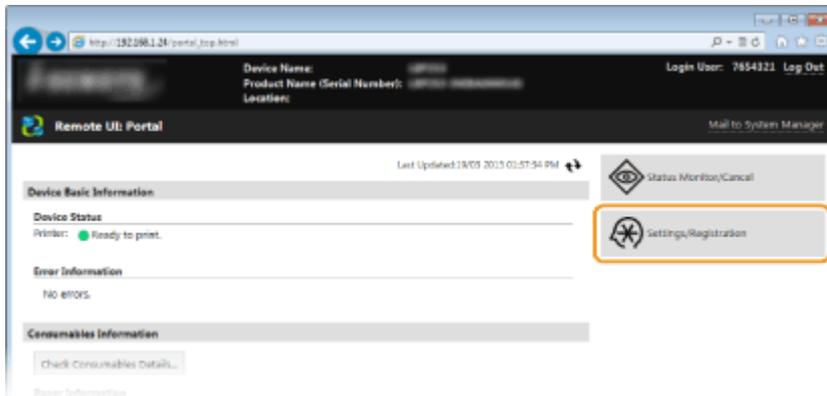
You can change the various machine settings by using the Remote UI. Most of the settings can be set also on the machine, but some settings can only be set using the Remote UI.

## NOTE

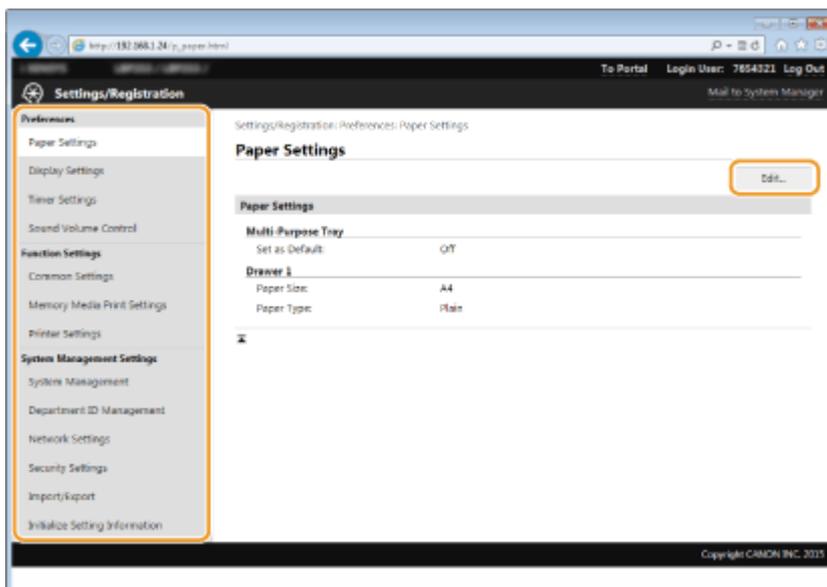
- Some settings can only be changed when you have logged on in System Manager Mode.

**1 Start the Remote UI. ▶Starting Remote UI(P. 270)**

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



**3 Click the menu item you want to set, and click [Edit].**



- For more information about the settings menu, see each item below

Menu items	Referents
Preferences	

Menu items	Referents
Paper Settings	▶ <b>Specifying Paper Size and Type(P. 50)</b>
Display Settings	▶ <b>Preferences(P. 302)</b>
Timer Settings	▶ <b>Timer Settings(P. 307)</b>
Sound Volume Control	▶ <b>Volume Settings(P. 302)</b>
Function Settings	
Common Settings	▶ <b>Common Settings(P. 311)</b>
Printer Settings	▶ <b>Printer Settings(P. 313)</b>
Output Report Settings	▶ <b>Printing Reports and Lists(P. 409)</b>
System Management Settings	
System Management	▶ <b>System Management Settings(P. 337)</b>
Department ID Management	▶ <b>Setting the Department ID Management(P. 209)</b>
Network Settings	▶ <b>Network(P. 131)</b>
Security Settings	▶ <b>Security(P. 202)</b>
Import/Export	▶ <b>Saving/Loading Registered Data(P. 281)</b>
Initialize Setting Information	▶ <b>Initializing Menu(P. 423)</b>

## LINKS

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▶ **Remote UI Screens(P. 272)**

## Saving/Loading Registered Data

0W20-053

Menu options data that has been registered in the machine can be saved in your computer (export). Data that is saved on your computer can also be registered in the machine (import). Data exported from this machine can be imported to another machine of the same model. So you can easily copy a variety of settings data to multiple machines. To use these features, it is required that you have logged on in System Manager Mode.

▶ **Saving Registered Data(P. 282)**

▶ **Loading Registered Data(P. 284)**

### IMPORTANT

#### Do not turn OFF the machine until the export/import process is complete

- It may take a few minutes to complete the process. If the machine is turned OFF during the process, it may result in damage to data or the machine.

#### Do not operate the machine during the export/import process

- Before exporting/importing, check that no operation such as printing documents is currently processing.

### NOTE

#### Settings that cannot be imported/exported

- See ▶ **Setting Menu List(P. 287)** .

#### Import/export using the operation panel

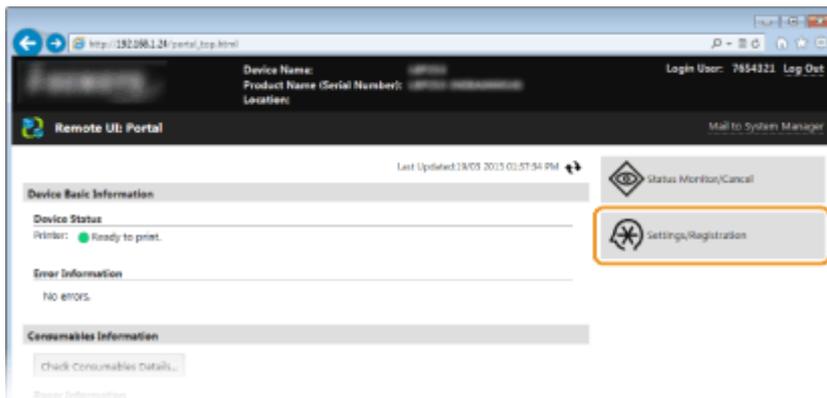
- Using USB memory, settings can be imported and exported from the Settings menu in the operation panel.  
▶ **Using a USB Memory Device to Save/Load Registered Data(P. 417)**

## Saving Registered Data

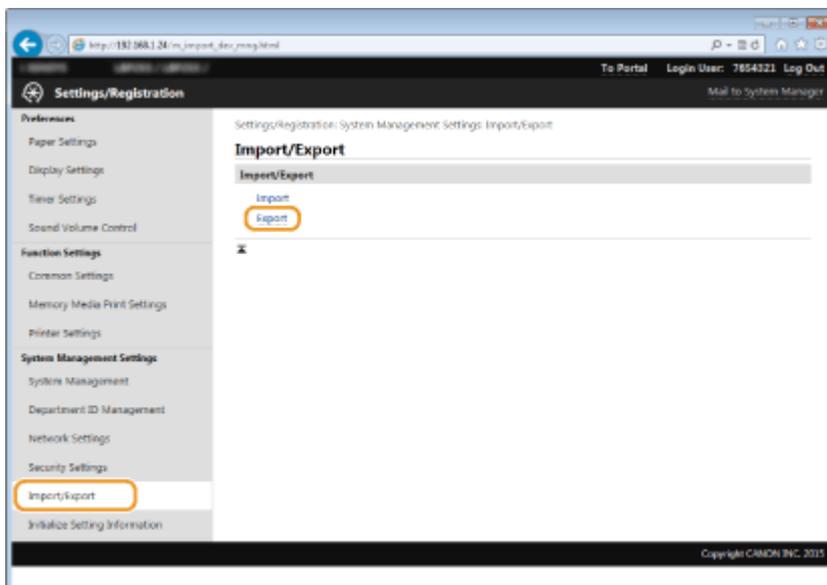
OW20-054

You can export machine settings data and save them in your computer. It is recommended that you regularly back up important settings.

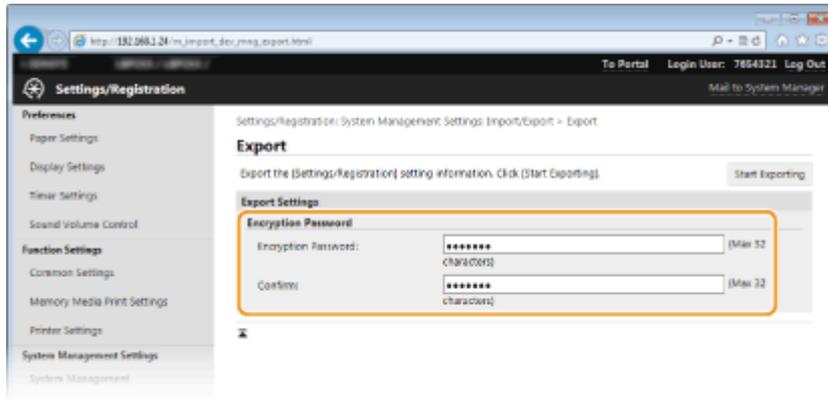
- 1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 270)
- 2 Click [Settings/Registration].



- 3 Click [Import/Export] ▶ [Export].



- 4 Set the encryption password.



### [Encryption Password]

Enter an encryption password up of up to 32 alphanumeric characters. Enter the same password in [Confirm]. To export the data, you must set an encryption password.

#### NOTE:

- The password is required when exported data is imported.

## 5 Click [Start Exporting].

## 6 Follow the on-screen instructions to specify the location where the exported setting data is saved.

- The setting data will be saved.

### LINKS

▶ Remote UI Screens(P. 272)

▶ Setting Menu List(P. 287)

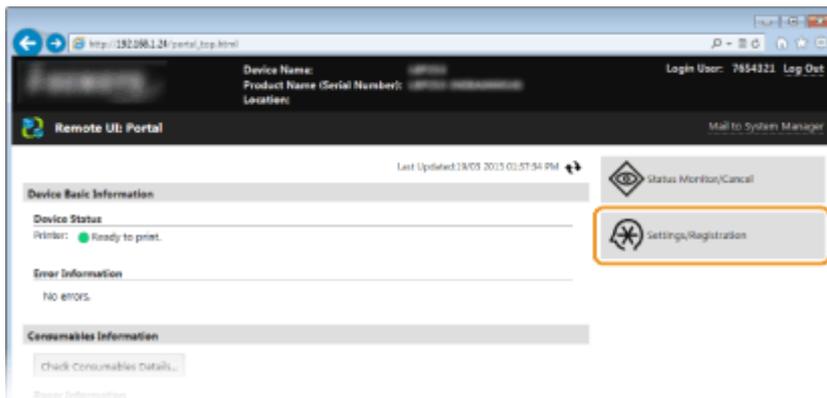
# Loading Registered Data

OW20-055

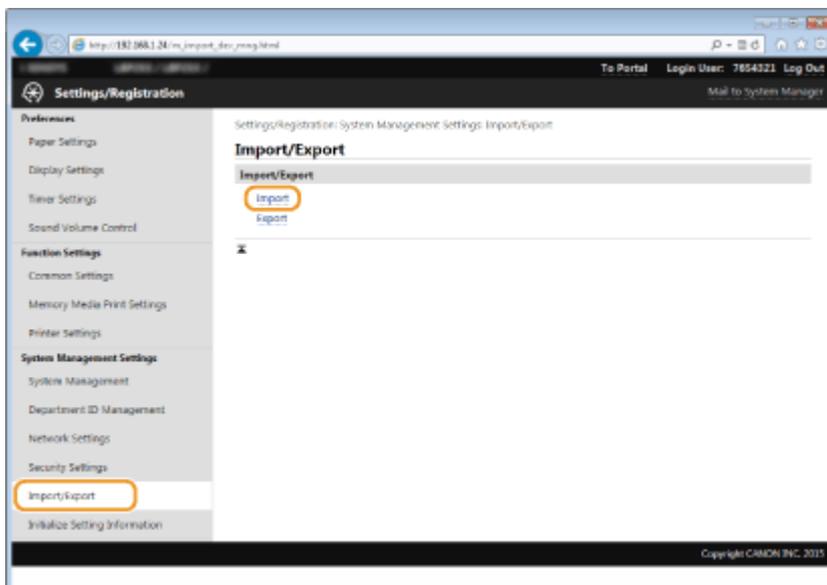
Load (import) data that was exported from the machine. You can also import settings from another machine if it is the same model as your machine.

**1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 270)**

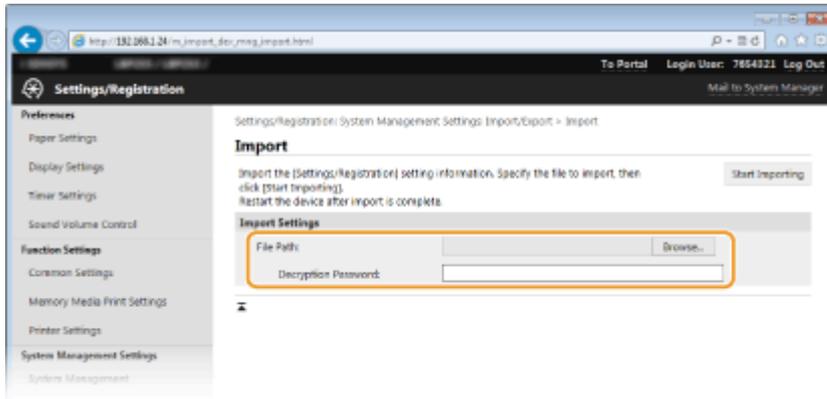
**2 Click [Settings/Registration].**



**3 Click [Import/Export] ▶ [Import].**



**4 Specify the file to import, and enter the password.**

**[File Path]**

Either click [Browse] and select the file, or if the file's save destination is known, enter it in [File Path] directly.

**[Decryption Password]**

Enter the password set when the settings were exported.

**5 Click [Start Importing].****6 Click [OK].**

- The selected settings data is loaded into the machine.

**7 Click [OK].**

- The machine automatically restarts.

## LINKS

- ▶ **Remote UI Screens(P. 272)**
- ▶ **Setting Menu List(P. 287)**

# Setting Menu List

<b>Setting Menu List</b> .....	287
<b>Paper Settings (LBP252dw)</b> .....	288
<b>Direct Connection</b> .....	289
<b>Network Settings</b> .....	290
<b>Output Reports</b> .....	301
<b>Preferences</b> .....	302
<b>Timer Settings</b> .....	307
<b>Common Settings</b> .....	311
<b>Printer Settings</b> .....	313
<b>Adjustment/Maintenance</b> .....	332
<b>System Management Settings</b> .....	337

# Setting Menu List

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0W20-056

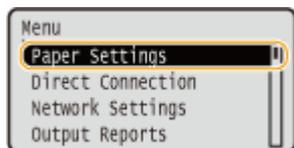
There are various settings in this machine. You can adjust each of the settings in detail. Access these settings by pressing  on the operation panel.

## TIPS

- You can print the setting menu in list form to check the current settings:  
▶ **User Data List/System Manager Data List(P. 411)**

## Paper Settings LBP252dw

0W20-05J



You can specify the paper size and type for each paper source. You can also register custom paper sizes and limit the paper sizes that will be displayed. ▶ **Specifying Paper Size and Type(P. 50)**

### NOTE

#### Asterisks (\*)

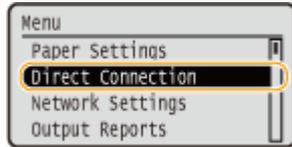
- Settings marked with an asterisk (\*) are only available when the optional paper feeder (drawer 2) is attached.

Multi-Purpose Tray  
Drawer 1  
Drawer 2\*  
Register Custom Paper  
Select Frequently Used Paper Sizes

## Direct Connection

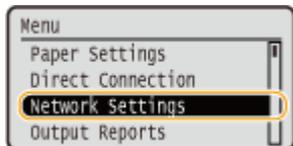
---

0W20-088



Connect the mobile device and the machine directly without using a wireless LAN router. ▶ **Make Direct Connection (Access Point Mode)(P. 125)**

# Network Settings



All the settings about the network are listed with short descriptions. Default settings are marked with a dagger ( †).

## NOTE

### Asterisks (\*)

- Settings marked with an asterisk (\*) cannot be imported or exported.

- ▶ **Select Wired/Wireless LAN(P. 290)**
- ▶ **Wireless LAN Settings(P. 290)**
- ▶ **Enable Direct Connection(P. 292)**
- ▶ **TCP/IP Settings(P. 292)**
- ▶ **SNMP Settings(P. 298)**
- ▶ **Dedicated Port Settings(P. 298)**
- ▶ **Waiting Time for Connection at Startup(P. 299)**
- ▶ **Ethernet Driver Settings(P. 299)**
- ▶ **IEEE 802.1X Settings(P. 299)**
- ▶ **Device Settings Management On/Off(P. 300)**
- ▶ **Initialize Network Settings(P. 300)**

## Select Wired/Wireless LAN

When switching the machine from Wireless LAN to Wired LAN, you need to specify the setting. Conversely, when switching the machine from Wired LAN to Wireless LAN, you do not need to specify this setting (You can switch using the following <Wireless LAN Settings>). ▶ **Selecting Wired LAN or Wireless LAN(P. 134)**

Wired LAN †  
Wireless LAN

## Wireless LAN Settings

Specify settings for connecting the machine to a wireless LAN. You can also view the current settings or specify the setting for saving power consumption.

### WPS Push Button Mode

Select to automatically configure a wireless connection by using the button on a WPS wireless router. ▶ **Setting Up Connection Using WPS Push Button Mode(P. 138)**

### WPS PIN Code Mode

Select to configure a wireless connection by entering a PIN code for a WPS wireless router. ▶ **Setting Up Connection Using WPS PIN Code Mode(P. 140)**

## SSID Settings

Select to configure a wireless connection by specifying information including an SSID or a network key by inputting manually from the operation panel.

### Select Access Point

Wireless LAN routers that can access the machine are automatically located, so you can select from the list. You must manually enter a network key, such as a WEP key or a PSK. **▶Setting Up Connection by Selecting a Wireless Router(P. 143)**

### Enter Manually

Select to configure a wireless connection by manually entering an SSID. By using this method, you can specify authentication and encryption settings in detail. **▶Setting Up Connection by Specifying Detailed Settings(P. 146)**

**Security Settings**

- None
- WEP
  - Open System †
  - Select WEP Key: 1/2/3/4
  - Edit WEP Key
- Shared Key
  - Select WEP Key: 1/2/3/4
  - Edit WEP Key
- WPA/WPA2-PSK
  - Auto †
  - AES-CCMP

## Power Save Mode

Select whether or not the machine enters Power Save Mode based on signals emitted from the wireless router.

Off †

On

[OK] ▶ <Network Settings> ▶ [OK] ▶ <Wireless LAN Settings> ▶ [OK] ▶ Read the displayed message ▶ [OK] ▶ <Power Save Mode> ▶ [OK] ▶ Select <Off> or <On> ▶ [OK]

## Connection Information

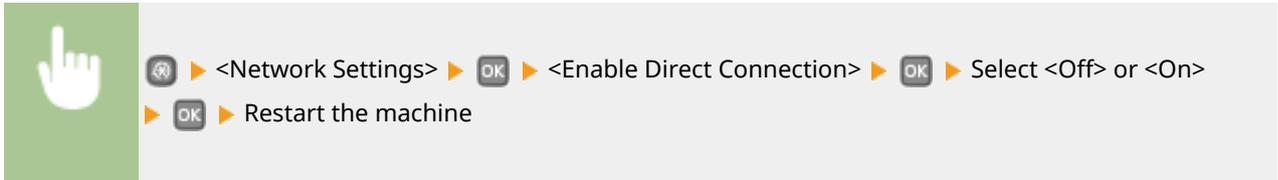
Select to view the current wireless LAN settings. **▶Viewing Network Settings(P. 161)**

- MAC Address
- Wireless LAN Status
- Latest Error Information
- Channel
- SSID Settings
- Security Settings
- Power Save Mode

## Enable Direct Connection \*

Set whether to connect directly. By enabling this function, connecting directly with the machine is possible even in an environment without an access point or wireless LAN router.

Off †
On



### IMPORTANT

Setting <Enable Direct Connection> to <On> prevents use of a wired LAN or any wireless LAN other than Direct Connection.

## 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.

#### IP Address Settings

Configure the IP address, which is used for identifying devices, such as computers and printers, on a TCP/IP network. ▶ **Setting IPv4 Address(P. 154)**

<p><b>Auto Acquire †</b></p> <p>Select Protocol</p> <p>Off</p> <p>DHCP †</p> <p>Auto IP</p> <p>Off</p> <p>On †</p> <p><b>Manually Acquire</b></p> <p>IP Address: 0.0.0.0</p> <p>Subnet Mask: 0.0.0.0</p> <p>Gateway Address: 0.0.0.0</p> <p><b>Check Settings</b></p> <p>Auto Acquire</p> <p>IP Address</p> <p>Subnet Mask</p> <p>Gateway Address</p>
---

## PING Command

Select to check that the machine is connected to a computer over a network. [▶Testing the Network Connection\(P. 156\)](#)

## DNS Settings

Specify settings for Domain Name System (DNS), which provides a host name for IP address resolutions. [▶Configuring DNS\(P. 181\)](#)

<p><b>DNS Server Settings</b>          Primary DNS Server: 0.0.0.0          Secondary DNS Server: 0.0.0.0</p> <p><b>DNS Host Name/Domain Name Settings</b>          Host Name          Domain Name</p> <p><b>DNS Dynamic Update Settings</b>          Off <sup>†</sup>          On          DNS Dynamic Update Interval          0 to 24 <sup>†</sup> to 48 (hr.)</p>
---

## mDNS Settings

Specify settings for using DNS functions without DNS servers. [▶Configuring DNS\(P. 181\)](#)

<p><b>Off</b></p> <p><b>On <sup>†</sup></b>          mDNS Name</p>
--

## DHCP Option Settings

If DHCP is enabled, use these settings to select whether to use the DHCP optional functions to acquire the DNS server address or the domain name. [▶Configuring DNS\(P. 181\)](#)

<p><b>Acquire Host Name</b>          Off          On <sup>†</sup></p> <p><b>DNS Dynamic Update</b>          Off <sup>†</sup>          On</p> <p><b>Acquire DNS Server Address</b>          Off          On <sup>†</sup></p> <p><b>Acquire Domain Name</b>          Off          On <sup>†</sup></p> <p><b>Acquire WINS Server Address</b>          Off          On <sup>†</sup></p>
---

## IPv6 Settings

---

Specify settings for using the machine in an IPv6 network.

### Use IPv6

Enable or disable IPv6 in the machine. You can also view the current settings. [▶Setting IPv6 Addresses\(P. 157\)](#)

**Off** <sup>†</sup>

**On**

**Check Settings**  
 Link-Local Address  
 Prefix Length

### Stateless Address Settings

Enable or disable stateless addresses. [▶Setting IPv6 Addresses\(P. 157\)](#)

**Off**  
**On** <sup>†</sup>

**Check Settings**

Stateless Address  
 Prefix Length

### Use DHCPv6

Enable or disable the stateful address that is acquired via DHCPv6. [▶Setting IPv6 Addresses\(P. 157\)](#)

**Off** <sup>†</sup>

**On**

**Check Settings**  
 Stateful Address  
 Prefix Length

## DNS Settings

Specify settings for Domain Name System (DNS), which provides a host name for IP address resolutions. [▶Configuring DNS\(P. 181\)](#)

**DNS Host Name/Domain Name Settings**  
 Use IPv4 Host/Domain  
 Off  
     Host Name  
     Domain Name  
 On <sup>†</sup>

**DNS Dynamic Update Settings**

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 (hr.)

### mDNS Settings

Specify settings for using DNS functions without DNS servers. ▶ **Configuring DNS(P. 181)**

Off  
 On †  
 Use Same mDNS Name as IPv4  
 Off  
 mDNS Name  
 On †

### DHCP Option Settings

If DHCP is enabled, use these settings to select whether to use the DHCP optional functions to acquire the DNS server address or the domain name. ▶ **Configuring DNS(P. 181)**

**Acquire DNS Server Address**  
 Off  
 On †  
**Acquire Domain Name**  
 Off  
 On †

### WINS Settings

Specify settings for Windows Internet Name Service (WINS), which provides a NetBIOS name for IP address resolutions in a mixed network environment of NetBIOS and TCP/IP. ▶ **Configuring WINS(P. 186)**

**WINS Resolution**  
 Off †  
 On  
 WINS Server Address: 0.0.0.0

### LPD Settings

Enable or disable LPD, a printing protocol that can be used on any hardware platform or operating system. You can also set the reception timeout period after which printing is canceled if print data reception is interrupted. ▶ **Configuring Printing Protocols and WSD Functions(P. 165)**

**LPD Print Settings**

Off  
On **+**

**RX Timeout**  
1 to 5 **+** to 60 (min.)

### RAW Settings

Enable or disable RAW, a Windows specific printing protocol. You can also set the reception timeout period after which printing is canceled if print data reception is interrupted. **▶Configuring Printing Protocols and WSD Functions(P. 165)**

**RAW Print Settings**  
Off  
On **+**

**RX Timeout**  
1 to 5 **+** to 60 (min.)

### WSD Settings

Enable or disable automatic browsing and acquiring information for the printer by using the WSD protocol that is available on Windows Vista/7/8/Server 2008/Server 2012. **▶Configuring Printing Protocols and WSD Functions(P. 165)**

**WSD Print Settings**  
Use WSD Print  
Off  
On **+**

Use WSD Browsing  
Off  
On **+**

**Use Multicast Discovery**  
Off  
On **+**

### Use HTTP

Enable or disable HTTP, which is required for communications with a computer, such as when using the Remote UI, WSD printing, or printing with Google Cloud Print. **▶Disabling HTTP Communication(P. 232)**

Off  
On **+**

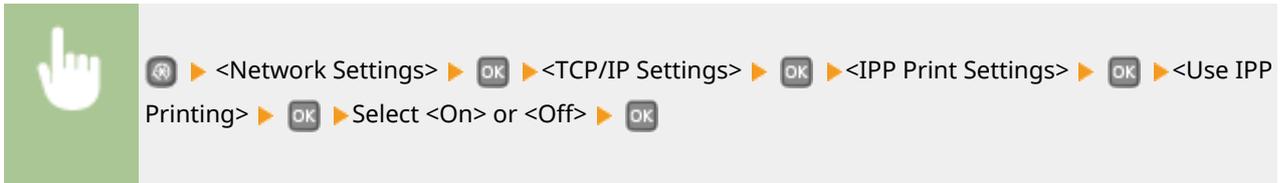
### IPP Print Settings

Forward data to the machine and configure print settings via the Internet.

#### Use IPP Printing

Select whether to print using IPP.

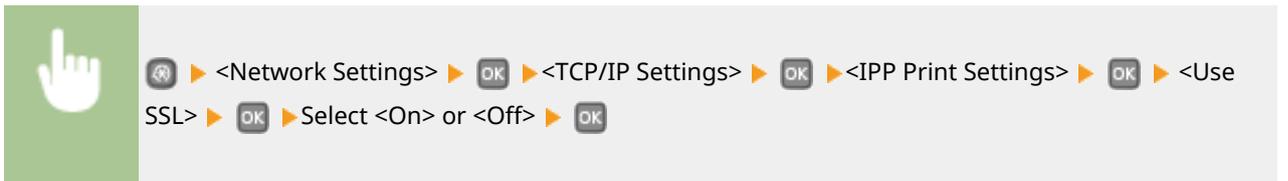
Off  
On **+**



### Use SSL

Select whether to perform encryption by SSL when printing using IPP.

Off †  
On



### Port Number Settings

Change port numbers for protocols according to the network environment. ▶ **Changing Port Numbers(P. 226)**

**LPD**  
1 to 515 † to 65535

**RAW**  
1 to 9100 † to 65535

**WSD Multicast Discovery**  
1 to 3702 † to 65535

**HTTP**  
1 to 80 † to 65535

**Multicast Discovery**  
1 to 427 † to 65535

**SNMP**  
1 to 161 † to 65535

### MTU Size

Select the maximum size of packets the machine sends or receives. ▶ **Changing the Maximum Transmission Unit(P. 179)**

1300  
1400  
1500 †

## 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. 191)

#### SNMPv1 Settings

Enable or disable SNMPv1. When enabling SNMPv1, specify a community name and access privileges to Management Information Base(MIB) objects.

Off  
On <sup>†</sup>



▶ <Network Settings> ▶ ▶ <SNMP Settings> ▶ ▶ <SNMPv1 Settings> ▶ ▶ Select <Off> or <On> ▶ ▶ Restart the machine

#### SNMPv3 Settings

Enable or disable SNMPv3. Use the Remote UI to specify detailed settings that are applied when SNMPv3 is enabled.

Off <sup>†</sup>  
On



▶ <Network Settings> ▶ ▶ <SNMP Settings> ▶ ▶ <SNMPv3 Settings> ▶ ▶ Select <Off> or <On> ▶ ▶ Restart the machine

#### Acquire Printer Management Information from Host

Enable or disable the monitoring of printer management information from a networked computer running SNMP-compatible software.

Off <sup>†</sup>  
On

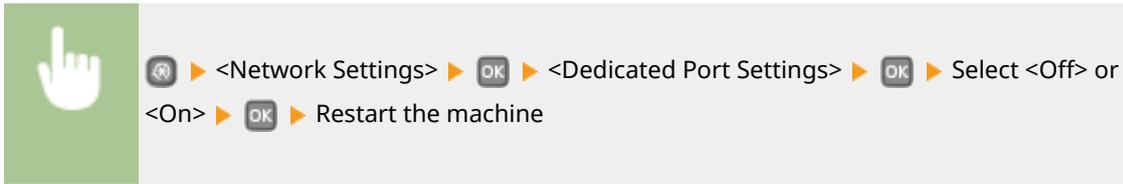


▶ <Network Settings> ▶ ▶ <SNMP Settings> ▶ ▶ <Acquire Printer Management Information from Host> ▶ ▶ Select <Off> or <On> ▶ ▶ Restart the machine

## Dedicated Port Settings

Enable or disable the dedicated port. The dedicated port is used when printing and when browsing or specifying the machine settings over the network.

Off  
On †



## Waiting Time for Connection at Startup

Specify a wait time for connecting to a network. Select the setting depending on the network environment. ▶ **Setting a Wait Time for Connecting to a Network(P. 180)**

0 † to 300 (sec.)

## Ethernet Driver Settings

Select the Ethernet type (10BASE-T/100BASE-TX/1000BASE-T) and the communication mode of Ethernet (half-duplex/full-duplex). You can also view the MAC address for wired LAN.

### MAC Address

Check the MAC address of the machine, which is a number unique to each communication device. ▶ **Viewing the MAC Address for Wired LAN(P. 162)**

### Auto Detect

Select whether to automatically detect or manually select the communication mode and the Ethernet type. ▶ **Configuring Ethernet Settings(P. 177)**

Off  
Communication Mode  
Half Duplex †  
Full Duplex  
Ethernet Type  
10BASE-T †  
100BASE-TX  
1000BASE-T  
On †

## IEEE 802.1X Settings \*

Enable or disable IEEE 802.1X authentication. ▶ **Configuring IEEE 802.1X Authentication(P. 248)**

Off †  
On



 ▶ <Network Settings> ▶  ▶ <IEEE 802.1X Settings> ▶  ▶ Select <Off> or <On>  
 ▶  ▶ Restart the machine

## Device Settings Management On/Off

Specify whether to manage data in the machine such as settings data by using an imageWARE Enterprise Management Console plug-in. For details of the imageWARE Enterprise Management Console, contact your local authorized Canon dealer.

Off  
On <sup>†</sup>



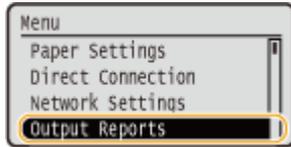
 ▶ <Network Settings> ▶  ▶ <Device Settings Management On/Off> ▶  ▶ Select <Off> or <On> ▶ 

## Initialize Network Settings

Select to return the Network Settings to the factory defaults.  **Initialize Menu(P. 345)**

# Output Reports

0W20-089



You can check the condition of consumables and the machine settings by printing reports and lists. ▶ **Printing Reports and Lists(P. 409)**

## NOTE

### Asterisks (\*)

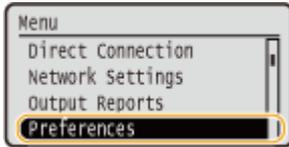
Reports and lists marked with an asterisk (\*) are only available for the LBP252dw.

#### Print List

- Consumables Status Report
- User Data List
- System Manager Data List
- Department ID Management Report
- IPSec Policy List
- PCL Font List
- PS Font List \*

# Preferences

0W20-058



All the settings about the sound volume and display are listed with short descriptions. Default settings are marked with a dagger (†).

## NOTE

### Asterisks (\*)

Settings marked with an asterisk (\*) have different defaults depending on the country or region of purchase.

▶ **Volume Settings(P. 302)**

▶ **Display Settings(P. 303)**

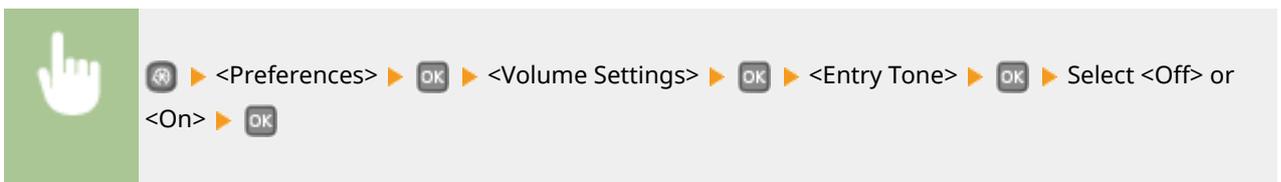
## Volume Settings

Adjust the volume of a notification beep the machine generates when a key is pressed on the operation panel, printing is complete, etc.

### Entry Tone

Select whether the machine beeps when a key is pressed on the operation panel.

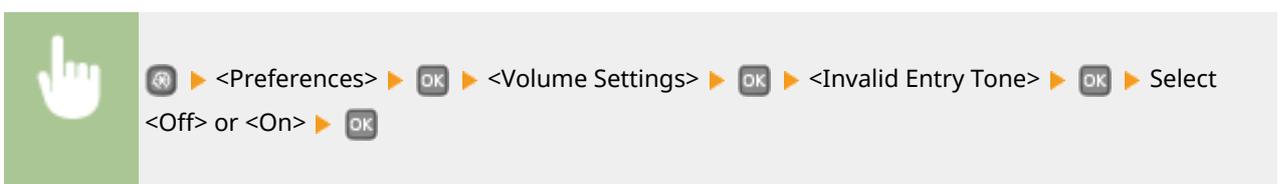
Off  
On †



### Invalid Entry Tone

Select whether the machine beeps when an invalid settings value is entered, such as when a user is trying to enter a number unavailable for a setting.

Off †  
On



### Restock Supplies Tone

Select whether the machine beeps when the toner cartridge is almost empty.

Off<sup>†</sup>  
On



 > <Preferences> >  > <Volume Settings> >  > <Restock Supplies Tone> >  > Select  
 <Off> or <On> > 

### Job Done Tone

Select whether the machine beeps when printing is complete.

Off  
On<sup>†</sup>



 > <Preferences> >  > <Volume Settings> >  > <Job Done Tone> >  > Select <Off>  
 or <On> > 

### Energy Saver Alert

Select whether the machine beeps when the machine enters or wakes from sleep mode.

Off<sup>†</sup>  
On



 > <Preferences> >  > <Volume Settings> >  > <Energy Saver Alert> >  > Select  
 <Off> or <On> > 

## Display Settings

### Brightness

Adjust the brightness of the display to suit the installation location of the machine.

Five Levels



 > <Preferences> >  > <Display Settings> >  > <Brightness> >  > Use ◀ / ▶ to adjust the brightness > 

### Contrast

Adjust the contrast (difference in brightness between light and dark areas) of the display to suit the installation location of the machine.

Seven Levels



 > <Preferences> >  > <Display Settings> >  > <Contrast> >  > Use ◀ / ▶ to adjust the contrast > 

### Invert Screen Colors

Select <On> to invert the display colors. Select <On> if the display is hard to view even after the brightness was adjusted in <Brightness>.

Off<sup>+</sup>  
On



 > <Preferences> >  > <Display Settings> >  > <Invert Screen Colors> >  > Select <Off> or <On> > 

### Millimeter/Inch Entry Switch

Select the unit of measurement.

Millimeter<sup>+</sup>  
Inch



 > <Preferences> >  > <Display Settings> >  > <Millimeter/Inch Entry Switch> >  > Select <Millimeter> or <Inch> > 

### Message Display Time

Specify the interval in seconds at which two different messages are alternately displayed.

1 to 2<sup>+</sup> to 5 (sec.)



 ▶ <Preferences> ▶  ▶ <Display Settings> ▶  ▶ <Message Display Time> ▶  ▶ Enter a number for the interval ▶ 

### Scrolling Speed

Adjust the speed for scrolling the screen by selecting from three levels.

Slow  
 Standard    
 Fast



 ▶ <Preferences> ▶  ▶ <Display Settings> ▶  ▶ <Scrolling Speed> ▶  ▶ Select the speed ▶ 

### Cursor Movement Type

Configure how the cursor moves after a character is entered on the screen. Select <Auto> to automatically move the cursor to the right of the entered character after approximately 1 second. Select <Manual> to manually move the cursor to the right of the entered character.

Auto    
 Manual



 ▶ <Preferences> ▶  ▶ <Display Settings> ▶  ▶ <Cursor Movement Type> ▶  ▶ Select <Auto> or <Manual> ▶ 

### Language\*

Select the display language used for the display, reports, and lists.

English , Japanese, French, Spanish, German, Italian, Dutch, Finnish, Portuguese, Norwegian, Swedish, Danish, Slovene, Czech, Hungarian, Russian, Turkish, Greek, Estonian, Romanian, Slovak, Croatian, Bulgarian, Catalan, Polish, Chinese (Simplified), Chinese (Traditional), Korean, Latvian, Lithuanian, Arabic



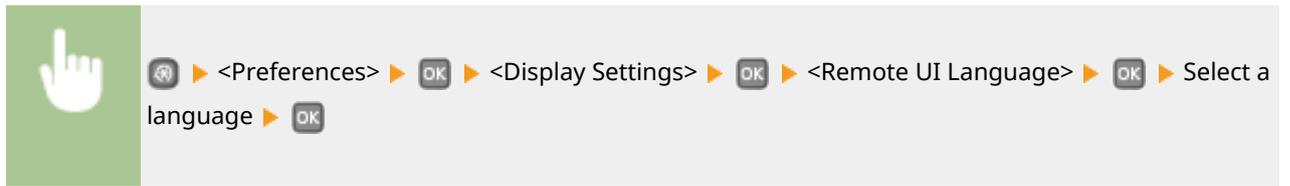
 ▶ <Preferences> ▶  ▶ <Display Settings> ▶  ▶ <Language> ▶  ▶ Select a language ▶ 

### Remote UI Language\*

Select the display language used for the Remote UI screens.

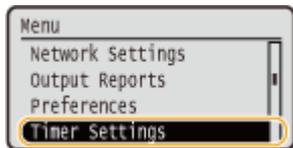
## Setting Menu List

English †, Japanese, French, Spanish, German, Italian, Dutch, Finnish, Portuguese, Norwegian, Swedish, Danish, Czech, Hungarian, Russian, Turkish, Polish, Chinese (Simplified), Chinese (Traditional), Korean



# Timer Settings

0W20-059



All the settings about the timer are listed with short descriptions. Default settings are marked with a dagger ( † ).

## NOTE

### Asterisks (\*)

- Settings marked with "\*1" may be unavailable or have different defaults depending on the country or region of purchase.
- Settings marked with "\*2" cannot be imported or exported.

- ▶ **Date/Time Settings(P. 307)**
- ▶ **Auto Reset Time(P. 309)**
- ▶ **Auto Sleep Time(P. 309)**
- ▶ **Auto Shutdown Time(P. 309)**

## Date/Time 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 \*1

Select the date format (order of year, month, and day).

YYYY MM/DD  
 MM/DD/YYYY  
 DD/MM YYYY †

⚙️ ▶ <Timer Settings> ▶ OK ▶ <Date/Time Settings> ▶ OK ▶ <Date Format> ▶ OK ▶ Select the date format ▶ OK

### Time Format

Select the 12- or 24-hour clock display setting.

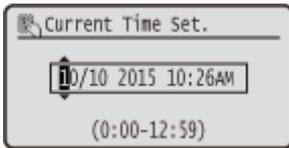
12 Hour (AM/PM) †  
 24 Hour



 > <Timer Settings> >  > <Date/Time Settings> >  > <Time Format> >  > Select the display setting > 

### Current Date/Time Settings \*2

Set the current date and time. Use ◀ / ▶ to move the cursor, and ▲ / ▼ to specify the date and time or switch between <AM>/<PM>.



### 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.



 > <Timer Settings> >  > <Date/Time Settings> >  > <Current Date/Time Settings> >  > Set the date and time > <Apply> > 

### NOTE

- The current date and time cannot be changed for 1 hour after daylight saving time is in effect.

### Time Zone

Select the time zone. If the time zone setting is changed, the values set in <Current Date/Time Settings> are also changed accordingly.

(UTC-12:00) International Date Line West to (UTC) Coordinated Universal Time † to (UTC+14:00) Christmas Island

### 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.



 > <Timer Settings> >  > <Date/Time Settings> >  > <Time Zone> >  > Select a time zone > 

## Daylight Saving Time Settings \*1

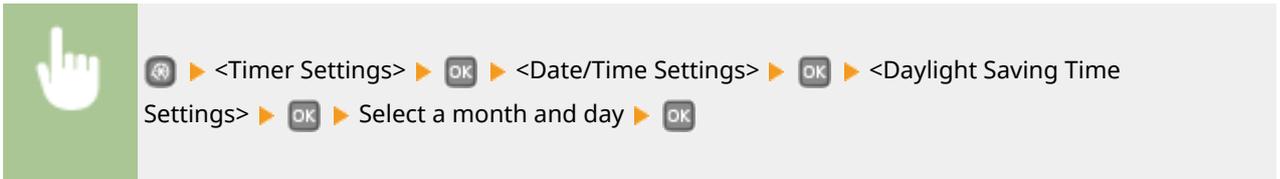
Enable or disable daylight saving time. If daylight saving time is enabled, specify the dates from which and to which daylight saving time is in effect.

Off

On †

Start: Month, Week, Day

End: Month, Week, Day



## Auto Reset Time

If a key is not pressed for a specified period of time, the screen and the settings are initialized to display the default screen (Auto Reset). Specify the interval at which the Auto Reset is performed. Select <0> to disable the Auto Reset function. The Auto Reset is not performed in the following cases:

- The setting menu is displayed.
- The machine is processing data, such as when printing documents.
- An error message is displayed and the Error indicator is blinking (However, Auto Reset is performed when the error does not prevent the user from continuing to use a function.)

0 (Auto Reset is disabled.)  
1 to 2 † to 9 (min.)



## Auto Sleep Time

If the machine has not been operated or has had no data to print for a specified period of time, the machine enters sleep mode to save energy consumption (Auto Sleep). Specify the period of time after which auto sleep is performed. Auto Sleep is not performed when the setting menu is displayed. We recommend using the factory default settings to save the most power. ▶ **Entering Sleep Mode(P. 62)**

3 † to 60 (min.)

## Auto Shutdown Time

Set a timer to automatically shut down the machine after the specified period of idle time has elapsed since the machine entered the sleep mode. ▶ **Setting Auto Shutdown Time(P. 66)**

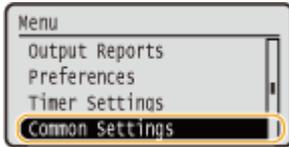
## Setting Menu List

0 (Auto Shutdown is disabled.)

1 to 4 <sup>†</sup> to 8 (hr.)

## Common Settings

0W20-05A



All the settings for paper feed method are listed with short descriptions. Default settings are marked with a dagger ( †).

### NOTE

#### Asterisks (\*)

- Settings marked with an asterisk (\*) are only available when the optional paper feeder (drawer 2) is attached.

## Switch Paper Feed Method

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 use just the same way of paper loading (which side up or down) both for 1- and 2-sided printing (the logo side face up when using the paper drawer, or the logo side face down when using the multi-purpose tray). For more information, see [Loading Preprinted Paper\(P. 46\)](#).

#### Multi-Purpose Tray

Speed Priority †

Print Side Priority

#### Drawer 1

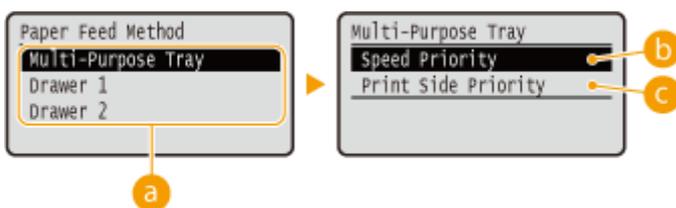
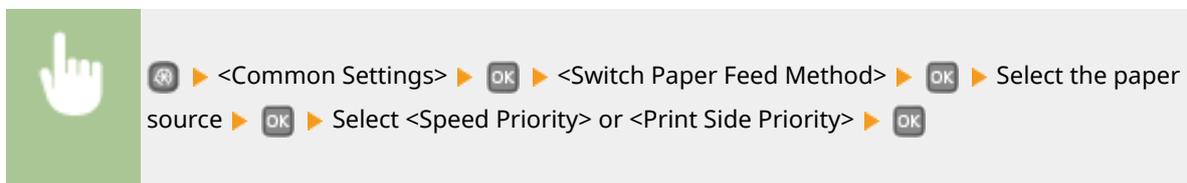
Speed Priority †

Print Side Priority

#### Drawer 2 \*

Speed Priority †

Print Side Priority



#### a Paper Sources

Select the paper source that you want to change the setting for.

### **b** <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.

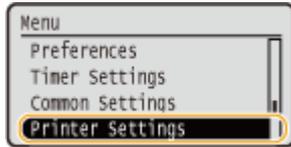
### **c** <Print Side Priority>

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. 440)** ), <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. 46)** ).
- 1-sided printing speed may be slower when <Print Side Priority> is selected.

# Printer Settings



All the settings about the printer are listed with short descriptions. Default settings are marked with a dagger ( † ).

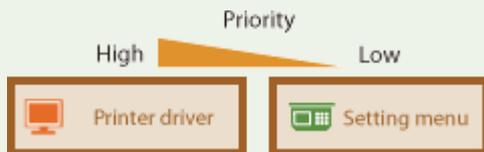
## NOTE

### Asterisks (\*)

- Settings marked with "\*1" are only available when the optional paper feeder (drawer 2) is attached.
- Settings marked with "\*2" are only available for the LBP252dw.

### Priority of settings

- If a print setting is specified both from the printer driver and the operation panel of the machine, the specification from the printer driver overrides that from the operation panel. The specification from the operation panel becomes effective in some specific cases, such as when you are printing from UNIX or other operating system on which printer drivers for the machine are not available.



### Availability of settings

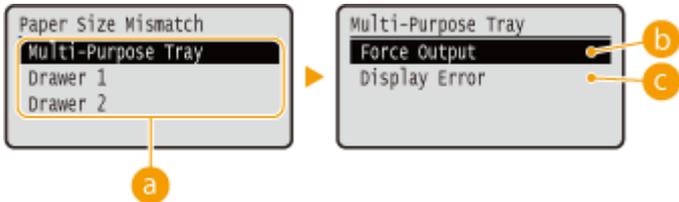
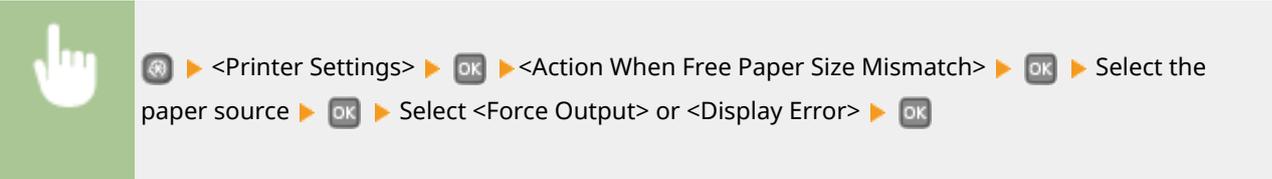
- All the printer settings described in this section, except for <Paper Size Override> ( ▶ **Paper Size Override(P. 315)** ), are only available for PS/PCL printing. Specifying these settings is unnecessary, for example, when you print using the UFR II printer driver.

- ▶ **Action When Free Paper Size Mismatch(P. 313)**
- ▶ **Copies(P. 314)**
- ▶ **2-Sided Printing(P. 315)**
- ▶ **Default Paper(P. 315)**
- ▶ **Paper Size Override(P. 315)**
- ▶ **Print Quality(P. 315)**
- ▶ **Layout(P. 317)**
- ▶ **Auto Error Skip(P. 319)**
- ▶ **Timeout(P. 320)**
- ▶ **Personality(P. 320)**
- ▶ **UFR II(P. 320)**
- ▶ **PCL(P. 321)**
- ▶ **PS(P. 326)**
- ▶ **XPS(P. 328)**
- ▶ **Imaging(P. 331)**

## Action When Free Paper Size Mismatch

In the case where the paper size for a paper source is set to <Free Size> under <Free Size>, specify the operation to be performed by the machine when the size of the loaded paper and the paper size setting in the printer driver are rather different from each other.

<p><b>Multi-Purpose Tray</b>                  Force Output †                  Display Error</p> <p><b>Drawer 1</b>                  Force Output †                  Display Error</p> <p><b>Drawer 2 *1</b>                  Force Output †                  Display Error</p>
--



**a Paper Sources**

Select the paper source for which you want to specify the operation.

**b <Force Output>**

Perform printing even when the paper size setting in the printer driver and the size of the loaded paper are rather different.

**c <Display Error>**

Display an error message and do not perform printing when the paper size setting in the printer driver and the size of the loaded paper are rather different.

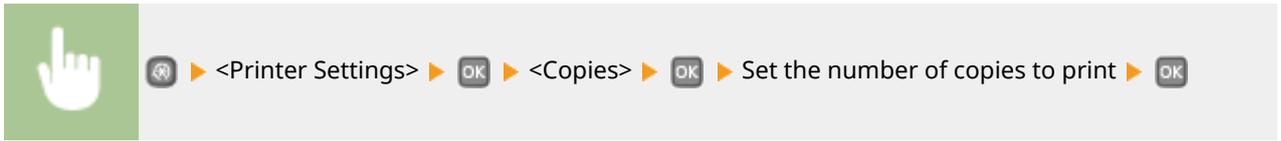
**IMPORTANT**

- If the settings in the printer driver do not match the size and type of the loaded paper, a paper jam or printing error may occur.

**Copies**

Set the number of copies to print.

1 † to 99

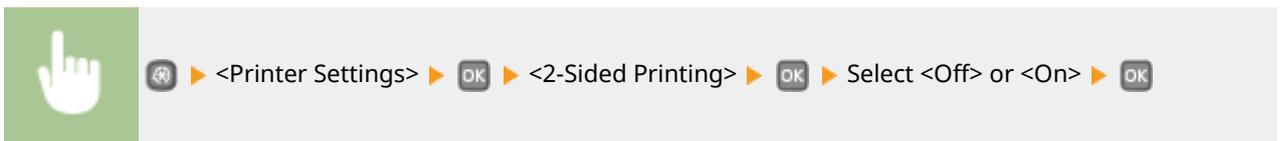


## 2-Sided Printing

Select whether to make 2-sided printouts.

Off <sup>†</sup>

On



## Default Paper

Use this item to specify the paper size and type. [▶Paper\(P. 440\)](#)



## Paper Size Override

Select whether to switch between printing on A4 and LTR size paper if one of these paper sizes is loaded but the other is not. [▶Configuring Printer Settings on the Machine\(P. 108\)](#)

Off <sup>†</sup>

On

### NOTE

- Most print settings such as setting for number of copies or 1-sided/2-sided printing can be made from the printer driver or an application software ( [▶Basic Printing Operations\(P. 70\)](#) ), but the setting for <Paper Size Override> is required to be made on the machine.

## Print Quality

You can change settings related to print quality.

## Density

Adjust the toner density. ▶ **Adjusting Print Density(P. 405)**

### Density

17 Levels

### Fine Adjust

High

17 Levels

Medium

17 Levels

Low

17 Levels

## NOTE

- The settings specified for <Density> are disabled when <Toner Save> is enabled.

## Toner Save

You can save toner consumption. Select <On> when you want to check the layout or other appearance characteristics before proceeding to final printing of a large job.

Off †

On



⚙️ ▶ <Printer Settings> ▶ OK ▶ <Print Quality> ▶ OK ▶ <Toner Save> ▶ OK ▶ Select <Off> or <On> ▶ OK

## Resolution

Specify the resolution to be used for print data processing.

1200 dpi

600 dpi †



⚙️ ▶ <Printer Settings> ▶ OK ▶ <Print Quality> ▶ OK ▶ <Resolution> ▶ OK ▶ Select <1200 dpi> or <600 dpi> ▶ OK

## Barcode Adjustment Mode

If bar codes printed with this machine cannot be read, set this item. The improvement effect is weakest with <Mode 1> and strongest with <Mode 3>.

Off †

Mode 1

Mode 2  
Mode 3

  ▶ <Printer Settings> ▶  ▶ <Print Quality> ▶  ▶ <Barcode Adjustment Mode> ▶  ▶ Select the mode ▶ 

**NOTE**

- Print density will be lighter when you select stronger improvement.
- When printing from the computer, the setting in the printer driver takes precedence. When the setting of [Graphics Mode] in the printer driver is changed to [UFR II Mode] and [Barcode Adjustment Mode] is changed to [Printer Default], the setting in the operation panel takes precedence.
- When you set this item to one of <Mode 1> to <Mode 3>, <Special Printing Mode A> is automatically set to <Off>.  **Special Printing Mode A(P. 334)**

## Layout

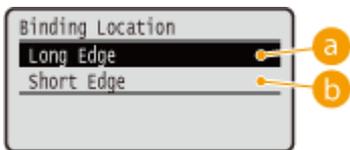
Specify the page layout settings such as binding position and margin values.

### 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. Specify the setting of this item in combination with <Gutter>, which specifies the binding margin to apply to the binding position.

Long Edge †  
Short Edge

  ▶ <Printer Settings> ▶  ▶ <Layout> ▶  ▶ <Binding Location> ▶  ▶ Select <Long Edge> or <Short Edge> ▶ 



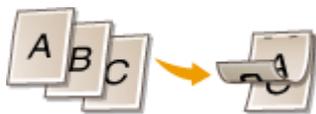
#### **a** <Long Edge>

Specify this to bind on the long edge of paper.



**b <Short Edge>**

Specify this to bind on the short edge of paper.

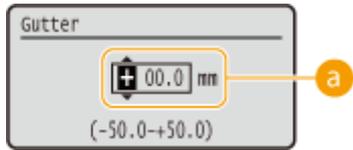


**Gutter**

Shift the print position to adjust the binding margin to apply to the binding edge specified by <Binding Location>. The value "00.0" exerts no effect on the binding margin.

-50.0 to 00.0 <sup>+</sup> to +50.0 (mm)

> <Printer Settings> > OK > <Layout> > OK > <Gutter> > OK > Specify the binding margin > OK



**a Entering the setting value**

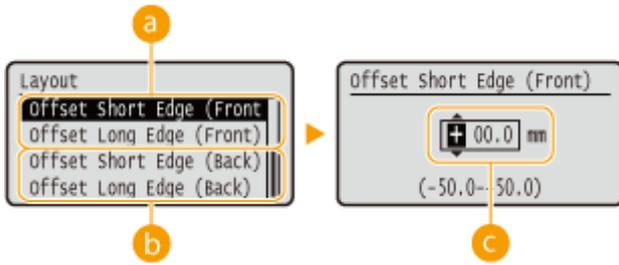
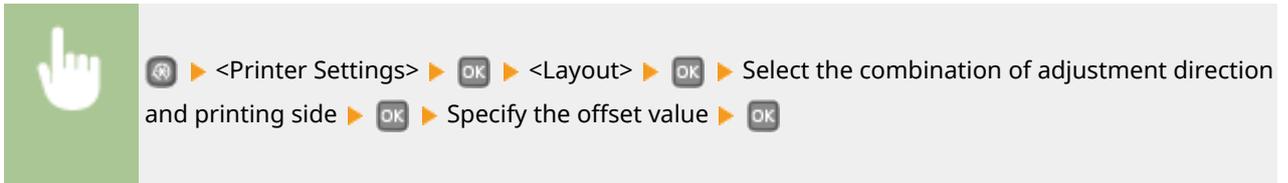
Specify the print position shift direction and shift width. Whether the setting value is a "+" or "-" value determines the binding edge along which to adjust the binding margin. You can adjust the binding margin in units of 0.5 mm. Use ◀ / ▶ to move the cursor, and ▲ / ▼ to switch between "+" / "-" and to increase or decrease the value.

Setting Value	Long Edge	Short Edge
A value with a "+" sign	Left edge of paper 	Top edge of paper 
A value with a "-" sign	Right edge of paper 	Bottom edge of paper 

**Offset Short Edge/Offset Long Edge**

Irrespective of the paper source, you can shift the print position in units of 0.5 mm for all print jobs.

-50.0 to 00.0 <sup>+</sup> to +50.0 (mm)



**a <Offset Short Edge (Front)>/<Offset Long Edge (Front)>**

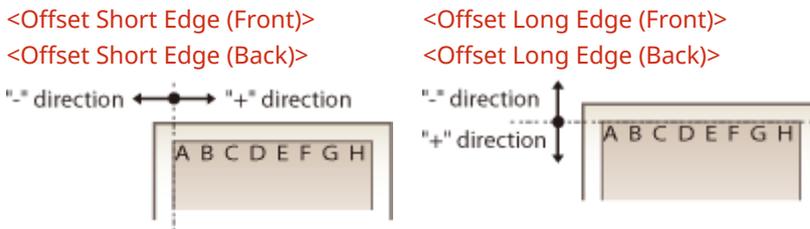
Shifts the print position on the side of paper facing up.

**b <Offset Short Edge (Back)>/<Offset Long Edge (Back)>**

Shifts the print position on the side of paper facing down.

**c Entering the setting value**

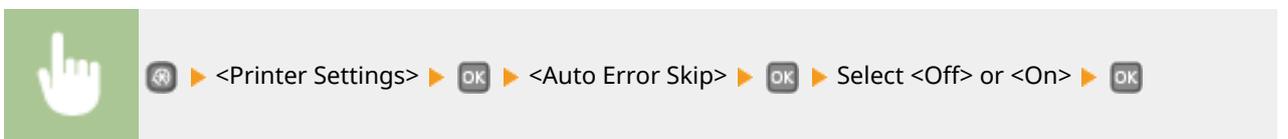
For <Offset Short Edge (Front)>/<Offset Short Edge (Back)>, specify a value with a "+" sign to shift the print position in the left-to-right direction. For <Offset Long Edge (Front)>/<Offset Long Edge (Back)>, specify a value with a "+" sign to shift the print position in the up-to-down direction. To shift in the reverse direction, specify a value with a "-" sign. Use ◀ / ▶ to move the cursor, and ▲ / ▼ to switch between "+" / "-" and to increase or decrease the value.



## Auto Error Skip

Printing stops if a certain error occurs in the process. However, if you set this item to <On>, the certain error will be skipped and printing can continue. Normally, set this item to <Off>.

Off<sup>†</sup>  
On



## Timeout

Set the time period after which the current print job is automatically canceled in the case of a print data reception interruption.

5 to 15 <sup>+</sup> to 300 (sec.)



## Personality <sup>\*2</sup>

Specify the mode in which the machine should operate when the format of document data is unknown.

Auto <sup>+</sup>  
 PS  
 PCL  
 XPS



## UFR II

You can change the settings that become effective when printing from the UFR II printer driver.

### Halftones

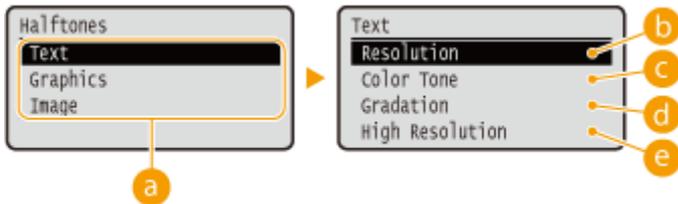
You can select the printing method to reproduce halftones (the intermediate range between the lighter and darker areas of an image) for optimal image quality. For each document, you can make settings by type of image.

**Text**  
 Resolution <sup>+</sup>  
 Color Tone  
 Gradation  
 High Resolution

**Graphics**  
 Resolution  
 Color Tone <sup>+</sup>  
 Gradation  
 High Resolution

**Image**

- Resolution
- Color Tone †
- Gradation
- High Resolution



**a Type of image**

Select the object for which to change the setting. <Text> represents letters and characters, <Graphics> represents lines and figures, and <Image> represents photos and images.

**b <Resolution>**

Produces a fine print with clear edges of text. It is suitable for printing characters and fine lines.

**c <Color Tone>**

Produces a sharp print with strong contrast of lightness and darkness. It is suitable for printing image data such as photo image data.

**d <Gradation>**

Produces a print with smooth gradation or smooth edges. It is suitable for printing figures or graphs containing gradation areas.

**e <High Resolution>**

As compared to <Resolution>, this produces a finer print but quality stability is slightly lower. It is suitable to obtain a print of character data or fine line data or CAD data with sharp edges.

**PCL**

Specify the PCL printing settings such as page layout and print quality.

**Paper Save**

Select whether to save paper by not outputting blank pages in documents. By selecting <On>, the machine will not output blank pages. To output all your document data when printing, including any blank pages that you have inserted in your document, select <Off>.

- Off †
- On



### Orientation

Select <Portrait> (vertical orientation) or <Landscape> (horizontal orientation) for the page orientation.

Portrait †  
Landscape



### 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 operation panel. **PCL Font List(P. 414)**

0 † to 54



### 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>.

4.00 to 12.00 † to 999.75 (point)



### 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>.

0.44 to 10.00 † to 99.99 (cpi)



**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>.

5 to 64 + to 128 (lines)



**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>.

DESKTOP	PC8 +
ISO4	PC850
ISO6	PC852
ISO11	PC8DN
ISO15	PC8TK
ISO17	PC1004
ISO21	PIFONT
ISO60	PSMATH
ISO69	PSTEXT
ISOL1	ROMAN8
ISOL2	VNINTL
ISOL5	VNMATH
ISOL6	VNUS
LEGAL	WIN30
MATH8	WINBALT
MCTEXT	WINL1
MSPUBL	WINL2
PC775	WINL5



**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>.

Off<sup>†</sup>  
On



⚙️ ▶ <Printer Settings> ▶ OK ▶ <PCL> ▶ OK ▶ <Custom Paper> ▶ OK ▶ Select <Off> or <On> ▶ OK

### Unit of Measure

Select the unit of measurement to use to set a custom paper size.

Millimeters<sup>†</sup>  
Inches



⚙️ ▶ <Printer Settings> ▶ OK ▶ <PCL> ▶ OK ▶ <Unit of Measure> ▶ OK ▶ Select <Millimeters> or <Inches> ▶ OK

### X dimension

Specify the horizontal dimension (short edge) of the custom paper.

77 to 216<sup>†</sup> (mm)



⚙️ ▶ <Printer Settings> ▶ OK ▶ <PCL> ▶ OK ▶ <X dimension> ▶ OK ▶ Specify the dimension ▶ OK

### Y dimension

Specify the vertical dimension (long edge) of the custom paper.

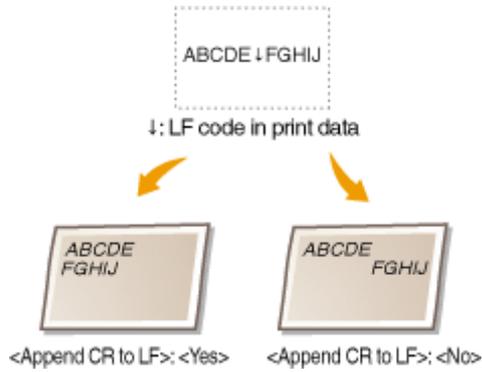
127 to 356<sup>†</sup> (mm)



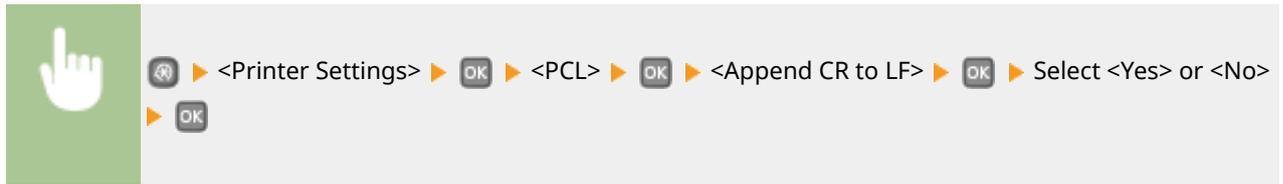
⚙️ ▶ <Printer Settings> ▶ OK ▶ <PCL> ▶ OK ▶ <Y dimension> ▶ OK ▶ Specify the dimension ▶ OK

### 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.



Yes  
No †



### 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.

Off †  
On



### Halftones

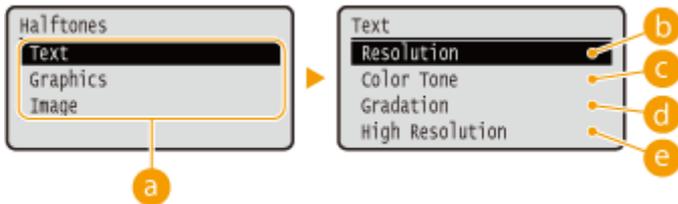
You can select the printing method to reproduce halftones (the intermediate range between the lighter and darker areas of an image) for optimal image quality. For each document, you can make settings by type of image.

**Text**  
Resolution †  
Color Tone  
Gradation  
High Resolution

**Graphics**  
Resolution  
Color Tone †  
Gradation  
High Resolution

**Image**

- Resolution
- Color Tone †
- Gradation
- High Resolution



**a Type of image**

Select the object for which to change the setting. <Text> represents letters and characters, <Graphics> represents lines and figures, and <Image> represents photos and images.

**b <Resolution>**

Produces a fine print with clear edges of text. It is suitable for printing characters and fine lines.

**c <Color Tone>**

Produces a sharp print with strong contrast of lightness and darkness. It is suitable for printing image data such as photo image data.

**d <Gradation>**

Produces a print with smooth gradation or smooth edges. It is suitable for printing figures or graphs containing gradation areas.

**e <High Resolution>**

As compared to <Resolution>, this produces a finer print but quality stability is slightly lower. It is suitable to obtain a print of character data or fine line data or CAD data with sharp edges.

**PS \*2**

Specify the PS printing settings such as page layout and print quality.

**Job Timeout**

This setting enables you to specify the amount of time before a job times out. If a job has not finished within the set time limit, the job automatically cancels.

0 † to 3600 (sec.)



### Print PS Errors

This setting determines whether an error page is printed when an error is encountered.

Off<sup>†</sup>  
On



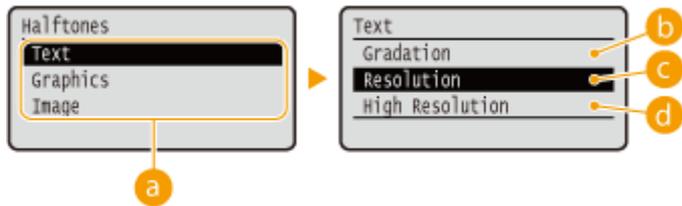
### Halftones

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.

**Text**  
Resolution<sup>†</sup>  
Gradation  
High Resolution

**Graphics**  
Resolution<sup>†</sup>  
Gradation  
High Resolution

**Image**  
Resolution<sup>†</sup>  
Gradation  
High Resolution



**a Type of image**

Select the object for which to change the setting. <Text> represents letters and characters, <Graphics> represents lines and figures, and <Image> represents photos and images.

**b <Resolution>**

Produces a fine print with clear edges of text. It is suitable for printing characters and fine lines.

**c <Gradation>**

Produces a print with smooth gradation or smooth edges. It is suitable for printing figures or graphs containing gradation areas.

**d <High Resolution>**

As compared to <Resolution>, this produces a finer print but quality stability is slightly lower. It is suitable to obtain a print of character data or fine line data or CAD data with sharp edges.

**Grayscale Conversion**

You can select ways to convert color values to a grayscale value when you print color print data.

sRGB NTSC † Uniform RGB
-------------------------------

**NOTE**

- This section describes the settings to convert the color data into grayscale data.
- This setting is invalid for black-and-white data.



 ▶ <Printer Settings> ▶  ▶ <PS> ▶  ▶ <Grayscale Conversion> ▶  ▶ Specify the grayscale conversion ▶ 

**XPS \*2**

You can change settings for XPS files.

**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.

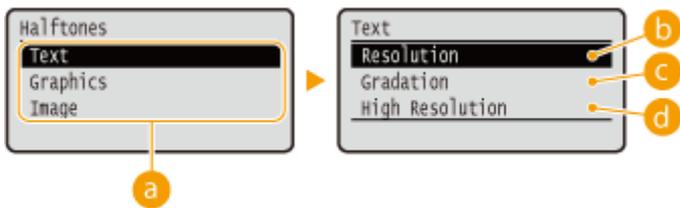
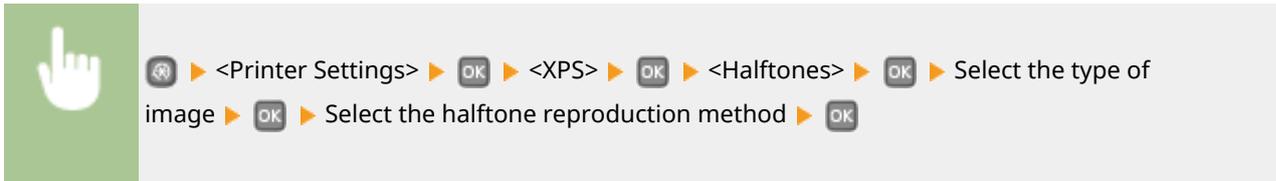
<b>Text</b> Resolution † Gradation High Resolution
---

**Graphics**

- Resolution †
- Gradation
- High Resolution

**Image**

- Resolution †
- Gradation
- High Resolution



**a Type of image**

Select the object for which to change the setting. <Text> represents letters and characters, <Graphics> represents lines and figures, and <Image> represents photos and images.

**b <Resolution>**

Produces a fine print with clear edges of text. It is suitable for printing characters and fine lines.

**c <Gradation>**

Produces a print with smooth gradation or smooth edges. It is suitable for printing figures or graphs containing gradation areas.

**d <High Resolution>**

As compared to <Resolution>, this produces a finer print but quality stability is slightly lower. It is suitable to obtain a print of character data or fine line data or CAD data with sharp edges.

**Grayscale Conversion**

Specify the type of grayscale conversion of color print data.

**Text**

- sRGB
- NTSC †
- Uniform RGB

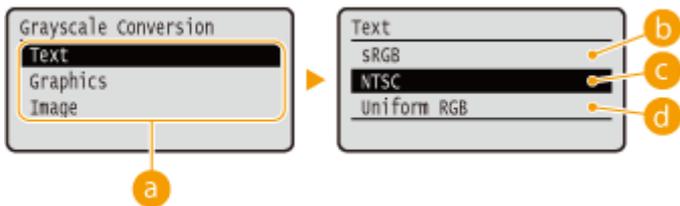
**Graphics**

- sRGB
- NTSC †

Uniform RGB

**Image**  
 sRGB  
 NTSC †  
 Uniform RGB

 <Printer Settings> > <XPS> > <Grayscale Conversion> > Select the type of image > Select the type of grayscale conversion >



**a Type of image**

Select the object for which to change the setting. <Text> represents letters and characters, <Graphics> represents lines and figures, and <Image> represents photos and images.

**b <sRGB>**

Color data is converted to monochrome with emphasis on color differences so that a smooth gradation is achieved.

**c <NTSC>**

Color data is converted to monochrome so that the resulting image looks like a television picture (of the NTSC system).

**d <Uniform RGB>**

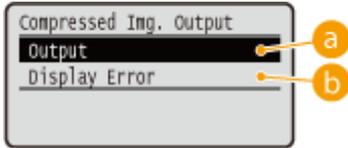
Color data is converted to monochrome so that R, G, and B are uniformly converted to the same gray level.

**Compressed Image Output**

As time passes after a print job starts, image quality may decrease depending on the print data. Specify how the machine is to behave when image quality has significantly decreased.

Output †  
 Display Error

 <Printer Settings> > <XPS> > <Compressed Image Output> > Select <Output> or <Display Error>



**a <Output>**

The machine continues the print job regardless of the degree of decrease in image quality.

**b <Display Error>**

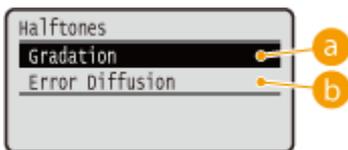
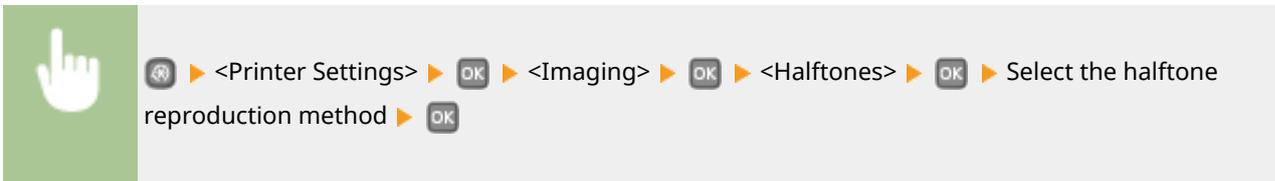
When image quality has significantly decreased, the machine displays an error message and stops the print job.

## Imaging

Make settings for JPEG and TIFF image files that you can print by AirPrint.

### 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.



**a <Gradation>**

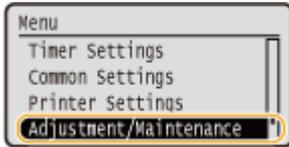
Prints images with fine gradation, such as digital camera images, with a smooth finish.

**b <Error Diffusion>**

Prints images with small text or fine lines with a clear finish.

# Adjustment/Maintenance

0W20-05F



All the settings about adjustment and maintenance are listed with short descriptions. Default settings are marked with a dagger ( † ).

## NOTE

### Asterisks (\*)

Settings marked with an asterisk (\*) are only available when the optional paper feeder (drawer 2) is attached.

- ▶ **Display Timing for Cartridge Preparation Notification (P. 332)**
- ▶ **Printer Density(P. 332)**
- ▶ **Toner Save(P. 333)**
- ▶ **Adjust Print Position(P. 333)**
- ▶ **Special Processing(P. 334)**
- ▶ **Clean Fixing Assembly(P. 336)**

## Display Timing for Cartridge Preparation Notification

Set the display timing for the message notifying you that the amount remaining in the toner cartridge is low.

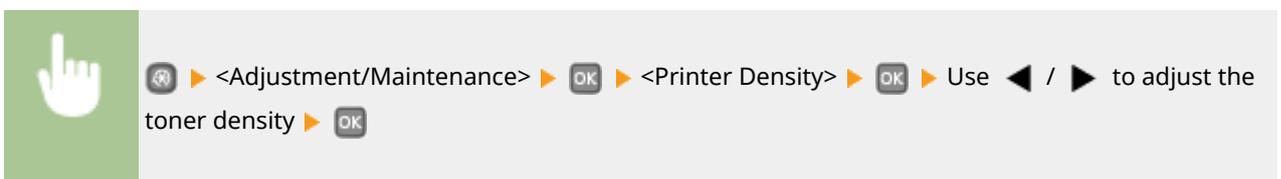
**Auto †**  
**Custom**  
 1 to 20 † to 99 (%)



## Printer Density

Adjust the toner density to be used for printing. ▶ **Adjusting Print Density(P. 405)**

Nine Levels



## Toner Save

You can save toner when performing Report Print.

Off †  
On



> <Adjustment/Maintenance> > > <Toner Save> > > Select <Off> or <On> >

## Adjust Print Position

For each paper source, you can adjust the print position. You can adjust the print position in the range -5.0 to +5.0 mm in vertical direction, and in the range -3.0 to +3.0 mm in horizontal direction, both in increments of 0.1 mm.

### Adjusting Print Position(P. 407)

#### Multi-Purpose Tray

Adjust Vertically (Front Side)

-0.20 to 0.00 † to +0.20 (") or -5.0 to 0.0 † to +5.0 (mm)

Adjust Horizontally (Front Side)

-0.12 to 0.00 † to +0.12 (") or -3.0 to 0.0 † to +3.0 (mm)

Adjust Vertically (Back Side)

-0.20 to 0.00 † to +0.20 (") or -5.0 to 0.0 † to +5.0 (mm)

Adjust Horizontally (Back Side)

-0.12 to 0.00 † to +0.12 (") or -3.0 to 0.0 † to +3.0 (mm)

#### Drawer 1

Adjust Vertically (Front Side)

-0.20 to 0.00 † to +0.20 (") or -5.0 to 0.0 † to +5.0 (mm)

Adjust Horizontally (Front Side)

-0.12 to 0.00 † to +0.12 (") or -3.0 to 0.0 † to +3.0 (mm)

Adjust Vertically (Back Side)

-0.20 to 0.00 † to +0.20 (") or -5.0 to 0.0 † to +5.0 (mm)

Adjust Horizontally (Back Side)

-0.12 to 0.00 † to +0.12 (") or -3.0 to 0.0 † to +3.0 (mm)

#### Drawer 2 \*

Adjust Vertically (Front Side)

-0.20 to 0.00 † to +0.20 (") or -5.0 to 0.0 † to +5.0 (mm)

Adjust Horizontally (Front Side)

-0.12 to 0.00 † to +0.12 (") or -3.0 to 0.0 † to +3.0 (mm)

Adjust Vertically (Back Side)

-0.20 to 0.00 † to +0.20 (") or -5.0 to 0.0 † to +5.0 (mm)

Adjust Horizontally (Back Side)

-0.12 to 0.00 † to +0.12 (") or -3.0 to 0.0 † to +3.0 (mm)

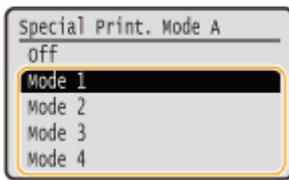
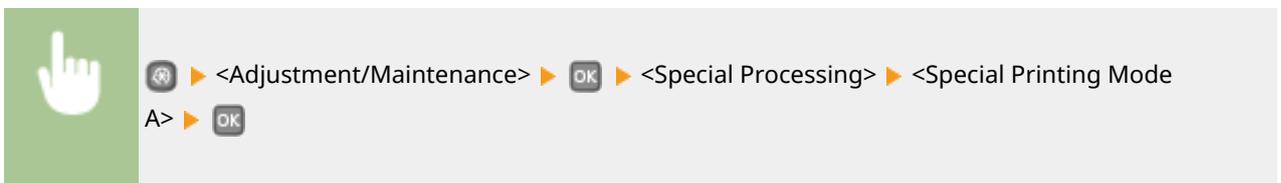
## Special Processing

If the print results are not satisfactory, the following settings may improve the quality of the printouts.

### Special Printing Mode A

Streaks may appear on printouts depending on the paper type or the environmental conditions. In this case, setting this item may solve the problem. The improvement effect is weakest with <Mode 1> and strongest with <Mode 4>.

Off  
Mode 1 †  
Mode 2  
Mode 3  
Mode 4



### NOTE

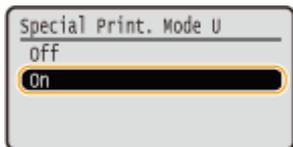
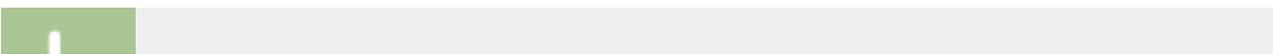
- When printing from the computer, the setting in the printer driver takes precedence. When the setting of [Graphics Mode] in the printer driver is changed to [UFR II Mode], the setting in the operation panel takes precedence. ▶ **Smudges Appear on Printouts(P. 378)**
- This item cannot be set when <Barcode Adjustment Mode> is set to one of <Mode 1> to <Mode 3>. ▶ **Barcode Adjustment Mode(P. 316)**
- Print density will be lighter when you select stronger improvement. It may also result in less sharp edges and rougher details.
- If the problem cannot be solved in spite of this item having been set, set <Special Printing Mode D> to <On>. ▶ **Special Printing Mode D(P. 336)**

### Special Printing Mode U

Toner smudges and splatters may appear around printed characters, graphics, etc. depending on the paper type or the environmental conditions (more specifically when you print on heavy paper or use the machine in an environment with low humidity). In this case, setting this item to <On> may solve the problem.

Off †  
On



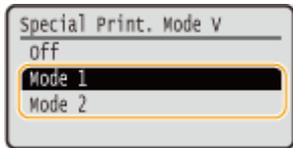


**NOTE**

When you set this item to <On>, print quality may be lower depending on the paper type or the operating environment (more specifically when you print on thin paper or use the machine in an environment with high humidity).

**Special Printing Mode V**

If the printed paper curls when you are using paper having absorbed moisture, set this item. The improvement effect is stronger with <Mode 2> than with <Mode 1>.

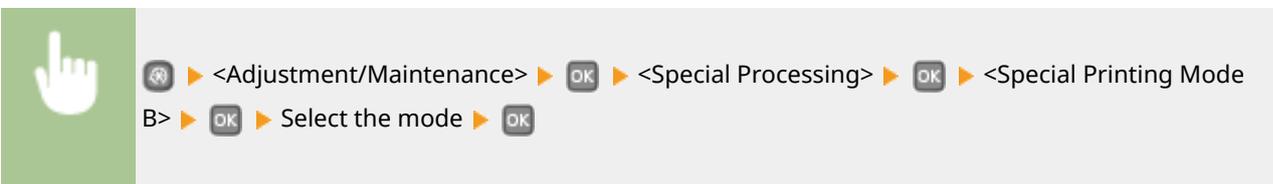


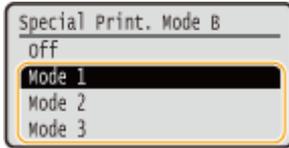
**NOTE**

Printing speed becomes slower when you select stronger improvement.

**Special Printing Mode B**

Streaks may appear on printouts immediately after you replace the toner cartridge or when you print for the first time after a long time. In this case, setting this item may solve the problem. The improvement effect is weakest with <Mode 1> and strongest with <Mode 3>.



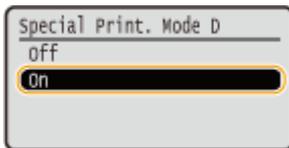
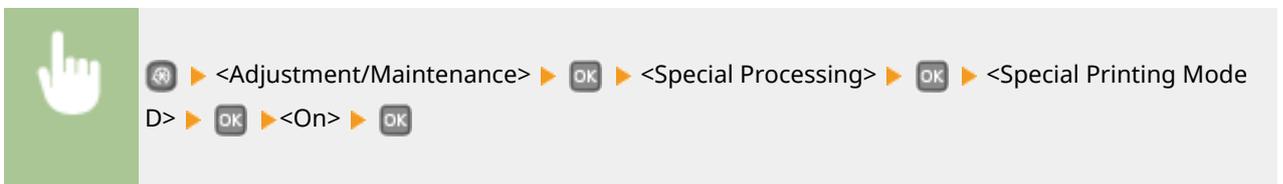
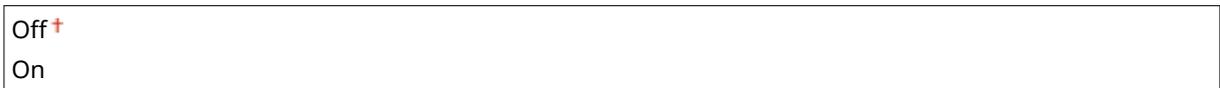


## NOTE

Printing speed becomes slower when you select stronger improvement.

## Special Printing Mode D

Streaks may appear on printouts depending on the paper type or the environmental conditions. Setting this item to <On> may solve the problem. Also, setting this item to <On> will reduce the operating noise during printing.



## NOTE

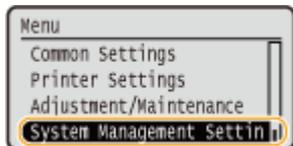
If you set this item to <On>, the printing speed becomes slower.

## Clean Fixing Assembly

Clean the fixing unit after a toner cartridge is replaced or if black streaks appear on printouts. **Fixing Unit(P. 394)**

# System Management Settings

0W20-08H



All the settings about System Management Settings are listed with short descriptions. Default settings are marked with a dagger ( † ).

## NOTE

### Asterisks (\*)

- Settings marked with "\*"1" cannot be imported or exported.
- Settings marked with "\*"2" have different defaults depending on the country or region of purchase.
- Settings marked with "\*"3" are only available for the LBP252dw.

- ▶ **Network Settings(P. 337)**
- ▶ **System Manager Information Settings(P. 337)**
- ▶ **Device Information Settings(P. 338)**
- ▶ **Department ID Management On/Off(P. 338)**
- ▶ **Security Settings(P. 338)**
- ▶ **Select Country/Region(P. 340)**
- ▶ **Remote UI Settings(P. 341)**
- ▶ **Display Job Log(P. 341)**
- ▶ **Use as USB Device(P. 342)**
- ▶ **Enable Product Extended Survey Program(P. 342)**
- ▶ **Display Consumables Information (RUI/Toner Status)(P. 342)**
- ▶ **Google Cloud Print Settings(P. 343)**
- ▶ **Notify to Check Paper Settings(P. 343)**
- ▶ **Import/Export of Settings(P. 343)**
- ▶ **Secure Print Settings(P. 343)**
- ▶ **PDL Selection (Plug and Play)(P. 344)**
- ▶ **Update Firmware(P. 345)**
- ▶ **Initialize Key and Certificate(P. 345)**
- ▶ **Initialize Menu(P. 345)**
- ▶ **Initialize All Data/Settings(P. 346)**

## Network Settings

See ▶ **Network Settings(P. 290)** .

## System Manager Information Settings

Specify the ID or PIN exclusively for Administrators who have access privileges to <Network Settings> and <System Management Settings>. ID is <System Manager ID> and PIN is <System Manager PIN>. You can also register the name of an Administrator. ▶ **Setting the System Manager ID(P. 207)**

### System Manager ID and PIN

Enter a number of up to seven digits for the System Manager ID and PIN.

System Manager ID  
System Manager PIN

### System Manager Name

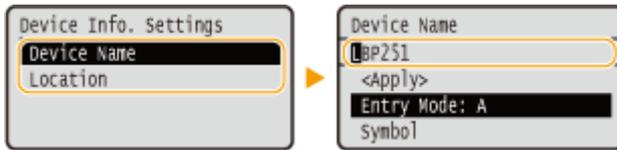
Enter up to 32 alphanumeric characters for the name of an Administrator.

## Device Information Settings

Enter up to 32 alphanumeric characters for the name and the installation location to identify the machine.

Device Name  
Location

  > <System Management Settings> >  > <Device Information Settings> >  > Select <Device Name> or <Location> >  > Enter <Device Name> or <Location> (  **Entering Text(P. 32)** ) > 



## Department ID Management On/Off

Select whether to use the Department ID Management, a feature that uses IDs as user accounts to specify access privileges and maintain information on how the machine is used.  **Setting the Department ID Management(P. 209)**

Off   
On

  > <System Management Settings> >  > <Department ID Management On/Off> >  > Select <Off> or <On> > 

## Security Settings

Enable or disable settings for encrypted communication via SSL or IPsec, as well as settings for IP address or MAC address packet filtering.

### Use SSL \*1

Select whether to use SSL encrypted communication.  **Enabling SSL Encrypted Communication for the Remote UI(P. 235)**

Off   
On



 > <System Management Settings> >  > <Security Settings> >  > <Use SSL>  
 >  > Select <Off> or <On> >  > Restart the machine

### Use IPsec \*1

Select whether to perform encrypted communication by establishing a virtual private network (VPN) via IPsec.  
 **Configuring IPsec Settings(P. 239)**

Off   
 On



 > <System Management Settings> >  > <Security Settings> >  > <Use IPsec>  
 >  > Select <Off> or <On> >  > Restart the machine

### IPv4 Address Filter

Enable or disable settings for filtering packets sent to or received from devices with specified IPv4 addresses.   
**Specifying IP Addresses for Firewall Rules(P. 219)**

**Outbound Filter**  
 Off   
 On

**Inbound Filter**  
 Off   
 On



 > <System Management Settings> >  > <Security Settings> >  > <IPv4 Address  
 Filter> >  > Select <Outbound Filter> or <Inbound Filter> >  > Select <Off> or  
 <On> >  > Restart the machine

### IPv6 Address Filter

Enable or disable settings for filtering packets sent to or received from devices with specified IPv6 addresses.   
**Specifying IP Addresses for Firewall Rules(P. 219)**

**Outbound Filter**  
 Off   
 On

**Inbound Filter**  
 Off   
 On



 > <System Management Settings> >  > <Security Settings> >  > <IPv6 Address Filter> >  > Select <Outbound Filter> or <Inbound Filter> >  > Select <Off> or <On> >  > Restart the machine

### MAC Address Filter

Enable or disable settings for filtering packets sent to or received from devices with specified MAC addresses.  **Specifying MAC Addresses for Firewall Rules(P. 223)**

<p><b>Outbound Filter</b></p> <p>Off </p> <p>On</p>
<p><b>Inbound Filter</b></p> <p>Off </p> <p>On</p>



 > <System Management Settings> >  > <Security Settings> >  > <MAC Address Filter> >  > Select <Outbound Filter> or <Inbound Filter> >  > Select <Off> or <On> >  > Restart the machine

## Select Country/Region <sup>\*1</sup> <sup>\*2</sup>

Specify the country or region where the machine is used. The default setting may vary depending on the setting selected at initial power-on.

Austria (AT)	Netherlands (NL)
Belarus (BY)	Norway (NO)
Belgium (BE)	Poland (PL)
Czech Republic (CZ)	Portugal (PT)
Denmark (DK)	Russia (RU)
Egypt (EG)	Saudi Arabia (SA)
Finland (FI)	Slovenia (SI)
France (FR)	South Africa (ZA)
Germany (DE)	Spain (ES)
Greece (GR)	Sweden (SE)
Hungary (HU)	Switzerland (CH)
Ireland (IE)	Ukraine (UA)
Italy (IT)	Great Britain (GB) 
Jordan (JO)	Other
Luxembourg (LU)	



## Remote UI Settings \*1

Configure settings for using the Remote UI. Using the Remote UI allows you to configure machine settings from a Web browser.

### Use Remote UI

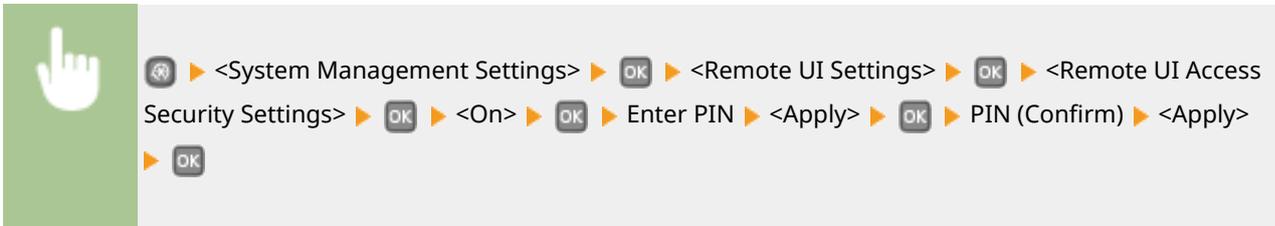
Select whether to use the Remote UI. Using the Remote UI allows you to configure machine settings from a Web browser. **Disabling Remote UI(P. 233)**

Off  
On +

### Remote UI Access Security Settings

Set whether a PIN is required for accessing the Remote UI. Set a PIN of up to 7 digits. All users use a common PIN. **Setting a Remote UI PIN(P. 216)**

**Off +**  
  
**On**  
Remote UI Access PIN



## Display Job Log

Select whether to display the printing logs on the display of the machine.

Off  
On +



## Use as USB Device

Enable or disable the USB port that is used for connecting the machine to a computer. ▶ **Restricting USB Functions(P. 231)**

Off  
On †

## Enable Product Extended Survey Program

Enable or disable the Product Extended Survey Program (a program for the machine usage survey).

Off  
On †



▶ <System Management Settings> ▶ **OK** ▶ <Enable Product Extended Survey Program> ▶ **OK** ▶ Select <Off> or <On> ▶ **OK** ▶ Restart the machine

## Display Consumables Information (RUI/Toner Status)

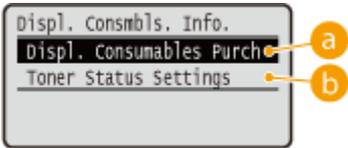
Set whether to display a button in the Remote UI or Toner Status for accessing the Web site for purchasing toner cartridges. Also set whether to use Toner Status.

**Display Consumables Purchase Button (RUI)**  
Off  
On †

**Toner Status Settings**  
Off  
On †  
Displ. Consmbls. Purchase Btn.  
Off  
On †



▶ <System Management Settings> ▶ **OK** ▶ <Display Consumables Information (RUI/Toner Status)> ▶ **OK** ▶ Specify the settings ▶ **OK**



**a <Display Consumables Purchase Button (RUI)>**

Select <Off> to prevent a button that accesses sites for purchasing toner cartridges from being displayed in the Remote UI.

**b <Toner Status Settings>**

If you do not want to use the toner cartridge level notification tool, select <Off>. To prevent a button that accesses sites for purchasing toner cartridges from being displayed in the toner cartridge level notification tool, select <On> and then <Off>.

## Google Cloud Print Settings

Enable or disable Google Cloud Print. **▶ Changing Google Cloud Print Settings(P. 452)**

<p><b>Enable Google Cloud Print</b></p> <p>Off</p> <p>On <sup>†</sup></p>
<p><b>Google Cloud Print Registration Status</b></p>

## Notify to Check Paper Settings

Specify whether to display a message prompting you to check paper settings when loading the paper drawer into the machine.

<p>Off</p> <p>On <sup>†</sup></p>
-----------------------------------



## Import/Export of Settings <sup>\*1</sup>

You can use a USB memory device to import and export settings data. **▶ Using a USB Memory Device to Save/Load Registered Data(P. 417)**

<p>Import</p> <p>Export</p>
-----------------------------

## Secure Print Settings <sup>\*3</sup>

Enable or disable Secure Print. **▶ Printing via Secure Print(P. 112)**

<p><b>Off</b></p>
-------------------

**On †**

Secure Print Deletion Time  
10 to 30 † to 240 (min.)

## 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.

### Network \*1

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.

UFR II †  
UFR II (V4)  
PCL5  
PCL6  
PS \*3

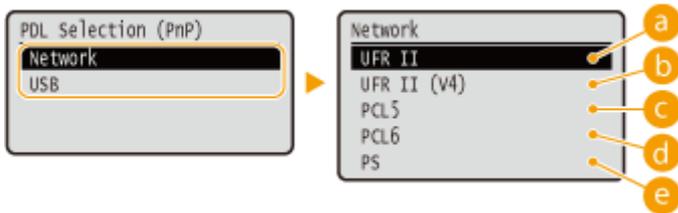
### USB

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.

UFR II †  
UFR II (V4)  
PCL5  
PCL6  
PS \*3



⊞ ▶ <System Management Settings> ▶ OK ▶ <PDL Selection (Plug and Play)> ▶ OK ▶ Select <Network> or <USB> ▶ OK ▶ Select a page description language ▶ OK ▶ Restart the machine



**a <UFR II>**

Detects and connects the machine as a UFR II printer.

**b <UFR II (V4)>**

Detects and connects the machine as a UFR II printer that is compatible with XML Paper Specification (XPS).

**c <PCL5>**

Detects and connects the machine as a PCL5 printer.

**d <PCL6>**

Detects and connects the machine as a PCL6 printer.

**e <PS>**

Detects and connects the machine as a PS printer.

## Update Firmware \*1

Select how to install the firmware update according to the environment of the machine.

- <Via PC>  
Select to manually install the firmware update available on the Canon Web site yourself. For instructions on how to install the update, see the instruction manual available on the Web site. When the machine uses a wireless LAN, update with <Via PC> below or use a USB cable to connect.
- <Via Internet>  
Select to automatically install the firmware update without using a computer. Follow the on-screen instructions to perform the update. The machine must be connected to the Internet.
- <Version Information>  
Select to check details for the current firmware.

Via PC  
Via Internet  
Version Information

## Initialize Key and Certificate \*1

Select to restore [Key and Certificate Settings] and [CA Certificate Settings] to the factory defaults. **▶Initializing Key and Certificate(P. 425)**

## Initialize Menu \*1

Select to restore the settings listed below to the factory defaults. You can restore all the settings listed below at once, or you can restore individual settings separately. **▶Initializing Menu(P. 423)**

Preferences  
Timer Settings  
Common Settings  
Printer Settings  
System Management Settings  
Initialize All

### System Management Settings

Select to restore the System Management Settings to the factory defaults. You can restore all the System Management Settings at once. **▶Initializing Menu(P. 423)**

Network Settings	Enable Product Extended Survey Program
System Manager Information Settings	Information for Purchasing Consumables
Device Information Settings	Google Cloud Print Settings

## Setting Menu List

Department ID Management On/Off	Notify to Check Paper Settings
Display Job Log	Secure Print Settings *3
Use as USB Device	PDL Selection (Plug and Play)
	Initialize All

## Initialize All Data/Settings

Initializes the area where data including logs and settings are stored. Perform this as necessary, for example in such cases as when you want to dispose of the machine after erasing all usage logs. When initializing is complete, the machine restarts automatically.



### IMPORTANT

- To use the machine after initializing, it is necessary to specify all settings again from scratch.

# Troubleshooting

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# Troubleshooting

0W20-05K

When a problem occurs, check this chapter to find out solutions before contacting Canon.

## ■ Paper Jams

If a paper jams, see [▶Clearing Jams\(P. 350\)](#) to remove the jammed paper.



## ■ A Message or Error Code Appears

If the screen displays a message or error code (three digits), see the following sections.



- ▶[When an Error Message Appears\(P. 357\)](#)
- ▶[When an Error Code Appears\(P. 366\)](#)

## ■ Common Problems

If you suspect that the machine is malfunctioning, see the following sections before contacting Canon.



- ▶[Common Problems\(P. 368\)](#)
- ▶[Installation/Settings Problems\(P. 369\)](#)
- ▶[Printing Problems\(P. 373\)](#)

## ■ Printing Results are Not Satisfactory

If printing results are not satisfactory, see [▶When You Cannot Print Properly\(P. 376\)](#) .



## ■ When a Problem Cannot Be Solved

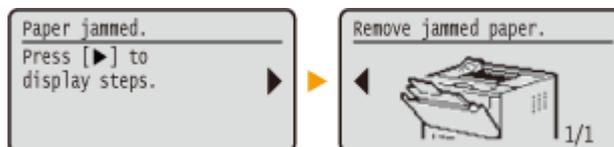
If a problem persists, see [▶When a Problem Cannot Be Solved\(P. 388\)](#) to find out where to contact.



## Clearing Jams

0W20-05L

If a paper jam occurs, <Paper jammed.> is displayed on the screen\*. Press **▶** to display simple solutions. If it is difficult to understand the procedures on the display, see the following sections to clear jams.



\* If the solution is not displayed, press **⊗** and then select <Error Information/Notification> to display the solution.

- <Remove paper from MP tray.>  
**▶ Paper Jams in the Multi-Purpose Tray(P. 350)**
- <Open Drawer 1.>  
 <Open Drawer 2.>  
**▶ Paper Jams in the Paper Drawer(P. 351)**
- <Open the upper rear cover.>  
**▶ Paper Jams in the Back Side(P. 352)**
- <Open the front cover.>  
**▶ Paper Jams inside the Machine(P. 353)**
- <Pull out Drawer 1.>  
**▶ Paper Jams at the Duplex Transport Guide(P. 355)**

### 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. 440)**
- Check that no jammed paper fragments remain in the machine.

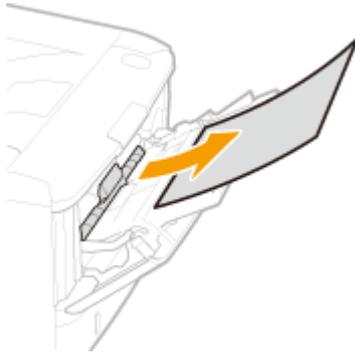
#### Do not forcibly remove the jammed document or paper from the machine

- Forcibly removing the paper may damage parts. 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. 388)**

### Paper Jams in the Multi-Purpose Tray

If there is paper loaded in the tray, remove it first. 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 Gently pull out the paper.**



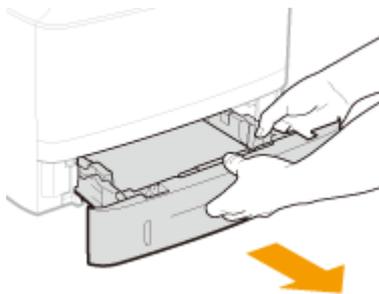
**2 When the screen shown below is displayed, use ◀ / ▶ to select <Yes>, and press **OK**.**



## Paper Jams in the Paper Drawer

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 Pull out the paper drawer.**

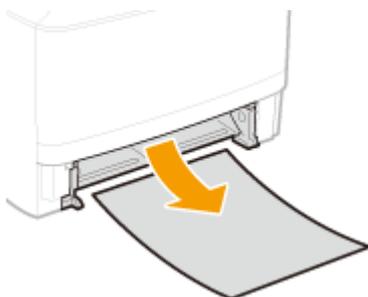


**IMPORTANT:**

- Make sure to hold the paper drawer with both hands, and pull it out gently. Otherwise, you may damage the paper drawer by dropping it, if it slides out too easily.

**2 Gently pull out the paper.**

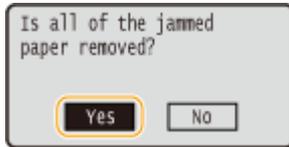
- When the optional paper feeder(drawer 2) is attached, gently pull out the paper in the same way.



### 3 Set the paper drawer.

- When you insert the paper drawer with <Notify to Check Paper Settings> set to <On>, a confirmation screen is displayed. **☞Notify to Check Paper Settings(P. 343)**

### 4 When the screen shown below is displayed, use ◀/▶ to select <Yes>, and press **OK**.

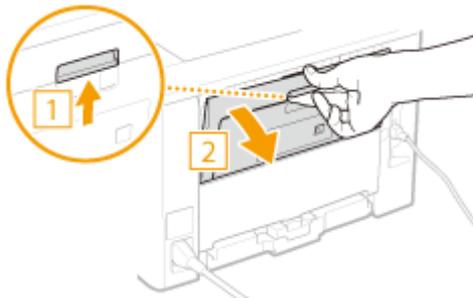


## Paper Jams in the Back Side

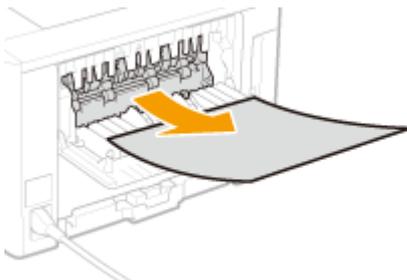
Do not forcibly remove jammed paper from the machine. If the jammed paper cannot be removed easily, proceed to the next step.

### 1 Remove the jammed paper inside the upper rear cover.

- 1 Open the upper rear cover.



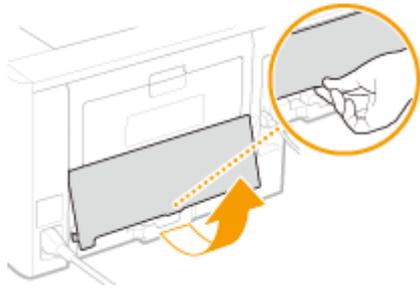
- 2 Gently pull out the paper.



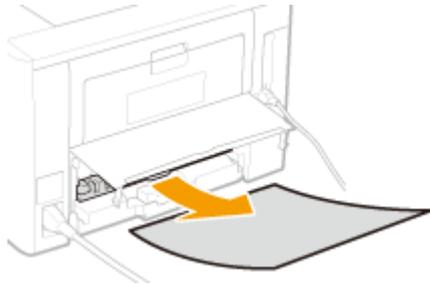
- 3 Close the upper rear cover.

### 2 Remove the jammed paper in the duplex unit.

- 1 Open the lower rear cover.



**2** Gently pull out the paper.



**3** Close the lower rear cover.

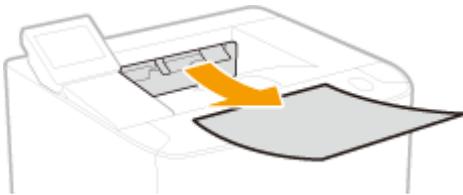
**3** When the screen shown below is displayed, use ◀ / ▶ to select <Yes>, and press **OK**.



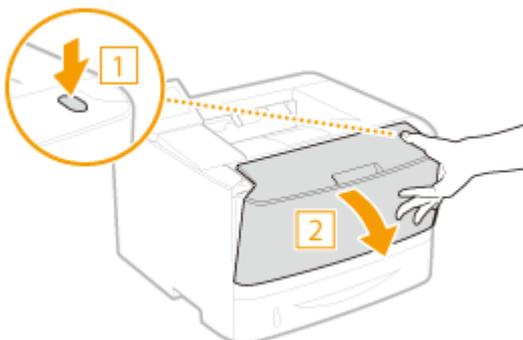
## Paper Jams inside the Machine

Do not forcibly remove jammed paper from the machine. If the jammed paper cannot be removed easily, proceed to the next step.

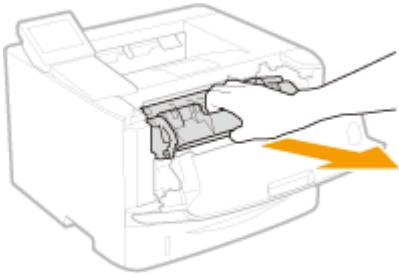
**1** Gently pull out the paper.



**2** Open the front cover while holding down on the button.

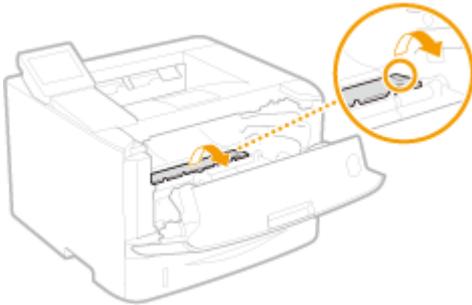


**3 Remove the toner cartridge.**



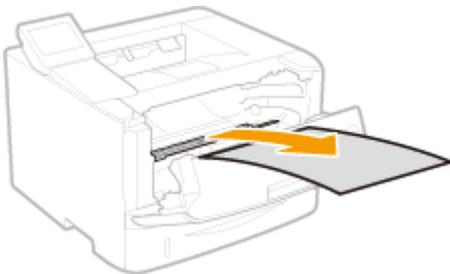
**4 Hold the green knob and raise the transport guide.**

- Keep holding the transport guide until returning it back to position in step 6.



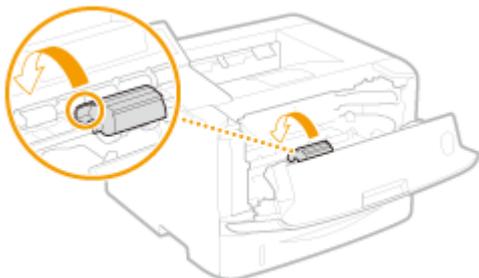
**5 Gently pull out the paper.**

- Pull out the paper while holding it as horizontally as possible to prevent unfixed toner from falling.

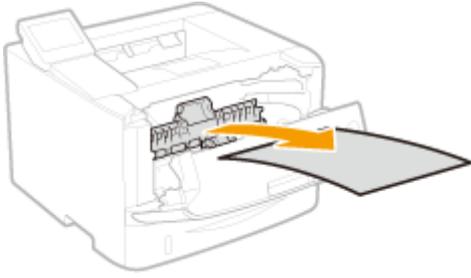


**6 Gently return the transport guide back to position.**

**7 Hold the green knob, and open the roller cover.**



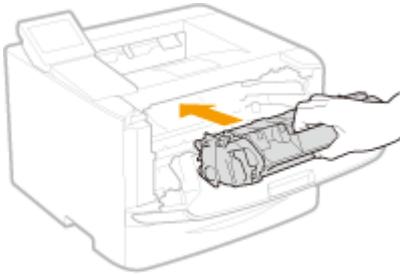
**8 Gently pull out the paper.**



**9 Gently return the roller cover back to position.**

**10 Install the toner cartridge.**

- Fully push it in until it cannot go any further.

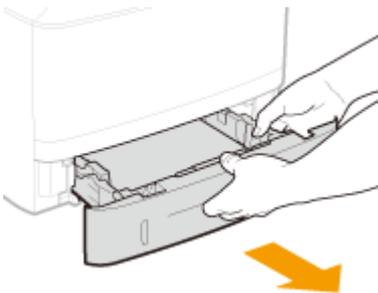


**11 Close the front cover.**

## Paper Jams at the Duplex Transport Guide

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.

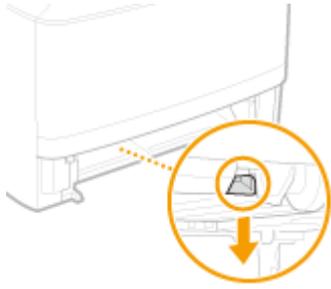
**1 Pull out the paper drawer.**



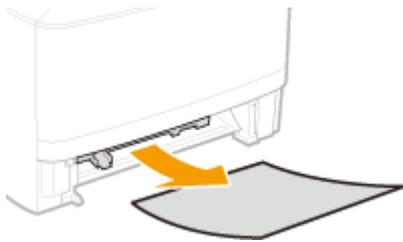
**IMPORTANT:**

- Make sure to hold the paper drawer with both hands, and pull it out gently. Otherwise, you may damage the paper drawer by dropping it, if it slides out too easily.

**2 Hold the green knob and push down the duplex transport guide.**

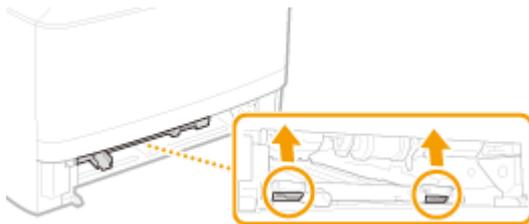


**3 Gently pull out the paper.**



**4 Holding the left and right side handles of the duplex transfer guide, return the guide back to position.**

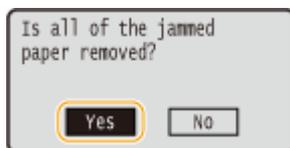
- Fully close the guide until it clicks.



**5 Set the paper drawer.**

- When you insert the paper drawer with <Notify to Check Paper Settings> set to <On>, a confirmation screen is displayed. ▶ **Notify to Check Paper Settings(P. 343)**

**6 When the screen shown below is displayed, use ◀/▶ to select <Yes>, and press **OK**.**



## When an Error Message Appears

0W20-08A

When you encounter an operation problem such as when a print processing error occurs or the memory becomes full, a message appears on the screen. Find out more information about messages in the following list.

### Cannot analyze the authentication server certificate.

**The authentication server certificate may be invalid, or the certificate may be in a format that the printer does not support.**

- Check the authentication server certificate.
- ▶ **Configuring IEEE 802.1X Authentication(P. 248)**

### Cannot find the access point.

**When automatic setting with WPS was attempted, a wireless router could not be detected within a specific period of time.**

- Connect again paying attention to the time limit.
- ▶ **Setting Up Connection Using WPS Push Button Mode(P. 138)**
- ▶ **Setting Up Connection Using WPS PIN Code Mode(P. 140)**

**An SSID or network key of a wireless router was entered manually, but the entry was incorrect.**

- Check the SSID and network key, and enter the correct ones again.
- ▶ **Checking the SSID and Network Key(P. 150)**
- ▶ **Setting Up Connection by Specifying Detailed Settings(P. 146)**

**A wireless router could not be detected due to setting problems of the network to be connected.**

- Check whether the machine is properly installed and ready to connect to the network.
- ▶ **Installation/Settings Problems(P. 369)**
- If the problem persists, check the security settings of the wireless router.

### Cart. end of lifetime. Rplcmt. recommended.

**The toner cartridge has reached the end of its lifetime.**

- Replacement of the toner cartridge is recommended.
- ▶ **How to Replace Toner Cartridges(P. 400)**

### Change the authentication password.

**The password has expired.**

- Set a new password.

## Check the authentication settings.

**The authentication method set on the machine does not match the authentication method set on the RADIUS server.**

- Check that the same authentication method is set on this machine and the RADIUS server, and set the correct authentication method.
- ▶ **Configuring IEEE 802.1X Authentication(P. 248)**

## Could not connect using Access Point Mode.

**Connection in Access Point Mode failed due to an error.**

- Wait a few moments and try again. If you still cannot connect, try switching the machine off briefly.
- ▶ **Make Direct Connection (Access Point Mode)(P. 125)**

## Could not connect using the wireless LAN.

**Wireless LAN communication failed due to an error.**

- Wait for a while, and set again. If you still cannot get connection, turn OFF the machine and then restart it.

## Could not connect using the wireless LAN.

**A connection failed due to an error while setting wireless LAN connection.**

- Restart the machine and set again.
- If the problem persists even after restarting the machine, check whether the machine is properly installed and ready to connect to the network.
- ▶ **Installation/Settings Problems(P. 369)**
- If the problem persists even after checking the wireless LAN connection, check the security settings of the wireless router.

## Could not connect using WPS.

**When automatic setting with WPS was attempted, the connection failed due to an error.**

- Wait for a while, and set again. If the problem persists, check whether the wireless router supports WPS.

**If WPS is supported:**

Check whether the machine is properly installed and ready to connect to the network.

- ▶ **Installation/Settings Problems(P. 369)**

**If WPS is not supported:**

Set using another connecting method.

- ▶ **Connecting to a Wireless LAN(P. 136)**

## Could not connect. Check the PSK settings.

**The network key (PSK) of a wireless router to be connected is not set to the machine correctly.**

- Check the network key (PSK) of the wireless router, and set it to the machine again.
- ▶ **Checking the SSID and Network Key(P. 150)**
- ▶ **Setting Up Connection by Selecting a Wireless Router(P. 143)**
- ▶ **Setting Up Connection by Specifying Detailed Settings(P. 146)**
- If the problem persists even after checking the network key, check whether the machine is properly installed and ready to connect to the network.
- ▶ **Installation/Settings Problems(P. 369)**

## Could not connect. Max connections to access point reached

**You tried to connect to a wireless LAN router to which the maximum possible number of devices are already connected.**

- Decrease the number of devices connected to the wireless LAN router (the number of clients). For the maximum number of devices that can be connected to a wireless LAN router, see the instruction manual for the router or contact the manufacturer of the router.

## Could not detect any connections from wireless devices.

**It was not possible to detect any mobile device within the predetermined length of time.**

- Connect again paying attention to the time limit.
- ▶ **Make Direct Connection (Access Point Mode)(P. 125)**

## Could not perform cleaning.

**Paper jammed during cleaning.**

- Remove the jammed paper, set paper correctly, and perform cleaning again.
- ▶ **Clearing Jams(P. 350)**
- ▶ **Fixing Unit(P. 394)**

**The amount remaining in toner cartridge required for cleaning the fixing unit is insufficient.**

- Cleaning requires sufficient toner cartridge remaining. Replace the toner cartridge, and perform the cleaning again.
- ▶ **Replacing Toner Cartridges(P. 396)**

## Could not perform Open System auth. Check WEP settings.

**The authentication method of the machine is set to <Open System>, but that of a wireless router is set to "Shared Key."**

- Connect again by manually changing the WEP authentication method to <Shared Key>.

▶ **Setting Up Connection by Specifying Detailed Settings(P. 146)**

**The MAC address of the machine is rejected because the MAC address filter is set at a wireless router.**

- Set the wireless router to permit the MAC address of the machine and your computer. For more information about how to set, see the instruction manuals for your networking devices or contact your manufacturer. To check the MAC address of the machine, press  ▶ select <Network Settings> ▶ <Wireless LAN Settings> ▶ <Connection Information>.

▶ **Viewing the MAC Address for Wired LAN(P. 162)**

Could not perform Shared Key auth. Check WEP settings.

**The network key (the WEP key) of a wireless router to be connected is not set to the machine correctly.**

- Check the network key (the WEP key) of the wireless router, and set it to the machine again.

▶ **Checking the SSID and Network Key(P. 150)**

▶ **Setting Up Connection by Specifying Detailed Settings(P. 146)**

- Connect again by selecting a wireless router or by manually changing the WEP authentication method to <Open System>.

▶ **Setting Up Connection by Selecting a Wireless Router(P. 143)**

▶ **Setting Up Connection by Specifying Detailed Settings(P. 146)**

**The authentication method of the machine is set to <Shared Key>, but that of the wireless router is set to "Open System."**

- Change the WEP authentication method to "Shared Key" at the wireless router, and connect again. For more information about how to change, see the instruction manuals for your networking devices or contact your manufacturer.

Direct Connection terminated.

**Connection between the machine and the mobile device was terminated.**

- Reestablish Direct Connection.

▶ **Make Direct Connection (Access Point Mode)(P. 125)**

Insert the toner cartridge.

**The toner cartridge is not set or properly set.**

- Properly set the toner cartridge.

▶ **How to Replace Toner Cartridges(P. 400)**

Error. Non-Canon cart. not cov'd by warranty. Amount in cart. cannot be displ. correctly. Close: Press OK

**A toner cartridge may not be installed correctly or may be faulty.**

- Re-install the toner cartridge. If re-installing the toner cartridge fails to clear the error message, the toner cartridge may be faulty. Contact the store where you purchased the toner cartridge or consult the Canon Customer Help Center.

▶ **How to Replace Toner Cartridges(P. 400)**

**The toner cartridge used may not be a genuine Canon product.**

- Only genuine Canon toner cartridges should be used as replacement toner cartridges.

▶ **Consumables(P. 443)**

## Google Cloud Print not avail. Server auth err

**Server authentication for Cloud Print failed. Or, acquisition of information for registration failed.**

- Check whether the date and time settings are correctly specified.

▶ **Date/Time Settings(P. 307)**

## Google Cloud Print not avail. Server comm err

**Cloud Print is unavailable due to an error.**

- Check whether the machine is correctly connected to a wireless LAN or wired LAN.

▶ **Connecting to a Wireless LAN(P. 136)**

▶ **Connecting to a Wired LAN(P. 135)**

- A port that is used for Cloud Print may be blocked by a firewall or other protection. Check whether the 5222 port is available with your computer.
- If a proxy server is used on the network, check whether the proxy settings on the machine and the server are correct. For details, contact your Network Administrator.

▶ **Setting a Proxy(P. 228)**

## Incorrect number of characters/invalid characters entered.

**The network key (the WPA/WPA2-PSK or WEP key) of a wireless router is not entered correctly.**

- Check the network key (the WPA/WPA2-PSK or WEP key) of the wireless router, and set it to the machine again. For more information about how to check the network key, see the instruction manuals for your networking devices or contact your manufacturer.

▶ **Checking the SSID and Network Key(P. 150)**

▶ **Setting Up Connection by Selecting a Wireless Router(P. 143)**

▶ **Setting Up Connection by Specifying Detailed Settings(P. 146)**

## Mem. full. Check error w/ Status Monitor key.

**The memory became full of print data that could not be printed due to errors.**

- For the documents with errors, select <Skip Error> or cancel printing of those documents.

▶ **Canceling Prints(P. 75)**

## Memory full. Process secure print jobs.

**Memory became full of secured documents that were not printed.**

- Print the secured documents that are stored in memory.
- ▶ **Printing via Secure Print(P. 112)**

## No Paper

**Paper is not loaded in the paper drawer or the multi-purpose tray.**

- Load the paper.
- ▶ **Loading Paper(P. 35)**

**Paper on which reports or lists can be printed is not loaded.**

- Reports or lists can be printed on A4 or Letter size paper. Load A4 or Letter size paper and set its size. Also, set the paper type to <Plain>, <Plain L>, <Recycled>, <Color>, or <Heavy 1> depending on the loaded paper.
- ▶ **Loading Paper(P. 35)**
- ▶ **Specifying Paper Size and Type(P. 50)**

## No reply from the destination.

**A network cable may be disconnected, or there may be a problem in a switch.**

- Check the status of the network cables and switches.

## No response from host.

**The machine is not connected to a network correctly.**

- Check the machine and network settings, and connect again.
- ▶ **Connecting to a Network(P. 132)**

**Non-Canon cart. not covered by warranty. Amount in cart. cannot be displ. correctly. Close: Press OK**

**The toner cartridge used may not be a genuine Canon product.**

- Only genuine Canon toner cartridges should be used as replacement toner cartridges.
- ▶ **Consumables(P. 443)**

## Paper jammed.

### Paper jams.

- Remove the jammed paper, and print again (Printing may resume automatically).
- ▶ **Clearing Jams(P. 350)**

## Prepare a cartridge.

### The toner cartridge needs to be replaced soon.

- Shake the toner cartridge to evenly distribute the toner inside the toner cartridge. It is recommended to replace the toner cartridge when printing a large volume of documents.
- ▶ **Using Up Toner(P. 398)**
- ▶ **How to Replace Toner Cartridges(P. 400)**

## Printing is restricted.

### Printing is disabled in the Department ID Management.

- Log on with a Department ID for which printing is not disabled. For the Department ID and PIN, contact your Administrator.
- ▶ **Setting the Department ID Management(P. 209)**

## Set the correct authentication information.

### The client authentication information (key pair and certificate, user name and password, or CA certificate) is not set correctly.

- Check the specified authentication method and authentication information (key pair and certificate, user name and password, and CA certificate).
- ▶ **Configuring IEEE 802.1X Authentication(P. 248)**
- ▶ **Verifying Key Pairs and Digital Certificates(P. 266)**

## Set the information necessary for authentication.

### The IEEE 802.1X authentication has not been configured correctly.

- Configure the IEEE 802.1X correctly from the Remote UI.
- ▶ **Configuring IEEE 802.1X Authentication(P. 248)**

## Size/Settings Mismatch

### The paper size setting on the operation panel does not match the loaded paper size.

- Match the paper size setting specified in <Paper Settings> and the size of the paper that is actually loaded.

**To use the loaded paper**

Change the setting of <Paper Settings> to match the loaded paper size.

▶ **Specifying Paper Size and Type(P. 50)**

**NOTE:**

If printing from a computer, check whether the paper size setting in the printer driver matches the loaded paper size.

**To load paper without changing the settings**

Load the paper with the size that is set to <Paper Settings>.

▶ **Loading Paper(P. 35)**

- Check that the paper guides in the paper drawer are set in the correct position.

▶ **Loading Paper(P. 35)**

**The authentication server certificate has expired.**

**The server certificate sent from the RADIUS server has expired.**

- Check the valid period of the server certificate on the RADIUS server.

▶ **Configuring IEEE 802.1X Authentication(P. 248)**

**The authentication server certificate is incorrect.**

**There is no CA certificate registered in the printer that is compatible with the authentication server certificate.**

- Check that there is a CA certificate registered in the printer that is compatible with the authentication server certificate.

▶ **Configuring IEEE 802.1X Authentication(P. 248)**

**The drawer paper guide may not be set to the correct position. Adjust the guide to the size of the loaded paper.**

**The paper guides in the paper drawer are not set correctly.**

- Set the paper guides in the paper drawer correctly.

▶ **Loading Paper in the Paper Drawer(P. 37)**

**The WEP key is not set correctly. Check the WEP settings.**

**The network key (the WEP key) of a wireless router to be connected is not set to the machine correctly.**

- Check the network key (the WEP key) of the wireless router, and set it to the machine again.

▶ **Checking the SSID and Network Key(P. 150)**

▶ **Setting Up Connection by Selecting a Wireless Router(P. 143)**

▶ **Setting Up Connection by Specifying Detailed Settings(P. 146)**

**The authentication method of the machine is set to <Shared Key>, but that of the wireless router is set to "Open System."**

- Connect again by selecting a wireless router or by manually changing the WEP authentication method to <Open System>.
- ▶ **Setting Up Connection by Selecting a Wireless Router(P. 143)**
- ▶ **Setting Up Connection by Specifying Detailed Settings(P. 146)**
- Change the WEP authentication method to "Shared Key" at the wireless router, and connect again. For more information about how to change, see the instruction manuals for your networking devices or contact your manufacturer.

**Use Remote UI to set info. necessary for authentication.**

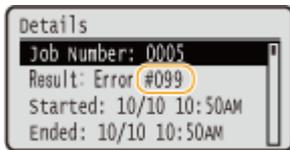
**The IEEE 802.1X settings are incorrect.**

- Check whether [Login Name] is set correctly.
- Check whether the [Use TLS], [Use TTLS], or [Use PEAP] check box is selected.
- If using TLS, check whether a key pair is registered.
- If using TTLS or PEAP, check whether a user name and password are set correctly.
- ▶ **Configuring IEEE 802.1X Authentication(P. 248)**

## When an Error Code Appears

0W20-08C

If printing is not successful due to an error, the print log screen displays an error code consisting of three digits. Check the following to find out causes and solutions for each error code.



### #037

#### Memory is full.

- If a print job is queued, wait until the job is completed and try printing again.
- To print a document with many pages, divide it into multiple sections.

### #099

#### Printing was canceled.

- When you cancel an operation, this error code is displayed, but this is not abnormal. Try printing documents again as necessary.

### #701

#### Authentication failed because an incorrect Department ID or PIN was entered when the Department ID Management was activated.

- Enter the correct Department ID and PIN.

#### Continuing operating without entering a Department ID was attempted even though unknown-ID jobs (functions that permit operations without a Department ID and PIN) were disabled in the Department ID Management.

- Enable unknown-ID jobs in System Manager Mode in Remote UI.
- ▶ **Blocking Jobs When Department ID Is Unknown(P. 214)**

### #852

#### The machine turns OFF for some reason.

- Check whether the power plug is inserted into an outlet firmly.

## #853

**A document could not be printed because its data size exceeded the machine's maximum processing capability.**

- The machine may not be able to print documents with many pages. Print a reduced number of pages at a time, or print when no print job is queued or no document is being printed. If you are still unable to print, check the document data for any defects.

**Printing was canceled from the computer.**

- If you cancel an operation when the print data is being sent to the machine from a computer, this error code is displayed, but this is not abnormal. Print again as necessary.

**A secured document that had been left unprinted was deleted.**

- If the secured document is not printed within a specific period of time (30 minutes by default), it is deleted from memory. Send the secured document again, and print it within the period.

▶ **Printing via Secure Print(P. 112)**

**Printing using Secure Print was attempted when Secure Print was restricted.**

- When <Secure Print Settings> is set to <Off>, you cannot use Secure Print. Set the setting to <On> and print again.

▶ **Printing via Secure Print(P. 112)**

- Print without using Secure Print.

▶ **Basic Printing Operations(P. 70)**

**You tried to print a file that is either corrupted or not supported.**

- Check the file and try again.

▶ **Basic Printing Operations(P. 70)**

## #861

**A document could not be printed because a printer driver that was not intended for this machine was used.**

- Print again by using the printer driver for this machine.

▶ **Basic Printing Operations(P. 70)**

**A document could not be printed due to a defect in its data.**

- Check the document data for any defects.

## #863

**An error occurred when printing from a computer.**

- Turn OFF the machine, wait for at least 10 seconds, and turn it back ON. After the restart is complete, try printing again.

## Common Problems

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0W20-05S

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?

- If the machine is turned ON but does not respond, turn it OFF, check whether the power cord is connected correctly, and turn it back ON. For information connecting the power cord, see "Getting Started".

▶ **Manuals Included with the Machine(P. 456)**

#### → Are the LAN cable and USB cable connected correctly?

- Check whether these cables are connected correctly.

▶ **Parts and Their Functions(P. 16)**

#### → Is sleep mode activated?

- If you leave the machine unattended for a specific period of time, it enters sleep mode for power conservation, not allowing you to operate it.  
To cancel sleep mode, press .

#### → Is any message displayed on the screen?

- If a problem occurs, a message is displayed.

▶ **When an Error Message Appears(P. 357)**

#### If a problem persists even after checking

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Click the link that corresponds to the problem.

▶ **Installation/Settings Problems(P. 369)**

▶ **Printing Problems(P. 373)**

# Installation/Settings Problems

0W20-05U

See [▶Common Problems\(P. 368\)](#) also.

[▶Problems with the Wireless/Wired LAN Connection\(P. 369\)](#)

[▶Problem with the USB Connection\(P. 372\)](#)

[▶Problem with the Print Server\(P. 372\)](#)

## 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. The following can be used at the same time: a USB cable and a wireless LAN, or a USB cable and a wired LAN.

### Remote UI is not displayed.

- Are <Use HTTP> and <Use Remote UI> set to <On>?
  - ▶[Disabling HTTP Communication\(P. 232\)](#)
  - ▶[Disabling Remote UI\(P. 233\)](#)
- 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.
  - ▶[Operation Panel\(P. 24\)](#)
  - ▶[Viewing Network Settings\(P. 161\)](#)
- 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\(P. 135\)](#)
  - ▶[Viewing Network Settings\(P. 161\)](#)
- Are you using a proxy server? If so, 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 not limited by the firewall on your computer? If IP addresses are or an MAC address is incorrectly entered, the Remote UI cannot be displayed. In that case, you need to use the operation panel to set <IPv4 Address Filter>, <IPv6 Address Filter>, or <MAC Address Filter> to <Off>.
  - ▶[Restricting Communication by Using Firewalls\(P. 218\)](#)
  - ▶[IPv4 Address Filter\(P. 339\)](#)
  - ▶[IPv6 Address Filter\(P. 339\)](#)
  - ▶[MAC Address Filter\(P. 340\)](#)

### A connection to a network cannot be established.

- The IP address may not be set correctly. Set the IP address again.
  - ▶[Setting IP Addresses\(P. 153\)](#)
- When you connect the machine to a computer via 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\(P. 370\)](#)

### You are unsure of the set IP address.

- ▶ **Viewing Network Settings(P. 161)**

### The connection method cannot be switched between a wired LAN and a wireless LAN.

- Did you select a wired LAN or a wireless LAN on the operation panel on the machine as well? This selection is required to have the machine switch to your selection.
  - ▶ **Selecting Wired LAN or Wireless LAN(P. 134)**

### You are unsure of the SSID or the network key of the wireless router to be connected. The SSID is not displayed on the screen.

- Check whether the SSID can be found on the wireless router or package box.
- Check the SSID or the network key of the wireless router by using Canon MF/LBP Wireless Setup Assistant.
  - ▶ **Checking the SSID and Network Key(P. 150)**

### The SSID of the wireless router to be connected is not displayed in the access point list.

- Check whether the SSID is correct.
  - ▶ **Checking the SSID and Network Key(P. 150)**
- If the SSID of the wireless router is hidden (using a stealth mode\*), set the SSID to be visible on the wireless router.

\* A mode that disables the SSID auto-detection of other devices.

- Check whether the machine is properly installed and ready to connect to the network.
  - ▶ **When the machine cannot connect to the wireless LAN(P. 370)**

### The machine dials up to an unintended connection destination (if a dialup router is connected to a network).

- If a dialup router does not need to pass broadcast packets, set the dialup router so that the broadcast packets will not pass. If the dialup router needs to pass broadcast packets, check whether the settings are correct.
- If a DNS server is located in an external network, set the IP address to be connected, not the host name, even if connecting to the devices that are on the network that is connected to the machine.
- If a DNS server is located on a network that is connected to the machine and the information about the devices that are connected to an external network is registered to the DNS server, check whether the settings are correct.

## When the machine cannot connect to the wireless LAN

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### 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 the devices, and then turn them on again.
  - Wait for a while, and try again to connect to the network.



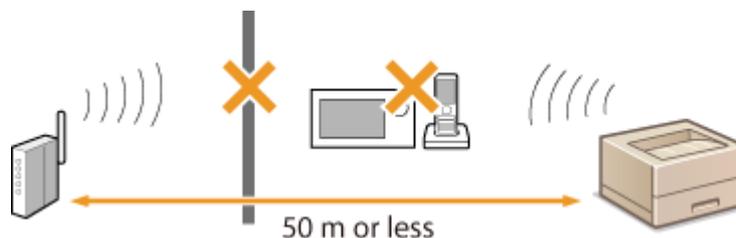
**Check whether the machine is turned ON.**

- If the machine is turned ON, turn it OFF, and then turn it back ON.



**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?



**Perform one of the following settings again.**

- ▶ **Setting Up Connection Using WPS Push Button Mode(P. 138)**
- ▶ **Setting Up Connection Using WPS PIN Code Mode(P. 140)**
- ▶ **Setting Up Connection by Selecting a Wireless Router(P. 143)**
- ▶ **Setting Up Connection by Specifying Detailed Settings(P. 146)**

**NOTE**

**When you need to manually set up the connection**

If the wireless router is set as described below, manually enter all the required information for the wireless LAN connection ( ▶ **Setting Up Connection by Specifying Detailed Settings(P. 146)** ).

- ANY connection refusal\* is activated.
- The WEP key that was automatically generated (hexadecimal) is selected.
- The stealth mode is activated.

\* A function in which the wireless router refuses the connection if the SSID on 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 as described below, change the settings of the router.

- The MAC address packet filtering is set.

- When only IEEE 802.11n is used for the wireless communication, WEP is selected or the WPA/WPA2 encryption method is set to TKIP.

## Problem with the USB Connection

### Cannot communicate.

- Change the USB cable. If you are using a long USB cable, replace it with a short one.
- If you are using a USB hub, connect the machine directly to your computer using a USB cable.

## Problem with 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, contact the server administrator.
- Is [Network discovery] enabled? (Windows Vista/7/8/Server 2008/Server 2012)
  - ▶ **Enabling [Network discovery](P. 474)**

### 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. 475)**

# Printing Problems

0W20-05W

See [▶Common Problems\(P. 368\)](#) also.

## Printing results are not satisfactory. Paper creases or curls.

### ▶When You Cannot Print Properly(P. 376)

## 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. 476)

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. 161)

#### 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 a 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. 161)

### ▶Checking the SSID to Which Your Computer Is Connected(P. 480)

### ▶Connecting to a Wireless LAN(P. 136)

#### NOTE:

#### When you reset wireless LAN connection settings

- 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. 478)

### ▶Configuring Printer Ports(P. 168)

- Is communication not limited by the firewall on your computer? If IP addresses are incorrectly entered, you will be not able to access the machine. In that case, you need to use the operation panel to set <IPv4 Address Filter> or <IPv6 Address Filter> to <Off>.

### ▶Restricting Communication by Using Firewalls(P. 218)

### ▶IPv4 Address Filter(P. 339)

### ▶IPv6 Address Filter(P. 339)

- 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. 478)**
- ▶ **Configuring Printer Ports(P. 168)**
- Is communication not limited by the firewall on your computer? If IP addresses are or an MAC address is incorrectly entered, you will be not able to access the machine. In that case, you need to use the operation panel to set <IPv4 Address Filter>, <IPv6 Address Filter>, or <MAC Address Filter> to <Off>.
- ▶ **Restricting Communication by Using Firewalls(P. 218)**
- ▶ **IPv4 Address Filter(P. 339)**
- ▶ **IPv6 Address Filter(P. 339)**
- ▶ **MAC Address Filter(P. 340)**
- 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. 478)**
- Is bidirectional communication enabled? Enable bidirectional communication, and restart the computer.
- ▶ **Checking Bidirectional Communication(P. 479)**
- Disable security software and other resident software.
- Connect to another USB port on the computer.
- 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 the print server and your computer.
- ▶ **Problem with the Print Server(P. 372)**
- 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.

**Printing seems to be slow. \* (LBP252dw)**

- Disabling Secure Print is recommended if you are not using it.
  - ▶ **Changing the Valid Time Period for Secured Documents(P. 115)**

\* When the free space in memory is running low, the processing speed of the machine becomes slow, just as a computer does. There is nothing abnormal.

**You cannot print with Google Cloud Print.**

- ▶ **Using Google Cloud Print(P. 452)**

### **It takes a long time before printing starts.**

- Did you print to narrow width 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).**

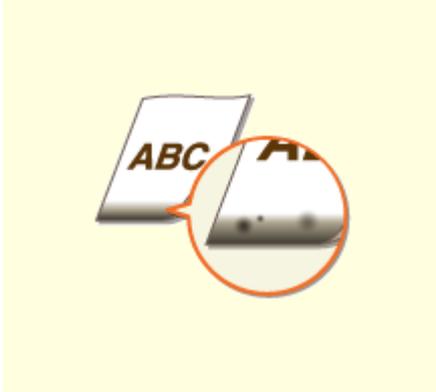
- Did you pull the sealing tape out when loading the toner cartridge? If you did not pull it out, remove the toner cartridge, pull the sealing tape out, and reload the toner cartridge.

▶ **How to Replace Toner Cartridges(P. 400)**

## When You Cannot Print Properly

0W20-05X

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. 378)



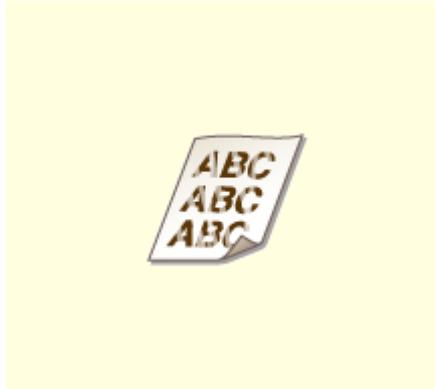
▶ Smudges Appear on Printouts(P. 378)



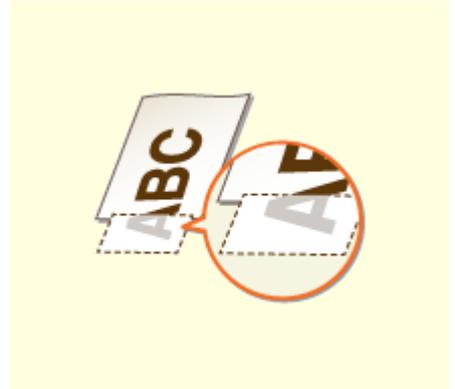
▶ Toner Smudges and Splatters Appear(P. 379)



▶ Afterimages Appear in Blank Areas(P. 380)



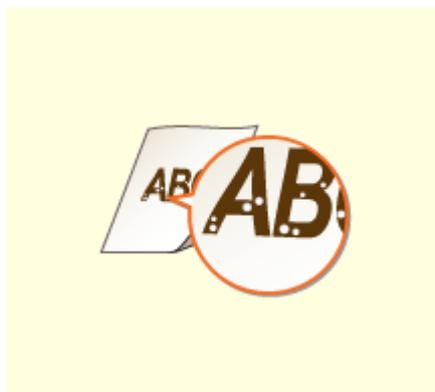
▶ Printouts Are Faded(P. 380)



▶ A Portion of the Page Is Not Printed(P. 381)



▶ Streaks Appear/Printing is Uneven(P. 381)



▶ White Spots Appear(P. 382)



▶ Black Spots Appear(P. 382)



▶ Reverse Side of Paper is Smudged(P. 383)



▶ Printed Barcode Cannot Be Read(P. 383)



▶ Paper Creases(P. 385)



▶ Paper Curls(P. 385)



▶ Paper Is Not Fed/Two or More Sheets Are Fed Together (P. 387)



▶ Printouts Are Skewed(P. 387)

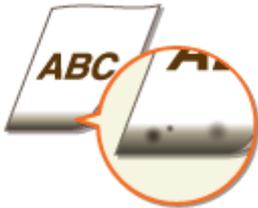
# Printing Results Are Not Satisfactory

0W20-05Y

Dirt inside the machine may affect printing results. Perform care and cleaning to the machine first.

▶ **Cleaning the Machine(P. 392)**

## Smudge Marks Appear on the Bottom Edge of Printouts



### → Are you using appropriate paper?

- Check the supported paper types and replace with an appropriate type. Also, specify the paper size and type settings properly.
- ▶ **Paper(P. 440)**
- ▶ **Loading Paper(P. 35)**
- ▶ **Specifying Paper Size and Type(P. 50)**

### → Do you print data without margins?

- This symptom occurs if a margin is set to none in the printer driver. The marginal areas within the first 5 mm from the respective edges of paper are not printable (for envelopes, the top and bottom marginal areas within the first 10 mm from the top/bottom edge are not printable). Make sure to have margins around the document to print.

[Finishing] tab ▶ [Advanced Settings] ▶ [Expand Print Region and Print] ▶ [Off]

## Smudges Appear on Printouts



### → Are you using appropriate paper?

- Check usable paper, and replace with appropriate paper.
- ▶ **Paper(P. 440)**
- ▶ **Loading Paper(P. 35)**

## → Do streaks appear on printouts depending on the paper type or the operating environment?

- Change the setting for [Special Print Adjustment A]. The improvement effect is weakest with [Mode 1] and strongest with [Mode 4]. Try the adjustment starting with [Mode 1].

### Setting in the Printer Driver

[Finishing] tab ► [Advanced Settings] ► [Special Print Adjustment A] ► Select the mode

### Specifying Settings in the Setting Menu of the Operation Panel

#### ▶ Special Printing Mode A(P. 334)

#### NOTE:

- When printing from the computer, the setting in the printer driver takes precedence. When the setting of [Graphics Mode] in the printer driver is changed to [UFR II Mode], the setting in the operation panel takes precedence.
- This item cannot be set when <Barcode Adjustment Mode> is set to one of <Mode 1> to <Mode 3>. ▶ **Barcode Adjustment Mode(P. 316)**
- Print density will be lighter when you select stronger improvement. It may also result in less sharp edges and rougher details.
- If the problem cannot be solved in spite of this item having been set, set <Special Printing Mode D> to <On>. ▶ **Special Printing Mode D(P. 336)**

## → Do streaks appear immediately after you replace the toner cartridge or when you print for the first time after a long time?

- Change the setting for <Special Printing Mode B>. The improvement effect is weakest with <Mode 1> and strongest with <Mode 3>. Try the adjustment starting with <Mode 1>.

#### ▶ Special Printing Mode B(P. 335)

#### NOTE:

- Printing speed becomes slower when you select stronger improvement.

## Toner Smudges and Splatters Appear



## → Do smudges appear on printouts depending on the paper type or the environmental conditions (more specifically when you print on heavy paper or use the machine in an environment with low humidity)?

- Set <Special Printing Mode U> to <On>.

#### ▶ Special Printing Mode U(P. 334)

**NOTE:**

- When you set this item to <On>, print quality may be lower depending on the paper type or the operating environment (more specifically when you print on thin paper or use the machine in an environment with high humidity).

→ **Are you using appropriate paper?**

- Check usable paper, and replace with appropriate paper.
- ▶ **Paper(P. 440)**
- ▶ **Loading Paper(P. 35)**

Afterimages Appear in Blank Areas



→ **Are you using appropriate paper?**

- Check usable paper, and replace with appropriate paper.
- ▶ **Paper(P. 440)**
- ▶ **Loading Paper(P. 35)**

→ **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. 400)**

Printouts Are Faded



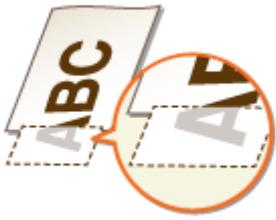
→ **Is the amount remaining in toner cartridge running low?**

- Remove the toner cartridge, shake it five or six times gently to evenly distribute the toner inside the cartridge, and then reload it into the machine.
- ▶ **Using Up Toner(P. 398)**

### → Are you using appropriate paper?

- Check usable paper, and replace with appropriate paper. Also, specify the paper size and type settings properly.
- ▶ **Paper(P. 440)**
- ▶ **Loading Paper(P. 35)**
- ▶ **Specifying Paper Size and Type(P. 50)**

## A Portion of the Page Is Not Printed



### → Do the paper guides align with the edges of the paper?

- If the paper guides are too loose or too tight, part of a document may not be printed.
- ▶ **Loading Paper(P. 35)**

### → Do you print data without margins?

- This symptom occurs if a margin is set to none in the printer driver. The marginal areas within the first 5 mm from the respective edges of paper are not printable (for envelopes, the top and bottom marginal areas within the first 10 mm from the top/bottom edge are not printable). Make sure to have margins around the document to print.

[Finishing] tab ▶ [Advanced Settings] ▶ [Expand Print Region and Print] ▶ [Off]

## Streaks Appear/Printing is Uneven



### → Have you cleaned the fixing unit?

- Clean the fixing unit.
- ▶ **Fixing Unit(P. 394)**

→ **Is the amount remaining in toner cartridge running low?**

- Remove the toner cartridge, shake it five or six times gently to evenly distribute the toner inside the cartridge, and then reload it into the machine.
- ▶ **Using Up Toner(P. 398)**

→ **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. 400)**

White Spots Appear



→ **Are you using paper that has absorbed moisture?**

- Replace with appropriate paper.
- ▶ **Loading Paper(P. 35)**

→ **Are you using appropriate paper?**

- Check usable paper, and replace with appropriate paper.
- ▶ **Paper(P. 440)**
- ▶ **Loading Paper(P. 35)**

→ **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. 400)**

Black Spots Appear



### → Have you cleaned the fixing unit?

- Clean the fixing unit.
- ▶ **Fixing Unit(P. 394)**

## 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.

### → Have you cleaned the fixing unit?

- Clean the fixing unit.
- ▶ **Fixing Unit(P. 394)**

## Printed Barcode Cannot Be Read



### → Are you using a small barcode or a barcode consisting of thick lines?

- Enlarge the barcode.
- If the direction of lines in the barcode is perpendicular to the paper output direction, turn the image 90 degrees to make the lines parallel to the paper output direction.
- If the problem persists even after performing the above operation, change the mode by using [Barcode Adjustment Mode]. The improvement effect is weakest with [Mode 1] and strongest with [Mode 3]. Try the adjustment starting with [Mode 1].

#### Setting in the Printer Driver

[Finishing] tab ▶ [Advanced Settings] ▶ [Barcode Adjustment Mode] ▶ Select the mode

#### Specifying Settings in the Setting Menu of the Operation Panel

▶ **Barcode Adjustment Mode(P. 316)**

**NOTE:**

- Print density will be lighter when you select stronger improvement.
- When printing from the computer, the setting in the printer driver takes precedence. When the setting of [Graphics Mode] in the printer driver is changed to [UFR II Mode] and [Barcode Adjustment Mode] is changed to [Printer Default], the setting in the operation panel takes precedence.
- When you set [Barcode Adjustment Mode] to one of [Mode 1] to [Mode 3], [Special Print Adjustment A] is automatically set to [Off].

## Paper Creases or Curls

0W20-060

### Paper Creases



#### → Is paper loaded correctly?

- If paper is not loaded below the load limit line or the load limit guide or is loaded obliquely, it may crease.
- ▶ **Loading Paper(P. 35)**

#### → Are you using paper that has absorbed moisture?

- Replace with appropriate paper.
- ▶ **Loading Paper(P. 35)**

#### → Are you using appropriate paper?

- Check usable paper, and replace with appropriate paper.
- ▶ **Paper(P. 440)**
- ▶ **Loading Paper(P. 35)**

### Paper Curls



#### → Are you using paper that has absorbed moisture?

- Replace with appropriate paper.
- ▶ **Loading Paper(P. 35)**
- When the current setting of <Paper Type> is <Plain>, change it to <Plain L>
- ▶ **Specifying Paper Size and Type(P. 50)**
- Change the setting for <Special Printing Mode V>. The improvement effect is stronger with <Mode 2> than with <Mode 1>. First try the adjustment with <Mode 1>.

▶ **Special Printing Mode V(P. 335)**

**NOTE:**

Printing speed becomes slower when you select stronger improvement.

→ **Are you using appropriate paper?**

- Check usable paper, and replace with appropriate paper. Also, specify the paper size and type settings properly.
- ▶ **Paper(P. 440)**
  - ▶ **Loading Paper(P. 35)**
  - ▶ **Specifying Paper Size and Type(P. 50)**

## Paper Is Fed Incorrectly

0W20-061

### Paper Is Not Fed/Two or More Sheets Are Fed Together



#### → Is paper loaded correctly?

- Fan the paper stack thoroughly so that paper is not stuck together.
- Check whether paper is loaded correctly.
  - ▶ **Loading Paper(P. 35)**
- Check whether the number of sheets of paper loaded is appropriate and whether the appropriate paper is used.
  - ▶ **Paper(P. 440)**
  - ▶ **Loading Paper(P. 35)**
- Check whether mixed sizes and types of paper are loaded together.

### Printouts Are Skewed



#### → Do the paper guides align with the edges of the paper?

- If the paper guides are too loose or too tight, the printouts are skewed.
  - ▶ **Loading Paper(P. 35)**

## When a Problem Cannot Be Solved

0W20-062

If you cannot solve a problem by referring to the information in this chapter, contact your local authorized Canon dealer or the Canon help line.

### IMPORTANT

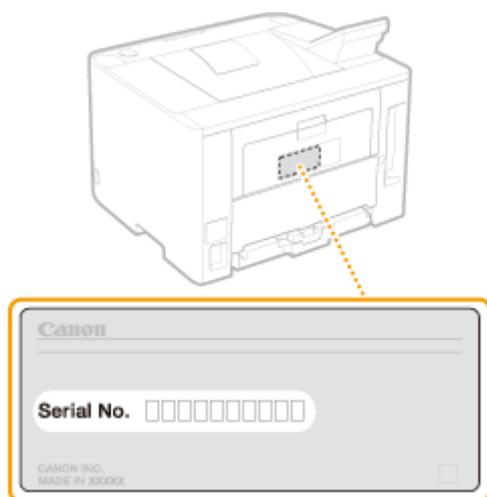
- Do not disassemble or repair the machine yourself

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 (LBP252dw / LBP251dw)
- Dealer where you purchased the machine
- Details about your problem (such as what you did and what happened as a result)
- Serial number (10 alphanumeric characters long, found on the label on the back side of the machine)



### NOTE

#### Checking the serial number from the operation panel

You can also check by  ▶ <Device Status> ▶ <Serial Number>.

# Maintenance

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# Maintenance

0W20-063

This chapter describes upkeep of the machine, including how to clean the machine and initialize settings.

## ■ Basic Cleaning ▶ **Cleaning the Machine(P. 392)**



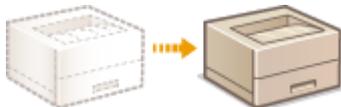
- The machine becomes dirty, see ▶ **Exterior(P. 393)** .
- Streaks appear on printouts, see ▶ **Fixing Unit(P. 394)** .

## ■ Replacing Toner Cartridges ▶ **Replacing Toner Cartridges(P. 396)**



- If you want to use all of the toner, see ▶ **Using Up Toner(P. 398)** .
- How to replace toner cartridges, see ▶ **How to Replace Toner Cartridges(P. 400)** .

## ■ Relocating the Machine



- Relocating the machine for maintenance or an office move, see ▶ **Relocating the Machine(P. 402)** .

## ■ Managing Print Quality ▶ **Maintaining and Improving Print Quality(P. 404)**

- If you want to adjust the toner density to be used for printing, see ▶ **Adjusting Print Density(P. 405)** .
- If you want to adjust the print position, see ▶ **Adjusting Print Position(P. 407)** .

## ■ Printing Reports and Lists



- Printing out lists of settings or the like , see ▶ **Printing Reports and Lists(P. 409)** .

## ■ Checking the Total Pages Printed by the Machine

If you want to check the total page number of printouts , see ▶ **Viewing the Counter Value(P. 416)** .

### ■ Saving/Loading Registered Data

If you want to save the machine's settings data or load the saved data, see [▶Using a USB Memory Device to Save/Load Registered Data\(P. 417\)](#) .

### ■ Initializing Settings

If you want to restore the settings, see [▶Initializing Settings\(P. 422\)](#) .

# Cleaning the Machine

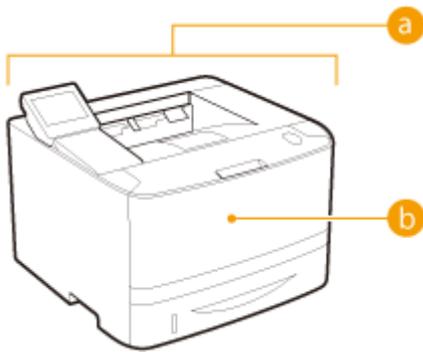
---

0W20-064

Regularly clean the machine to prevent deterioration in printing quality and to ensure that you use it safely and easily. Carefully read the safety instructions before you start cleaning. **▶Maintenance and Inspections(P. 9)**

## Where to Clean

---



- a** Exterior of the machine and ventilation slots  
**▶Exterior(P. 393)**
- b** Internal fixing unit  
**▶Fixing Unit(P. 394)**

## Exterior

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0W20-065

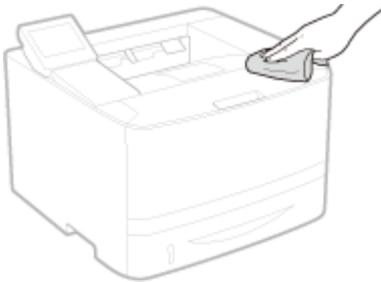
Regularly wipe the exterior of the machine, especially around the ventilation slots, to keep the machine in good condition.

### 1 Turn OFF the machine, and unplug the power cord from the AC power outlet.

- When you turn OFF the machine, data that is waiting to be printed is deleted.

### 2 Clean 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.
- To locate the ventilation slots, see **▶Front Side(P. 17)** and **▶Back Side(P. 19)**.



### 3 Wait for the exterior of machine to dry completely.

### 4 Reconnect the power cord and turn ON the machine.

## Fixing Unit

OW20-066

Dirt may adhere to the fixing units inside the machine and cause black streaks to appear on printouts. To clean the fixing unit, perform the following procedure. Note that you cannot clean the fixing unit when the machine has documents waiting to be printed. To clean the fixing unit, you need plain A4 or Letter size paper. Set the paper in the paper drawer or multi-purpose tray ( ▶ **Loading Paper in the Paper Drawer(P. 37)** ▶ **Loading Paper in the Multi-Purpose Tray(P. 41)** ) before performing the following procedure.

### NOTE

- Cleaning consumes the toner cartridge. Make sure that there is sufficient toner cartridge remaining beforehand. ▶ **Checking the Amount Remaining in the Toner Cartridge(P. 397)**

- 1 Press .
- 2 Use ▲ / ▼ to select <Adjustment/Maintenance>, and press .
- 3 Select <Clean Fixing Assembly>, and press .
- 4 Check that the size and type of paper displayed on the screen is loaded in the machine, and press .

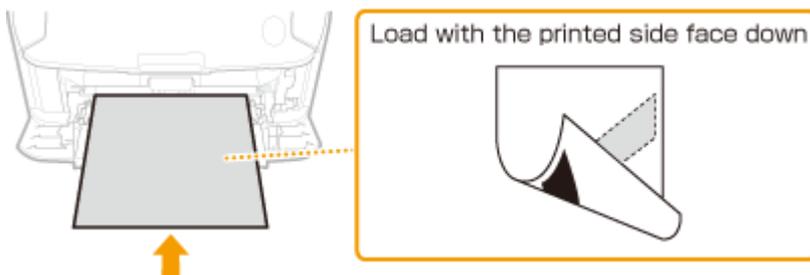
```
Allowed Paper:
Size: A4, LTR
Type: Plain, Plain L,
Recycled, Color
*Next Screen: Press OK
```

- 5 Press .

```
Steps (Start:Press OK)
1. Print Cleaning
Sheet
2. Place sheet in MP
Tray & start Cleaning
```

⇒ The cleaning sheet is printed out.

- 6 Load the printed cleaning sheet in the multi-purpose tray, with the printed side face down.



**NOTE:**

**If paper remains in the multi-purpose tray**

Remove the loaded paper before loading the cleaning sheet.

**7 Press .**

Place the cleaning sheet with the printed side face down in the multi-purpose tray, then press OK.

⇒ Cleaning starts. When the <Finished.> message is displayed approximately 1 minute later.

# Replacing Toner Cartridges

0W20-067

The machine will display a message when a toner cartridge is nearly empty. Note that the print quality becomes poor if you continue printing without taking any action. You can check the amount remaining in the toner cartridge on the display.

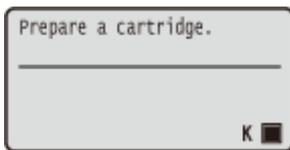
- ▶ **When a Message Appear(P. 396)**
- ▶ **If Printouts are Poor in Quality(P. 396)**
- ▶ **Checking the Amount Remaining in the Toner Cartridge(P. 397)**

## ■ When a Message Appear

Depending on which message is displayed, you will need to make sure that you have a replacement toner cartridge ready or replace the toner cartridge. ▶ **How to Replace Toner Cartridges(P. 400)** ▶ **Consumables(P. 443)**

### <Prepare a cartridge.>

This message notifies you that a toner cartridge needs to be replaced soon. Make sure that you have a replacement toner cartridge ready. Replace the toner cartridge if you see this message before you start to print a large job.



### NOTE

#### When this message is displayed

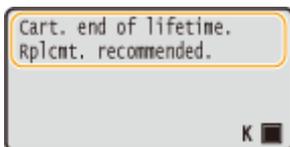
- You can continue printing the document.

#### Specify when this message is displayed

- You can set any value as the percentage of the amount remaining in the toner cartridge that triggers this message. ▶ **Display Timing for Cartridge Preparation Notification (P. 332)**

### <Cart. end of lifetime. Rplcmt. recommended.>

This message notifies you that a toner cartridge has reached the end of its lifetime. It is recommended that you replace the cartridge with a new one. You can continue printing, but the print quality cannot be guaranteed.



## ■ If Printouts are Poor in Quality

If your printouts begin to show any of the following features, one of your toner cartridges is consumed. Replace the nearly empty toner cartridge even if no message is displayed.

- ▶ **How to Replace Toner Cartridges(P. 400)**

Streaks appear



Partially faded



Uneven density



Afterimages appear in blank areas



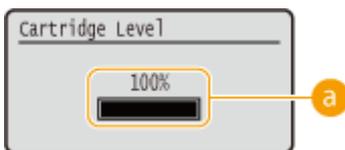
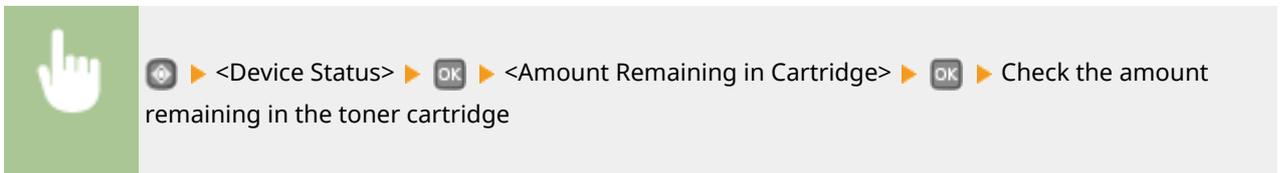
White spots appear

**NOTE**

- If, of the above symptoms, "Streaks appear," "Partially faded," or "Uneven density" appears, performing the procedure for [Using Up Toner\(P. 398\)](#) may allow you to get fine print again, for some limited time.

## ■ Checking the Amount Remaining in the Toner Cartridge

You can check the amount remaining in the toner cartridge according to the following, whenever you want to. It is recommended that you check the level before you start to print a large job.



### **a** Toner Level

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.

**LINKS**

[Consumables\(P. 443\)](#)

## Using Up Toner

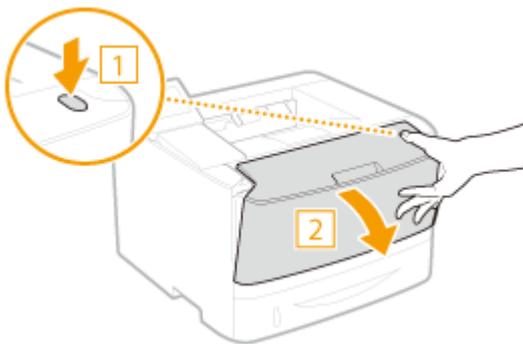
0W20-068

Symptoms like the following appear on printouts when toner runs low.

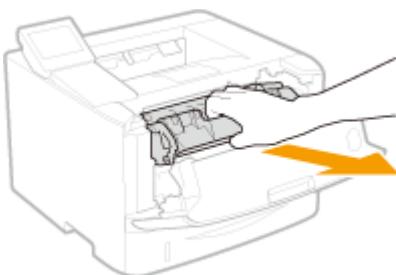


Perform the following procedure when any of the above symptoms appears. They will allow you to use up all of the toner in the toner cartridge. Performing this procedure may allow you to get fine print again for some time until the toner is used up. If the symptom does not improve after you perform the following procedure, replace the toner cartridge ( [How to Replace Toner Cartridges\(P. 400\)](#) ). Before starting the procedure, read the precautions given in [Maintenance and Inspections\(P. 9\)](#) and [Consumables\(P. 10\)](#) .

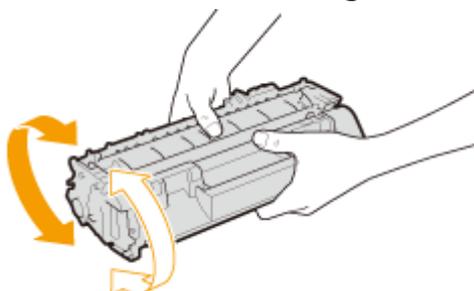
### 1 Open the front cover while holding down on the button.



### 2 Remove the toner cartridge.

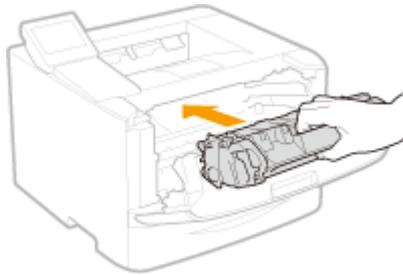


### 3 Shake the toner cartridge five or six times as shown below to evenly distribute the toner inside the cartridge.



#### **4** Install the toner cartridge.

- Fully push it in until it cannot go any further.



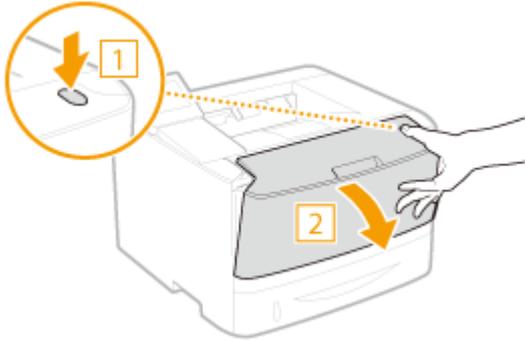
#### **5** Close the front cover.

# How to Replace Toner Cartridges

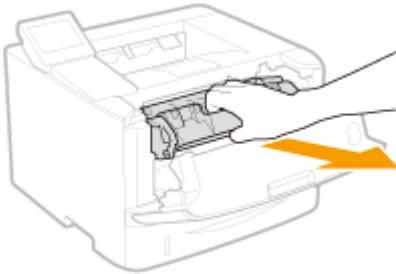
0W20-069

Read the precautions in **Maintenance and Inspections(P. 9)** and **Consumables(P. 10)** before replacing the toner cartridges.

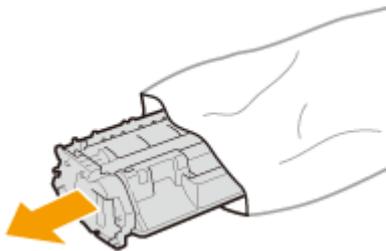
- 1 Open the front cover while holding down on the button.**



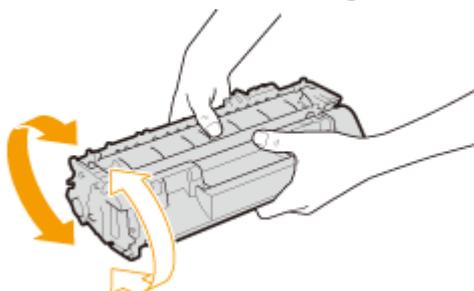
- 2 Remove the toner cartridge.**



- 3 Remove the replacement toner cartridge from the protective bag.**

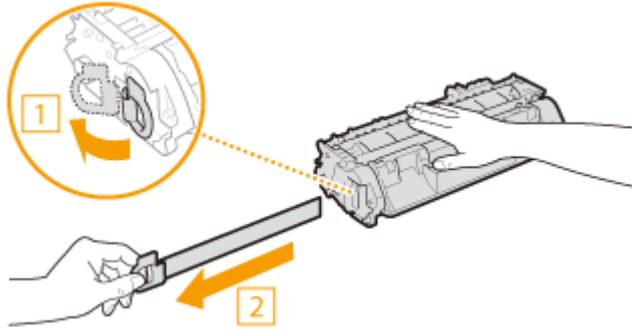


- 4 Shake the toner cartridge five or six times as shown below to evenly distribute the toner inside the cartridge, and then place it on a flat surface.**



## 5 Pull the sealing tape straight out.

- The full length of the sealing tape is approximately 50 cm.

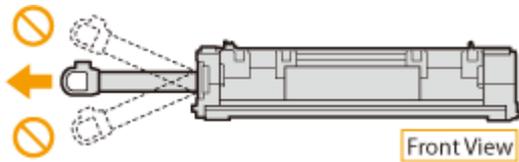


### IMPORTANT:

#### When pulling out the sealing tape

If the sealing tape remains inside the toner cartridge, the quality of printouts may deteriorate.

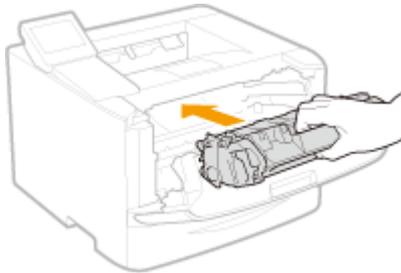
- Do not pull out the sealing tape at an angle or sideways. If the tape breaks, you may not be able to pull it out completely.



- If the sealing tape becomes stuck when pulling it out, keep pulling until it is completely removed.

## 6 Install the toner cartridge.

- Fully push it in until it cannot go any further.



## 7 Close the front cover.

# Relocating the Machine

0W20-06A

The machine is heavy. Make sure to follow the procedures below when moving the machine to avoid injury, and also make sure to read the safety precautions before you begin. **▶Important Safety Instructions(P. 2)**

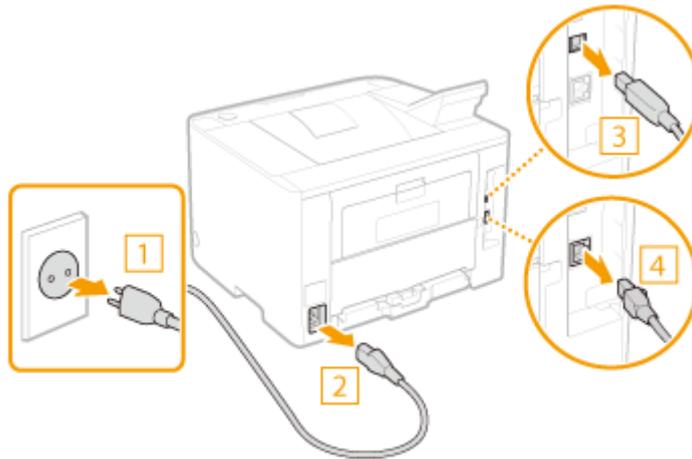
## 1 Turn OFF the machine and computer.

- 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.

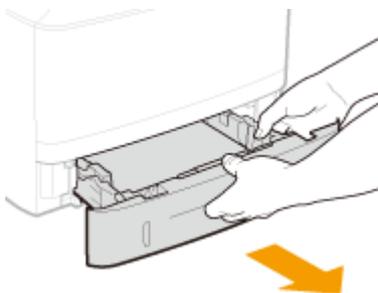
- Whether the cables with "\*" are connected depends on your environment.

- 1 Power plug
- 2 Power cord
- 3 USB cable\*
- 4 LAN cable\*



## 3 When transporting the machine across a long distance, remove the toner cartridge. **▶How to Replace Toner Cartridges(P. 400)**

## 4 Pull out the paper drawer.



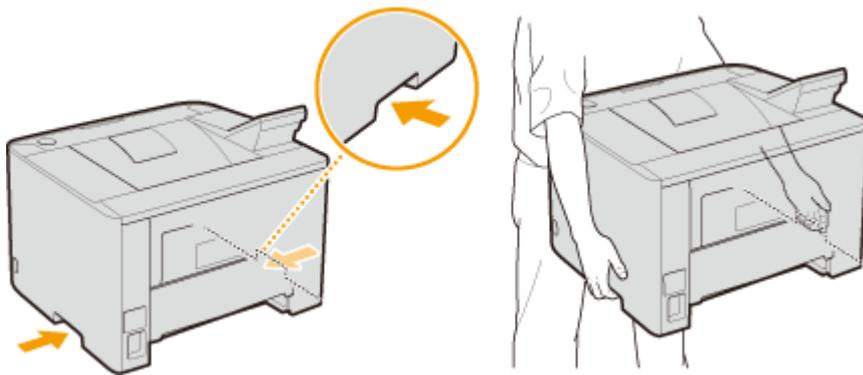
### IMPORTANT:

- Make sure to hold the paper drawer with both hands, and pull it out gently. Otherwise, you may damage the paper drawer by dropping it, if it slides out too easily.

## 5 Close all the open covers, and move the machine to a new location.

- The machine is heavy ( **▶Machine Specifications(P. 437)** ). Do not try hard to carry the machine.

- Position yourself toward the front side of the machine and hold the lift handles, then lift up the machine. If you have attached the optional paper feeder, leave the optional drawer on the floor and move it after moving the main unit of the machine.



## 6 Carefully place the machine at the new installation site.

- For information about how to install the machine after relocating it, see Getting Started. ▶ **Manuals Included with the Machine(P. 456)**

# Maintaining and Improving Print Quality

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0W20-08E

When you cannot obtain a satisfactory print result, such as when the resulting print density or print position is different than expected, try the following adjustments.

## ■ Density Adjustment

Adjust the toner density. You can make fine adjustment of toner density by density level. [▶ Adjusting Print Density\(P. 405\)](#)

## ■ Print Position Adjustment

For each paper source, you can adjust the print position. [▶ Adjusting Print Position\(P. 407\)](#)

# Adjusting Print Density

0W20-06C

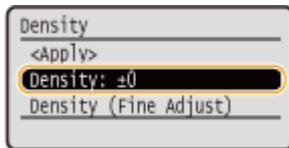
If the resulting print is darker or lighter than expected, you can adjust the toner density. You can make fine adjustment of the toner density by dividing the whole density range into three areas.

## IMPORTANT

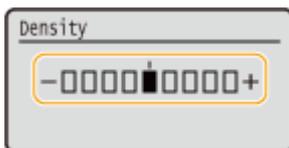
- If <Toner Save> is set to <On>, you cannot use this adjustment function. [Toner Save\(P. 316\)](#)

- 1 Press .
- 2 Use  /  to select <Printer Settings>, and press .
- 3 Select <Print Quality>  <Density>.
- 4 Adjust the density.

- 1 Select <Density>, and press .



- 2 Use  /  to adjust the density.

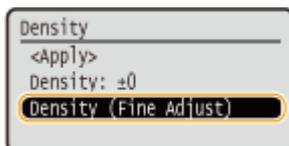


- 3 Press .

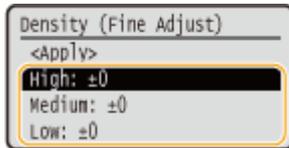
## ■ Making fine adjustment of toner density by density level

You can make fine adjustment of toner density on three density levels - high, medium, and low.

- 1 Select <Density (Fine Adjust)>, and press .



- 2 Select the desired density level, and press .



- 3 Use ◀ / ▶ to adjust the density.



- 4 Press **OK**.
- If you want to also make adjustments on other density levels, repeat the operations in steps 2 to 4.
- 5 Select <Apply>, and press **OK**.

- 5** Select <Apply>, and press **OK**.

#### When the printed text or thin lines are faded

You can make the whole print job darker by using <Printer Density> under <Adjustment/Maintenance> in the Setting Menu of the operation panel.

# Adjusting Print Position

OW20-08F

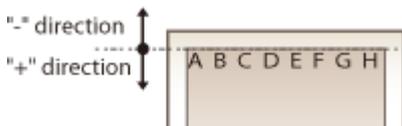
If a document is printed off-center or out of the printable range, adjust the print position. You can adjust the print position for each paper source. You can adjust the print position in the range -5.0 to +5.0 mm in vertical direction, and in the range -3.0 to +3.0 mm in horizontal direction, both in increments of 0.1 mm.



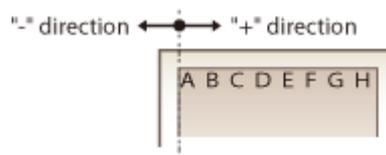
## Checking the Direction and Distance to Adjust

When you adjust the print position, specify the direction using "+" and "-" and the distance using "mm." For <Adjust Vertically (Front Side)>/<Adjust Vertically (Back Side)>, specify a value with a "+" sign to shift the print position in the up-to-down direction. For <Adjust Horizontally (Front Side)>/<Adjust Horizontally (Back Side)>, specify a value with a "+" sign to shift the print position in the left-to-right direction. To shift in the reverse direction, specify a value with a "-" sign.

<Adjust Vertically (Front Side)>/<Adjust Vertically (Back Side)>



<Adjust Horizontally (Front Side)>/<Adjust Horizontally (Back Side)>

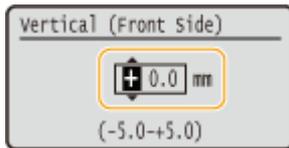


- 1 Press .
- 2 Use  /  to select <Adjustment/Maintenance>, and press .
- 3 Select <Adjust Print Position>, and press .
- 4 Select the paper source, and press .
 

Adjust Print Position  
 Multi-Purpose Tray  
 Drawer 1  
 Drawer 2
- 5 Select the combination of adjustment direction and printing side, and press .
 

Multi-Purpose Tray  
 Adjust Vertically (Front)  
 Adjust Horizontally (Fro  
 Adjust Vertically (Back  
 Adjust Horizontally (Bac
- 6 Set an adjustment value.

- Use ◀ / ▶ to move the cursor, and use ▲ / ▼ to switch between "+" and "-" and to increase or decrease the value.



**7** Press **OK**.

### Adjusting Print Position for All Print Jobs

You can use <Printer Settings> in the setting menu of the operation panel to adjust the print position for all print jobs regardless of the paper source. You can adjust the print position in the range of -50.0 to +50.0 mm in 0.5 mm increments in vertical/horizontal direction.

▶ **Offset Short Edge/Offset Long Edge(P. 318)**

# Printing Reports and Lists

---

0W20-06E

You can check the condition of consumables and the machine settings by printing reports and lists.

## Consumables Status Report

---

You can check the consumables status. [▶Consumables Status Report\(P. 410\)](#)

## User Data List/System Manager Data List

---

You can check the list of the settings ( [▶Setting Menu List\(P. 287\)](#) ) as well as the content that has been registered in the machine. [▶User Data List/System Manager Data List\(P. 411\)](#)

## Department ID Management Report

---

You can check the total volume of printouts for each <Department ID>. [▶Department ID Management Report\(P. 412\)](#)

## IPSec Policy List

---

You can check the list of policy names and the content of the IPSec settings that are registered in the machine. [▶IPSec Policy List\(P. 413\)](#)

## PCL Font List

---

You can check the list of available fonts for the machine. [▶PCL Font List\(P. 414\)](#)

## PS Font List

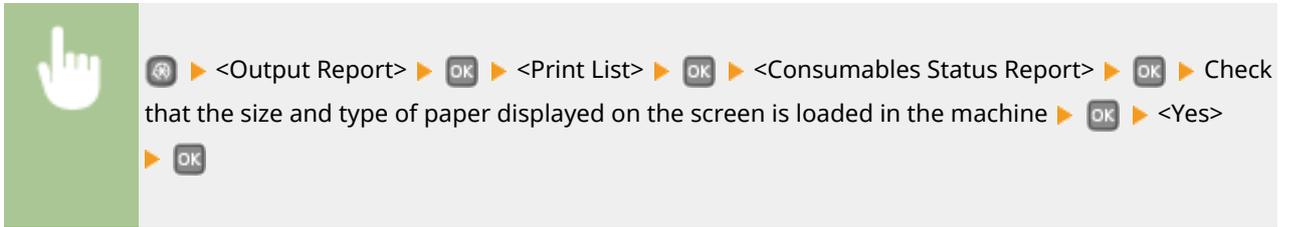
---

You can check the fonts available in PS mode. [▶PS Font List \(LBP252dw\)\(P. 415\)](#)

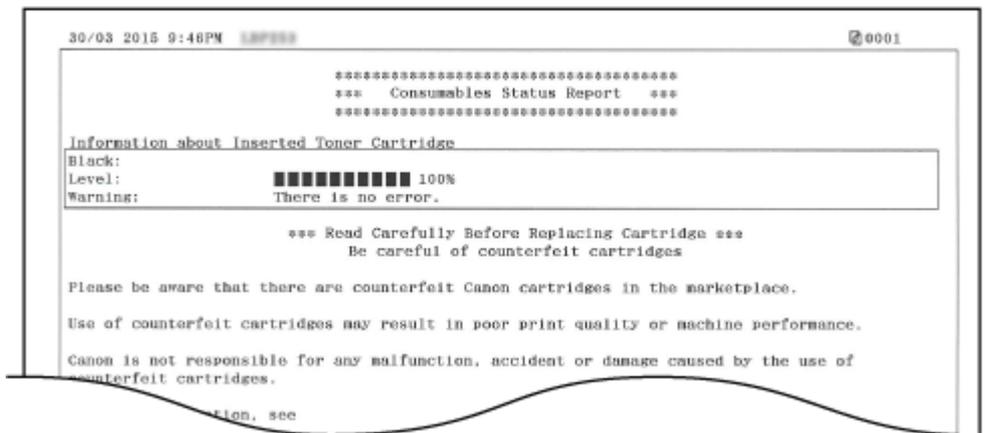
# Consumables Status Report

0W20-06F

You can check the consumables status installed in the machine.



## Example:



## LINKS

▶ [Replacing Toner Cartridges\(P. 396\)](#)

# User Data List/System Manager Data List

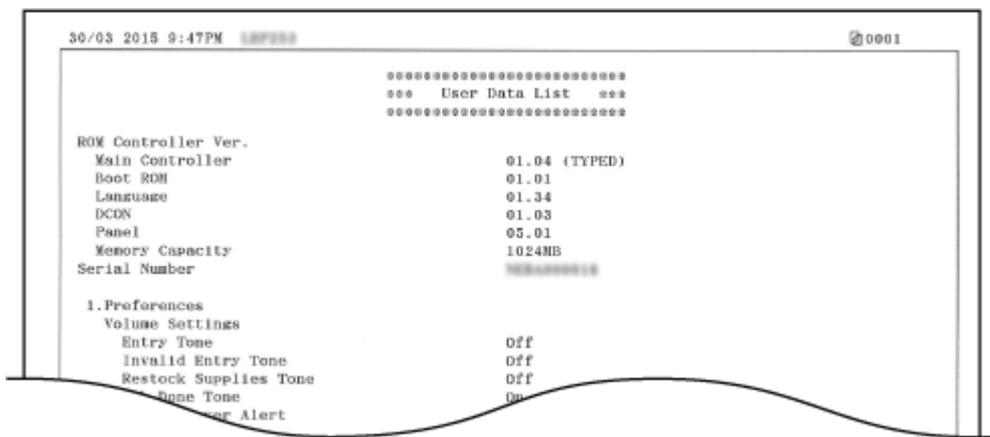
0W20-06H

You can check the list of the settings ( **▶Setting Menu List(P. 287)** ) as well as the content that has been registered in the machine by printing a User Data List or a System Manager Data List. Both lists include the paper size and type registered in the machine.



▶ <Output Report> ▶  ▶ <Print List> ▶  ▶ <User Data List> or <System Manager Data List> ▶  ▶ Check that the size and type of paper displayed on the screen is loaded in the machine ▶  ▶ <Yes> ▶

**Example:**



**NOTE**

- The <User Data List> does not include the setting lists of <Network Settings> and <System Management Settings>. To check all the settings items, including <Network Settings> and <System Management Settings>, print the <System Manager Data List>.

**LINKS**

**▶Loading Paper(P. 35)**

# Department ID Management Report

0W20-06J

When Department ID Management is enabled, you can check the total volume of printouts for each <Department ID> by printing a Department ID Management Report. By checking the printout totals, you can better manage your paper and toner cartridge supplies.



> <Output Report> >  > <Print List> >  > <Department ID Management Report> >   
 > Check that the size and type of paper displayed on the screen is loaded in the machine >  > <Yes> >

**Example:**

30/03 2016 8:47PM LBP555		0001
***** *** Dept. ID Mngt. Report *** *****		
Dept. ID	Print Pages	
000001	0	
000002	0	
000003	0	
000004	0	
Unknown ID Jobs	0	

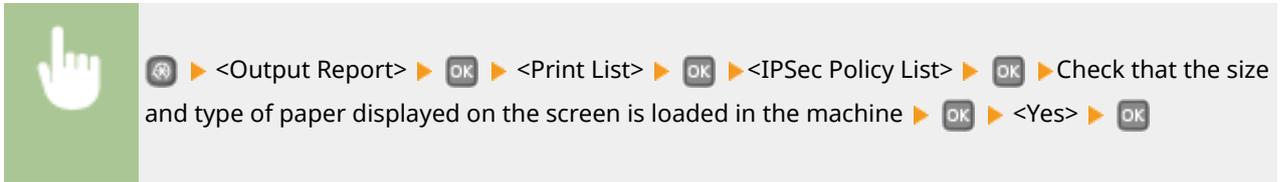
LINKS

➤ [Setting the Department ID Management\(P. 209\)](#)

## IPSec Policy List

0W20-06K

You can check the list of policy names and the IPSec settings registered in the machine by printing an IPSec Policy List.



### Example:

```

30/03 2015 9:47PM 18P553 0001
*****
see  IPSec Policy List  see
*****

1. IPSec Settings
Use IPSec                On
Receive Non-Policy Packets Allow
Priority                  1
Policy Settings
  Policy Name            SP01
  Enable Policy          On
Selector Settings
  Local Address          All IP Addresses
  Remote Address         All IP Addresses
  Local Port             All Ports
  Remote Port           All Ports
IKE Settings
  IKE Node               Main
  Authentication Method

```

### LINKS

▶ [Configuring IPSec Settings\(P. 239\)](#)

# PCL Font List

0W20-06L

You can print a list to check the fonts available in PCL mode.



▶ <Output Report> ▶  ▶ <Print List> ▶  ▶ <PCL Font List> ▶  ▶ Check that the size and type of paper displayed on the screen is loaded in the machine ▶  ▶ <Yes> ▶

Example:

<b>FONTS LIST</b>							PAGE 001
PCL Internal Fonts							
Font Name	Symbol	Spacing	Style	StrokeW	Pitch/Point Typeface	Sample	
[000] Courier		0	0	0	scalable 4099	ABCDEFGHIJKLMNOPQRSTUVWXYZ	
[001] CG Times		1	0	0	scalable 4101	ABCDEFGHIJKLMNOPQRSTUVWXYZ	
[002] CG Times Bold		1	0	3	scalable 4101	ABCDEFGHIJKLMNOPQRSTUVWXYZ	
[003] CG Times Italic		1	1	0	scalable 4101	ABCDEFGHIJKLMNOPQRSTUVWXYZ	
[004] CG Times Bold Italic		1	1	3	scalable 4101	ABCDEFGHIJKLMNOPQRSTUVWXYZ	
[005] CG Omega		1	0	0	scalable 4113	ABCDEFGHIJKLMNOPQRSTUVWXYZ	
	Bold	0	0	3	scalable	ABCDEFGHIJKLMNOPQRSTUVWXYZ	

# PS Font List LBP252dw

OW20-06R

You can print a list to check the fonts available in PS mode.



▶ <Output Report> ▶  ▶ <Print List> ▶  ▶ <PS Font List> ▶  ▶ Check that the size and type of paper displayed on the screen is loaded in the machine ▶  ▶ <Yes> ▶

**Example:**

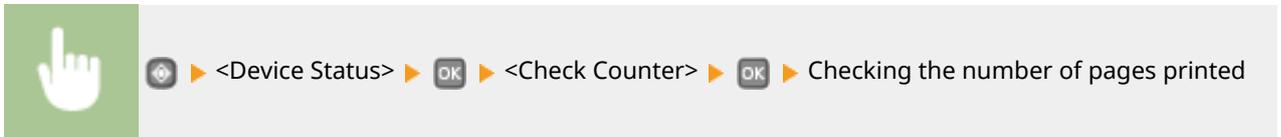
<b>Font List</b>		PAGE.001
PS Fonts		
Font Name	Sample	
AdobeSansMM	ABCDEFGHIJKLMN <strong>OP</strong> QRSTUVWXYZ	
AdobeSerifMM	ABCDEFGHIJKLMN <strong>OP</strong> QRSTUVWXYZ	
AlbertusMT	ABCDEFGHIJKLMN <strong>OP</strong> QRSTUVWXYZ	
AlbertusMT-Italic	<i>ABCDEFGHIJKLMN<strong>OP</strong>QRSTUVWXYZ</i>	
AlbertusMT-Light	ABCDEFGHIJKLMN <strong>OP</strong> QRSTUVWXYZ	
AntiqueOlive-Bold	<b>ABCDEFGHIJKLMN<strong>OP</strong>QRSTUVWXYZ</b>	
AntiqueOlive-Compact	<b>ABCDEFGHIJKLMN<strong>OP</strong>QRSTUVWXYZ</b>	
AntiqueOlive-Italic	<i>ABCDEFGHIJKLMN<strong>OP</strong>QRSTUVWXYZ</i>	

## Viewing the Counter Value

---

0W20-06S

You can check the total number of pages printed by the machine. The total number also includes pages of reports and lists.



# Using a USB Memory Device to Save/Load Registered Data

0W20-06U

Menu options data that has been registered in the machine can be saved in a USB memory device (export). Data that is saved on a USB memory device can also be registered in the machine (import). Data exported from this machine can be imported to another machine of the same model. So you can easily copy a variety of settings data to multiple machines.

🔗 **Saving Registered Data to a USB Memory Device(P. 418)**

🔗 **Loading Registered Data from a USB Memory Device(P. 420)**

## IMPORTANT

### Do not turn OFF the machine until the export/import process is complete

- It may take a few minutes to complete the process. If the machine is turned OFF during the process, it may result in damage to data or the machine.

### Do not operate the machine during the export/import process

- Before exporting/importing, check that no operations such as printing documents are currently in progress.

## NOTE

- For the settings that cannot be imported or exported, see 🔗 **Setting Menu List(P. 287)** .

## Available USB Memory Devices

You can use USB memory devices with the following format styles.

- FAT16 (memory capacity: up to 2 GB)
- FAT32 (memory capacity: up to 32 GB)

## IMPORTANT

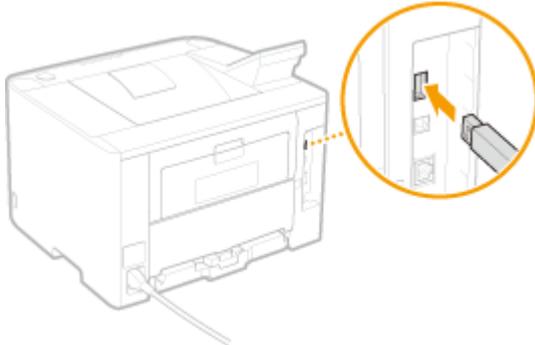
- Do not use non-standard USB memory devices. You may not be able to export/import data properly with some USB memory devices.
- Do not connect anything other than a USB memory device. USB memory devices cannot be connected via a USB hub or an extension cable.
- Do not use USB memory devices with special functions such as built-in security functions.

# Saving Registered Data to a USB Memory Device

0W20-06W

You can export machine settings data and save them in a USB memory device. It is recommended that you regularly back up important settings.

## 1 Connect a USB memory device to the USB port for a USB device.



### IMPORTANT:

- Do not disconnect, jostle, or turn OFF the machine or USB memory device while the data is being transferred.

## 2 Press .

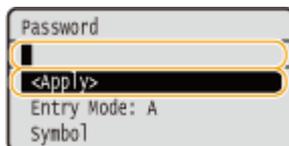
## 3 Use / to select <System Management Settings>, and press .

- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press  . **Logging on to the Machine(P. 34)**

## 4 Select <Import/Export of Settings> <Export>.

## 5 Enter the password, select <Apply>, and press .

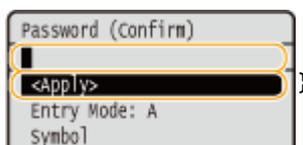
- Enter a password for the export data consisting of up to 32 alphanumeric characters.



### IMPORTANT:

This password will be required when you import the data to the machine.  **Loading Registered Data from a USB Memory Device(P. 420)**

## 6 Enter the password again for confirmation, select <Apply>, and press .



⇒ Exporting starts.



## 7 Disconnect the USB memory device from the USB port.

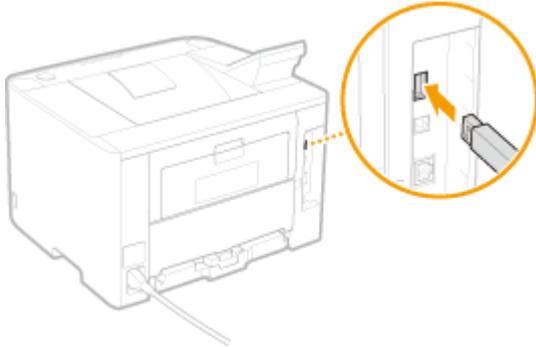
- 1 Press .
- 2 Select <Device Status>, and press .
- 3 Select <Remove Memory Media>, and press .
  - Wait until the <Memory media can be safely removed.> message is displayed.
- 4 Disconnect the USB memory device.

# Loading Registered Data from a USB Memory Device

0W20-06X

Load (import) data that was exported from the machine to a USB memory device. You can also import settings from another machine if it is the same model as your machine.

## 1 Connect a USB memory device to the USB port for a USB device.



### IMPORTANT:

- Do not remove, bump or jostle the USB memory device while data is being imported or exported.

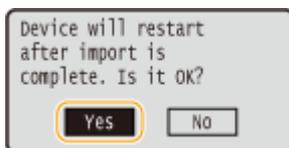
## 2 Press .

## 3 Use / to select <System Management Settings>, and press .

- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press  . **Logging on to the Machine(P. 34)**

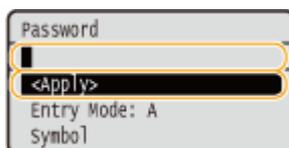
## 4 Select <Import/Export of Settings> <Import>.

## 5 Check the message, select <Yes>, and press .

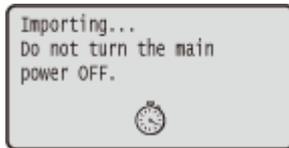


## 6 Enter the password, select <Apply>, and press .

- Enter the password that was set when exporting the data.



➡ Importing starts. The machine automatically restarts after the import is complete.



## 7 Disconnect the USB memory device from the USB port.

- 1 Press .
- 2 Select <Device Status>, and press .
- 3 Select <Remove Memory Media>, and press .
  - Wait until the <Memory media can be safely removed.> message is displayed.
- 4 Disconnect the USB memory device.

# Initializing Settings

---

0W20-06Y

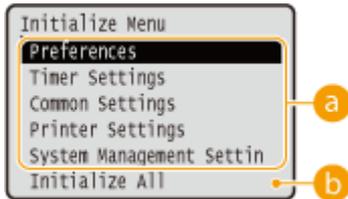
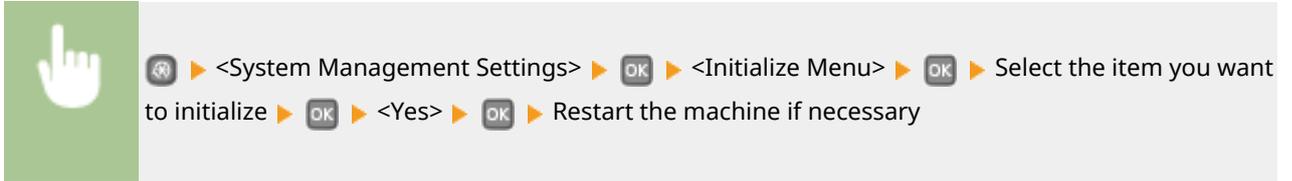
You can restore the following settings:

- ▶ **Initializing Menu(P. 423)**
- ▶ **Initializing Key and Certificate(P. 425)**

# Initializing Menu

OW20-070

You can restore the settings of the machine (▶ **Setting Menu List(P. 287)** ). Depending on the settings selected, you may need to restart the machine after initialization.

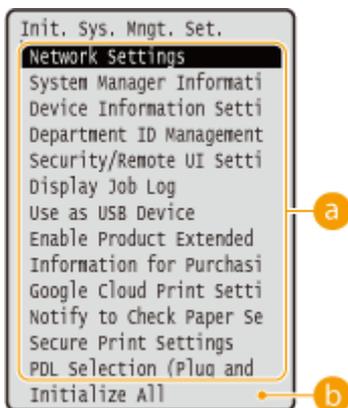


## a Items for initializing

Select the setting you want to initialize.

### ■ When <System Management Settings> is selected

Select the specific system management settings that you want to initialize, select <Yes>, and press [OK].



## a Settings to be initialized

Select the settings to be initialized.

## b <Initialize All>

Initializes all the system management settings.

## IMPORTANT

### If Remote UI settings are initialized

The Remote UI Access PIN is also initialized. After an initialization, reset the Remote UI Access PIN. ▶ **Setting a Remote UI PIN(P. 216)**

## NOTE

You can use the procedure below to restore the default <Network Settings> set at the time of purchase.



▶ <Network Settings> ▶ <Initialize Network Settings> ▶ <Yes> ▶ Restart the machine

### **b** <Initialize All>

Initializes all the settings on the machine.

# Initializing Key and Certificate

---

OW20-071

You can restore the settings of the key pairs and digital certificates. Note that all the key pairs that you registered in the machine and certificates (except the preinstalled digital certificates) will be deleted after initializing.

## NOTE

After initializing, functions that require key pairs such as SSL encrypted communication and TLS of the IEEE 802.1X authentication are not available. To use these functions, configure the settings for the key pairs and activate the functions again.



 > <System Management Settings> >  > <Initialize Key and Certificate> >  > <Yes> > 

## LINKS

---

[▶ Configuring Settings for Key Pairs and Digital Certificates\(P. 253\)](#)

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## Appendix

---

0W20-072

This chapter contains technical specifications of this machine, instructions on how to use the e-Manual, disclaimers, copyright information, and other important information for customers.

## Feature Highlights

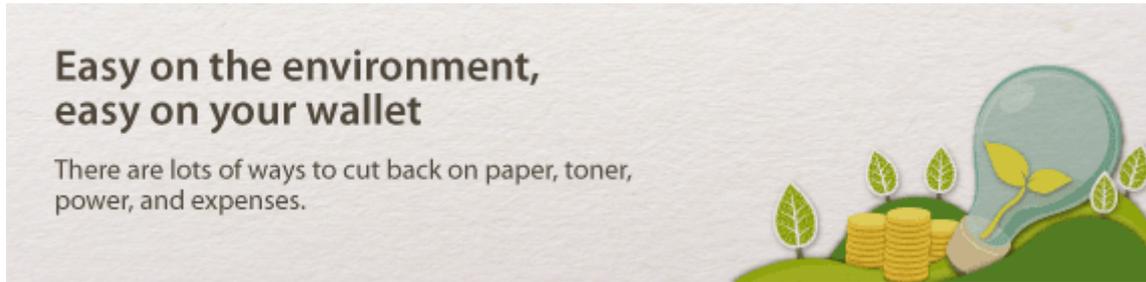
---

0W20-073

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

0W20-074



01



### 2-Sided Printing

You can print on both sides of the paper. Use 2-sided printing to save paper not only on large print jobs but also when you only want to print a few pages. To save even more, combine 2-sided printing with N on 1 printing of multiple pages on one sheet of paper. You can print up to 32 pages on a single sheet, which is both economical and environmentally friendly.



To print 2-sided documents from your computer: [Switching 1-Sided and 2-Sided Printing\(P. 84\)](#)

To print multiple pages onto one sheet from your computer: [Printing Multiple Pages onto One Sheet\(P. 88\)](#)

02



### 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. It is even more effective when combined with 2-sided printing.



To print multiple pages onto one sheet from your computer: [Printing Multiple Pages onto One Sheet\(P. 88\)](#)

To print 2-sided documents from your computer: [Switching 1-Sided and 2-Sided Printing\(P. 84\)](#)

03



## Sleep Mode



If you will not be using the machine for a while, you can save power by putting it into sleep mode, either manually or automatically. 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: ▶ **Entering Sleep Mode(P. 62)**

To configure the machine to be automatically turned OFF: ▶ **Powering OFF at a Fixed Time(P. 64)**

04



## Save Toner



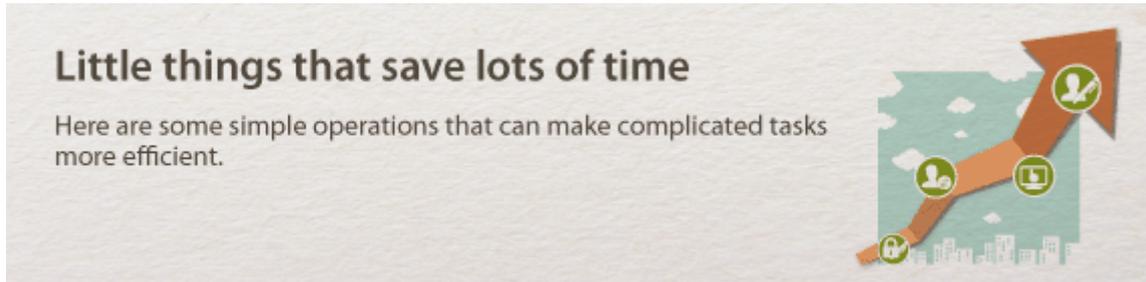
To economize on toner, you can use draft mode for drafts and test printouts. Or you can switch between modes according to purpose, using normal mode for beautiful photos and draft mode for company documents that do not require presentation quality.



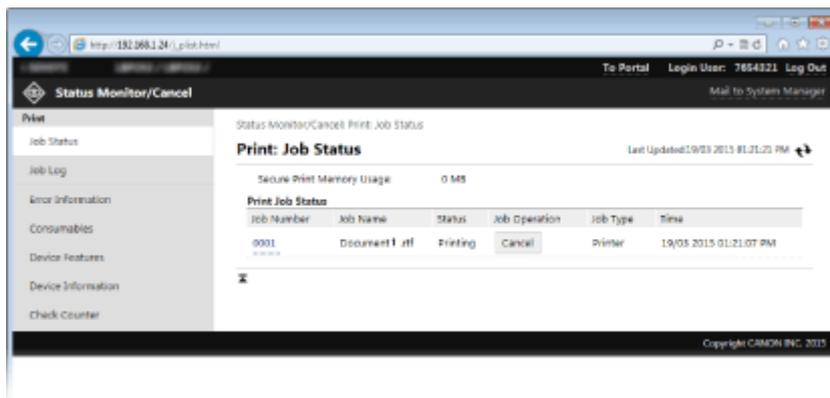
For more information about this function, see ▶ **Saving Toner(P. 102)** .

# Improving Efficiency

OW20-075



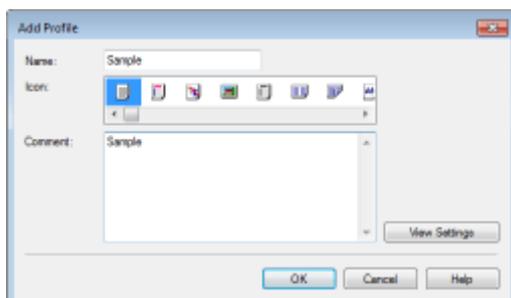
The Remote UI allows you to manage the machine remotely from the computer at your desk. You can check the remaining amounts of paper and toner cartridge, and check the current status of print jobs to decide if you should temporarily interrupt print jobs to print urgent documents or move documents up among the jobs waiting to be printed. Save time and trouble by eliminating trips between your desk and the printer.



For more information about this function, see [▶Using Remote UI\(P. 269\)](#).



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.

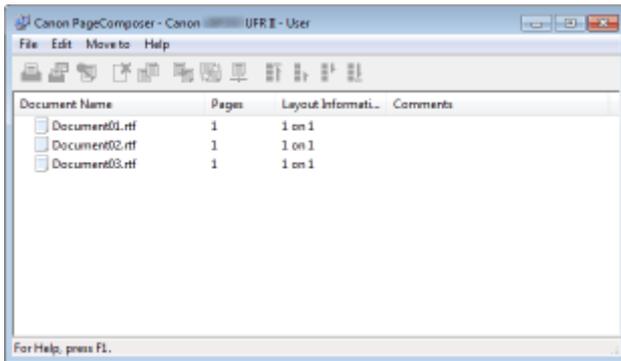


To change default print settings: ▶ **Changing Default Settings(P. 120)**

To register combinations of frequently used print settings as "profiles": ▶ **Registering Combinations of Frequently Used Print Settings(P. 118)**

## 03 Save Time with Shortcuts

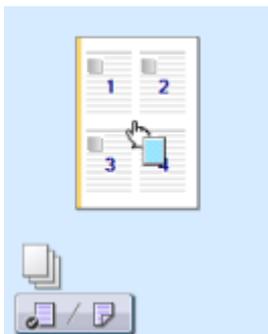
When you have a number of documents to print, it would be convenient to print them all with one operation. Canon PageComposer allows you to combine multiple documents and print them all at once. These shortcuts save time and allow you to work more efficiently.



For more information about this function, see ▶ **Combining and Printing Multiple Documents(P. 104)** .

## 04 Make Print Settings Quickly with Intuitive Operation

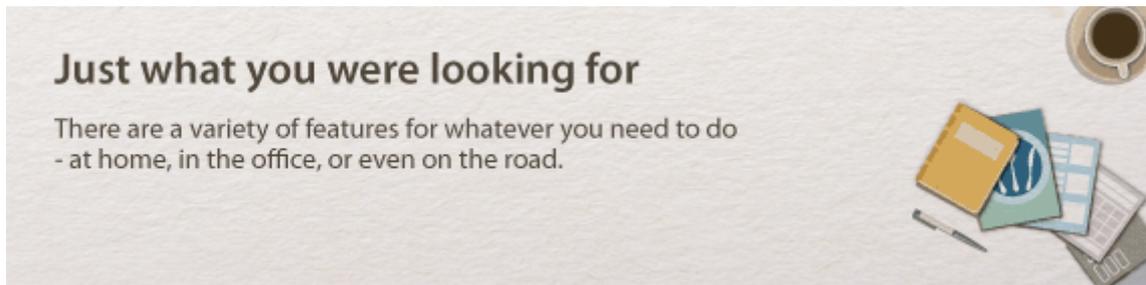
You can easily specify the page layout as well as binding position, switching between 1-sided and 2-sided printing, etc. intuitively on the preview image in the printer driver. The simple click-operation allows you to conveniently make settings while viewing how settings are applied.



For more information about this function, see ▶ **Basic Printing Operations(P. 70)** .

## So Much More

0W20-076



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, or scan materials handed out at a meeting using a smartphone, Canon Mobile Application comes in handy. Even in environments without a wireless LAN router, you can connect to the machine with a mobile device wirelessly and directly.

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\(P. 123\)](#)

02



### Easy Printing with Google Cloud Print

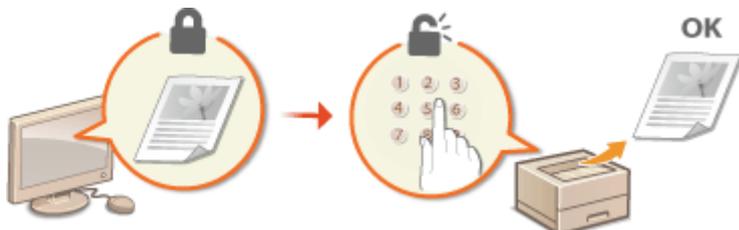
Hook up to Google Cloud Print with your laptop or cell phone, send your data, and out come your printed documents. With this machine, Google Cloud Print, and your mobile device, print whenever you want from wherever you want.



For more information about this function, see [▶Using Google Cloud Print\(P. 452\)](#) .

**03**  **Keep Your Printouts Private (LBP252dw)**

Normally, when you print something from your computer, it comes out of the printer right away. However, if you have sensitive documents, this may not be what you want. Just use secure printing and no one will be able to print your documents without entering your password on the machine's operation panel. Don't let your confidential documents lie exposed on the tray for everyone to see. For even greater security, you can print a watermark such as "CONFIDENTIAL" or "PRIVATE COPY."



To print a document secured by a PIN: [▶Printing a Document Secured by a PIN \(Secure Print\) \(LBP252dw\) \(P. 109\)](#)

To print watermarks such as "CONFIDENTIAL" over the document: [▶Printing Watermarks\(P. 96\)](#)

**04**  **Go Wireless**

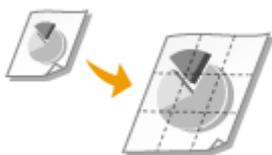
No cables, easy installation, simple maintenance. If you've got a WPS wireless LAN router, bypass the settings process altogether and be ready to go before you know it. Enjoy the kind of clutter-free and easy to use document system that you can only get from wireless. Compatible with IEEE 802.11b/g/n 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\(P. 136\)](#) .

**05**  **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\(P. 90\)](#) .

06

**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\(P. 91\)](#) .

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\(P. 86\)](#) .

# Specifications

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0W20-077

The machine specifications are subject to change without prior notice due to improvements of the machine.

- ▶ **Machine Specifications(P. 437)**
- ▶ **Wireless LAN Specifications(P. 439)**
- ▶ **Paper(P. 440)**

# Machine Specifications

OW20-078

<b>Type</b>	Desktop page printer
<b>Printing Method</b>	Semiconductor laser + dry-type electrophotographic system
<b>Toner Fixing System</b>	On-demand fixing system
<b>Resolution</b>	600 dpi
<b>Print Speed *1</b> (Plain paper (60 to 89 g/m <sup>2</sup> ), A4 continuous printing)	<p><b>LBP252dw</b></p> <ul style="list-style-type: none"> <li>1-sided printing: 33 pages/minute</li> <li>2-sided printing: 16.8 pages/minute (8.4 sheets/minute)</li> </ul> <p><b>LBP251dw</b></p> <ul style="list-style-type: none"> <li>1-sided printing: 30 pages/minute</li> <li>2-sided printing: 16 pages/minute (8 sheets/minute)</li> </ul>
<b>Warm-Up Time *2</b> (from power ON until machine enters standby)	16 seconds or less
<b>Recovery Time *3</b> (recovery from sleep mode to standby)	9 seconds or less
<b>First Print Time *3</b> (1-sided printing on A4 size paper, with the output tray used)	Approx. 6.0 seconds
<b>Acceptable Paper Stock</b>	▶ <b>Paper(P. 440)</b>
<b>Printable Area</b>	▶ <b>Printable Area(P. 442)</b>
<b>Paper Capacity</b>	<ul style="list-style-type: none"> <li>Drawer 1: Approx. 250 sheets</li> <li>Drawer 2 (optional): Approx. 500 sheets</li> <li>Multi-purpose tray: Approx. 50 sheets</li> </ul>
<b>2-Sided Printing</b>	<ul style="list-style-type: none"> <li>Standard size: A4, Legal, Letter, Oficio, Oficio (Brazil), Oficio (Mexico), Foolscap, and Legal (India)</li> </ul>
<b>Paper Output</b>	Face down (output tray)/Face up (sub-output tray)
<b>Output Capacity *4</b>	<ul style="list-style-type: none"> <li>Output tray: Approx. 150 sheets</li> <li>Sub-output tray: 1 sheet</li> </ul>
<b>Noise</b> (measured in accordance with ISO 7779, declared noise emission in accordance with ISO 9296)	<p><b>LwAd (declared A-weighted sound power level (1 B = 10 dB))</b></p> <ul style="list-style-type: none"> <li>During standby: Inaudible *5</li> <li>During printing: 6.9 B or less (LBP252dw) 6.8 B or less (LBP251dw)</li> </ul> <p><b>LpAm (declared A-weighted sound pressure level (bystander position))</b></p> <ul style="list-style-type: none"> <li>During standby: Inaudible *5</li> <li>During printing: 54 dB (LBP252dw) 53 dB (LBP251dw)</li> </ul>

## Appendix

<b>Environmental Conditions</b> (main unit only)	<b>Operating Environment</b> <ul style="list-style-type: none"> <li>● Temperature: 10 to 30 °C</li> <li>● Humidity: 20 to 80% RH (no condensation)</li> </ul>
Host Interface	<ul style="list-style-type: none"> <li>● USB interface: Hi-Speed USB/USB</li> <li>● Network interface: Shared 10BASE-T/100BASE-TX/1000 BASE-T (RJ-45) Full Duplex/Half Duplex IEEE 802.11b/g/n</li> </ul>
<b>Printing Software</b>	<b>LBP252dw</b> <ul style="list-style-type: none"> <li>● UFR II, PCL6, and PS</li> </ul> <p style="text-align: center;"><b>LBP251dw</b></p> <ul style="list-style-type: none"> <li>● <b>UFR II and PCL6</b></li> </ul>
<b>Power Supply</b>	220 to 240 V (± 10 %), 50/60 Hz (± 2 Hz)
<b>Power Consumption *6</b> (at 20 °C)	<ul style="list-style-type: none"> <li>● Maximum: 1,150 W or less</li> <li>● During operation: Approx. 550 W (LBP252dw) Approx. 520 W (LBP251dw)</li> <li>● During standby: Approx. 12.1 W</li> <li>● During sleep mode: Approx. 0.9 W (USB connection) Approx. 1.0 W (wired LAN connection) Approx. 1.5 W (wireless LAN connection)</li> <li>● When the power switch is turned OFF: 0.1 W or less</li> </ul>
<b>Consumables</b>	▶ <b>Consumables(P. 443)</b>
<b>Weight</b>	<b>Main unit and accessories</b> <ul style="list-style-type: none"> <li>● Main unit (excluding toner cartridge): Approx. 11.5 kg</li> <li>● Toner cartridge: Approx. 0.8 kg</li> </ul> <b>Consumables and optional accessories</b> <ul style="list-style-type: none"> <li>● Toner cartridge (Canon Cartridge 719): Approx. 0.8 kg</li> <li>● Toner cartridge (Canon Cartridge 719 H): Approx. 1.0 kg</li> <li>● Paper Feeder Unit PF-44 (including the drawer): Approx. 4.1 kg</li> </ul>

\*1 The 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 the use conditions of the machine (including use of optional accessories and installation environment).

\*3 May vary depending on the output environment.

\*4 May vary depending on the installation environment and paper type 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.

## Wireless LAN Specifications

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OW20-079

<b>Standard</b>	IEEE 802.11g, IEEE 802.11b, IEEE 802.11n
<b>Transmission Scheme</b>	DS-SS System, OFDM System
<b>Frequency Range</b>	2,412 to 2,472 MHz
<b>Maximum Radio-Frequency Power Transmitted</b>	15.98 dBm
<b>Communication Mode</b>	Infrastructure Mode
<b>Security</b>	WEP, WPA-PSK (TKIP/AES-CCMP), WPA2-PSK (TKIP/AES-CCMP)
<b>Connection Method</b>	WPS (Wi-Fi Protected Setup), Manual setup

# Paper

0W20-07A

## ■ Supported Paper Sizes

Paper sizes that can be loaded in the paper drawer, the multi-purpose tray, and optional paper feeders are listed below.

✓ : Available    — : Unavailable

Paper Size	Paper Drawer	Multi-Purpose Tray	Automatic 2-Sided Printing *1
A4 (210.0 x 297.0 mm)	✓	✓	✓
B5 (182.0 x 257.0 mm)	✓	✓	—
A5 (148.0 x 210.0 mm)	✓	✓	—
A6 (105.0 x 148.0 mm)	✓	✓	—
Legal (LGL) (215.9 x 355.6 mm)	✓	✓	✓
Letter (LTR) (215.9 x 279.4 mm)	✓	✓	✓
Statement (STMT) (139.7 x 215.9 mm)	✓	✓	—
Executive (EXEC) (184.1 x 266.7 mm)	✓	✓	—
Oficio (215.9 x 317.5 mm)	✓	✓	✓ <sup>*2</sup>
Oficio (Brazil) (215.9 x 355.0 mm)	✓	✓	✓ <sup>*2</sup>
Oficio (Mexico) (215.9 x 341.0 mm)	✓	✓	✓ <sup>*2</sup>
Letter (Government) (203.2 x 266.7 mm)	✓	✓	—

\*1 Automatic 2-sided printing is available without necessity of paper reloading.

\*2 Set the paper size switch lever in the same position as that for Letter/Legal size. **Interior(P. 21)**

\*3 Custom size paper with width 105.0 to 216.0 mm and length 148.0 to 356.0 mm can be loaded.

\*4 Custom size paper with width 76.2 to 216.0 mm and length 127.0 to 356.0 mm can be loaded.

Paper Size	Paper Drawer	Multi-Purpose Tray	Automatic 2-Sided Printing *1
Legal (Government) (203.2 x 330.2 mm)	✓	✓	—
Foolscap (215.9 x 330.2 mm)	✓	✓	✓ *2
Foolscap (Australia) (206.0 x 337.0 mm)	✓	✓	—
Legal (India) (215.0 x 345.0 mm)	✓	✓	✓ *2
Envelope No.10 (COM10) (104.7 x 241.3 mm)	—	✓	—
Envelope Monarch (98.4 x 190.5 mm)	—	✓	—
C5 (162.0 x 229.0 mm)	—	✓	—
Envelope DL (110.0 x 220.0 mm)	—	✓	—
3x5inch (76.2 x 127.0 mm)	—	✓	—
Custom	✓ *3	✓ *4	—

\*1 Automatic 2-sided printing is available without necessity of paper reloading.

\*2 Set the paper size switch lever in the same position as that for Letter/Legal size. **Interior(P. 21)**

\*3 Custom size paper with width 105.0 to 216.0 mm and length 148.0 to 356.0 mm can be loaded.

\*4 Custom size paper with width 76.2 to 216.0 mm and length 127.0 to 356.0 mm can be loaded.

## NOTE

- The default paper size of the machine is set to A4. Change the paper size setting when using a different size of paper. **Specifying Paper Size and Type in the Paper Drawer(P. 51)**

## ■ Paper Type and Paper Source Capacity

Chlorine-free paper can be used with this machine.

— : Unavailable

Paper Type	Paper Capacity for Paper Drawer	Paper Capacity for Multi-Purpose Tray
Plain paper *	60 to 89 g/m <sup>2</sup>	250 sheets
		50 sheets

\* Automatic 2-sided printing is available without replacing paper.

Paper Type		Paper Capacity for Paper Drawer	Paper Capacity for Multi-Purpose Tray
Heavy paper	90 to 120 g/m <sup>2</sup> *	200 sheets	40 sheets
	121 to 163 g/m <sup>2</sup>	—	25 sheets
Recycled paper *	60 to 89 g/m <sup>2</sup>	250 sheets	50 sheets
Color paper *	60 to 89 g/m <sup>2</sup>	250 sheets	50 sheets
Label		—	20 sheets
Envelope		—	5 sheets

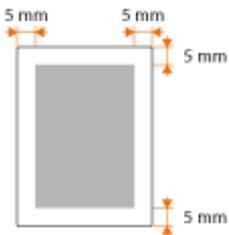
\* Automatic 2-sided printing is available without replacing paper.

## ■ Paper Type and Setting for the Machine

### 🔍 Loading Paper(P. 35)

### ■ Printable Area

The shaded areas in the image below indicate the printable area of the document. For envelope, the top, bottom, left, and right margins are all 10 mm.



# Consumables

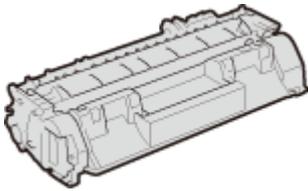
0W20-07E

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\(P. 10\)](#) ).

## 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 2,100 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 719	2,100 sheets
Canon Cartridge 719 H	6,400 sheets

## NOTE

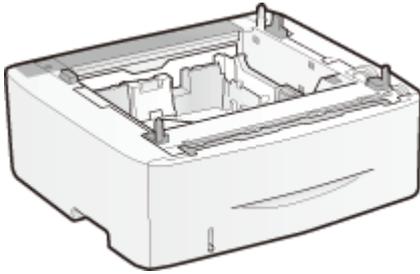
- When replacing toner cartridges [▶How to Replace Toner Cartridges\(P. 400\)](#)

## Optional Items

0W20-07F

The functionality of the machine can be fully utilized by using the optional items described below. Optional items can be purchased from the retail outlet where you purchased the machine or from your local Canon dealer.

### ■ Paper Feeder Unit PF-44



In addition to the provided standard paper drawer and multi-purpose tray, you can install the optional paper feeder to the machine. Adding the drawer enables you to load different sizes of paper in each drawer and enables the machine to hold up to 800 sheets (with the original drawer, multi-purpose tray, and optional paper feeder).

<b>Paper Capacity</b>	500 sheets
<b>Available Paper</b>	▶ <b>Paper(P. 440)</b>
<b>Power Supply</b>	From main unit
<b>Dimensions (W x L x H)</b>	390 x 441 x 165.5 mm
<b>Weight</b>	Approx. 4.1 kg

# Using AirPrint

0W20-07H

You can print without using drivers by sending print data from Apple devices.



## AirPrint settings

- ▶ [Configuring AirPrint Settings\(P. 445\)](#)
- ▶ [Displaying the Screen for AirPrint\(P. 447\)](#)

## Functions of the AirPrint

- ▶ [Printing with AirPrint\(P. 449\)](#)

## Troubleshooting

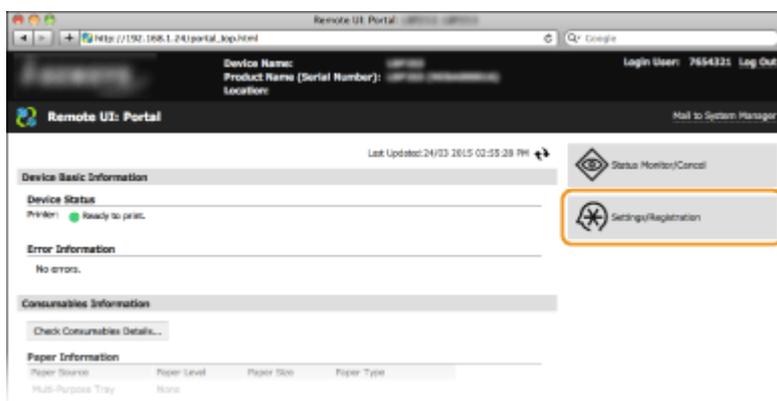
- ▶ [If AirPrint Cannot Be Used\(P. 451\)](#)

## Configuring AirPrint Settings

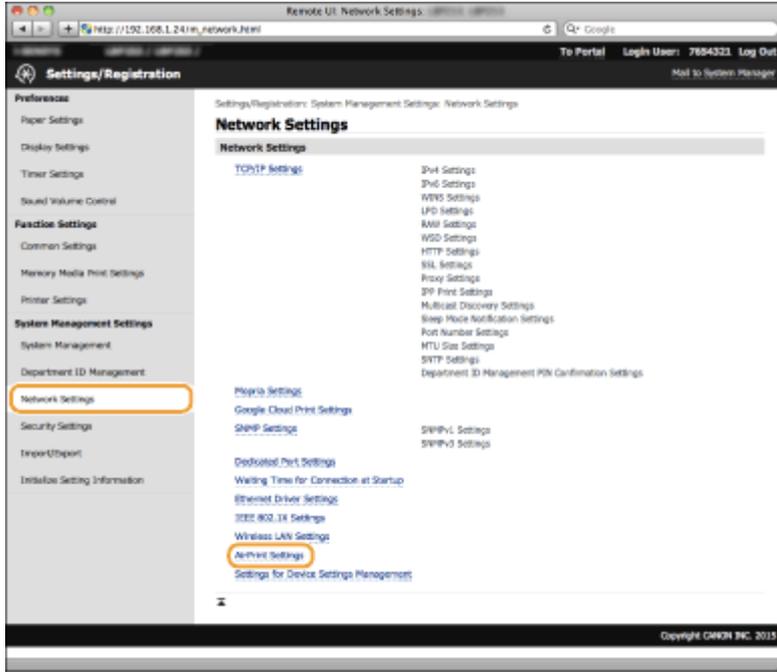
You can register information, including the name of the machine and installation location, that is used for identifying the machine. You can also disable the AirPrint function of the machine. Use the Remote UI to change these settings.

- 1 Start the Remote UI and log on in System Manager Mode. ▶ [Starting Remote UI\(P. 270\)](#)**
- 2 Click [Settings/Registration].**

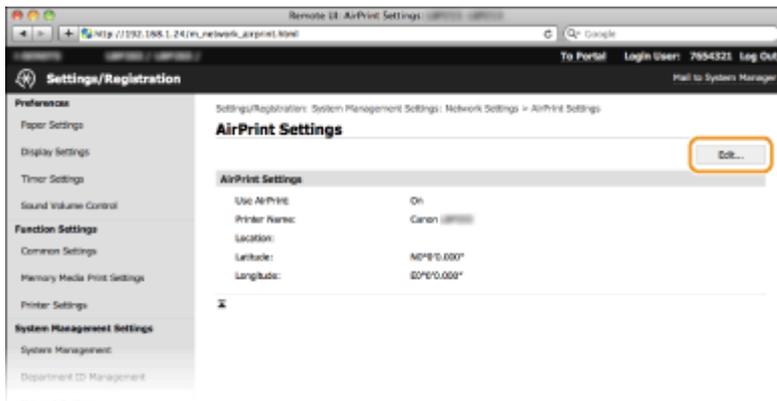
- If you are using a mobile device, such as iPad, iPhone, or iPod touch, read "click" as "tap" in this section.



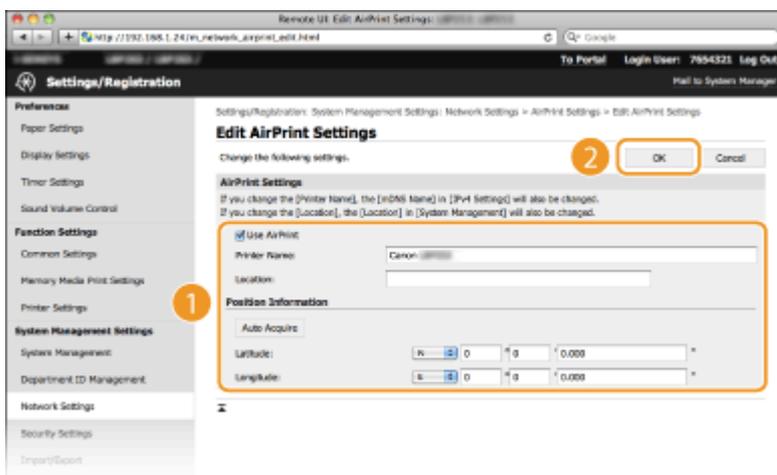
- 3 Click [Network Settings] ▶ [AirPrint Settings].**



**4** Click [Edit].



**5** Specify the required settings, and click [OK].



**[Use AirPrint]**

Select the check box to enable AirPrint. To disable AirPrint, clear the check box.

**[Printer Name]/[Location]/[Latitude]/[Longitude]**

Enter the name and the installation location information to help you identify this machine when operating your Apple device. This information is useful if you have more than one AirPrint printer.

**NOTE:**

**If you select the [Use AirPrint] check box**

The following items are also set to <On> automatically.

- <mDNS Settings> for IPv4 and IPv6 **▶Configuring DNS(P. 181)**
- <Use HTTP> **▶Disabling HTTP Communication(P. 232)**
- <Use IPP Printing> under <IPP Print Settings> **▶Configuring Printing Protocols and WSD Functions(P. 165)**

**If you change [Printer Name]**

If you change [Printer Name] that you have once specified, you may be unable to print any more from the Mac that has been able to be used for printing so far. This phenomenon occurs because <mDNS Name> ( **▶Configuring DNS(P. 181)** ) of IPv4 is also changed automatically. In this case, add the machine to the Mac again.

**6 Restart the machine.**

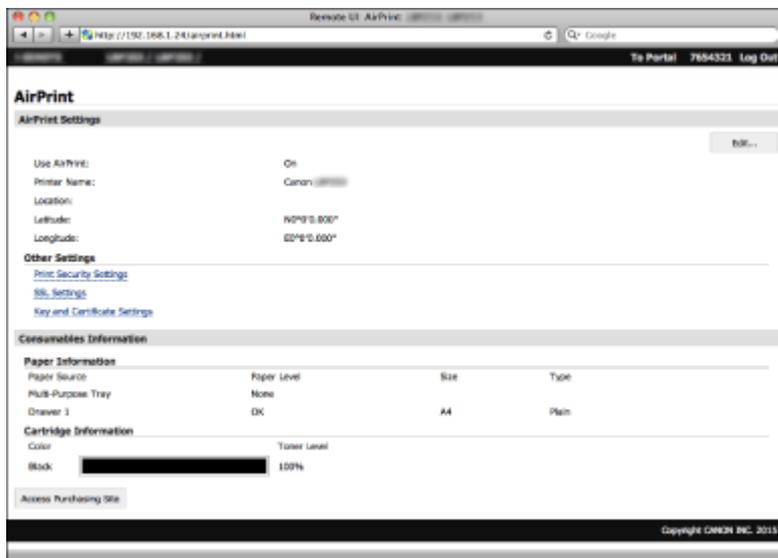
- Turn OFF the machine, wait for at least 10 seconds, and turn it back ON.

**Displaying the Screen for AirPrint**

You can display the screen for AirPrint, on which you can not only access the AirPrint Settings but also view information about consumables, such as paper and toner cartridge. Further, you can configure security function settings ( **▶Enabling SSL Encrypted Communication for the Remote UI(P. 235)** ).

- 1 Click [System Preferences] in the Dock on the desktop ▶ [Printers & Scanners].**
- 2 Select your printer and click [Options & Supplies].**
- 3 Click [Show Printer Webpage].**
- 4 Log on to the Remote UI.**

- To change AirPrint settings, log on in System Manager Mode.



## Trademarks

Apple, Bonjour, iPad, iPhone, iPod touch, Mac, Mac OS, and Mac OS X are trademarks of Apple Inc., registered in the U.S. and other countries. AirPrint and the AirPrint logo are trademarks of Apple Inc.

# Printing with AirPrint

0W20-07J

You do not necessarily need to use a computer for printing e-mails, photos, Web pages, and other documents. AirPrint enables you to print directly from Apple devices such as iPad, iPhone, and iPod touch.



- ▶ **Printing from iPad, iPhone, or iPod touch(P. 449)**
- ▶ **Printing from Mac(P. 450)**

## System Requirements

To print with AirPrint, you need one of the following Apple devices.

- iPad (all models)
- iPhone (3GS or later)
- iPod touch (3rd generation or later)
- Mac (Mac OS X 10.7 or later)\*

\* Mac OS X 10.9 or later when you use USB connection.

## Network Environment

You need one of the following environments.

- The Apple device and the machine are connected to the same LAN.
- The Apple device and the machine are in Direct Connection.
- The Mac and the machine are connected via USB.

## Printing from iPad, iPhone, or iPod touch

- 1 Make sure that the machine is turned ON and that it is connected to your Apple device.**
  - For how to make sure of this, see "Getting Started." ▶ **Manuals Included with the Machine(P. 456)**
  - For how to make sure whether the Apple device and the machine are in Direct Connection, see ▶ **Make Direct Connection (Access Point Mode)(P. 125)** .
- 2 From the application on your Apple device, tap  to display the menu options.**
- 3 From the drop-down list, tap [Print].**

## 4 Select this machine from [Printer] in [Printer Options].

- The printers connected to the network are displayed. Select this machine in this step.

### IMPORTANT:

[Printer Options] is not displayed on applications that do not support AirPrint. You cannot print by using those applications.

## 5 Specify the print settings as necessary.

### NOTE:

The available settings and paper sizes differ depending on the application you are using.

## 6 Tap [Print].

- Printing starts.

### NOTE:

#### Checking the print status

During printing, press the Home button of the Apple device twice ► tap [Print].

## Printing from Mac

## 1 Make sure that the machine is turned ON and that it is connected to your Mac.

- For how to make sure of this, see "Getting Started." ► **Manuals Included with the Machine(P. 456)**

## 2 Add the machine to the Mac from [System Preferences] ► [Printers & Scanners].

## 3 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.

## 4 Select this machine in the print dialog box.

- The printers connected to the Mac are displayed. Select this machine in this step.

## 5 Specify the print settings as necessary.

### NOTE:

The available settings and paper sizes differ depending on the application you are using.

## 6 Click [Print].

- Printing starts.

## If AirPrint Cannot Be Used

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0W20-07K

If AirPrint cannot be used, try taking the following solutions.

- Make sure that the machine is turned ON. If the machine is turned ON, first turn it OFF, then wait for at least 10 seconds and then turn it back ON to check if the problem is solved.
- Make sure that no error messages are displayed on the machine.
- Make sure that Apple devices and the machine are connected to the same LAN. If the machine is turned ON, it may take several minutes before the machine is ready for communication.
- Make sure that Bonjour on your Apple device is enabled.
- Make sure that the machine is configured to enable printing from a computer even when no department ID and password are entered. ▶ **Blocking Jobs When Department ID Is Unknown(P. 214)**
- Make sure that the paper is loaded in the machine and the machine has sufficient toner cartridge remaining. ▶ **Displaying the Screen for AirPrint(P. 447)**

# Using Google Cloud Print

0W20-07L

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. 452)**
- ▶ **Changing Google Cloud Print Settings(P. 452)**
- ▶ **Registering the Machine with Google Cloud Print(P. 453)**

## 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. 136)** ▶ **Connecting to a Wired LAN(P. 135)**
- Make sure that the date and time and the time zone settings are correct. ▶ **Date/Time Settings(P. 307)**
- If the Department ID Management is enabled, make sure that the machine is configured to enable printing from a computer even when no Department ID and PIN are entered. ▶ **Blocking Jobs When Department ID Is Unknown(P. 214)**

## 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.

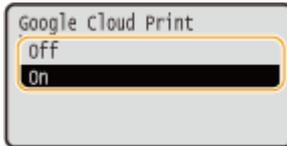
**1** Press .

**2** Use ▲ / ▼ to select <System Management Settings>, and press **OK**.

- If the logon screen appears, enter the correct ID and PIN using the numeric keys, and then press **ID** . **▶**  
Logging on to the Machine(P. 34)

**3** Select <Google Cloud Print Settings> ▶ <Enable Google Cloud Print>.

**4** Select <On> or <Off>, and press **OK**.

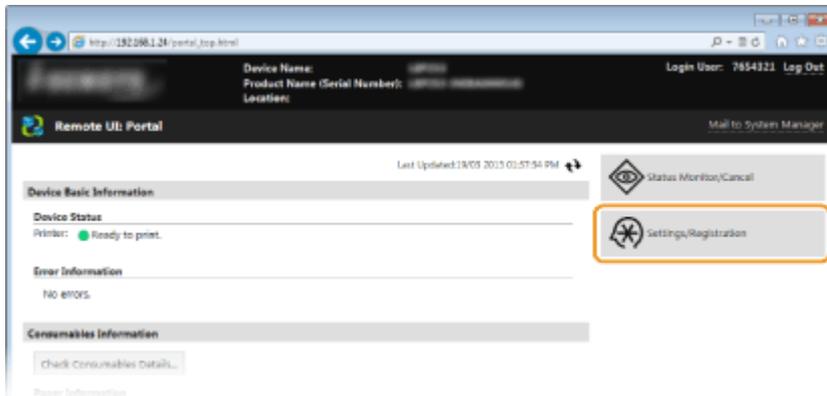


## Registering the Machine with Google Cloud Print

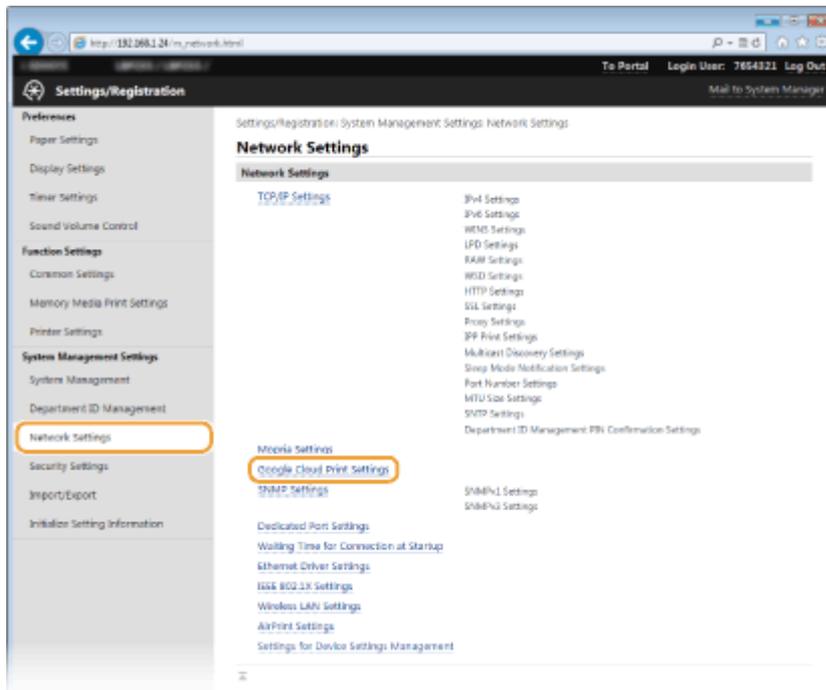
Registering the machine with Google Cloud Print allows you to print from anywhere.

**1** Start the Remote UI and log on in System Manager Mode. **▶** Starting Remote UI(P. 270)

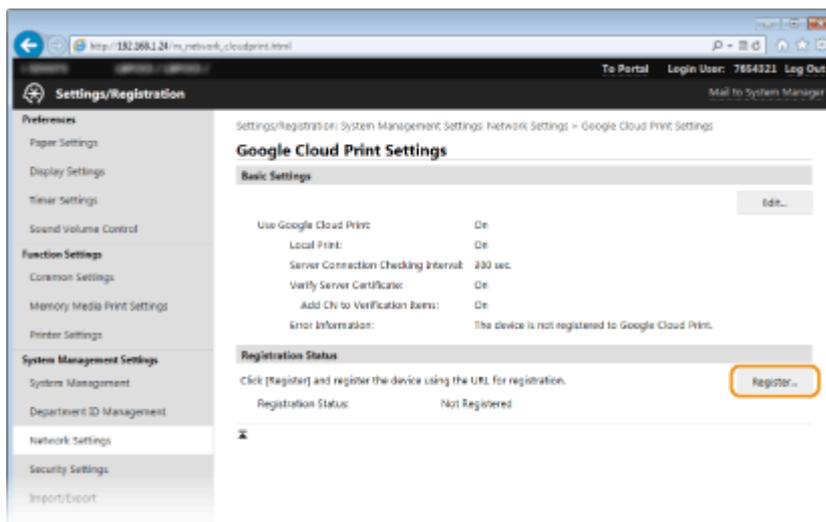
**2** Click [Settings/Registration].



**3** Click [Network Settings] ▶ [Google Cloud Print Settings].



#### 4 Click [Register] in [Registration Status].



#### NOTE:

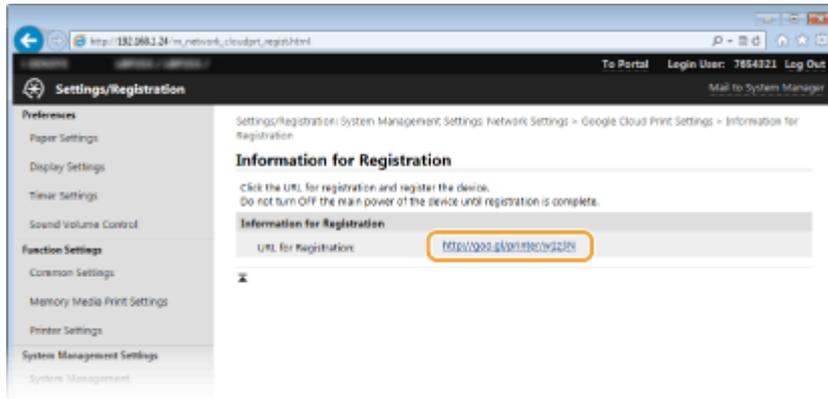
##### If [Register] is unavailable

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 machine's display shows the following confirmation screen before completion of the registration. Press <Yes> 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

0W20-07R

The manuals listed below are included with the machine. Refer to them as necessary.

<b>Getting Started</b>		Read this manual first. It describes basic setup procedures, from removing the packing materials to setting up the machine.
<b>Wireless LAN Setting Guide</b>		This manual describes the procedure for connecting the machine to a wireless LAN router, it also contains information for troubleshooting when configuring the settings. Read this manual with Getting Started.
<b>e-Manual (This Manual)</b>		This manual describes all the functions of the machine in a manual that is viewed using a Web browser. You can browse information by category or enter a keyword to search for pages on a specific topic. ▶ <b>Using e-Manual(P. 457)</b>
<b>Printer Driver Installation Guide</b>		This manual describes how to install the printer driver and the supplied software on the User Software and Manuals CD-ROM/DVD-ROM.

# Using e-Manual

0W20-07S

The e-Manual is a manual that can be viewed on your computer that describes all of the functions of the machine. You can search from your intended use 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 e-Manual(P. 458)**

## How to Find the Topic You Are Looking for

You can find the page you are looking for using the following 3 methods.

### Search the contents

You can find the page you are looking for by selecting the topic from the [Contents] tab on the left side of the screen, and selecting the [Chapter icon] next to the topic.

#### ▶Top Page(P. 465)

#### ▶Topic Page(P. 467)

### Search by keyword

Perform a search by entering a keyword, such as "envelope" or "toner cartridge", and the pages containing the keyword are displayed. You can find the page you are looking for from those results. You can also enter phrases such as "connecting to a network." The keyword search also supports the AND Boolean to search for multiple keywords.

#### ▶Search Tab(P. 468)

### Search the site map

Click [Site Map] on the top part of the screen, and a list of all the e-Manual topics is displayed. From there you can find the topic you are looking for.

#### ▶Site Map(P. 469)

## NOTE

### System Requirements

- To use the e-Manual, the following Web browsers are 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

#### 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

- The 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.

### About the latest e-Manual

For the latest e-Manual, see the Canon Web site.

# Installing e-Manual

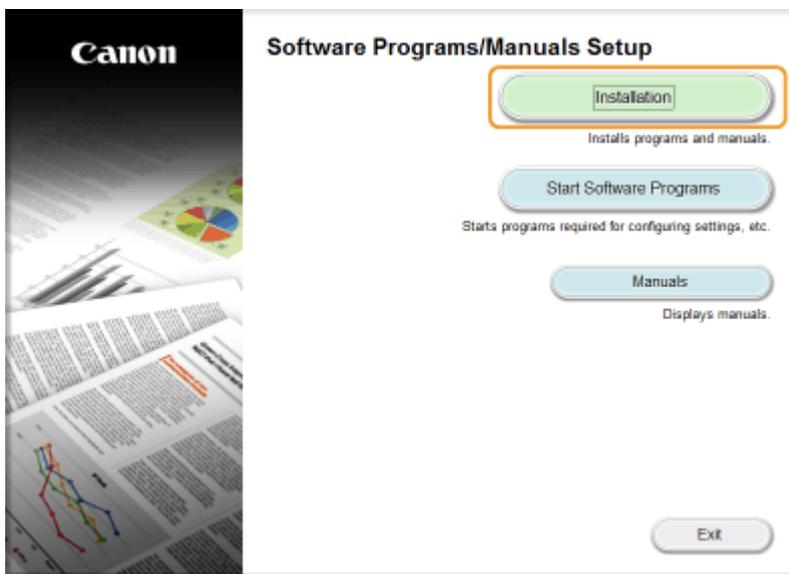
0W20-07U

Install the e-Manual on your computer by using the DVD-ROM that comes with the machine.

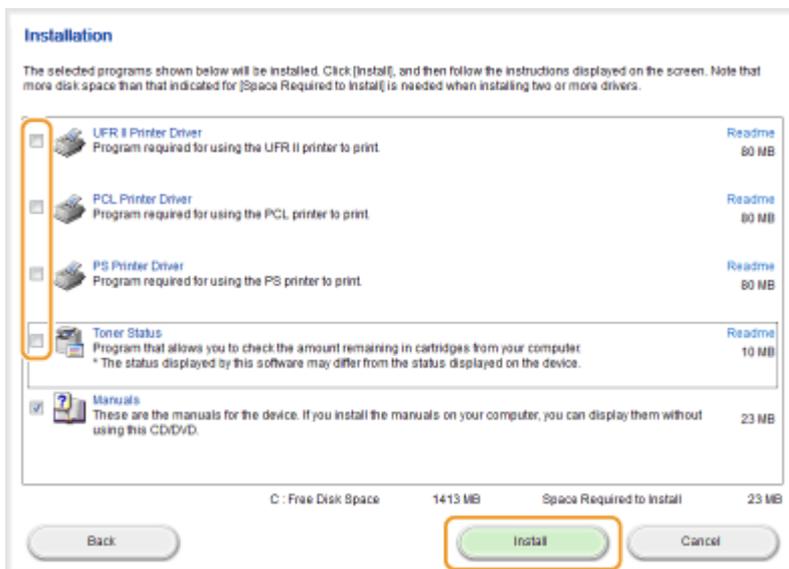
## 1 Insert the User Software and Manuals DVD-ROM into the drive on the computer.

- Select a language and click [OK] if you are prompted to do so.
- If the [Software Programs/Manuals Setup] screen does not appear, remove the DVD-ROM from the drive and insert it again, or see **Displaying the [Software Programs/Manuals Setup] Screen (P. 476)**.
- If [AutoPlay] is displayed, click [Run MInst.exe].

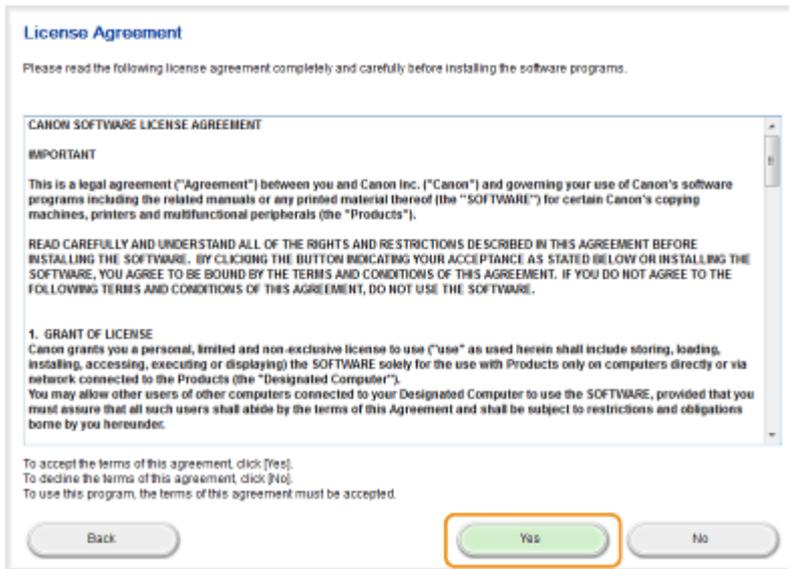
## 2 Click [Installation].



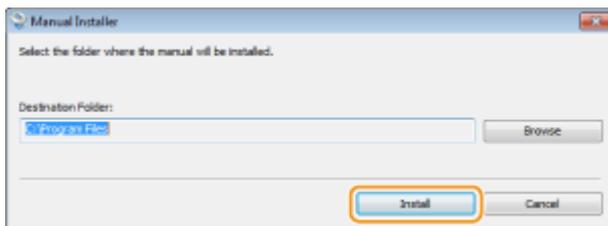
## 3 Clear all the check boxes except for [Manuals], and click [Install].



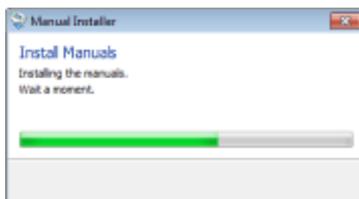
#### 4 Read the License Agreement and click [Yes] to agree.



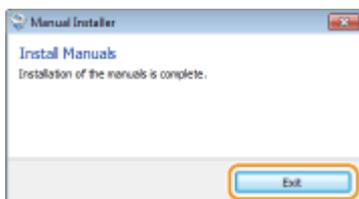
#### 5 Select the folder in which to install the e-Manual, and click [Install].



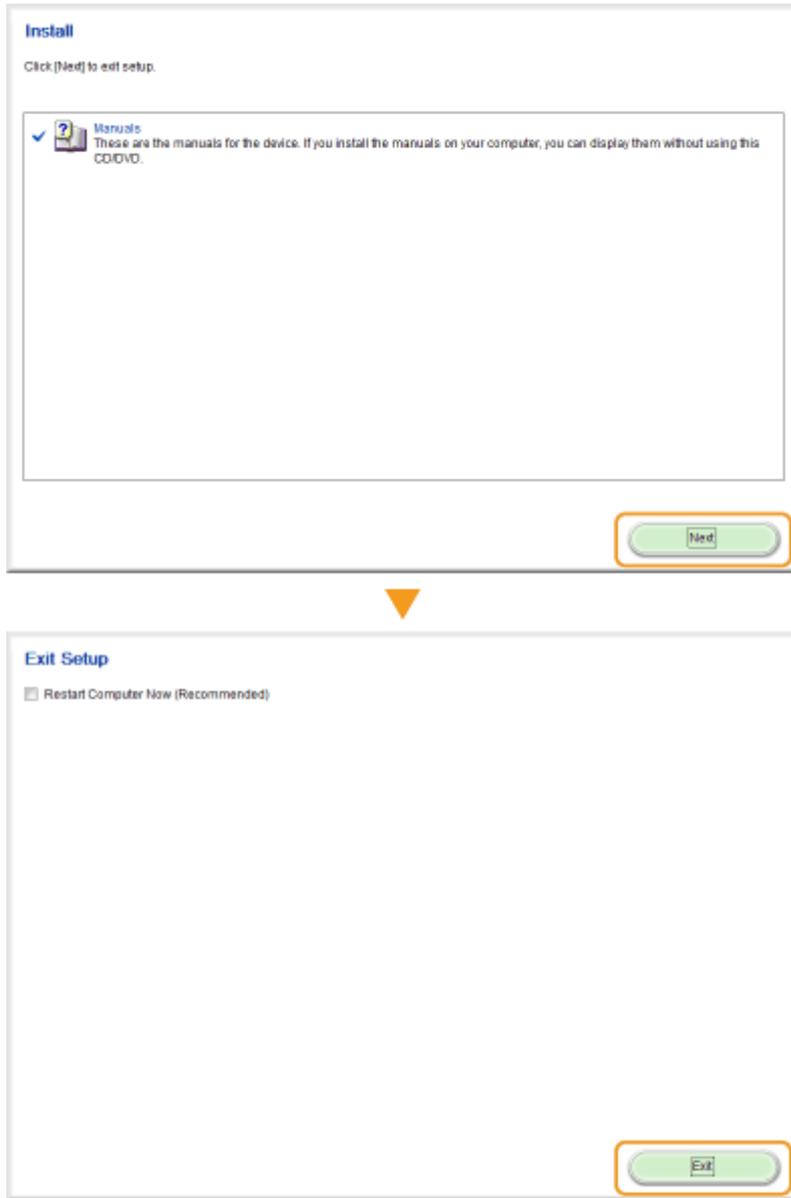
- The installation begins.
- Wait a moment. This process may take some time.



#### 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].



### TIPS for Viewing the e-Manual Directly from the DVD-ROM

- 1 Insert the User Software and Manuals DVD-ROM into the drive on the computer.

- Select a language and click [OK] if you are prompted to do so.
- If the [Software Programs/Manuals Setup] screen does not appear, remove the DVD-ROM from the drive and then insert it again, or see **▶ Displaying the [Software Programs/Manuals Setup] Screen(P. 476)** .

**2** Click [Manuals].

**3** Click [e-Manual].

# Uninstalling e-Manual

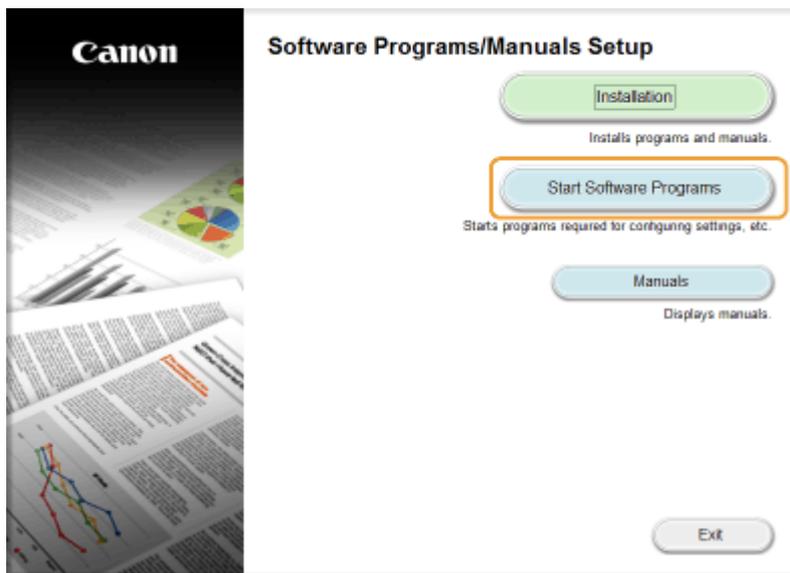
0W20-07W

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 User Software and Manuals DVD-ROM into the drive on the computer.

- Select a language and click [OK] if you are prompted to do so.

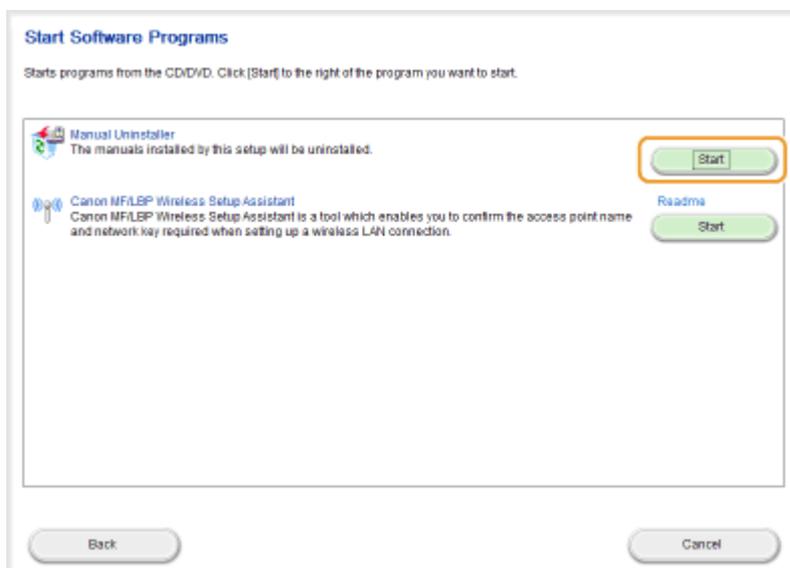
## 2 Click [Start Software Programs].



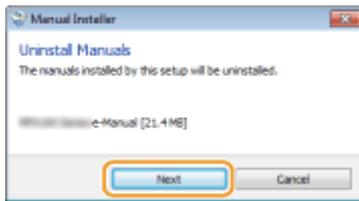
### NOTE:

- If the above screen is not displayed, see ▶ **Displaying the [Software Programs/Manuals Setup] Screen(P. 476)** .
- If [AutoPlay] is displayed, click [Run MInst.exe].

## 3 Click [Start] for [Manual Uninstaller].



#### 4 Click [Next].

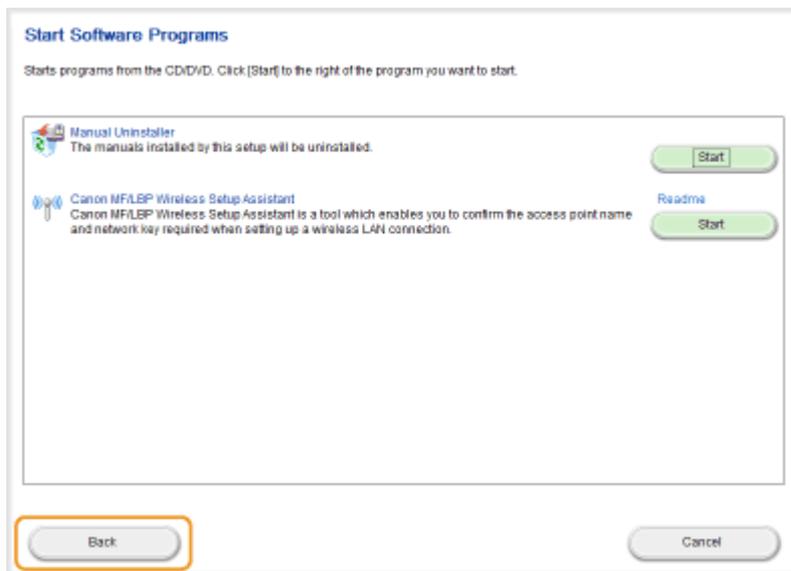


- Uninstall begins.
- Wait a moment. This process may take some time.

#### 5 Click [Exit].



#### 6 Click [Back] ► [Exit].



# Screen Layout of e-Manual

0W20-07X

The e-Manual is divided into different screens, and the content of each screen varies.

## Top Page

Appears when e-Manual is started.



### a Canon

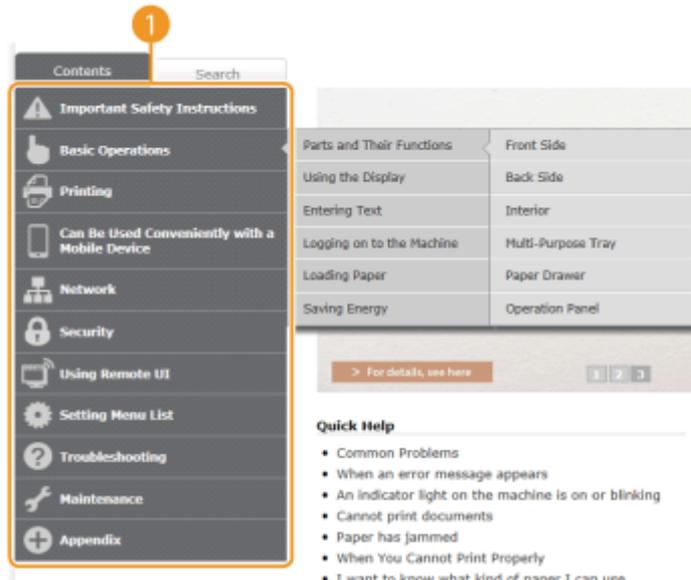
Click to return to the top page.

### b [Contents] tab/[Search] tab

Click to toggle the display between the table of contents and search.

### c Contents

The titles of chapters are displayed (1). Place the mouse pointer over one of the titles, and topics of the chapter are displayed on the right. Click a topic and its page is displayed.



**d [Top]**

Click to return to the top page.

**e [Site map]**

Click to display all the 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 displayed content.

**h Feature Highlights**

Provides a variety of practical examples of ways to use the machine. Click **1** / **2** / **3** / **4** 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. 466)**

**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]**

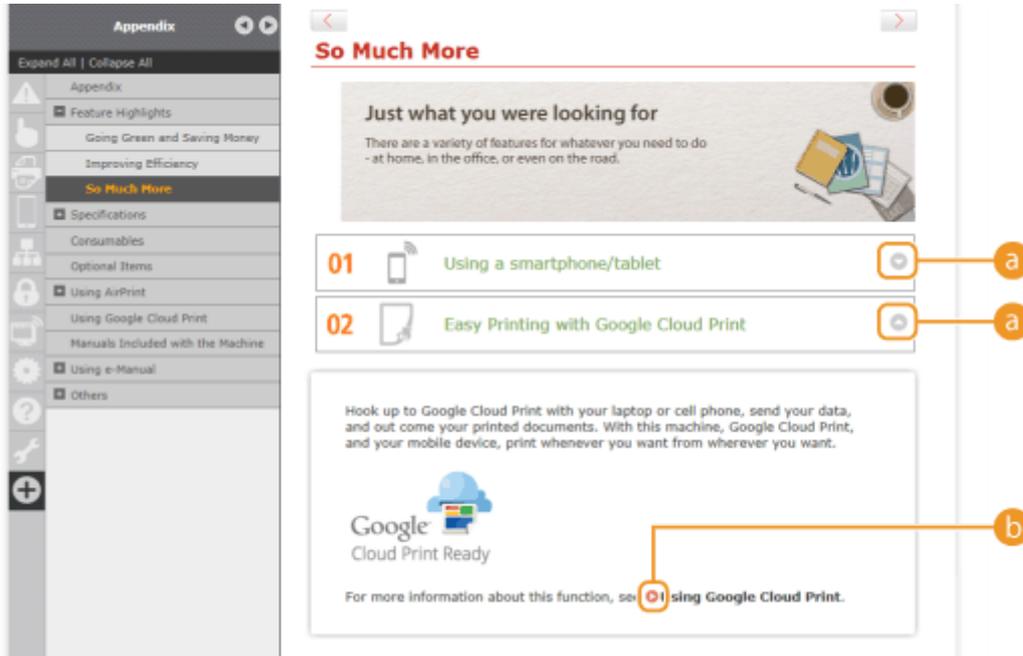
Click to view important information you should know when using the machine.

**l [Office Locations]**

Click to display contact information for any inquiries about the machine.

## Feature Highlights

Provides a variety of practical examples of ways to use the machine.



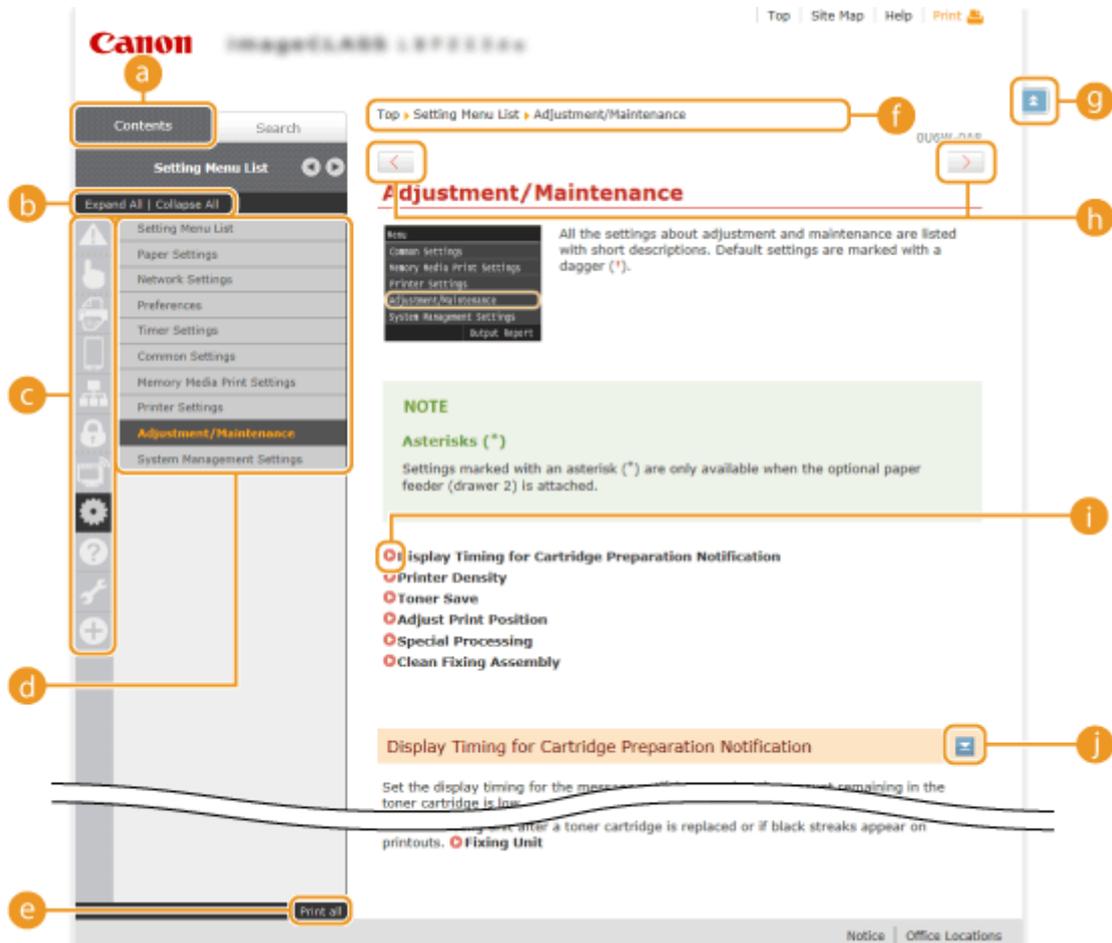
Click to display the detailed information. Click again to close the window.



Click to display the corresponding topic page.

## Topic Page

Contains information about how to configure and use the machine.



**a [Contents]**

The chapter icons and titles are displayed.

**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 Topic page**

Displays the topics of the selected chapter. If "+" is displayed on the topic, clicking it displays the subsections of that topic. Click "-" to close the expanded topic.

**e [Print all]**

All pages of the selected chapter are opened in a separate window. The chapter can be printed if necessary.

**f Navigation**

See what chapter topic you are currently viewing.



Click to return to the page top.



Click to display the previous or following topic.



Click to jump to the corresponding page. To return to the previous page, click "Back" on your Web browser.



Click to display the hidden detailed descriptions. Click again to close the detailed descriptions.

**Search Tab**

Contains a text box to perform a search and find the page you are looking for.



**a [Enter keyword(s) here]**

Enter a keyword or keywords and click  to display the search results in the search result list (). You can search for pages containing all the keywords by separating the keywords by a space (blank). Also you can only search for pages containing an exact phrase by enclosing the keywords in double quotation marks.

**b [Search options]**

Click to specify search conditions such as scope of search and fuzzy match conditions. To display the conditions, click this button when it is gray. To close the display, click the button when it is orange.

**c Search scope selector**

Specifies the search scope. You can efficiently search for topics by narrowing the search scope. The search scope selector is especially useful when you can predict the general location of the topic that you are looking for.

**d Search options selector**

Select the check box to make your search case-sensitive.

**e [Search with these conditions]**

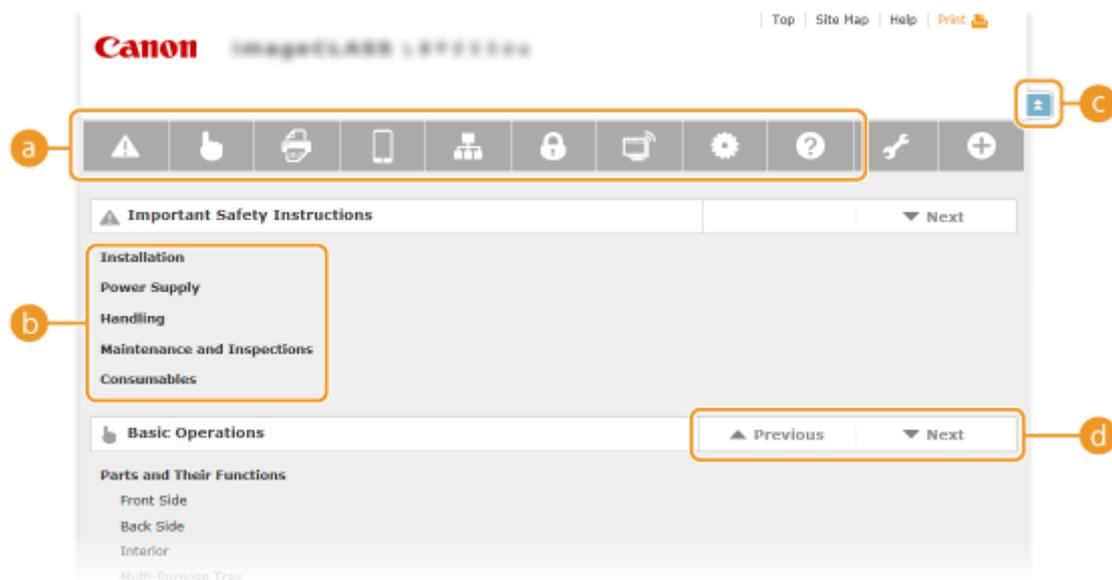
Click to display the search results with the conditions specified with  and .

**f Search result list**

Displays the search results of the 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

Displays the table of contents for the e-Manual.



**a Chapter icons**

Click to jump to the top of the selected chapter.

**b Title (Topic)**

Displays titles and topics. Click a title or topic to jump to the page.

**c **

Click to return to the page top.

**d **

Click to go to the previous or next chapter.

# Viewing e-Manual

0W20-07Y

## Marks

Cautions regarding safety, restrictions and cautions regarding the handling of the machine, useful tips, and other information are indicated using the marks below.



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.



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 and Buttons Used in this Manual

Keys on the operation panel and buttons on the computer display appear in the following notation:

Type	Example
Keys on the operation panel	 (Print) 
Settings displayed on the operation panel	<Timer Settings> <Paper jammed.>
Buttons and other text interfaces displayed on the computer display	[Preferences]

## ▲ / ▼ Used in This Manual

The ▲ / ▼ keys are used to select a desired setting. They are only described at the first applicable occurrence of their use in a page and omitted from the second time onward. For example, the ▲ / ▼ keys appear in Step 2, but are omitted in Step 3.

### Example:

- 1 Press .
- 2 Use ▲ / ▼ to select <Network Settings>, and press .
- 3 Select <TCP/IP Settings> ▶ <IPv4 Settings> ▶ <IP Address Settings>.

### **Screens Used in This Manual**

---

Unless otherwise noted, displays used in the e-Manual are those for the LBP252dw. Depending on the operating system you are using, the appearance of the displays used in this manual may slightly differ from the actual displays. Also, the appearance of drivers and software may differ depending on their version.

### **Illustrations Used in This Manual**

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Unless otherwise noted, the illustrations of the machine used in the e-Manual are those for the LBP252dw. The illustrations of the toner cartridge used in the e-Manual are those for the Canon Cartridge 719.

# Manual Display Settings

---

0W20-08J

## Others

---

0W20-080

This section describes basic Windows operations and includes disclaimers, copyright information, and other information.

# Basic Windows Operations

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OW20-081

- ▶ **Displaying [Computer] or [My Computer](P. 474)**
- ▶ **Displaying the Printer Folder(P. 474)**
- ▶ **Enabling [Network discovery](P. 474)**
- ▶ **Displaying Shared Printers in the Print Server(P. 475)**
- ▶ **Displaying the [Software Programs/Manuals Setup] Screen(P. 476)**
- ▶ **Printing a Test Page in Windows(P. 476)**
- ▶ **Checking the Bit Architecture(P. 477)**
- ▶ **Checking the Printer Port(P. 478)**
- ▶ **Checking Bidirectional Communication(P. 479)**
- ▶ **Checking the SSID to Which Your Computer Is Connected(P. 480)**

## ■ 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 2008**

[Start] ▶ select [Control Panel] ▶ double-click [Printers].

### **Windows Server 2003**

[Start] ▶ select [Printers and Faxes].

## ■ 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] ▶ select [Turn on network discovery] under [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.**

**Windows Vista/7/Server 2003/Server 2008**

[Start] ► select [All Programs] or [Programs] ► [Accessories] ► [Windows Explorer].

**Windows 8/Server 2012**

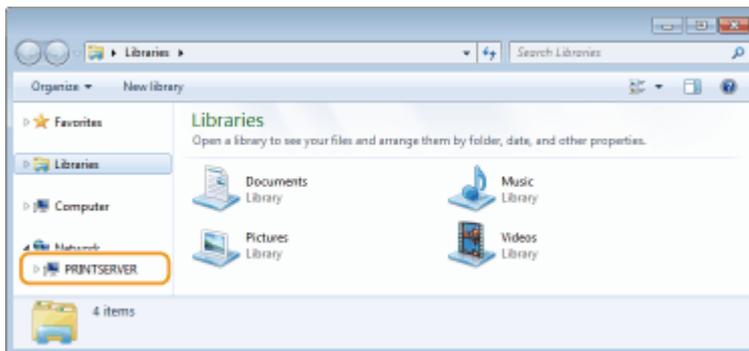
Right-click the lower-left corner of the screen ► select [File Explorer].

**Windows 8.1/Server 2012 R2**

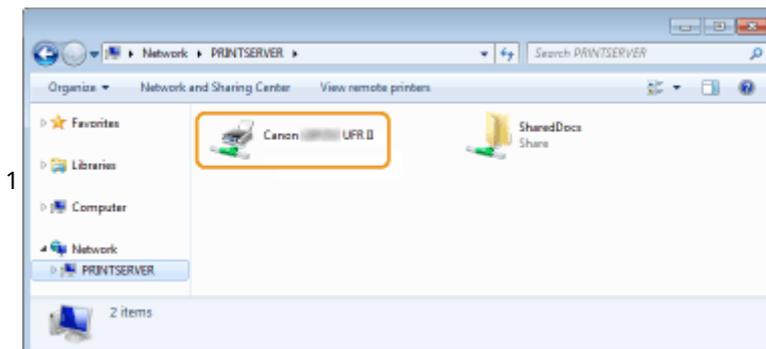
Right-click [Start] ► select [File Explorer].

**2 Select [Network] or [My Network Places] in printer server.**

- To view computers on the network, you may need to turn on network discovery or search the network for computers.



► 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 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]

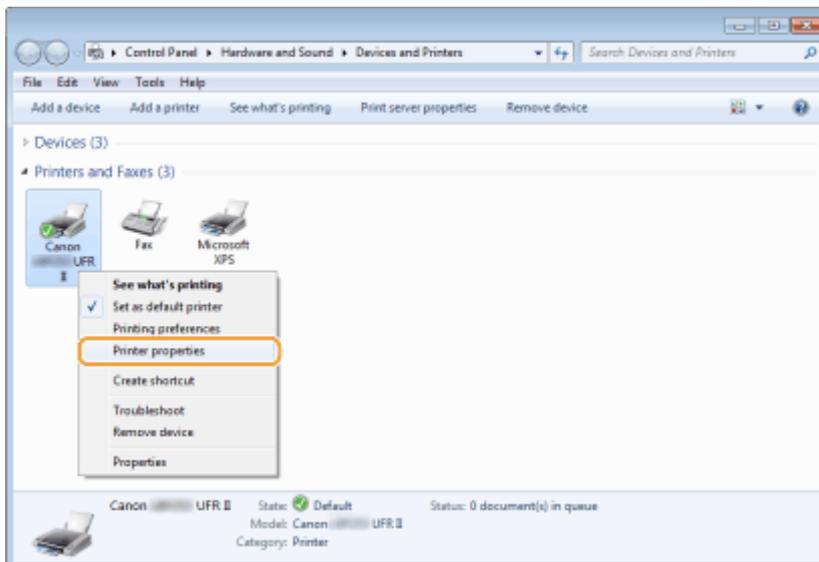
### Windows Server 2003

[Start] ► [Run] ► enter "D:\MInst.exe" ► click [OK]

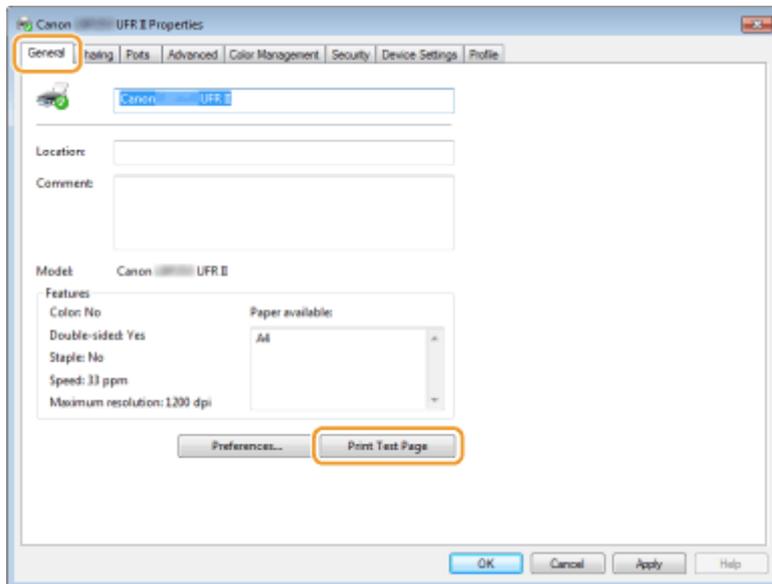
## ■ Printing a Test Page in Windows

You can check whether the printer driver is operational by printing a test page in Windows.

- 1 Load A4 size paper in the multi-purpose tray. **▶ Loading Paper in the Multi-Purpose Tray(P. 41)**
- 2 Open the printer folder. **▶ Displaying the Printer Folder(P. 474)**
- 3 Right-click your printer icon and click [Printer properties] or [Properties].



- 4 Click [Print Test Page] in [General] tab.



⇒ The test page is printed.

## ■ Checking the Bit Architecture

If you are not sure whether your computer is running 32-bit or 64-bit Windows, follow the procedure below.

### 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 Maintenance] or [System and Security] ► [System].

#### Windows Server 2008

Double-click [System].

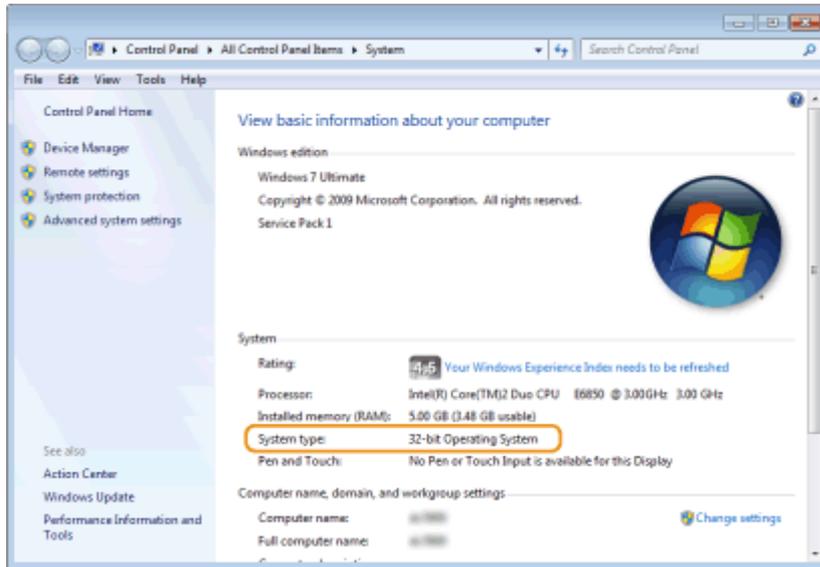
### 3 Check the bit architecture.

#### For 32-bit versions

[32-bit Operating System] is displayed.

#### For 64-bit versions

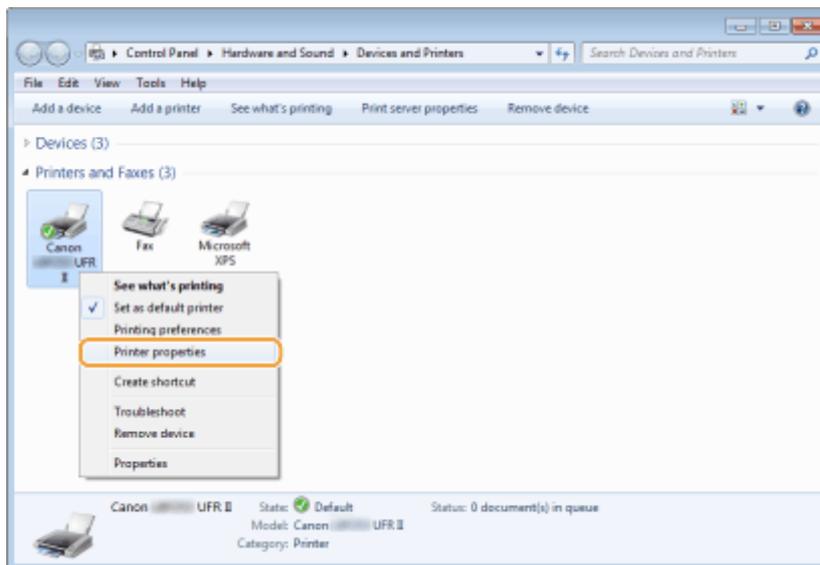
[64-bit Operating System] is displayed.



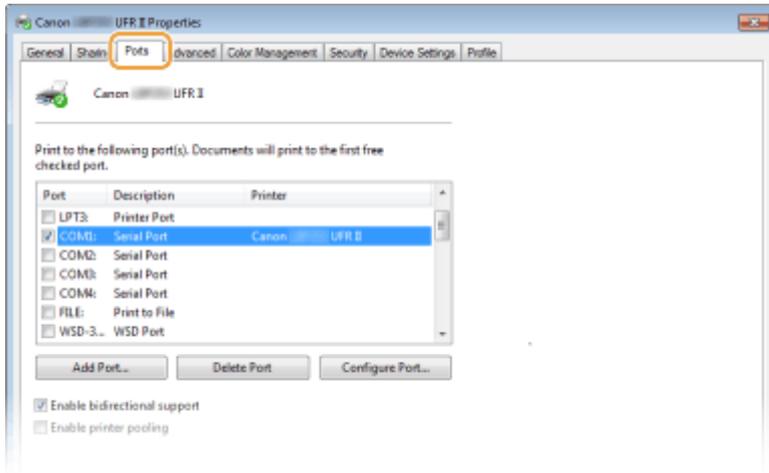
## ■ Checking the Printer Port

**1** Open the printer folder. ▶ Displaying the Printer Folder(P. 474)

**2** Right-click your printer icon and click [Printer properties] or [Properties].



**3** In the [Ports] tab, check that the port is selected correctly.



## NOTE

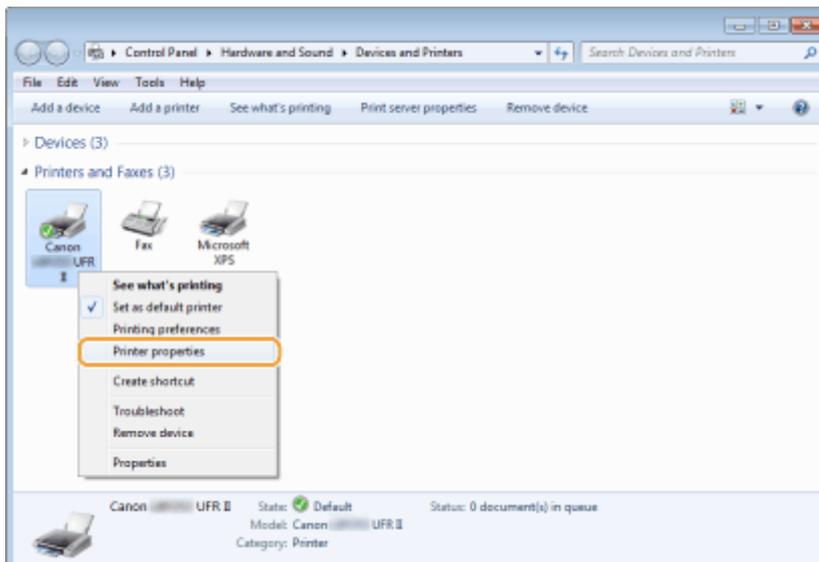
### If you are using a network connection and have changed the machine's IP address

- If [Description] for 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. 168)**

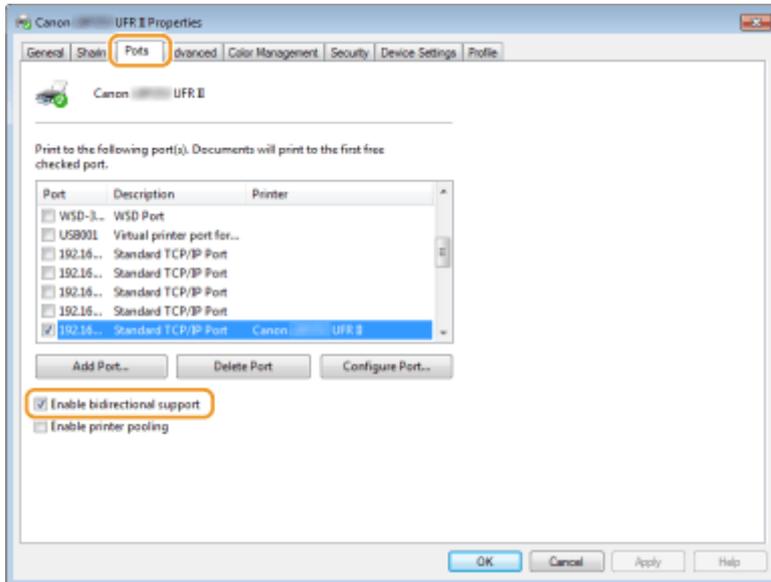
## ■ Checking Bidirectional Communication

**1** Open the printer folder. ▶ **Displaying the Printer Folder(P. 474)**

**2** Right-click your printer icon and click [Printer properties] or [Properties].

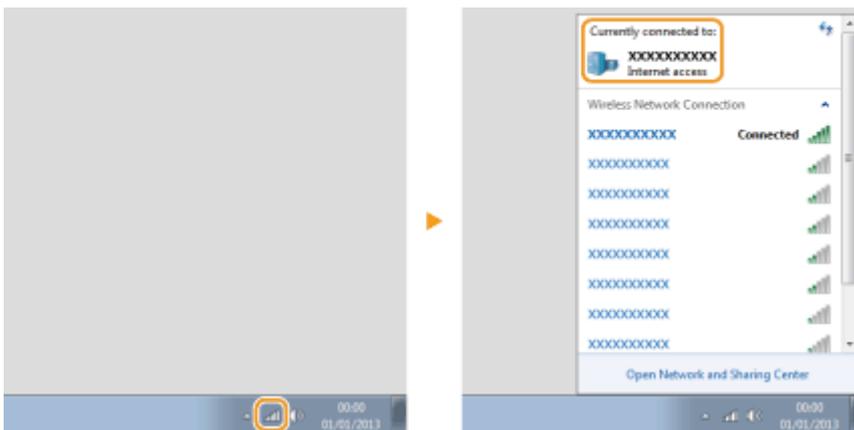


**3** In the [Ports] tab, make sure that the [Enable bidirectional support] check box is selected.



### ■ Checking the SSID to Which Your Computer Is Connected

If your computer is connected to a wireless LAN network, click , , or in the system tray to display the SSID of the connected wireless LAN router.



## For Mac OS Users

0W20-082

**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 "Canon UFR II/UFRII LT Printer Driver Guide".**

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	<ul style="list-style-type: none"> <li>● Getting Started</li> <li>● Canon UFR II/UFRII LT Printer Driver Guide</li> <li>● Canon PS Printer Driver Guide (LBP252dw)</li> </ul>
Using each feature	<ul style="list-style-type: none"> <li>● Driver's Help</li> <li>● Canon UFR II/UFRII LT Printer Driver Guide</li> <li>● Canon PS Printer Driver Guide (LBP252dw)</li> </ul>

### ■ Displaying the Driver Guide

Double-click the following HTML file in the [Documents] folder on the supplied DVD-ROM.

**Canon UFR II/UFRII LT Printer Driver Guide / Canon PS Printer Driver Guide(LBP252dw)**  
 [Documents]-[Print]-[XXXXXX]\*-[Guide]-[index.html]

\* For [XXXXXX], select your desired language.

### ■ Displaying the Driver Help

Click [  ] on the driver.

## Notice

0W20-083

### ■ Third Party Services and Software

#### Third Party Services and Software

### ■ 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.

LBP252dw / LBP251dw (F161900)

### ■ 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 certified as a Class 1 laser product under IEC60825-1:2007 and EN60825-1:2007. This means that the product does not produce hazardous laser radiation.

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. Do not remove protective housings or external covers, except as directed by the equipment's manuals.



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 KLASSE 1



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

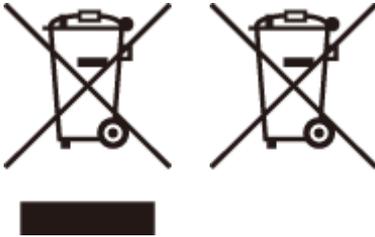


As an ENERGY STAR® Partner, Canon Inc. has determined that this product meets the ENERGY STAR Program for energy efficiency.

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](http://www.canon-europe.com/weee) , or [www.canon-europe.com/battery](http://www.canon-europe.com/battery) .

## ■ IPv6 Ready Logo



The protocol stack included in this machine has obtained the IPv6 Ready Logo Phase-2 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
LBP252dw / LBP251dw	1.6 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.

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## ■ Wireless LAN Regulatory Information

### Regulatory information for users in Jordan

LBP252dw / LBP251dw 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

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LBP252dw / LBP251dw includes approved Wireless LAN Module (Model name: AW-NM383).

TRA  
REGISTERED No: ER0126617/14  
DEALER No: DA0060877/11

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