



**MF244dw / MF232w / MF231**

# **User's Guide**

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# Important Safety Instructions

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## **Important Safety Instructions**

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15A8-000

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

15A8-001

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 (MF244dw / MF232w)

- 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 above sea level 3,000 m or higher

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

15A8-002

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

### 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.

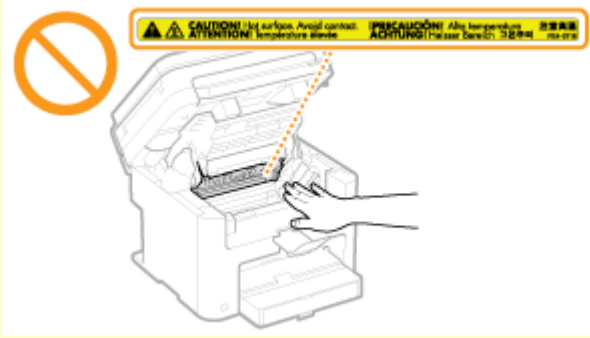
### **If you are using a cardiac pacemaker**

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**



- When copying with a thick book placed on the platen glass, do not press the feeder or the platen glass cover forcefully. Doing so may damage the platen glass and result in injury.
- Be careful not to drop a heavy object, such as a dictionary, on the platen glass. Doing so may damage the platen glass and result in injury.

**Laser beam**

- 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.

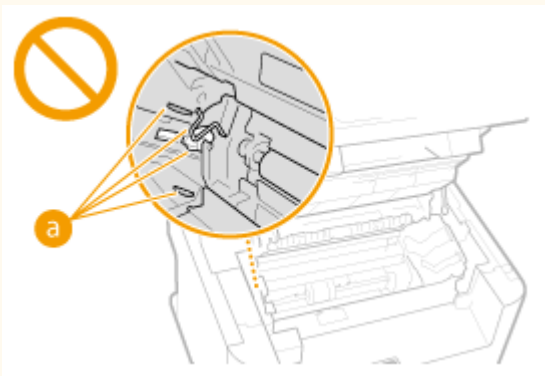
- Remove the toner cartridges.
- Securely pack the machine in the original box with packing materials.

**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 (a). Doing so may result in damage to the machine.



- Do not turn OFF the machine during printing. Also, do not open and close the cover and do not remove or insert paper during printing. Doing so can cause paper jams.

## Maintenance and Inspections

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15A8-004

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. 339)** . If the problem cannot be resolved or you feel the machine requires an inspection, see **▶When a Problem Cannot Be Solved(P. 374)** .

### 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. Washing with warm water can cause toner to adhere and be impossible to remove.

## Consumables

15A8-005

### 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 gather the toner particles together or wipe them up with a soft, damp cloth in a way that prevents inhalation. Never use a vacuum cleaner that does not have safeguards against dust explosions to clean up spilled toner. Doing so may cause a malfunction in the vacuum cleaner, or result in a dust explosion due to static discharge.

### If you are using a cardiac pacemaker

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

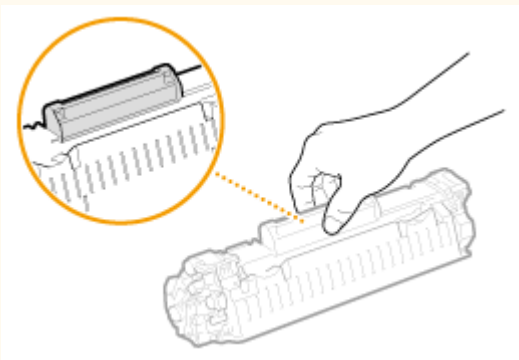
### CAUTION

- Use caution not to inhale any toner. If you should inhale toner, consult a physician immediately.
- Use caution so that toner does not get into your eyes or mouth. If toner should get into your eyes or mouth, immediately wash 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.

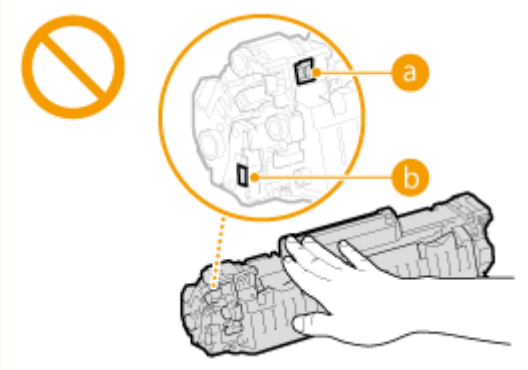
## IMPORTANT

### Handling the toner cartridge

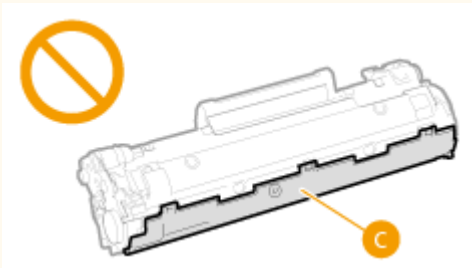
- Hold the toner cartridge correctly as shown. Do not stand it up or turn it upside-down.



- Do not touch the toner cartridge memory ( **a** ) or the electrical contacts ( **b** ).



- Do not scratch the drum surface (C) or expose it to light.



- Do not remove the toner cartridge from this machine or from the protective bag unnecessarily.
- The toner cartridge is a magnetic product. Keep it away from floppy disks, disk drives, and other devices that can be affected by magnetism. Failure to do so may result in data loss.

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

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

Place the toner container 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

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

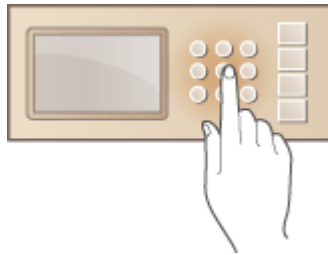
## ■ Parts and Their Functions

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. 15)**



## ■ Using the Operation Panel

This section describes how to toggle the display and select items. ▶ **Using the Operation Panel(P. 33)**



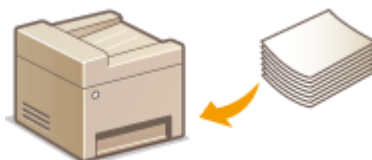
## ■ Placing Documents

This section describes how to place documents on the platen glass and in the feeder. ▶ **Placing Documents(P. 38)**



## ■ Loading Paper

This section describes how to load the paper into the paper drawer and manual feed slot. ▶ **Loading Paper(P. 42)**



### ■ Entering Quiet Mode

This section describes how to place the machine in quiet mode to reduce operation sound. ▶ **Entering Quiet Mode(P. 57)**



### ■ Entering Sleep Mode

This section describes how to set the sleep mode. ▶ **Entering Sleep Mode(P. 59)**



### ■ Setting Auto Shutdown Time

This section describes how to enable the <Auto Shutdown Time> setting. ▶ **Setting Auto Shutdown Time(P. 61)**

## Parts and Their Functions

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15A8-007

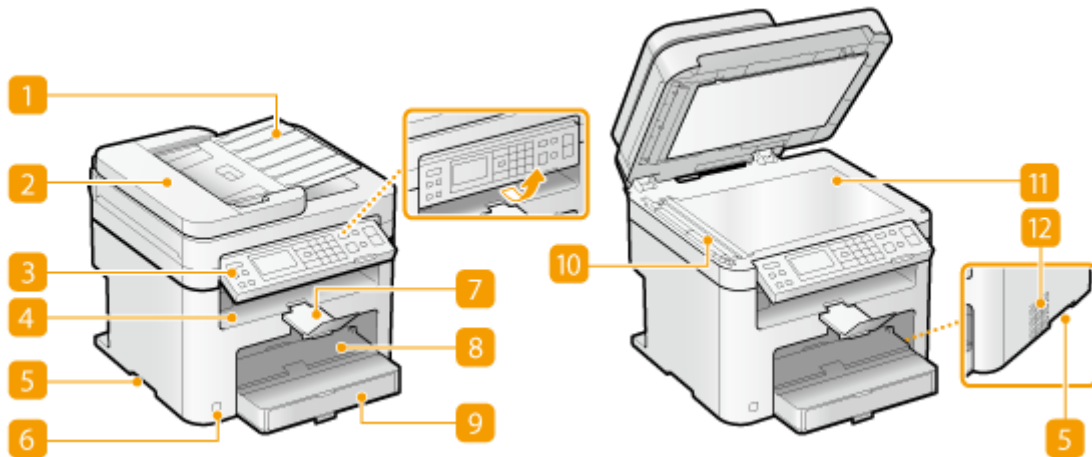
This section describes the parts of the machine (exterior, front and back side, and interior) and how they function. In addition to describing the parts of the machine used for such basic operations as placing documents, loading paper, and replacing the toner cartridges, this section also describes the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



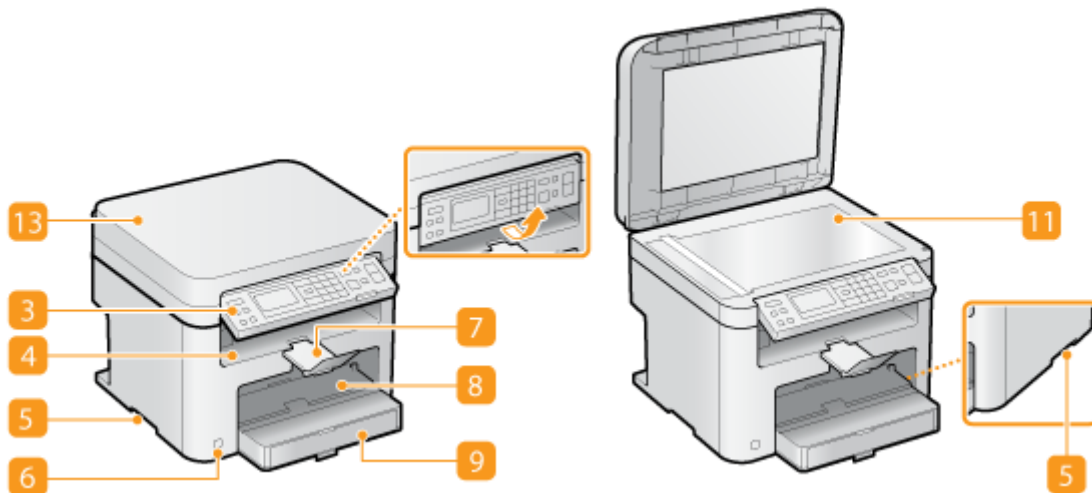
- ▶ **Front Side(P. 16)**
- ▶ **Back Side(P. 18)**
- ▶ **Interior(P. 20)**
- ▶ **Manual Feed Slot(P. 21)**
- ▶ **Paper Drawer(P. 22)**
- ▶ **Operation Panel(P. 23)**

## Front Side

### MF244dw



### MF232w / MF231



#### 1 Document feeder tray (MF244dw)

Open to load an original in the feeder. ▶ **Placing Documents(P. 38)**

#### 2 Feeder (MF244dw)

Automatically feeds documents into the machine for scanning. When two or more sheets are loaded in the feeder, documents can be scanned continuously. ▶ **Placing Documents(P. 38)**

#### 3 Operation panel

The operation panel consists of keys such as the numeric keys and [Start] key, a display, and status indicators. You can perform all the operations and specify settings from the operation panel. You can move it up or down so it is easier to operate. ▶ **Operation Panel(P. 23)** ▶ **Display(P. 30)**

#### **4 Output tray**

Printed paper is output to the output tray.

#### **5 Lift handles**

Hold the lift handles when carrying the machine. ▶ **Relocating the Machine(P. 393)**

#### **6 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.

#### **7 Paper stopper**

Prevents paper that has been output after printing from falling.

#### **8 Manual feed slot**

Load the paper into the manual feed slot when you want to temporarily use a type of paper different from that which is loaded in the paper drawer. ▶ **Loading Paper in the Manual Feed Slot(P. 47)**

#### **9 Paper drawer**

Load the type of paper you frequently use into the paper drawer. ▶ **Loading Paper in the Paper Drawer(P. 44)**

#### **10 Scanning area (MF244dw)**

Documents loaded in the feeder are automatically fed to the scanning area for scanning.

#### **11 Platen glass**

Place documents to copy or scan here. For MF244dw, use the platen glass to place thick or bound documents such as books when they cannot be loaded in the feeder. ▶ **Placing Documents(P. 38)**

#### **12 Ventilation slots (MF244dw)**

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)**

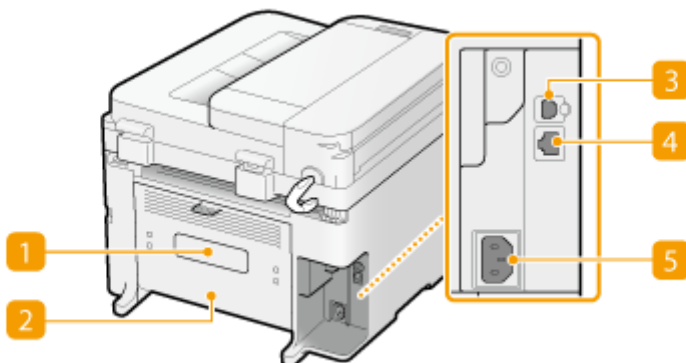
#### **13 Platen glass cover (MF232w / MF231)**

Open to place documents on the platen glass. ▶ **Placing Documents(P. 38)**

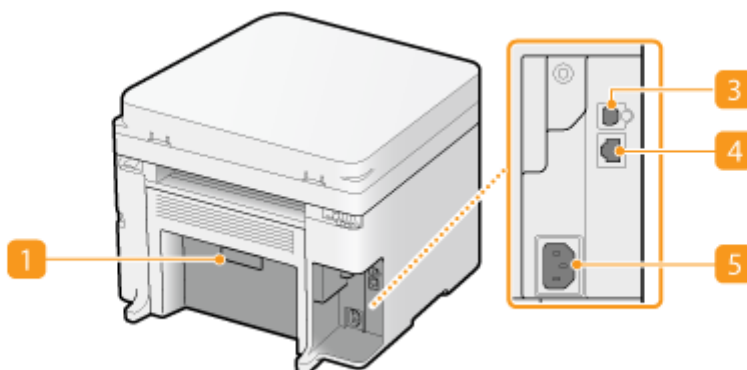
## Back Side

15A8-009

### MF244dw



### MF232w / MF231



#### 1 Rating label

The label shows the serial number, which is needed when making inquiries about the machine. ▶ **When a Problem Cannot Be Solved(P. 374)**

#### 2 Rear cover (MF244dw)

Open the rear cover when clearing paper jams. ▶ **Clearing Jams(P. 341)**

#### 3 USB port


Connect a USB cable when connecting the machine and a computer. For connection steps, see "Getting Started". ▶ **Manuals Included with the Machine(P. 425)**

#### 4 LAN port (MF244dw / MF232w)

Connect a LAN cable when connecting the machine to a wired LAN router, etc. For connection steps, see "Getting Started". ▶ **Manuals Included with the Machine(P. 425)**



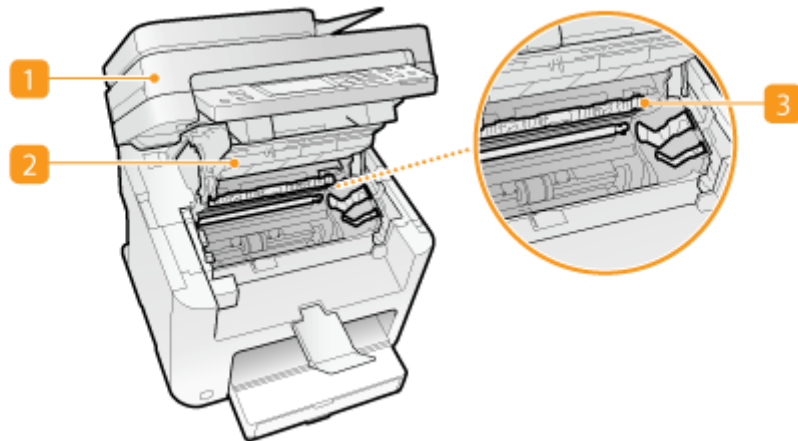
## **5 Power socket**

Connect the power cord. For connection steps, see "Getting Started".  **Manuals Included with the Machine(P. 425)**

# Interior

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15A8-00A



## 1 Operation panel

Lift this panel to replace the toner cartridges or clear paper jams. ▶ [How to Replace Toner Cartridges\(P. 390\)](#) ▶ [Clearing Jams\(P. 341\)](#)

## 2 Toner cover

Open this cover to replace the toner cartridges or clear paper jams. ▶ [How to Replace Toner Cartridges\(P. 390\)](#) ▶ [Clearing Jams\(P. 341\)](#)

## 3 Paper exit guide

Open this guide to clear paper jams. ▶ [Clearing Jams\(P. 341\)](#)

## LINKS

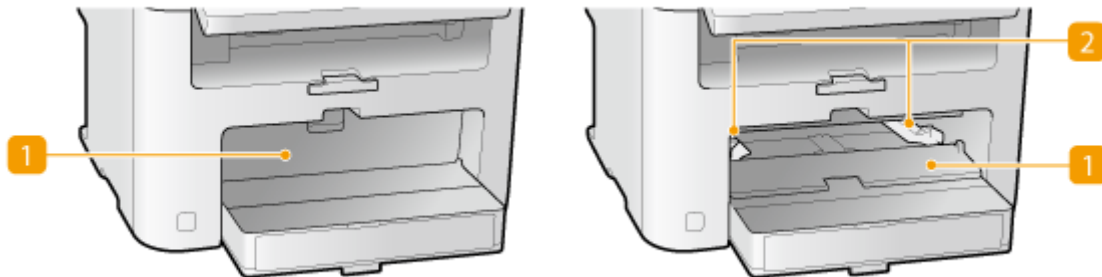
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▶ [How to Replace Toner Cartridges\(P. 390\)](#)

## Manual Feed Slot

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15A8-00C



### 1 Manual feed cover

Open this slot to load paper in the manual feed slot.

### 2 Paper guides

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

## LINKS

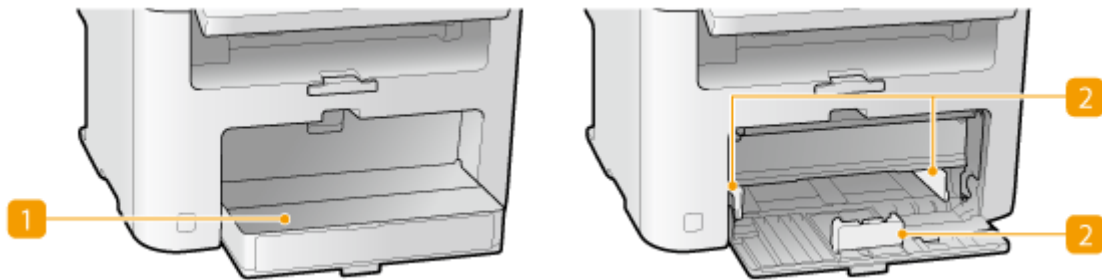
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▶ [Loading Paper in the Manual Feed Slot\(P. 47\)](#)

# Paper Drawer

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15A8-00E



## 1 Dust cover

Open this cover to load paper in the paper drawer.

## 2 Paper guides

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

### LINKS

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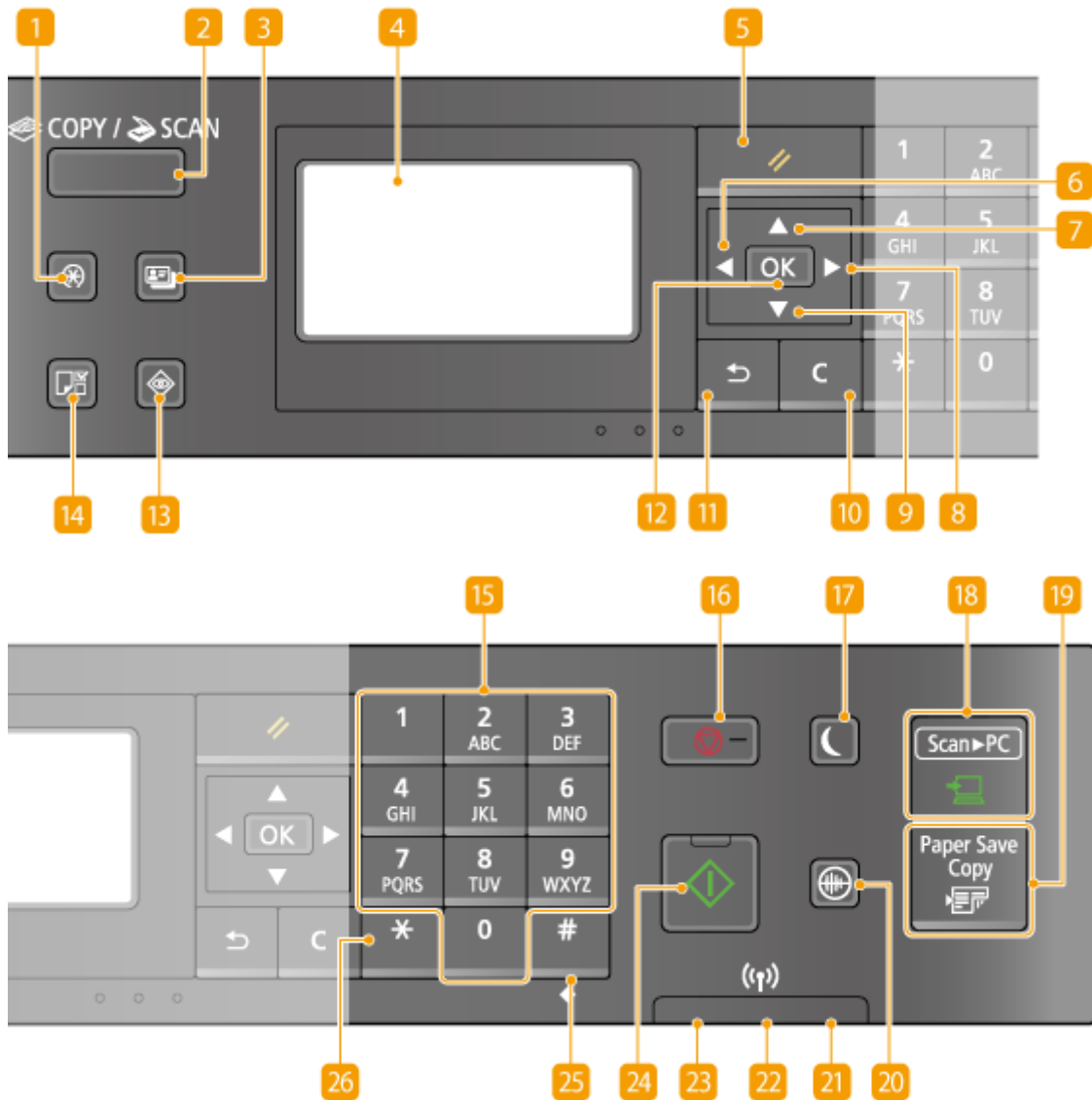
▶ [Loading Paper in the Paper Drawer\(P. 44\)](#)

# Operation Panel

▶ MF244dw / MF231(P. 23)

▶ MF232w(P. 26)

## ■ MF244dw / MF231



### 1 [Menu] key

Press to start specifying many of the settings for the machine, such as <Timer Settings> or <Preferences>. ▶  
**Setting Menu List(P. 285)**

### 2 [COPY/SCAN] key

Press to switch the mode to copy or scan.

**3 [ID Card Copy] key**

Press to enter a mode for copying the front and back sides of a driver's license or other ID card onto the same side of a page at actual size. ▶ **Copying Both Sides of an ID Card onto One Page(P. 81)**

**4 Display**

Displays the operation and status screens for copying and other functions, as well as the status of the machine and error information. Also, view the screen when specifying the settings of the machine. ▶ **Display(P. 30)** ▶ **Using the Operation Panel(P. 33)**

**5 [Reset] key**

Press to cancel the settings and restore the previously specified settings.

**6 [◀] key**

- When specifying settings, press to return to the previous screen.
- When entering text, press to move the cursor to the left.
- Press to decrease a setting value such as density for scanning, copying, etc.

**7 [▲] key**

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

**8 [▶] key**

- When specifying settings, press to proceed to the next screen.
- When entering text, press to move the cursor to the right.
- Press to increase a setting value such as density for scanning, copying, etc.

**9 [▼] key**

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

**10 [Clear] key**

Press to delete the entered numbers and text.

**11 [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.

**12 [OK] key**

Press to apply settings or specified details.

**13 [Status Monitor] key**

Press to check the status of printing or copy to view the usage history. You can also check the status of the machine, such as the paper size and the amount remaining in the toner cartridges, or whether any errors occurred. ▶ **Display(P. 30)**

**14 [Paper Setting] key**

Press to select the paper you want to use, or to set the size and type of paper loaded in the paper source. ▶ **Specifying Paper Size and Type(P. 53)**

**15 Numeric keys ([0]-[9] keys)**

Press to enter numbers and text. ▶ **Entering Text(P. 35)**

**16 [Stop] key**

Press to cancel copying, scanning, and other operations.

**17 [Energy Saver] key**

Press to put the machine into sleep mode. The key lights up green when the machine is in sleep mode. Press the key again to exit sleep mode. ▶ **Entering Sleep Mode(P. 59)**

**18 [Scan -> PC] key**

Press to send the scanned documents to the registered computer. ▶ **Scanning Using the [Scan -> PC] Key(P. 133)**

**19 [Paper Save Copy] key**

Press to put the machine into paper save copy mode for copying multiple document pages reduced on a single sheet. ▶ **Using the [Paper Save Copy] Key (MF244dw / MF231)(P. 79)**

**20 [Quiet Mode] key**

Press to put the machine into quiet mode. While in quiet mode this key is lit in green. Press the key again to exit quiet mode. ▶ **Entering Quiet Mode(P. 57)**

**21 [Error] indicator**

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

**22 Wi-Fi indicator (MF244dw)**

Lights up when the machine is connected to wireless LAN.

**23 [Processing/Data] indicator**

Blinks while operations such as sending or printing are being performed. Lights up when there are documents waiting to be processed.

**24 [Start] key**

Press to scan or copy documents.

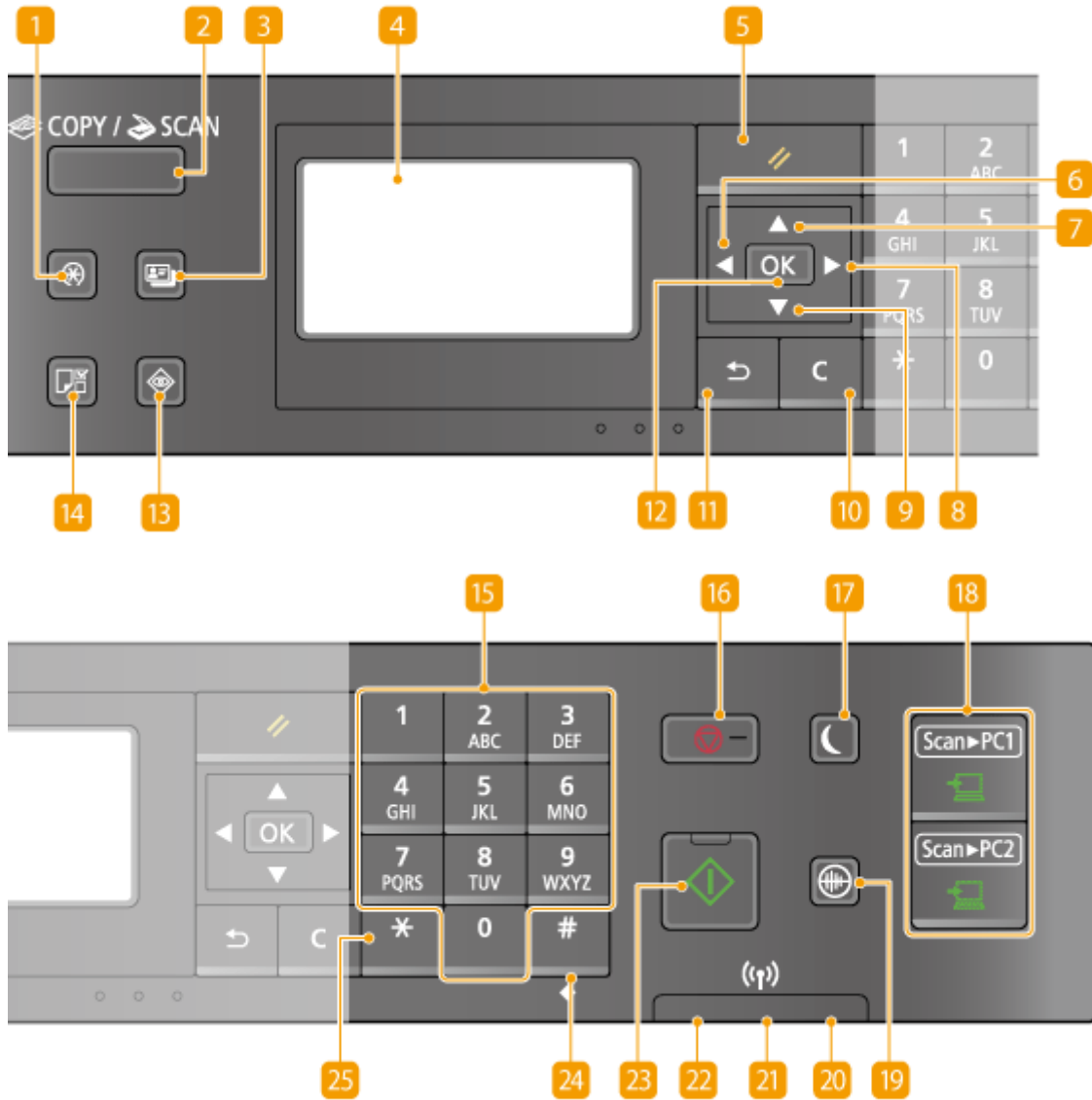
**25 [#] key**

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


**26 [\*] key**

Press to switch the type of text that is entered.

■ MF232w



**1 [Menu] key**

Press to start specifying many of the settings for the machine, such as <Timer Settings> or <Preferences>.  **Setting Menu List(P. 285)**

**2 [COPY/SCAN] key**

Press to switch the mode to copy or scan.



**3 [ID Card Copy] key**

Press to enter a mode for copying the front and back sides of a driver's license or other ID card onto the same side of a page at actual size. ▶ **Copying Both Sides of an ID Card onto One Page(P. 81)**

**4 Display**

Displays the operation and status screens for copying and other functions, as well as the status of the machine and error information. Also, view the screen when specifying the settings of the machine. ▶ **Display(P. 30)** ▶ **Using the Operation Panel(P. 33)**

**5 [Reset] key**

Press to cancel the settings and restore the previously specified settings.

**6 [◀] key**

- When specifying settings, press to return to the previous screen.
- When entering text, press to move the cursor to the left.
- Press to decrease a setting value such as density for scanning, copying, etc.

**7 [▲] key**

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

**8 [▶] key**

- When specifying settings, press to proceed to the next screen.
- When entering text, press to move the cursor to the right.
- Press to increase a setting value such as density for scanning, copying, etc.

**9 [▼] key**

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

**10 [Clear] key**

Press to delete the entered numbers and text.

**11 [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.

**12 [OK] key**

Press to apply settings or specified details.

**13 [Status Monitor] key**

Press to check the status of printing or copy to view the usage history. You can also check the status of the machine, such as the paper size and the amount remaining in the toner cartridges, or whether any errors occurred. ▶ **Display(P. 30)**

**14 [Paper Setting] key**

Press to select the paper you want to use, or to set the size and type of paper loaded in the paper source. ▶ **Specifying Paper Size and Type(P. 53)**

**15 Numeric keys ([0]-[9] keys)**

Press to enter numbers and text. ▶ **Entering Text(P. 35)**

**16 [Stop] key**

Press to cancel copying, scanning, and other operations.

**17 [Energy Saver] key**

Press to put the machine into sleep mode. The key lights up green when the machine is in sleep mode. Press the key again to exit sleep mode. ▶ **Entering Sleep Mode(P. 59)**

**18 [Scan -> PC1]/[Scan -> PC2] key**

Press to send the scanned documents to the registered computer for each key. ▶ **Scanning Using the [Scan -> PC] Key(P. 133)**

**19 [Quiet Mode] key**

Press to put the machine into quiet mode. While in quiet mode this key is lit in green. Press the key again to exit quiet mode. ▶ **Entering Quiet Mode(P. 57)**

**20 [Error] indicator**

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

**21 Wi-Fi indicator**

Lights up when the machine is connected to wireless LAN.

**22 [Processing/Data] indicator**

Blinks while operations such as sending or printing are being performed. Lights up when there are documents waiting to be processed.

**23 [Start] key**

Press to scan or copy documents.

**24 [#] key**

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

**25 [\*] key**

Press to switch the type of text that is entered.

LINKS

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▶ **Using the Operation Panel(P. 33)**

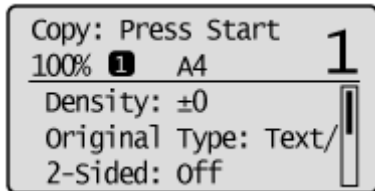
# Display

15A8-00H

The display shows the screens for copying, scanning, and other functions, as well as the screens for specifying settings for these functions. You can also check information such as error messages and communication status on the display.


## Main Screen

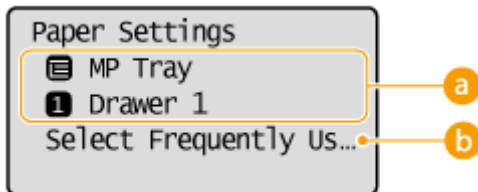
When you press  (COPY/SCAN) the main screen for the selected function is displayed. The copy main screen is shown below as an example.



- ▶ **Basic Copy Operations(P. 65)**
- ▶ **Using the Machine as a Scanner(P. 128)**

## <Paper Settings> Screen

When you press  (Paper Setting) to select the paper to copy or print on, the <Paper Settings> screen is displayed. Select the paper on the screen. Also, for example, you can press this key to change the paper settings when you load a paper size that is different from the previously loaded paper size. Note that the paper setting must be correctly specified so that the paper is fed properly.




### a Selecting Paper Tray

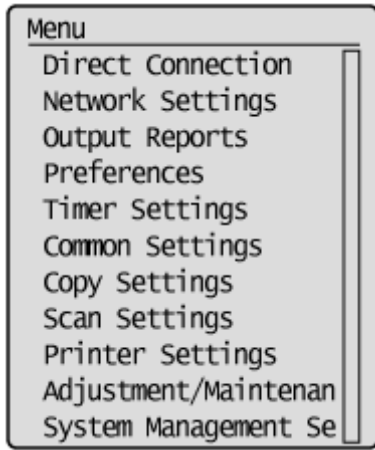
Use to select the paper for each tray. ▶ **Specifying Paper Size and Type(P. 53)**

### b <Select Frequently Used Paper Sizes>

You can set the machine to display only frequently used paper sizes in the selection screen.


## <Menu> Screen

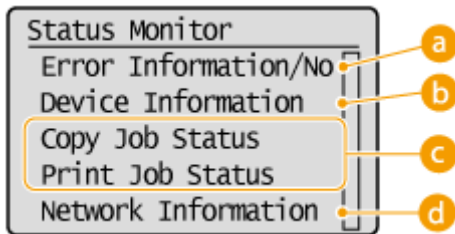
When you press , the <Menu> screen is displayed. On this screen, you can start specifying general machine settings such as <Preferences> or <Timer Settings>, as well as many of the settings for each function, such as copy and scan.



▶ **Setting Menu List(P. 285)**

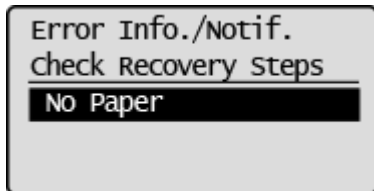
**<Status Monitor> Screen**

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



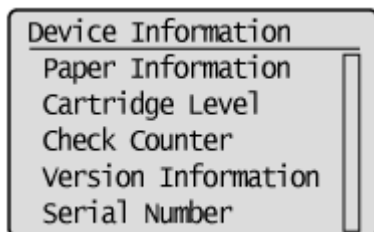
**a <Error Information/Notification>**

Displays the details of any errors that occurred. ▶ **When an Error Message Appears(P. 347)**



**b <Device Information>**

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



**<Paper Information>**

Displays the paper size specified in each paper source.

**<Cartridge Level>**

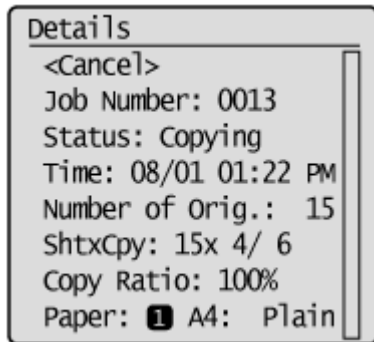
Displays the amount remaining in the toner cartridges. Other internal parts may reach the end of their lifetime before the toner runs out.

**<Check Counter>**

Displays the totals for printouts. ▶ **Viewing the Counter Value(P. 395)**

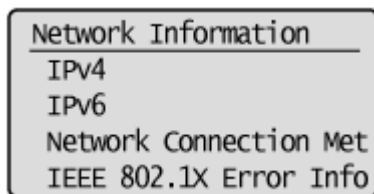
### **C** Status of copy/print jobs

Displays the current status of the selected item. The <Copy Job Status> screen is shown below as an example.



### **d** <Network Information> (MF244dw / MF232w)

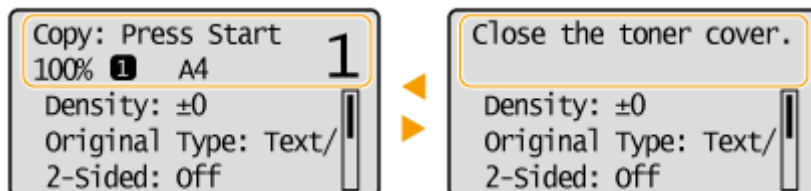
Displays the network settings such as the IP address of the machine and status such as the condition of wireless LAN communications.



#### **Viewing Network Settings(P. 194)**

### When a Message Is Displayed

Messages are displayed at the top of the screen in situations such as when end of toner cartridge lifetime is reached or when a cover is left open. The display alternates between showing the normal screen and the message.



#### **When an Error Message Appears(P. 347)**

### 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. 347)** ).



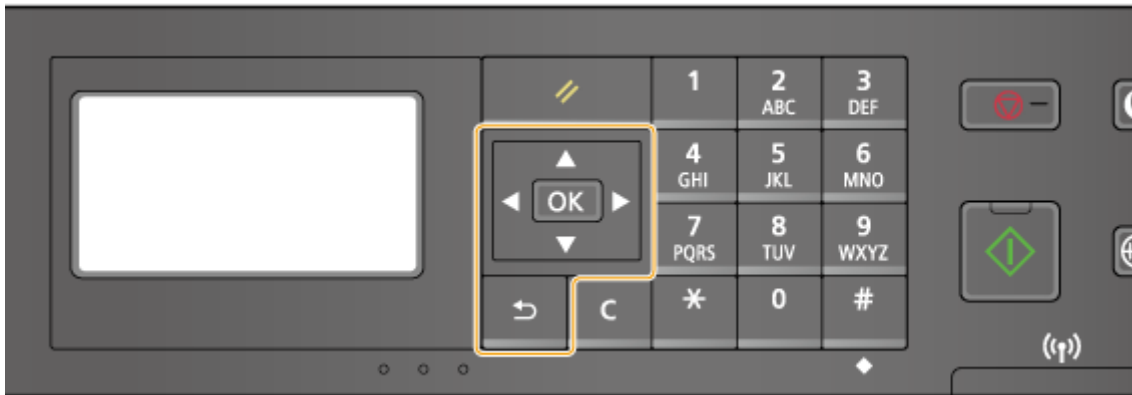
### LINKS

#### **Using the Operation Panel(P. 33)**

## Using the Operation Panel

15A8-00J

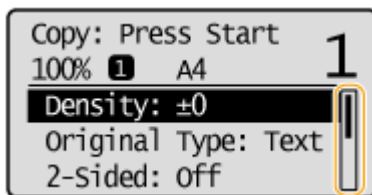
Use the keys shown below to specify settings and adjust values.



### Using ▲ / ▼

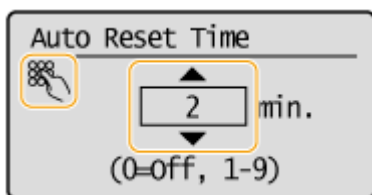
#### ■ Scrolling the screen

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 ▲ / ▼ when entering numbers. You can also enter the value directly using the numeric keys when the numeric key icon is displayed in the top-left corner of the screen, as shown below. **▶ Entering Text (P. 35)**



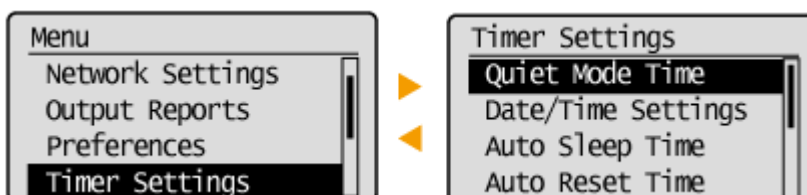
#### NOTE:

The numbers in parentheses beneath the value input field indicate the range of possible values.


### Using ◀ / ▶

#### ■ Proceeding to next screen/Returning to previous screen

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

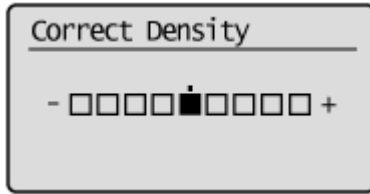



**NOTE:**

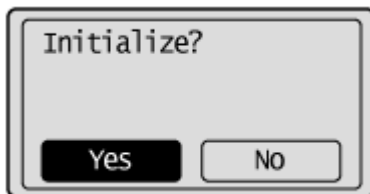
You can also proceed to the next screen by pressing **OK**, and return to the previous screen by pressing .

**■ Adjusting a setting value**

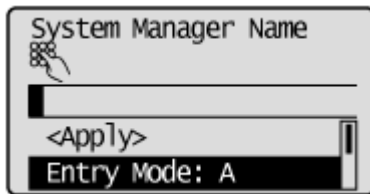
Use  /  when adjusting the value on a scale.



**Using **

Press  to apply a setting.

**Using the Numeric Keys**

Use the numeric keys when entering text and numbers.  **Entering Text(P. 35)**

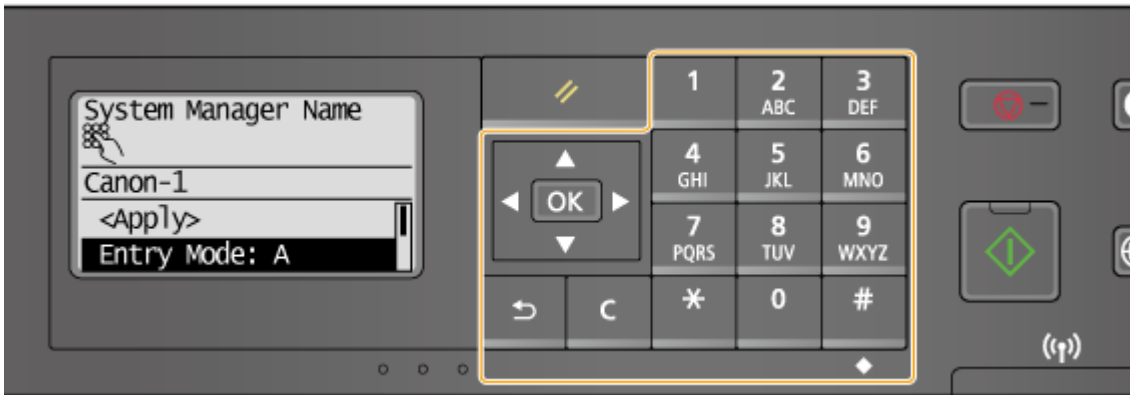
**TIPS**

- You can change a variety of display-related settings, such as the scrolling speed or display language:
  -  **Display Settings(P. 300)**
- To change the screen that is automatically displayed when the machine remains idle for a specified length of time:
  -  **Function After Auto Reset(P. 306)**



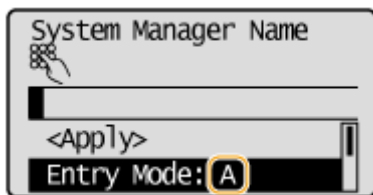
## Entering Text

Use the numeric keys to enter text and values.



### Switching the Type of Text

Press **\*** to switch the type of text that is entered. The currently selected type of text is indicated by the "A", "a", or "12" of <Entry Mode>.



#### NOTE

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








### Types of Text That Can Be Entered

The text that can be entered using the numeric keys and **#** are listed below.



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

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




**NOTE**

Press  or select <Symbol> and press  when the type of text that is entered is <A> or <a> to display a screen for selecting symbols. Use the  /  /  /  keys to select the symbol to enter, and press .

**Deleting Text**









One character is deleted each time  is pressed. Press and hold  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  repeatedly until the letter "C" is selected.
- 3** Press  repeatedly until <a> is selected.
- 4** Press  repeatedly until the letter "a" is selected.
- 5** Press  repeatedly until the letter "n" is selected.
- 6** Press  repeatedly until the letter "o" is selected.
- 7** Press  repeatedly until the letter "n" is selected.
- 8** Press  repeatedly until the symbol "-" is selected.

- 9 Press  repeatedly until <12> is selected.
- 10 Press .
- 11 Press  /  to highlight <Apply>, and then press .

## Placing Documents

Place documents on the platen glass or in the feeder (MF244dw). Use the platen glass when scanning thick or bound documents such as books. You can load two or more sheets of documents in the feeder so that they can be scanned continuously. For information about the types of documents that can be placed on the platen glass or in the feeder, and information about the scannable area of a document, see [▶ Document Type\(P. 417\)](#) or [▶ Scan Area\(P. 418\)](#).



▶ [Placing Documents on the Platen Glass\(P. 38\)](#)

▶ [Placing Documents in the Feeder \(MF244dw\)\(P. 39\)](#)

### IMPORTANT

#### Use documents that are completely dry

When placing documents, make sure that any glue, ink, or correction fluid on the documents has completely dried.

#### To avoid paper jams (MF244dw)

Do not place the following types of documents in the feeder as this may cause paper jams:

- Wrinkled or creased paper
- Carbon paper or carbon-backed paper
- Curled or rolled paper
- Coated paper
- Torn paper
- Onion skin or thin paper
- Stapled or clipped documents
- Paper printed by a thermal transfer printer
- Transparencies



### NOTE

#### To scan documents more accurately (MF244dw)

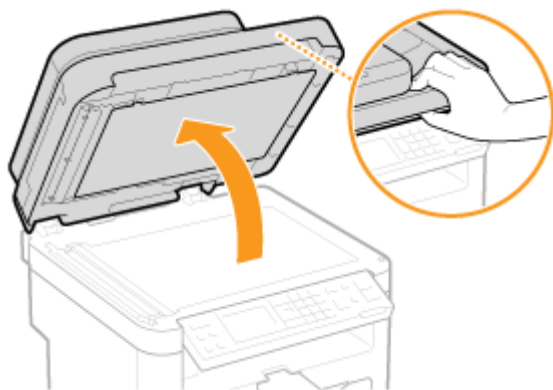
Documents placed in the feeder are scanned while being fed into the machine. On the other hand, documents placed on the platen glass remain in a fixed position while they are scanned. To ensure more accurate scanning results, placing documents on the platen glass is recommended.

#### To scan tracing paper or transparencies (MF244dw)

To scan transparent documents (for example, tracing paper or transparencies), place them on the platen glass.

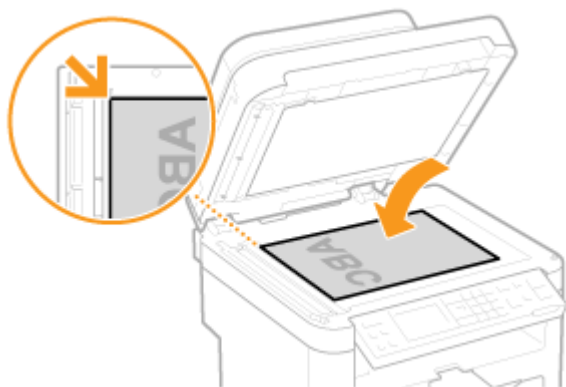
## Placing Documents on the Platen Glass

- 1 **Open the feeder or the platen glass cover.**



**2 Place the document face down on the platen glass.**

- Align the corner of the document with the top-left corner of the platen glass.



**NOTE:**

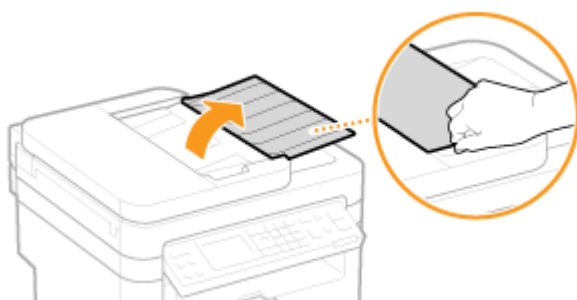
To scan transparent documents (for example, tracing paper or transparencies), cover them with plain white paper.

**3 Gently close the feeder or the platen glass cover.**

- The machine is ready to scan the document.
- When scanning is complete, remove the document from the platen glass.

**Placing Documents in the Feeder (MF244dw)**

**1 Open the document feeder tray.**



## 2 Spread the document guides apart.

- Slide the document guides outward until they are slightly farther apart than the actual document width.



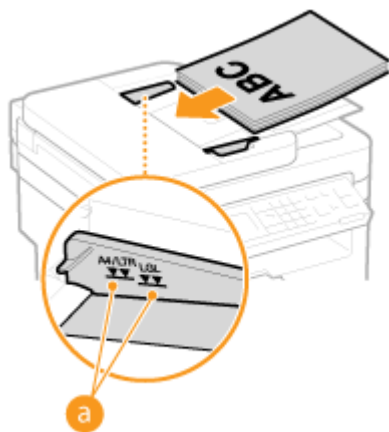
## 3 Fan the document stack and align the edges.

- Fan the document stack in small batches, and align the edges by lightly tapping the stack on a flat surface a few times.



## 4 Place the document(s) face up in the feeder.

- Make sure that the document stack does not exceed the load limit guide (a).



### IMPORTANT:

- Do not load documents of various sizes at the same time.
- Up to 35 sheets can be loaded at a time. If 35 or more sheets are loaded, scanning may stop or a paper jam may occur.

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

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



- The machine is ready to scan the document.

**IMPORTANT:**

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

Document guides that are too loose or too tight can cause misfeeds or paper jam.

**While documents are being scanned**

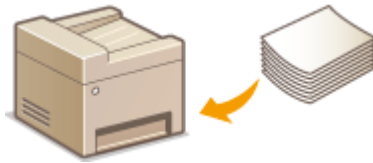
Do not add or remove documents.

**When scanning is complete**

Remove the scanned documents from beneath the feeder to prevent paper jams.

## Loading Paper

You can load the paper into the paper drawer or manual feed slot. Load the paper you usually use into the paper drawer. The paper drawer is convenient when using large amounts of paper. Use the manual feed slot when you temporarily use size or type of paper that is not loaded in the paper drawer. See [▶Paper\(P. 419\)](#) 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\(P. 53\)](#). For the amount of paper that can be loaded in each paper source, see [▶Paper\(P. 419\)](#).

Paper Type	Paper Weight	Paper Setting on the Machine
Plain paper	60 to 89 g/m <sup>2</sup>	<Plain (60-89 g/m <sup>2</sup> )>
		<Plain L (60-89 g/m <sup>2</sup> )>*
Recycled paper	60 to 89 g/m <sup>2</sup>	<Recycled (60-89 g/m <sup>2</sup> )>
Color paper	60 to 89 g/m <sup>2</sup>	<Color (60-89 g/m <sup>2</sup> )>
Heavy paper	90 to 120 g/m <sup>2</sup>	<Heavy 1 (90-120 g/m <sup>2</sup> )>
	121 to 163 g/m <sup>2</sup>	<Heavy 2 (121-163 g/m <sup>2</sup> )>
Bond paper	60 to 90 g/m <sup>2</sup>	<Bond 1 (60-90 g/m <sup>2</sup> )>
	91 to 120 g/m <sup>2</sup>	<Bond 2 (91-120 g/m <sup>2</sup> )>
	121 to 163 g/m <sup>2</sup>	<Bond 3 (121-163 g/m <sup>2</sup> )>
Envelope	—	<Envelope>
Label	—	<Labels>
Index card	—	<Index Card>

\* If set to <Plain (60-89 g/m<sup>2</sup>)> and that printout is curled, specify <Plain L (60-89 g/m<sup>2</sup>)> and print again.

### 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 on the back side of the operation panel or 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. 55)**

# Loading Paper in the Paper Drawer

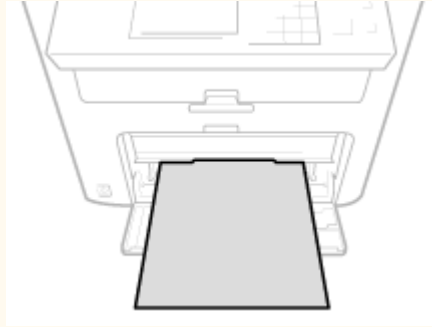
15A8-00S

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 manual feed slot. **▶ Loading Paper in the Manual Feed Slot (P. 47)**

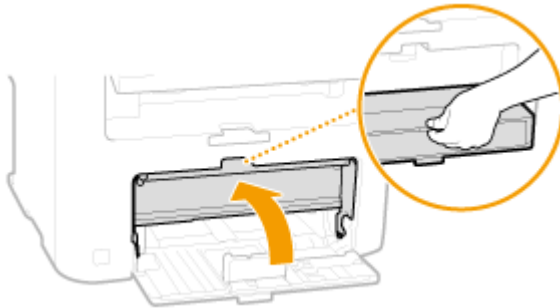
## IMPORTANT

### Make sure to load paper in portrait orientation

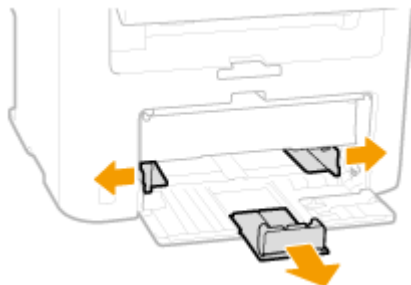
Paper cannot be loaded in landscape orientation. Make sure to load the paper in portrait orientation.



### 1 Lift the dust cover.



### 2 Slide the paper guides apart.



#### NOTE:

#### Size abbreviations on the paper guides

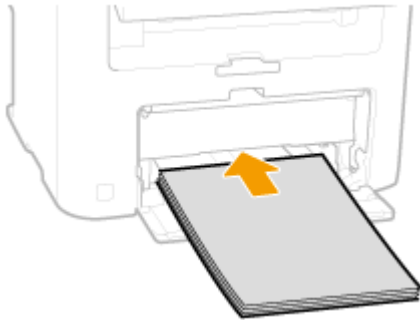
The abbreviations on the paper guides in the paper drawer indicate paper sizes as follows:

- LGL: Legal
- LTR: Letter
- STMT: Statement

- EXEC: Executive

### 3 Insert the paper into the paper drawer until the paper stops.

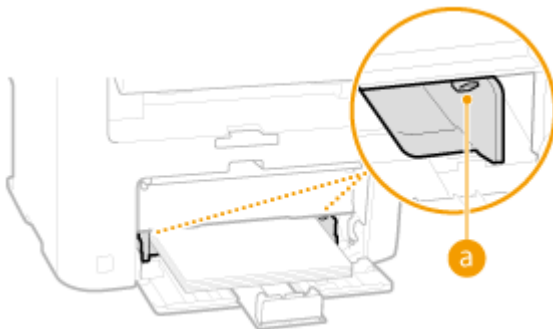
- Load the paper in portrait orientation (with the short edge toward the machine), with the print side face up. Paper cannot be loaded in landscape orientation.
- Fan the paper stack well, and tap it on a flat surface to align the edges.
- When you insert the paper with <Notify to Check Paper Settings> set to <On>, a confirmation screen is displayed. ▶ **Notify to Check Paper Settings(P. 301)**



#### 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. 49)** or ▶ **Loading Preprinted Paper(P. 51)**.

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

- Move the paper guides in so they are exactly the width of the paper.



#### IMPORTANT:

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

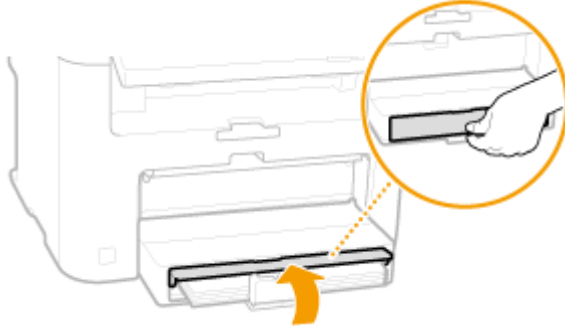
Paper guides that are too loose or too tight can cause misfeeds or paper jams.

## 5 Lower the dust cover.

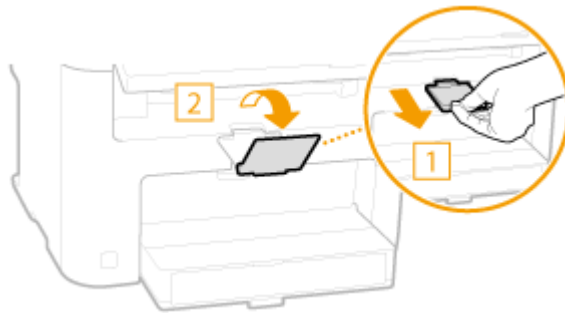
### NOTE:

#### When Legal size paper is loaded

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



## 6 Pull out the paper stopper to open.



### » Continue to » Specifying Paper Size and Type (P. 53)

### IMPORTANT:

#### When changing the paper size or type

The factory default settings for paper size and type are <A4> and <Plain (60-89 g/m²)>, 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 manual feed slot ( » Loading Paper in the Manual Feed Slot (P. 47) ), with the side to print face up (previously printed side face down).

- Load one sheet at a time per each print.
- You can use only the paper printed with this machine.
- You cannot print on the side that has previously been printed on.
- If you are using A5 paper, the reverse side may not be printed correctly.

### LINKS

» Paper (P. 419)

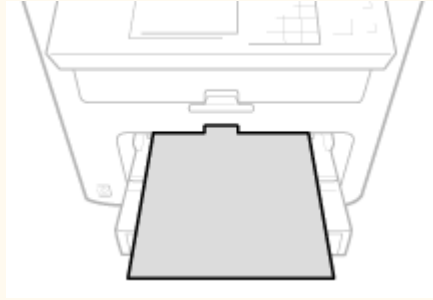
## Loading Paper in the Manual Feed Slot

When you want to print on paper that is not loaded in the paper drawer, load the paper in the manual feed slot. Load the paper that you usually use in the paper drawer. **▶ Loading Paper in the Paper Drawer(P. 44)**

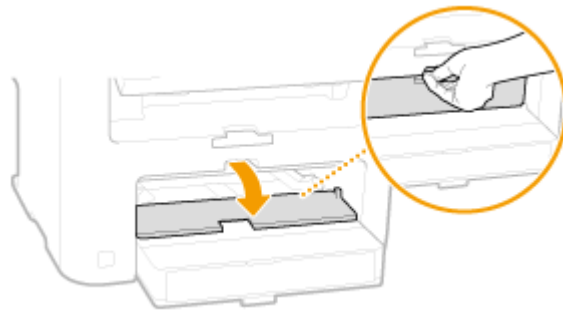
### IMPORTANT

#### Make sure to load paper in portrait orientation

Paper cannot be loaded in landscape orientation. Make sure to load the paper in portrait orientation.

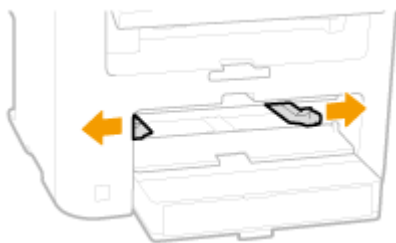


### 1 Open the manual feed cover.



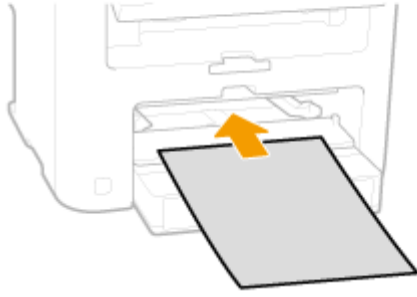
### 2 Spread the paper guides apart.

- Slide the paper guides outward.



### 3 Insert the paper into the manual feed slot 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.
- When you insert the paper with <Notify to Check Paper Settings> set to <On>, a confirmation screen is displayed. **▶ Notify to Check Paper Settings(P. 301)**

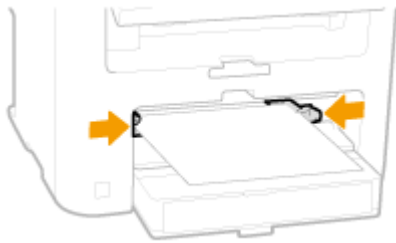


**NOTE:**

When loading envelopes or paper with a logo, see [▶ Loading Envelopes\(P. 49\)](#) or [▶ Loading Preprinted Paper\(P. 51\)](#).

**4 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.

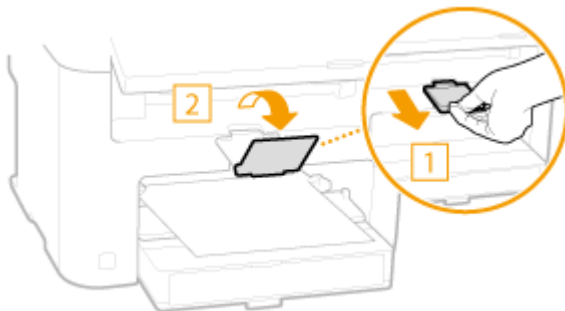


**IMPORTANT:**

**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.

**5 Pull out the paper stopper to open.**



Continue to [▶ Specifying Paper Size and Type\(P. 53\)](#)

# Loading Envelopes

15A8-00W

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.

🔍 **Before Loading Envelopes(P. 49)**

🔍 **Loaded Orientation(P. 50)**

## 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 paper drawer or manual feed slot, see 🔍 **Loading Paper in the Paper Drawer(P. 44)** or 🔍 **Loading Paper in the Manual Feed Slot(P. 47)**.

## Before Loading Envelopes

Follow the procedure below to prepare the envelopes before loading.

## NOTE

Only one envelope at a time can be loaded in the manual feed slot. Follow steps 1 to 4 in the procedure below to prepare the envelope for loading.

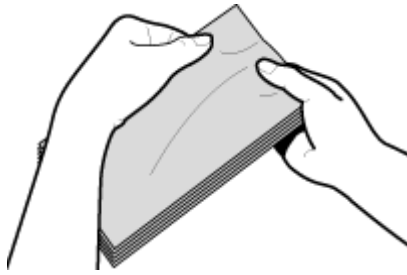
### 1 Close the flap of each envelope.



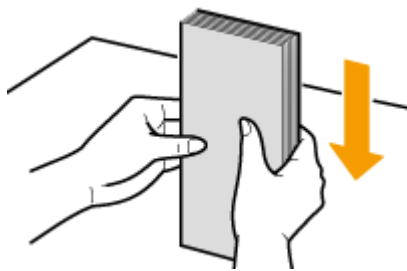
### 2 Flatten them to release any remaining air, and make sure that the edges are pressed tightly.



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



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

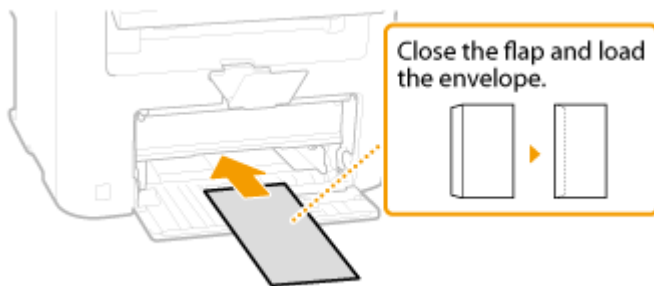


### Loaded Orientation

Load the envelopes in portrait orientation, short edge first, with the non-glued side (front side) face up.

**NOTE**  
Load envelopes in the same orientation for both the paper drawer and manual feed slot.

Load the envelopes so that their flaps are at the left.





# Loading Preprinted Paper

15A8-00X

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. 51)
- ▶ Making 2-Sided Printouts on Paper with Logos (MF244dw)(P. 52)

## 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 manual feed slot, see ▶ **Loading Paper in the Paper Drawer(P. 44)** or ▶ **Loading Paper in the Manual Feed Slot(P. 47)**.

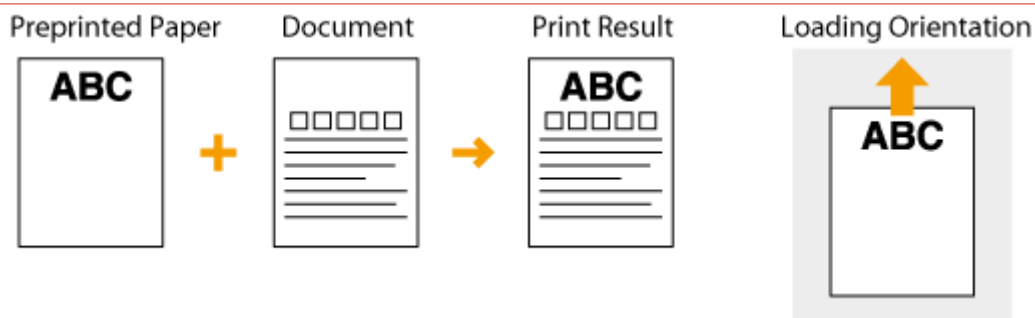
## Making 1-Sided Printouts on Paper with Logos

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

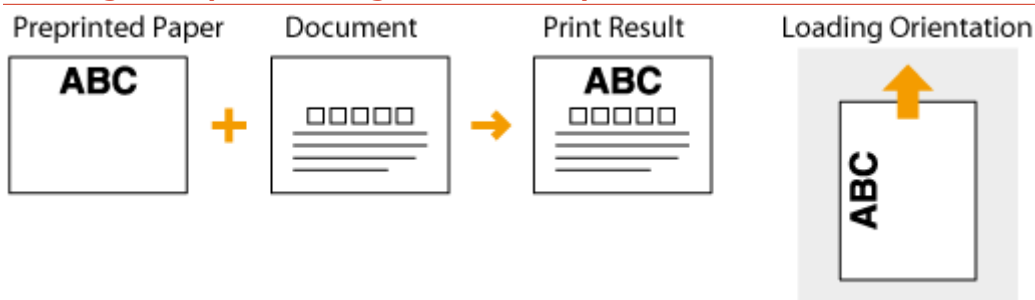
## IMPORTANT

Load only one sheet of paper in the manual feed slot each time you print.

### Printing on Paper with Logos in Portrait Orientation



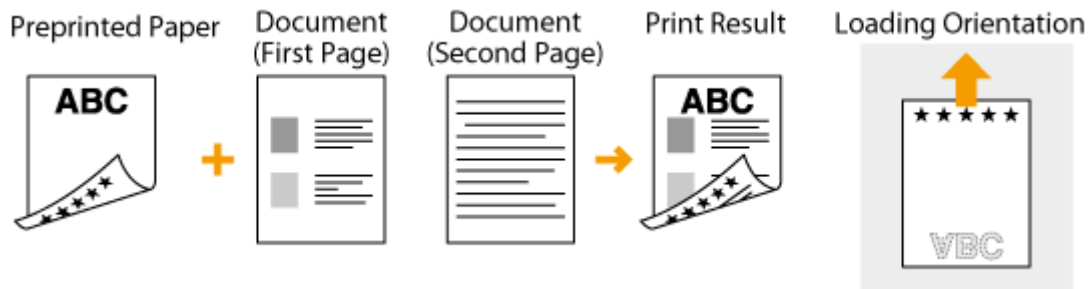
### Printing on Paper with Logos in Landscape Orientation



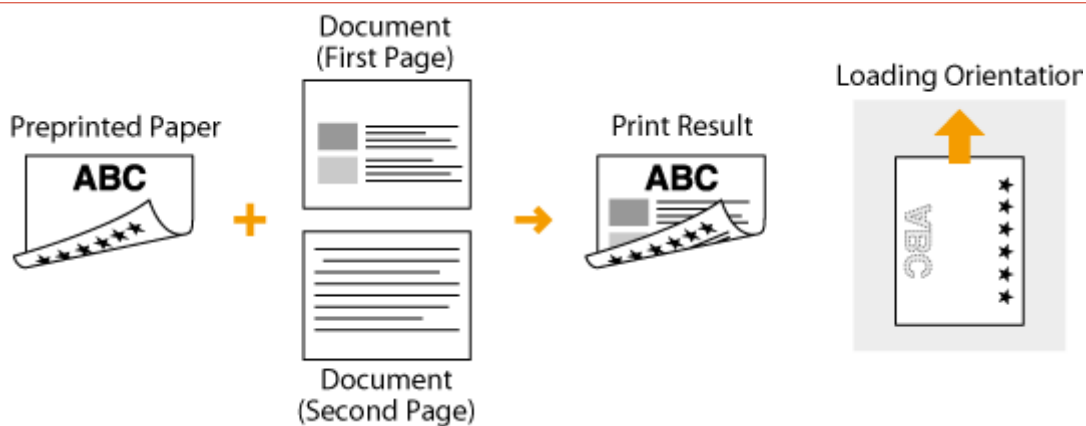
## Making 2-Sided Printouts on Paper with Logos (MF244dw)

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

### Printing on Paper with Logos in Portrait Orientation



### Printing on Paper with Logos in Landscape Orientation



## NOTE

### The <Switch Paper Feed Method> setting (MF244dw)


When you print on preprinted paper, you need to change the facing of the paper to load each time you perform 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 down) 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. 308)**

## Specifying Paper Size and Type

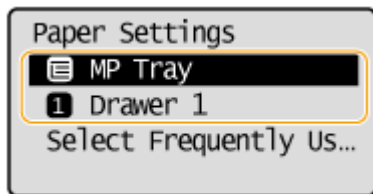
You must specify the paper size and type settings to match the paper that is loaded. Make sure to change the paper settings when you load the paper that is different from the previously loaded paper.

### IMPORTANT

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

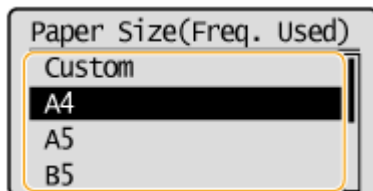
**1** Press  (Paper Setting).

**2** Use ▲ / ▼ to select <MP Tray> or <Drawer 1>, and press .

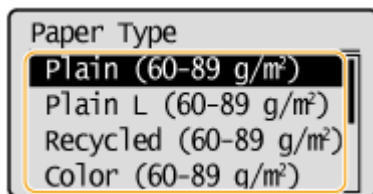


**3** Select the loaded paper size, and press .

- If the loaded paper size is not displayed, use ▲ / ▼ to select <Other Sizes>, and press .






**4** Select the loaded paper type, and press .



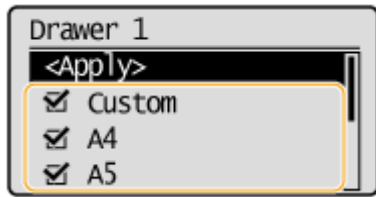
### TIPS

#### When a frequently used paper size is known

You can set the machine to display only frequently used paper sizes in the selection screen.

- 1** Press  (Paper Setting).
- 2** Select <Select Frequently Used Paper Sizes>, and press .
- 3** Select <Multi-Purpose Tray> or <Drawer 1>, and press .

- 4 Select a frequently used paper size and press **OK** to checkmark it.



**NOTE:**

Uncheckmarked paper sizes are displayed in the <Paper Size (Other Sz.)> screen.

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


LINKS

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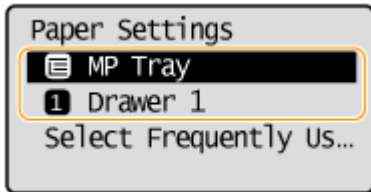
- ▶ **Loading Paper in the Paper Drawer(P. 44)**
- ▶ **Paper(P. 419)**


## Registering a Custom Paper Size

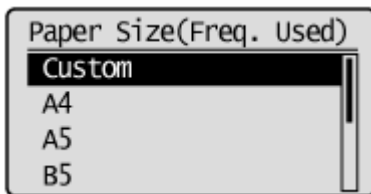
You can register one frequently used custom paper size each for the paper drawer and manual feed slot.

**1** Press  (Paper Setting).

**2** Use ▲ / ▼ to select <MP Tray> or <Drawer 1>, and press .



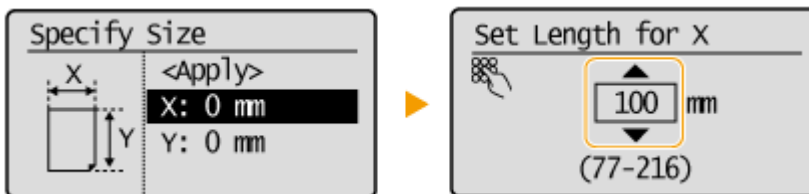
**3** Select <Custom>, and press .





**4** Specify the paper size.

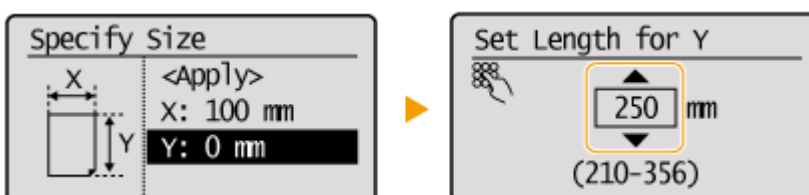
**1** Specify the length of the <X> (shorter) side.

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

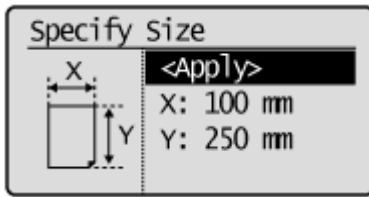


**2** Specify the length of the <Y> (longer) side.

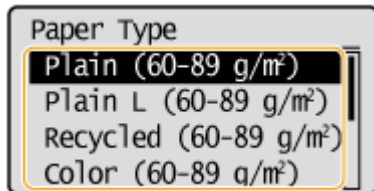
- Select <Y>, and press .
- Input the length of the <Y> side, and press .



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



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




## LINKS

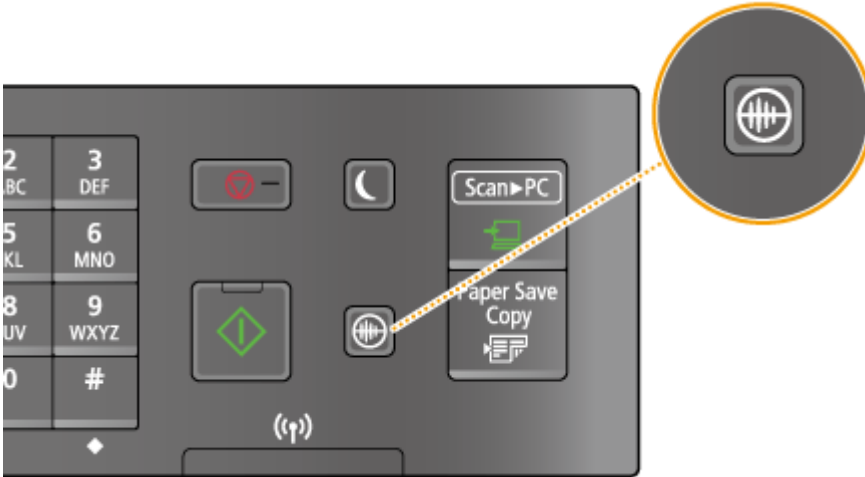
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- Loading Paper in the Paper Drawer(P. 44)
- Loading Paper in the Manual Feed Slot(P. 47)

## Entering Quiet Mode


15A8-011

The quiet mode function reduces the operation sound of the machine. For example, when using the machine at night, press  on the operation panel. With only this operation, you can easily minimize operation sound. You can also specify a time for the machine to automatically enter quiet mode.



### NOTE

#### When in quiet mode

When the machine enters quiet mode,  lights up green.

#### When quiet mode is enabled

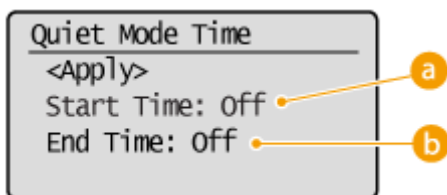
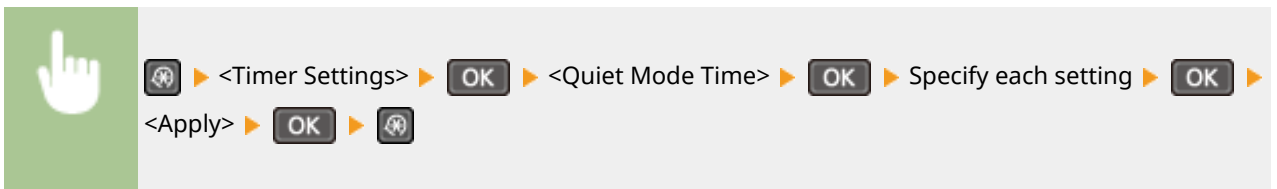
The operation of functions becomes slower.

#### When the machine cannot enter quiet mode

- The machine is in Special Printing Mode
- A particular paper size or paper type is specified

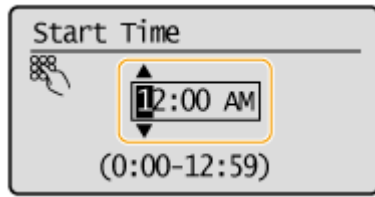
### Specifying a time for the machine to enter quiet mode MF244dw / MF232w

You can specify a time for the machine to enter or exit quiet mode automatically. For example, this is useful when wanting to reduce operation noise only for late-night operation.

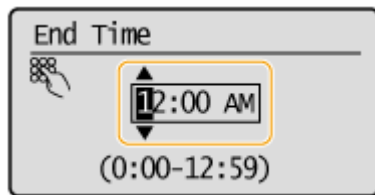



**a <Start Time>**

Specify a time for entering quiet mode. To set, select <On> then specify the time.

**b <End Time>**

Specify a time for exiting quiet mode. To set, select <On> then specify the time.


**Exiting Quiet Mode**

Press  to exit quiet mode.



## Entering Sleep Mode


15A8-012

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,  lights up green.

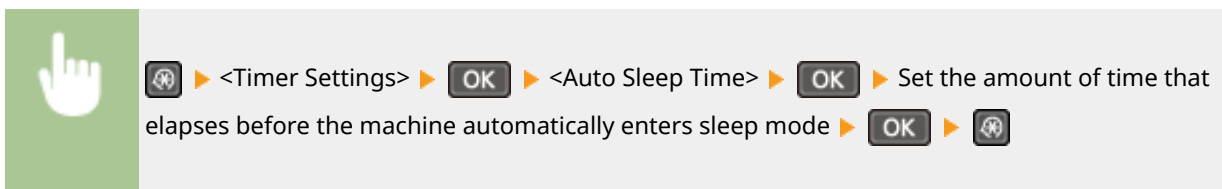
#### Situations in which the machine does not enter sleep mode

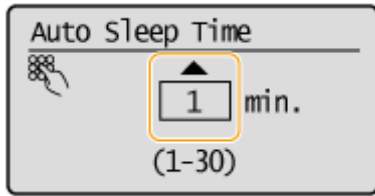
- When the machine is in operation
- When the [Processing/Data] indicator is lit up or blinking
- When documents are placed in the feeder
- When the machine is performing an operation such as adjustment or cleaning
- When a paper jam occurs
- When the menu screen is displayed
- When an error message is displayed on the screen (There are some exceptions. The machine sometimes enters sleep mode when error messages are displayed.)
- When the machine is waiting for a wireless LAN connection or Direct Connection

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



The factory default settings for the amount of time that elapses before the machine enters auto sleep mode are listed below. 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.

- 1 minute (setting range is 1 to 30 minutes)





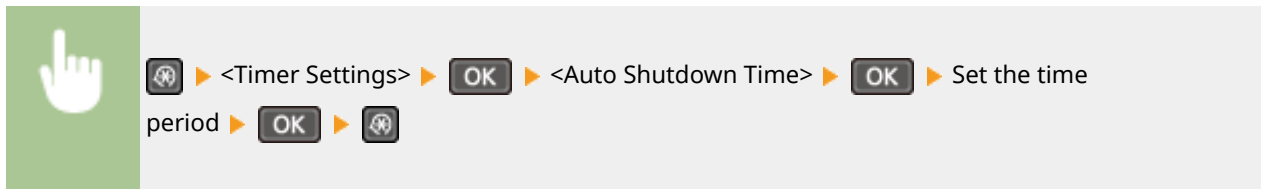
### Exiting Sleep Mode

Press . You can also press any key other than  to exit sleep mode.

## Setting Auto Shutdown Time

15A8-013

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.



### NOTE

- The default setting is 4 hours.
- MF244dw / MF232w users: 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.

# Copying

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# Copying

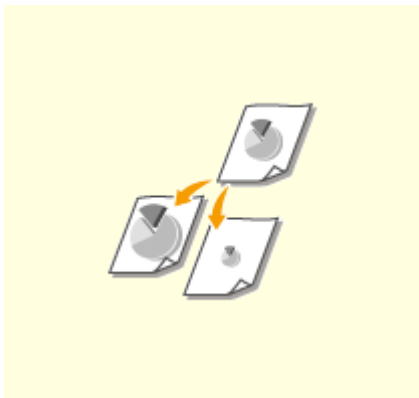
This chapter describes basic copy operations and various other useful copy functions, such as copying several pages onto a single sheet.

## ■ Using Basic Operations

**Basic Copy Operations(P. 65)**

**Canceling Copies(P. 67)**

## ■ Using Copy Settings to Suit Your Needs



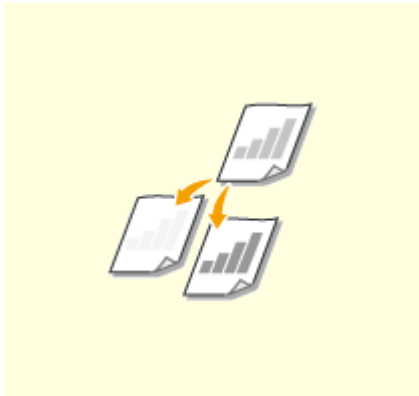
**Enlarging or Reducing(P. 70)**



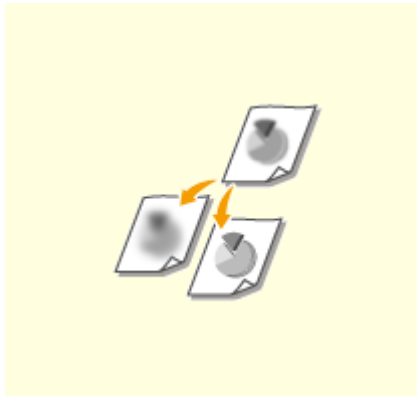
**Collating Copies by Page(P. 82)**



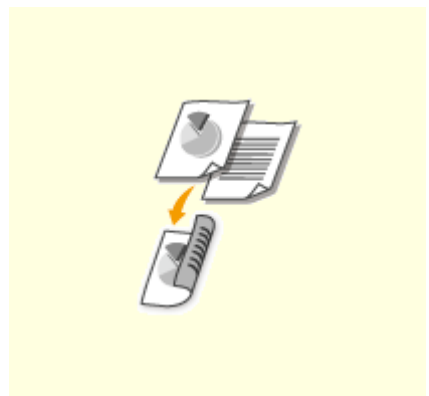
**Selecting Document Type(P. 71)**



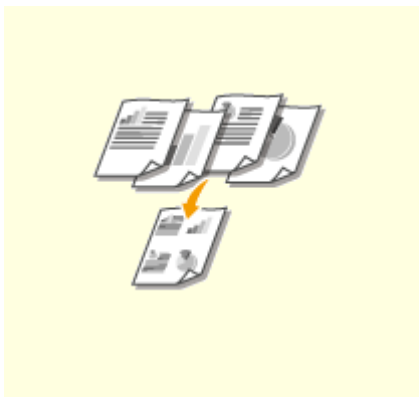
**Adjusting Density(P. 72)**



**Adjusting Sharpness(P. 73)**



**2-Sided Copying (MF244dw) (P. 75)**



**Copying Multiple Documents  
onto One Sheet (2 on 1/4 on 1)  
(P. 77)**

**Using the [Paper Save Copy]  
Key (MF244dw / MF231)(P. 79)**

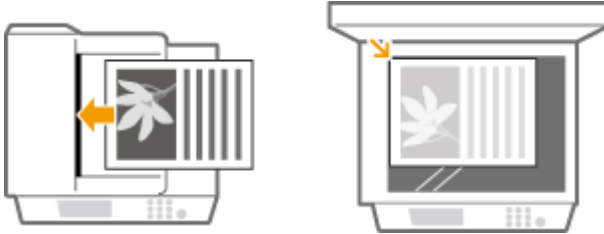
**Copying Both Sides of an ID  
Card onto One Page(P. 81)**

## ■ Simplifying Your Frequent Copy Operations

**Changing Default Settings(P. 83)**


## Basic Copy Operations

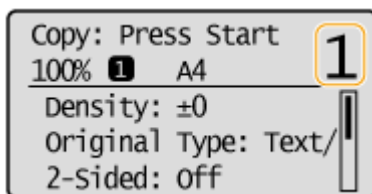
### 1 Place the document(s). Placing Documents(P. 38)





### 2 Press (COPY/SCAN) to switch to the Copy mode screen.

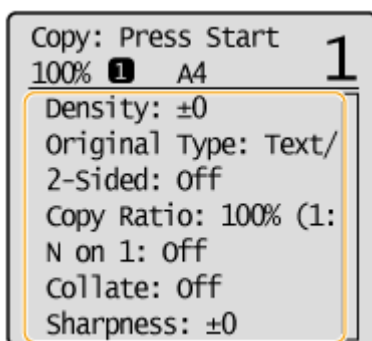
### 3 Enter the number of copies using the numeric keys.

- Enter a quantity from 1 to 999.
- Press  to cancel the entered quantity.



### 4 Specify the copy settings as necessary.

- Use  /  to select the settings.  Various Copy Settings(P. 69)




### 5 Press .


- Copying starts.
- If you want to cancel copying, press   <Yes>  .  Canceling Copies(P. 67)

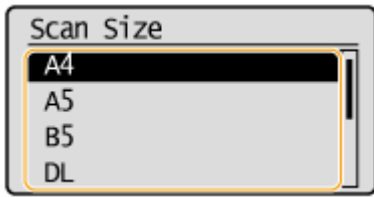
#### ■ When placing documents in the feeder in step 1 (MF244dw)



The document is automatically scanned.

## ■ When placing documents on the platen glass in step 1

Depending on the copy settings you made, a screen for selecting the document size is displayed after you press [  ]. Follow the procedure below.

- 1 Select the document size, and press  .



- 2 Place the next document on the platen glass, and press  .
  - Repeat this step until you finish scanning the entire document.
- 3 Select <Start Copying>, and press  .

### NOTE:

When the <Size/Settings Mismatch> message appears.

- ▶ **When an Error Message Appears(P. 347)**

## IMPORTANT

### When copying documents with text or images that extend to the edges of the page




The edges of the document might not be copied. For more information about the scan margins, see ▶ **Scan Area(P. 418)** .

## TIPS

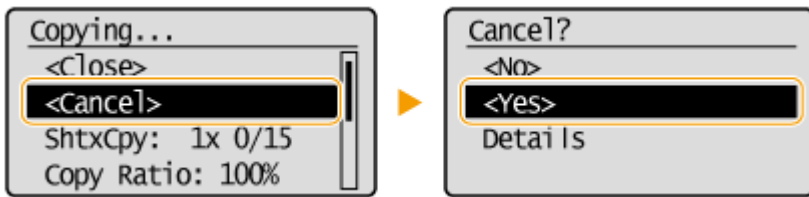
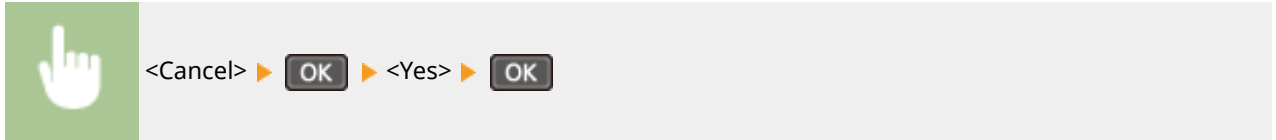
If you always want to make copies with the same settings: ▶ **Changing Default Settings(P. 83)**



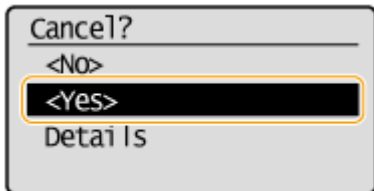
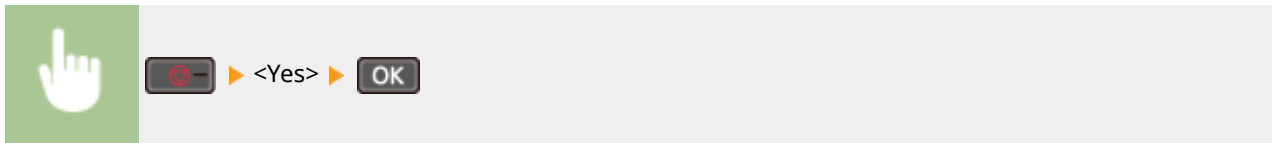
## Canceling Copies

If you want to cancel copying immediately after pressing , select <Cancel> and press , or press  on the operation panel. You can also cancel copying after checking the copy status.

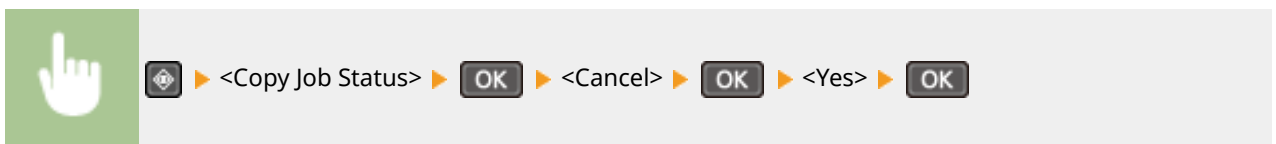
### ■ Canceling in the Screen That is Displayed While Copying

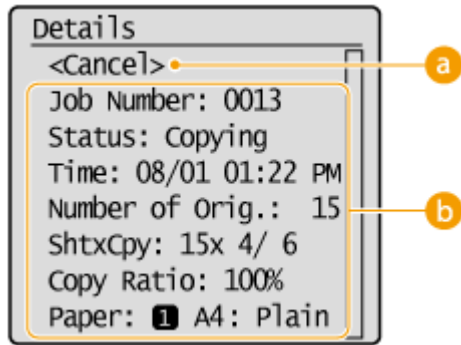


### ■ Press to Cancel




### ■ Use to Cancel





**a** **<Cancel>**  
Cancels copying.

**b** **Copy details**  
The number of copies, settings, and other details are displayed. If you only want to check the details without canceling copying, press  to return to the copy main screen.

LINKS

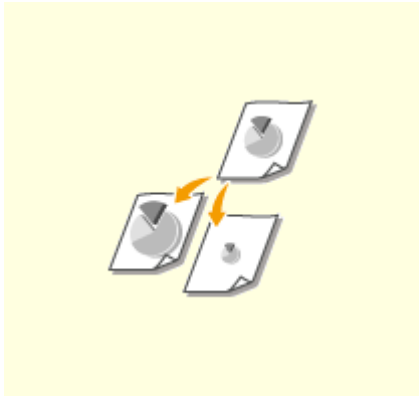
---

 **Basic Copy Operations(P. 65)**

## Various Copy Settings

15A8-017

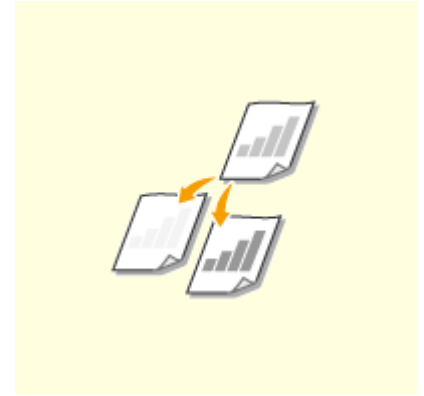
A variety of settings are available to suit your needs, such as when you want to save paper or make your documents easier to read.



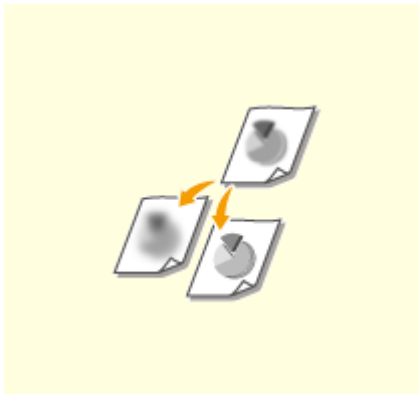
**Enlarging or Reducing(P. 70)**



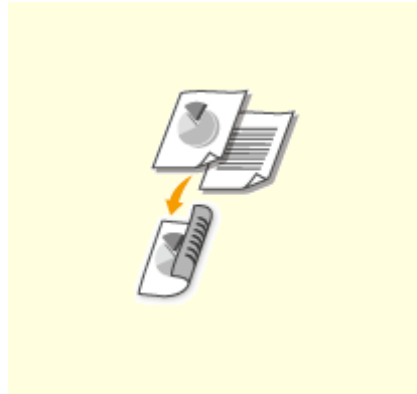
**Selecting Document Type(P. 71)**



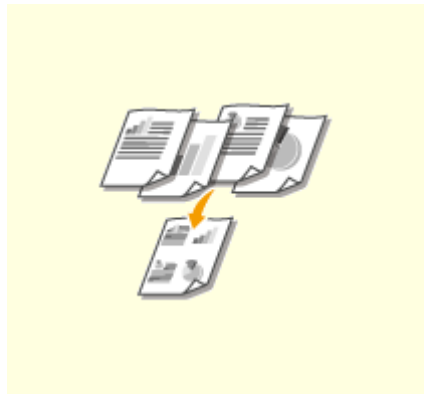
**Adjusting Density(P. 72)**



**Adjusting Sharpness(P. 73)**



**2-Sided Copying (MF244dw) (P. 75)**



**Copying Multiple Documents onto One Sheet (2 on 1/4 on 1) (P. 77)**



**Using the [Paper Save Copy] Key (MF244dw / MF231)(P. 79)**



**Copying Both Sides of an ID Card onto One Page(P. 81)**



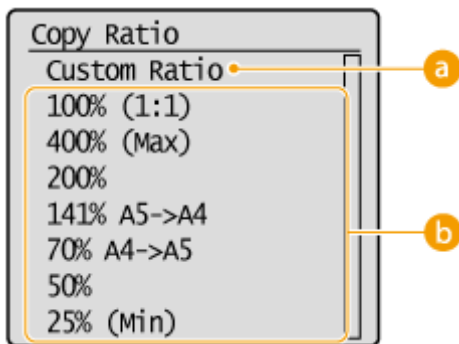
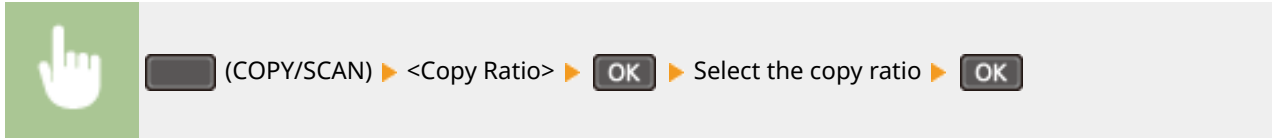
**Collating Copies by Page(P. 82)**

## Enlarging or Reducing

15A8-018

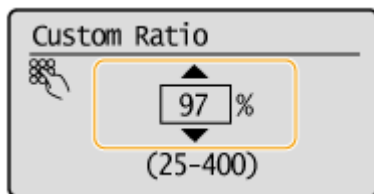


You can enlarge or reduce copies by using a preset copy ratio such as <A5->A4>, or by setting a custom copy ratio in increments of 1%.



### a <Custom Ratio>

Use ▲ / ▼ or the numeric keys to enter the copy ratio, and press **OK**. You can set any copy ratio from 25% to 400% in 1% increments.



### b Preset copy ratio

Select a copy ratio.

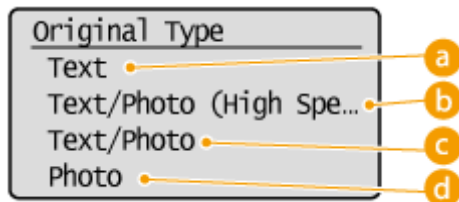
## LINKS

➤ [Basic Copy Operations\(P. 65\)](#)

## Selecting Document Type



You can select the optical image quality for the copy depending on the document type, such as text-only documents, documents with charts and graphs, or magazine photos.



### a <Text>

Suitable when copying documents that only contain text.

### b <Text/Photo (High Speed)>

Suitable when copying documents that contain both text and photos. Priority is given to speed over image quality.

### c <Text/Photo>

Suitable when copying documents that contain both text and photos.

### d <Photo>

Suitable when copying documents that contain printed photos, such as magazines or pamphlets.

## NOTE

If <Text/Photo (High Speed)>, <Text/Photo>, or <Photo> is selected and <Density> is set to <Auto Density>, it changes to Manual Density.

## LINKS

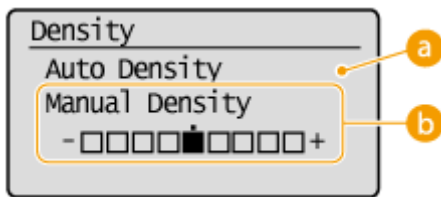
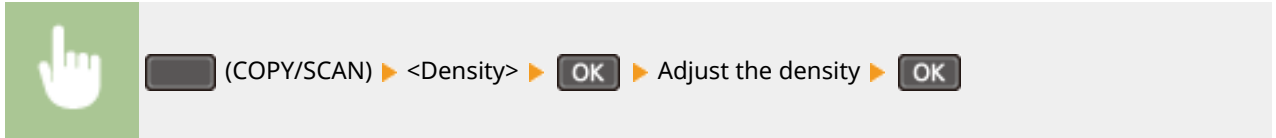
➤ [Basic Copy Operations\(P. 65\)](#)

## Adjusting Density

15A8-01A



You can adjust the density of the copy if the text or images in a document are too light or dark. You can also automatically set an optimal density for a document.



### a <Auto Density>

An optimal density for the document is automatically set.

<Original Type> is automatically set to <Text>. ( [▶Selecting Document Type\(P. 71\)](#) )

### b <Manual Density>

Use ◀ / ▶ to adjust the density.

## LINKS

- ▶ [Basic Copy Operations\(P. 65\)](#)
- ▶ [Adjusting Sharpness\(P. 73\)](#)
- ▶ [Correct Density\(P. 311\)](#)

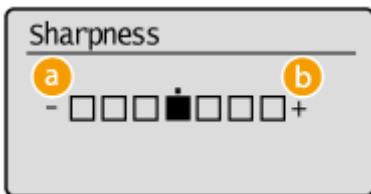
# Adjusting Sharpness

15A8-01C



You can adjust sharpness of the copied image. Increase the sharpness to sharpen blurred text and lines, or decrease the sharpness to improve the appearance of magazine photos.

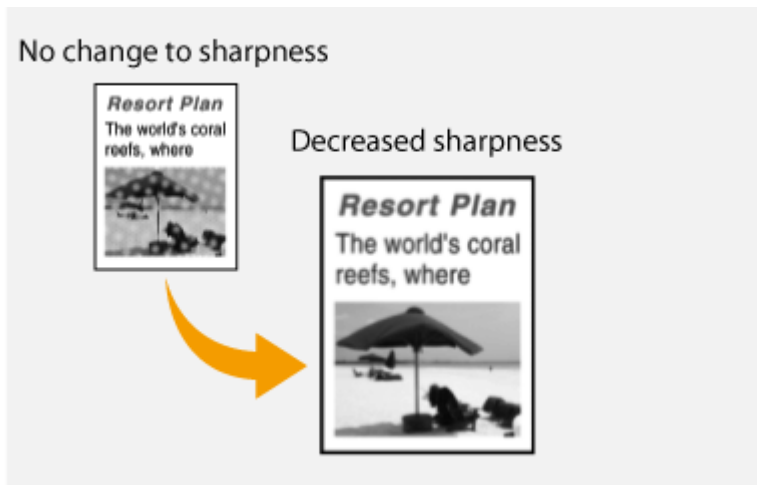

 (COPY/SCAN) ▶ <Sharpness> ▶  ▶ Adjust the sharpness ▶



**a <->: Press** ◀

Decreases the sharpness, resulting in a softer image.

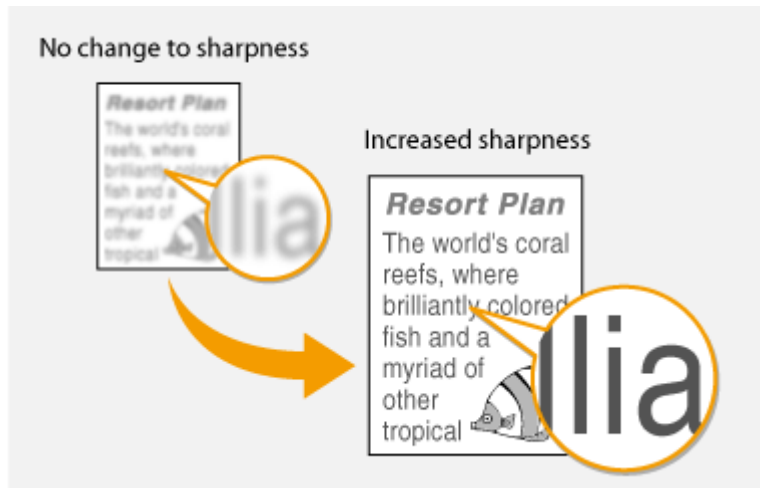
**Example:** If you want to improve the appearance of magazine photos



**b <+>: Press** ▶

Increases the image sharpness.

**Example:** If you want to sharpen text and lines written in pencil



LINKS

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- ▶ Basic Copy Operations(P. 65)
- ▶ Adjusting Density(P. 72)



## 2-Sided Copying MF244dw

15A8-01E



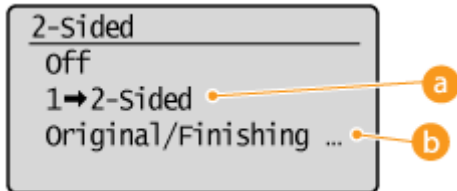
You can copy two pages of a document on both sides of the paper.

### NOTE

- <2-Sided> may not be available with some sizes and types of paper.  
▶ **Paper(P. 419)**
- <2-Sided> is not available when using <Paper Save Copy> or <ID Card Copy>.

### TIPS

Using **Paper Save Copy** enables you to combine 2-sided copying and <2 on 1>/<4 on 1>: ▶ **Using the [Paper Save Copy] Key (MF244dw / MF231)(P. 79)**



#### a Types of 2-sided copying

The illustration below shows the types of 2-sided copying.

1-Sided->2-Sided




#### b <Original/Finishing Type>

Specify if you want to change the binding, such as when copying book-type documents in calendar-type format.

#### ■ 1-Sided->2-Sided


- If you want to copy portrait-oriented documents in calendar-type format (short-edge binding)



 <Original/Finishing Type> ▶  ▶ <1->2-Sided> ▶  ▶ <Portrait> ▶  ▶ <Calendar Type> ▶

- If you want to copy landscape-oriented documents in book-type format (short-edge binding)



 <Original/Finishing Type> ▶  ▶ <1->2-Sided> ▶  ▶ <Landscape> ▶  ▶ <Book Type> ▶

## LINKS

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- ▶ **Basic Copy Operations(P. 65)**
- ▶ **Copying Multiple Documents onto One Sheet (2 on 1/4 on 1)(P. 77)**
- ▶ **Using the [Paper Save Copy] Key (MF244dw / MF231)(P. 79)**


# Copying Multiple Documents onto One Sheet (2 on 1/4 on 1)

15A8-01F





You can copy two or four documents onto a single sheet at a reduced size. This decreases the number of pages, enabling you to save paper.





## NOTE

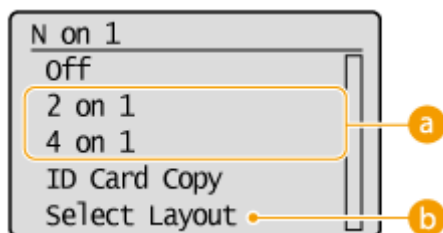
- Using <2 on 1>/<4 on 1> reduces the copy ratio automatically (the copy ratio is displayed on the screen). You can increase or further reduce the copy ratio before pressing , but the edges of the document might not be copied if you increase it.
- <2 on 1>/<4 on 1> is not available when using <Paper Save Copy> or <ID Card Copy>.
- When you copy multiple documents onto one page, margins may be created in the copied image.

## TIPS

Using  enables you to combine 2-sided copying and <2 on 1>/<4 on 1>  **Using the [Paper Save Copy] Key (MF244dw / MF231)(P. 79)**



 (COPY/SCAN) ▶ <N on 1> ▶  ▶ Select <2 on 1> or <4 on 1> ▶  ▶ Select the document size on the <Scan Size> screen ▶ 

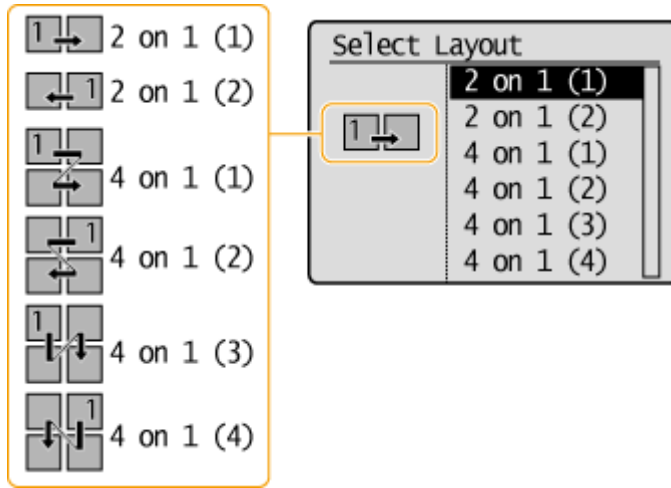


### **a** <2 on 1>/<4 on 1>

Select <2 on 1> to copy two pages of documents onto a single sheet, or select <4 on 1> to copy four pages of documents onto a single sheet.

### **b** <Select Layout>

Specify how to arrange the documents on the page.



LINKS

- ▶ **Basic Copy Operations(P. 65)**
- ▶ **2-Sided Copying (MF244dw)(P. 75)**
- ▶ **Using the [Paper Save Copy] Key (MF244dw / MF231)(P. 79)**

# Using the [Paper Save Copy] Key MF244dw / MF231

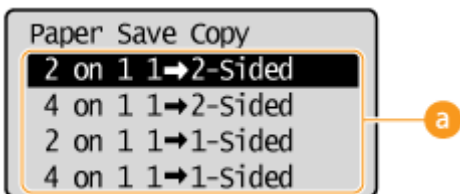
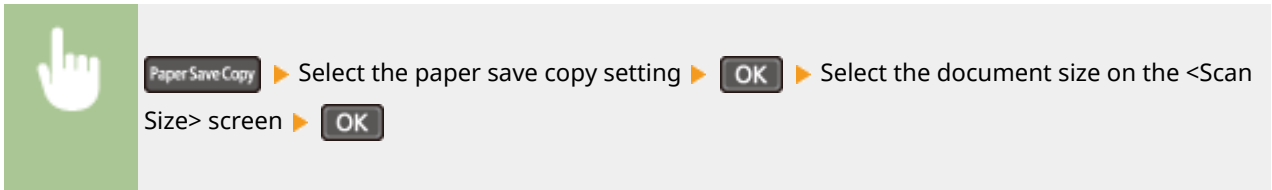
15A8-01H



You can use <2 on 1>/<4 on 1> to copy multiple documents onto a single sheet, and <2-Sided> to copy the document onto both sides of a page. Using **Paper Save Copy**, which combines these functions, makes it easier to save paper than when using the functions separately.

## NOTE

- The 2-sided <Paper Save Copy> settings may not be available with some sizes and types of paper. **Paper(P. 419)**
- Using <Paper Save Copy> reduces the copy ratio automatically (the copy ratio is displayed on the screen). You can increase or further reduce the copy ratio before pressing **OK**, but the edges of the document might not be copied if you increase it.
- <Paper Save Copy> is not available when using <2-Sided>, <2 on 1>/<4 on 1> or <ID Card Copy>.
- When you copy multiple documents onto one page, margins may be created in the copied image.







### a Paper save copy settings

Select one of four setting combinations.

	Original (Portrait)	Copy
<2 on 1 1->2-Sided>*		
<4 on 1 1->2-Sided>*		

## Copying

<2 on 1 1->1-Sided>		
<4 on 1 1->1-Sided>		

\* MF244dw Only

### LINKS

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- ▶ **Basic Copy Operations(P. 65)**
- ▶ **2-Sided Copying (MF244dw)(P. 75)**
- ▶ **Copying Multiple Documents onto One Sheet (2 on 1/4 on 1)(P. 77)**

## Copying Both Sides of an ID Card onto One Page

15A8-01J



You can use <ID Card Copy> to copy the front and back sides of a card onto the same side of a page. This function is useful when copying a driver's license or ID card.

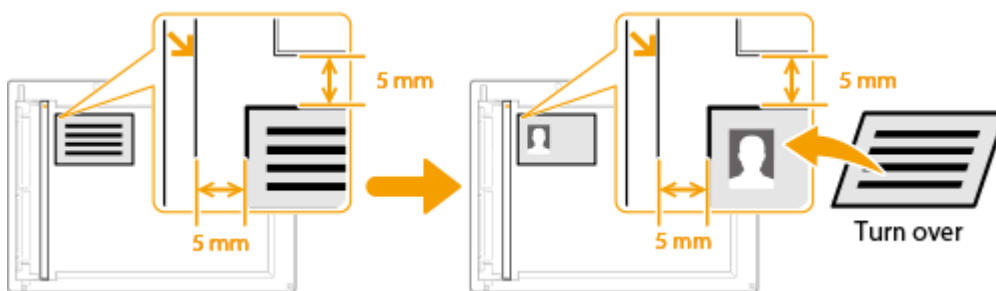
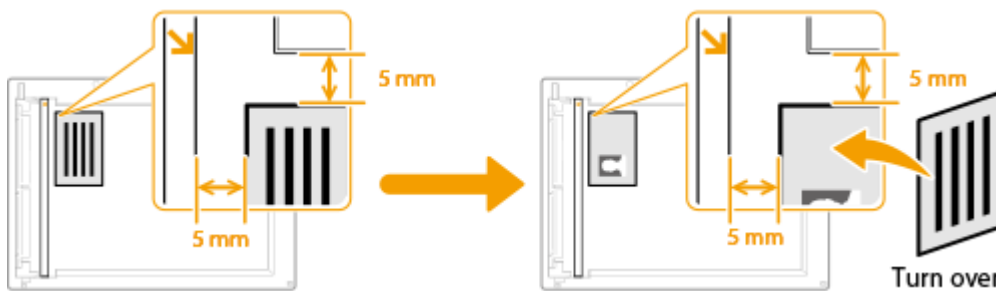
### NOTE

- All regular paper sizes can be used except Letter (Government), Legal (Government), and Envelope.
- <Copy Ratio> is automatically set to <Copy Ratio: 100% (1:1)>.
- <ID Card Copy> is not available when using <Paper Save Copy>, <2-Sided>, or <2 on 1>/<4 on 1>.



Place the card ▶ (ID Card Copy) ▶ ▶ Turn the card over ▶

### ■ How to place the card



### NOTE:

- When the <Size/Settings Mismatch> message appears. **When an Error Message Appears(P. 347)**

### LINKS

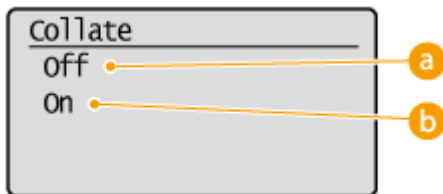
**Basic Copy Operations(P. 65)**

## Collating Copies by Page

15A8-01K



When preparing multiple copies of multi-page documents, set <Collate> to <On> to collate copies in sequential page order. This function is useful when preparing handouts for meetings or presentations.



### a <Off>

The copies are grouped by page and not collated. For example, if you are making 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.



### b <On>

The copies are grouped into complete sets in sequential page order. For example, if you are making 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.




## LINKS

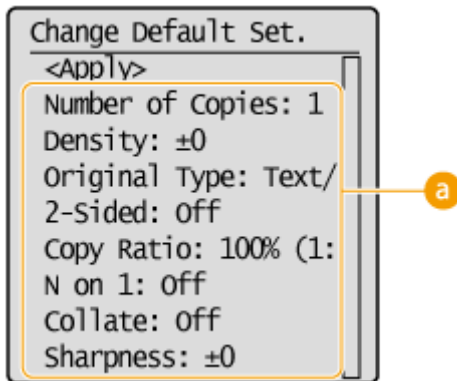
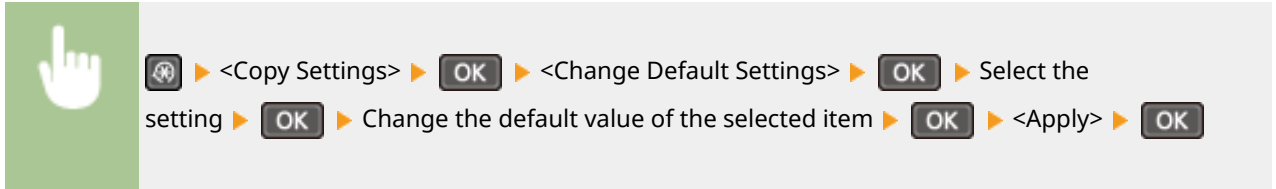
▶ **Basic Copy Operations(P. 65)**



## Changing Default Settings

15A8-01L

The default settings are the settings that are displayed whenever you turn ON the machine, or when you press . If you change these default settings to match the operations that you perform frequently, you can eliminate the need to configure the same settings every time you make copies.



### **a** Settings

Select the item you want to set, and change the default value.

### LINKS

- ▶ **Basic Copy Operations(P. 65)**
- ▶ **Various Copy Settings(P. 69)**
- ▶ **Copy Settings(P. 310)**

# Using the Machine as a Printer

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## Using the Machine as a Printer

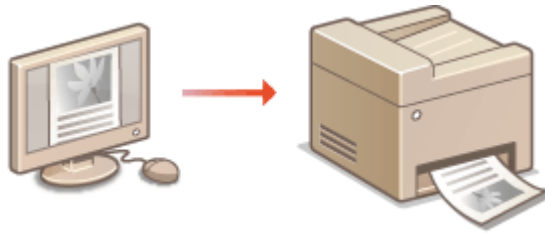
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15A8-01R

There are many ways to use the machine as a printer. You can print documents on your computer by using the printer driver, or print from mobile devices. Make full use of the print functions to suit your needs.

### ■ Printing from a Computer

You can print a document made on your computer by using the printer driver. ▶ **Printing from a Computer(P. 86)**



### Printing from Mobile Devices

- Linking mobile devices such as smartphones or tablets to this machine provides a quick and easy way to print photos and web pages. The machine also supports Google Cloud Print™.

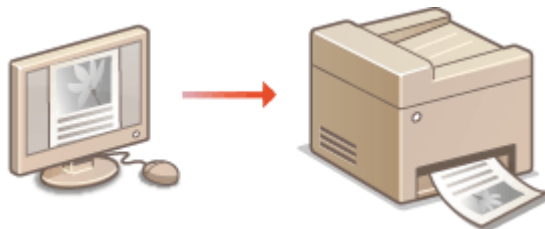
▶ **Can Be Used Conveniently with a Mobile Device (MF244dw / MF232w)(P. 142)**

▶ **Using Google Cloud Print(P. 159)**

## Printing from a Computer

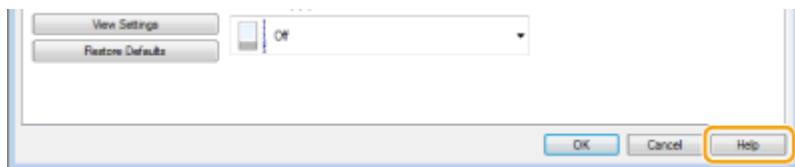
15A8-01S

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 "MF Driver Installation Guide."



### 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 User's Guide.



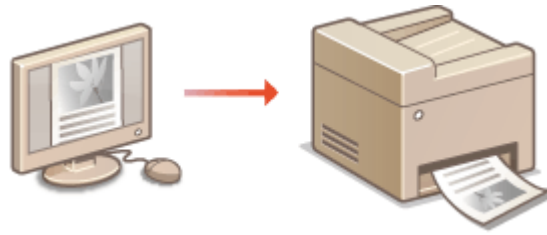
### NOTE

- If you are a Mac OS user, see Printer Driver's User's Guide for installing the printer drivers and Printer Driver's Help for using print functions.
- 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.
- If you are using the MF244dw, you can use the PCL6 printer driver as well as the UFRII LT printer driver. The available print settings vary depending on the printer driver. For more information, click [Help] on each printer driver screen.

# Printing a Document

15A8-01U

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



## NOTE

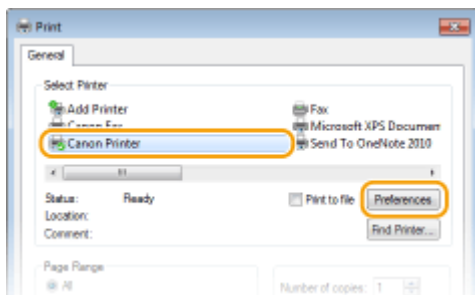
### Paper settings on the machine

- Normally, it is necessary to specify the paper size and type for the paper loaded in each paper source before proceeding to printing. ▶ **Specifying Paper Size and Type(P. 53)**

## 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 the printer driver for this machine, 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]

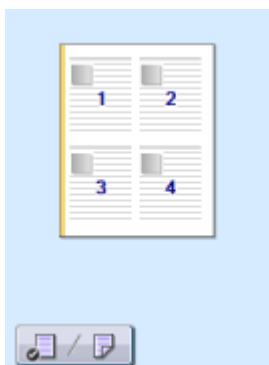
Select the size of a document made in the application.

**b [Output Size]**

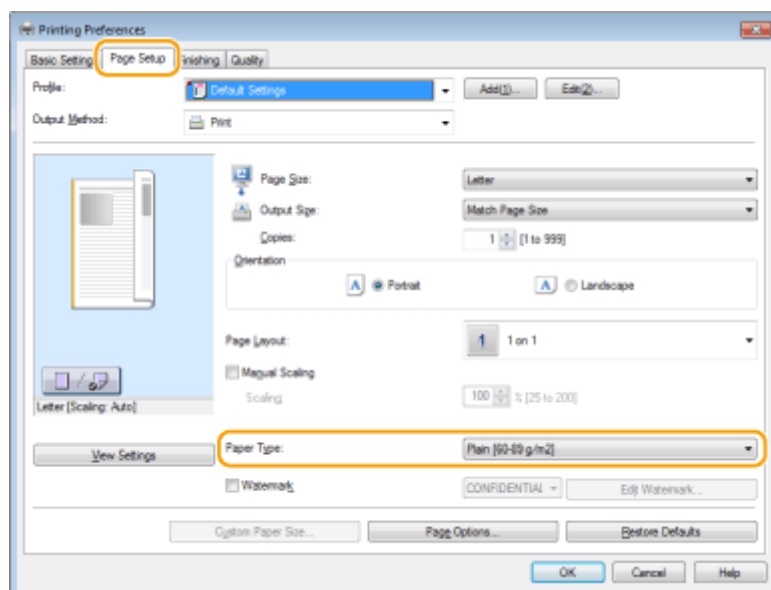
Select the size of paper on which the document will be actually printed. If the selected size differs from the one specified in [Page Size], the document is printed enlarged/reduced automatically according to the selected size. ▶ **Enlarging or Reducing(P. 97)**

**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.

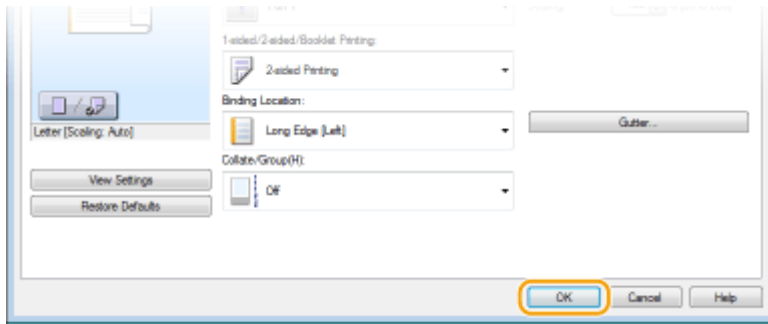
**4 In the [Page Setup] tab, select the paper type.**

- Set [Paper Type] according to the type of paper to be used in the printing. ▶ **Loading Paper(P. 42)**

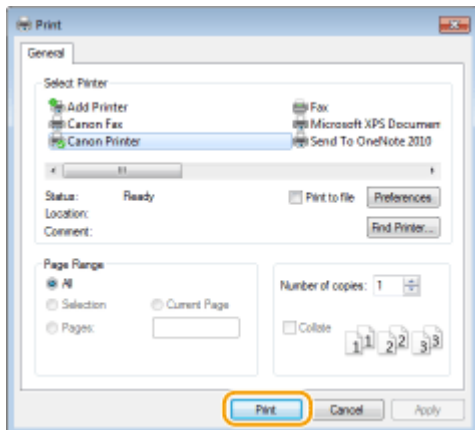
**5 Specify other print settings as necessary. ▶ Various Print Settings(P. 95)****NOTE:**

- 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. ▶ **Registering Combinations of Frequently Used Print Settings(P. 123)**

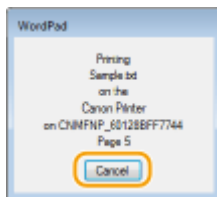
**6 Click [OK].**



## 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. 91)**

## NOTE

### When printing from the Windows Store app in Windows 8/10/Server 2012

Display the charms on the right side of the screen and use the procedure shown below.

#### Windows 8/Server 2012

Tap or click [Devices] ▶ the printer driver for this machine ▶ [Print].

#### Windows 8.1/Server 2012 R2

Tap or click [Devices] ▶ [Print] ▶ the printer driver for this machine ▶ [Print].

#### Windows 10

Select [Print] in the application menu.

- 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

▶ **Managing Documents and Checking the Machine Status(P. 278)**



## Canceling Prints

15A8-01W

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

- ▶ **From a Computer(P. 91)**
- ▶ **From the Operation Panel(P. 92)**

### 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.

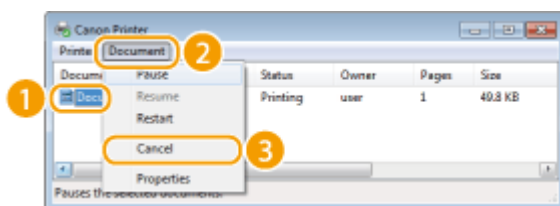


#### NOTE:

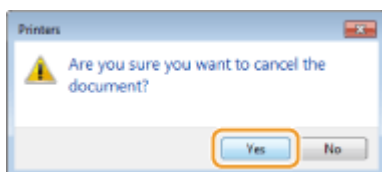
##### When the printer icon is not displayed

- Open the printer folder ( ▶ **Displaying the Printer Folder(P. 434)** ), right-click the printer driver icon for this machine, 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.

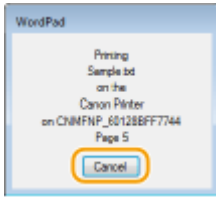
#### TIPS

##### 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. 278)**

## Canceling from an application

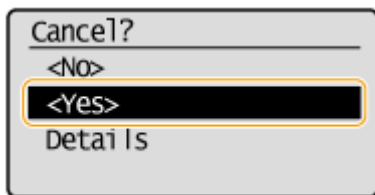
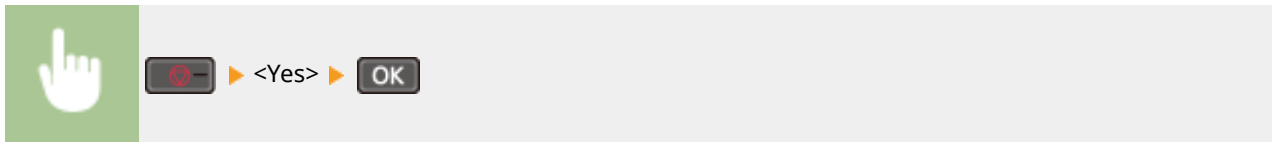
- On some applications, a screen like shown below appears. You can cancel printing by clicking [Cancel].



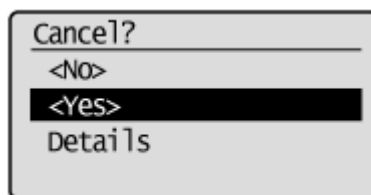
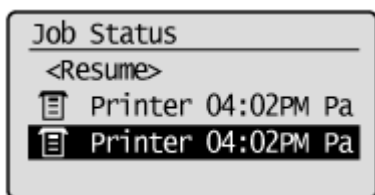
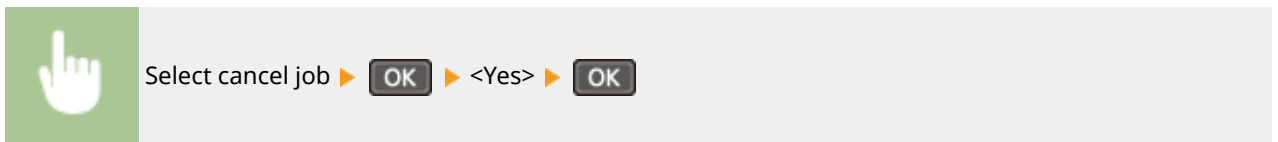
## From the Operation Panel

Cancel printing using  or .

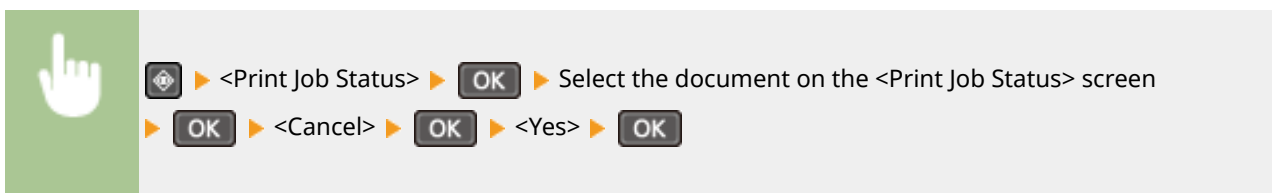
- Press  to Cancel

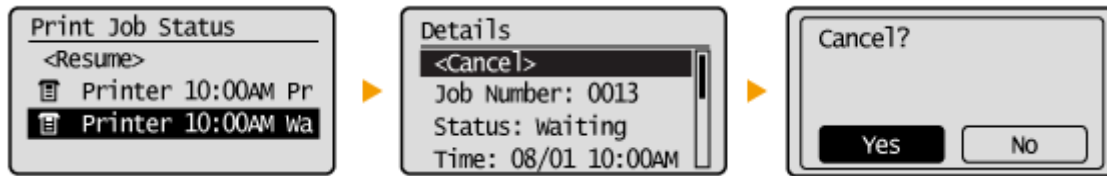


### If the Screen Displays a List of Documents When is Pressed



- Check the Print Job Status before Canceling





## NOTE

- Several pages may be output after you cancel printing.

## LINKS

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- ▶ [Printing a Document\(P. 87\)](#)
- ▶ [Checking the Printing Status\(P. 94\)](#)

## Checking the Printing Status

15A8-01X

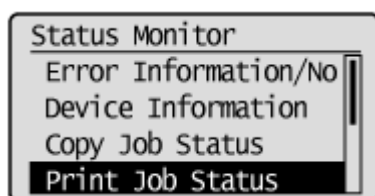
You can check the current print statuses.

### Useful in the Following Cases

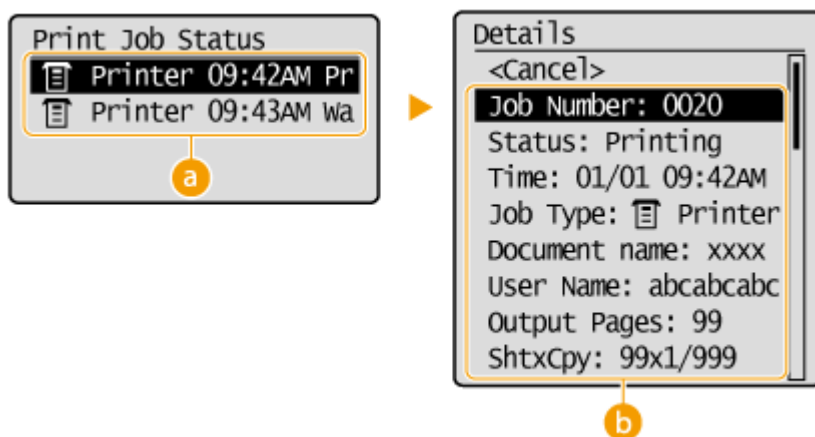
- When your documents are not printed for a long time, you may want to see the waiting list of the documents waiting to be printed.
- When you cannot find your printouts that you thought had been printed, you may want to see whether an error has occurred.

**1** Press .

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



**3** Select the document 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.

### LINKS

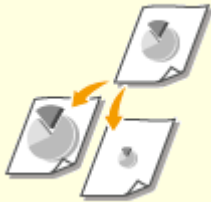
 [Printing a Document\(P. 87\)](#)

 [Canceling Prints\(P. 91\)](#)

## Various Print Settings

15A8-01Y

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



▶ **Enlarging or Reducing(P. 97)**



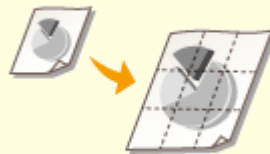
▶ **Switching 1-Sided and 2-Sided Printing (MF244dw)(P. 99)**



▶ **Collating Printouts by Page(P. 101)**



▶ **Printing Multiple Pages onto One Sheet(P. 103)**



▶ **Printing Posters(P. 105)**



▶ **Printing Booklet (MF244dw) (P. 107)**



▶ **Printing Borders(P. 109)**



▶ **Printing Dates and Page Numbers(P. 110)**



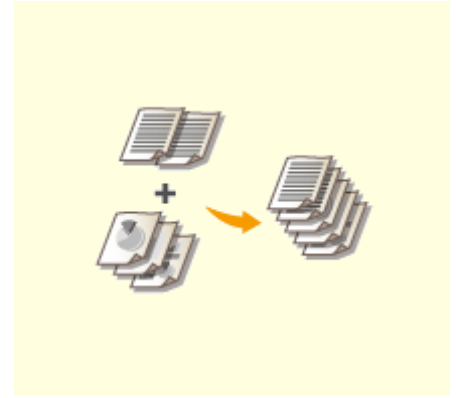
▶ **Printing Watermarks(P. 112)**



▶ **Selecting Document Type(P. 114)**



▶ **Saving Toner(P. 116)**



▶ **Combining and Printing Multiple Documents(P. 118)**

## Enlarging or Reducing

15A8-020



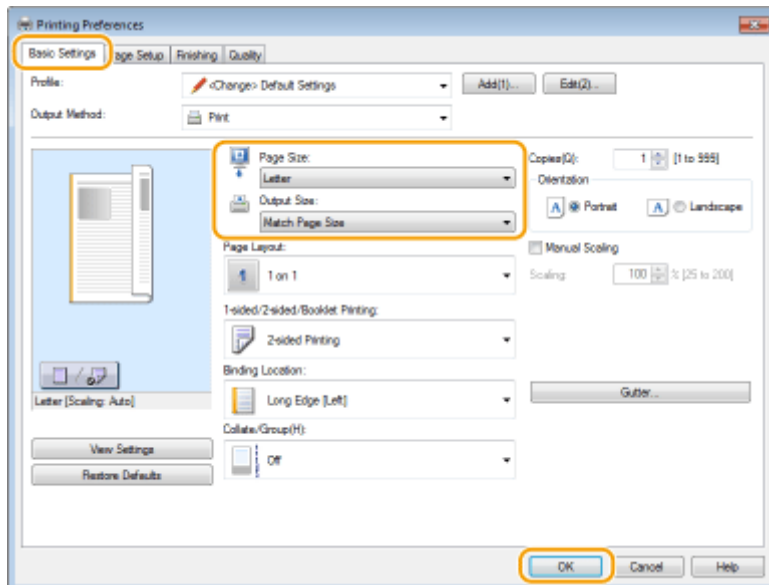
You can make enlarged or reduced printouts by using a preset print ratio, such as A5 to A4, or a custom print ratio that you set in increments of 1%.

### 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.



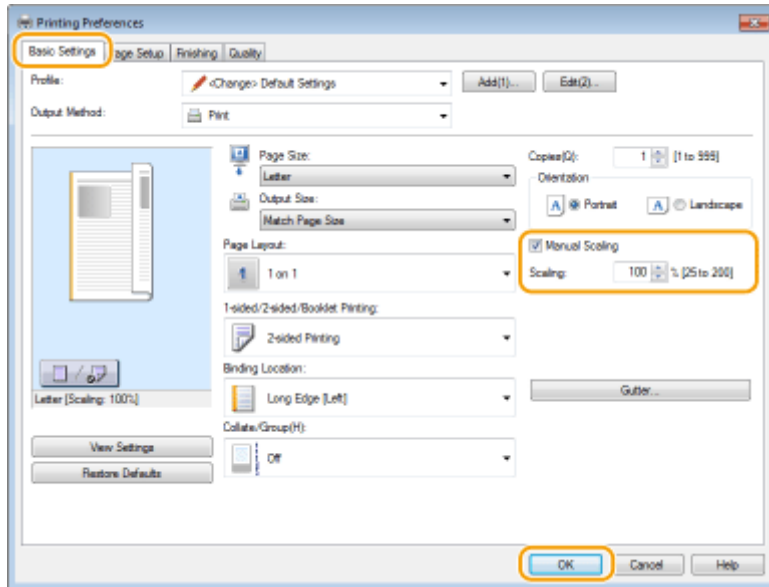
[Basic Settings] tab ► Select the document size in [Page Size] ► Select the paper size in [Output Size] ► [OK]



### 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

▶ **Printing a Document(P. 87)**



## Switching 1-Sided and 2-Sided Printing MF244dw

15A8-021



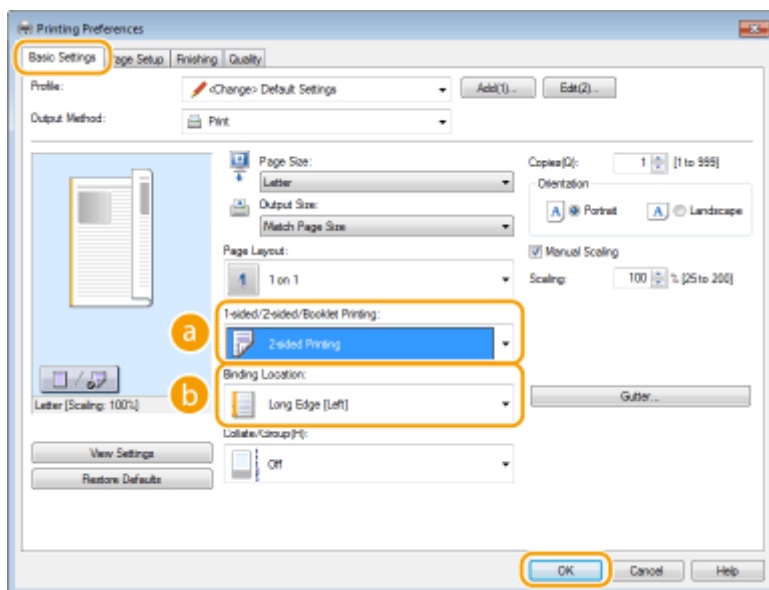
You can make both 1-sided and 2-sided printouts. The default setting is [2-sided Printing]. Change the setting as necessary.

### NOTE

- 2-sided printing may not be available with some sizes and types of paper. ▶ **Paper(P. 419)**



[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 (MF244dw)(P. 107)** .

### **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

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- ▶ **Printing a Document(P. 87)**
- ▶ **Printing Multiple Pages onto One Sheet(P. 103)**
- ▶ **Printing Booklet (MF244dw)(P. 107)**

## Collating Printouts by Page

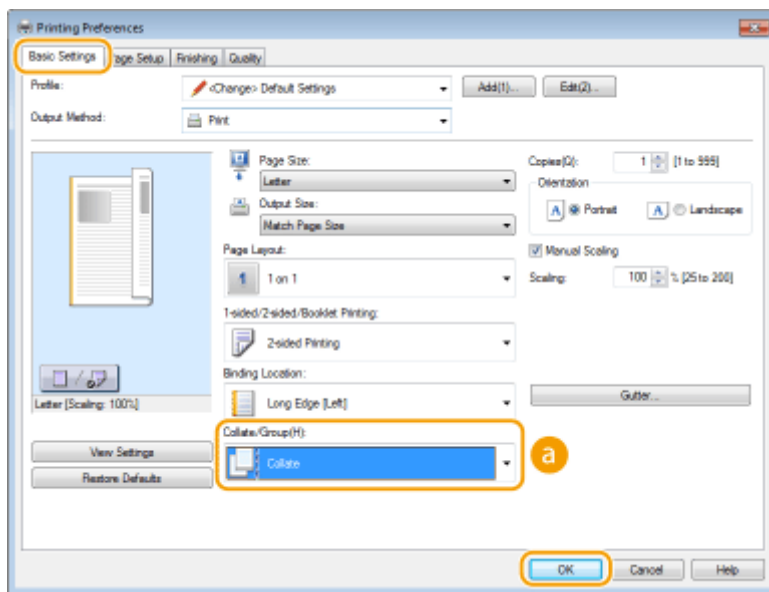
15A8-022



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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**▶ Printing a Document(P. 87)**

## Printing Multiple Pages onto One Sheet

15A8-023



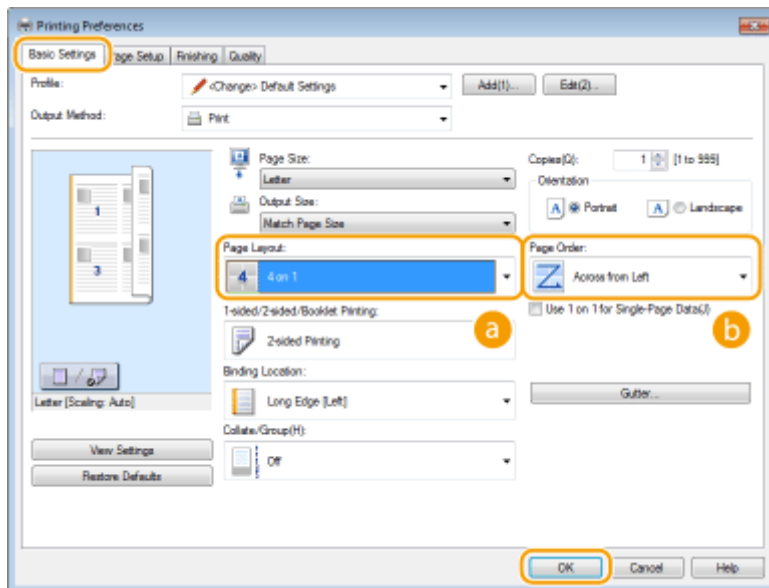
You can print multiple pages onto a single sheet. For example, you can print four or nine pages onto a single sheet by using [4 on 1] or [9 on 1]. Use this function if you want to save paper or to view your document in thumbnails.

### NOTE

- To save more paper, combine this setting with 2-sided printing. [Switching 1-Sided and 2-Sided Printing \(MF244dw\)\(P. 99\)](#)



[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\(P. 105\)](#).
- 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.



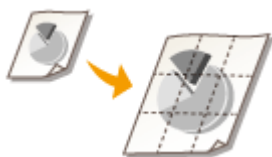
## LINKS

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- ▶ **Printing a Document(P. 87)**
- ▶ **Switching 1-Sided and 2-Sided Printing (MF244dw)(P. 99)**

## Printing Posters

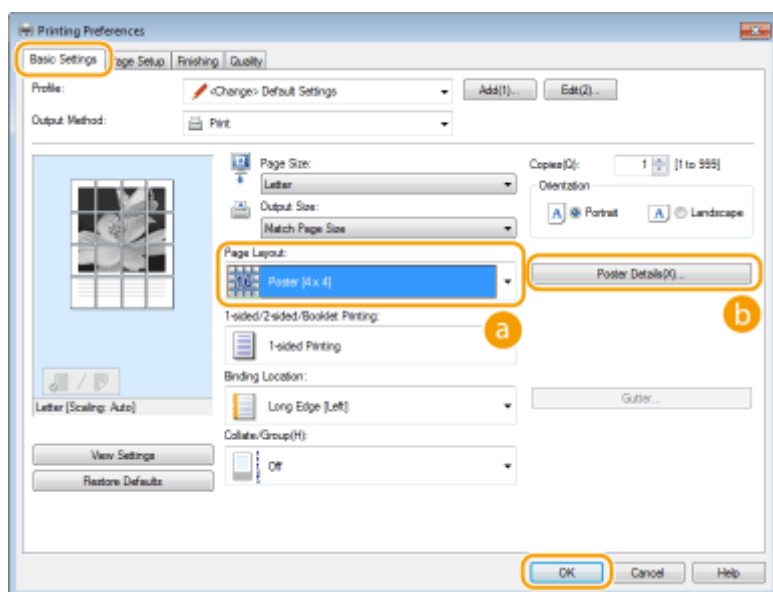
15A8-024



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]



### a [Page Layout]

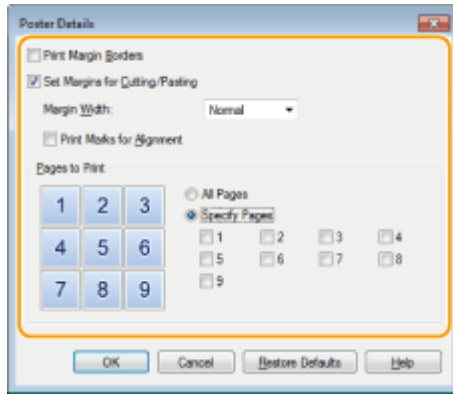
Select the layout for poster printing. There are four size settings: [Poster [1 x 2]], [Poster [2 x 2]], [Poster [3 x 3]], and [Poster [4 x 4]].

#### 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.

### b [Poster Details]

The screen below appears.



**[Print Margin Borders]**

Borders are printed on each page. The borders are helpful if you want to paste the printouts together or cut off the margins.

**[Set Margins for Cutting/Pasting]**

Prints margins to allow cutting or pasting. To print markings so that margins can be easily identified, select the [Print Marks for Alignment] check box.

**[Pages to Print]**

- [All Pages]: Carry out poster printing for all pages.
- [Specify Pages]: Carry out poster printing only for specified pages.

LINKS

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▶ **Printing a Document(P. 87)**

▶ **Enlarging or Reducing(P. 97)**



## Printing Booklet MF244dw

15A8-025



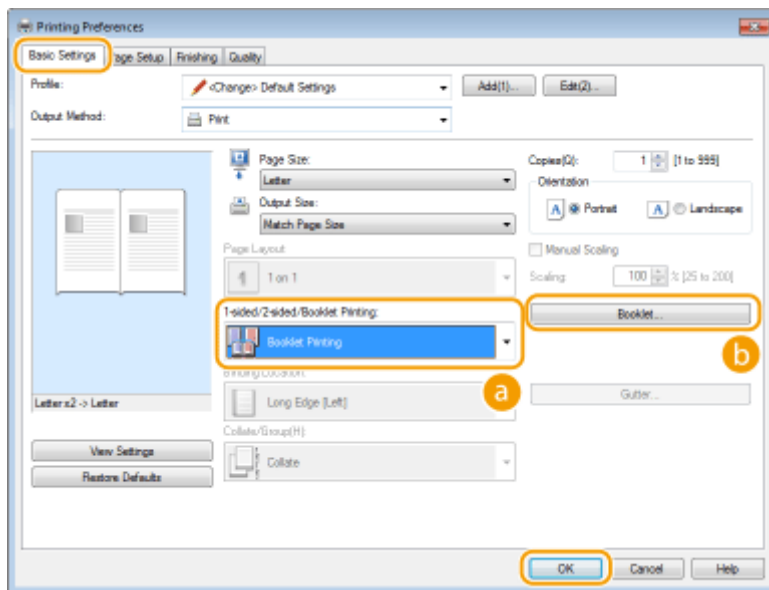
You can print two pages of a document on both sides of paper and then fold your printed pages in half to make a booklet. The printer driver controls the print order in such a way that the page numbers are correctly arranged.

### NOTE

- Booklet printing may not be available with some sizes and types of paper. The paper that is available for 2-sided printing is also available for booklet printing. See [▶ Paper \(P. 419\)](#).



[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]

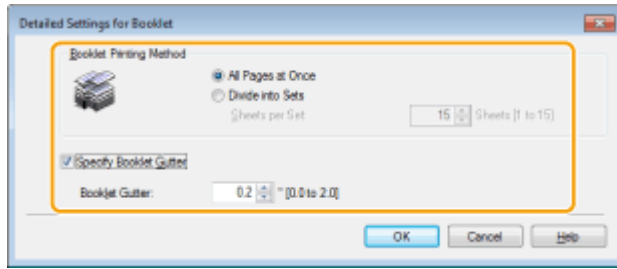
Select [Booklet Printing].

#### NOTE:

- For [1-sided Printing] and [2-sided Printing], see [▶ Switching 1-Sided and 2-Sided Printing \(MF244dw\) \(P. 99\)](#).

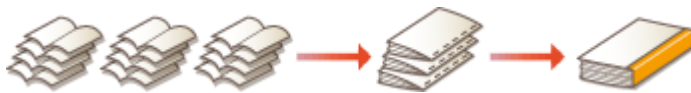
#### **b** [Booklet]

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**

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**▶ Printing a Document(P. 87)**

## Printing Borders

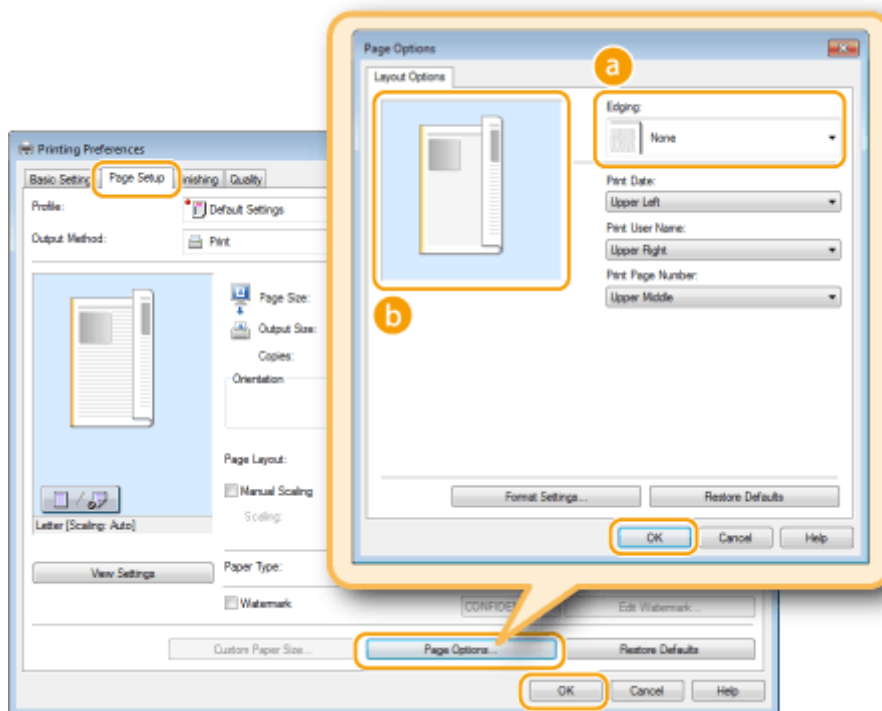
15A8-026



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

- ▶ [Printing a Document\(P. 87\)](#)
- ▶ [Printing Dates and Page Numbers\(P. 110\)](#)
- ▶ [Printing Watermarks\(P. 112\)](#)

## Printing Dates and Page Numbers

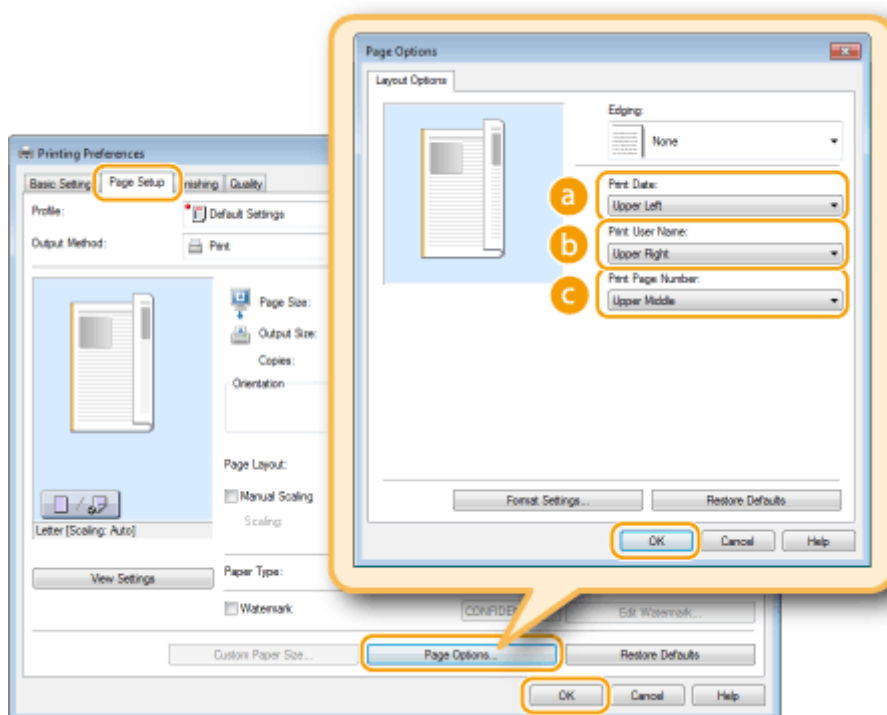
15A8-027



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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- ▶ **Printing a Document(P. 87)**
- ▶ **Printing Borders(P. 109)**
- ▶ **Printing Watermarks(P. 112)**

# Printing Watermarks

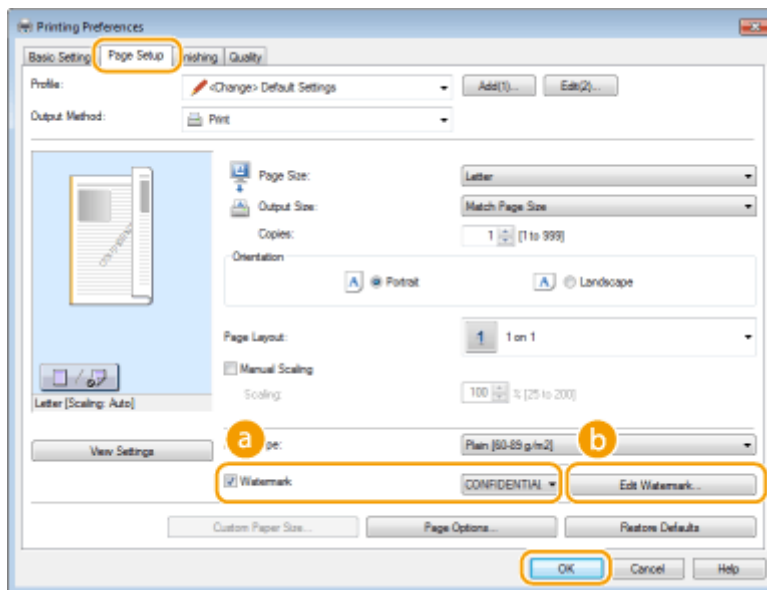
15A8-028



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 the drop-down list  
▶ [OK]

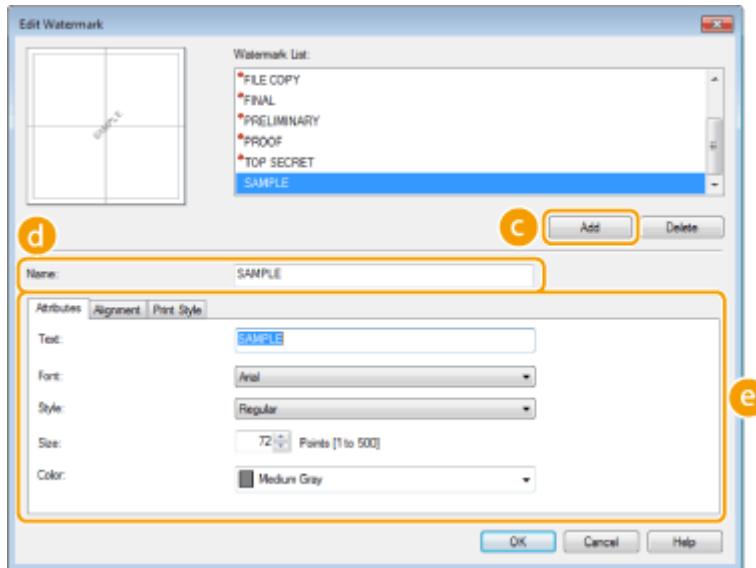


## a [Watermark]

Select the [Watermark] check box to display the list of the watermarks in the 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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- ▶ **Printing a Document(P. 87)**
- ▶ **Printing Borders(P. 109)**
- ▶ **Printing Dates and Page Numbers(P. 110)**

## Selecting Document Type

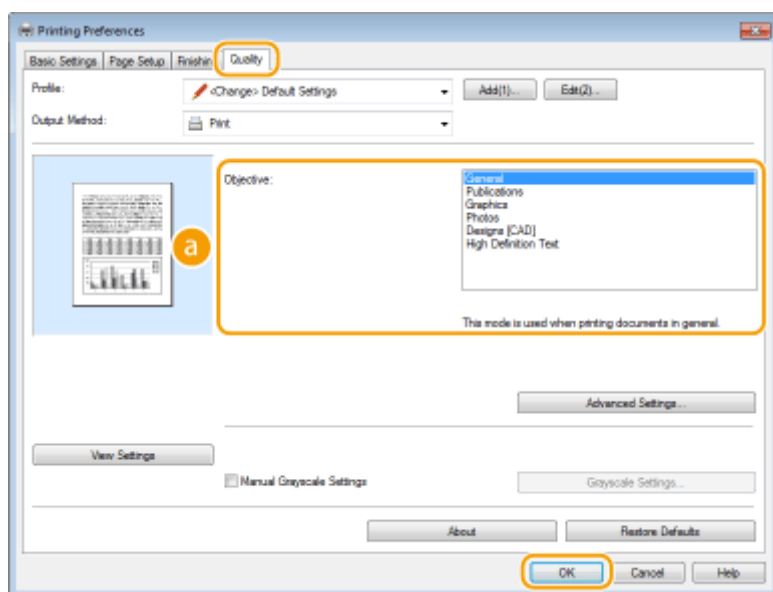
15A8-029



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:**



- 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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 **Printing a Document(P. 87)**

## Saving Toner

15A8-02A



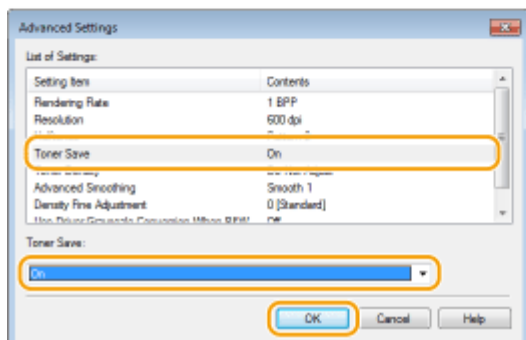
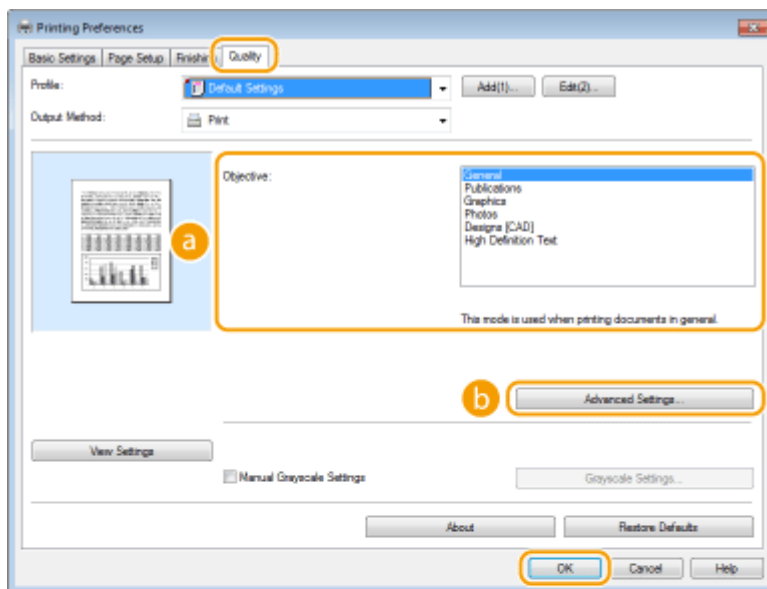
You can set the printer driver to print documents using less toner.

### 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. 114)

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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### **▶ Printing a Document(P. 87)**

# Combining and Printing Multiple Documents

15A8-02C

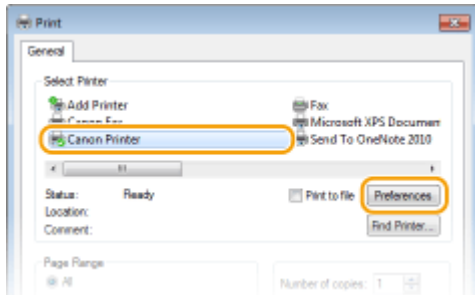


By using Canon PageComposer, you can combine multiple documents into one print job and print the job with specified print settings. This function, for example, enables you to combine documents made with different applications and print all of the pages in the same paper size.

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

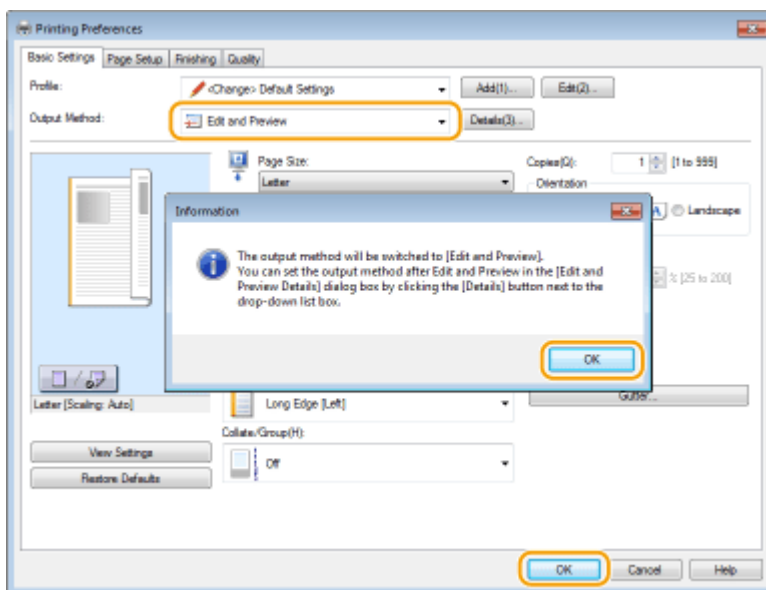
- How to display the print dialog box differs for each application. For more information, see the instruction manual for the application you are using.

## 2 Select the printer driver for this machine, and click [Preferences] or [Properties].

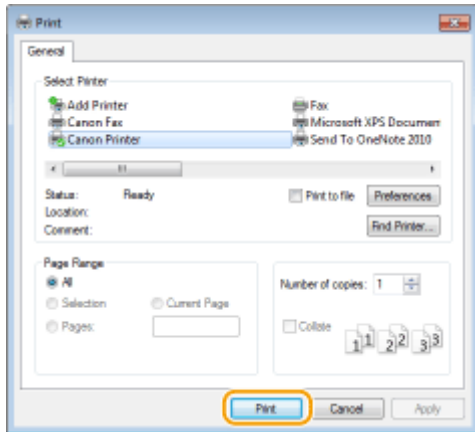


## 3 Select [Edit and Preview] in [Output Method].

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



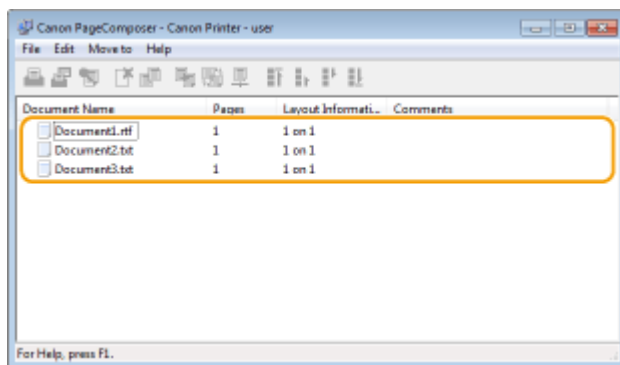
## 4 Click [Print] or [OK].



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

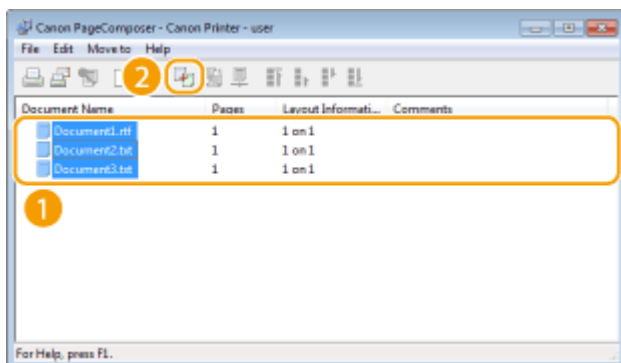
## 5 Repeat steps 1 to 4 for the documents you want to combine.

⇒ The documents are added to the Canon PageComposer.



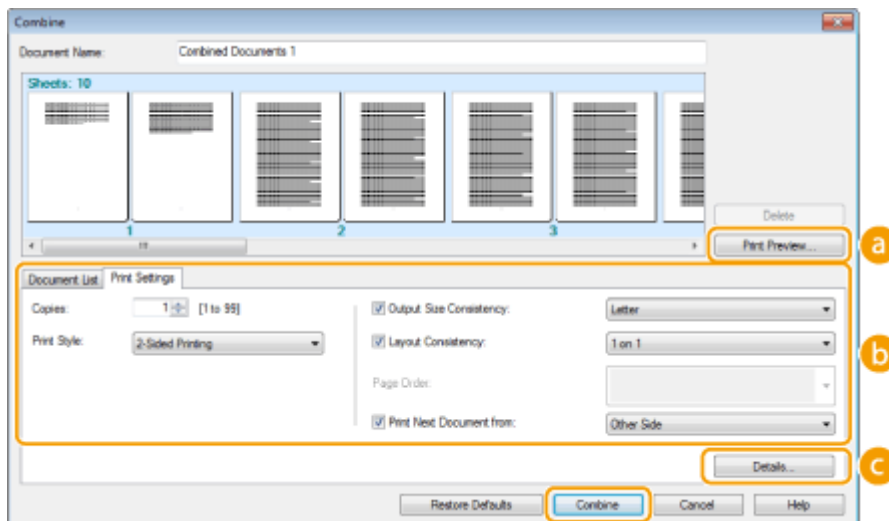
## 6 From the [Document Name] list, select the documents to combine, and click .

- 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.

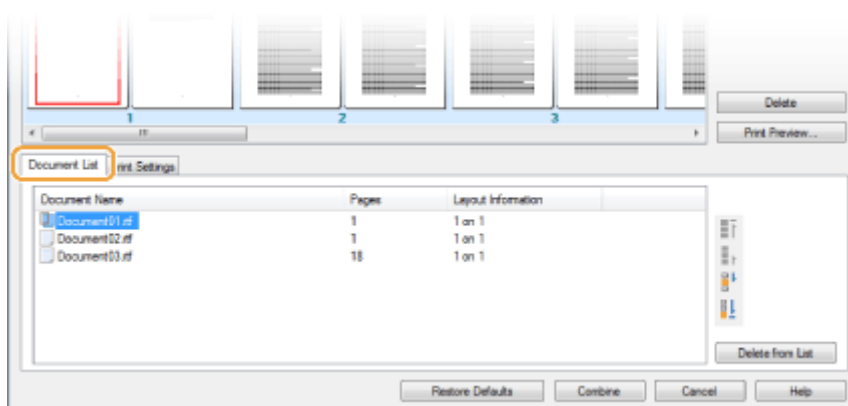


**a [Print Preview]**

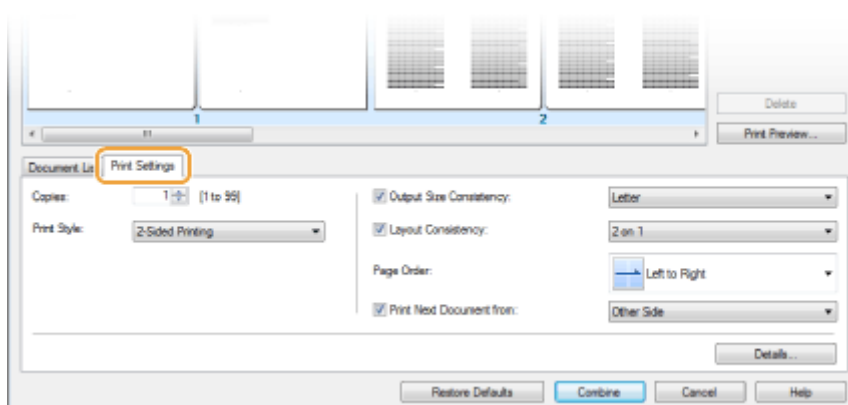
Displays a preview of the document to be printed.

**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.



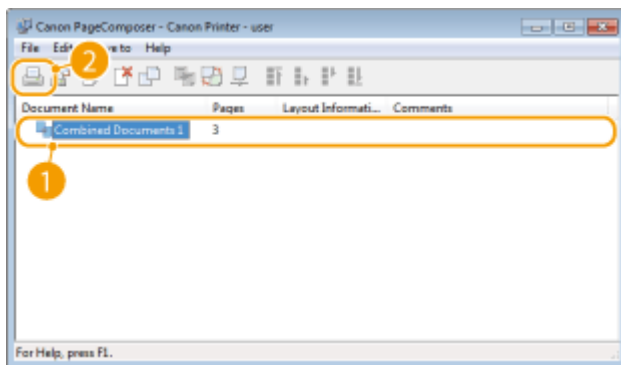
**NOTE:**

- 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\(P. 91\)](#).

## LINKS

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[▶Printing a Document\(P. 87\)](#)

## Configuring Print Settings to Your Needs

15A8-02E

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 include a "TOP SECRET" watermark.



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. 123)**



To save printing costs, I always print 2 document pages on 1 printout 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. 125)**



# Registering Combinations of Frequently Used Print Settings

15A8-02F

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.

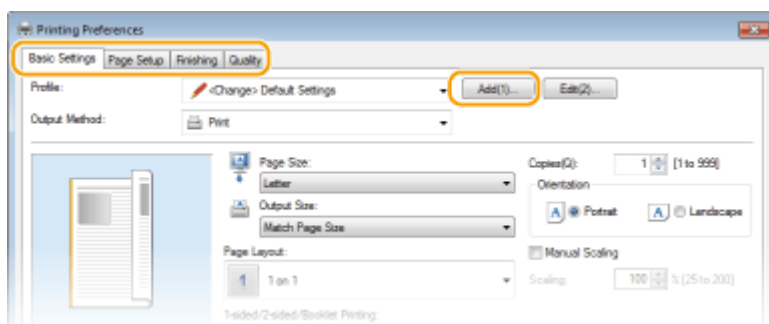
▶ **Registering a Profile(P. 123)**

▶ **Selecting a Profile(P. 124)**

## Registering a Profile

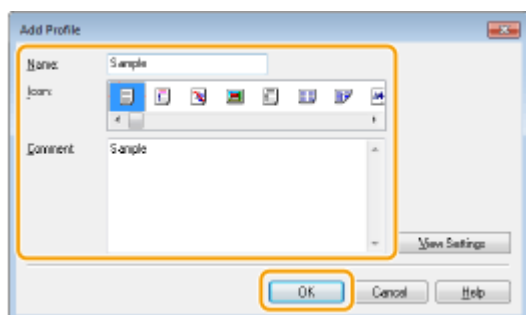
### 1 Change the settings that you want to register as a profile, and click [Add].

- Click the [Basic Settings], [Page Setup], [Finishing], or [Quality] tabs to specify the print settings on each screen as necessary. ▶ **Various Print Settings(P. 95)**



### 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.



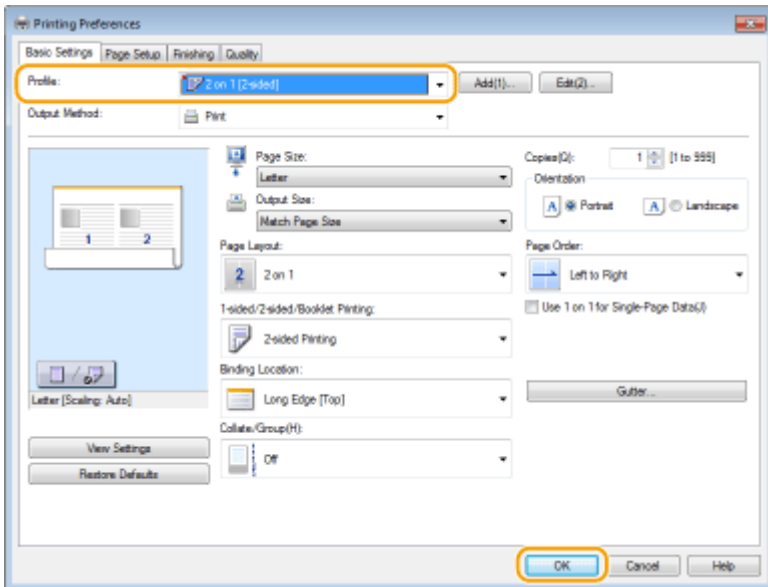
## NOTE

### 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

- ▶ [Printing a Document\(P. 87\)](#)
- ▶ [Changing Default Settings\(P. 125\)](#)

## Changing Default Settings

15A8-02H

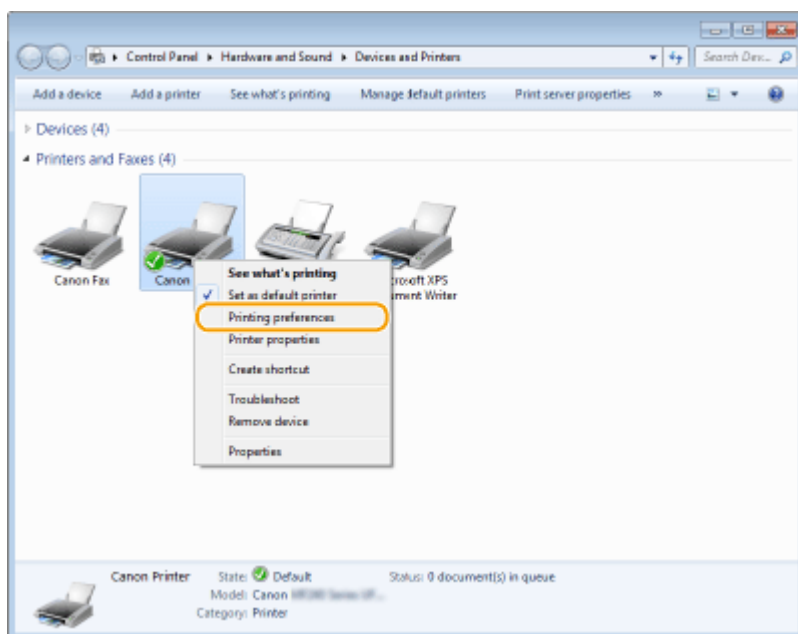
The default settings are the settings that are first displayed whenever you open the print settings screen of the printer driver, but you can change them. For example, if you want to print all documents in such manner that each two pages are shrunk and printed on one page, specify [2 on 1] as the user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

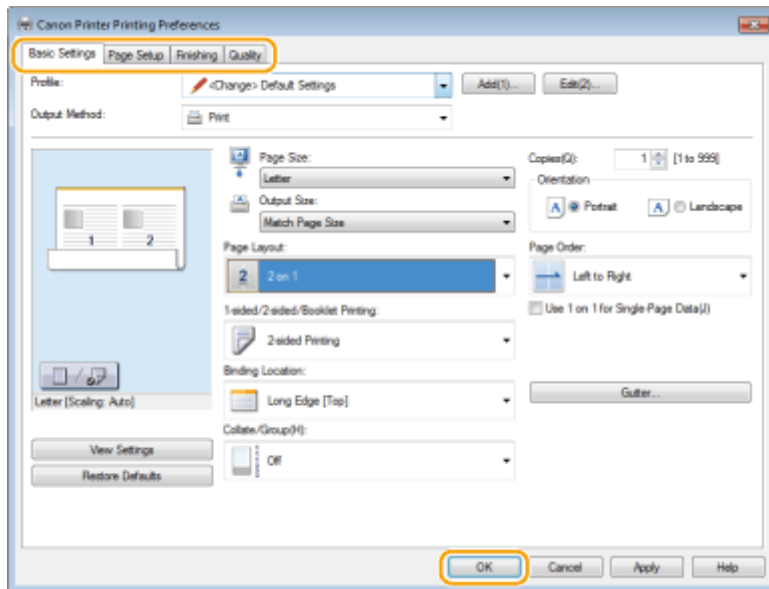
**1** Open the printer folder. ▶ **Displaying the Printer Folder(P. 434)**

**2** Right-click the printer driver icon for this machine and click [Printing preferences].



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

- Click the [Basic Settings], [Page Setup], [Finishing], or [Quality] tabs to specify the print settings on each screen as necessary. ▶ **Various Print Settings(P. 95)**



## LINKS

- ▶ [Printing a Document\(P. 87\)](#)
- ▶ [Various Print Settings\(P. 95\)](#)

# Using the Machine as a Scanner

<b>Using the Machine as a Scanner</b> .....	128
<b>Preparing to Use the Machine as a Scanner (MF244dw / MF232w)</b> .....	129
<b>Scanning from the Machine</b> .....	130
Scanning Using the [Scan -> PC] Key .....	133
<b>Scanning from a Computer</b> .....	137
Scanning Using an Application .....	138
Configuring Scan Settings in ScanGear MF .....	140

## Using the Machine as a Scanner

15A8-02J

You can scan original documents by using the operation panel of the machine or an application on a computer. Whichever way you use, the scanned documents are converted into electronic file formats such as PDFs. Use the scan function to convert large-volume paper documents into files so that you can organize them easily.

### NOTE

- To use this machine as a scanner, you must complete preparations in advance, including installation of software to a computer. For more information, see "MF Driver Installation Guide." To connect the machine to your computer via a network, you must register the machine to the installed software. **▶Preparing to Use the Machine as a Scanner (MF244dw / MF232w)(P. 129)**
- If you are a Mac OS user, see the User's Guide for ScanGear MF for installing the software and for using scan functions.
- Depending on the operating system and the version of the scanner driver or applications you are using, the screens in this manual may differ from your screens.

### ■ Scanning from the Machine

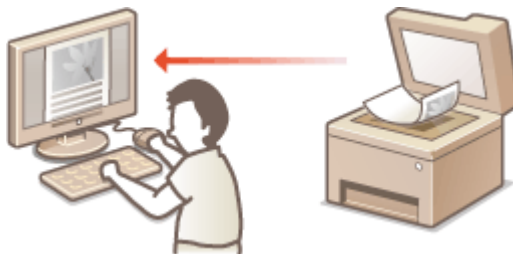
You can scan and save documents to your computer by using the operation panel of the machine.

**▶Scanning from the Machine(P. 130)**



### ■ Scanning from a Computer

You can scan documents placed on the machine from a computer. The scanned documents are saved to the computer. You can scan using MF Scan Utility (included with the machine), or with other applications such as an image-processing or word-processing application. **▶Scanning from a Computer(P. 137)**



### Scanning from Mobile Devices (MF244dw / MF232w)

- Linking mobile devices such as smartphones or tablets to this machine provides a quick and easy way to scan documents set on this machine. **▶Can Be Used Conveniently with a Mobile Device (MF244dw / MF232w)(P. 142)**

## Preparing to Use the Machine as a Scanner MF244dw / MF232w

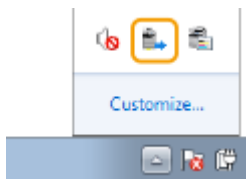
15A8-02K

Make sure that the machine and your computer are connected and all software is installed. For how to check, see "MF Driver Installation Guide." To connect via a wireless or wired LAN, you must register this machine in MF Network Scanner Selector. Register by following the procedure below. This procedure is not required if the machine and your computer are connected via USB.

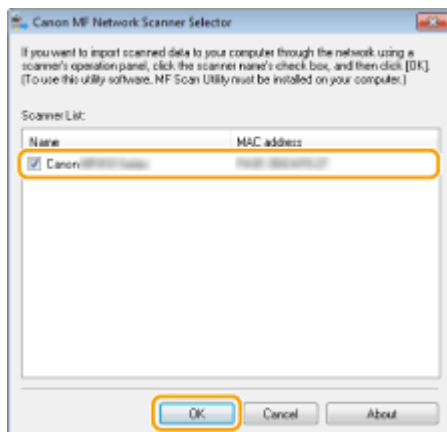
### IMPORTANT

The scan function is not available if the machine and your computer are connected in an IPv6 environment. Use IPv4 or a USB connection.

- 1 Click  in the system tray.



- 2 Select the check box for the machine, and click [OK].



- Up to ten computers can be connected at a time on a network to one product (scanner).

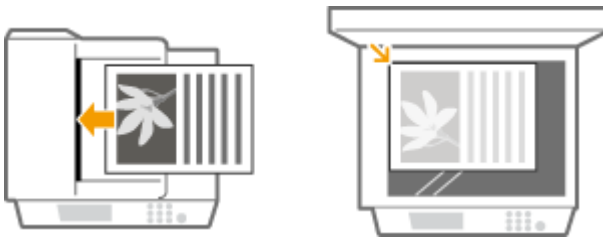
## Scanning from the Machine

15A8-02L



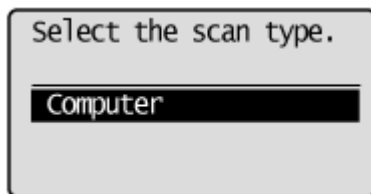
The sequence of "scanning a document and saving it to a computer" can be done entirely from the machine. Scan while specifying what computer documents will be saved to; whether to scan documents in color or black and white; whether to save documents as PDFs or JPEGs; and other settings.

### 1 Place the document(s). [▶Placing Documents\(P. 38\)](#)



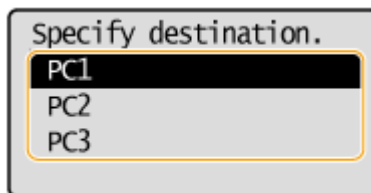
### 2 Press (COPY/SCAN) to switch to the Scan mode screen.

### 3 Use / to select <Computer>, and press .

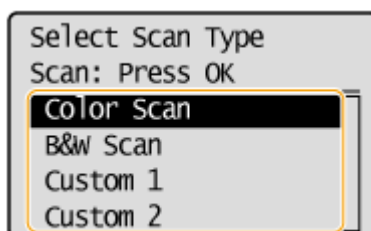


### 4 Select the destination computer, and press .

- This screen is not displayed if only a computer is connected to the machine via USB.



### 5 Select the scan type.





Scan type	Color	Resolution	File format
<Color Scan>	Color	300 dpi	JPEG (Exif)
<B&W Scan>	Black and white* <sup>1</sup>	300 dpi	PDF (searchable* <sup>2</sup> )
<Custom 1>	Color	300 dpi	JPEG (Exif)
<Custom 2>	Color	300 dpi	JPEG (Exif)

\*<sup>1</sup> Documents are scanned in black and white only, with no intermediate shades of gray.

\*<sup>2</sup> A PDF format where characters on the document are scanned as text data and the text can be searched using a computer.

**NOTE:**

**To change settings**

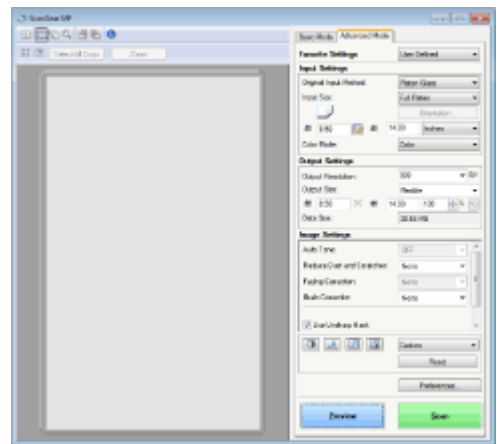
- The settings in the table above are all factory default settings. You can change settings from MF Scan Utility. For more information, click [Instructions] on MF Scan Utility.
- If you are a Mac OS user, see the User's Guide for ScanGear MF.

**6 Press .**

- Scanning starts.
- To cancel, press  ► <Yes> ► .

**IMPORTANT:**

You cannot scan while the ScanGear MF is displayed. Close the screen before scanning.




**■When placing documents in the feeder in step 1 (MF244dw)**

When scanning is complete, the save destination folder is displayed on the computer.

**■When placing documents on the platen glass in step 1**

When scanning is complete, follow the procedure below (when file format is PDF).

**1 If there are additional pages of documents to be scanned, place the next document on the platen glass, and press .**

- Repeat this step until you finish scanning all of the pages.
- When there is only one page to be scanned, proceed to the next step.

**2 Use  /  to select <Finish Scanning>, and press .**

- The save destination folder is displayed on the computer.

## NOTE

### About the save destination folder

- By default, the scanned data is saved to the [My Documents] folder. A subfolder named with the scanning date is created, and the data is saved to that folder.
- You can change the save destination from MF Scan Utility. For more information, click [Instructions] on MF Scan Utility.

## TIPS

### Scan from the machine more easily

- If you have regularly used preferences, such as scanning in color or black and white, or a pre-determined computer where scanned documents will be saved, specifying these settings each time you scan can be troublesome. Register these settings in a [Scan -> PC] key so that you can scan with one press of a key. ▶

**Scanning Using the [Scan -> PC] Key(P. 133)**

## Scanning Using the [Scan -> PC] Key

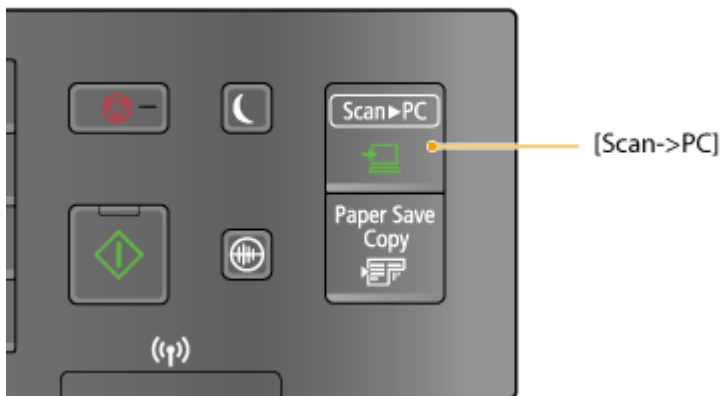



Place a document on the machine, and press **[Scan▶PC]** (for MF232w, **[Scan▶PC1]** or **[Scan▶PC2]**), and scanning starts immediately. The type of scan (color or black and white), the save destination for the document, and other settings can be registered to a button, and documents can be scanned using those settings. This section describes how to register settings in a button and scan with it.

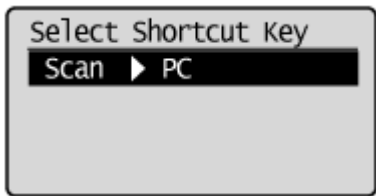
- ▶ **Registering Your Settings in the [Scan -> PC] Key(P. 133)**
- ▶ **Using the [Scan -> PC] Key(P. 135)**

### Registering Your Settings in the [Scan -> PC] Key

Register the computer that scanned images are saved in and the type of scan to **[Scan▶PC]** (for MF232w, **[Scan▶PC1]** or **[Scan▶PC2]**).



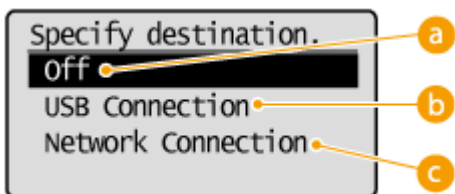
- 1** Press **[]**.
- 2** Use **▲ / ▼** to select **<Scan Settings>**, and press **[OK]**.
- 3** Select **<Shortcut Key Settings>** ▶ **<Register>**.
- 4** Press **[OK]**.
  - If you are using the MF232w, select the shortcut key to which you want to register settings, and press **[OK]**.



If you are using the MF232w / MF231, select the shortcut key to which you

want to register settings, and press

**5 Select the type of connection that is used between the machine and computer, and press **OK**.**



**a <Off>**

Select this setting to erase registered settings.

**b <USB Connection>**

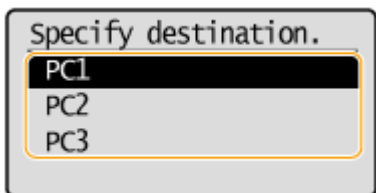
Select this setting if the machine and computer are connected via USB.

**c <Network Connection> (MF244dw / MF232w)**

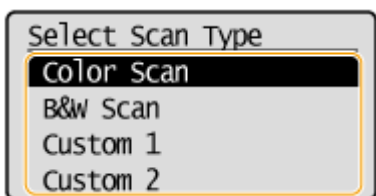
Select this setting if the machine and computer are connected via a network.

**6 Select the destination computer, and press **OK**.**

- This screen is not displayed if you select <USB Connection> in step 5.



**7 Select the scan type, and press **OK**.**



Scan type	Color	Resolution	File format
<Color Scan>	Color	300 dpi	JPEG (Exif)
<B&W Scan>	Black and white <sup>*1</sup>	300 dpi	PDF (searchable <sup>*2</sup> )

<sup>\*1</sup> Documents are scanned in black and white only, with no intermediate shades of gray.

<sup>\*2</sup> A PDF format where characters on the document are scanned as text data and the text can be searched using a computer.

Scan type	Color	Resolution	File format
<Custom 1>	Color	300 dpi	JPEG (Exif)
<Custom 2>	Color	300 dpi	JPEG (Exif)

\*1 Documents are scanned in black and white only, with no intermediate shades of gray.

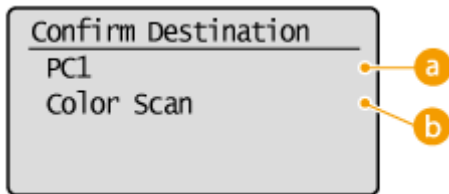
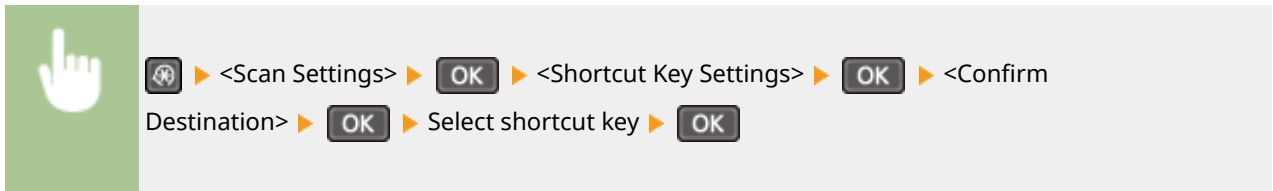
\*2 A PDF format where characters on the document are scanned as text data and the text can be searched using a computer.

**NOTE:**

**To change settings**

- The settings in the table above are all factory default settings. You can change settings from MF Scan Utility. For more information, click [Instructions] on MF Scan Utility.
- If you are a Mac OS user, see the User's Guide for ScanGear MF.

■ **Checking the Registered Settings**



**a Name of destination computer**

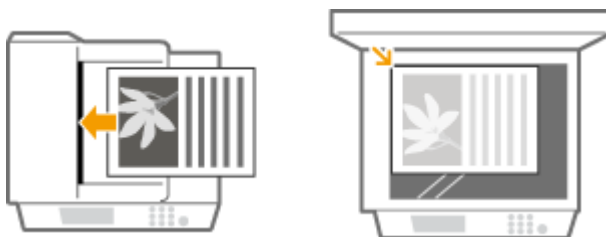
Shows the name of the computer registered as the save destination.

**b Scan type**



Shows the type of scan that has been set.

Using the [Scan -> PC] Key

**1 Place the document(s).** **Placing Documents(P. 38)**

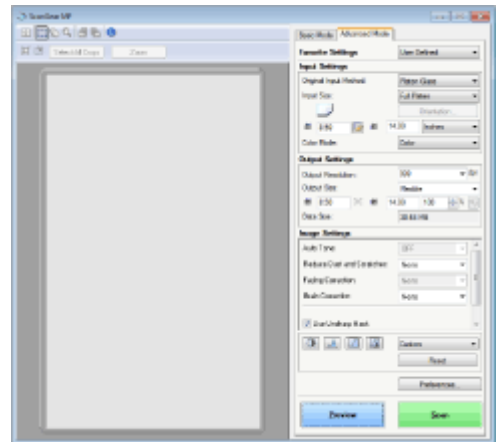


**2 Press** (for MF232w, or ).

- To check the settings registered in the key, see [▶Checking the Registered Settings\(P. 135\)](#) .
- Scanning starts.
- To cancel, press  ▶ <Yes> ▶  .

**IMPORTANT:**

You cannot scan while the ScanGear MF is displayed. Close the screen before scanning.







**■When placing documents in the feeder in step 1 (MF244dw)**

When scanning is complete, the save destination folder is displayed on the computer.

**■When placing documents on the platen glass in step 1**

When scanning is complete, follow the procedure below (when file format is PDF).

- 1 If there are additional pages of documents to be scanned, place the next document on the platen glass, and press .**
  - Repeat this step until you finish scanning all of the pages.
  - When there is only one page to be scanned, proceed to the next step.
- 2 Use  /  to select <Finish Scanning>, and press .**
  - The save destination folder is displayed on the computer.

**NOTE**

**About the save destination folder**

- By default, the scanned data is saved to the [My Documents] folder. A subfolder named with the scanning date is created, and the data is saved to that folder.
- You can change the save destination from MF Scan Utility. For more information, click [Instructions] on MF Scan Utility.

**LINKS**

- [▶Scanning from the Machine\(P. 130\)](#)

## Scanning from a Computer

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15A8-02S

There are two ways to scan from a computer: using MF Scan Utility and using an application such as an image-processing or word-processing application.



### Scanning Using MF Scan Utility

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MF Scan Utility is an application included with the machine that enables you to scan documents or images to a computer. You can forward the scanned data to a specified application, or attach it to an e-mail message. After installing it from the supplied DVD-ROM, click [MF Scan Utility] displayed in the Windows start menu to start MF Scan Utility. For details on using this utility, click [Instructions] on MF Scan Utility.

#### NOTE

- If you are a Mac OS user, see the User's Guide for ScanGear MF.

### Scanning Using an Application

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You can scan images by using an application such as a word-processing or image-processing application, and load the images directly into the application. You do not need to start another application to scan.

# Scanning Using an Application

15A8-02U



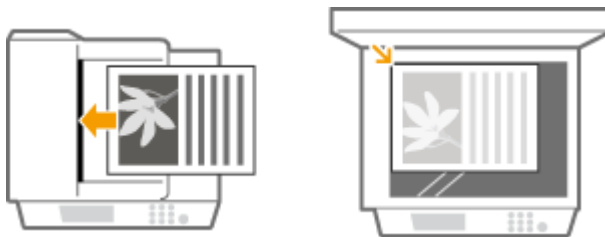
You can scan documents from applications such as image-processing or word-processing software. The scanned image is directly loaded in the application, allowing you to edit or process the image immediately. The following procedure varies depending on the application.

## IMPORTANT

- The application must be compatible with TWAIN or WIA\*. For more information, see the instruction manual for your application.

\* TWAIN is a standard for connecting image input devices, such as scanners, with computers. WIA is a function that is an integrated standard in Windows.

### 1 Place the document(s). ▶ **Placing Documents(P. 38)**



#### IMPORTANT:

- The second or subsequent documents may not be scanned, or an error message may be displayed depending on the application. In such a case, place and scan one document at a time.
- When <Auto Online for Remote Scan> is set to <Off>, you must press  (COPY/SCAN) ▶ <Remote Scanner> ▶  to bring the machine online. ▶ **Auto Online for Remote Scan(P. 333)**

### 2 From the application, select the start scan command.

- The procedure for selecting the start scan command varies depending on the application. For more information, see the instruction manual for your application.

### 3 Select the scanner driver for the machine.

- Select ScanGear MF or WIA.

### 4 Configure the scan settings as necessary.

- For more information about ScanGear MF scan settings, see ▶ **Configuring Scan Settings in ScanGear MF(P. 140)**

### 5 Click [Scan].



⇒ Scanning of the document starts.

- When scanning is complete, the scanned image is forwarded to an application.

## LINKS

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▶ **Configuring Scan Settings in ScanGear MF(P. 140)**

## Configuring Scan Settings in ScanGear MF

15A8-02W



ScanGear MF is a scanner driver included with the machine. You can use ScanGear MF to configure advanced scan settings when you scan. The way of starting ScanGear MF differs depending of the way of scanning from the computer.


### Starting from MF Scan Utility

When scanning from MF Scan Utility, click [ScanGear] to start ScanGear MF. For instructions on how to use ScanGear MF, click [Instructions] on MF Scan Utility.

#### NOTE

- If you are a Mac OS user, see the User's Guide for ScanGear MF.

### Starting from an Application

- To scan from applications such as image-processing or word-processing software, select ScanGear MF as scanner driver. **☛ Scanning Using an Application(P. 138)**
- For instructions on how to use ScanGear MF, click on the ScanGear MF  icon and see the Help.



# Can Be Used Conveniently with a Mobile Device (MF244dw / MF232w)

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## Can Be Used Conveniently with a Mobile Device

MF244dw / MF232w

15A8-02X

Combining the machine with a mobile device such as a smartphone or tablet enables you to use an appropriate application to perform printing, scan, or other operation 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. 143)**
- ▶ **Making the Best Use of the Machine by Utilizing Applications(P. 147)**
- ▶ **Managing the Machine Remotely(P. 163)**

## Connecting to a Mobile Device

15A8-02Y

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

### ■ Connecting via a Wireless LAN Router

Like when connecting a computer and the machine, connect a mobile device and the machine via a wireless LAN router. For how to connect your mobile device and wireless LAN, see the instruction manual for the device or contact your manufacturer.

Connect the machine to the router with a wired LAN or wireless LAN. ▶ **Connecting to a Network (P. 166)**



### ■ 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. You can also configure the machine to exit Direct Connection mode automatically once a certain period of time elapses after the machine enters Direct Connection mode and switch to a wireless LAN connection. ▶ **Make Direct Connection (Access Point Mode) (P. 144)**



## Make Direct Connection (Access Point Mode)

15A8-030

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

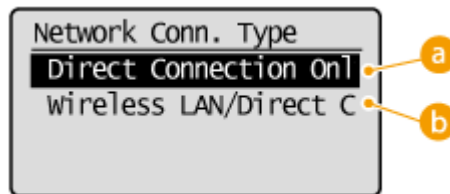


#### Put the machine into Access Point Mode.

- Set <Use Direct Connection> to <On>.
- ▶ Use Direct Connection (P. 289)

#### ■ If connected to the network by wireless LAN

A screen for selecting the Direct Connection method is displayed.



#### a <Direct Connection Only>

Connection by wireless LAN becomes unavailable. Set when only using Direct Connection.

#### b <Wireless LAN/Direct Conn. (Auto Switch)>



A wireless LAN connection is disconnected only when using Direct Connection. Set when wishing to switch between Direct Connection and connection by wireless LAN.

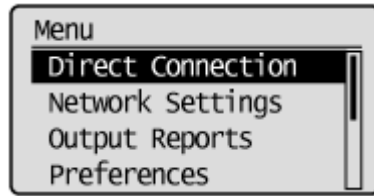


2



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

- Press  ▶ <Direct Connection> ▶ . The machine enters the state in which you can connect your mobile device to the machine.

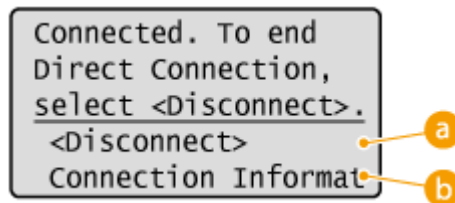


### Connecting from a mobile device

- 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>

Stops the Direct Connection procedure. When printing, scanning, or other desired operation is complete, select <Disconnect> and press **OK** 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.
- If <Use Custom SSID> is <Off> when the machine is in Direct Connection mode, only a single device can be connected 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.
- If you use the Direct Connection, do not set the IP address manually on the mobile device. Doing so may prevent proper communication after using the Direct Connection.

## TIPS

### **Setting an arbitrary SSID and network key**

- You can enter and set the SSID and network key used for Direct Connection yourself. Setting any SSID allows up to 5 devices to connect to the machine at the same time. ▶ **Access Point Mode Settings(P. 289)**

### **Exiting from Direct Connection mode automatically**

- You can also configure the machine to exit Direct Connection mode automatically once a certain period of time elapses after the machine enters Direct Connection mode. If <Wireless LAN/Direct Conn. (Auto Switch)> is specified as the connection method in Direct Connection mode, the machine connects to a wireless LAN automatically after exiting Direct Connection mode.
  - ▶ **Selecting Wired LAN or Wireless LAN(P. 168)**
  - ▶ **Time Until Direct Connection Termination (P. 289)**



# Making the Best Use of the Machine by Utilizing Applications

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15A8-031

You can use an appropriate application that enables you to perform printing, scanning, or other operation 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/Scanning via Canon PRINT Business

You can print from mobile devices that support iOS/Android, and place and scan originals with the machine, then send to a mobile device. When printing, it is not necessary to perform operations on the machine. For more information on supported operating systems, detailed setting methods, and operations, see the Canon website (<http://www.canon.com/>).

## ■ Printing with Canon Print Service

You can easily print from the menu of applications that support the Android print subsystem. For more information on supported operating systems and detailed settings and procedures, see the Canon website (<http://www.canon.com/>).

## ■ Using Google Cloud Print

You can print from an application or service that supports Google Cloud Print. You can print by remotely operating the machine at any time and from anywhere, for example even while you are on the go. **Using Google Cloud Print(P. 159)**



## ■ 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>.



## Using AirPrint

15A8-032

You can print or scan without using drivers by sending print data from Apple devices.



### AirPrint settings

- ▶ **Configuring AirPrint Settings(P. 148)**
- ▶ **Displaying the Screen for AirPrint(P. 151)**

### Functions of the AirPrint

- ▶ **Printing with AirPrint(P. 153)**
- ▶ **Scanning with AirPrint(P. 156)**

### Troubleshooting

- ▶ **If AirPrint Cannot Be Used(P. 158)**

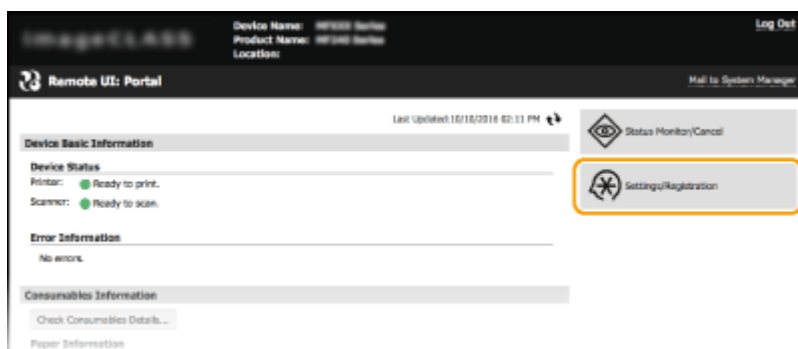
## Configuring AirPrint Settings

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.

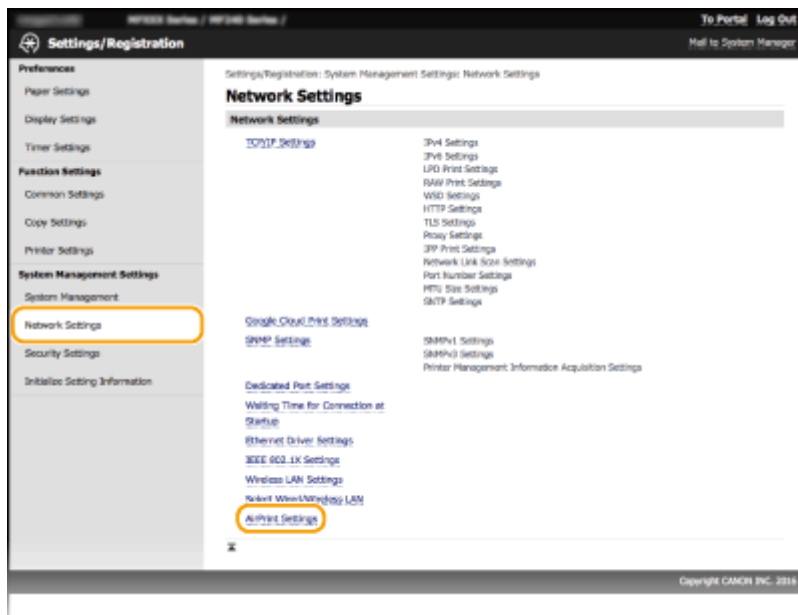
**1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 273)**

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

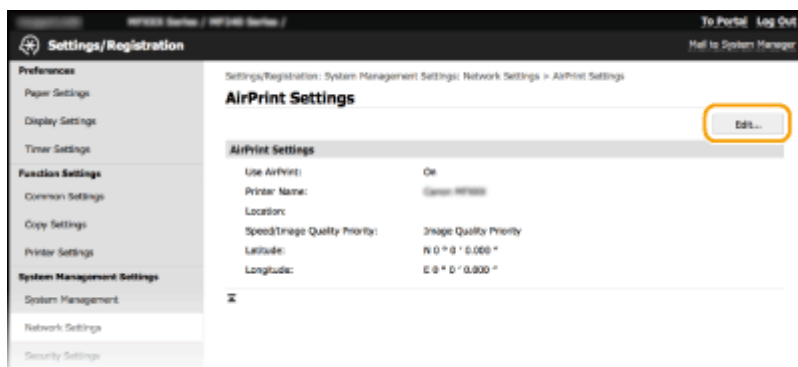
- If you are using a mobile device, such as iPad, iPhone, or iPod touch, read "click" as "tap" in this section.



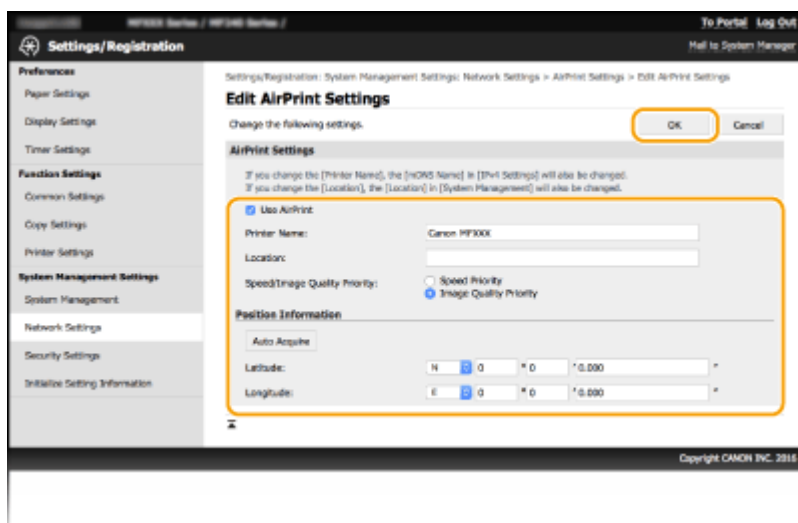
**3 Click [Network Settings] ▶ [AirPrint Settings].**



**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]/[Speed/Image Quality Priority]/[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. Also select whether to give priority to print speed or to print quality.

**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. 212)**)
- <Use HTTP> (▶ **Disabling HTTP Communication(P. 246)**)
- [Use IPP Printing] under [IPP Print Settings] (▶ **Changing the Setting of Functions Available with AirPrint(P. 150)**)
- <Use Network Link Scan> (▶ **Changing the Setting of Functions Available with AirPrint(P. 150)**)

**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. 212)**) of IPv4 is also changed automatically. In this case, add the machine to the Mac again.

## ■ Changing the Setting of Functions Available with AirPrint

If you want to disable functions that you are not going to use with AirPrint or encrypt communications, configure the necessary setting using the operation panel or Remote UI.

### Changing Print Settings

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To perform printing with AirPrint, IPP protocol is used.

#### Turning the function On/Off

You can specify whether to perform printing with AirPrint. The factory default setting is [On].



Log on to the Remote UI in System Manager Mode (▶ **Starting Remote UI(P. 273)**) ▶ [Settings/Registration] ▶ [Network Settings] ▶ [TCP/IP Settings] ▶ [IPP Print Settings] ▶ [Edit] ▶ Clear or select the [Use IPP Printing] check box ▶ [OK]

#### Changing the TLS setting

You can specify whether to encrypt communications using TLS when performing printing with AirPrint. The factory default setting is [On].

**NOTE:**

- When the machine is connected to a Mac via USB, set [Use TLS] to [Off].



Log on to the Remote UI in System Manager Mode (▶ **Starting Remote UI(P. 273)**) ▶ [Settings/Registration] ▶ [Network Settings] ▶ [TCP/IP Settings] ▶ [IPP Print Settings] ▶ [Edit] ▶ Clear or select the [Use TLS] check box ▶ [OK]

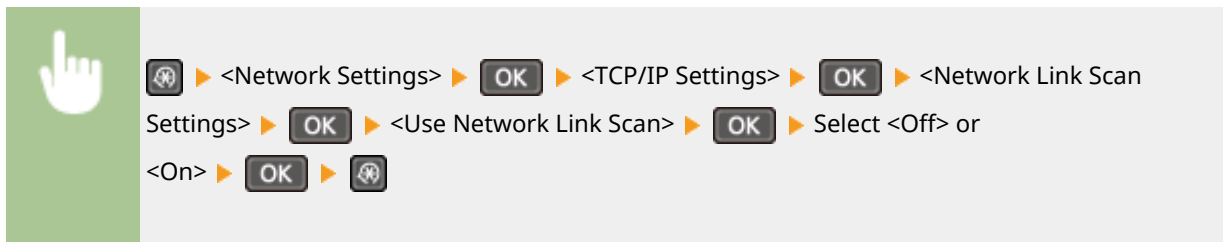
### Changing Scan Settings

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To perform scanning with AirPrint, Network Link Scan is used.

### Turning the function On/Off

You can turn on/off the scan function available with AirPrint. The factory default setting is <On>.

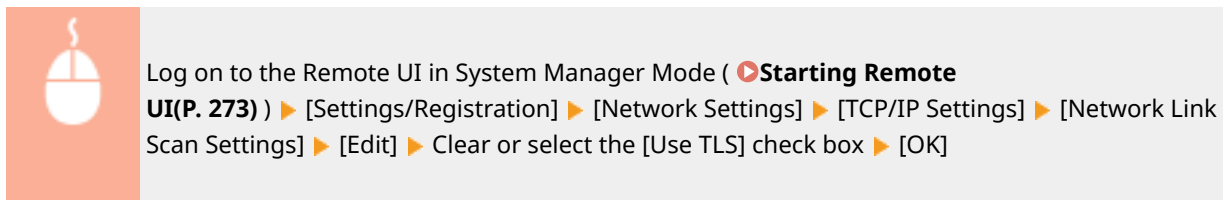


### Changing the TLS setting


You can specify whether to encrypt communications using TLS when performing scanning with AirPrint. The factory default setting is [On].

#### NOTE:

- When the machine is connected to a Mac via USB, set [Use TLS] to [Off].



## 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 TLS Encrypted Communication for the Remote UI(P. 249)** ).

**1** Click [System Preferences] in the Dock on the desktop ▶ [Printers & Scanners].

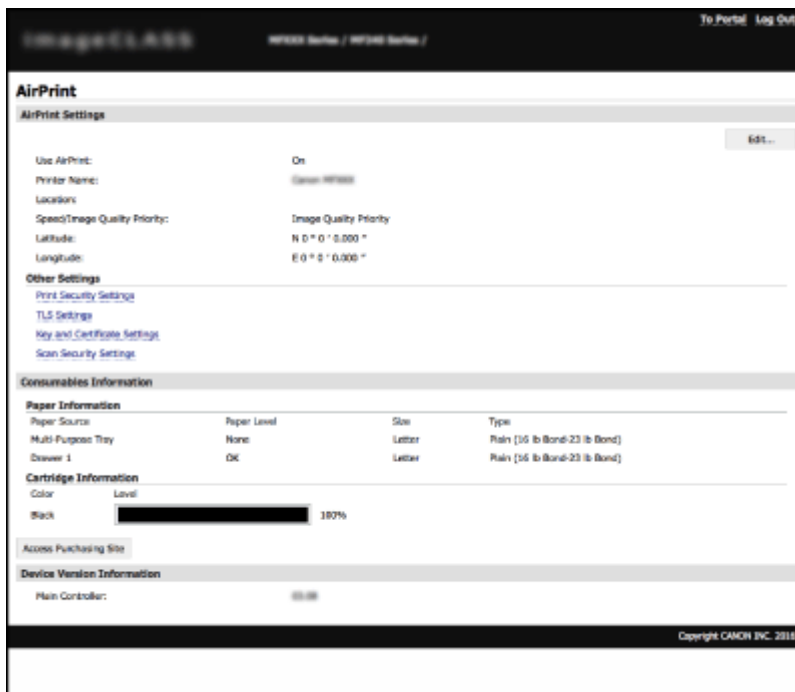
**2** Select this machine and click [Options & Supplies].

**3** Click [Show Printer Webpage].

**4** Log on to the Remote UI.

- To change AirPrint settings, log on in System Manager Mode.

⇒ The screen for AirPrint is displayed.



## Trademarks

Apple, Bonjour, iPad, iPhone, iPod touch, Mac, Mac OS, OS X, and Safari 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

15A8-033

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. 153)**

▶ **Printing from Mac(P. 154)**

### 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)\*

\* 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.

### IMPORTANT

- For printing, it is required to set [Use IPP Printing] to [On]. ▶ **Changing the Setting of Functions Available with AirPrint(P. 150)**

## 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. 425)**
- For how to make sure whether the Apple device and the machine are in Direct Connection, see ▶ **Make Direct Connection (Access Point Mode)(P. 144)** .

**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.
- You can specify the halftones setting for image files using the operation panel.  **Mobile Print Halftones(P. 315)**

**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. 425)**

**2** Add the machine to the Mac from [System Preferences]  [Printers & Scanners].

- This operation is not necessary if the registration has already been performed for another operation.

**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.

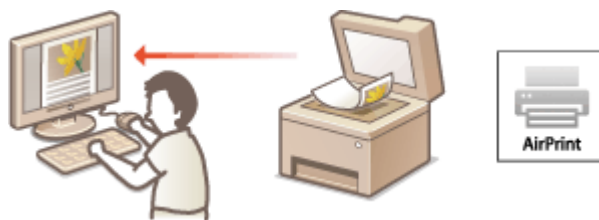




## Scanning with AirPrint

15A8-034

You can use AirPrint to transfer the data scanned by the machine directly to a Mac.



### System Requirements

To scan with AirPrint, you need a Mac with OS X 10.9 or later installed.

### Network Environment

You need one of the following environments.

- The Mac and the machine are connected to the same LAN.
- The Mac and the machine are connected via USB.

### IMPORTANT

- For scanning, it is required to set <Use Network Link Scan> to <On>. **▶ Changing the Setting of Functions Available with AirPrint(P. 150)**
- Before scanning, it is required to put the machine into online state. When the auto online function ( **▶ Auto Online for Remote Scan(P. 333)** ) is set to <Off>, use the following steps to bring the machine online before starting the procedure for scanning.  (COPY/SCAN) ▶ Select <Remote Scanner> ▶
- You cannot scan while settings for operations are being made, or while the machine is performing an operation whatsoever.

### Scanning from the Mac

- 1 Make sure that the machine is turned ON and that it is connected to the Mac.**
  - For how to make sure of this, see "Getting Started." **▶ Manuals Included with the Machine(P. 425)**
- 2 Add the machine to your Mac from [System Preferences] ▶ [Printers & Scanners].**
  - This operation is not necessary if the registration has already been performed for another operation.
- 3 Select this machine from the list of printers in [Printers & Scanners].**
- 4 Click [Scan].**

**5 Click [Open Scanner].**

⇒ The [Scanner] screen is displayed.

**6 Configure the scan settings as necessary.**

**7 Click [Scan].**

⇒ Scanning starts, and scanned data is displayed.

## If AirPrint Cannot Be Used

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15A8-035

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.
- For printing, make sure that the paper is loaded in the machine and the machine has sufficient toner cartridge remaining. **▶Displaying the Screen for AirPrint(P. 151)**
- For scanning, make sure that the machine's setting for Network Link Scan is <On>. **▶Changing the Setting of Functions Available with AirPrint(P. 150)**

## Using Google Cloud Print

15A8-036

Google Cloud Print is a service that enables a user who has a Google account to print from applications compatible with Google Cloud Print 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 an application compatible with Google Cloud Print. You will find your printouts when you go to the machine.



- ▶ **Checking the Machine Settings(P. 159)**
- ▶ **Changing Google Cloud Print Settings(P. 159)**
- ▶ **Registering the Machine with Google Cloud Print(P. 160)**

### 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.
- Google Cloud Print does not support printing from IPv6 addresses.

### NOTE

- To use Google Cloud Print, a Google account is required. If you do not have one, access Google website 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. 170)**
  - ▶ **Connecting to a Wired LAN(P. 169)**
- Make sure that the date and time and the time zone settings are correct. ▶ **Date/Time Settings(P. 303)**

## 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.

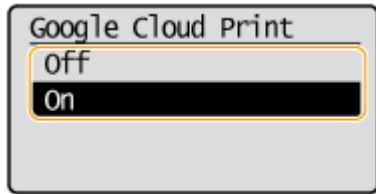
**1** Press .

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

- If a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press **OK**. **Setting the System Manager PIN(P. 229)**

**3** Select **<Google Cloud Print Settings>** ▶ **<Enable Google Cloud Print>**, and press **OK**.

**4** Select **<On>** or **<Off>**, and press **OK**.

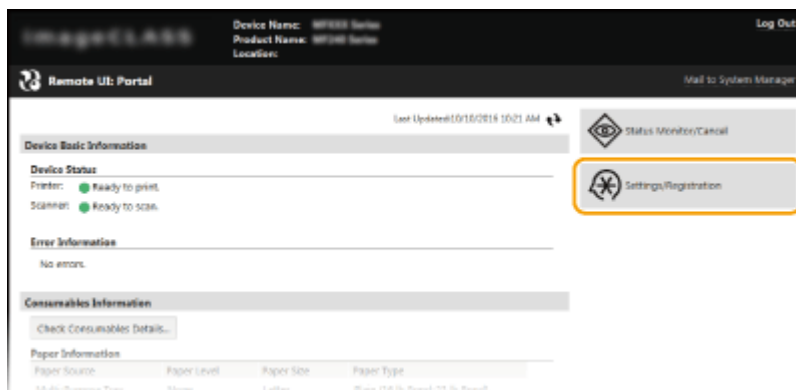


## Registering the Machine with Google Cloud Print

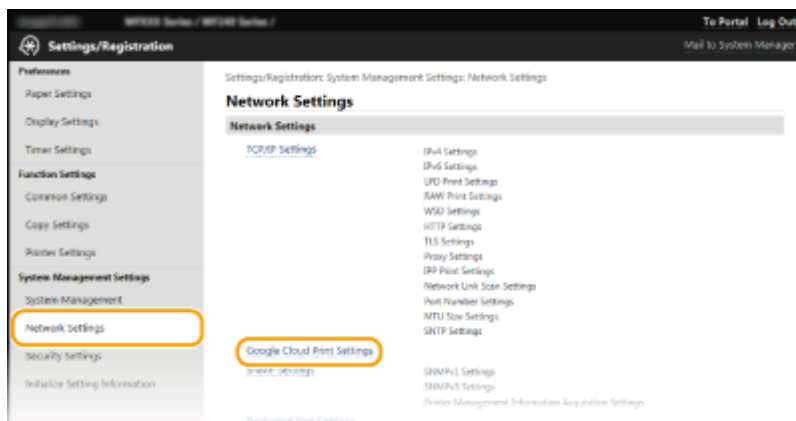
Registering the machine with Google Cloud Print allows you to print from anywhere.

**1** Start the Remote UI and log on in System Manager Mode. **▶Starting Remote UI(P. 273)**

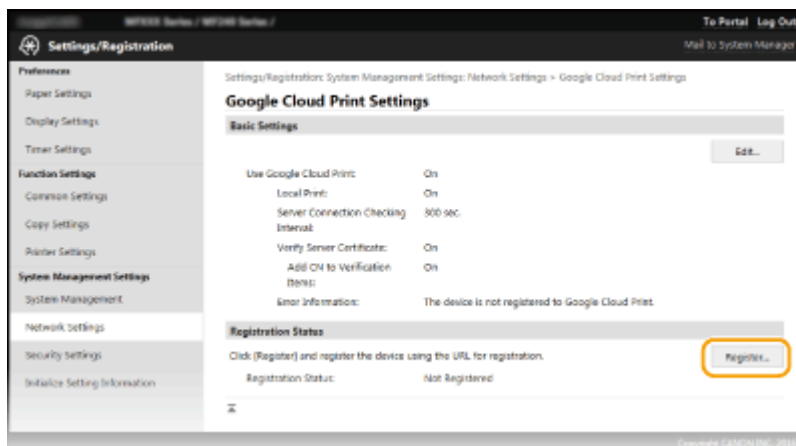
**2** Click [Settings/Registration].



**3** Click [Network Settings] ▶ [Google Cloud Print Settings].



#### 4 Click [Register] in [Registration Status].



#### NOTE:

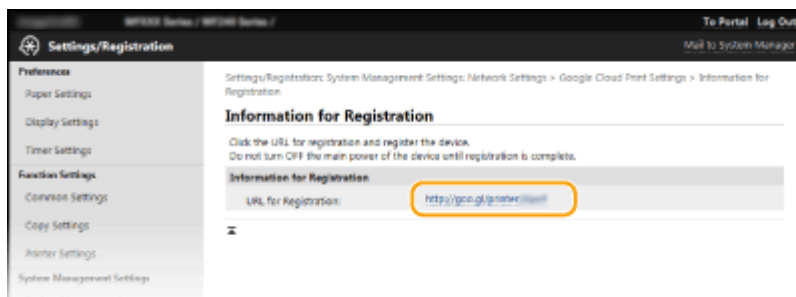
##### If [Register] is unavailable

- 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™.

#### NOTE:

- Access the Google Cloud Print website 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. Select <Yes> to complete the registration.



\* For the registration procedure, see the instruction manual for your mobile device or the Google Cloud Print website.



# Managing the Machine Remotely

15A8-037

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. Note that the Remote UI screen may not be displayed properly for some devices and environments.



## 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\(P. 194\)](#) ). 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 \(MF244dw / MF232w\)\(P. 272\)](#)

# Network (MF244dw / MF232w)

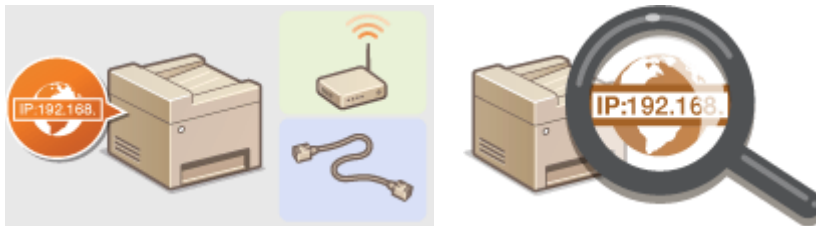
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<b>Configuring the Machine for Your Network Environment</b> .....	207
Configuring Ethernet Settings .....	208
Changing the Maximum Transmission Unit .....	210
Setting a Wait Time for Connecting to a Network .....	211
Configuring DNS .....	212
Configuring SNTP .....	216
Monitoring and Controlling the Machine with SNMP .....	218

## Network MF244dw / MF232w

15A8-038

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. 166)**

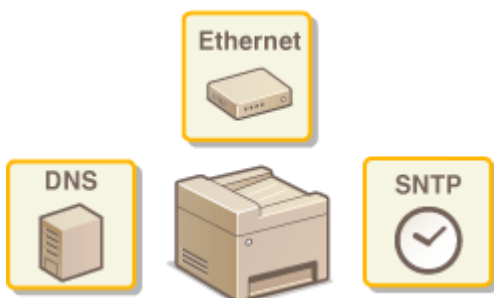
▶ **Viewing Network Settings(P. 194)**

### ■ Configuring or Preparing for Print/Scan Functions



▶ **Configuring the Machine for Printing from a Computer(P. 197)**

### ■ Customizing the Machine for More Convenient Network Experience



▶ **Configuring the Machine for Your Network Environment(P. 207)**

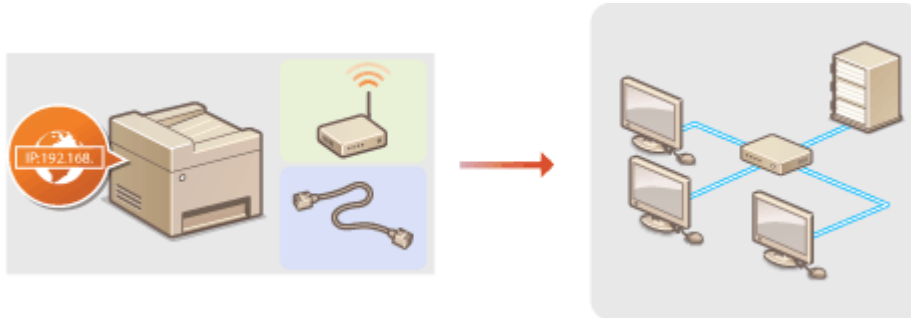
#### Direct Connection to a mobile device

- 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. 144)**

# Connecting to a Network

15A8-039

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 steps to connect the machine and set an IP address, see "Getting Started" ( **Manuals Included with the Machine(P. 425)** ). 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) ( **Configuring Ethernet Settings(P. 208)** ). 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. 194)**
  - ▶ **Viewing the MAC Address and Information for Wireless LAN(P. 195)**

- To connect to an IEEE 802.1X network, see ▶ **Configuring IEEE 802.1X Authentication(P. 252)**



2



**Select wired or wireless LAN.**

- ▶ **Selecting Wired LAN or Wireless LAN(P. 168)**



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. 169)**
- ▶ **Connecting to a Wireless LAN(P. 170)**



4



**Set the IP address as necessary.**

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

- ▶ **Setting IP Addresses(P. 187)**


## Selecting Wired LAN or Wireless LAN

15A8-03A

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. For how to connect to and specify settings for a wireless LAN/wired LAN, see "Getting Started" ( [Manuals Included with the Machine\(P. 425\)](#) ). Note that if you change the setting from <Wired LAN> to <Wireless LAN> or vice versa, you will need to uninstall MF Drivers installed on your computer and then reinstall them. For more information, see "MF Driver Installation Guide."

**1** Press .

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

- If a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press . [Setting the System Manager PIN\(P. 229\)](#)

**3** Select <Select Wired/Wireless LAN>, and press .

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

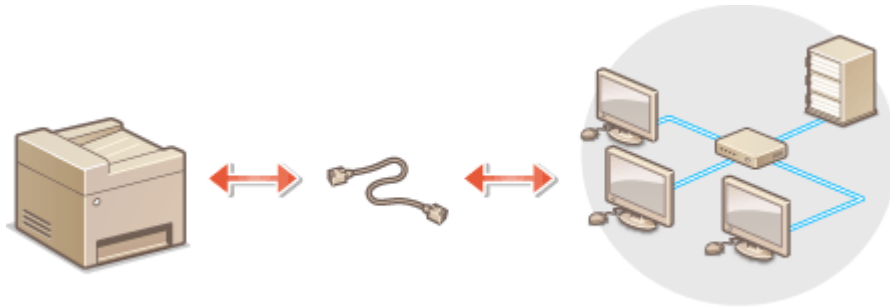


### LINKS

- [Connecting to a Network\(P. 166\)](#)
- [Connecting to a Wired LAN\(P. 169\)](#)
- [Connecting to a Wireless LAN\(P. 170\)](#)

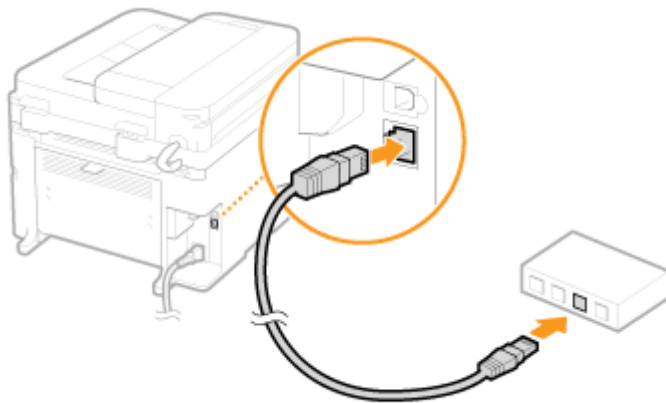
## Connecting to a Wired LAN

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\(P. 187\)](#)

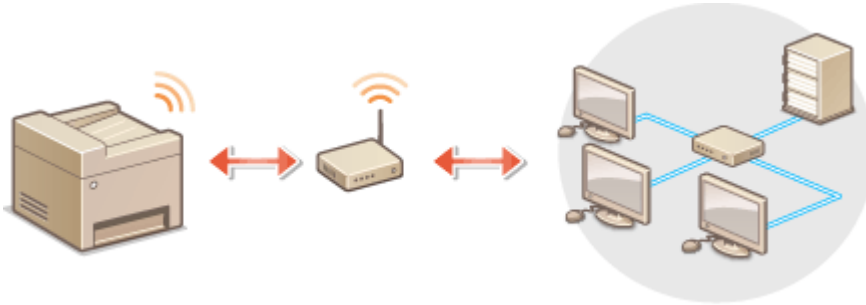
#### LINKS

[▶Connecting to a Network\(P. 166\)](#)

## Connecting to a Wireless LAN

15A8-03E

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. 170)**
- ▶ **Manually Setting Up Connection(P. 171)**

### 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\(P. 172\)](#)



## ■ 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\(P. 174\)](#)

### 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\(P. 184\)](#) ).

### ■ 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\(P. 177\)](#)

### ■ 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\(P. 180\)](#)

### LINKS

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[▶Connecting to a Network\(P. 166\)](#)

[▶Selecting Wired LAN or Wireless LAN\(P. 168\)](#)

# Setting Up Connection Using WPS Push Button Mode

15A8-03F



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 .

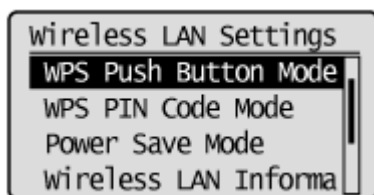
- If a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press .  **Setting the System Manager PIN(P. 229)**


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

- If the <Enable the wireless LAN?> message is displayed, select <Yes>, and press .
- If the <Direct Connection will be disabled. Is it OK?> message is displayed, select <Yes>, and press .

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


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



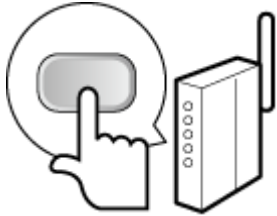
**6** Select <Yes>, and press .



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

The button must be pressed within 2 minutes after pressing  in 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.

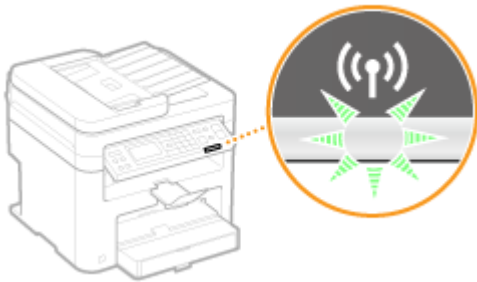
**NOTE:**

**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 \(P. 288\)](#)

**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\(P. 170\)](#)

# Setting Up Connection Using WPS PIN Code Mode

15A8-03H

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 .

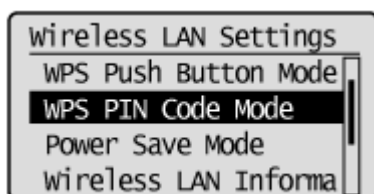
- If a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press .  **Setting the System Manager PIN(P. 229)**

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

- If the <Enable the wireless LAN?> message is displayed, select <Yes>, and press .
- If the <Direct Connection will be disabled. Is it OK?> message is displayed, select <Yes>, and press .

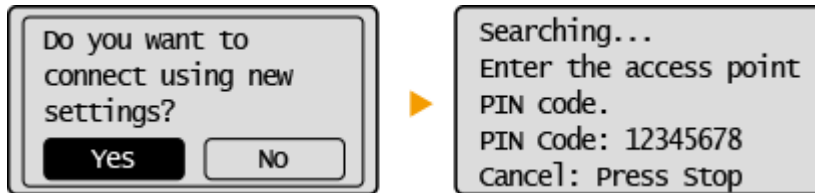
#### 5 Read the message that is displayed, and press .

#### 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 **OK** in step 7.

**NOTE:**

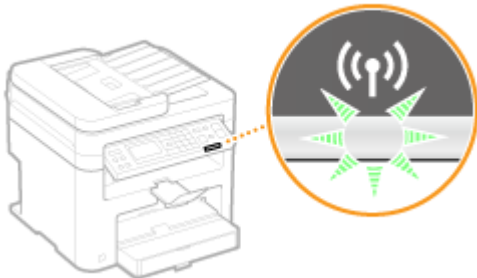
If an error message is displayed during setup

Press **OK** 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. 288)**

### 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. 170)**

## Setting Up Connection by Selecting a Wireless Router

15A8-03J

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 TKIP. 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. 184)**).


### 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. 180)**).

**1** Press .

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

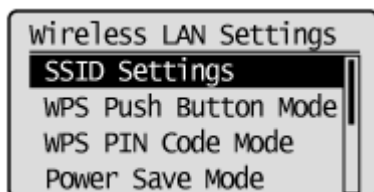
- If a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press . ▶ **Setting the System Manager PIN(P. 229)**

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

- If the <Enable the wireless LAN?> message is displayed, select <Yes>, and press .
- If the <Direct Connection will be disabled. Is it OK?> 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.



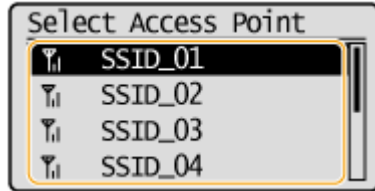
**NOTE:**

If <Cannot find the access point.> is displayed

See [▶When an Error Message Appears\(P. 347\)](#) .

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

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

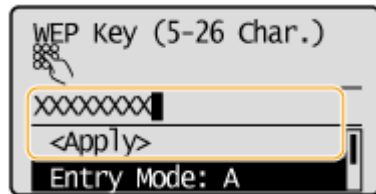
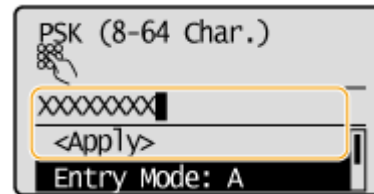
**NOTE:**

If your wireless router is not found

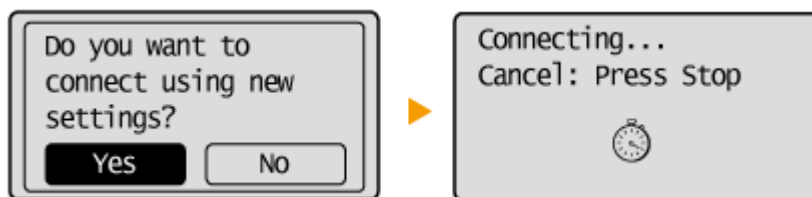
Check whether the machine is properly installed and ready to connect to the network. [▶Installation/Settings Problems\(P. 356\)](#)

## 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\(P. 35\)](#)

**WEP****WPA-PSK or WPA2-PSK**

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

**NOTE:**

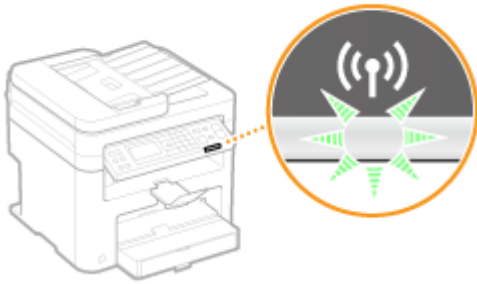
If an error message is displayed during setup

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. 288)**

**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. 170)**


## Setting Up Connection by Specifying Detailed Settings

15A8-03K



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\(P. 184\)](#) ).

**1** Press .

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

- If a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press . [▶Setting the System Manager PIN\(P. 229\)](#)


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

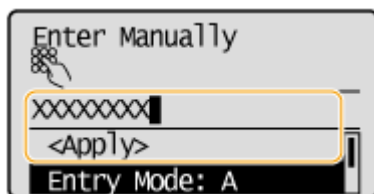
- If the <Enable the wireless LAN?> message is displayed, select <Yes>, and press .
- If the <Direct Connection will be disabled. Is it OK?> message is displayed, select <Yes>, and press .

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


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

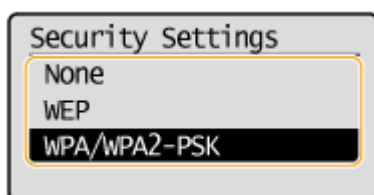
**6** Enter the SSID that you have written down.

- Enter the SSID using the numeric keys, select <Apply>, and press . [▶Entering Text\(P. 35\)](#)



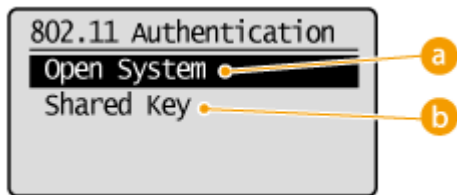
**7** Specify the security settings based on the information that you have written down.

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



## ■ Using WEP

- 1 Select <WEP>, and press **OK**.
- 2 Select an authentication method, and press **OK**.



### a <Open System>

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

### b <Shared Key>

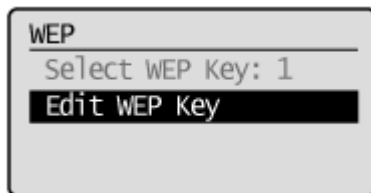
Uses the WEP key as a password.

### NOTE:

#### When <Open System> is selected

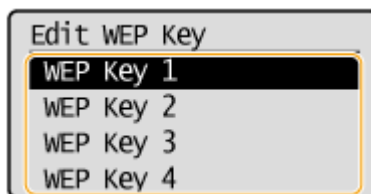
When connecting to a wireless LAN, the machine experiences an authentication error if the shared key authentication is set on the wireless router. If this happens, the machine automatically changes the setting to <Shared Key> and retries the connection.

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



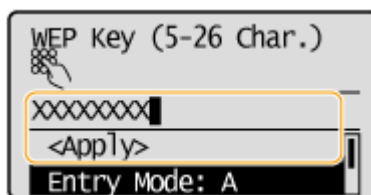
- 4 Select the WEP key (1 to 4) you want to edit, and press **OK**.

- 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, and select <Apply>, and press **OK**. **▶ Entering Text(P. 35)**

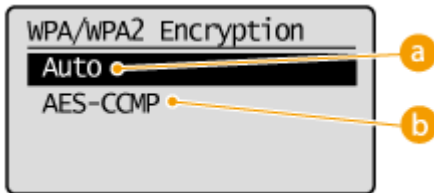


- 6 Select <Select WEP Key>, and press **OK**.

- 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**.



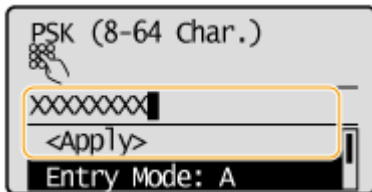
**a** <Auto>

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

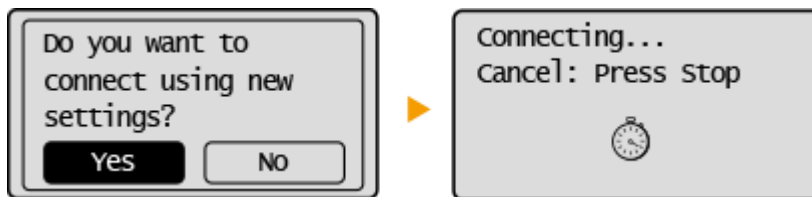
**b** <AES-CCMP>

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. 35)**



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



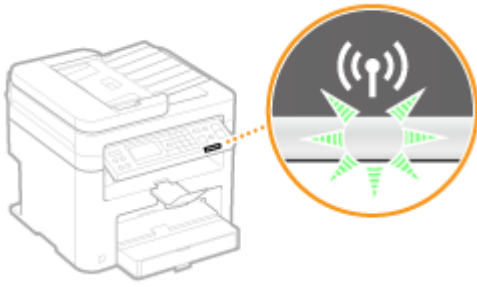
**NOTE:**

**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 \(P. 288\)](#)

**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\(P. 170\)](#)

## Checking the SSID and Network Key

15A8-03L

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

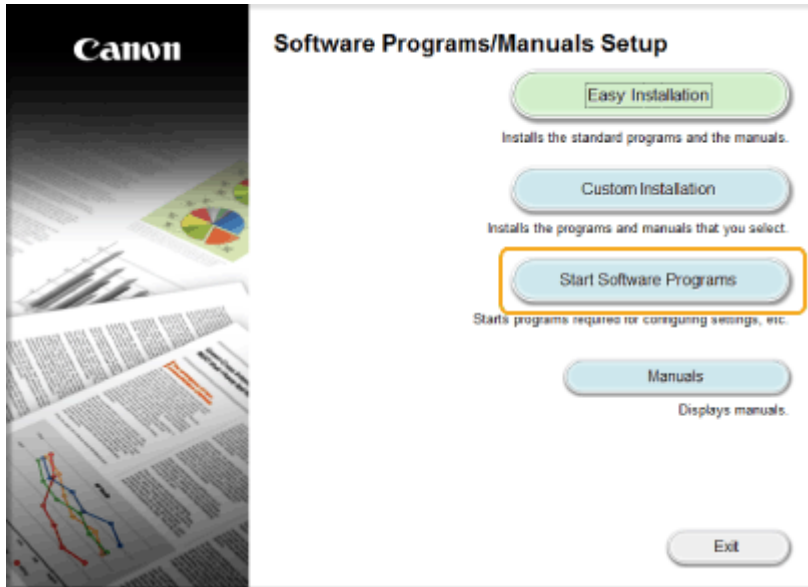
##### If you are a Mac OS user

The provided DVD-ROM that comes with the machine does not contain the Canon MF/LBP Wireless Setup Assistant for Mac OS. 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.

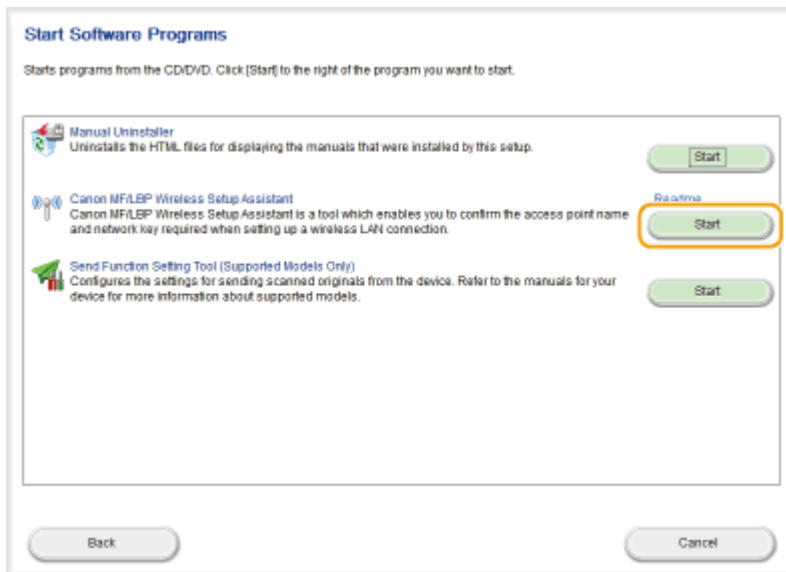
### 2 Click [Start Software Programs].



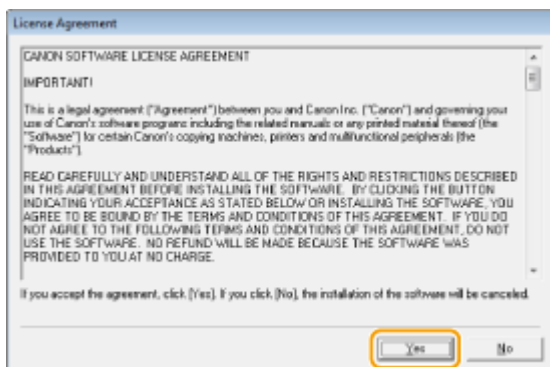
**NOTE:**

- If the above screen is not displayed ▶ **Displaying the [Software Programs/Manuals Setup] Screen(P. 435)**
- If [AutoPlay] is displayed, click [Run MInst.exe].

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

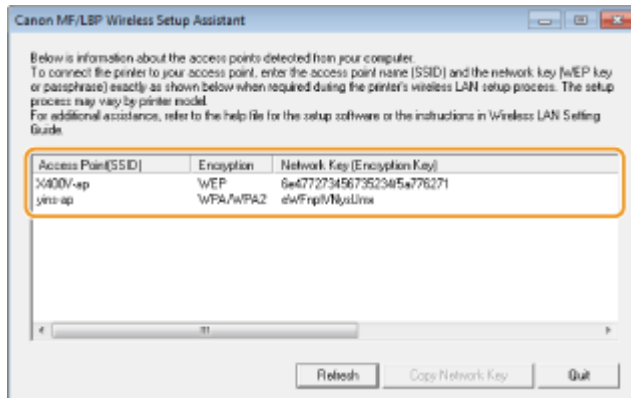


**4 Read the License Agreement and click [Yes] to agree.**



## 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

---

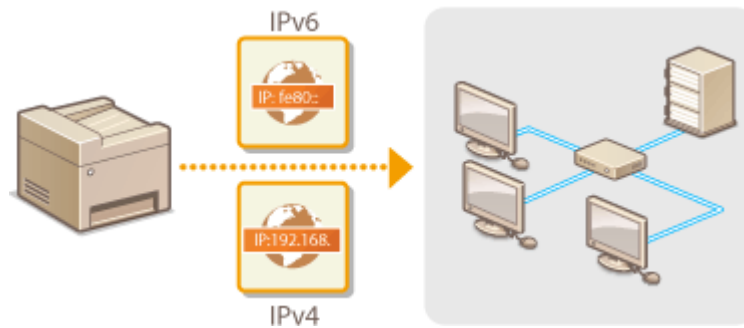
- ▶ [Connecting to a Wireless LAN\(P. 170\)](#)
- ▶ [Setting Up Connection by Selecting a Wireless Router\(P. 177\)](#)
- ▶ [Setting Up Connection by Specifying Detailed Settings\(P. 180\)](#)



## Setting IP Addresses

15A8-03R

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

15A8-03S



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. 169)** ). You can test the network connection if necessary.

▶ **Setting IPv4 Address(P. 188)**

▶ **Testing the Network Connection(P. 190)**

## Setting IPv4 Address

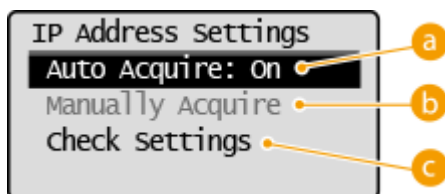
**1** Press .

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

- If a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press **OK**. ▶ **Setting the System Manager PIN(P. 229)**

**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 a protocol such as DHCP. When **<Auto Acquire: On>** is displayed, automatic addressing is enabled.

**b** **<Manually Acquire>**

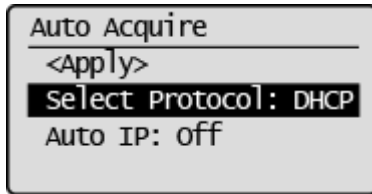
Select to configure the IP address settings by manually entering an IP address. In order to select this option, **<Auto Acquire>** must be set to **<Off>**.

**c** **<Check Settings>**

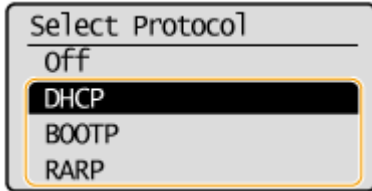
Select when you want to view the current IP address settings.

### ■ **Automatically assigning an IP address**

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



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



**NOTE:**

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

Select <Off>. If you select <DHCP>, <BOOTP>, or <RARP> when these services are unavailable, the machine will waste time and communications resources searching the network for these services.

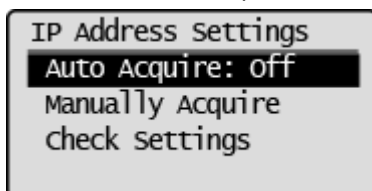
- 3 Check that <Auto IP> is set to <On>.
- If <Off> is selected, change the setting to <On>.
- 4 Select <Apply>, and press **OK**.

**NOTE:**

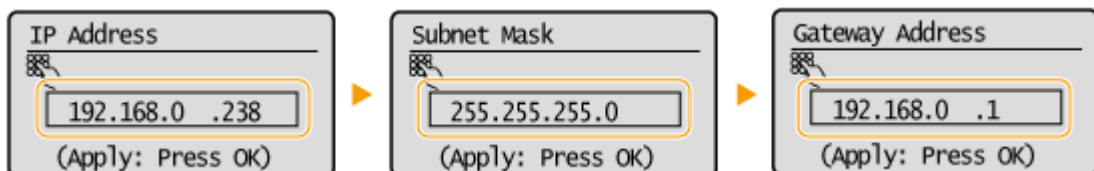
IP addresses assigned via DHCP/BOOTP/RARP override the address obtained via Auto IP.

**Manually entering an IP address**

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



- If <On> is displayed, select <Auto Acquire>, 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** on each screen.



**NOTE**


### Checking whether the settings are correct

Make sure that the Remote UI screen can be displayed with your computer ( [▶Starting Remote UI\(P. 273\)](#) ). If a computer is not available, you can check the connection by using the operation panel ( [▶Testing the Network Connection\(P. 190\)](#) ).

## Testing the Network Connection

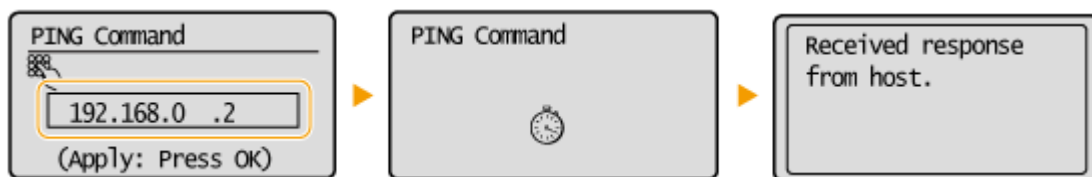
**1** Press .

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

- If a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press . [▶Setting the System Manager PIN\(P. 229\)](#)

**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\(P. 191\)](#)

[▶Viewing Network Settings\(P. 194\)](#)

# Setting IPv6 Addresses

15A8-03U

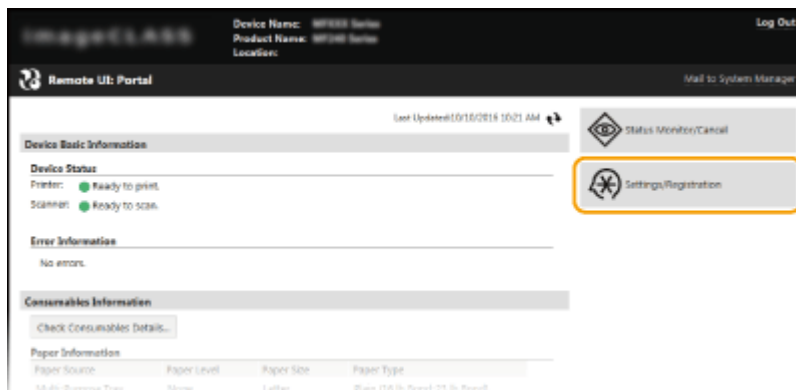


The IPv6 addresses of the machine can be configured via the Remote UI. Before setting IPv6 addresses, check the IPv4 address settings ( [▶ Viewing IPv4 Settings\(P. 194\)](#) ). You need to set the correct IPv4 settings to use IPv6 addresses. Note that the scan function that uses the scanner driver or MF Scan Utility is not available in an IPv6 environment. The machine can use up to nine of the following IPv6 addresses:

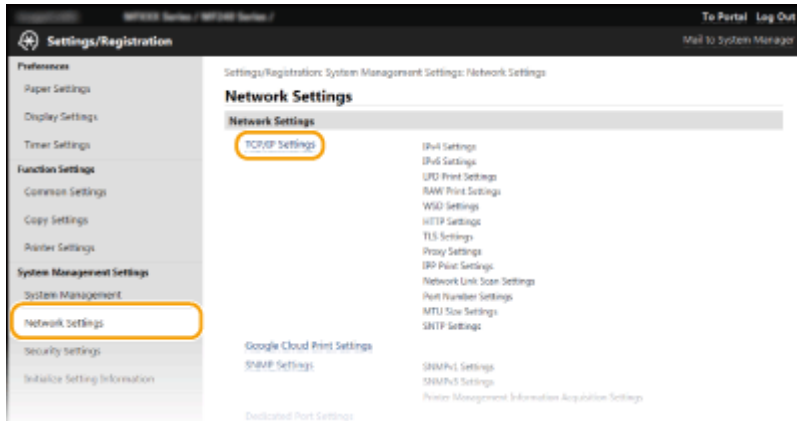
Type	Maximum number available	Description
Link-local address	1	An address that is only valid within a subnet or link and cannot be used to communicate with devices beyond a router. A link-local address is automatically set when the IPv6 function of the machine is enabled.
Manual address	1	An address 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\(P. 273\)](#)**

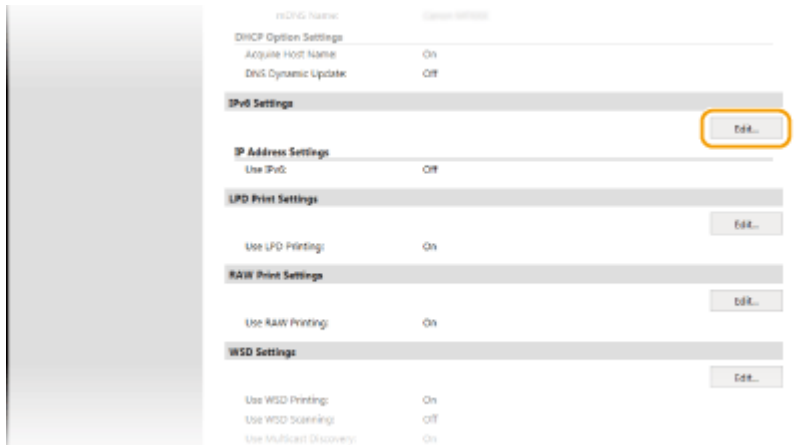
**2 Click [Settings/Registration].**



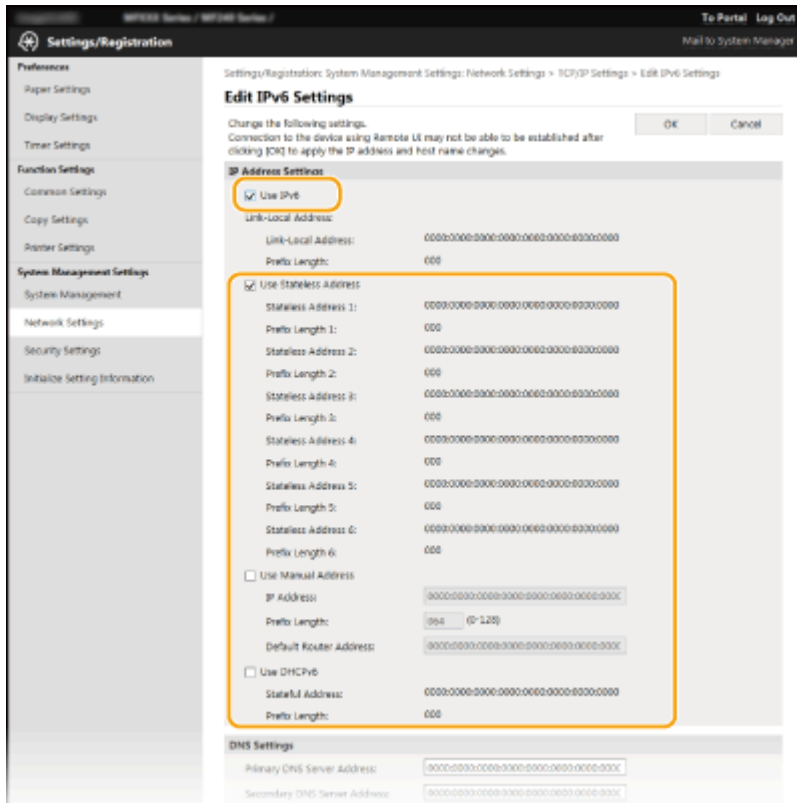
**3 Click [Network Settings] ▶ [TCP/IP Settings].**



**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.

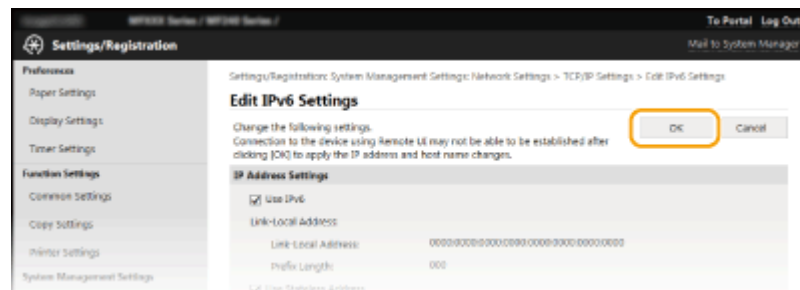
**[Default Router Address]**

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].



## 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. 273)**

### Using the operation panel

IPv6 settings can also be accessed from <Menu> screen. ▶ **IPv6 Settings(P. 291)**

## LINKS

▶ **Setting IPv4 Address(P. 188)**

▶ **Viewing Network Settings(P. 194)**

## Viewing Network Settings

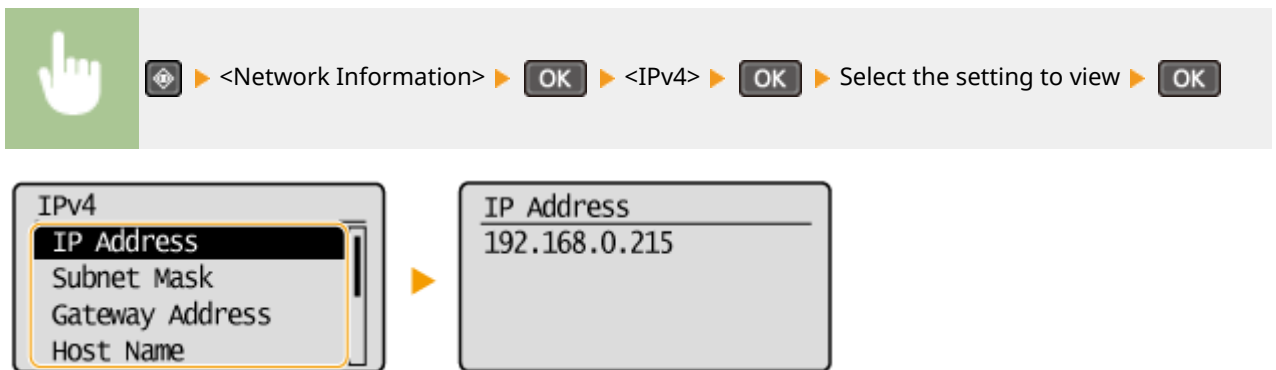
15A8-03W

- ▶ Viewing IPv4 Settings(P. 194)
- ▶ Viewing IPv6 Settings(P. 194)
- ▶ Viewing the MAC Address for Wired LAN(P. 194)
- ▶ Viewing the MAC Address and Information for Wireless LAN(P. 195)

### 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. 211)**
- You can print a list of the current network settings. ▶ **Output Reports(P. 297)**

### Viewing IPv4 Settings



### Viewing IPv6 Settings



### Viewing the MAC Address for Wired LAN

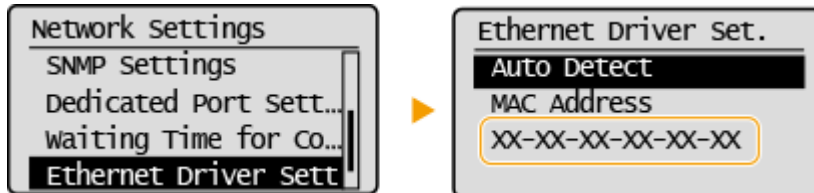
1 Press .



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

- If a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press **OK**. **▶ Setting the System Manager PIN(P. 229)**

**3** Select <Ethernet Driver Settings>, and press **OK**.



## Viewing the MAC Address and Information for Wireless LAN

**1** Press **ⓘ**.

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

- If a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press **OK**. **▶ Setting the System Manager PIN(P. 229)**

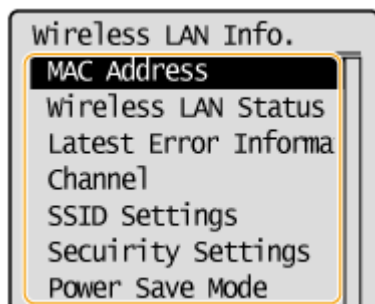
**3** Select <Wireless LAN Settings>, and press **OK**.

- If the <Enable the wireless LAN?> message is displayed, select <Yes>, and press **OK**.
- If the <Direct Connection will be disabled. Is it OK?> message is displayed, select <Yes>, and press **OK**.

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

**5** Select <Wireless LAN Information>, and press **OK**.

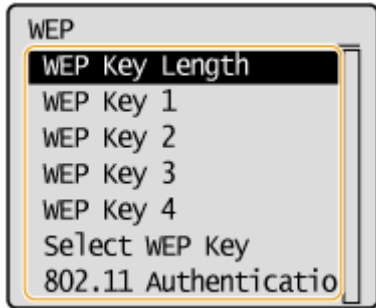
**6** Select the setting to view, and press **OK**.



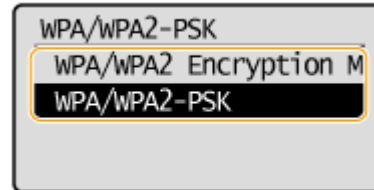
## ■ Viewing WEP and WPA/WPA2-PSK information

- 1 Select <Security Settings>, and press **OK**.
- 2 Confirm and select 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> and select the setting to view.

## LINKS

- ▶ [Connecting to a Wireless LAN\(P. 170\)](#)
- ▶ [Setting IPv4 Address\(P. 188\)](#)
- ▶ [Setting IPv6 Addresses\(P. 191\)](#)
- ▶ [Configuring DNS\(P. 212\)](#)

## Configuring the Machine for Printing from a Computer

15A8-03X

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 "MF 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

15A8-03Y

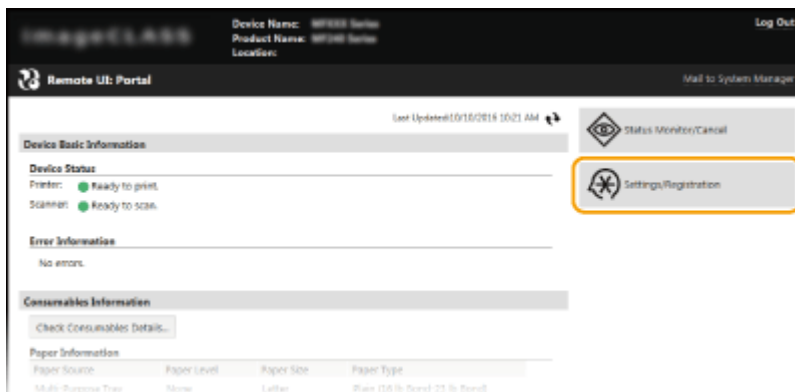
Configure the protocols that are used for printing documents from a networked computer. The protocols supported by the machine include LPD, RAW, and WSD (Web Services on Devices).

## NOTE

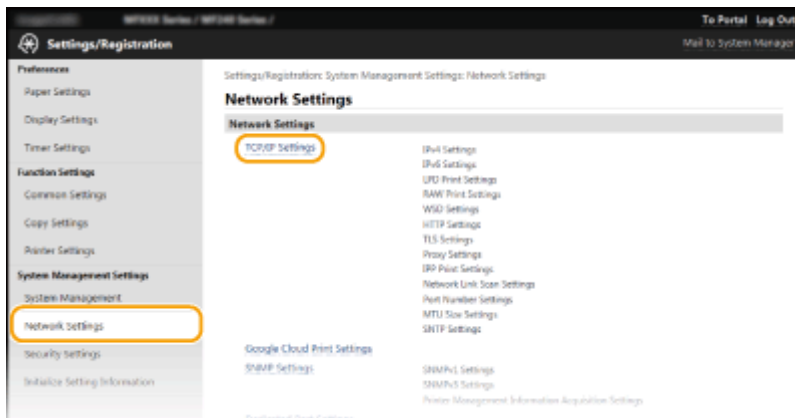
To change protocols' port numbers, see [▶ Changing Port Numbers \(MF244dw / MF232w\)\(P. 241\)](#).

**1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 273)**

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



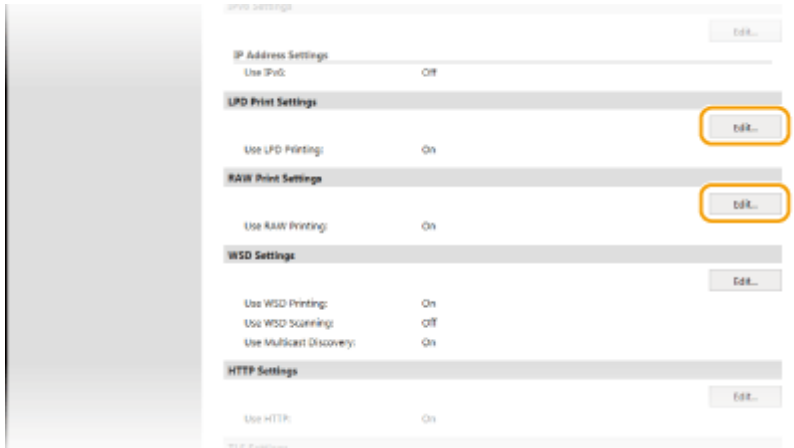
**3 Click [Network Settings] ▶ [TCP/IP Settings].**



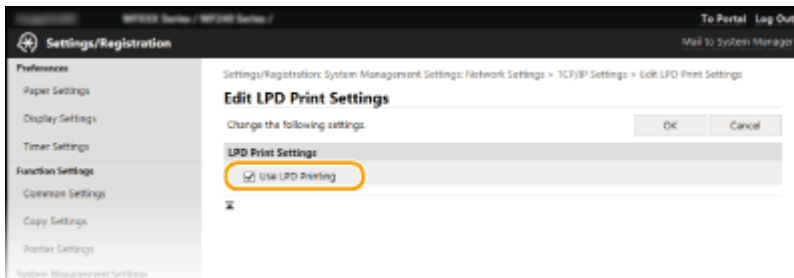
**4 Configure printing protocols.**

### ■ Configuring LPD or RAW

**1** Click [Edit] in [LPD Print Settings] or [RAW Print 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.

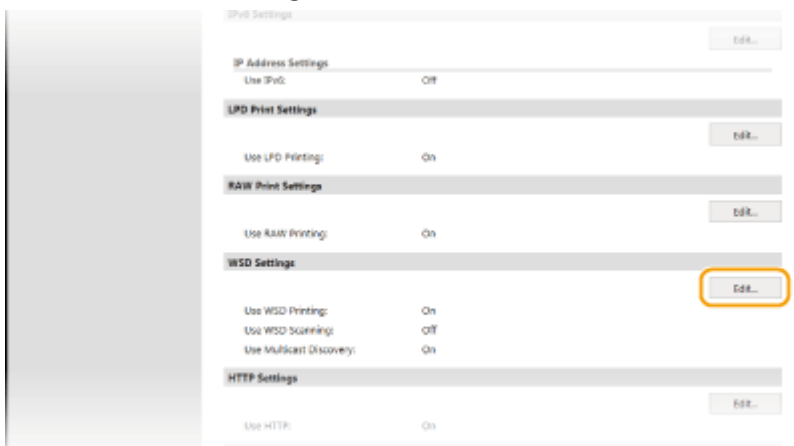
**[Use RAW Printing]**

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

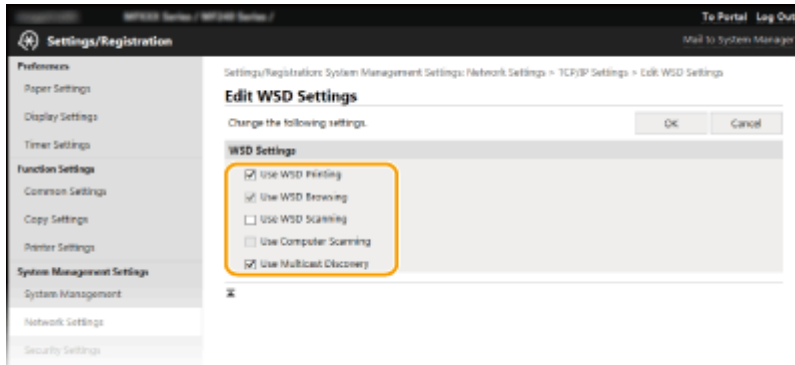
3 Click [OK].

**■ 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 WSD Scanning]

Available for Windows Vista/7/8/10, WSD scanning enables you to scan documents to a computer without installing the scanner driver. Select the check box to scan documents via WSD. When not using WSD scanning, clear the check box.

### [Use Computer Scanning]

Select the check box to use WSD scanning by operating the machine with the operation panel. This check box can only be selected when the [Use WSD Scanning] check box is selected. To perform scanning, press  (COPY/SCAN) and specify a WSD-connected computer as a scan destination (  **Scanning from the Machine(P. 130)** ).

### [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].


## NOTE

### Using the operation panel

- LPD, RAW, and WSD settings can also be accessed from <Menu> screen.

- ▶ **LPD Print Settings(P. 293)**
- ▶ **RAW Print Settings(P. 293)**
- ▶ **WSD Settings(P. 293)**

### Setting up WSD network devices on Windows Vista/7/8/10

- The WSD printer and scanner can be added from the printer folder. Open the printer folder (  **Displaying the Printer Folder(P. 434)** ) ▶ click [Add a device] or [Add a printer] and follow the on-screen instructions. For more information about how to install MF Drivers for the WSD network printer, see "MF Driver Installation Guide."

## LINKS

- ▶ **Configuring Printer Ports(P. 201)**

# Configuring Printer Ports

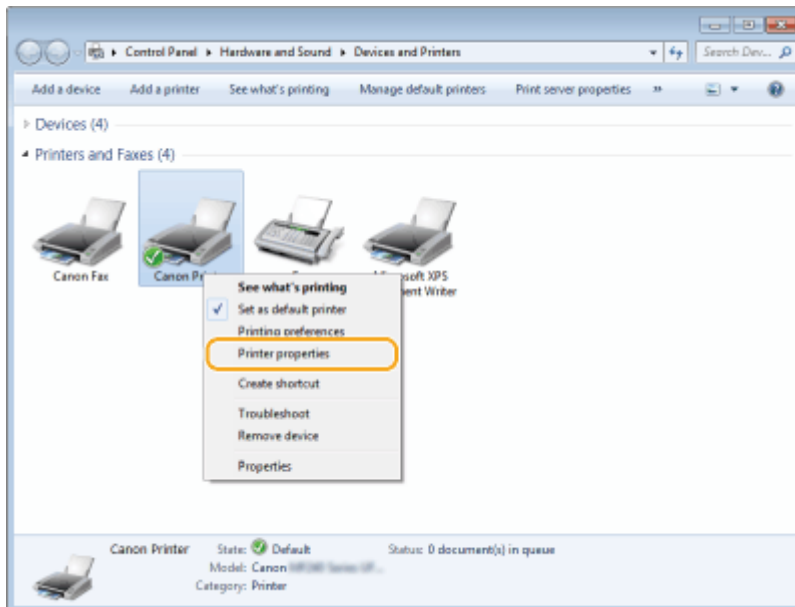
15A8-040

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.

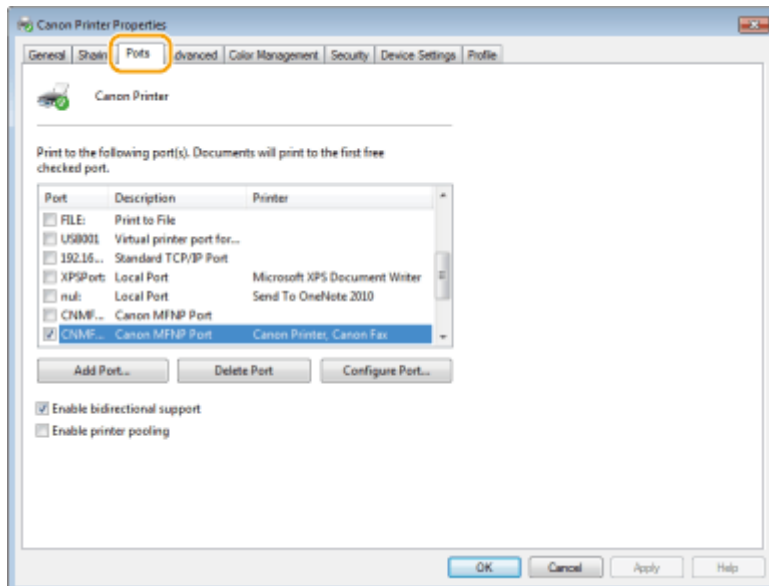
## IMPORTANT

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

- 1 Open the printer folder. ▶ **Displaying the Printer Folder(P. 434)**
- 2 Right-click your printer icon and click [Printer properties] (or [Properties]).



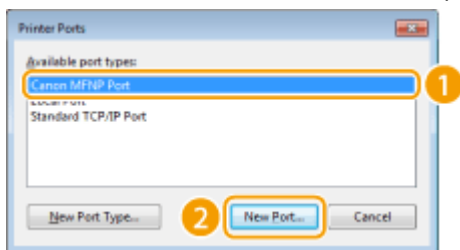
- 3 Click the [Ports] tab and configure the required settings.



### ■ Adding a port

If the IP address of the machine has been changed, add a new port. Adding a port is also an effective solution when an incorrect port type was selected in the Windows printer folder during the printer driver installation.

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



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

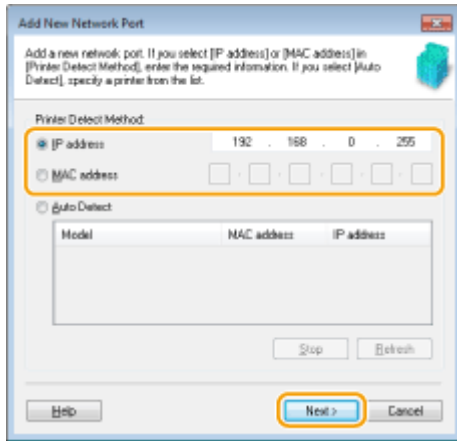


#### NOTE:

##### If the machine is not detected

Click [Refresh]. If the problem persists, click [IP address] or [MAC address], enter the IP address or MAC address of the machine ( ▶ **Viewing Network Settings(P. 194)** ), and then click [Next].





4 Click [Add] ► [Finish].

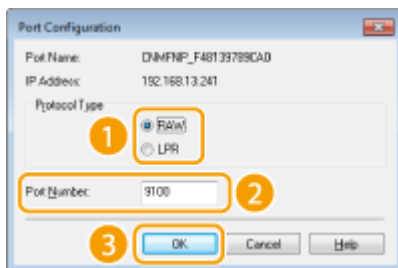
5 Click [Close].

### ■ Changing the port type or number

If the printing protocols ( ► [Configuring Printing Protocols and WSD Functions\(P. 198\)](#) ) or port numbers ( ► [Changing Port Numbers \(MF244dw / MF232w\)\(P. 241\)](#) ) have been changed on the machine, the corresponding settings on the computer must also be configured. This change is only available for LPR or RAW ports.

1 Click [Configure Port].

2 Click the [LPR] or [RAW] radio button in [Protocol Type], change the number in the [Port Number] text box as necessary, and then click [OK].



4 Click [Close].

## LINKS

► [Setting Up Print Server\(P. 204\)](#)

# Setting Up Print Server

15A8-041

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 MF Drivers over the network, which saves you the trouble of installing the drivers on each computer by using the provided 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.

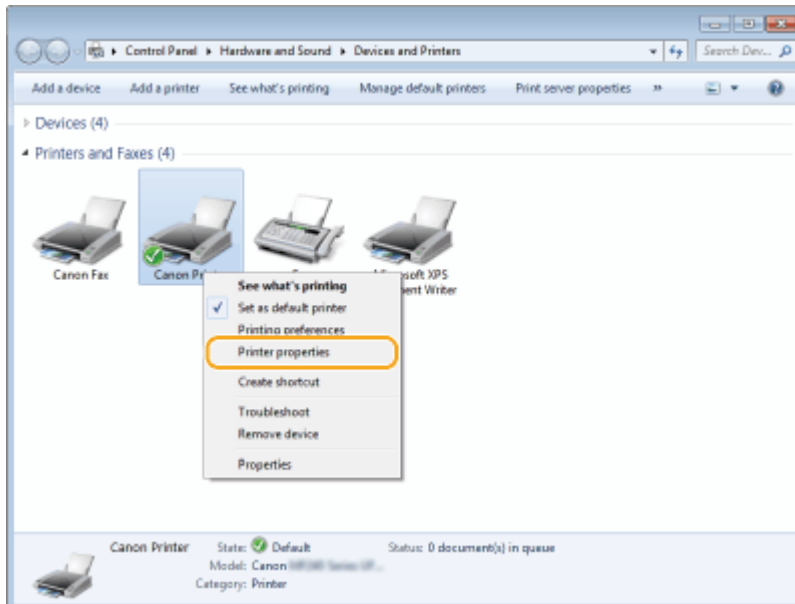
## NOTE

### To obtain device information when using a print server

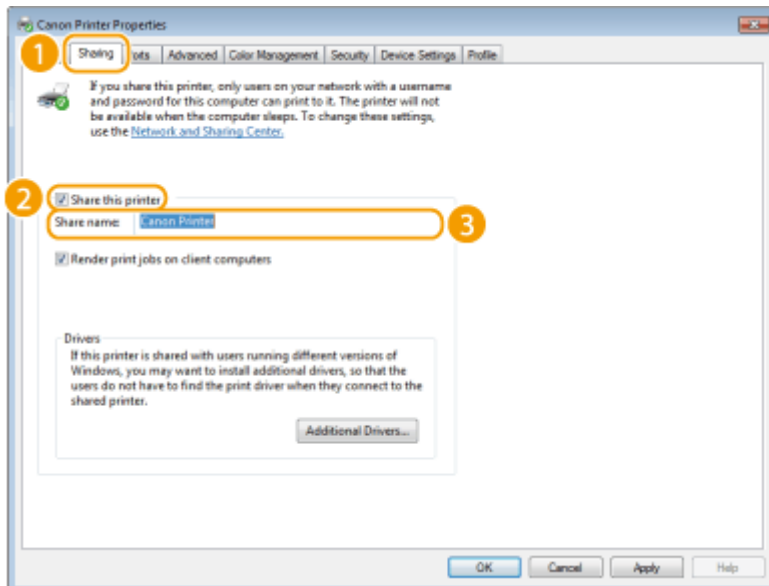
- Canon Driver Information Assist Service must be added during the printer driver installation. For more information, see "MF Driver Installation Guide."

**1** Open the printer folder. ▶ **Displaying the Printer Folder(P. 434)**

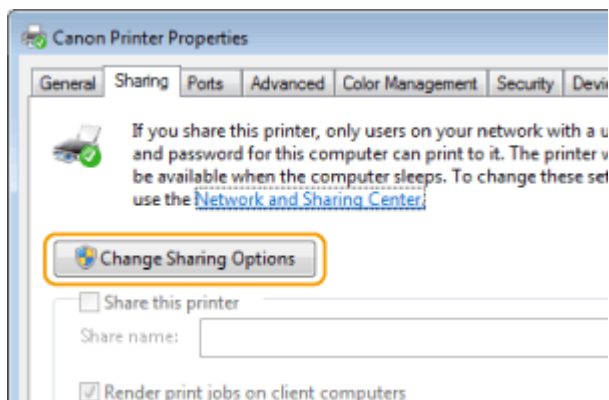
**2** Right-click your printer icon and click [Printer properties] (or [Properties]).



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

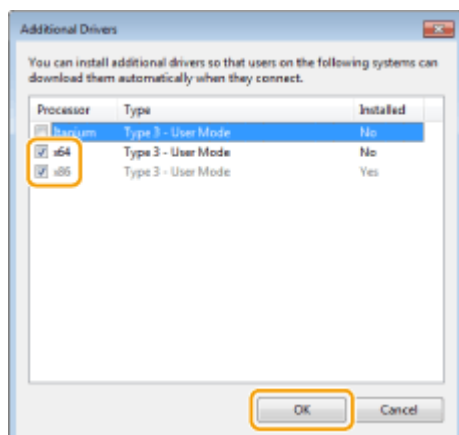
**NOTE:****When [Change Sharing Options] is displayed**

Click [Change Sharing Options]. If the [User Account Control] dialog box appears, click [Yes] (or [Continue]).

**4 Install additional drivers as necessary.**

- This operation is required if you want to install MF 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	[x86] under [Processor]

**NOTE:**

If you do not know whether your Windows Vista/7/8/10/Server 2008/Server 2012 is a 32-bit or 64-bit operating system, see **▶Checking the Bit Architecture(P. 437)** .

- 3** Insert the provided DVD-ROM into the drive on the computer, click [Browse] to specify the folder that contains MF Drivers, and then click [OK].
  - \* Specify the folder for your language in [xxxx].
    - If the print server runs a 32-bit operating system, select [intdrv] ▶ [UFRII] or [PCL] ▶ [XXXX]\* ▶ [x64] ▶ [Driver] folders on the provided DVD-ROM.
    - If the print server runs a 64-bit operating system, select [intdrv] ▶ [UFRII] or [PCL] ▶ [XXXX]\* ▶ [32bit] ▶ [Driver] folders on the provided DVD-ROM.
- 4** Follow the on-screen instructions to install the drivers.

**5** Click [OK].**■ Installing MF 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. 435)**
- 2** Double-click the shared printer.
- 3** Follow the on-screen instructions to install the drivers.

**LINKS**

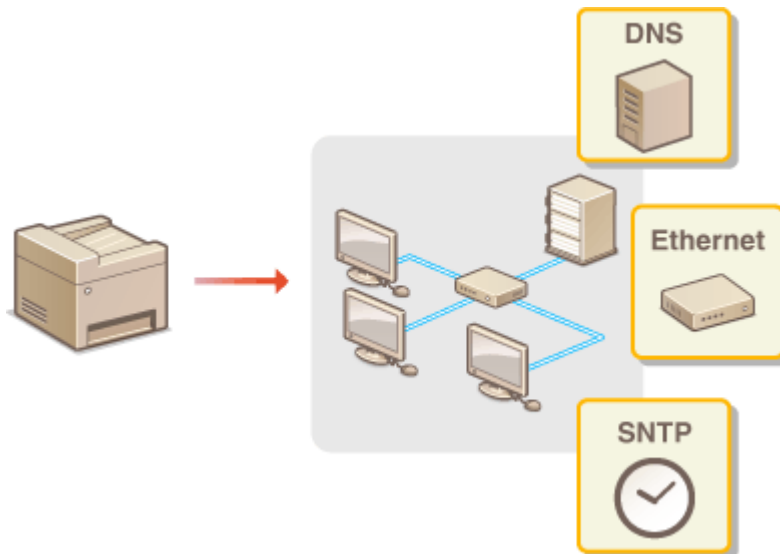
**▶Printing from a Computer(P. 86)**

# Configuring the Machine for Your Network Environment

---

15A8-042

The configuration of a network varies depending on the purpose of the network. Specify the settings necessary to suit your network environment.



# Configuring Ethernet Settings

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). In general, the machine can be used without changing the defaults ( **▶ Ethernet Driver Settings(P. 296)** ), but you can change these settings to suit your network environment.

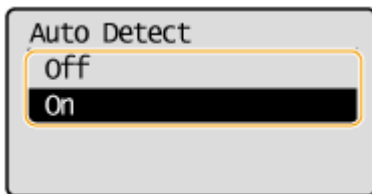
**1** Press .

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

- If a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press **OK**. **▶ Setting the System Manager PIN(P. 229)**

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

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



## ■ Configuring Ethernet settings automatically

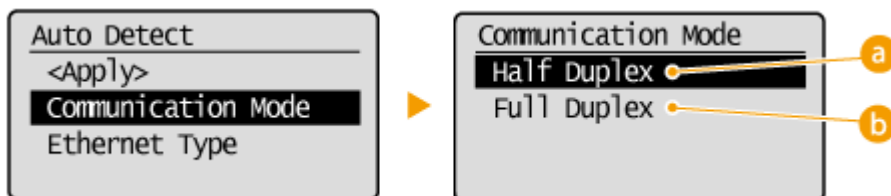
Select **<On>**, and press **OK**. The machine detects and automatically sets the communication mode and the Ethernet type that can be used.

## ■ Configuring Ethernet settings manually

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

**2** Select the communication mode.

- Select **<Communication Mode>** ▶ **OK** ▶ select **<Half Duplex>** or **<Full Duplex>** ▶ **OK**.



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

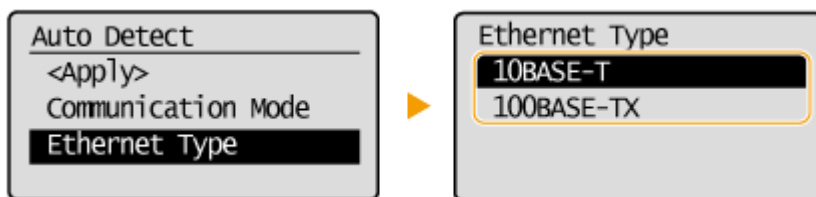
Alternately sends and receives communication data. Select when the machine is connected to a networking device using half duplex.

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

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

**3** Select the Ethernet type.

- Select <Ethernet Type> ► **OK** ► select <10BASE-T> or <100BASE-TX> ► **OK** .

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

---

- ◉ [Changing the Maximum Transmission Unit\(P. 210\)](#)
- ◉ [Setting a Wait Time for Connecting to a Network\(P. 211\)](#)

# Changing the Maximum Transmission Unit



---

15A8-044

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.

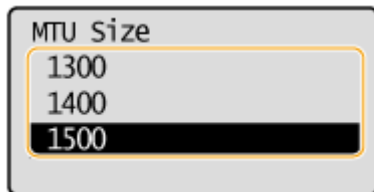
**1** Press .

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

- If a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press .  **Setting the System Manager PIN(P. 229)**

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

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



## LINKS

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-  **Configuring Ethernet Settings(P. 208)**
-  **Setting a Wait Time for Connecting to a Network(P. 211)**





## Setting a Wait Time for Connecting to a Network

15A8-045

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 .

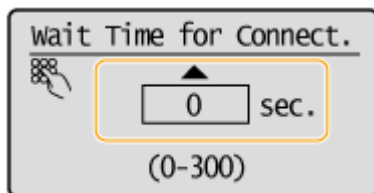
**2** Use ▲ / ▼ to select <Network Settings>, and press .

- If a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press .  **Setting the System Manager PIN(P. 229)**

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

**4** Enter the wait time in seconds, and press .

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



### LINKS

-  **Configuring Ethernet Settings(P. 208)**
-  **Changing the Maximum Transmission Unit(P. 210)**

# Configuring DNS

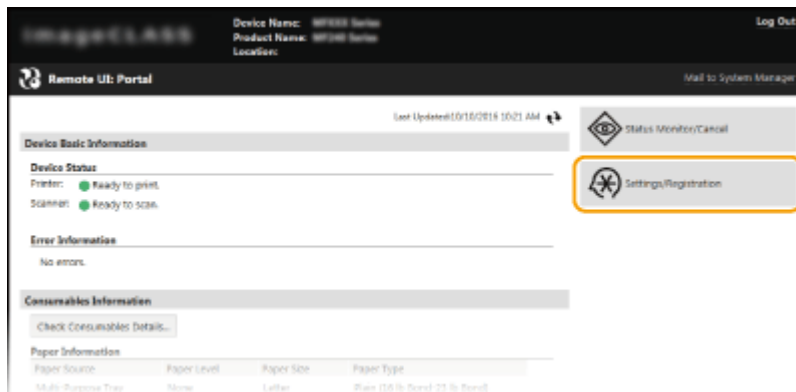
15A8-046

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.

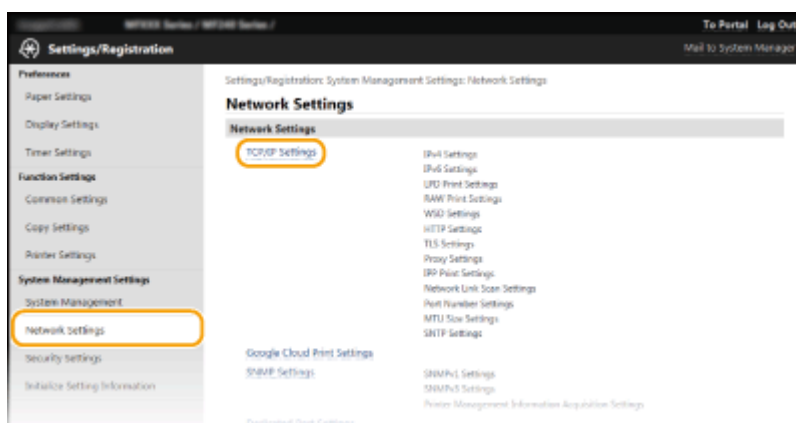


**1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 273)**

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



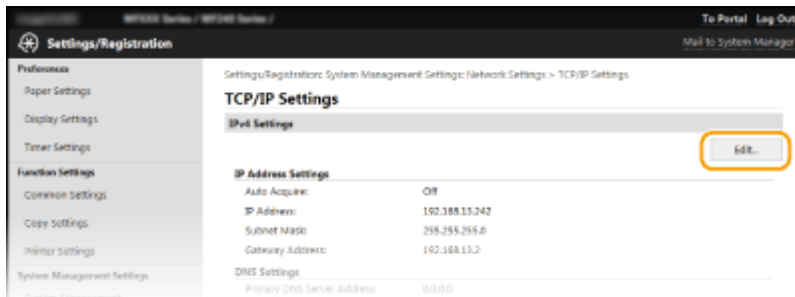
**3 Click [Network Settings] ▶ [TCP/IP Settings].**



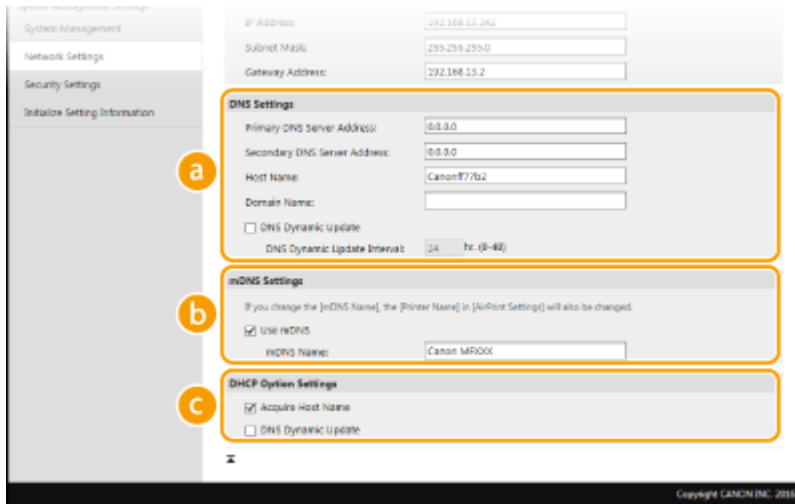
**4 Configure DNS settings.**

## ■ 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]

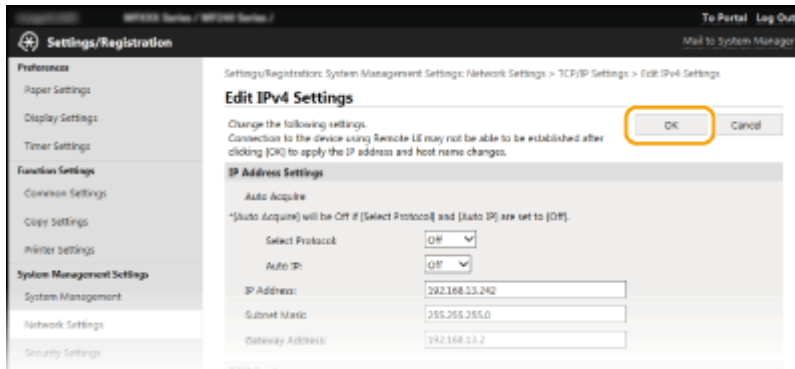
#### [Acquire Host Name]

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

#### [DNS Dynamic Update]

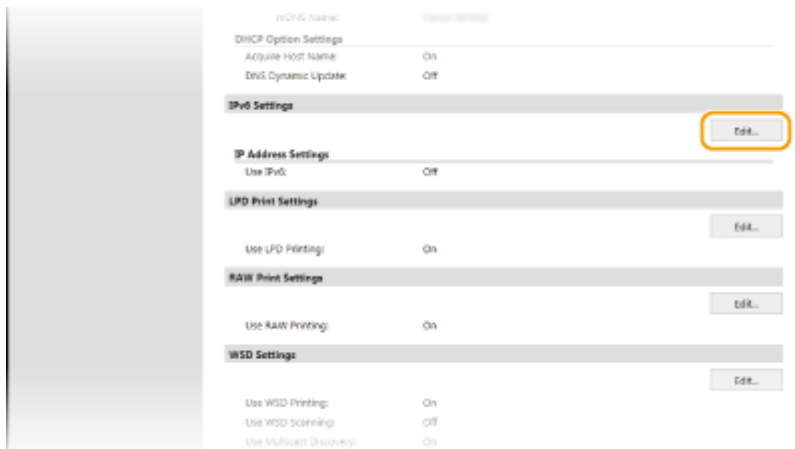
Select the check box to enable Option 81 to dynamically update the DNS records through the DHCP server.

3 Click [OK].



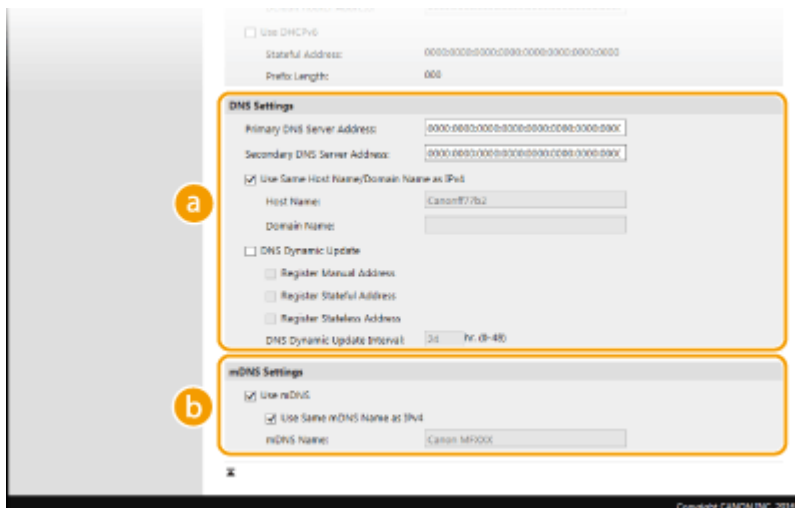
## ■ Configuring IPv6 DNS

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. 191)**



**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]**

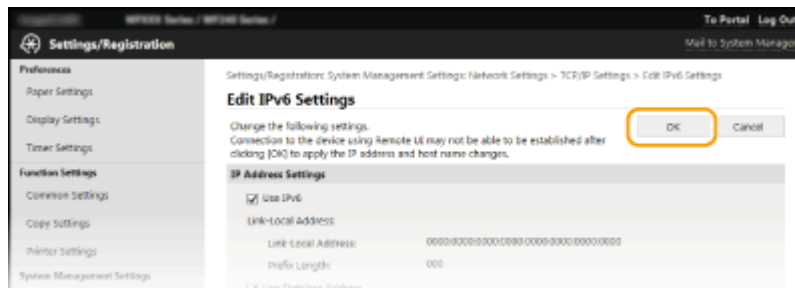
Select the check box to dynamically update the DNS records whenever the machine's IP address is changed. To specify the type(s) of addresses you want to register to the DNS server, select the check box for [Register Manual Address], [Register Stateful Address], or [Register Stateless Address]. To specify 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.

**3** Click [OK].**NOTE****Using the operation panel**

DNS settings can also be accessed from <Menu> screen. [▶IPv4 Settings\(P. 290\)](#) [▶IPv6 Settings\(P. 291\)](#)

**LINKS**

- [▶Setting IPv4 Address\(P. 188\)](#)
- [▶Setting IPv6 Addresses\(P. 191\)](#)
- [▶Viewing Network Settings\(P. 194\)](#)

# Configuring SNTP

15A8-047

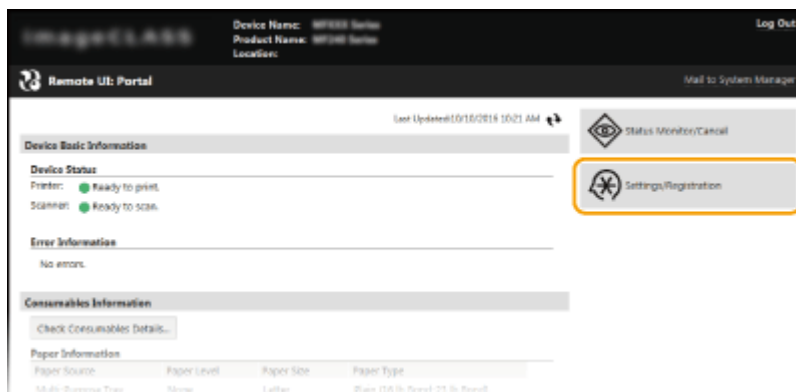


Simple Network Time Protocol (SNTP) enables you to adjust the system clock by using the time server on the network. The protocol is typically used for synchronizing the machine and a server. The time is adjusted based on Coordinated Universal Time (UTC), so specify the time zone setting before configuring SNTP ( [▶Date/Time Settings\(P. 303\)](#) ). SNTP settings can be specified via the Remote UI.

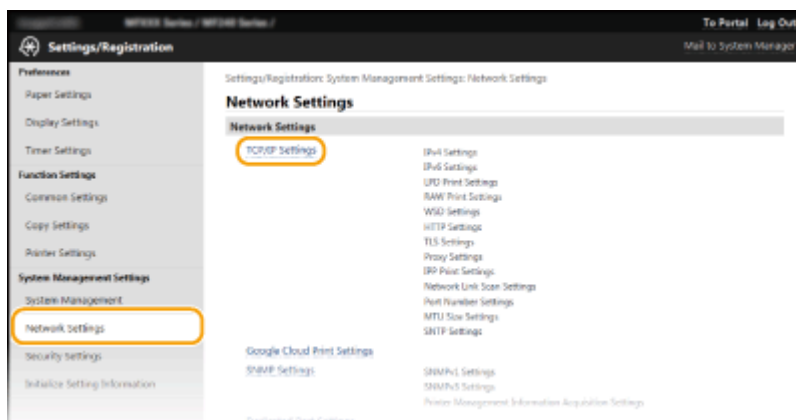
## NOTE

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

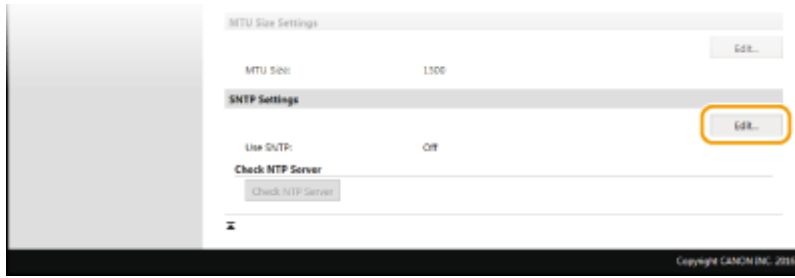
- 1 Start the Remote UI and log on in System Manager Mode. [▶Starting Remote UI\(P. 273\)](#)
- 2 Click [Settings/Registration].



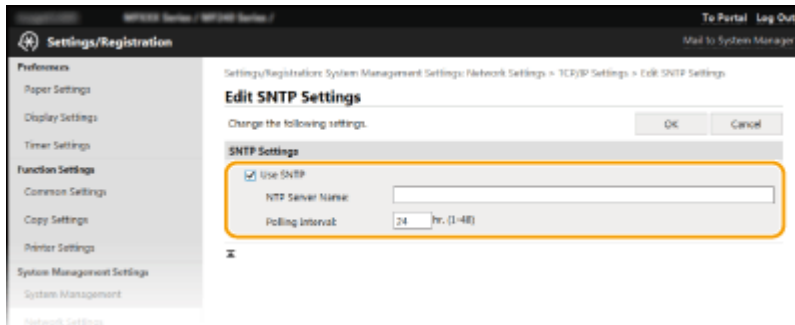
- 3 Click [Network Settings] ▶ [TCP/IP Settings].



- 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]

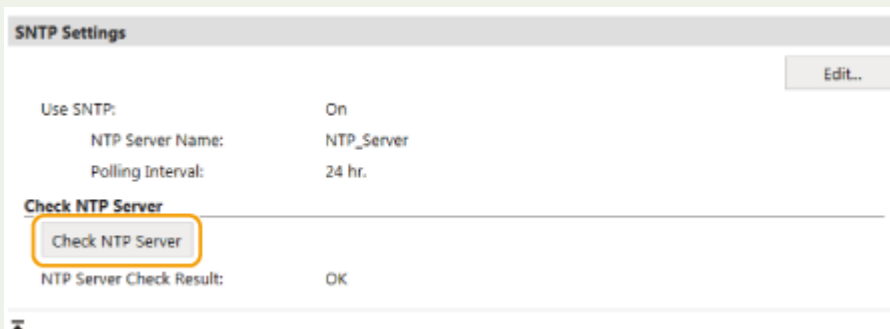
Specify the interval between one synchronization and the next. Specify an interval from 1 to 48 hours.

## 6 Click [OK].

## NOTE

### Testing communication with the NTP/SNTP server

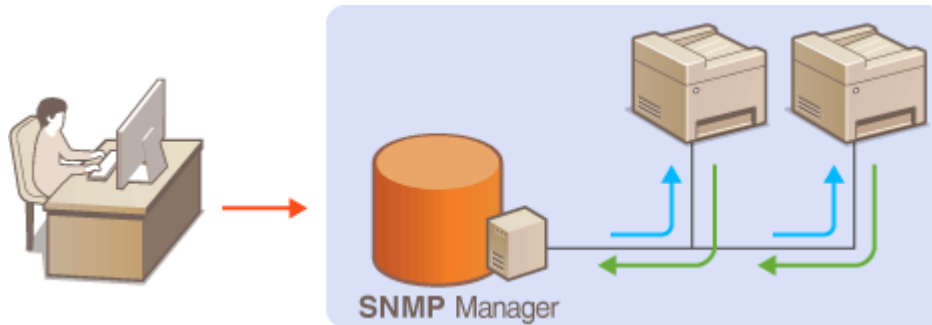
- You can view communication status with the registered server by clicking [Settings/Registration] ► [Network Settings] ► [TCP/IP Settings] and then clicking [Check NTP Server] in [SNTP Settings] that appears. If a proper connection has been established, the result is displayed as shown below. Note that this operation does not adjust the system clock.



# Monitoring and Controlling the Machine with SNMP

15A8-048

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 TLS must be enabled for the Remote UI before configuring SNMPv3 ( [▶Enabling TLS Encrypted Communication for the Remote UI\(P. 249\)](#) ).

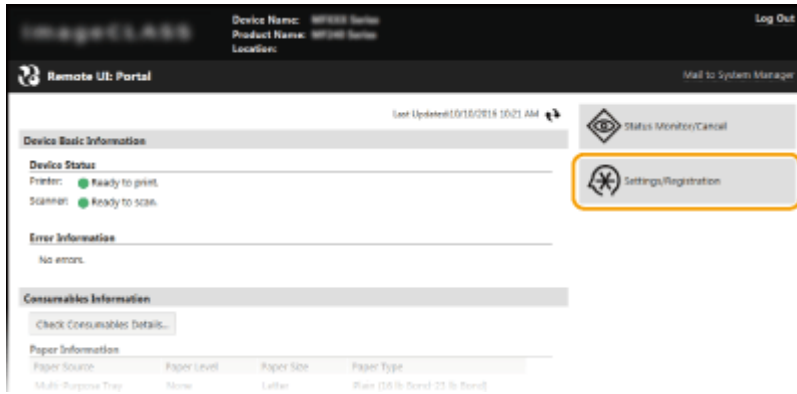
### NOTE

- The machine does not support the trap notification feature of SNMP.
- To change the port number of SNMP, see [▶Changing Port Numbers \(MF244dw / MF232w\)\(P. 241\)](#) .
- 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.

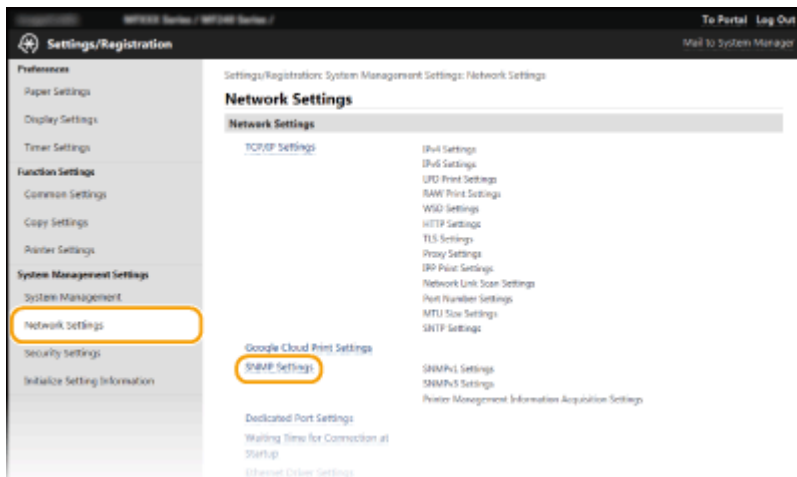
**1 Start the Remote UI and log on in System Manager mode. [▶Starting Remote UI\(P. 273\)](#)**

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

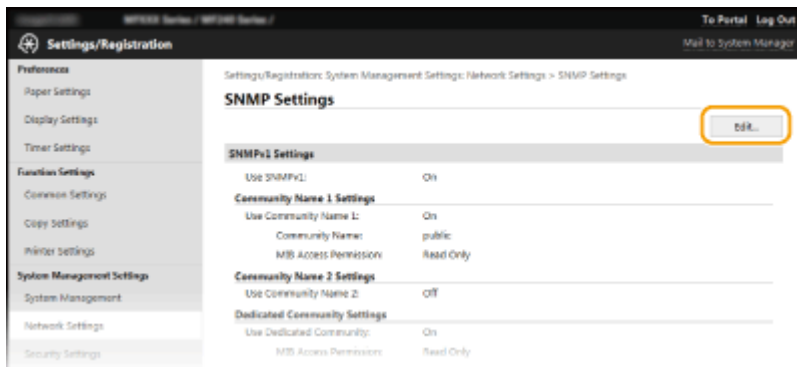




**3** Click [Network Settings] ► [SNMP Settings].

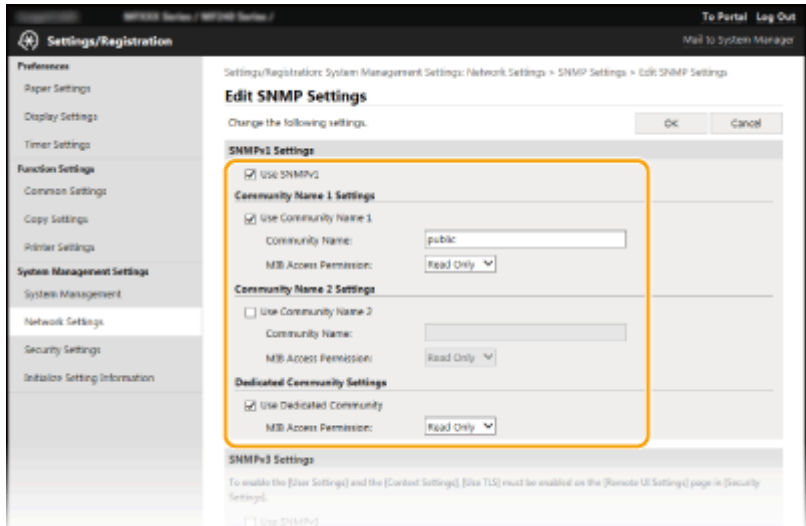


**4** Click [Edit].



**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.

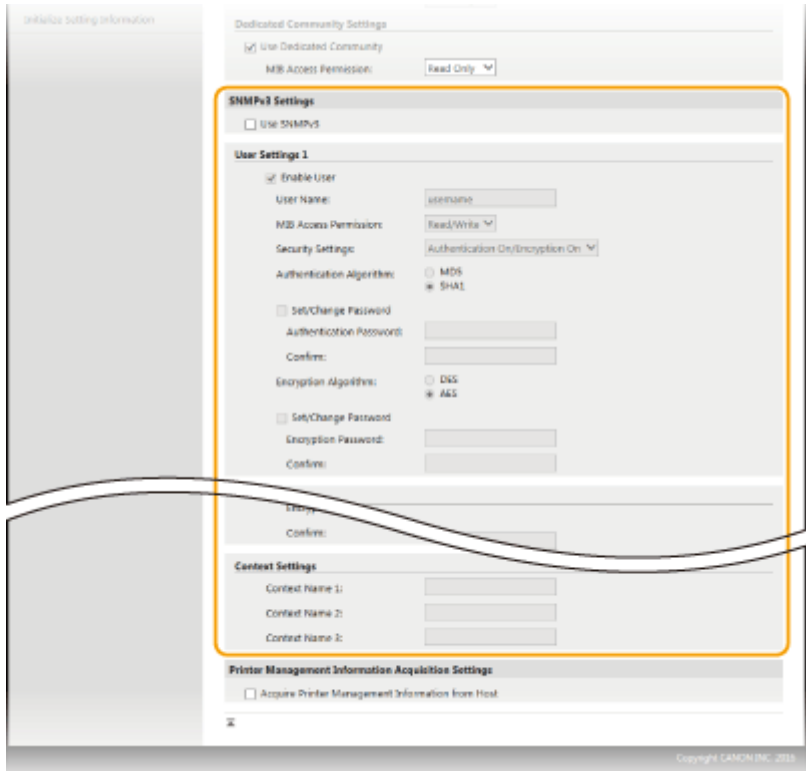
[Read/Write]	Permits both viewing and changing the values of MIB objects.
[Read Only]	Permits only viewing the values of MIB objects.

**[Use Dedicated Community]**

Dedicated Community is a preset community, intended exclusively for Administrators using Canon software. 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]**

If you selected [Authentication On/Encryption On] or [Authentication On/Encryption Off] for [Security Settings], select the algorithm that corresponds to your environment.

**[Encryption Algorithm]**

If you selected [Authentication On/Encryption On] for [Security Settings], select the algorithm that corresponds to your environment.

**[Set/Change Password]**

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

**[Context Name 1]/[Context Name 2]/[Context Name 3]**

Enter up to 32 alphanumeric characters for 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].

### NOTE

#### Disabling SNMPv1

- Some of the functions of the machine become unavailable, such as obtaining machine information via the printer driver.

#### Using the operation panel

- You can also specify SNMPv1 settings and enable/disable SNMPv3 settings from <Menu> screen. **▶SNMP Settings(P. 294)**

### TIPS

#### Enabling Both SNMPv1 and SNMPv3

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

### LINKS

- ▶**Enabling TLS Encrypted Communication for the Remote UI(P. 249)**

# Security

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# Security

15A8-049

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

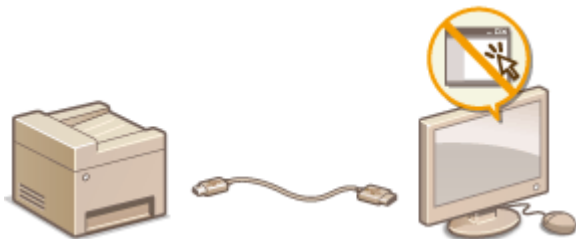
- You can configure the best security system by building an environment that inhibits access to printers on your in-house network via the Internet and using such environment together with the machine's security features. ▶ **Preventing Unauthorized Access(P. 226)**

## ■ Establishing the Basics of Information Security



### ▶ Protecting the Machine from Unauthorized Access(P. 225)

## ■ Preparing for Risks from Negligence or Misuse MF244dw / MF232w



### ▶ Restricting the Machine's Functions (MF244dw / MF232w)(P. 245)

## ■ Implementing Robust Security Features MF244dw / MF232w



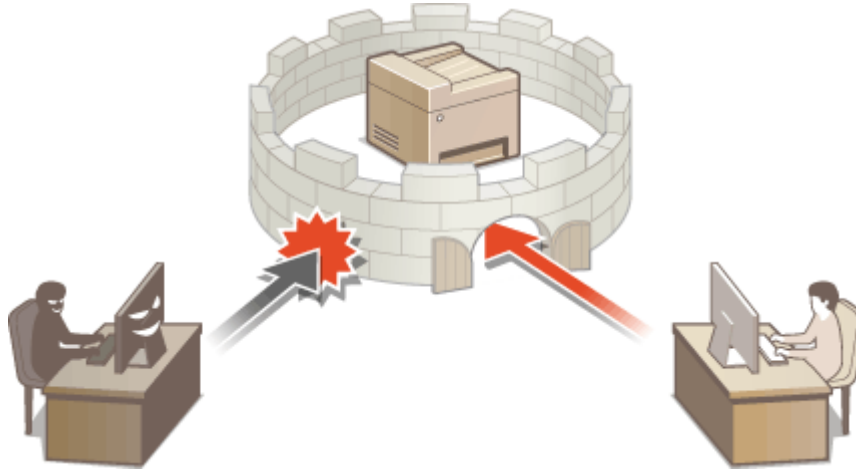
### ▶ Implementing Robust Security Features (MF244dw / MF232w)(P. 248)

## Protecting the Machine from Unauthorized Access

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15A8-04A

Prevent unauthorized third parties from accessing and using the machine. You can implement multiple security measures, such as using firewalls and changing port numbers.



# Preventing Unauthorized Access

15A8-04C

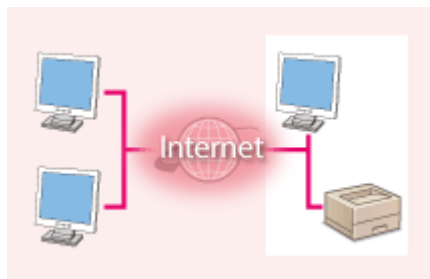
This section describes the security measures on how to prevent unauthorized access from the external network. This is a must-read for all users and administrators before using this machine, other printers, and multifunction machines connected to the network. In recent years, a printer/multifunction machine 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 (MF244dw / MF232w)(P. 226)**
- ▶ **Using Firewall to Restrict Transmission (MF244dw / MF232w)(P. 227)**
- ▶ **Specifying the TLS Encrypted Communication (MF244dw / MF232w)(P. 227)**
- ▶ **Setting PIN to Manage Information Stored in the Multifunction Machine(P. 227)**

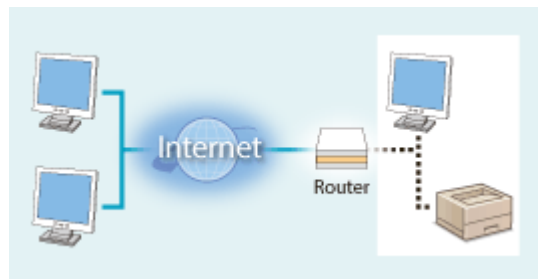
## Assigning a Private IP Address (MF244dw / MF232w)

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 external 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. 188)** .

### 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 (MF244dw / MF232w)

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\(P. 234\)](#) .

## Specifying the TLS Encrypted Communication (MF244dw / MF232w)

For information on the TLS Encrypted Communication, see [▶Implementing Robust Security Features \(MF244dw / MF232w\)\(P. 248\)](#) , and on the procedures to specify, see [▶Enabling TLS Encrypted Communication for the Remote UI\(P. 249\)](#) .

## Setting PIN to Manage Information Stored in the Multifunction Machine

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 \(MF244dw / MF232w\)\(P. 231\)](#) .
- Setting PIN for the System Manager Settings  
For more information, see [▶Setting the System Manager PIN\(P. 229\)](#) .

Listed above are some examples of security measures for preventing unauthorized access. For more information on the other security measures, see [▶Security\(P. 224\)](#) and take necessary security measures for preventing unauthorized access to suit your environment.

# Setting Access Privileges

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15A8-04E

Protect the machine from unauthorized access by only allowing users with access privileges to use the machine. When privileges are set, the user must enter a PIN to change settings or access the Remote UI.



Access privileges are divided into two types: System Manager Mode and General User Mode. System Manager Mode has full access privileges, and a System Manager PIN can be set to restrict logon in this mode. And by setting a Remote UI Access PIN, you can restrict use of the Remote UI in General User Mode and in System Manager Mode without a System Manager PIN set.

## System Manager PIN

---

System Manager PIN is intended exclusively for Administrators having full access privileges. If you specify this PIN, you need to log on to the machine using this PIN in order to access <Network Settings> or <System Management Settings>. Set the System Manager PIN when you need different access privilege levels for administrators and general users.

### ▶ Setting the System Manager PIN(P. 229)

## Remote UI PIN (Remote UI Access PIN) MF244dw / MF232w

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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 (MF244dw / MF232w)(P. 231)

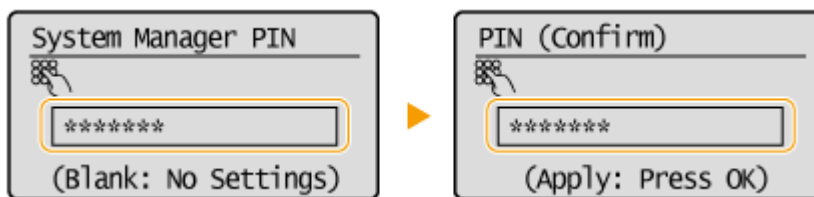
# Setting the System Manager PIN

15A8-04F



Set a System Manager PIN that is intended exclusively for Administrators. You can access <Network Settings>, <System Management Settings>, etc. only when the PIN has been entered correctly. It is recommended that only Administrators know the PIN.

- 1 Press .
- 2 Use  /  to select <System Management Settings>, and press .
- 3 Select <System Manager Information Settings>  <System Manager PIN>.
- 4 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.

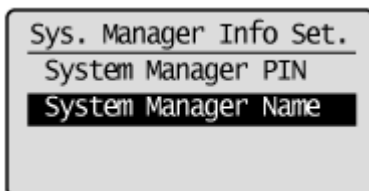




#### NOTE:

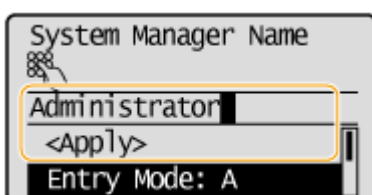
- You cannot set a PIN that consists only of zeros, such as "00" or "0000000".
- To disable the PIN, press  to erase the PIN (leave the text box blank), and press .

## ■ 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. 35)**



**NOTE****Configuring settings via the Remote UI (MF244dw / MF232w)**

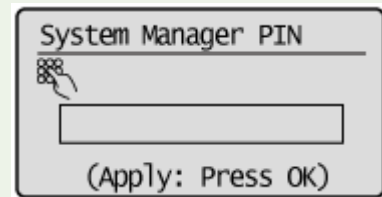
- Start the Remote UI and log on in System Manager Mode. Click [Settings/Registration] ► [System Management] ► [Edit] and specify the necessary settings on the displayed screen.
- By using the Remote UI, you can register a variety of information, including contact information, Administrator comments, 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. 280)**

**If PIN is forgotten**

- Do not forget your PIN. If you forget your PIN, contact your authorized Canon dealer or the Canon help line.

**If a System Manager PIN is Set**

- If you try to access <Network Settings>, <System Management Settings>, etc., the following screen is displayed. Enter the set PIN.
- Entering a PIN is also required when logging on in System Manager Mode in the Remote UI. ► **Starting Remote UI(P. 273)**

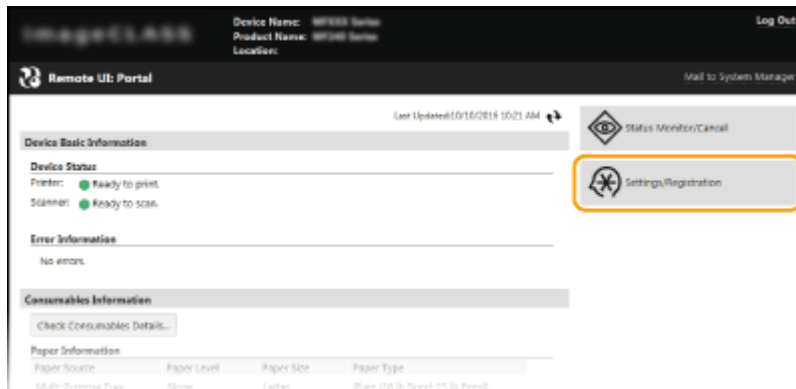


# Setting a Remote UI PIN MF244dw / MF232w

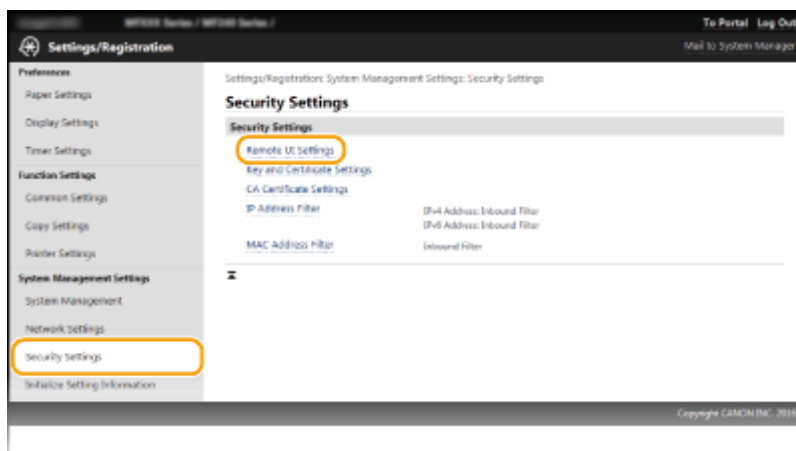
15A8-04H

You can set a PIN for access to the Remote UI. All users use a common PIN.

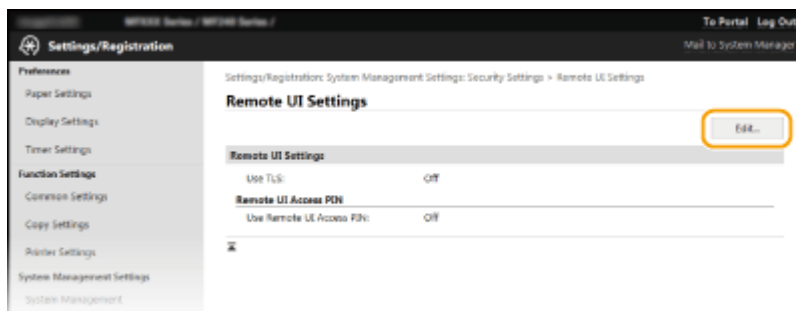
- 1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 273)**
- 2 Click [Settings/Registration].**



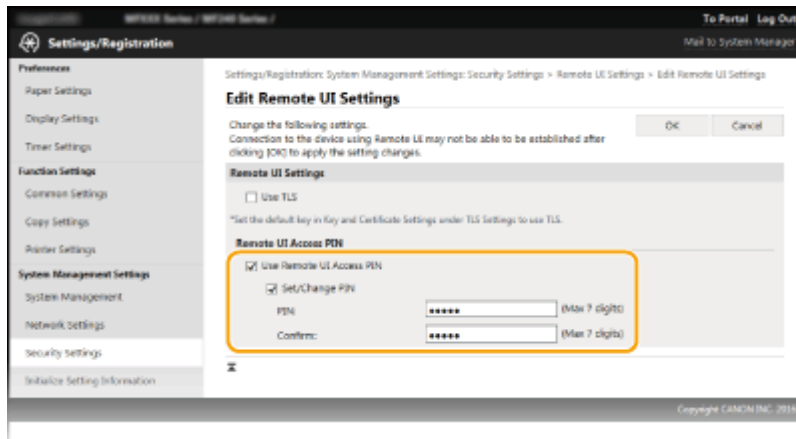
- 3 Click [Security Settings] ▶ [Remote UI Settings].**



- 4 Click [Edit].**



- 5 Select the [Use Remote UI Access PIN] check box and set 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

#### If PIN is forgotten

- Set a new Remote UI Access PIN in the settings menu on the operation panel. [▶Remote UI Settings\(P. 333\)](#)

#### If Remote UI settings are initialized

- The Remote UI Access PIN is also initialized. After an initialization, reset the PIN. [▶Initializing Menu\(P. 397\)](#)

### LINKS

[▶Setting Access Privileges\(P. 228\)](#)

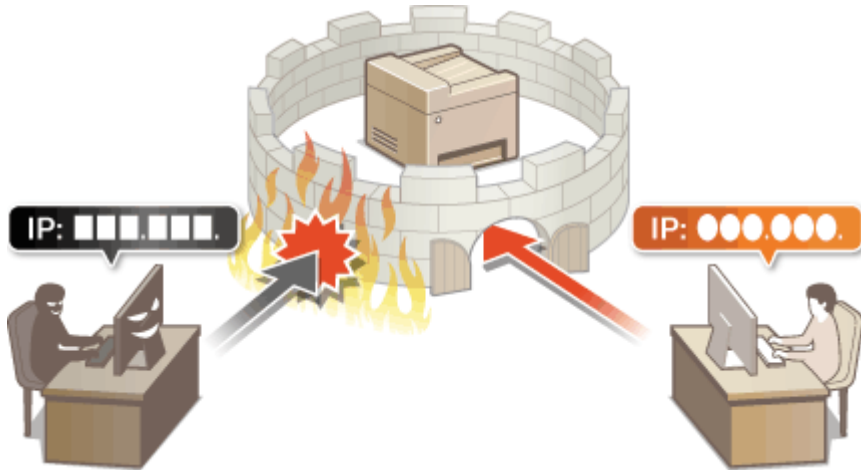
[▶Setting the System Manager PIN\(P. 229\)](#)

# Restricting Communication by Using Firewalls

MF244dw / MF232w

15A8-04J

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

15A8-04K

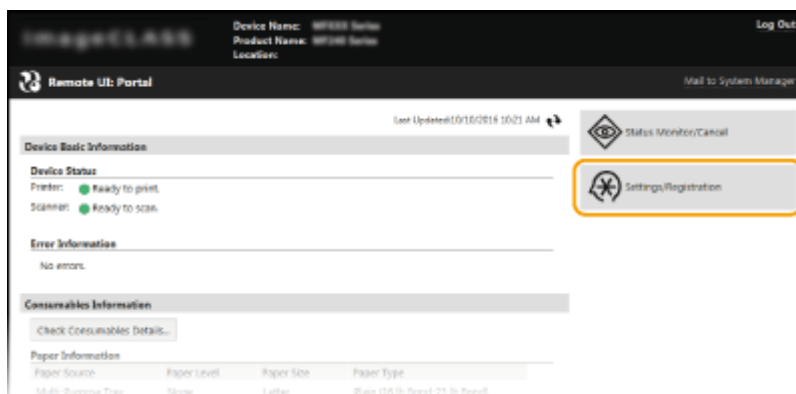
You can either limit communication to only devices with specified IP addresses, or block devices with specified IP addresses but permit other communications. You can specify a single IP address or a range of IP addresses.

## NOTE

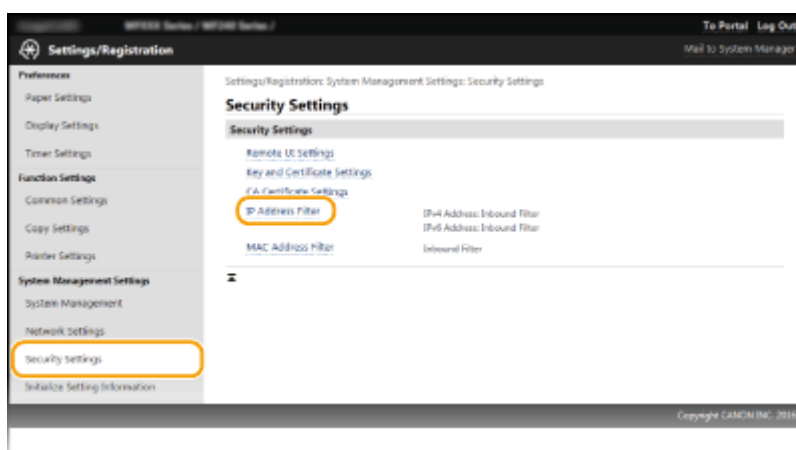
- Up to 4 IP addresses (or ranges of IP addresses) can be specified for both IPv4 and IPv6.
- The packet filters described in this section control communications over TCP, UDP, and ICMP.

**1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 273)**

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



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



**4 Click [Edit] for the filter type that you want to use.**





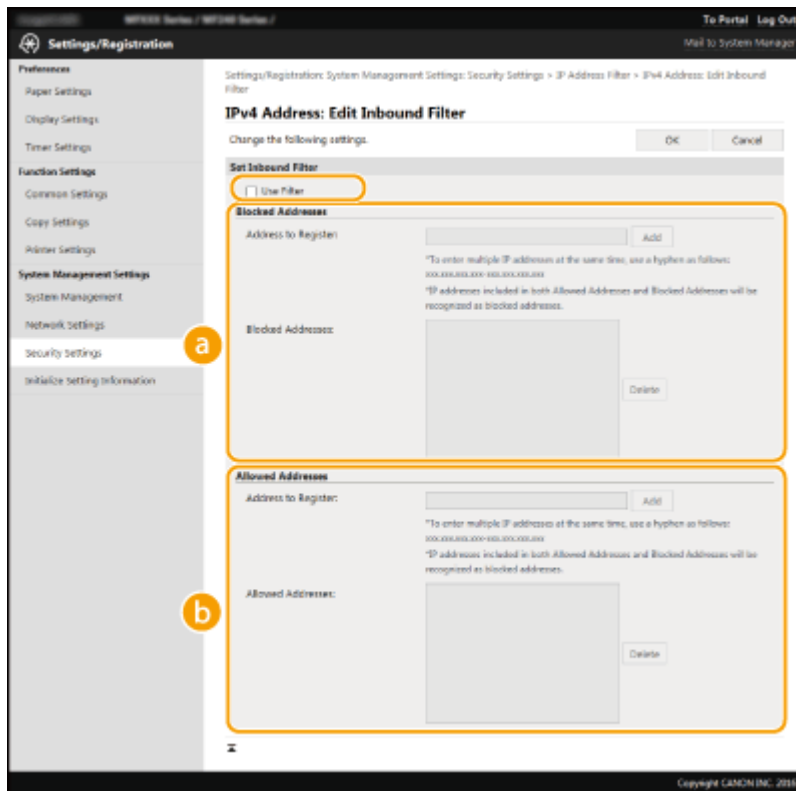
### [IPv4 Address: Inbound Filter]

Select to restrict receiving data from the machine to a computer by specifying IPv4 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.



### a [Blocked Addresses]

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

### b [Allowed Addresses]

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

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

- Select the check box to restrict communication. Clear the check box to disable the restriction.

## 2 Specify the address.

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

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

**IMPORTANT:**  
**Check for entry errors**

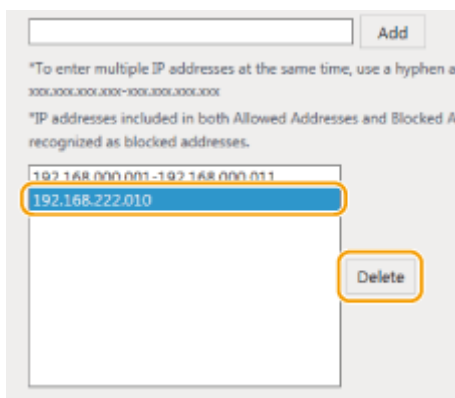
If IP addresses are incorrectly entered, you may be unable to access the machine from the Remote UI, in which case you need to set <IPv4 Address Filter> or <IPv6 Address Filter> to <Off>. **IPv4 Address Filter (P. 331)** **IPv6 Address Filter (P. 332)**

**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.	IPv4: 192.168.0.10-192.168.0.20
		IPv6: fe80::10-fe80::20
Specifying a range of addresses with a prefix (IPv6 only)	Enter the address, followed by a slash and a number indicating the prefix length.	fe80::1234/64

**Deleting an IP address from exceptions**

Select an IP address and click [Delete].



**3** Click [OK].

## NOTE

You can enable or disable the IP Address Filter settings from <Menu>. [▶IPv4 Address Filter \(P. 331\)](#) [▶IPv6 Address Filter \(P. 332\)](#)

## LINKS

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[▶Specifying MAC Addresses for Firewall Rules\(P. 238\)](#)

# Specifying MAC Addresses for Firewall Rules

15A8-04L

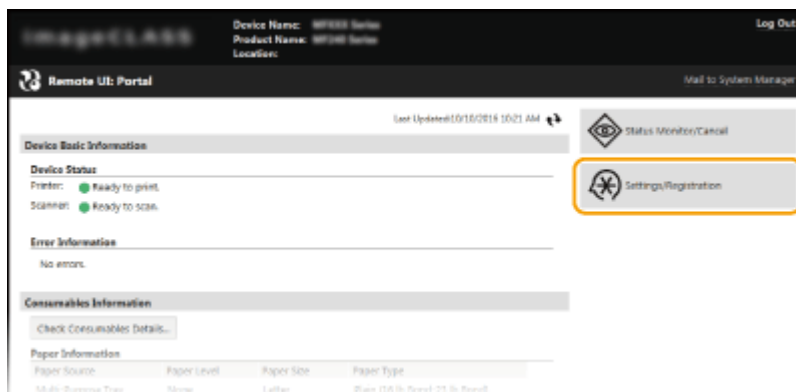
You can limit communication to only devices with specified MAC addresses, or block devices with specified MAC addresses but permit other communications. Up to 10 MAC addresses can be specified.

## IMPORTANT

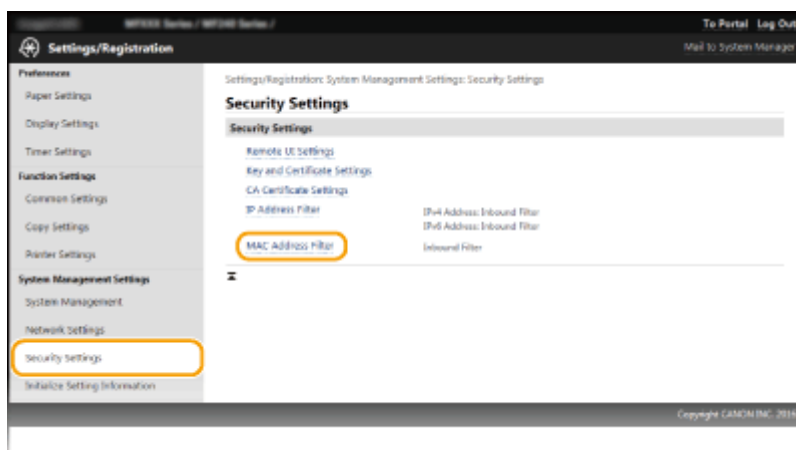
This function is unavailable when the machine is connected to a wireless LAN.

**1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 273)**

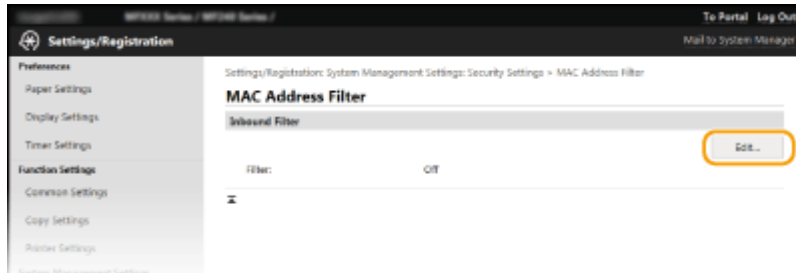
**2 Click [Settings/Registration].**



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



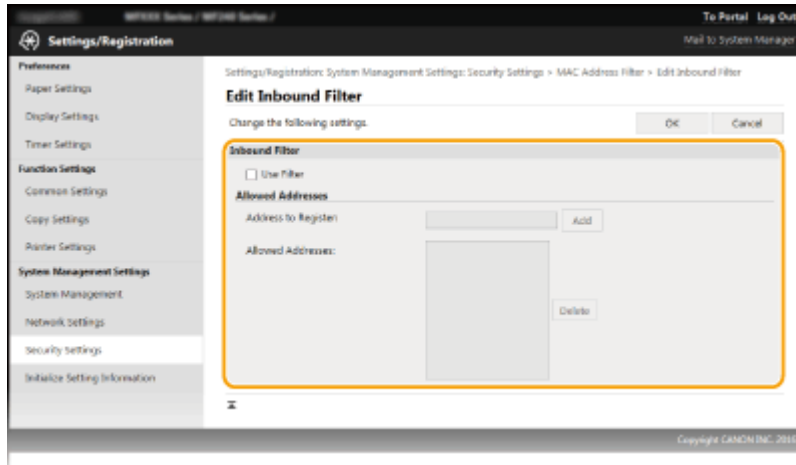
**4 Click [Edit].**



### [Inbound Filter]

Select to restrict receiving data from the machine to a computer by specifying MAC addresses.

## 5 Specify the settings for packet filtering.



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

- Select the check box to restrict communication. Clear the check box to disable the restriction.

### 2 Specify the address.

- Enter the MAC address in the [Address to Register] text box and click [Add]. Allows communication (received) only with devices having registered MAC addresses, and restricts communication with devices with any other MAC addresses.
- You do not need to delimit the address with hyphens or colons.

### IMPORTANT:

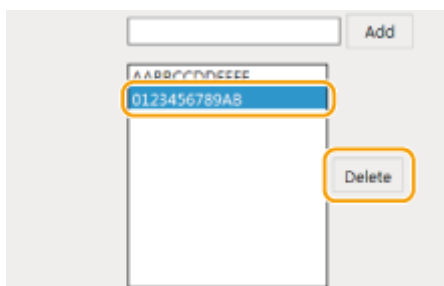
#### Check for entry errors

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. 332)**

### NOTE:

#### Deleting a MAC address from exceptions

Select a MAC address and click [Delete].



### 3 Click [OK].

## NOTE

You can enable or disable the MAC Address Filter settings from <Menu>. [▶ MAC Address Filter \(P. 332\)](#)

## LINKS

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[▶ Specifying IP Addresses for Firewall Rules\(P. 234\)](#)

## Changing Port Numbers MF244dw / MF232w

15A8-04R


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 \(MF244dw / MF232w\)\(P. 243\)](#).

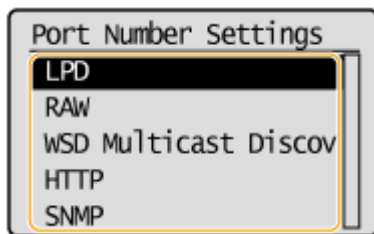
**1** Press .

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

- If a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press . [▶Setting the System Manager PIN\(P. 229\)](#)

**3** Select <TCP/IP Settings> ▶ <Port Number Settings>.

**4** Select a port, and press .

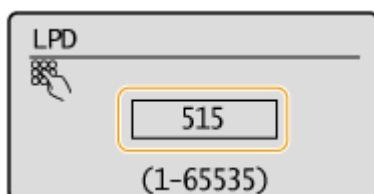


### NOTE:

#### Learning more about the ports

- <LPD>/<RAW>/<WSD Multicast Discovery> [▶Configuring Printing Protocols and WSD Functions\(P. 198\)](#)
- <HTTP> [▶Disabling HTTP Communication\(P. 246\)](#)
- <SNMP> [▶Monitoring and Controlling the Machine with SNMP\(P. 218\)](#)

**5** Enter the port number using the numeric keys, and press .



### LINKS

▶ **Configuring Printer Ports(P. 201)**

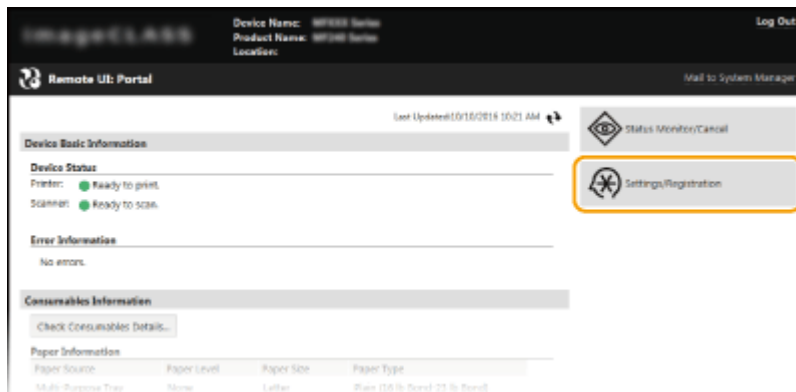


# Setting a Proxy MF244dw / MF232w

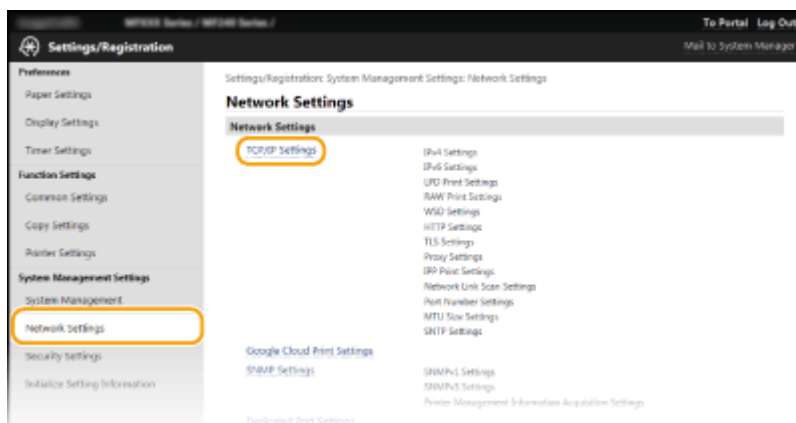
15A8-04S

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. 273)
- 2 Click [Settings/Registration].



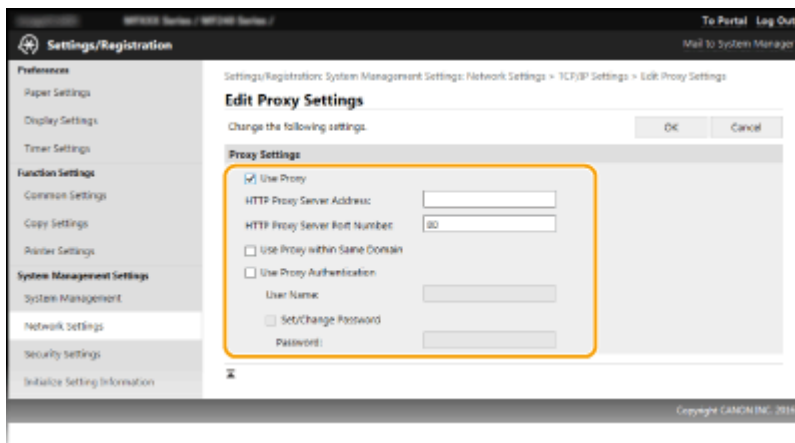
- 3 Click [Network Settings] ▶ [TCP/IP Settings].



- 4 Click [Edit] in [Proxy Settings].



## 5 Select the [Use Proxy] check box and specify the required settings.



### [Use Proxy]

Select the check box to use the specified proxy server when communicating with an HTTP server.

### [HTTP Proxy Server Address]

Enter the address of the proxy server. Specify the IP address or host name depending on the environment.

### [HTTP Proxy Server Port Number]

Change the port number as necessary. Enter a number between 1 and 65535.

### [Use Proxy within Same Domain]

Select the check box to use a proxy server specified in the same domain.

### [Use Proxy Authentication]

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

### [Set/Change Password]

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

## 6 Click [OK].

## Restricting the Machine's Functions MF244dw / MF232w

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15A8-04U

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.

### Disabling HTTP Communication and Remote Management

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- ▶ Disabling HTTP Communication(P. 246)
- ▶ Disabling Remote UI(P. 247)

# Disabling HTTP Communication

15A8-04W



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 a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press .  **Setting the System Manager PIN(P. 229)**

**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 (MF244dw / MF232w)(P. 272)**
-  **Changing Port Numbers (MF244dw / MF232w)(P. 241)**
-  **Configuring Printing Protocols and WSD Functions(P. 198)**

## Disabling Remote UI



15A8-04X

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 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.




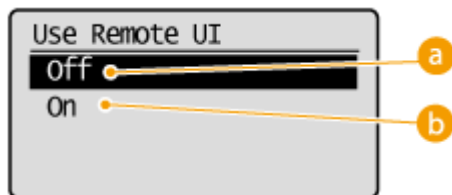
**1** Press .

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

- If a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press .  **Setting the System Manager PIN(P. 229)**

**3** Select <Remote UI Settings>  <Use Remote UI>.

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



**a** <Off>


Disables the Remote UI.

**b** <On>

Enables the Remote UI.

### LINKS

 **Using Remote UI (MF244dw / MF232w)(P. 272)**

 **Disabling HTTP Communication(P. 246)**

# Implementing Robust Security Features MF244dw / MF232w

15A8-04Y

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

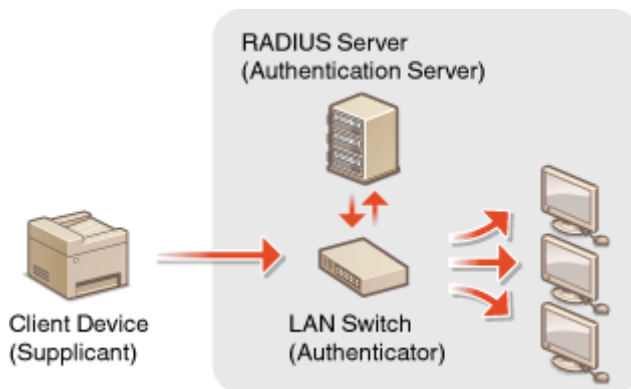
## TLS Encrypted Communication

TLS is a protocol for encryption for data sent over a network and is often used for communication via a Web browser or an e-mail application. TLS enables secure network communication when you access the machine from a computer via the Remote UI. [▶ Enabling TLS Encrypted Communication for the Remote UI\(P. 249\)](#)



## 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\(P. 252\)](#)



## LINKS

[▶ Configuring Settings for Key Pairs and Digital Certificates\(P. 257\)](#)

# Enabling TLS Encrypted Communication for the Remote UI

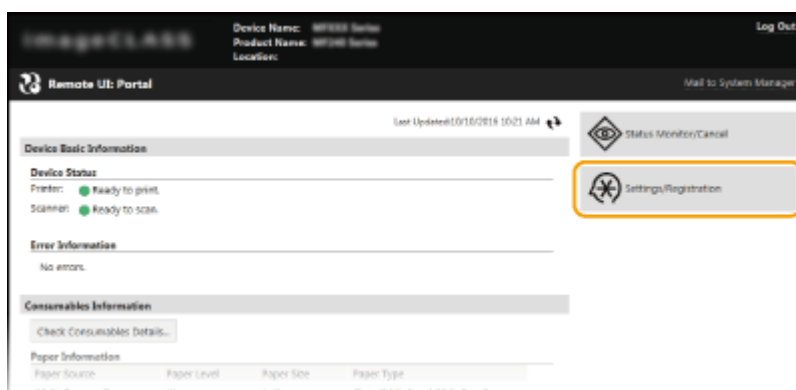
15A8-050

You can encrypt communication between the machine and a Web browser on the computer by using Transport Layer Security (TLS). TLS is a mechanism for encrypting data sent or received over the network. TLS must be enabled when the Remote UI is used for specifying settings for IEEE 802.1X authentication (TTLS/PEAP) or SNMPv3. To use TLS for the Remote UI, you need to set a key pair and enable the TLS function. Generate or install the key pair for TLS before enabling TLS ( [▶Configuring Settings for Key Pairs and Digital Certificates\(P. 257\)](#) ).

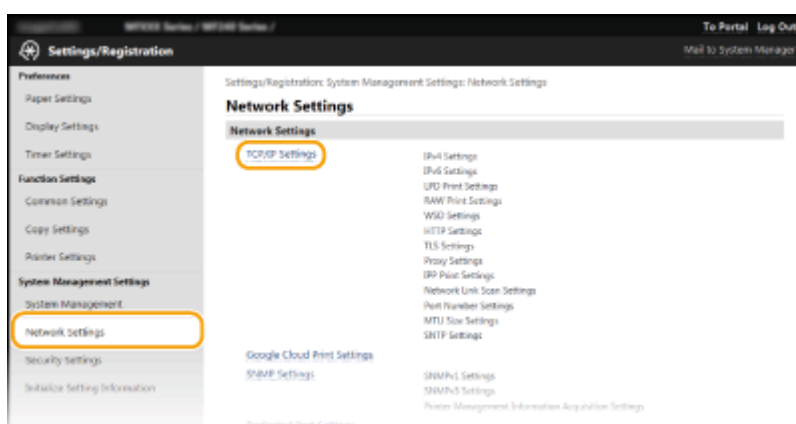


**1** Start the Remote UI and log on in System Manager Mode. [▶Starting Remote UI\(P. 273\)](#)

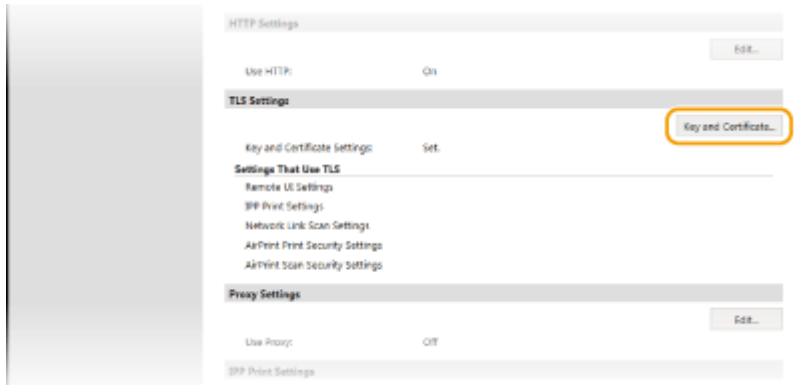
**2** Click [Settings/Registration].



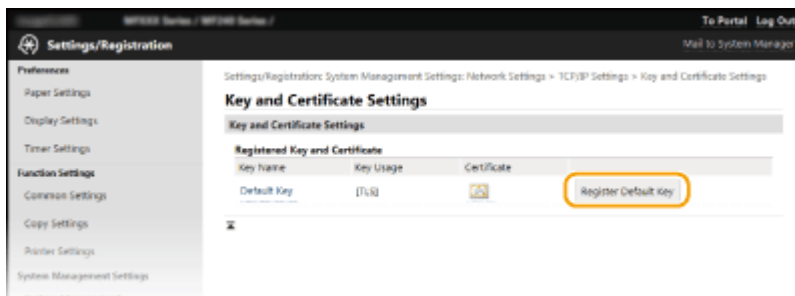
**3** Click [Network Settings] ▶ [TCP/IP Settings].



**4** Click [Key and Certificate] in [TLS Settings].



## 5 Click [Register Default Key] on the right of the key pair you want to use.



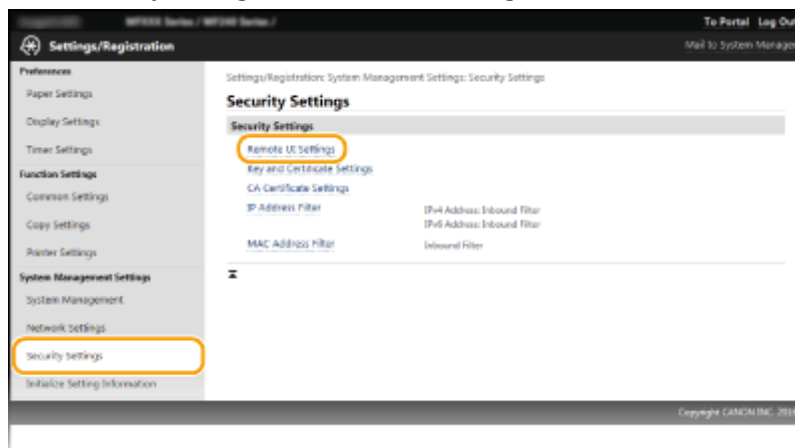
### NOTE:

#### Viewing details of a certificate

- You can check the details of the certificate or verify the certificate by clicking the corresponding text link under [Key Name], or the certificate icon. ▶ **Verifying Key Pairs and Digital Certificates(P. 269)**

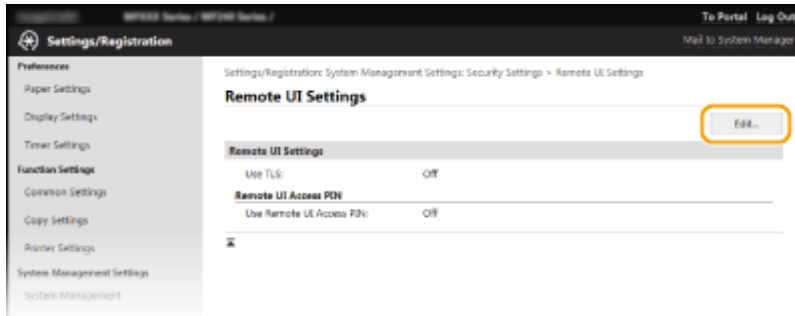
## 6 Enable TLS for the Remote UI.

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

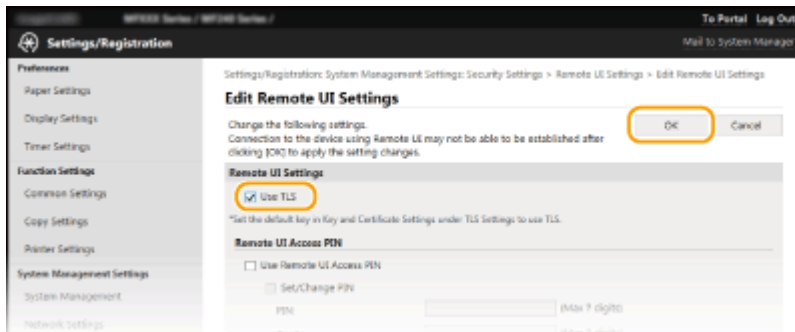


- 2 Click [Edit].





- 3 Select the [Use TLS] check box and click [OK].



## NOTE

### Using the operation panel

- You can also enable or disable TLS encrypted communication from <Menu>. [▶Use TLS\(P. 331\)](#)

### Starting the Remote UI with TLS

- If you try to start the Remote UI when TLS is enabled, a security alert may be displayed regarding the security certificate. In this case, check that the correct URL is entered in the address field, and then proceed to display the Remote UI screen. [▶Starting Remote UI\(P. 273\)](#)

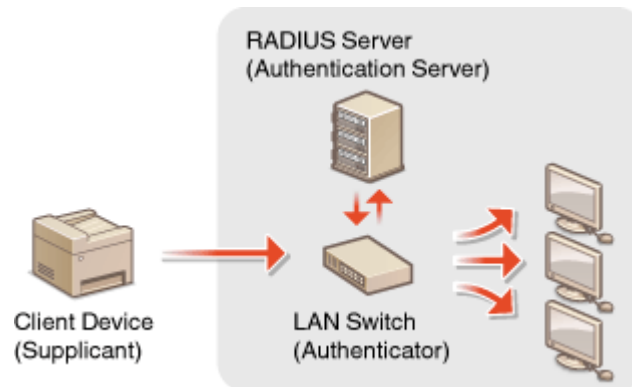
## LINKS

- [▶Generating Key Pairs\(P. 259\)](#)
- [▶Using CA-issued Key Pairs and Digital Certificates\(P. 266\)](#)
- [▶Configuring IEEE 802.1X Authentication\(P. 252\)](#)
- [▶Monitoring and Controlling the Machine with SNMP\(P. 218\)](#)

## Configuring IEEE 802.1X Authentication

15A8-051

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\(P. 266\)](#) ).

### 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.

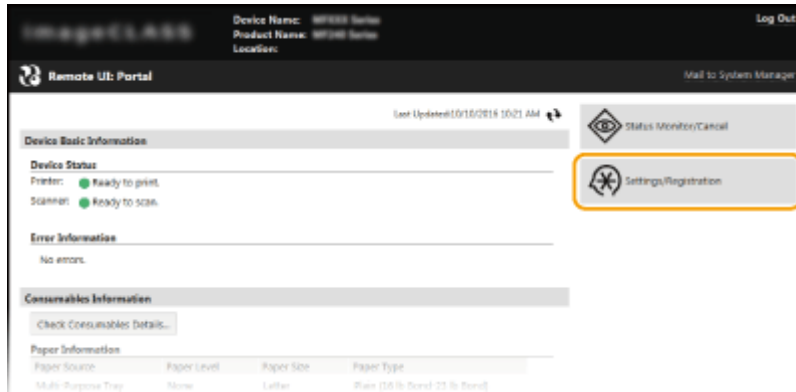
### TTLS

This authentication method uses a user name and password for the client authentication and a CA certificate for the server authentication. MSCHAPv2 or PAP can be selected as the internal protocol. TTLS can be used with PEAP at the same time. Enable TLS for the Remote UI before configuring this authentication method ( [▶Enabling TLS Encrypted Communication for the Remote UI\(P. 249\)](#) ).

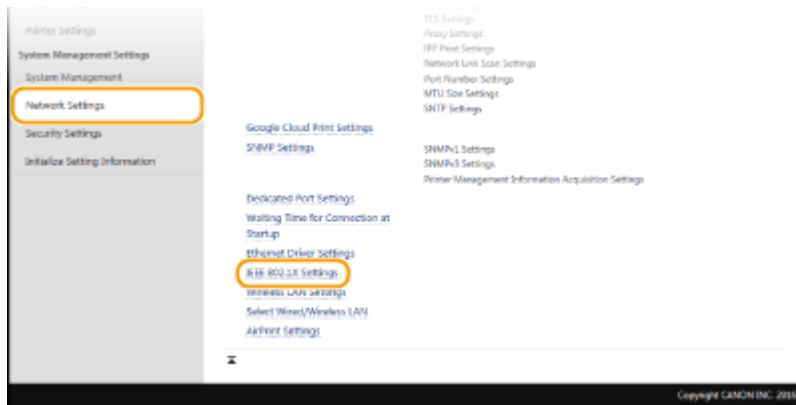
### PEAP

The required settings are almost the same as those of TTLS. MS-CHAPv2 is used as the internal protocol. Enable TLS for the Remote UI before configuring this authentication method ( [▶Enabling TLS Encrypted Communication for the Remote UI\(P. 249\)](#) ).

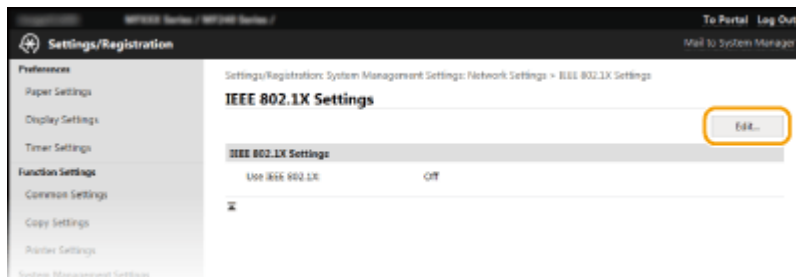
- 1 Start the Remote UI and log on in System Manager Mode. [▶Starting Remote UI\(P. 273\)](#)**
- 2 Click [Settings/Registration].**



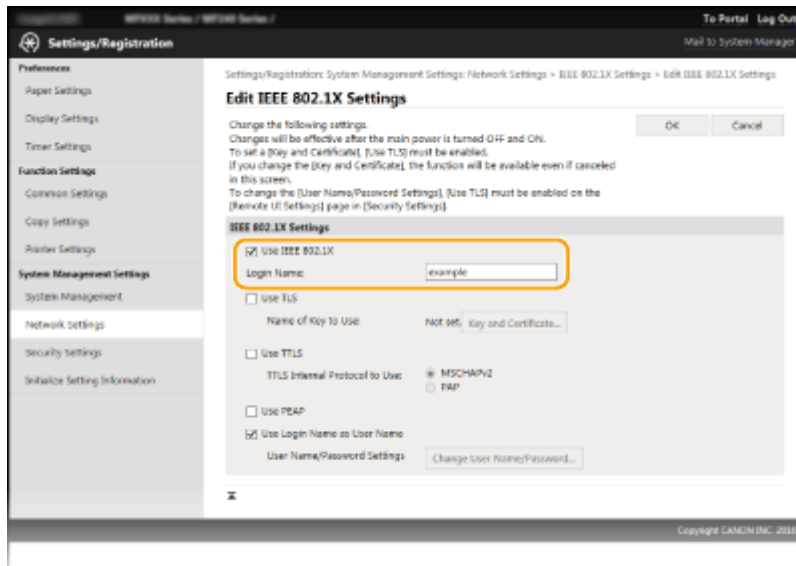
**3** Click [Network Settings] ► [IEEE 802.1X Settings].



**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]

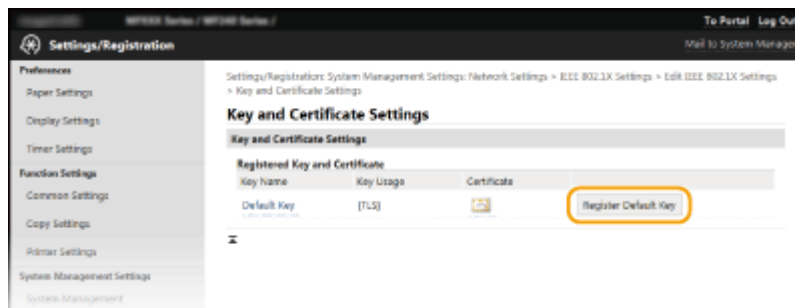
Select the check box to enable IEEE 802.1X authentication.

### [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.



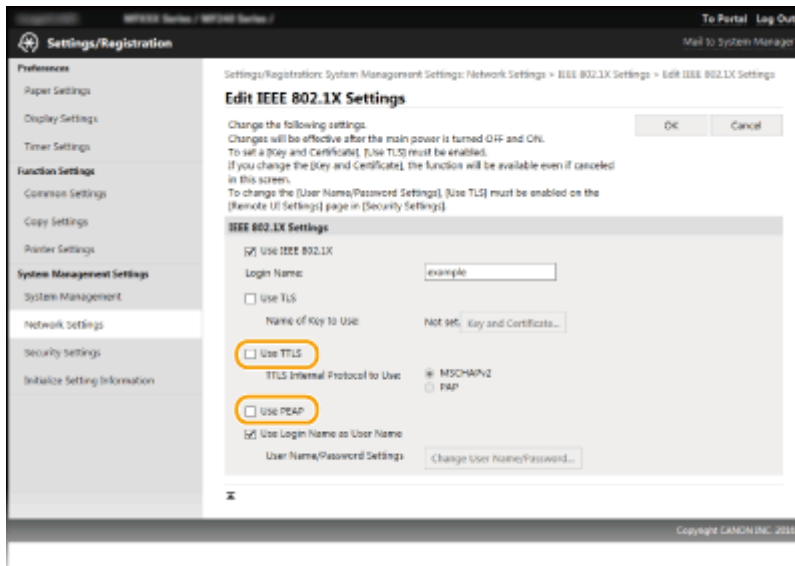
### NOTE:

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

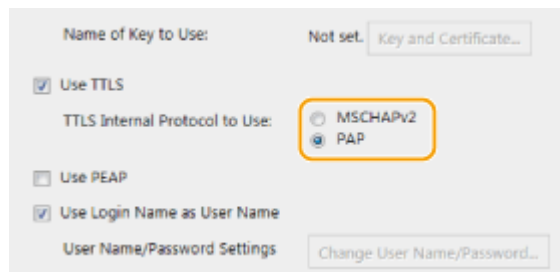
- You can check the details of the certificate or verify the certificate by clicking the corresponding text link under [Key Name], or the certificate icon. [▶ Verifying Key Pairs and Digital Certificates\(P. 269\)](#)

## ■ Setting TTLS/PEAP

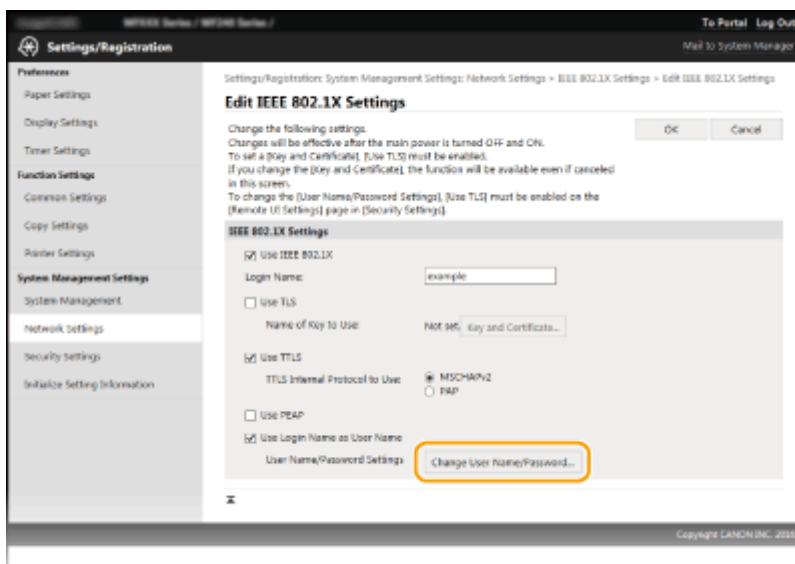
- 1 Select the [Use TTLS] or [Use PEAP] check box.

**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 from <Menu>. [▶ IEEE 802.1X Settings\(P. 296\)](#)

**LINKS**

- [▶ Configuring Settings for Key Pairs and Digital Certificates\(P. 257\)](#)

# Configuring Settings for Key Pairs and Digital Certificates

15A8-052

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. A key pair is used for TLS encrypted communication or TLS of the IEEE 802.1X authentication. Up to five key pairs (including the preinstalled pairs) can be generated to the machine ( [▶Using CA-issued Key Pairs and Digital Certificates\(P. 266\)](#) ). A key pair can be generated with the machine ( [▶Generating Key Pairs\(P. 259\)](#) ).

## 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\(P. 266\)](#) ).

### ■ 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), PEM</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

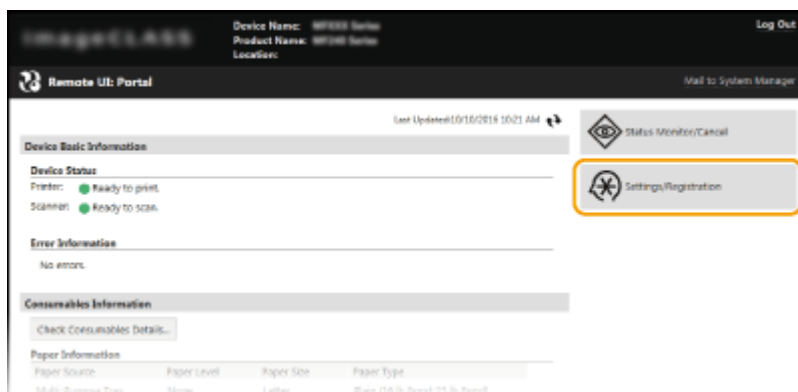
15A8-053

A key pair can be generated with the machine when it is required for encrypted communication via Transport Layer Security (TLS). You can use TLS when accessing the machine via the Remote UI. Up to five key pairs (including the preinstalled pairs) can be generated to the machine. 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.

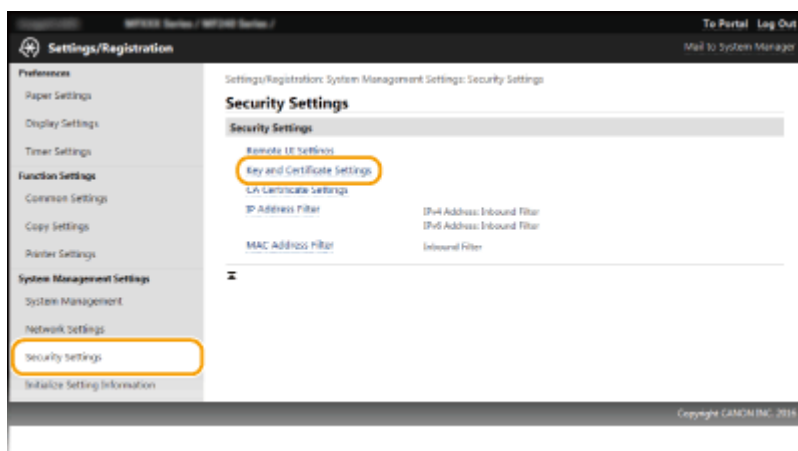
- ▶ **Generate Network Communication Key(P. 259)**
- ▶ **Generate Key and Certificate Signing Request (CSR)(P. 261)**

## Generate Network Communication Key

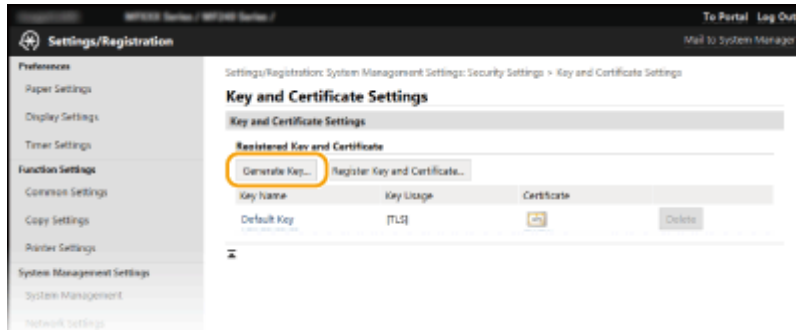
- 1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 273)**
- 2 Click [Settings/Registration].**



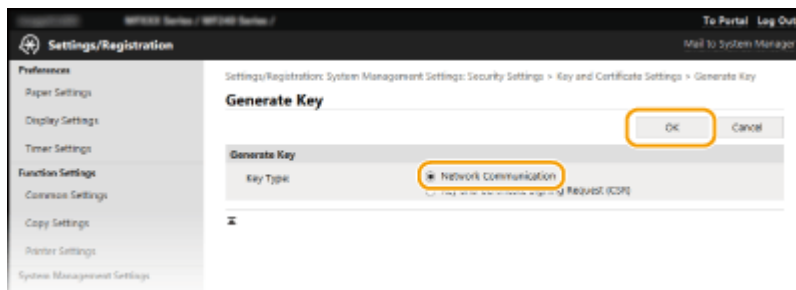
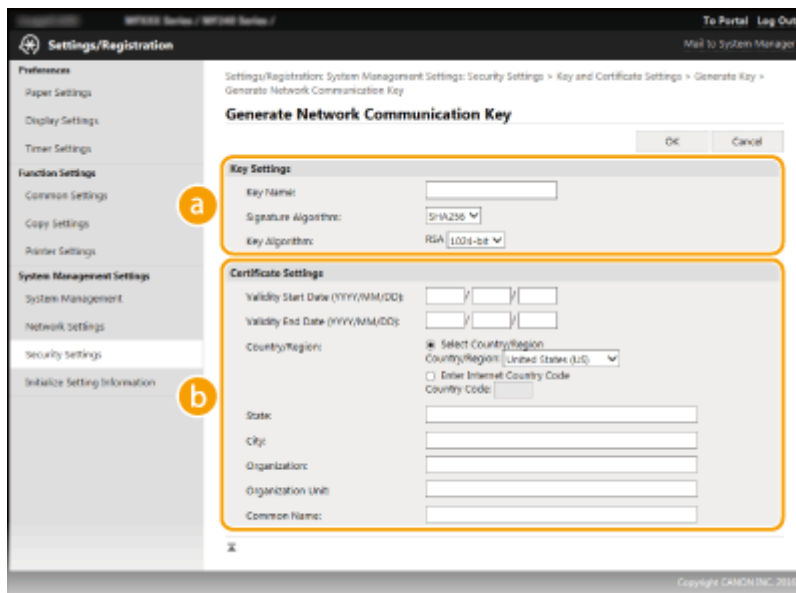
- 3 Click [Security Settings] ▶ [Key and Certificate Settings].**



- 4 Click [Generate Key].**

**NOTE:****Deleting a registered key pair**

- Click [Delete] on the right of the key pair you want to delete ► click [OK].
- A key pair cannot be deleted if it is currently used for some purpose, such as when "[TLS]" or "[IEEE 802.1X]" is displayed under [Key Usage]. In this case, disable the function or replace the key pair before deleting it.

**5 Select [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 31/12/2099, 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 31/12/2099, 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."

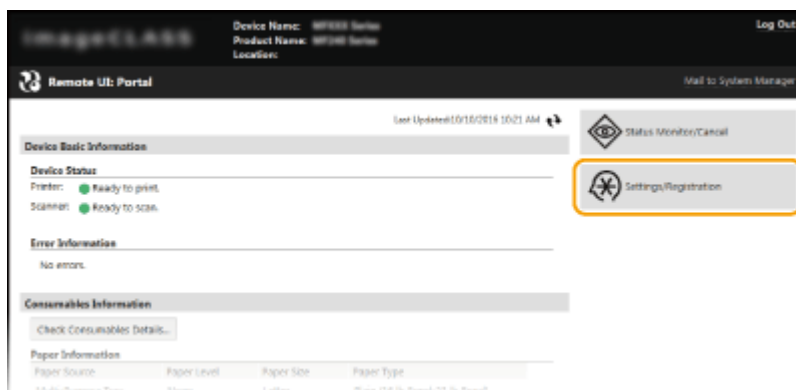
**7 Click [OK].**

- 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.

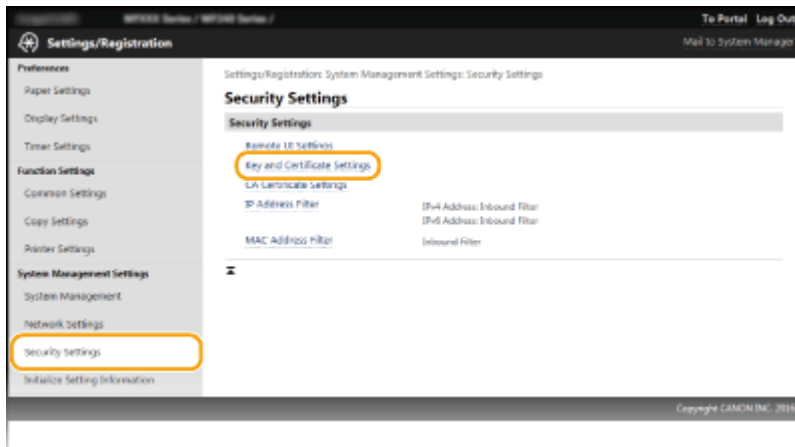
## Generate Key and Certificate Signing Request (CSR)

**1 Start the Remote UI and log on in System Manager Mode.**

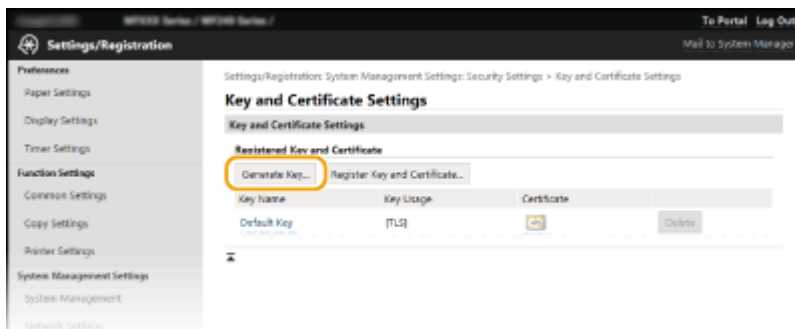
▶ Starting Remote UI (P. 273)

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

### 3 Click [Security Settings] ► [Key and Certificate Settings].



### 4 Click [Generate Key].

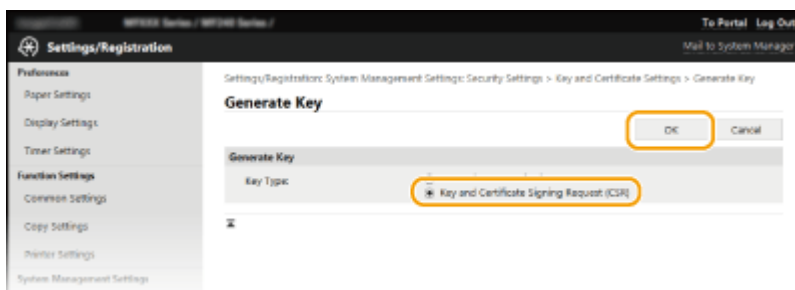


#### NOTE:

#### Deleting a registered key pair

- Click [Delete] on the right of the key pair you want to delete ► click [OK].
- A key pair cannot be deleted if it is currently used for some purpose, such as when "[TLS]" or "[IEEE 802.1X]" is displayed under [Key Usage]. In this case, disable the function or replace the key pair before deleting it.

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



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

### 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]

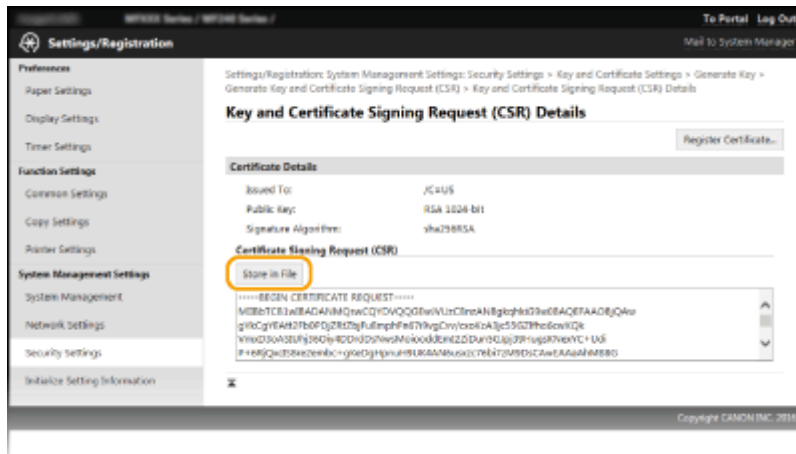
Enter up to 48 alphanumeric characters for the common name of the certificate as necessary. "Common Name" is often abbreviated as "CN."

## 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].



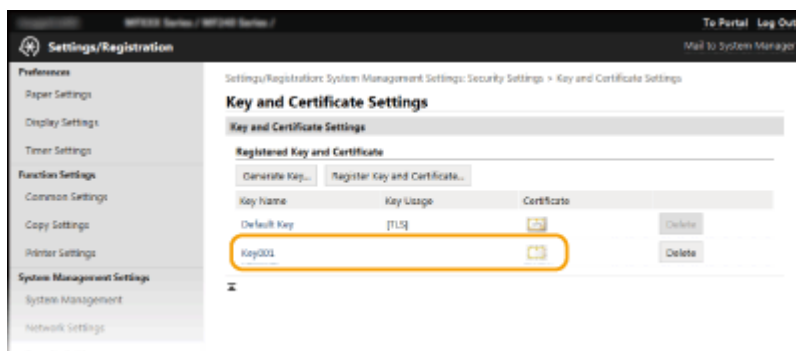
⇒ The Key and Certificate Signing Request (CSR) file is stored on the computer.

## 9 Attach the stored file and submit the application to the certification authority.

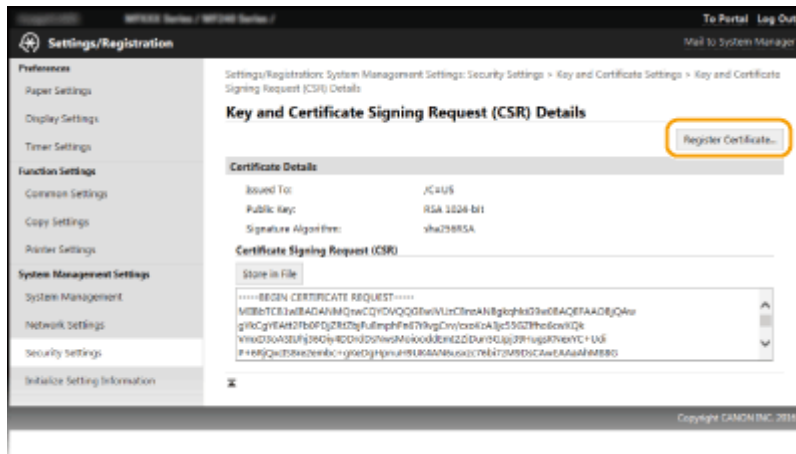
### ■ Registering the CA-issued Digital Certificate

You cannot use the key pair generated by the Certificate Signing Request (CSR) until the certificate is registered. Once the certification authority has issued the digital certificate, register it using the procedure below.

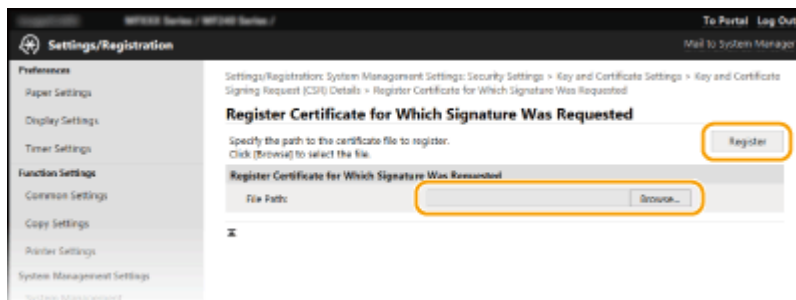
- 1 Start the Remote UI and log on in Administrator mode.
  - ▶ Starting Remote UI(P. 273)
- 2 Click [Settings/Registration].
- 3 Click [Security Settings] ▶ [Key and Certificate Settings].
- 4 Click [Key Name] or [Certificate] for the certificate to be registered.



- 5 Click [Register Certificate].



**6** Click [Browse], specify the file for the certificate signing request, and click [Register].



## LINKS

- ▶ Using CA-issued Key Pairs and Digital Certificates(P. 266)
- ▶ Verifying Key Pairs and Digital Certificates(P. 269)
- ▶ Enabling TLS Encrypted Communication for the Remote UI(P. 249)

# Using CA-issued Key Pairs and Digital Certificates

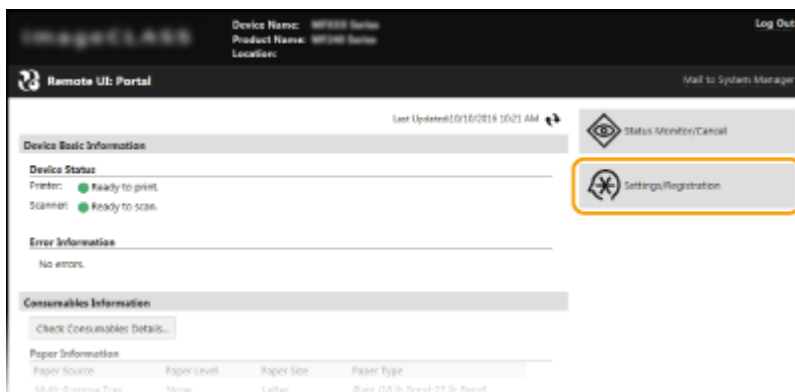
15A8-054

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\(P. 257\)](#) ). Up to five key pairs (including the preinstalled key pairs) and up to 67 CA certificates (including the 62 preinstalled certificates) can be registered.



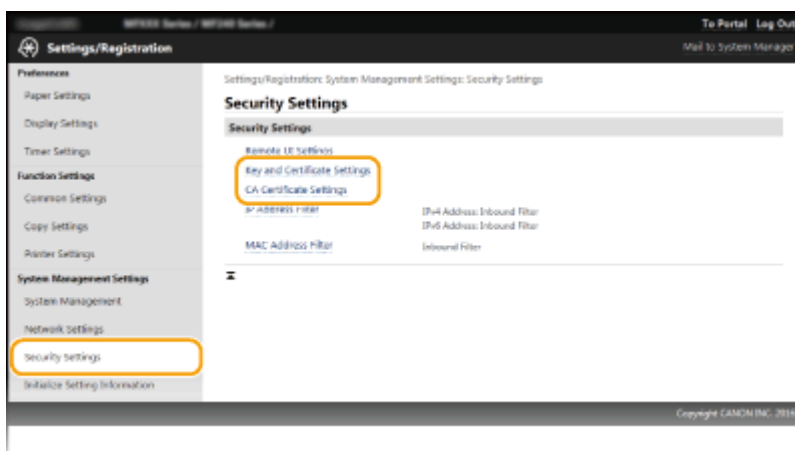
**1** Start the Remote UI and log on in System Manager Mode. [▶Starting Remote UI\(P. 273\)](#)

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



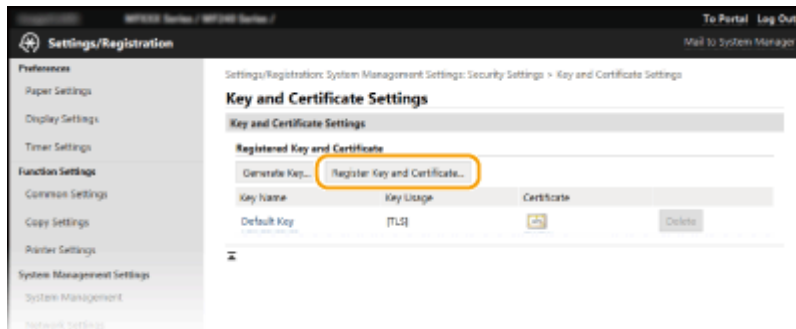
**3** Click [Security Settings] ▶ [Key and Certificate Settings] or [CA Certificate Settings].

- 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].

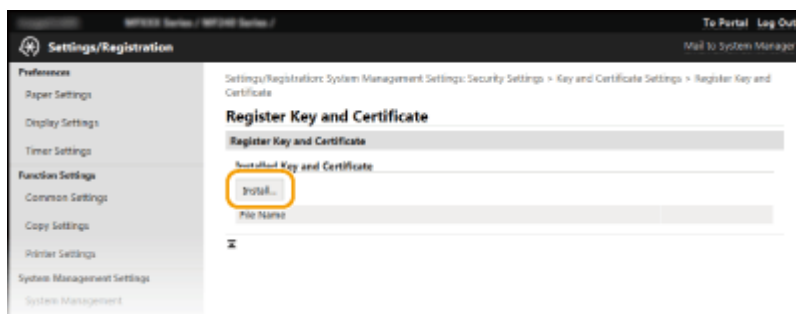


**NOTE:****Deleting a registered key pair or CA certificate**

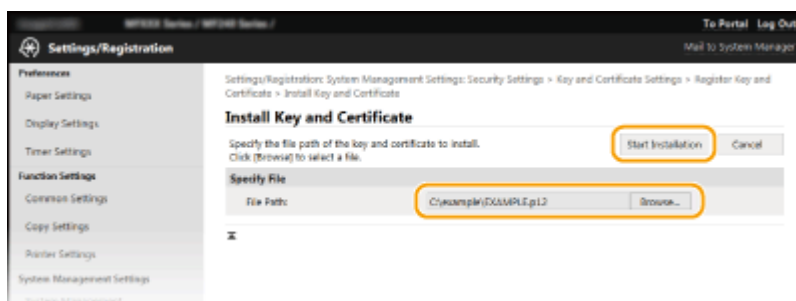
- Click [Delete] on the right of the key pair or CA certificate you want to delete ► click [OK]. You cannot delete the preinstalled CA certificates.
- A key pair cannot be deleted if it is currently used for some purpose, such as when "[TLS]" or "[IEEE 802.1X]" is displayed under [Key Usage]. In this case, disable the function or replace the key pair before deleting it. The preinstalled CA 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 file**

- Click [Delete] on the right of the file you want to delete ► click [OK].

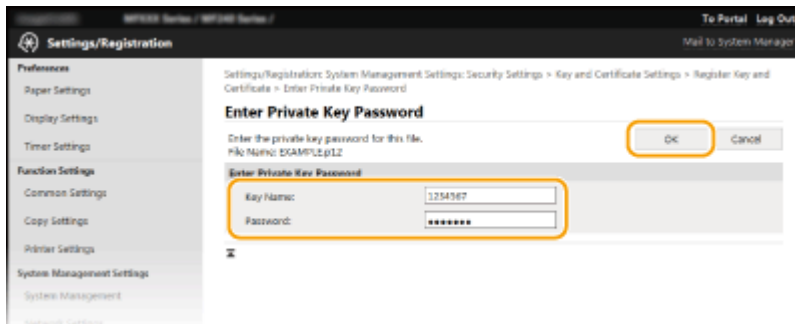
**6 Click [Browse], specify the file to install, and click [Start Installation].**

⇒ 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]

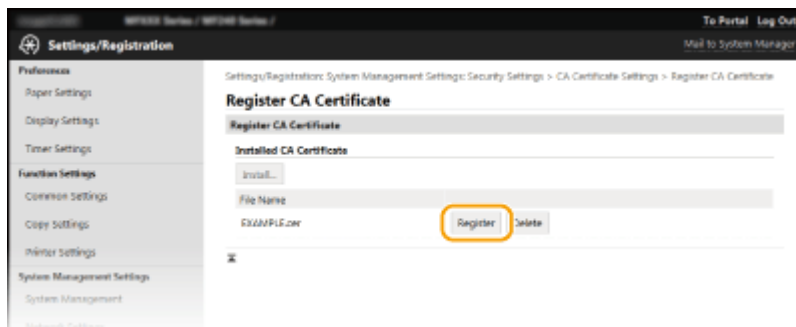
Enter up to 24 alphanumeric characters for the name of the key pair to be registered.

### [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

- ▶ [Generating Key Pairs\(P. 259\)](#)
- ▶ [Verifying Key Pairs and Digital Certificates\(P. 269\)](#)
- ▶ [Enabling TLS Encrypted Communication for the Remote UI\(P. 249\)](#)
- ▶ [Configuring IEEE 802.1X Authentication\(P. 252\)](#)

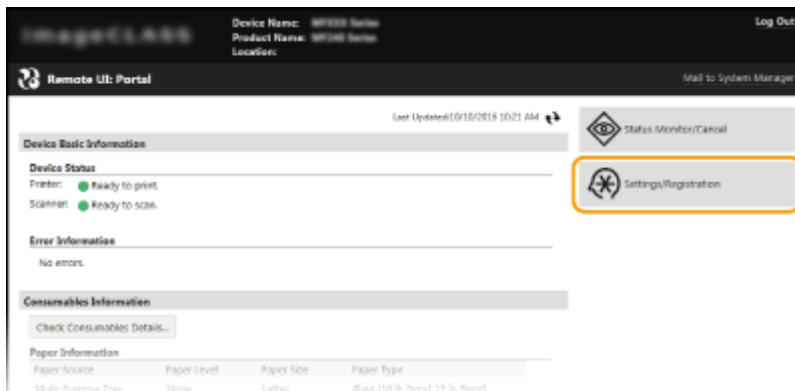
# Verifying Key Pairs and Digital Certificates

15A8-055

Once key pairs and CA certificates are registered, you can view their detailed information or verify them for validity and signature.

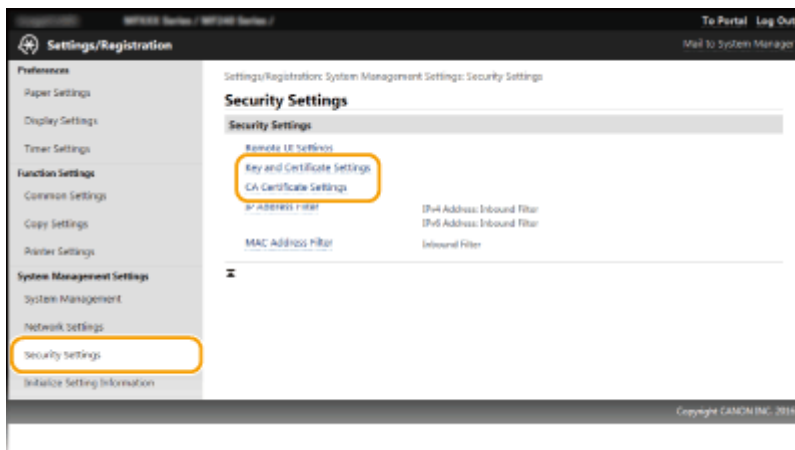
**1 Start the Remote UI and log on in System Manager Mode. ▶ Starting Remote UI(P. 273)**

**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.**



# Using Remote UI (MF244dw / MF232w)

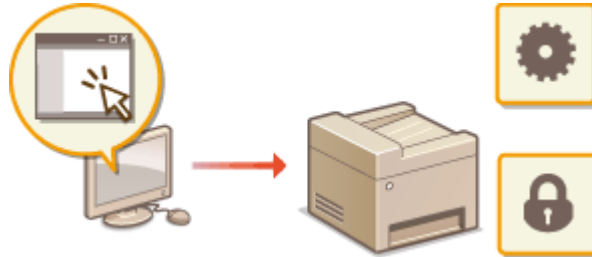
<b>Using Remote UI (MF244dw / MF232w)</b> .....	272
<b>Starting Remote UI</b> .....	273
<b>Remote UI Screens</b> .....	275
<b>Managing Documents and Checking the Machine Status</b> .....	278
<b>Setting Up Menu Options from Remote UI</b> .....	282

## Using Remote UI MF244dw / MF232w

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15A8-056

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 such as security. 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. 278)**
- ▶ **Setting Up Menu Options from Remote UI(P. 282)**

### Basics of the Remote UI

- ▶ **Starting Remote UI(P. 273)**
- ▶ **Remote UI Screens(P. 275)**

### 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/7/8/10
- Microsoft Internet Explorer 7.0 or later

#### Mac OS

- Mac OS 10.6 or later (except for Classic environment)
- Safari 3.2.1 or later

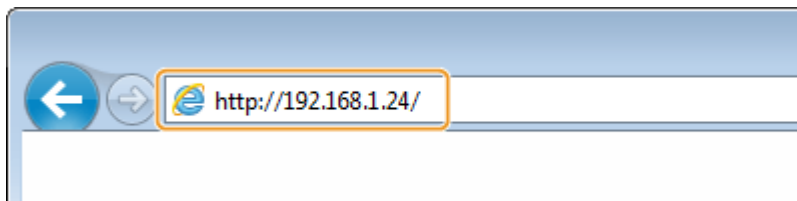
# Starting Remote UI

15A8-057

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\(P. 194\)](#) ). 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:

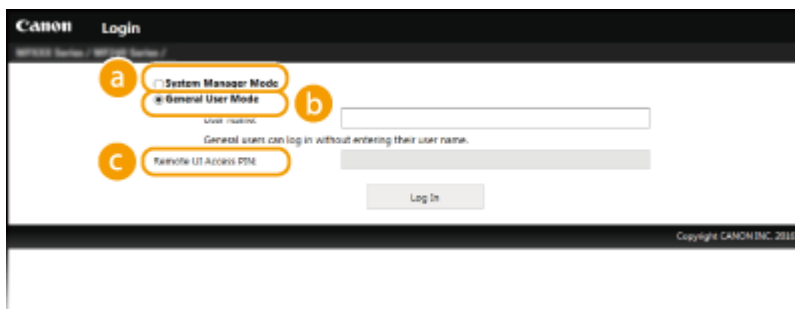
#### If a security alert is displayed

- A security alert may be displayed if communication with an Apple device is encrypted ( [▶Enabling TLS Encrypted Communication for the Remote UI\(P. 249\)](#) ). When certificate settings or TLS settings have no errors, continue browsing the Web site.
- A security alert may be displayed when the Remote UI communication is encrypted ( [▶Enabling TLS Encrypted Communication for the Remote UI\(P. 249\)](#) ). When certificate settings or TLS settings have no errors, continue browsing the website.

## 3 Log on to the Remote UI.

### ■When a System Manager PIN is not set

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 PIN in [System Manager PIN] ( [▶Setting the System Manager PIN\(P. 229\)](#) ). If [System Manager PIN] is not set, you do not need to input anything.

#### b [General User Mode]

You can check the status of documents or the machine, and you can also change some of the settings. If you wish to delete your print documents, enter the user name of the documents in [User Name]. The user

name is automatically set to print documents based on information such as your computer name or computer logon name.

### **C [Remote UI Access PIN]**

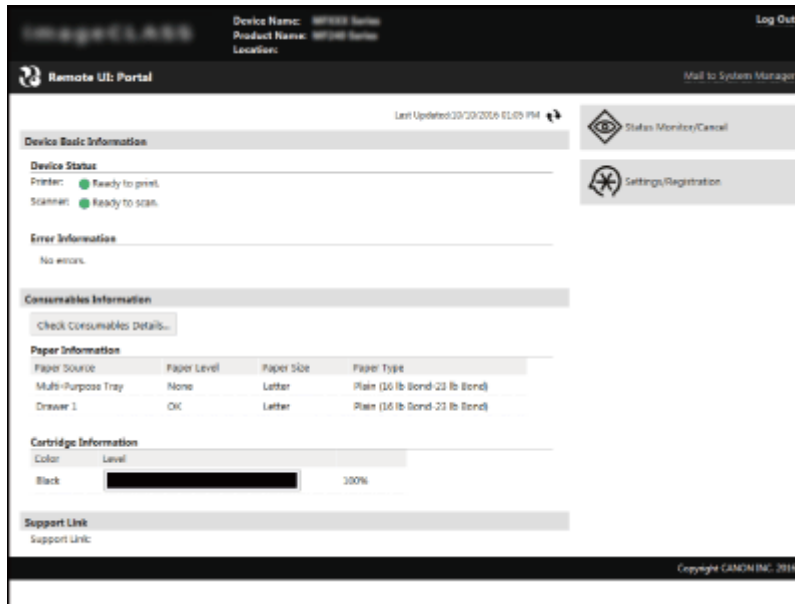
If [Remote UI Access PIN] is set, enter the PIN. **▶Setting a Remote UI PIN (MF244dw / MF232w)(P. 231)**

### **■When a System Manager PIN is set**

Enter the registered [System Manager PIN]. **▶Setting the System Manager PIN(P. 229)**

## **4 Click [Log In].**

- Portal Page (main page) will be displayed. **▶Remote UI Screens(P. 275)**



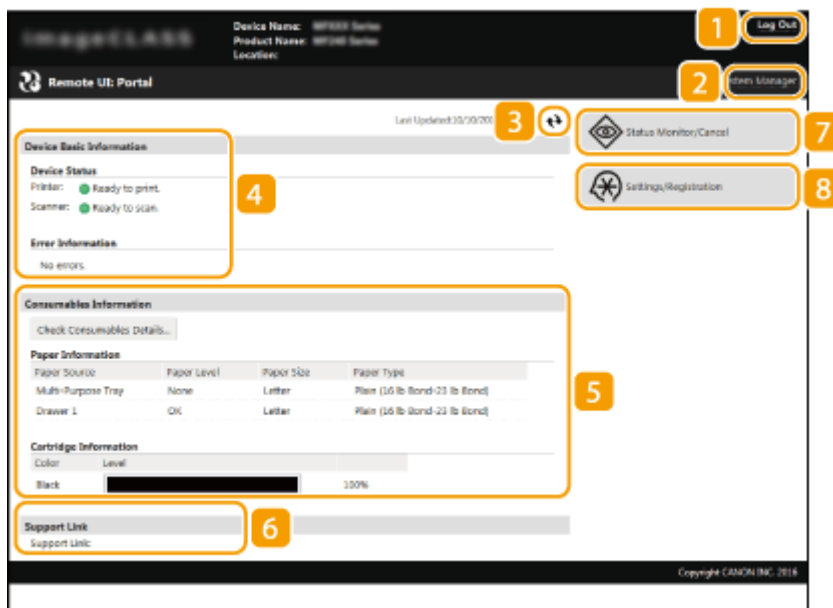


# Remote UI Screens

This section describes the typical screens of the Remote UI.

- ▶ **Portal Page (Main Page)(P. 275)**
- ▶ **[Status Monitor/Cancel] Page(P. 276)**
- ▶ **[Settings/Registration] Page(P. 277)**

## 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 cartridges. Click [Check Consumables Details] to display the screen for checking consumables. ▶ **Checking Consumables(P. 279)**

## 6 Support Link

Displays the support link specified in [Device Information] under [System Management].

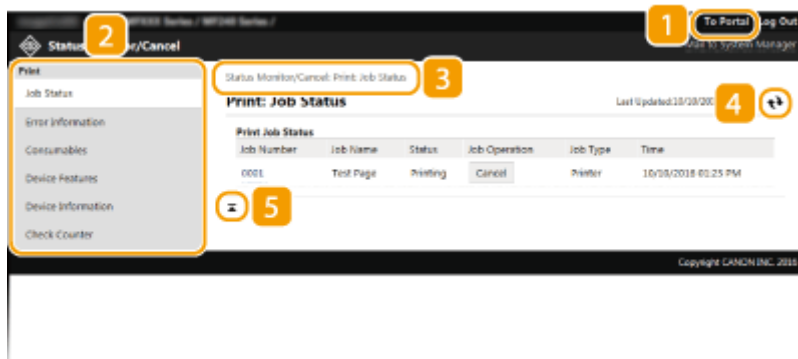
## 7 [Status Monitor/Cancel]

Displays the status of the current print documents and history of print and copy documents. You can also check the status of the machine.

## 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. 282)**

## [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. 278)**

### 3 Breadcrumb Trail

Indicates the series of pages you opened to display the currently displayed page. You can check what page is currently displayed.

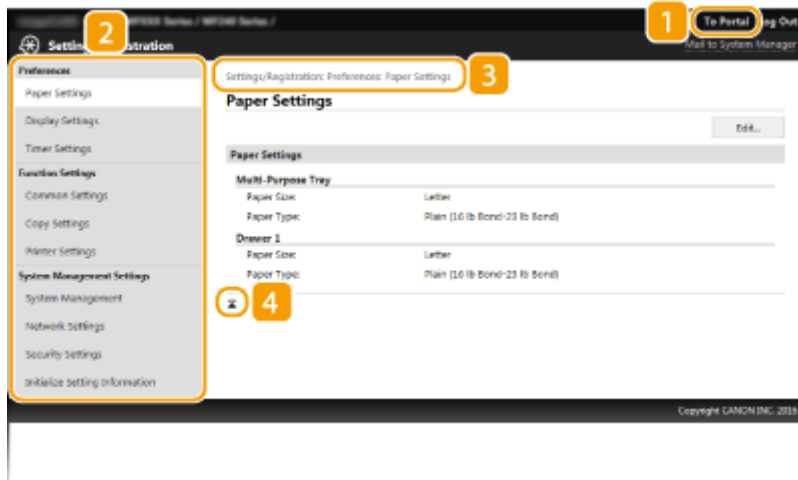
### 4 Refresh Icon

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. 282)**

### 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

15A8-059

- ▶ [Checking Current Status of Print Documents\(P. 278\)](#)
- ▶ [Checking Error Information\(P. 279\)](#)
- ▶ [Checking Consumables\(P. 279\)](#)
- ▶ [Checking Maximum Print Speed\(P. 279\)](#)
- ▶ [Checking System Manager Information\(P. 280\)](#)
- ▶ [Checking Print Total Counter\(P. 280\)](#)

## NOTE

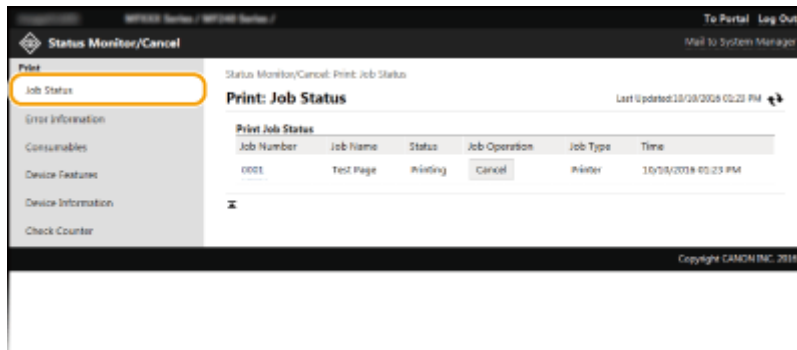
The document file name displays only 255 characters. The printed application name may be added to the file name.

## 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\(P. 273\)](#) ) ▶ [Status Monitor/Cancel] ▶ [Job Status]



You can delete a document job by clicking [Cancel].

## NOTE

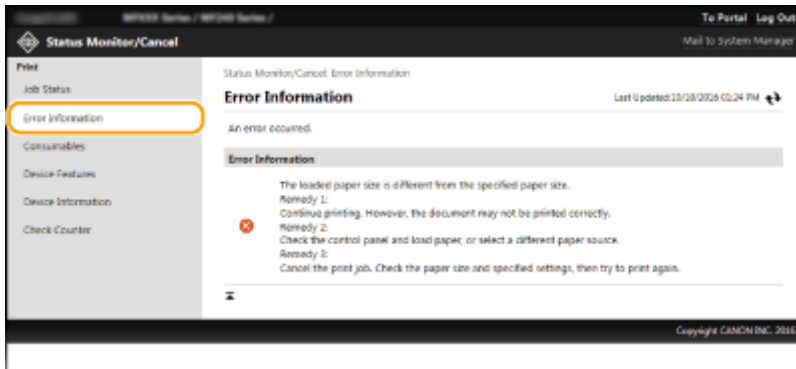
- If you logged on in System Manager Mode, all the print documents currently printing and waiting to be printed will be listed.
- If you entered your user name when you logged on in General User Mode, your user name will only be displayed on the documents that you printed.
- Click [Job Number] on the paused documents to display detailed information. You can check the user name and the page count of the printed document.

## 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. 275)**



Log on to the Remote UI ( **▶Starting Remote UI(P. 273)** ) ▶ [Status Monitor/Cancel] ▶ [Error Information]

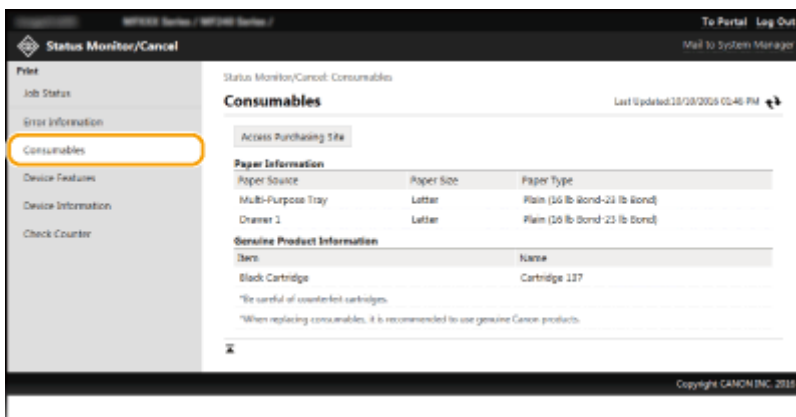


## Checking Consumables

Paper size and paper type for the paper source, toner cartridge model number, etc. are displayed. You can also click [Check Consumables Details] in **▶Portal Page (Main Page)(P. 275)** to display this page.



Log on to the Remote UI ( **▶Starting Remote UI(P. 273)** ) ▶ [Status Monitor/Cancel] ▶ [Consumables]

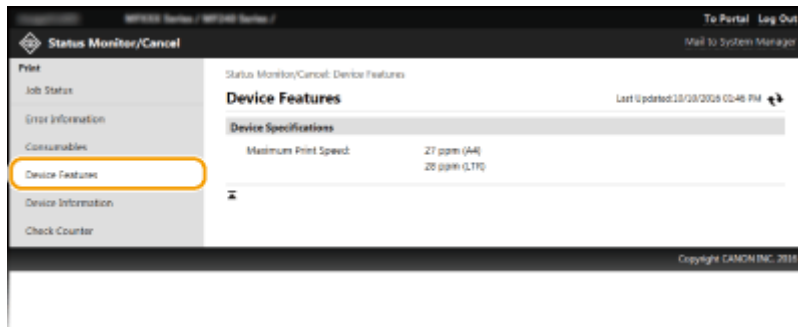


## Checking Maximum Print Speed

The maximum print speed is displayed.



Log on to the Remote UI ( [▶ Starting Remote UI\(P. 273\)](#) ) ▶ [Status Monitor/Cancel] ▶ [Device Features]

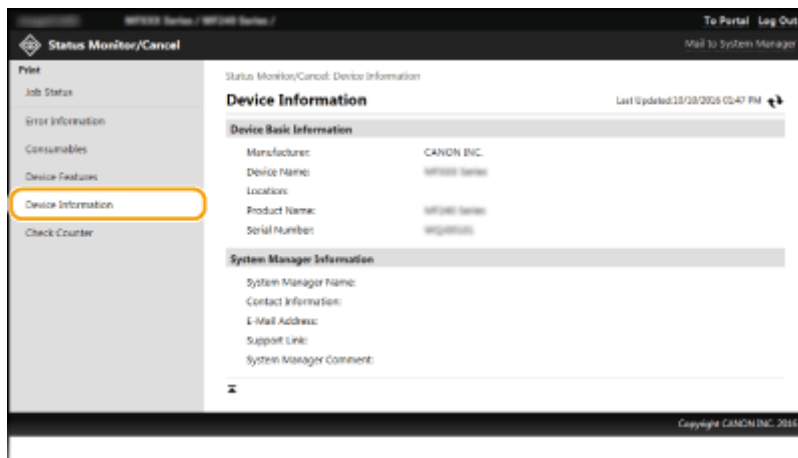


## Checking System Manager Information

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\(P. 330\)](#)



Log on to the Remote UI ( [▶ Starting Remote UI\(P. 273\)](#) ) ▶ [Status Monitor/Cancel] ▶ [Device Information]

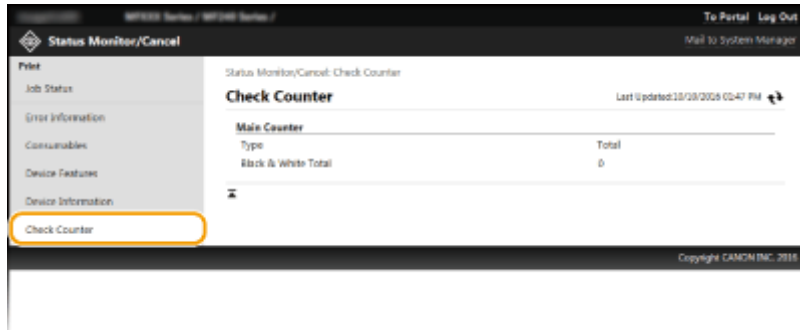


## Checking Print Total Counter

The total number of pages that have been printed by the copy and print functions is displayed.



Log on to the Remote UI ( [▶ Starting Remote UI\(P. 273\)](#) ) ▶ [Status Monitor/Cancel] ▶ [Check Counter]



## LINKS

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▶ Remote UI Screens(P. 275)

# Setting Up Menu Options from Remote UI

15A8-05A

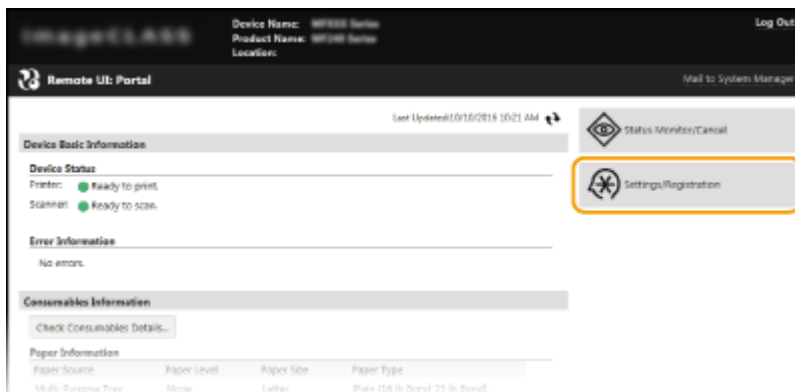
You can change the various machine settings by using the Remote UI. Most of the settings can be set also on the machine, but some settings can only be set using the Remote UI.

## NOTE

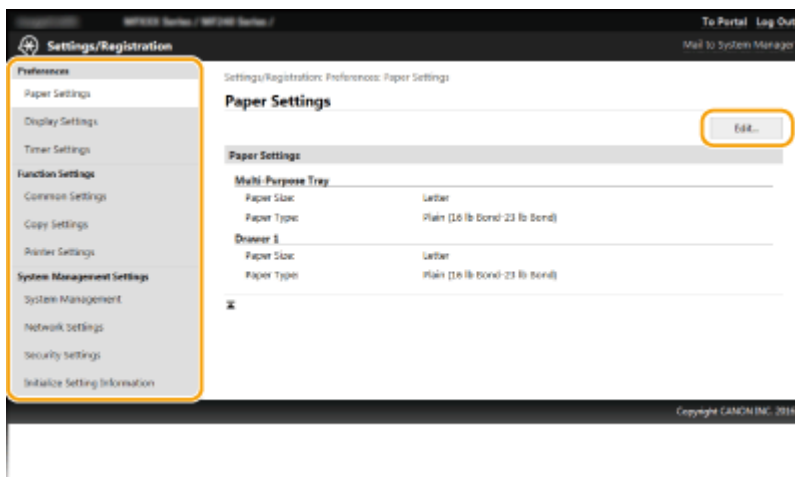
Some settings require you to first log on in System Manager Mode before you can change them.

### 1 Start the Remote UI. ▶Starting Remote UI(P. 273)

### 2 Click [Settings/Registration].



### 3 Click the menu item you want to set, then click [Edit].



- For more information about the settings menu, see each item below

Menu items	Refers
Preferences	
Paper Settings	▶Specifying Paper Size and Type(P. 53)
Display Settings	▶Preferences(P. 300)



Menu items	Referents
Timer Settings	▶ <b>Timer Settings(P. 303)</b>
Function Settings	
Common Settings	▶ <b>Common Settings (MF244dw)(P. 308)</b>
Copy Settings	▶ <b>Copy Settings(P. 310)</b>
Printer Settings	▶ <b>Printer Settings(P. 314)</b>
System Management Settings	
System Management	▶ <b>System Management Settings(P. 330)</b>
Network Settings	▶ <b>Network (MF244dw / MF232w)(P. 165)</b>
Security Settings	▶ <b>Security(P. 224)</b>
Initialize Setting Information	▶ <b>Initializing Menu(P. 397)</b>

## LINKS

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▶ **Remote UI Screens(P. 275)**


# Setting Menu List

<b>Setting Menu List</b> .....	285
<b>Direct Connection (MF244dw / MF232w)</b> .....	286
<b>Network Settings (MF244dw / MF232w)</b> .....	287
<b>Output Reports</b> .....	297
<b>Preferences</b> .....	300
<b>Timer Settings</b> .....	303
<b>Common Settings (MF244dw)</b> .....	308
<b>Copy Settings</b> .....	310
<b>Scan Settings</b> .....	312
<b>Printer Settings</b> .....	314
<b>Adjustment/Maintenance</b> .....	324
<b>System Management Settings</b> .....	330


# Setting Menu List

---

15A8-05C

There are various settings in this machine. You can adjust each of the settings in detail. Access these settings by pressing .

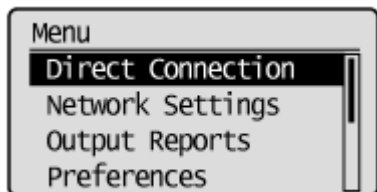
## TIPS

You can print the setting menu in list form to check the current settings:  **Output Reports(P. 297)**

## Direct Connection MF244dw / MF232w

---

15A8-05E

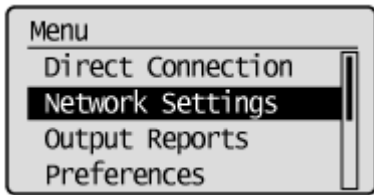


Make a direct connection between a mobile device and the machine. ▶ **Using the Machine in Direct Connection (in Access Point Mode)(P. 144)**

Settings for Direct Connection can be specified from ▶ **Direct Connection Settings (P. 289)**.

## Network Settings MF244dw / MF232w

15A8-05F



All the settings about the network are listed with short descriptions. Default settings are marked with a dagger (†).

### NOTE

If a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press **OK**. [▶Setting the System Manager PIN\(P. 229\)](#)

- ▶[Select Wired/Wireless LAN\(P. 287\)](#)
- ▶[Wireless LAN Settings\(P. 287\)](#)
- ▶[Direct Connection Settings \(P. 289\)](#)
- ▶[TCP/IP Settings\(P. 290\)](#)
- ▶[SNMP Settings\(P. 294\)](#)
- ▶[Dedicated Port Settings\(P. 295\)](#)
- ▶[Waiting Time for Connection at Startup\(P. 296\)](#)
- ▶[Ethernet Driver Settings\(P. 296\)](#)
- ▶[IEEE 802.1X Settings\(P. 296\)](#)
- ▶[Initialize Network Settings\(P. 296\)](#)

### 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\(P. 168\)](#)

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. See "Getting Started" [▶Manuals Included with the Machine\(P. 425\)](#) .

#### 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\(P. 177\)](#)

### 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. 180)**

**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

### 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. 172)**

### WPS PIN Code Mode

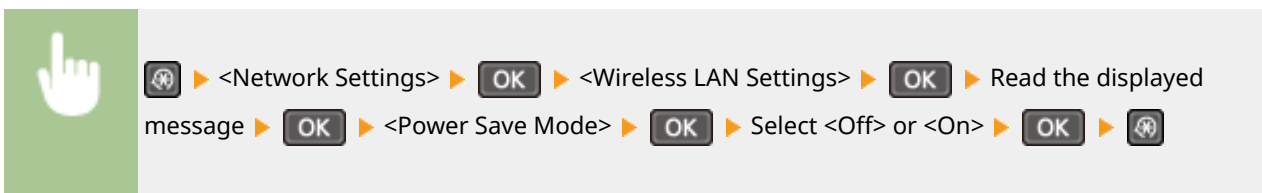
Select to configure a wireless connection by entering a PIN code for a WPS wireless router. **▶Setting Up Connection Using WPS PIN Code Mode(P. 174)**

### Power Save Mode

Select whether or not the machine enters Power Save Mode based on signals emitted from the wireless router.

Off †

On



### Wireless LAN Information

Select to view the current wireless LAN settings. **▶Viewing Network Settings(P. 194)**

MAC Address

Wireless LAN Status

Latest Error Information

Channel

SSID Settings


Security Settings

Power Save Mode

## Direct Connection Settings

Configure settings for Direct Connection. After configuring settings, you can connect to the machine directly and wirelessly from a mobile device even without an access point or wireless LAN router.


### Use Direct Connection



Select whether to use Direct Connection. You can select <Direct Connection Only> or <Wireless LAN/Direct Conn. (Auto Switch)> when <Use Direct Connection> is set to <On> while the Wireless LAN connection is enabled.  **Make Direct Connection (Access Point Mode)(P. 144)**

**Off** 

**On**

Direct Connection Only  
Wireless LAN/Direct Conn. (Auto Switch)






 > <Network Settings> > **OK** > <Direct Connection Settings> > **OK** > <Use Direct Connection> > **OK** > <On> > **OK** > Select <Direct Connection Only> or <Wireless LAN/Direct Conn. (Auto Switch)> when <Wireless LAN> is selected in <Select Wired/Wireless LAN> > **OK** > 

### Time Until Direct Connection Termination

Set the time that the machine exits Direct Connection mode automatically. Can be set when <Use Direct Connection> is <On>. Once the time set in <Time Until Direct Connection Termination> is reached, communication between the machine and a mobile device is discontinued. Before starting a large print job, you should set a long delay time or set the delay time to <0> (Off).

0 (Off)  
1 to 10  to 60 (min.)



 > <Network Settings> > **OK** > <Direct Connection Settings> > **OK** > <Time Until Direct Connection Termination> > **OK** > Set time to disconnect > **OK** > 

### Access Point Mode Settings

To make detailed settings, such as authentication and encryption, enter an SSID and network key to configure settings. Can be set when <Use Direct Connection> is <On>.

**Use Custom SSID**

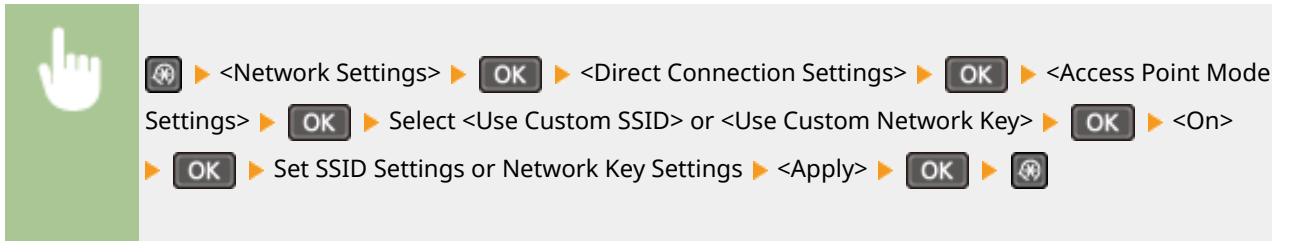
Off 

On

SSID (1-20 Characters)

**Use Custom Network Key**

Off †  
 On  
 Network Key (10 Char.)



**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. 188)**

**Auto Acquire †**  
 Select Protocol  
 Off  
 DHCP †  
 BOOTP  
 RARP  
 Auto IP  
 Off  
 On †

**Manually Acquire**  
 IP Address: 0.0.0.0  
 Subnet Mask: 0.0.0.0  
 Gateway Address: 0.0.0.0

**Check Settings**  
 Auto Acquire  
 IP Address  
 Subnet Mask  
 Gateway Address

**PING Command**

Select to check that the machine is connected to a computer over a network. ▶ **Testing the Network Connection(P. 190)**

**DNS Settings**

Specify settings for Domain Name System (DNS), which provides a host name for IP address resolutions. ▶ **Configuring DNS(P. 212)**



**DNS Server Settings**

Primary DNS Server: 0.0.0.0  
 Secondary DNS Server: 0.0.0.0

**DNS Host Name/Domain Name Settings**

Host Name  
 Domain Name

**DNS Dynamic Update Settings**

Off<sup>+</sup>  
 On  
 DNS Dyn. Updt. Intrvl.  
 0 to 24<sup>+</sup> to 48 (hr.)

**mDNS Settings**

Specify settings for using DNS functions without DNS servers. ▶ **Configuring DNS(P. 212)**

Off

On<sup>+</sup>

mDNS Name

**DHCP Option Settings**

Select whether to acquire the host name and whether to use the dynamic update function via the DHCP options when DHCP is enabled. ▶ **Configuring DNS(P. 212)**

**Acquire Host Name**

Off  
 On<sup>+</sup>

**DNS Dynamic Update**

Off<sup>+</sup>  
 On

**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. 191)**

Off<sup>+</sup>

On

**Check Settings**

Link-Local Address  
 Prefix Length

**Stateless Address Settings**

Enable or disable stateless addresses. ▶ **Setting IPv6 Addresses(P. 191)**

Off

**On** †

**Check Settings**  
 Stateless Address  
 Prefix Length

**Use DHCPv6**

Enable or disable the stateful address that is acquired via DHCPv6. ▶ **Setting IPv6 Addresses(P. 191)**

**Off** †

**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. 212)**

**DNS Host Name/Domain Name Settings**  
 Use IPv4 Host/Domain  
 Off  
 Host Name  
 Domain Name  
 On †

**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. 212)**

**Off**

**On** †  
 Use IPv4 Name for mDNS

Off mDNS Name On <sup>†</sup>
-------------------------------------

**LPD Print Settings**

Enable or disable LPD, a printing protocol that can be used on any hardware platform or operating system. ▶ **Configuring Printing Protocols and WSD Functions(P. 198)**

Off On <sup>†</sup>
------------------------

**RAW Print Settings**

Enable or disable RAW, a Windows specific printing protocol. ▶ **Configuring Printing Protocols and WSD Functions(P. 198)**

Off On <sup>†</sup>
------------------------

**WSD Settings**

Enable or disable automatic browsing and acquiring information for the printer or scanner by using the WSD protocol that is available on Windows Vista/7/8/10/Server 2008/Server 2012. ▶ **Configuring Printing Protocols and WSD Functions(P. 198)**

<p><b>WSD Print Settings</b></p> <p>Use WSD Print</p> <p>Off On <sup>†</sup></p> <p>Use WSD Browsing</p> <p>Off On <sup>†</sup></p> <p><b>WSD Scan Settings</b></p> <p>Use WSD Scan</p> <p>Off <sup>†</sup> On</p> <p>Use Computer Scan</p> <p>Off <sup>†</sup> On</p> <p><b>Use Multicast Discovery</b></p> <p>Off On <sup>†</sup></p>
---

**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. 246)**

Off On <sup>†</sup>
------------------------

## Port Number Settings

Change port numbers for protocols according to the network environment. **▶ Changing Port Numbers (MF244dw / MF232w)(P. 241)**

### 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

### 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. 210)**

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. 218)**

### SNMPv1 Settings

Enable or disable SNMPv1. When enabling SNMPv1, specify a community name and access privileges to Management Information Base (MIB) objects.

**Off**

**On **†****

Community Name 1 Settings

Off

On **†**

Community Name

MIB Access Permission

Community Name 2 Settings


Off **†**









On

Community Name

MIB Access Permission

Dedicated Community Settings  
 Off  
 On <sup>†</sup>










 ▶ <Network Settings> ▶  ▶ <SNMP Settings> ▶  ▶ <SNMPv1 Settings> ▶  ▶  
 <SNMPv1 Settings> ▶  ▶ Select <Off> or <On> ▶  ▶ Specify settings if <On> is  
 selected ▶  ▶ 

### 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> ▶  ▶ 

### Acquire Printer Mngt. Info. from Host

Enable or disable the monitoring of printer management information from a networked computer running SNMP-compatible software.

Off <sup>†</sup>  
 On

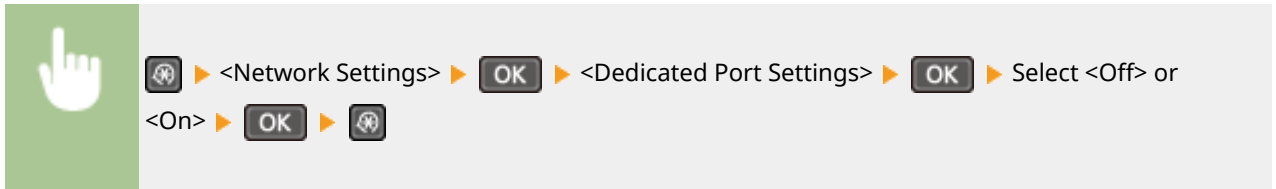


 ▶ <Network Settings> ▶  ▶ <SNMP Settings> ▶  ▶ <Acquire Printer Mngt. Info.  
 from Host> ▶  ▶ Select <Off> or <On> ▶  ▶ 

## Dedicated Port Settings

Enable or disable the dedicated port. The dedicated port is used when printing or scanning uses MF Scan Utility and when browsing or specifying the machine settings over the network.

Off  
 On <sup>†</sup>



## 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\(P. 211\)](#)

0 <sup>†</sup> to 300 (sec.)

## Ethernet Driver Settings

Select the communication mode of Ethernet (half-duplex/full-duplex) and the Ethernet type (10BASE-T/100BASE-TX). You can also view the MAC address of the machine.

### Auto Detect

Select whether to automatically detect or manually select the communication mode and the Ethernet type. [▶Configuring Ethernet Settings\(P. 208\)](#)

**Off**  
 Communication Mode  
 Half Duplex <sup>†</sup>  
 Full Duplex  
 Ethernet Type  
 10BASE-T <sup>†</sup>  
 100BASE-TX

**On** <sup>†</sup>

### 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\(P. 194\)](#)

## IEEE 802.1X Settings

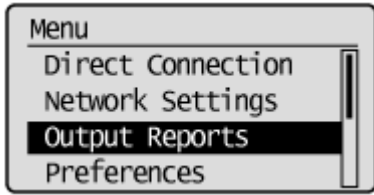
Enable or disable IEEE 802.1X authentication. [▶Configuring IEEE 802.1X Authentication\(P. 252\)](#)

Off <sup>†</sup>  
 On

## Initialize Network Settings

Select to return the Network Settings to the factory defaults. [▶Initialize Menu\(P. 337\)](#)

# Output Reports



You can check the list of the settings as well as the content that has been registered in the machine by printing a User Data List.

## NOTE

Reports or lists can be printed on A4 or Letter size paper.


▶ **Loading Paper(P. 42)**

### Asterisks (\*)

- Settings marked with "\*1" are only available for MF244dw / MF232w.
- Settings marked with "\*2" are only available for MF244dw.

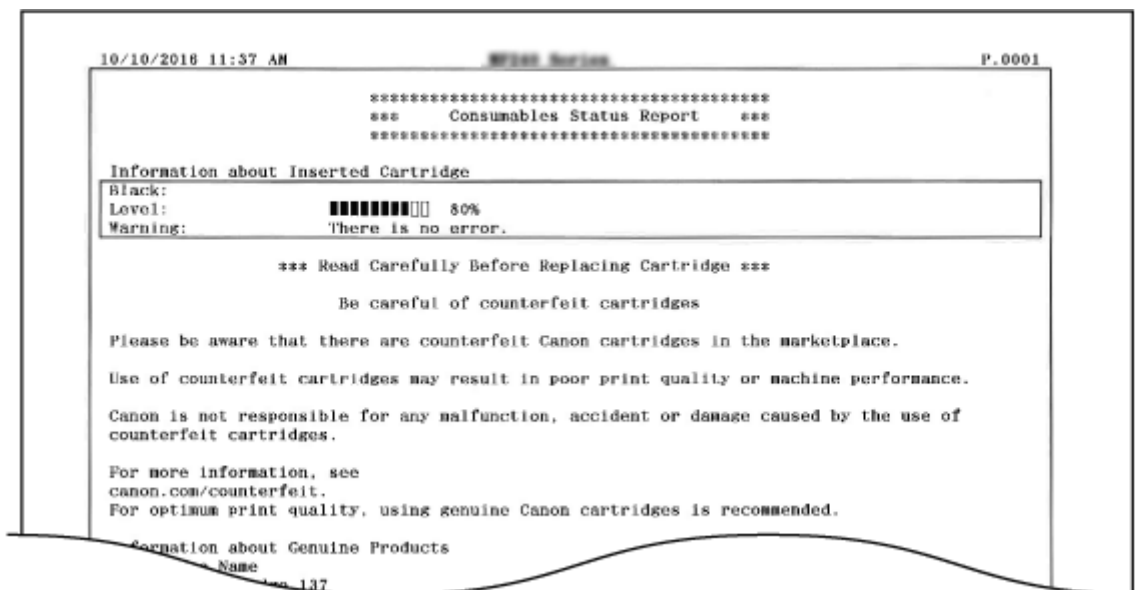
## Consumables Status Report

You can check the consumables status installed in the machine.




▶ <Output Reports> ▶  ▶ <Consumables Status Report> ▶  ▶ Check that the size of paper displayed on the screen is loaded in the machine ▶  ▶ <Yes> ▶  ▶







### Example:



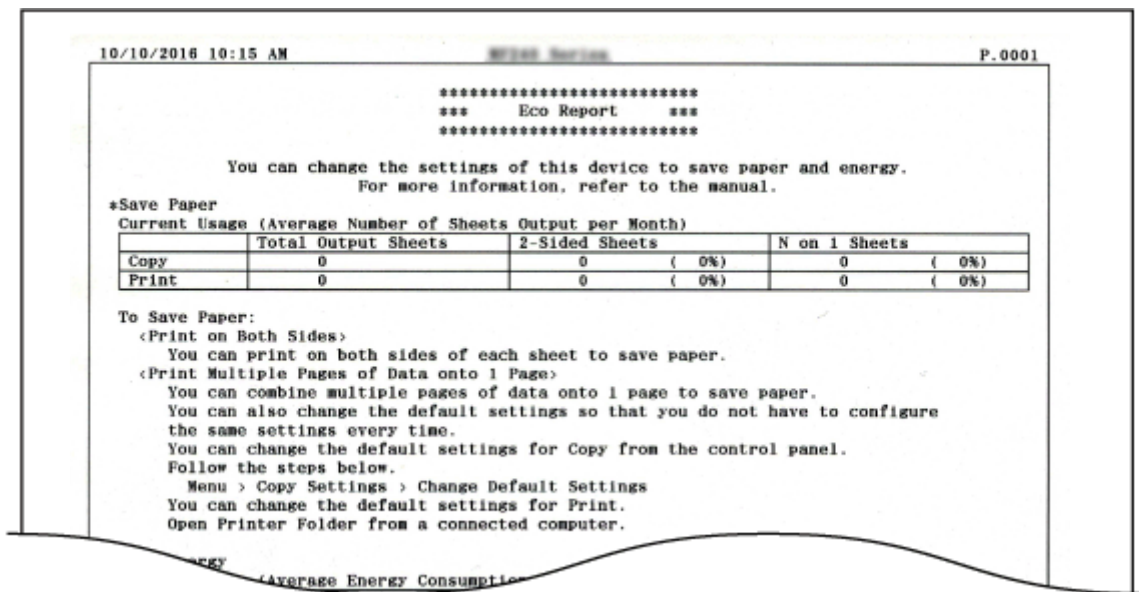
## Eco Report \*1

You can check information such as the number of printouts per month and amount of consumed power, and also check ways to increase savings.



 ▶ <Output Reports> ▶  ▶ <Eco Report> ▶  ▶ Check that the size of paper displayed on the screen is loaded in the machine ▶  ▶ <Yes> ▶  ▶ 






Example:



## User Data List

You can check a list of the machine's setting items (setting menu list) and their settings.

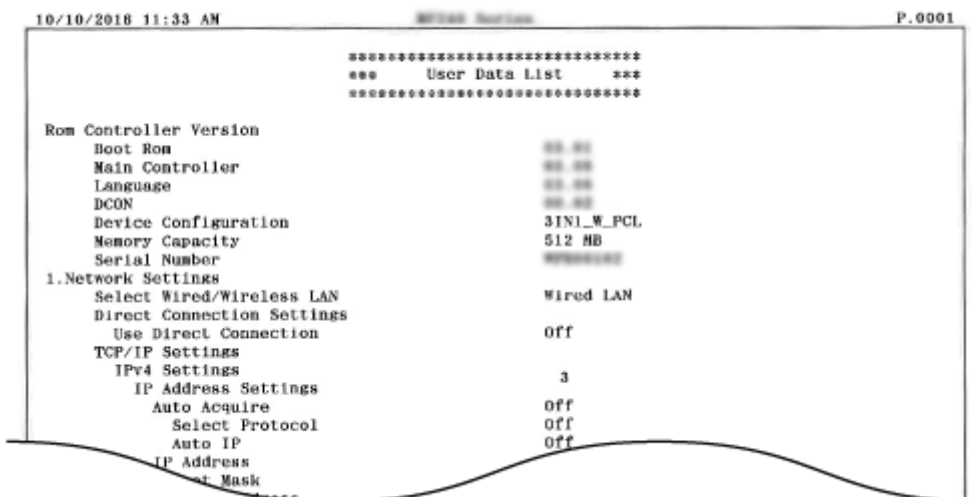


 ▶ <Output Reports> ▶  ▶ <User Data List> ▶  ▶ Check that the size of paper displayed on the screen is loaded in the machine ▶  ▶ <Yes> ▶  ▶ 

Example:



## Setting Menu List



## PCL Font List \*2

You can print a list to check the fonts available in PCL mode.

▶

<Output Reports>

▶

OK

▶

<PCL Font List>

▶

OK

▶

Check that the size of paper displayed on the screen is loaded in the machine

▶

OK

▶

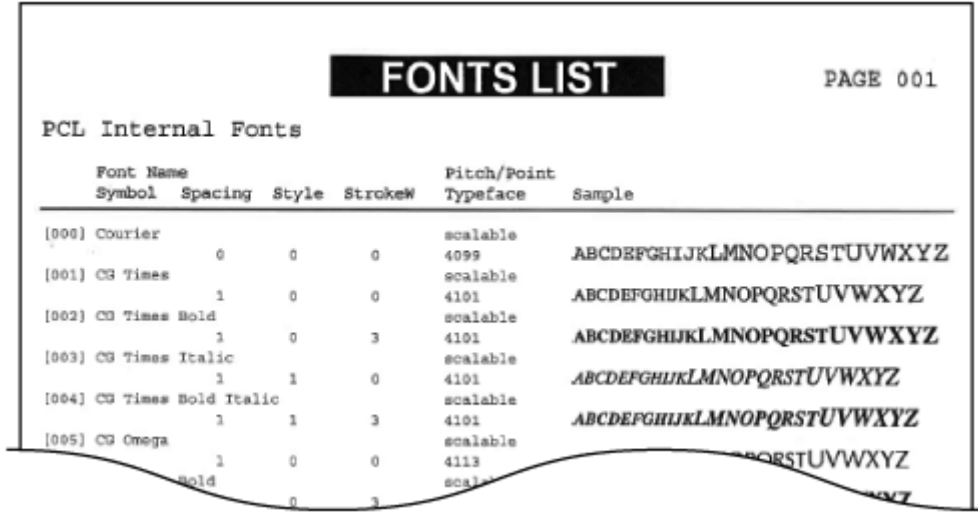
<Yes>

▶

OK

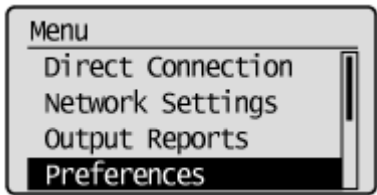
▶

**Example:**



# Preferences

15A8-05J



All the settings about the display are listed with short descriptions. Default settings are marked with a dagger (†).

## NOTE

### Asterisks (\*)


- Settings marked with "\*1" are only available for the MF244dw.
- Settings marked with "\*2" have different defaults depending on the country or region of purchase.
- Settings marked with "\*3" are only available for the MF244dw / MF232w.







## Display Settings

### Contrast

Adjust the brightness of the display to suit the installation location of the machine.

Five Levels










 > <Preferences> >  > <Display Settings> >  > <Contrast> >  > Use < / >  
 ▶ to adjust the brightness >  > 

### 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 <Contrast>.

Off†  
On










 > <Preferences> >  > <Display Settings> >  > <Invert Screen  
 Colors> >  > Select <On> or <Off> >  > 

### Millimeter/Inch Entry Switch

Select the unit of measurement.

Millimeter †  
Inch










 ▶ <Preferences> ▶  ▶ <Display Settings> ▶  ▶ <Millimeter/Inch Entry Switch> ▶  ▶ Select <Millimeter> or <Inch> ▶  ▶ 

### Notify to Check Paper Settings

Specify whether to display a message prompting you to check paper settings when loading paper into the paper drawer or manual feed slot.

Off  
On †










 ▶ <Preferences> ▶  ▶ <Display Settings> ▶  ▶ <Notify to Check Paper Settings> ▶  ▶ Select <Off> or <On> ▶  ▶ 

### Notify to Clean Original Scanning Area\*1

When set to <On>, a message is displayed for dirt or soiling on the original scanning area.

Off  
On †










 ▶ <Preferences> ▶  ▶ <Display Settings> ▶  ▶ <Notify to Clean Original Scanning Area> ▶  ▶ Select <Off> or <On> ▶  ▶ 

### Message Display Time

Specify the interval in seconds at which two different messages are alternately displayed.

1 to 2 † 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. 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\*2

Select the display language used for the display, reports, and lists.

Arabic, Basque, Bulgarian, Catalan, Chinese (Simplified), Chinese (Traditional), Croatian, Czech, Danish, Dutch, English †, Estonian, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Latvian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Slovak, Slovene, Spanish, Swedish, Turkish










 ▶ <Preferences> ▶  ▶ <Display Settings> ▶  ▶ <Language> ▶  ▶ Select a language ▶  ▶ 

### Remote UI Language\*2 \*3

Select the display language used for the Remote UI screens.

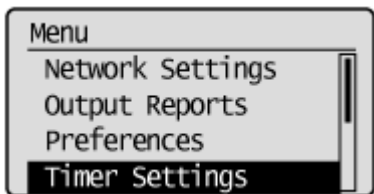
Chinese (Simplified), Chinese (Traditional), Czech, Danish, Dutch, English †, Finnish, French, German, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, Turkish



 ▶ <Preferences> ▶  ▶ <Display Settings> ▶  ▶ <Remote UI Language> ▶  ▶ Select a language ▶  ▶ 

# Timer Settings

15A8-05K



All the settings about the timer are listed with short descriptions. Default settings are marked with a dagger ( † ).

## NOTE

### Asterisks (\*)

- Settings marked with “\*1” are only available for the MF244dw / MF232w.
- Settings marked with “\*2” may be unavailable or have different defaults depending on the country or region of purchase.

- ▶ Quiet Mode Time(P. 303)
- ▶ Date/Time Settings(P. 303)
- ▶ Auto Sleep Time(P. 305)
- ▶ Auto Reset Time(P. 305)
- ▶ Function After Auto Reset(P. 306)
- ▶ Auto Offline Time(P. 306)
- ▶ Auto Shutdown Time(P. 307)

## Quiet Mode Time \*1

You can reduce the operation sound of the machine when you want it to run more quietly (quiet mode). Set a time for the machine to enter quiet mode automatically. You can also set the machine to always run in quiet mode. ▶ **Entering Quiet Mode(P. 57)**

<p><b>Start Time</b>                  Off †                  On                  Start time setting to enter quiet mode</p> <p><b>End Time</b>                  Off †                  On                  Stop time setting to exit quiet mode</p>
---

## Date/Time Settings \*1


Specify date and time settings, including the date format and the 12- or 24-hour clock display setting.







### Date Format \*2

Select the date format (order of year, month, and day).

YYYY MM/DD
------------

MM/DD/YYYY  
DD/MM YYYY †










 ▶ <Timer Settings> ▶  ▶ <Date/Time Settings> ▶  ▶ <Date Format> ▶  ▶ Select the date format ▶  ▶ 

**Time Format**

Select the 12- or 24-hour clock display setting.

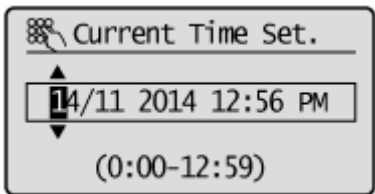

12 Hour (AM/PM) †  
24 Hour









 ▶ <Timer Settings> ▶  ▶ <Date/Time Settings> ▶  ▶ <Time Format> ▶  ▶ Select the display setting ▶  ▶ 

**Current Date/Time Settings**

Set the current date and time. Use ◀ / ▶ to move the cursor, and ▲ / ▼ to specify the date and time or switch between <AM>/<PM>.

 ▶ <Timer Settings> ▶  ▶ <Date/Time Settings> ▶  ▶ <Current Date/Time Settings> ▶  ▶ Set the date and time ▶  ▶ 

**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) Kiritimati 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 \*2**

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, Day  
 End: Month, Day



 > <Timer Settings> >  > <Date/Time Settings> >  > <Daylight Saving Time Settings> >  > <On> >  > Select a starting month and day > <Apply> >  > Select an ending month and day > <Apply> >  > 

**Auto Sleep Time**

If the machine has not been operated or has had no data to process 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. 59)**

1 † to 30 (min.)

**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.)



## NOTE

The screen displayed after the Auto Reset is performed can be selected in <Function After Auto Reset>.

## Function After Auto Reset

Select whether to return the display to the default screen after the Auto Reset is performed. If <Default Function> is selected, the display returns to the main screen for copy mode. If <Selected Function> is selected, the display returns to the main screen of the function that was selected.

Default Function +  
Selected Function



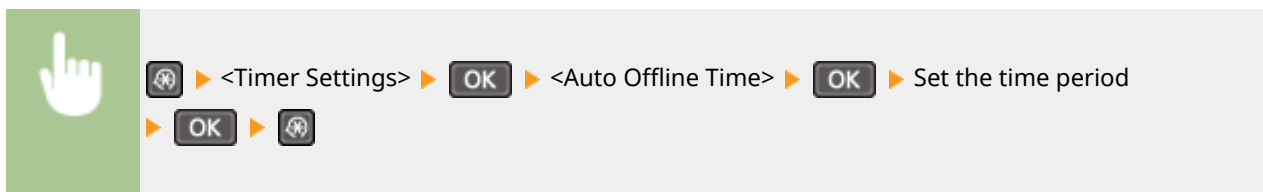
## Auto Offline Time

If a key has not been pressed for a specified period of time after the screen below is displayed (the machine is set online for scanning), the machine automatically becomes offline. Specify the time period at which the machine becomes offline. You can also set the machine to remain online.

Remote Scanner  
Waiting... (Online)  
Start scanning using  
the device at the  
store location.

0 (The machine remains online.)  
1 to 5 + to 60 (min.)





## Auto Shutdown Time

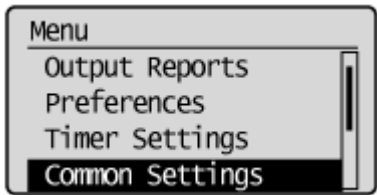
Set a timer to automatically shut down the machine after the specified period of idle time has elapsed since the machine entered the sleep mode. **▶Setting Auto Shutdown Time(P. 61)**

0 (Auto Shutdown is disabled.)

1 to 4 <sup>+</sup> to 8 (hr.)

# Common Settings MF244dw

15A8-05L



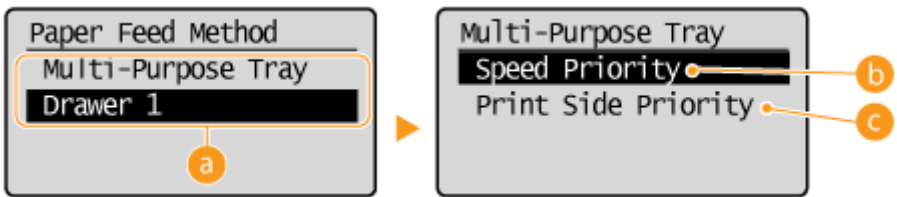
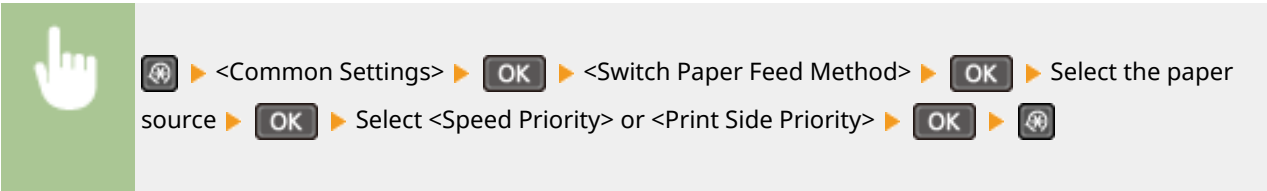
All the settings about the operation of the paper drawer and the paper feed method are listed with short descriptions. Default settings are marked with a dagger (†).

## 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 just load the paper face down for both 1- and 2-sided printing. For more information, see [Loading Preprinted Paper\(P. 51\)](#) .

**Multi-Purpose Tray**  
 Speed Priority †  
 Print Side Priority

**Drawer 1**  
 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.

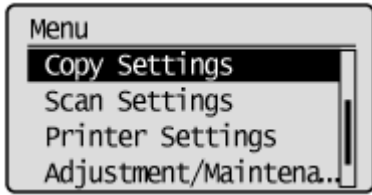
### **C <Print Side Priority>**

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. 419)** ), <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. 51)** ).
- 1-sided printing speed may be slower when <Print Side Priority> is selected.

# Copy Settings



All the settings about the copy are listed with short descriptions. Default settings are marked with a dagger (†).

## NOTE

### Asterisks (\*)

Settings marked with an asterisk (\*) are only available for MF244dw.

- ▶ **Change Default Settings (P. 310)**
- ▶ **Correct Density(P. 311)**
- ▶ **Initialize Default Settings(P. 311)**

## Change Default Settings

You can change the factory default settings about copy. The selected settings are used as the default settings of the copy function. ▶ **Changing Default Settings(P. 83)**

### Number of Copies

1 † to 999

### Density

-4 to 0 † to +4

Auto Density

### Original Type

Text

Text/Photo (High Speed) †

Text/Photo

Photo

### 2-Sided\*

Off †

1->2-Sided

Original/Finishing Type

### Copy Ratio

Custom Ratio

100% (1:1) †

400% (Max)

200%

141% A5->A4

70% A4->A5

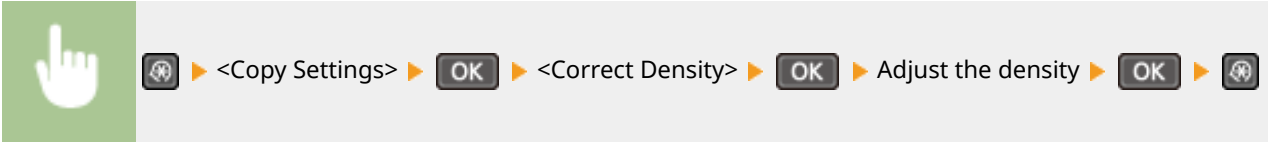
50%

25% (Min)
<b>N on 1</b>
Off †
2 on 1
4 on 1
ID Card Copy
Select Layout
<b>Collate</b>
Off †
On
<b>Sharpness</b>
Seven Levels

## Correct Density

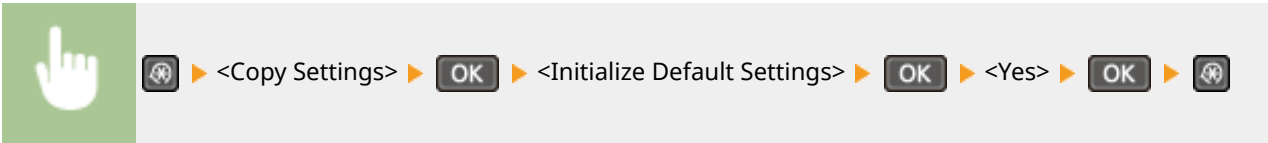
Specify the initial copy density. You can also change the copy density temporarily. **▶ Adjusting Density(P. 72)**

-4 to 0 † to +4

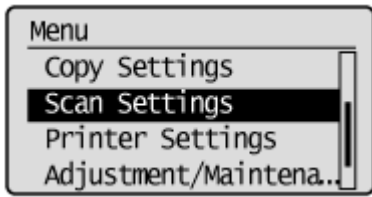


## Initialize Default Settings

Select this option to restore the default copy settings.



## Scan Settings







All the settings about the scan are listed with short descriptions. Default settings are marked with a dagger (†).

### NOTE

#### Asterisks (\*)

Settings marked with an asterisk (\*) are only available for MF244dw.

## Shortcut Key Settings

Register scan settings for the  key (for MF232w,  and  keys). The settings include the computer that scanned images are saved in, the type of scan (color or black and white), and the file format (PDF or JPEG). Registering these settings enables you to scan documents into a specified computer just by pressing a button. You can view the registered settings by selecting <Confirm Destination>.  **Scanning Using the [Scan -> PC] Key(P. 133)**

### MF244dw / MF231

#### Register

Scan -> PC

Off †

USB Connection

Color Scan

B&W Scan

Custom 1

Custom 2

Network Connection\*

Color Scan

B&W Scan

Custom 1

Custom 2

#### Confirm Destination

Scan -> PC

### MF232w

#### Register

Scan -> PC1

Off †

USB Connection

Color Scan

B&W Scan

Custom 1

Custom 2

Network Connection

Color Scan

B&W Scan

Custom 1

Custom 2

Scan -> PC2

Off †

USB Connection

Color Scan

B&W Scan

Custom 1

Custom 2

Network Connection

Color Scan

B&W Scan

Custom 1

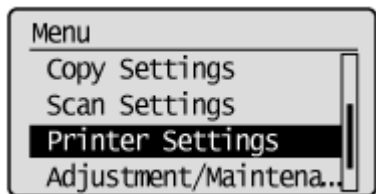
Custom 2

**Confirm Destination**

Scan -> PC1

Scan -> PC2

# 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 for the MF244dw / MF232w.
- Settings marked with "\*2" are only available for the MF244dw.

### 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 performing PCL printing and printing from UNIX or other operating system that does not support printer drivers.




- ▶ Action When Paper Size Mismatch(P. 314)
- ▶ Mobile Print Halftones(P. 315)
- ▶ Copies(P. 315)
- ▶ 2-Sided Printing(P. 315)
- ▶ Default Paper(P. 316)
- ▶ Print Quality(P. 316)
- ▶ Layout(P. 317)
- ▶ Timeout(P. 318)
- ▶ PCL(P. 319)






## Action When Paper Size Mismatch

Set whether printing goes ahead if a paper size other than the size loaded in the paper source is selected. You can also set the machine not to go ahead with printing and instead display an alert message. ▶ **When an Error Message Appears(P. 347)**

Force Output  
Display Error †











 ▶ <Printer Settings> ▶  ▶ <Action When Paper Size Mismatch> ▶  ▶ Select <Force Output> or <Display Error> ▶  ▶ 

## Mobile Print Halftones <sup>\*1</sup>

Select the image processing when printing from a mobile device. Select <Gradation> for photos and illustrations, and <Error Diffusion> for mostly text documents for more attractive printouts.

Gradation <sup>†</sup>  
Error Diffusion







 ▶ <Printer Settings> ▶  ▶ <Mobile Print Halftones> ▶  ▶ Select <Gradation> or <Error Diffusion> ▶  ▶ 

## Copies <sup>\*2</sup>

Set the number of copies to print.

1 <sup>†</sup> to 999








 ▶ <Printer Settings> ▶  ▶ <Copies> ▶  ▶ Set the number of copies to print  
▶  ▶ 

## 2-Sided Printing <sup>\*2</sup>

Select whether to make 2-sided printouts.

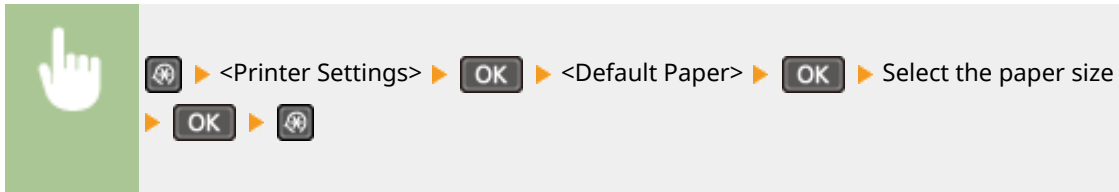
Off <sup>†</sup>  
On



 ▶ <Printer Settings> ▶  ▶ <2-Sided Printing> ▶  ▶ Select <Off> or <On>  
▶  ▶ 

## Default Paper \*2

Use this item to specify the paper size. **Paper(P. 419)**



## Print Quality

You can change settings related to print quality.

### Density \*2

Adjust the toner density.

#### 17 Levels

#### Fine Adjust

High

17 Levels

Medium

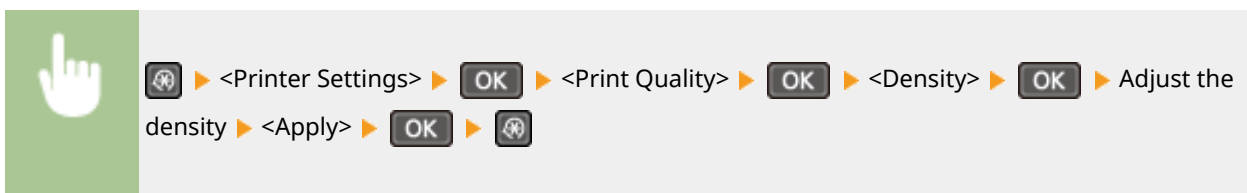
17 Levels

Low

17 Levels

### NOTE

- The settings specified for <Density> are disabled when <Toner Save> is enabled.

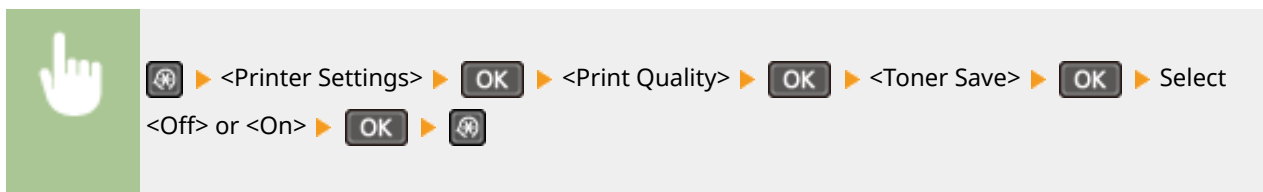


### Toner Save

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<sup>†</sup>

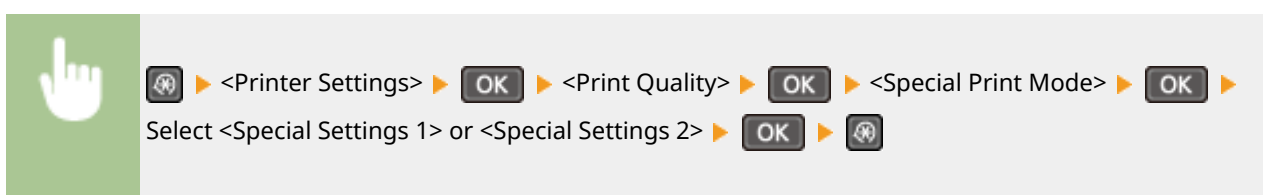
On



### Special Print Mode \*2

Select <Special Settings 1> if a printed bar code is unreadable, or <Special Settings 2> if print results are partially faded.

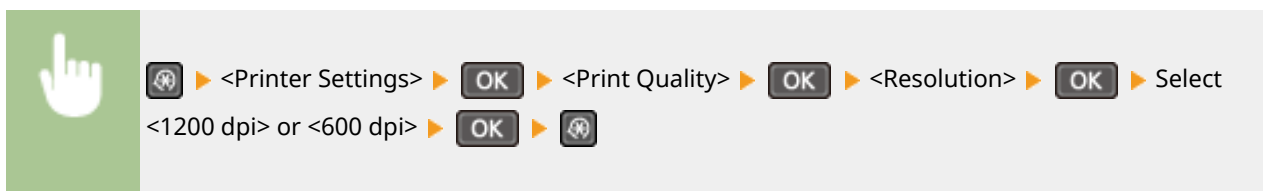
Off †  
Special Settings 1  
Special Settings 2



### Resolution \*2

Specify the resolution to be used for print data processing.

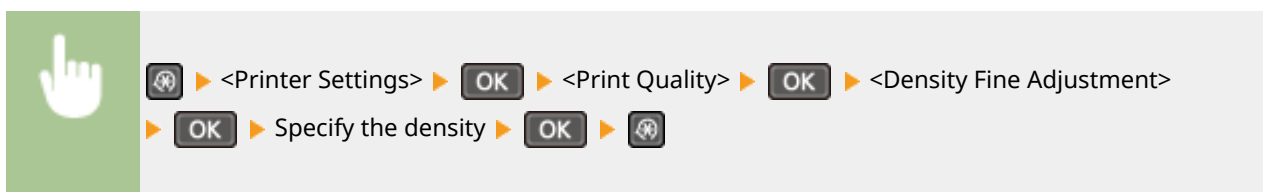
1200 dpi  
600 dpi †



### Density Fine Adjustment \*2

Finely adjust the density. You can specify this setting only when <1200 dpi> is selected in <Resolution>.

-1 to 0 † to 1



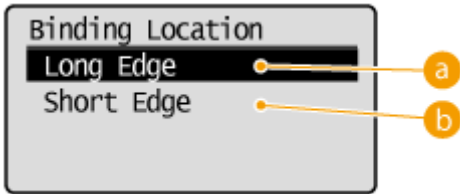
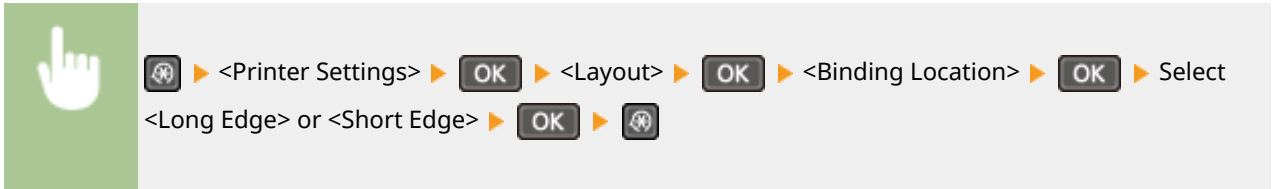
### Layout \*2

Specify the page layout settings such as binding position.

## 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.

Long Edge <sup>†</sup>  
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.



## Timeout \*2

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.)



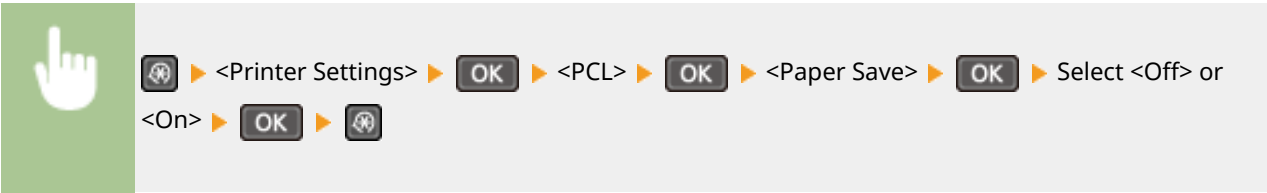
## PCL \*2

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>.

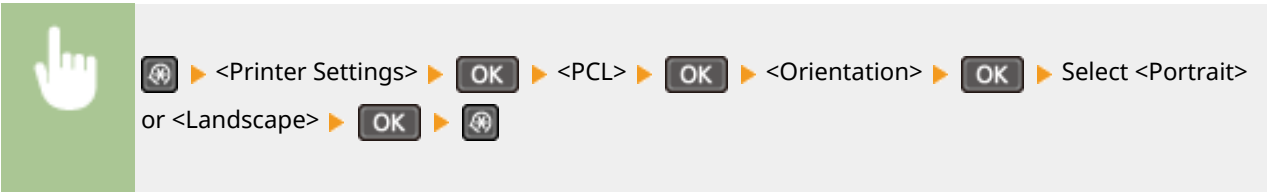
Off †  
On



### Orientation

Select <Portrait> (vertical orientation) or <Landscape> (horizontal orientation) for the page orientation.

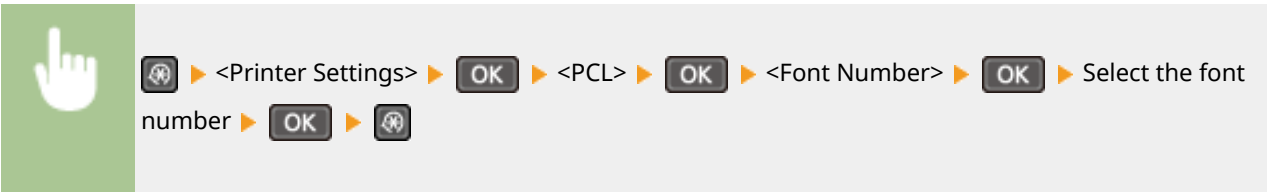
Portrait †  
Landscape



### 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. 299)**

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










 ▶ <Printer Settings> ▶  ▶ <PCL> ▶  ▶ <Character Code> ▶  ▶ Select the character code ▶  ▶ 

**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> ▶  ▶ <PCL> ▶  ▶ <Custom Paper> ▶  ▶ Select <Off> or <On> ▶  ▶ 

**Unit of Measure**

Select the unit of measurement to use to set a custom paper size.

Millimeters<sup>†</sup>  
Inches










 ▶ <Printer Settings> ▶  ▶ <PCL> ▶  ▶ <Unit of Measure> ▶  ▶ Select <Millimeters> or <Inches> ▶  ▶ 

**X dimension**

Specify the horizontal dimension (short edge) of the custom paper.

77 to 216<sup>†</sup> (mm)



 ▶ <Printer Settings> ▶  ▶ <PCL> ▶  ▶ <X dimension> ▶  ▶ Specify the dimension ▶  ▶ 

**Y dimension**

Specify the vertical dimension (long edge) of the custom paper.

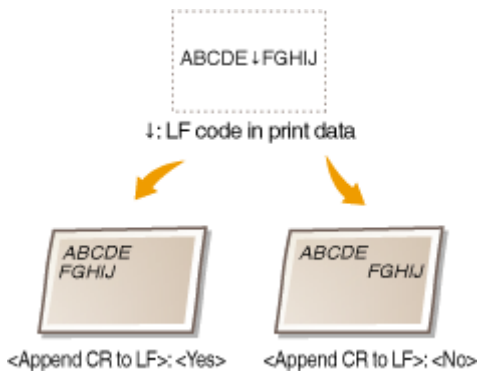
127 to 356<sup>†</sup> (mm)



▶ <Printer Settings> ▶  ▶ <PCL> ▶  ▶ <Y dimension> ▶  ▶ Specify the dimension ▶  ▶

### 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<sup>†</sup>



▶ <Printer Settings> ▶  ▶ <PCL> ▶  ▶ <Append CR to LF> ▶  ▶ Select <Yes> or <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<sup>†</sup>  
On



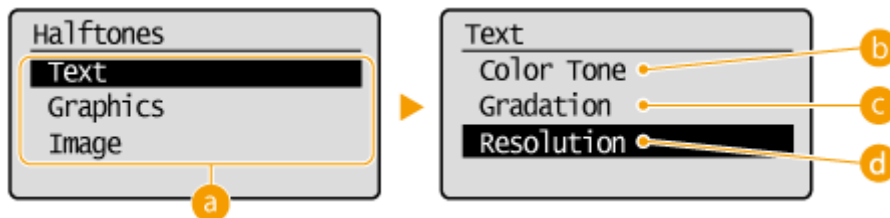
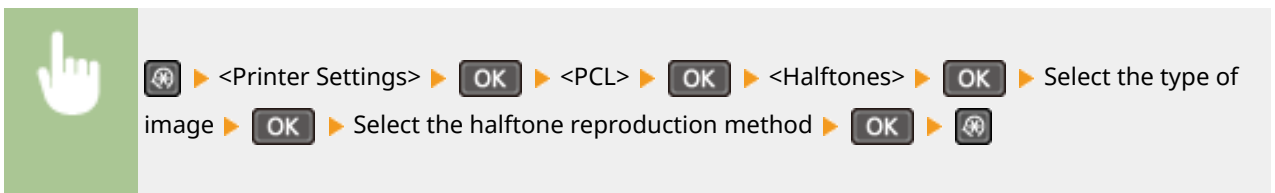
▶ <Printer Settings> ▶  ▶ <PCL> ▶  ▶ <Enlarge A4 Print Width> ▶  ▶ Select <Off> or <On> ▶  ▶



## 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.

<b>Text</b>
Color Tone
Gradation
Resolution †
<b>Graphics</b>
Color Tone †
Gradation
Resolution
<b>Image</b>
Color Tone †
Gradation
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 <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.

### c <Gradation>

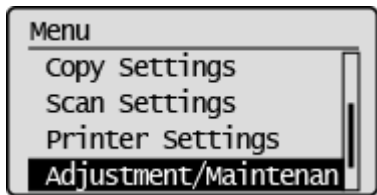
Produces a print with smooth gradation or smooth edges. It is suitable for printing figures or graphs containing gradation areas.

### d <Resolution>

Produces a fine print with clear edges of text. It is suitable for printing characters and fine lines.

# Adjustment/Maintenance

15A8-05W



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 for the MF244dw / MF232w.

- ▶ **Displ. Timing for Cartridge Prep. Notif.(P. 324)**
- ▶ **Toner Save(P. 324)**
- ▶ **Special Processing(P. 325)**
- ▶ **Clean Fixing Assembly (P. 329)**

## Displ. Timing for Cartridge Prep. Notif.

Set the display timing for the message notifying you that the amount remaining in the toner cartridges is low.

1 to 10 † to 99 (%)



## Toner Save

Select whether to reduce toner consumption when copying.

**Copy**  
Off †  
On



**NOTE:**

When set to <On>

Fine lines and portions with lighter print density may become blurred.

## Special Processing

If the print results on special types of paper are not satisfactory, the following settings may improve the quality of the printouts.

### Special Printing Mode U

If toner appears splattered around text and patterns in a printout, select <On>.

Off <sup>†</sup>  
On

✎

⚙️ ▶ <Adjustment/Maintenance> ▶ OK ▶ <Special Processing> ▶ OK ▶ <Special Printing Mode U> ▶ OK ▶ <On> ▶ OK ▶ ⚙️

**NOTE:**

When set to <On>

Print quality can be affected by the type of paper (especially lightweight paper) and the printing environment (especially high humidity).

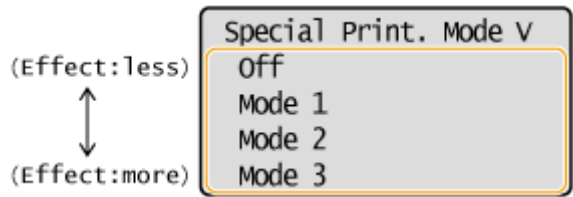
### Special Printing Mode V

Adjust this setting if the print paper curls or wrinkles.

Off <sup>†</sup>  
Mode 1  
Mode 2  
Mode 3

✎

⚙️ ▶ <Adjustment/Maintenance> ▶ OK ▶ <Special Processing> ▶ OK ▶ <Special Printing Mode V> ▶ OK ▶ Select the mode ▶ OK ▶ ⚙️



**NOTE:**

To enable the setting

This setting is enabled in the following conditions.

- The paper size is set to <B5>, <A5>, <STMT>, or <EXEC>
- <Paper Type> is set to <Plain (60-89 g/m²)>, <Plain L (60-89 g/m²)>, <Recycled (60-89 g/m²)>, <Color (60-89 g/m²)>, or <Envelope>

**After the setting is enabled**

Print speed is slower.

**Special Printing Mode X \***

Adjust this setting if streaks adhere to the print paper.

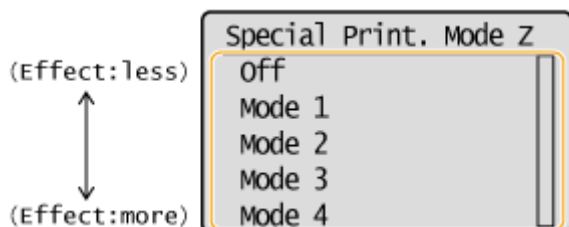
Off  
 Mode 1 †  
 Mode 2  
 Mode 3  
 Mode 4



**Special Printing Mode Z**

Adjust this setting if streaks adhere to the print paper output when copying.

Off  
 Mode 1  
 Mode 2 †  
 Mode 3  
 Mode 4



**NOTE:**

**After the setting is changed**

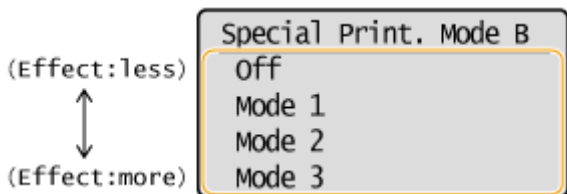
By specifying <Off> or <Mode 1>, streaks may adhere to the print paper. By specifying <Mode 3> or <Mode 4>, outlines may be blurred or images may appear somewhat grainy. The print density becomes lighter as the setting progresses from <Off> to <Mode 4>.

**After printing from a smartphone or tablet**

If streaks adhere to the paper, change the setting with <Special Printing Mode Z>.

**Special Printing Mode B**

Adjust this setting if streaks adhere to the print paper after replacing the toner cartridge or after not printing for a long period of time.



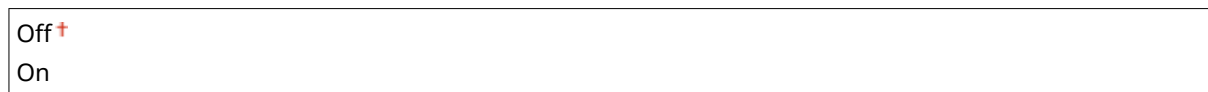
**NOTE:**

**After the setting is enabled**

Print speed is slower.

**Special Printing Mode C**

Adjust this setting if streaks adhere to the print paper.



**NOTE:**

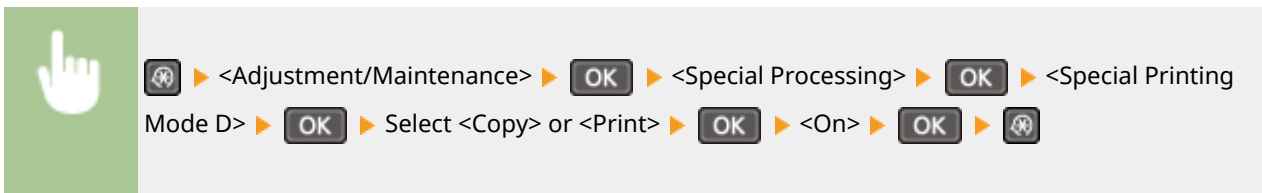
**After the setting is enabled**

- While more effect is gained than with <Special Printing Mode Z>, print speed is slower.

### Special Printing Mode D

Adjust this setting if streaks adhere to the print paper. Also, setting this item to <On> will reduce the operating noise during printing.

<b>Copy</b>
Off †
On
<b>Print</b>
Off †
On



**NOTE:**

**After the setting is enabled**

- While more effect is gained than with <Special Printing Mode Z>, print speed is slower.

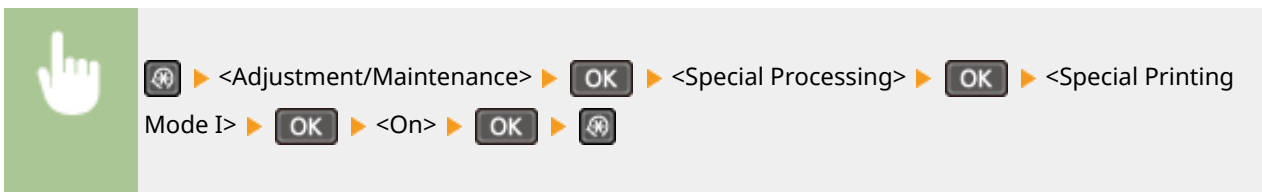
**After printing from a smartphone or tablet**

If streaks adhere to the paper, change the setting with <Special Printing Mode D> ▶ <Copy>.

### Special Printing Mode I

Only select <On> if paper jams frequently when printing on lightweight paper or on curled paper.

Off †
On



**NOTE:**

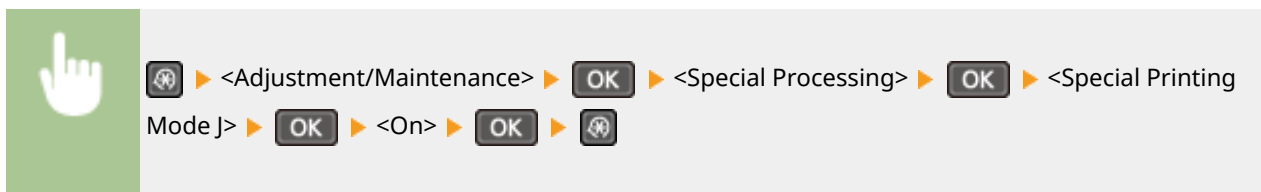
**When set to <On>**

White patches may appear in images printed on paper other than lightweight paper.

### Special Printing Mode J

If printing is uneven when printing fine lines or faint images, select <On>.

Off †
On

**NOTE:****When set to <On>.**

The following may occur.

- Definition may be affected
- Toner appears in non-print areas when using a new toner cartridge
- Toner cartridge may be used up more quickly

**Special Printing Mode K**

If toner does not adhere adequately and printouts are faded, select <On>.

Off <sup>†</sup>
On

**NOTE:****When set to <On>**

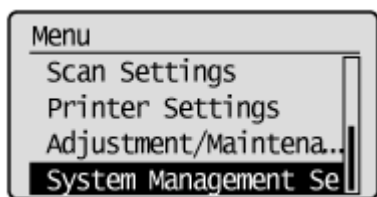
Print speed is slower.

## Clean Fixing Assembly

Clean the fixing assembly after a toner cartridge is replaced or if black streaks appear on printouts. **▶ Fixing Assembly(P. 383)**

## System Management Settings

15A8-05X



All the settings about System Management Settings are listed with short descriptions. Default settings are marked with a dagger ( † ).

### NOTE

#### If a screen for entering a PIN is displayed

Enter the PIN with the numeric keys and press **OK**. **Setting the System Manager PIN(P. 229)**

#### Asterisks (\*)

- Settings marked with "\*1" are only available for the MF244dw / MF232w.
- Settings marked with "\*2" have different defaults depending on the country or region of purchase.
- Settings marked with "\*3" are only available for the MF244dw.
- "\*4": Displayed as <Display Consumables Info. (Toner Status)> for the MF231.

- Network Settings(P. 330)**
- System Manager Information Settings(P. 330)**
- Device Information Settings(P. 331)**
- Security Settings(P. 331)**
- Select Country/Region(P. 332)**
- Remote UI Settings(P. 333)**
- Auto Online for Remote Scan(P. 333)**
- Use as USB Device(P. 334)**
- Enable Product Extended Survey Program(P. 334)**
- Displ. Consmbls. Info (RUI/Toner Status)(P. 334)**
- Google Cloud Print Settings(P. 335)**
- PDL Selection (Plug and Play) (P. 335)**
- Update Firmware(P. 336)**
- Initialize Eco Report Counter(P. 336)**
- Initialize Menu(P. 337)**
- Initialize All Data/Settings(P. 337)**

### Network Settings <sup>\*1</sup>

See **Network Settings (MF244dw / MF232w)(P. 287)** .

### System Manager Information Settings

Specify the PIN exclusively for Administrators who have access privileges to <Network Settings> and <System Management Settings>. You can set the PIN from <System Manager PIN>. You can also register the name of an Administrator. **Setting the System Manager PIN(P. 229)**



### System Manager PIN

Enter a number of up to seven digits for the System Manager PIN.


### System Manager Name

Enter up to 32 alphanumeric characters for the name of an Administrator.

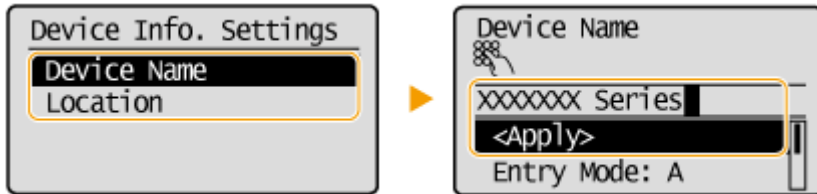
## Device Information Settings

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. 35)** ) ▶ <Apply> ▶  ▶



## Security Settings \*1

Enable or disable settings for IP address or MAC address packet filtering.

### Use TLS

Select whether to use TLS encrypted communication.  **Enabling TLS Encrypted Communication for the Remote UI(P. 249)**

Off <input type="button" value="Up"/>
On

### IPv4 Address Filter

Enable or disable settings for filtering packets received from devices with specified IPv4 addresses.  **Specifying IP Addresses for Firewall Rules(P. 234)**

Off <input type="button" value="Up"/>
On



### IPv6 Address Filter

Enable or disable settings for filtering packets received from devices with specified IPv6 addresses. ▶  
**Specifying IP Addresses for Firewall Rules(P. 234)**

Off †  
 On



### MAC Address Filter

Enable or disable settings for filtering packets received from devices with specified MAC addresses. ▶  
**Specifying MAC Addresses for Firewall Rules(P. 238)**

Off †  
 On

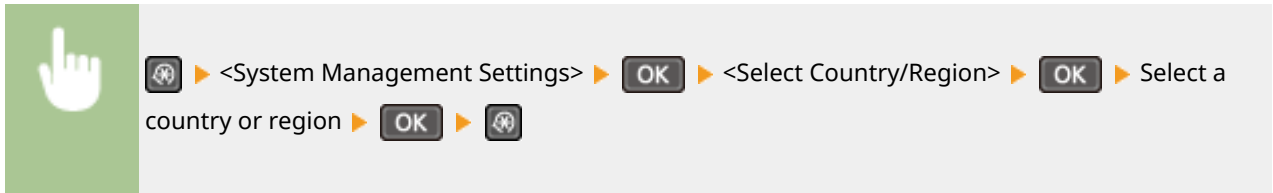


## Select Country/Region \*2

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. 247)**

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 (MF244dw / MF232w)(P. 231)**

Off †  
On  
Remote UI Access PIN



## Auto Online for Remote Scan

Select whether to use this feature to go online for remote scanning, even without using the operation panel.

Off  
On †







 ▶ <System Management Settings> ▶  ▶ <Auto Online for Remote Scan> ▶  ▶ Select <Off> or <On> ▶  ▶ 

## Use as USB Device

Enable or disable the USB port that is used for connecting the machine to a computer.

Off  
On <sup>†</sup>









 ▶ <System Management Settings> ▶  ▶ <Use as USB Device> ▶  ▶ Select <Off> or <On> ▶  ▶ Restart the machine

## Enable Product Extended Survey Program

Enable or disable the Product Extended Survey Program (a program for the machine usage survey).

Off  
On <sup>†</sup>



 ▶ <System Management Settings> ▶  ▶ <Enable Product Extended Survey Program> ▶  ▶ Select <Off> or <On> ▶  ▶ 


## Displ. Consmbls. Info (RUI/Toner Status) <sup>\*4</sup>







Set whether to display a button in the Remote UI for accessing the Web site for purchasing toner cartridges. Also set whether to use Toner Status.

**Displ. Consumables Purchase Button (RUI)<sup>\*1</sup>**  
Off  
On <sup>†</sup>

**Toner Status Settings**  
Off  
On <sup>†</sup>  
Displ. Purchase Button  
Off

On †



 ▶ <System Management Settings> ▶  ▶ <Displ. Consmbls. Info (RUI/Toner Status)> ▶  ▶ Select <Displ. Consumables Purchase Button (RUI)>\*1 or <Toner Status Settings> ▶  ▶ Select <Off> or <On> ▶  ▶ 

**NOTE:**

If you selected <On> for <Toner Status Settings>, continue by selecting <On> or <Off> for <Displ. Purchase Button>.

## Google Cloud Print Settings \*1

Enable or disable Google Cloud Print.  **Using Google Cloud Print(P. 159)**

**Enable Google Cloud Print**

Off

On †

**Google Cloud Print Registration Status**

## PDL Selection (Plug and Play)

Select a page description language so that the machine is detected as a printer that is compatible with that language when it is connected to a computer by using Plug and Play. For more information, see "MF Driver Installation Guide."

### 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.

UFRII LT †

UFRII LT (V4)

PCL6\*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.

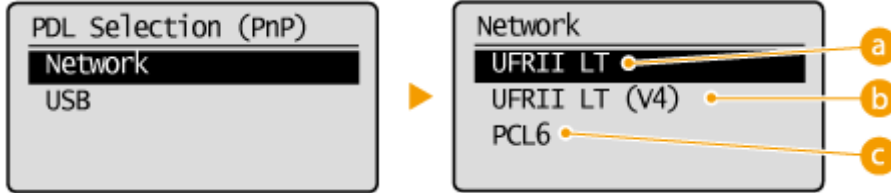
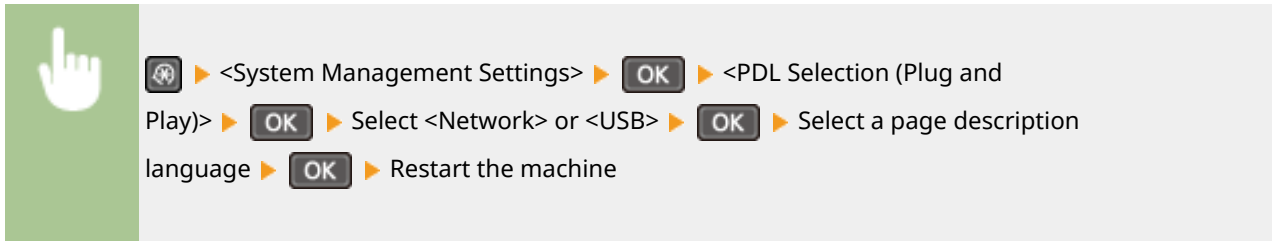
UFRII LT †

UFRII LT (V4)

PCL6\*3

**NOTE:**

Any setting change is enabled the next time the main power is turned ON.



**a** <UFR II LT>

Detects and connects the machine as a UFR II LT printer.

**b** <UFR II LT (V4)>

Detects and connects the machine as a UFR II LT printer that is compatible with XML Paper Specification (XPS).

**c** <PCL6>\*3

Detects and connects the machine as a PCL6 printer.

## Update Firmware

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 Internet> below or use a USB cable to connect.
- <Via Internet>\*1  
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.



## Initialize Eco Report Counter \*1

Select to restore the Eco Report Counter settings to the factory defaults. ▶ **Initialize Eco Report Counter (MF244dw / MF232w)(P. 399)**

## Initialize Menu

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. 397)**

- Preferences
- Timer Settings
- Common Settings\*<sup>3</sup>
- Copy Settings
- Scan Settings
- Printer Settings
- Adjustment/Maintenance
- System Management Settings
- Initialize All

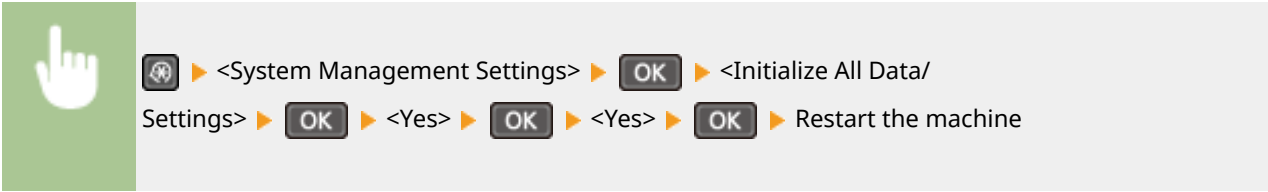
### System Management Settings

Select to restore the System Management Settings to the factory defaults. You can restore all the System Management Settings at once. **▶ Initializing Menu(P. 397)**

- |   |  |
|---|--|
| Network Settings* <sup>1</sup>            | Enable Product Extended Survey Program                 |
| System Manager Information Settings       | Displ. Consmbls. Info (RUI/Toner Status)* <sup>4</sup> |
| Device Information Settings               | Google Cloud Print Settings* <sup>1</sup>              |
| Security/Remote UI Settings* <sup>1</sup> | PDL Selection (Plug and Play)                          |
| Auto Online for Remote Scan               | Initialize All   |
| Use as USB Device                         |  |

## Initialize All Data/Settings

Delete all data on the machine and return it to its factory default settings.



# Troubleshooting

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<b>When a Problem Cannot Be Solved</b> .....	374



# Troubleshooting

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15A8-05Y

When a problem occurs, check this chapter to find out solutions before contacting Canon.

## ■ Paper Jams

If a document or paper jams, see [▶Clearing Jams\(P. 341\)](#) to remove the jammed paper.



## ■ A Message Appears

If the screen displays a message, see the following section.



[▶When an Error Message Appears\(P. 347\)](#)

## ■ Common Problems

If you suspect that the machine is malfunctioning, see the following sections before contacting Canon.



[▶Common Problems\(P. 355\)](#)

[▶Installation/Settings Problems\(P. 356\)](#)

[▶Copy/Printing Problems\(P. 360\)](#)

## ■ Printing Results are Not Satisfactory

If printing results are not satisfactory, see [▶When You Cannot Print Properly\(P. 363\)](#) .



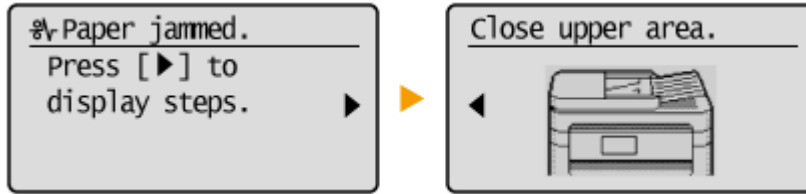
## ■ When a Problem Cannot Be Solved

If a problem persists, see [▶When a Problem Cannot Be Solved\(P. 374\)](#) to find out where to contact.



# Clearing Jams

If a paper jams, <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.



## MF244dw

- <Open feeder cover.>
  - ▶ **Document Jams in the Feeder (MF244dw)(P. 342)**
- <Close upper area.> ▶ <Lift control panel.>
  - ▶ **Paper Jams inside the Machine(P. 342)**

## MF232w / MF231

- <Close upper area.> ▶ <Lift control panel.>
  - ▶ **Paper Jams inside the Machine(P. 342)**

## IMPORTANT

### When removing the jammed paper, do not turn OFF the machine

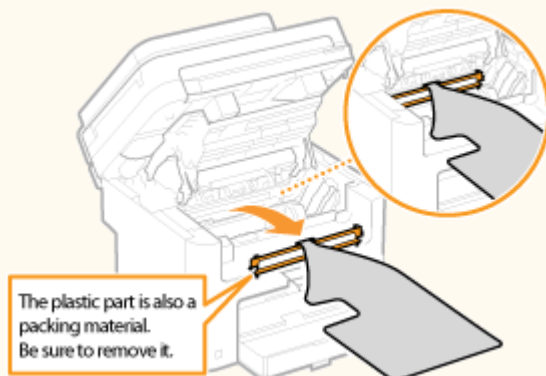
Turning OFF the machine deletes the data that is being printed.

### If paper tears

Remove all the paper fragments to prevent them from becoming jammed.

### If paper jams repeatedly

- Make sure that the paper and the packing material are completely removed.



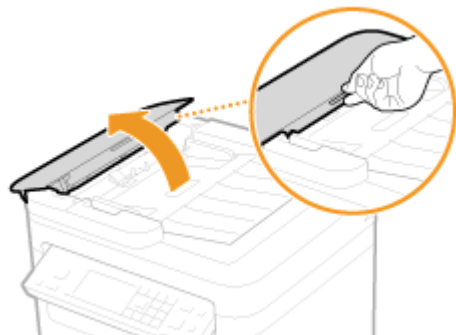
- Tap the paper stack on a flat surface to even the edges of the paper before loading it into the machine.
- Check that the paper is appropriate for the machine.
  - ▶ **Paper(P. 419)**
- Check that no jammed paper fragments remain in the machine.

### Do not forcibly remove the jammed document or paper from the machine

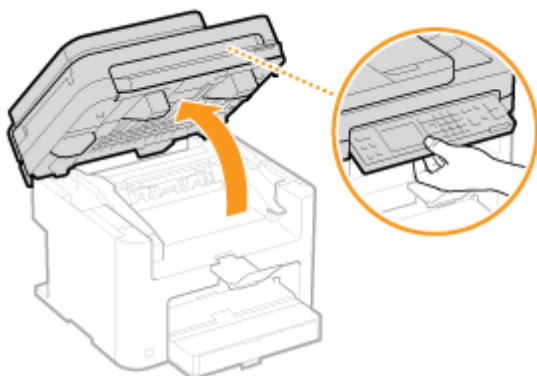
Forcibly removing the paper may damage parts. If you are not able to remove the paper, contact your local authorized Canon dealer or the Canon help line.

**▶When a Problem Cannot Be Solved(P. 374)****Document Jams in the Feeder (MF244dw)**

If there are documents placed in the feeder, remove them first. Then, follow the procedure below.

**1 Open the feeder cover.****2 Gently pull out the document.****3 Close the feeder cover.****Paper Jams inside the Machine****1 Remove the toner cartridge.**

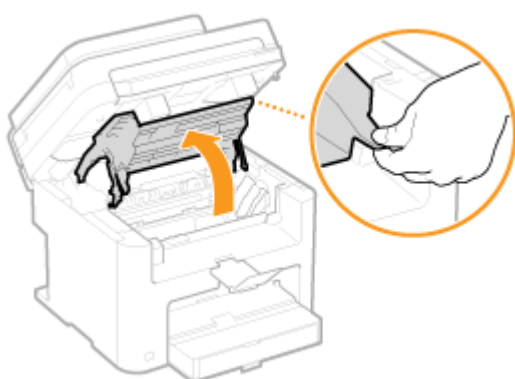
- 1 Lift the operation panel.



**IMPORTANT:**

The operation panel cannot be opened if the feeder or the platen glass cover is not completely closed. Forcing the operation panel up may cause damage.

- 2 Open the toner cover by the grip at the front right of the toner cover.



- 3 Remove the toner cartridge.

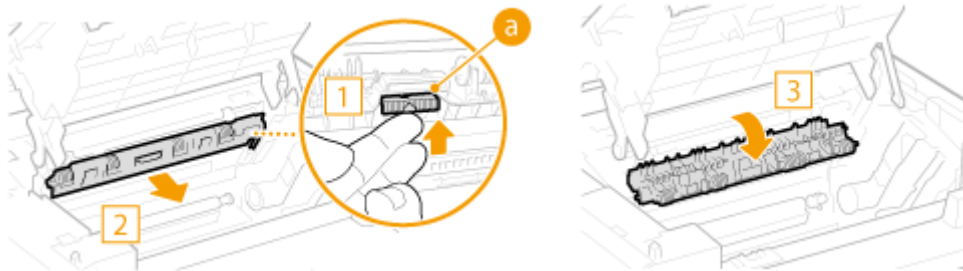


- 2 Gently pull out the document.

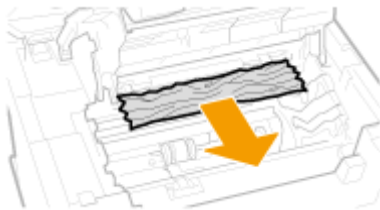


### 3 Check whether paper is jammed inside the paper exit guide.

- 1 Pull out toward you while pressing the button (a) to open the paper exit guide.



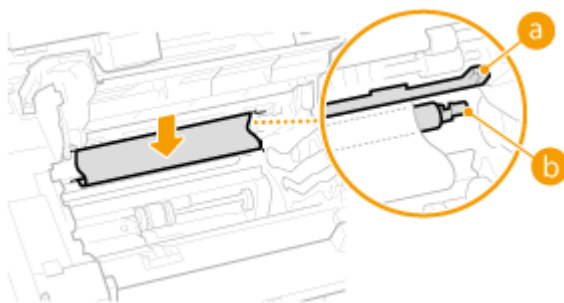
- 2 Gently pull out the document.



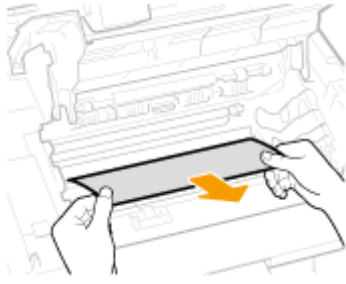
- 3 Close the paper exit guide.

### 4 Check whether paper is jammed inside the machine.

- 1 Gently pull out any paper between the fixing assembly (a) and roller (b) until you can see the edge of the paper.

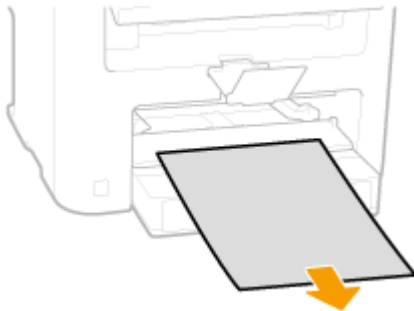


- 2 Once the edge of the paper is visible, pull it out slowly.

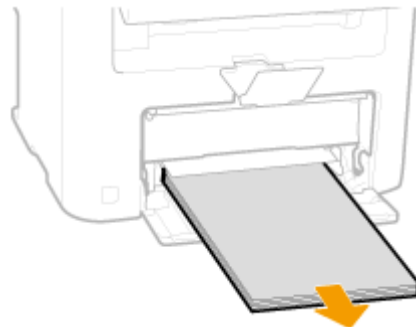
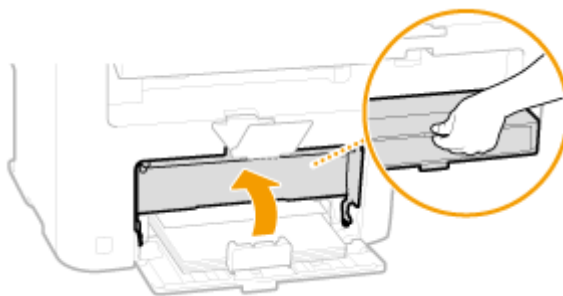


**5 Check whether paper is jammed in the manual feed slot or paper drawer.**

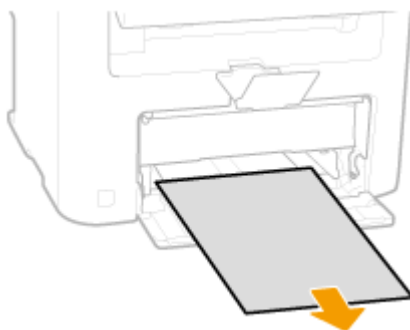
- 1** Slowly pull out any paper in the manual feed slot.



- 2** Open the paper cover and remove any loaded paper.



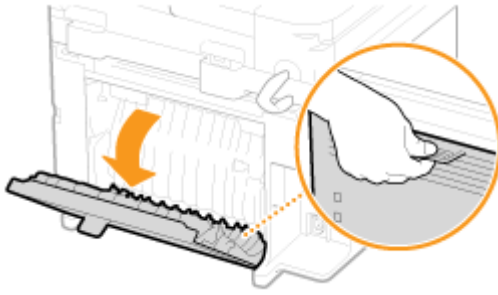
- 3** Gently pull out the document.



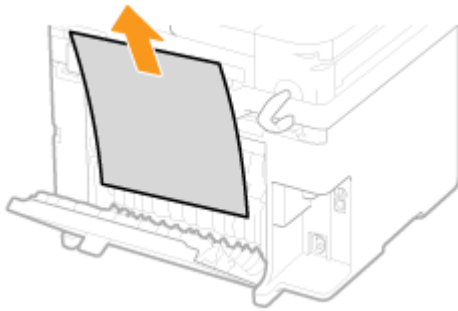
- 4** Load paper and close the paper cover.
- For MF232w / MF231, proceed to step 7.

**6 Check whether paper is jammed inside the rear cover.**

- 1 Open the rear cover.



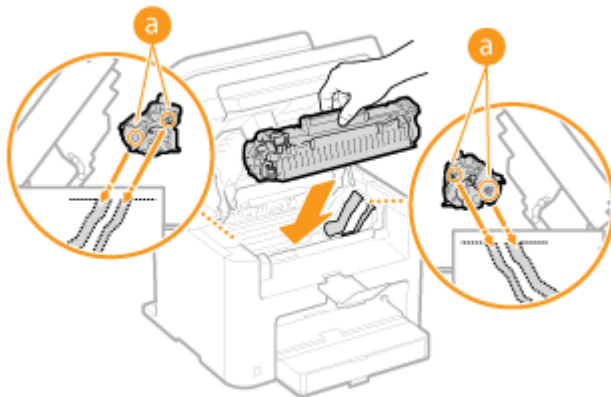
- 2 Gently pull out the document.



- 3 Close the rear cover.

## 7 Install the toner cartridge.

- Align the right and left projections (a) with the toner cartridge guides, and push securely all the way in.



- 8 Close the toner cover, and lower the operation panel.

### NOTE

#### If you cannot close the toner cover

Make sure that the toner cartridge is inserted properly. Forcing it closed may cause damage.



## When an Error Message Appears

15A8-061

If you cannot connect network or the memory is full, or you encounter operation problems, a message appears on the display. Find out more information about messages in the following list.

### A counterfeit or non-Canon cartridge may be in use.

**You might not be using a Canon genuine toner cartridge.**

- We recommend Canon genuine toner cartridges as replacement toner cartridges.
- ▶ **Consumables(P. 424)**

### Amount in cart. cannot be displ. correctly.

**Toner cartridge is not installed correctly, or there is possible trouble on the toner cartridge.**

- Reinstall the toner cartridge. If this message does not disappear after reinstalling several times, the toner cartridge might be possibly broken. Contact the shop where you purchased the machine, or the Canon Customer Care Center.
- ▶ **How to Replace Toner Cartridges(P. 390)**

**You might not be using a Canon genuine toner cartridge.**

- We recommend Canon genuine toner cartridges as replacement toner cartridges.
- ▶ **Consumables(P. 424)**

### 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. 172)**
- ▶ **Setting Up Connection Using WPS PIN Code Mode(P. 174)**

**An SSID of a wireless router was entered, but the entry was incorrect.**

- Check the SSID and enter the correct one again.
- ▶ **Checking the SSID and Network Key(P. 184)**
- ▶ **Setting Up Connection by Specifying Detailed Settings(P. 180)**

**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. 356)**
- If the problem persists, check the security settings of the wireless router.

## Cart. Comm. Error A counterfeit or non-Canon cartridge may be in use.

**Toner cartridge is not installed correctly, or there is possible trouble on the toner cartridge.**

- Reinstall the toner cartridge. If this message does not disappear after reinstalling several times, the toner cartridge might be possibly broken. Contact the shop where you purchased the machine, or the Canon Customer Care Center.

▶ **How to Replace Toner Cartridges(P. 390)**

**You might not be using a Canon genuine toner cartridge.**

- We recommend Canon genuine toner cartridges as replacement toner cartridges.

▶ **Consumables(P. 424)**

## 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. 390)**

## 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. 252)**

## 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. 184)**

▶ **Setting Up Connection by Selecting a Wireless Router(P. 177)**

▶ **Setting Up Connection by Specifying Detailed Settings(P. 180)**

- 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. 356)**

## 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. 144)**

## 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. 356)**
- 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. 356)**

**If WPS is not supported:**

Set using another connecting method.

▶ **Connecting to a Wireless LAN(P. 170)**

## 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.
- ▶ **Using the Machine in Direct Connection (in Access Point Mode)(P. 144)**

## Could not perform cleaning.

**Paper jammed during cleaning.**

- Remove the jammed paper, set paper correctly, and perform cleaning again.
- ▶ **Clearing Jams(P. 341)**
- ▶ **Fixing Assembly(P. 383)**

## 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. 184)**

▶ **Setting Up Connection by Specifying Detailed Settings(P. 180)**

- 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. 177)**

▶ **Setting Up Connection by Specifying Detailed Settings(P. 180)**

**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.

Could not update the device time because its battery has run out. Cannot use Google Cloud Print if the time settings are incorrect.

**The machine's battery has run out and the correct time settings could not be kept.**

- Set the correct time again.
- ▶ **Current Date/Time Settings(P. 304)**

Direct Connection terminated.

**Connection between the machine and the mobile device was terminated.**

- Reestablish Direct Connection.
- ▶ **Using the Machine in Direct Connection (in Access Point Mode)(P. 144)**

Google Cloud Print not avail. Server auth err

**Cloud Print could not perform server authentication, or could not acquire information for registration.**

- Check whether the date and time settings are correctly specified.
- ▶ **Date/Time Settings(P. 303)**

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. 170)**

▶ **Connecting to a Wired LAN(P. 169)**

- 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 (MF244dw / MF232w)(P. 243)**

**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. 184)**
- ▶ **Setting Up Connection by Selecting a Wireless Router(P. 177)**
- ▶ **Setting Up Connection by Specifying Detailed Settings(P. 180)**

**Insert the toner cartridge.**

**The toner cartridge is not set or properly set.**

- Properly set the toner cartridge.
- ▶ **How to Replace Toner Cartridges(P. 390)**

**Maximum number of wireless devices connected w/ Direct Connection has been reached. To connect other devices, terminate some of current connections.**

**The number of directly connected mobile devices is at a maximum.**

- To connect other devices by Direct Connection, disconnect current device(s) and try connecting again.
- ▶ **Using the Machine in Direct Connection (in Access Point Mode)(P. 144)**

**No Paper: XXXX\***

\*<Drawer 1> or <MP Tray> is displayed for XXXX.

**Paper is not loaded in the paper drawer or the manual feed slot.**

- Load the paper.
- ▶ **Loading Paper(P. 42)**

**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.
- ▶ **Loading Paper(P. 42)**
- ▶ **Specifying Paper Size and Type(P. 53)**

## 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. 166)**

## Paper jammed.

**Paper jams.**

- Remove the jammed paper or document, and print again (Printing may resume automatically).
- ▶ **Clearing Jams(P. 341)**

## Preparing a cartridge is recommended.

**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.
- ▶ **Before Replacing the Toner Cartridge(P. 388)**
- ▶ **Replacing Toner Cartridges(P. 386)**

## 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. 252)**
- ▶ **Verifying Key Pairs and Digital Certificates(P. 269)**

## 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. 53)**

**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. 42)**

**The connection with the PC has been lost. Check the connection.**

**The connection to the computer was lost during a scan.**

- Check the connection between the machine and the computer.
- ▶ **Preparing to Use the Machine as a Scanner (MF244dw / MF232w)(P. 129)**

**The memory is full. Scanning will be canceled. Print?**

**A document could not be scanned due to insufficient memory space.**

- Select whether to print up to the scanned pages or to cancel the scanning. If you cancel, divide the document into multiple sections and scan them, or change the scanning settings.

**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. 184)**
- ▶ **Setting Up Connection by Selecting a Wireless Router(P. 177)**
- ▶ **Setting Up Connection by Specifying Detailed Settings(P. 180)**

**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. 177)**
- ▶ **Setting Up Connection by Specifying Detailed Settings(P. 180)**
- 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. 252)**



## Common Problems

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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 on connecting the power cord, see Getting Started.  
▶ **Manuals Included with the Machine(P. 425)**

#### → Are the LAN cable and USB cable connected correctly?

- Check whether these cables are connected correctly.  
▶ **Parts and Their Functions(P. 15)**

#### → 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. 347)**

### If a Problem Persists Even after Checking

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Click the link that corresponds to the problem.

- ▶ **Installation/Settings Problems(P. 356)**
- ▶ **Copy/Printing Problems(P. 360)**

## Installation/Settings Problems

15A8-063

See [▶Common Problems\(P. 355\)](#) also.

- ▶[Problems with the Wireless/Wired LAN Connection \(MF244dw / MF232w\)\(P. 356\)](#)
- ▶[Problem with the USB Connection\(P. 359\)](#)
- ▶[Problem with the Print Server \(MF244dw / MF232w\)\(P. 359\)](#)

### Problems with the Wireless/Wired LAN Connection (MF244dw / MF232w)

#### 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\(P. 246\)](#)
  - ▶[Disabling Remote UI\(P. 247\)](#)
- 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\(P. 23\)](#)
  - ▶[Viewing Network Settings\(P. 194\)](#)
- 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\(P. 169\)](#)
  - ▶[Viewing Network Settings\(P. 194\)](#)
- 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 \(MF244dw / MF232w\)\(P. 233\)](#)
  - ▶[IPv4 Address Filter \(P. 331\)](#)
  - ▶[IPv6 Address Filter \(P. 332\)](#)
  - ▶[MAC Address Filter \(P. 332\)](#)

#### A connection to a network cannot be established.

- The IP address may not be set correctly. Set the IP address again.
  - ▶[Setting IP Addresses\(P. 187\)](#)
- 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\(P. 357\)](#)

**You are unsure of the set IP address. ▶ Viewing Network Settings(P. 194)**

**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. 168)**

**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. 184)**

**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. 184)**
- 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. 357)**

**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.



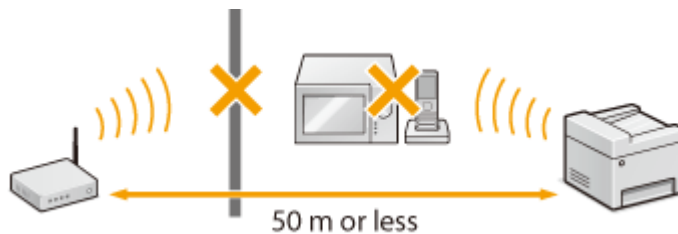
**Check whether the machine is turned ON.**

- 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. 172)**
- ▶ **Setting Up Connection Using WPS PIN Code Mode(P. 174)**
- ▶ **Setting Up Connection by Selecting a Wireless Router(P. 177)**
- ▶ **Setting Up Connection by Specifying Detailed Settings(P. 180)**

**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. 180)** ).

- 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 (MF244dw / MF232w)

### 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/7/8/10/Server 2008/Server 2012)  
 ▶ **Enabling [Network discovery](P. 434)**

### 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. 435)**

# Copy/Printing Problems

15A8-064

See [▶Common Problems\(P. 355\)](#) also.

## Printing/copy results are not satisfactory. Paper creases or curls. [▶When You Cannot Print Properly\(P. 363\)](#)

### 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\(P. 436\)](#)

If you cannot print a test page, check the following according to your environment.

#### ■ Wireless LAN connection (MF244dw / MF232w)

- Check the connection status (signal strength) of the wireless LAN.

#### [▶Viewing Network Settings\(P. 194\)](#)

#### 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\(P. 194\)](#)

#### [▶Checking the SSID to Which Your Computer Is Connected\(P. 441\)](#)

#### [▶Connecting to a Wireless LAN\(P. 170\)](#)

#### 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\(P. 439\)](#)
  - [▶Configuring Printer Ports\(P. 201\)](#)
- 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 \(MF244dw / MF232w\)\(P. 233\)](#)
  - [▶IPv4 Address Filter \(P. 331\)](#)
  - [▶IPv6 Address Filter \(P. 332\)](#)
- Disable security software and other resident software.
- Reinstall the printer driver in accordance with the MF 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 (MF244dw / MF232w)

- Have you selected the correct port? If there is no port to use, create a port.
  - ▶ **Checking the Printer Port(P. 439)**
  - ▶ **Configuring Printer Ports(P. 201)**
- 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 (MF244dw / MF232w)(P. 233)**
  - ▶ **IPv4 Address Filter (P. 331)**
  - ▶ **IPv6 Address Filter (P. 332)**
  - ▶ **MAC Address Filter (P. 332)**
- Disable security software and other resident software.
- Reinstall the printer driver in accordance with the MF 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 MF Driver Installation Guide. When you reinstall the printer driver, the correct port is created automatically.
  - ▶ **Checking the Printer Port(P. 439)**
- Is bidirectional communication enabled? Enable bidirectional communication, and restart the computer.
  - ▶ **Checking Bidirectional Communication(P. 440)**
- 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 (MF244dw / MF232w)**
- 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 (MF244dw / MF232w)(P. 359)**
- Disable security software and other resident software.
- Reinstall the printer driver in accordance with the MF 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. \*

- Print or delete data in memory.

\* 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. 159)**

**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. 390)**



## When You Cannot Print Properly

15A8-065

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 Edge of Printouts(P. 365)



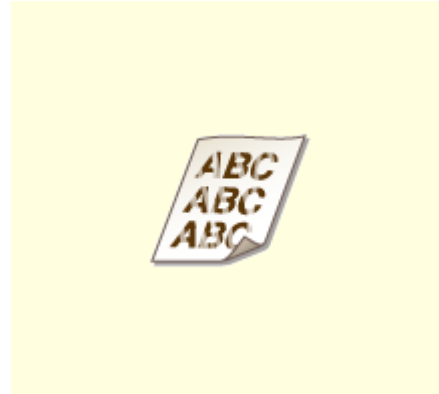
▶ Streaks Appear on Printouts(P. 365)



▶ White Streaks Appear(P. 366)



▶ Toner Smudges and Splatters Appear(P. 366)



▶ Printouts Are Faded(P. 367)



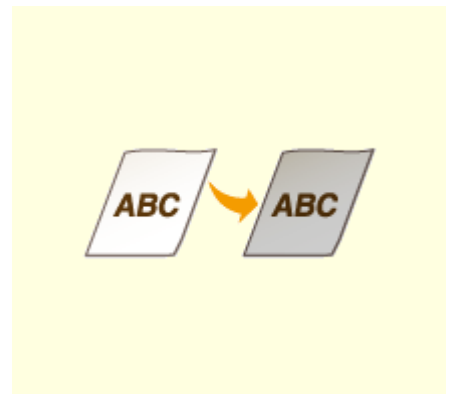
▶ Printed Pages Have White Specks(P. 367)



▶ A Portion of the Page Is Not Printed(P. 368)



▶ Print Density Is Uneven(P. 368)



▶ Printouts Are Grayish(P. 369)



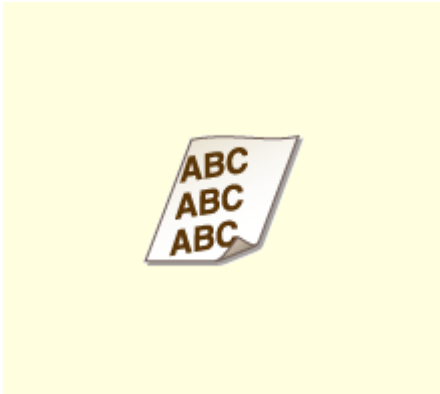
**Cannot Scan a Printed Barcode(P. 369)**



**Paper Creases(P. 370)**



**Paper Curls(P. 370)**



**Printouts Are Skewed(P. 372)**



**Paper Is Not Fed/Two or More Sheets Are Fed Together(P. 372)**



**Paper Jams Frequently with 2-Sided Printing (MF244dw)(P. 373)**

# Printing Results Are Not Satisfactory

15A8-066

Dirt inside the machine may affect printing results. Perform care and cleaning to the machine first.

▶ **Cleaning the Machine(P. 377)**

## Smudge Marks Appear on the Edge of Printouts



### → Do you print data without margins?

- This symptom occurs if a margin is set to none in the printer driver. A margin of 5 mm or less around the edge of paper or 10 mm or less around the edge of envelopes is not printable with the machine. Make sure to have margins around the document to print.

[Finishing] tab ▶ [Advanced Settings] ▶ [Expand Print Region and Print] ▶ [Off]

## Streaks Appear on Printouts



### → Are you using appropriate paper?

- Check usable paper, and replace with appropriate paper.
  - ▶ **Paper(P. 419)**
  - ▶ **Loading Paper(P. 42)**
- If using the appropriate paper still does not solve the problem, change one of the <Special Printing Mode Z>, <Special Printing Mode C>, and <Special Printing Mode D> settings.
  - ▶ **Special Processing (P. 325)**
- To print from a computer, change the setting for [Special Print Adjustment] in the printer driver.

**NOTE:**

[Mode 1] has the least effect while [Mode 4] has the most effect. Try each in order starting with [Mode 1]. Increasing the effect makes the print density lighter. Outlines may also be blurred or images may appear somewhat grainy.

→ **Did you just replace the toner cartridge? Have you not used the printer for a long period of time?**

- Change the setting for <Special Printing Mode B>.
- ▶ **Special Processing (P. 325)**

White Streaks Appear



→ **Is the platen glass dirty?**

- Clean the platen glass and the underside of the feeder.
- ▶ **Platen Glass(P. 379)**

→ **Is the amount remaining in the toner cartridge nearly empty?**

- Check the amount remaining in the toner cartridge, and replace the toner cartridges as necessary.
- ▶ **Replacing Toner Cartridges(P. 386)**

Toner Smudges and Splatters Appear



→ **Are you using appropriate paper?**

- Check usable paper, and replace with appropriate paper.
- ▶ **Paper(P. 419)**
- ▶ **Loading Paper(P. 42)**
- Change the setting for <Special Printing Mode U>.
- ▶ **Special Processing (P. 325)**

→ **Is the amount remaining in the toner cartridge nearly empty?**

- Check the amount remaining in the toner cartridge, and replace the toner cartridges as necessary.

▶ **Replacing Toner Cartridges(P. 386)**

## Printouts Are Faded



### → Is the amount remaining in the toner cartridge nearly empty?

- Check the amount remaining in the toner cartridge, and replace the toner cartridges as necessary.

▶ **Replacing Toner Cartridges(P. 386)**

### → Are you using appropriate paper?

- Check usable paper, and replace with appropriate paper. Also, specify the paper size and type settings properly.

▶ **Paper(P. 419)**

▶ **Loading Paper(P. 42)**

▶ **Specifying Paper Size and Type(P. 53)**

### → Are you using the machine in a special environment (in particular, a low-temperature environment)?

- Toner may not adhere adequately, causing printouts to appear faded. Change the setting for <Special Printing Mode K>.

▶ **Special Processing (P. 325)**

## Printed Pages Have White Specks



### → Are you using appropriate paper?

- Check usable paper, and replace with appropriate paper.

▶ **Paper(P. 419)**

▶ **Loading Paper(P. 42)**

→ **Is the drum in the toner cartridge deteriorated?**

- Replace the toner cartridge with a new one.
- ▶ **Replacing Toner Cartridges(P. 386)**

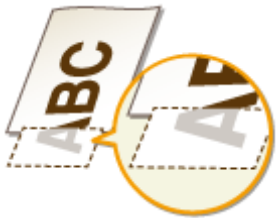
→ **Are you printing a document with strong contrasts?**

- Change the setting for [Special Print Mode] using the Printer Driver.

**NOTE:**

When set to [Special Settings 2], print density is lighter compared with [Off] or [Special Settings 1]. Text and lines may also appear faded.

**A Portion of the Page Is Not Printed**



→ **Do you print data without margins?**

- This symptom occurs if a margin is set to none in the printer driver. A margin of 5 mm or less around the edge of paper or 10 mm or less around the edge of envelopes is not printable with the machine. Make sure to have margins around the document to print.

[Finishing] tab ▶ [Advanced Settings] ▶ [Expand Print Region and Print] ▶ [Off]

**Print Density Is Uneven**



→ **Is the amount remaining in the toner cartridge nearly empty?**

- Check the amount remaining in the toner cartridge, and replace the toner cartridges as necessary.
- ▶ **Replacing Toner Cartridges(P. 386)**

→ **Is printing sometimes uneven when printing fine lines?**

- Change the setting for <Special Printing Mode J>.

▶ **Special Processing (P. 325)**

## Printouts Are Grayish



### → Is <Correct Density> in <Copy Settings> set too dark?

- Adjust the setting so that density is lighter.
- ▶ **Correct Density(P. 311)**

### → Is the printer installed where it is subject to direct sunlight or strong light?

- Install the printer in an appropriate location.
- ▶ **Installation(P. 3)**
- ▶ **Relocating the Machine(P. 393)**

### → Was the toner cartridge been left in direct sunlight for a long period of time?

- Store the toner cartridge in an appropriate location for two to three hours, then try printing again. This may solve the problem. If the problem persists, replace the toner cartridge.
- ▶ **Replacing Toner Cartridges(P. 386)**

## Cannot Scan a Printed Barcode



### → Are you trying to scan a barcode printed with factory default settings?

- In the printer driver, specify [Special Settings 1] for the setting of [Special Print Mode].

**NOTE:**

- When set to [Special Settings 1], print density is lighter compared with [Off]. Text and lines may also appear faded.
- White specks may appear in images when this feature is used with paper other than lightweight paper.

## Paper Creases or Curls

15A8-067

### Paper Creases



#### → Is paper loaded correctly?

- If paper is not loaded below the load limit guide or is loaded obliquely, it may crease.
- ▶ **Loading Paper(P. 42)**

#### → Are you using paper that has absorbed moisture?

- Replace with appropriate paper.
- ▶ **Loading Paper(P. 42)**

#### → Are you using appropriate paper?

- Check usable paper, and replace with appropriate paper.
- ▶ **Paper(P. 419)**
- If the problem persists after using appropriate paper, change the setting for <Special Printing Mode V>.
- ▶ **Special Processing (P. 325)**

### Paper Curls



#### → Are you using appropriate paper?

- Check usable paper, and replace with appropriate paper. Also, specify the paper size and type settings properly.
- ▶ **Paper(P. 419)**
- ▶ **Loading Paper(P. 42)**



▶ **Specifying Paper Size and Type(P. 53)**

- If using plain paper (60 to 89 g/m<sup>2</sup>), making the following change in the printer driver may solve the problem.  
[Page Setup] tab ▶ [Paper Type] ▶ [Plain L [60-89 g/m<sup>2</sup>]].
- If the use of the appropriate paper does not solve the problem, change the setting for <Special Printing Mode V>.

▶ **Special Processing(P. 325)**

## Paper Is Fed Incorrectly

15A8-068

### 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. 42)**

#### → Is the paper source the manual feed slot?

- Load the paper into the paper drawer.
- ▶ **Loading Paper in the Paper Drawer(P. 44)**

#### → Are you printing on curled envelopes?

- Uncurl the envelopes, and print again.
- ▶ **Loading Envelopes(P. 49)**

### 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. 42)**
- Check whether the number of sheets of paper loaded is appropriate and whether the appropriate paper is used.
- ▶ **Paper(P. 419)**

▶ **Loading Paper (P. 42)**

- Check whether mixed sizes and types of paper are loaded together.

## Paper Jams Frequently with 2-Sided Printing (MF244dw)



→ **Does paper jam frequently especially with lightweight paper or curled paper during 2-sided printing?**

- Set <Special Printing Mode I> to <On>.

▶ **Special Processing (P. 325)**

## When a Problem Cannot Be Solved

15A8-069

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

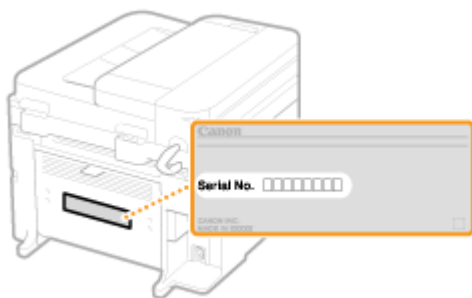
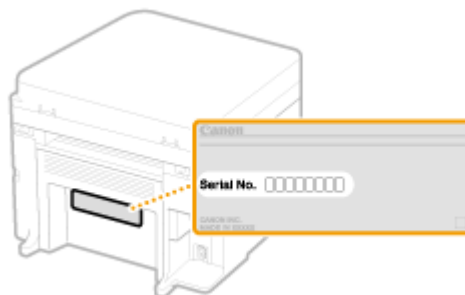
#### Do not disassemble or repair the machine yourself

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 (MF244dw / MF232w / MF231)
- Dealer where you purchased the machine
- Details about your problem (such as what you did and what happened as a result)
- Serial number (eight alphanumeric characters long, found on the label on the back side of the machine)

**MF244dw****MF232w / MF231**

# Maintenance

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# Maintenance

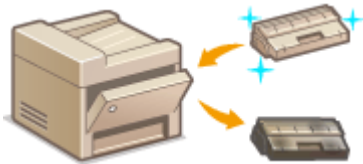
This chapter describes upkeep of the machine, including how to clean the machine and initialize settings.

## ■ Basic Cleaning ◀ **Cleaning the Machine(P. 377)**



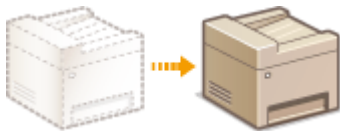
- The machine becomes dirty ▶ **Exterior(P. 378)**
- Smudge marks appear on originals or printouts ▶ **Platen Glass(P. 379)** ▶ **Feeder (MF244dw)(P. 382)**
- Streaks appear on printouts ▶ **Fixing Assembly(P. 383)**
- The interior of the machine becomes dirty ▶ **Machine Interior(P. 384)**

## ■ Replacing Toner Cartridges



- If you want to check the remaining toner cartridge level ▶ **Replacing Toner Cartridges(P. 386)**
- How to replace toner cartridges ▶ **How to Replace Toner Cartridges(P. 390)**

## ■ Relocating the Machine



- Relocating the machine for maintenance or an office move ▶ **Relocating the Machine(P. 393)**

## ■ Checking the Total Pages Printed by the Machine

If you want to check the total page number of printouts ▶ **Viewing the Counter Value(P. 395)**

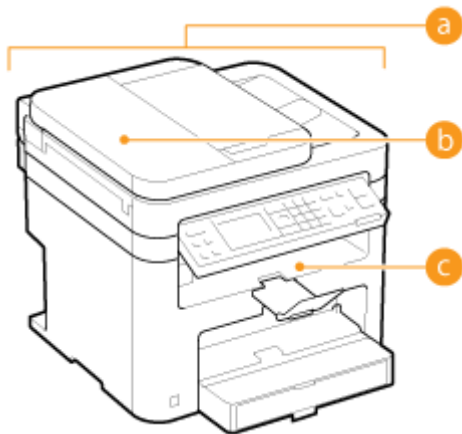
## ■ Initializing Settings

If you want to restore the settings ▶ **Initializing Settings(P. 396)**

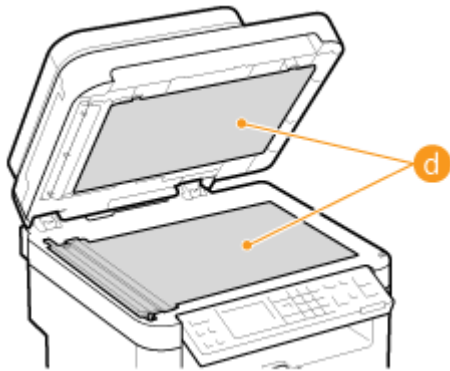
# Cleaning the Machine

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. 8)**

## Where to Clean



- a** Exterior of the machine  
▶ **Exterior(P. 378)**
- b** Rollers inside the feeder (MF244dw)  
▶ **Feeder (MF244dw)(P. 382)**
- c** Interior of the machine and fixing assembly  
▶ **Fixing Assembly(P. 383)**  
▶ **Machine Interior(P. 384)**



- d** Platen glass and the underside of the feeder or the platen glass cover  
▶ **Platen Glass(P. 379)**

## Exterior

---

15A8-06E

Regularly wipe the exterior of the machine, especially around the ventilation slots, to keep the machine in good condition.

### NOTE

- Ventilation slots are provided only on MF244dw.

### 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.

- 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. 16)**.



### 3 Wait for the exterior of machine to dry completely.

### 4 Reconnect the power cord and turn ON the machine.



# Platen Glass

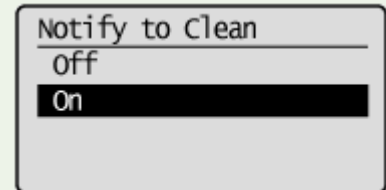
15A8-06F

Regularly wipe off the dust from the platen glass and the underside of the feeder or the platen glass cover to prevent smudges to be printed on documents or printouts.

## NOTE

### Feeder scan area cleaning notification (MF244dw)

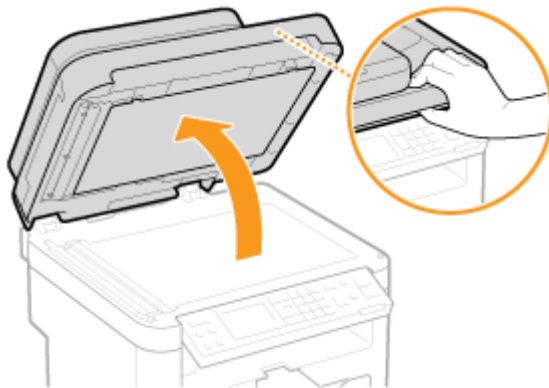
To display a message for soiling on the platen glass, set <Notify to Clean> to <On>.



## 1 Turn OFF the machine, and unplug the power cord from the AC power outlet.

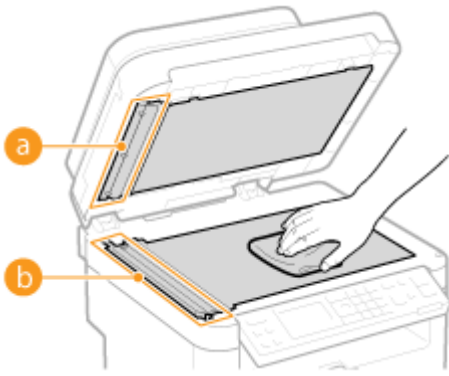
- When you turn OFF the machine, data that is waiting to be printed is deleted.

## 2 Open the feeder or the platen glass cover.



## 3 Clean the platen glass and the underside of the feeder or the platen glass cover.

- Clean the areas with a cloth dampened with water. Then, wipe the area with a soft, dry cloth.
- For MF244dw, in addition to the platen glass and underside of the feeder, make sure to clean and wipe the white strip of plate (a) and the surface of the transparent plastic part (b), too.



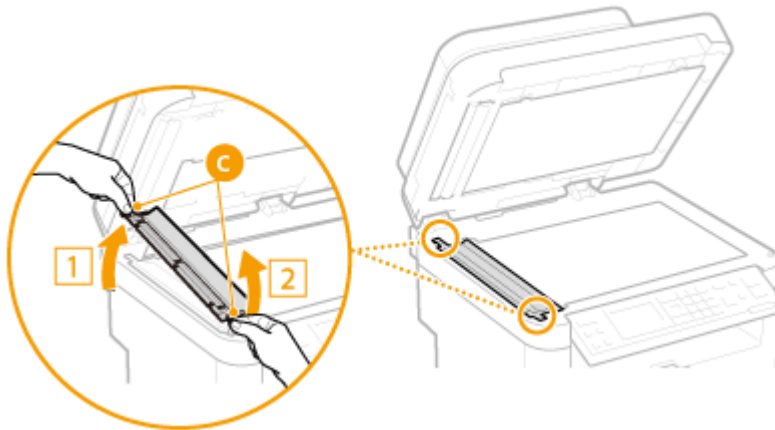
**IMPORTANT:**

- When wiping the transparent plastic part (b), take care not to bend the plastic.

**■If the problem persists (MF244dw)**

Remove the transparent plastic part (b) and wipe it.

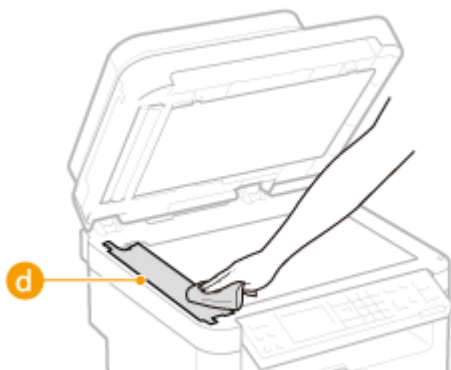
- 1 Hold the tabs (c) at both ends of the transparent plastic part, and remove the plastic part by gently lifting the rearward end first.



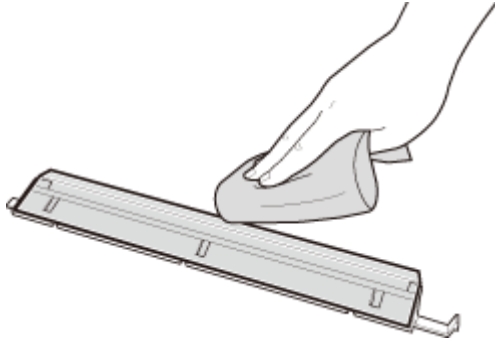
**IMPORTANT:**

- The plastic part (b) is rather damageable. When removing it, be careful not to bend it.

- 2 Wipe the scanning area (d).



- 3 Wipe the back side of the transparent plastic part.



- 4** Wait for the plastic part to dry completely.
- 5** Place the transparent plastic part back into position.
  - Make sure of the proper orientation, then hold the tabs and place the plastic part back into position by gently lowering the frontward end first.
  
- 4** Wait for the cleaned area to dry completely.
  
- 5** Gently close the feeder or the platen glass cover.
  
- 6** Reconnect the power cord and turn **ON** the machine.

## Feeder MF244dw

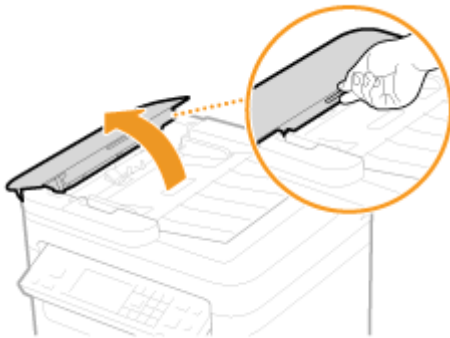
15A8-06H

Dust and graphite powder may adhere to the roller inside the feeder and cause smudges to appear on printouts. To clean the feeder, perform the following procedure.

### 1 Turn OFF the machine, and unplug the power cord from the AC power outlet.

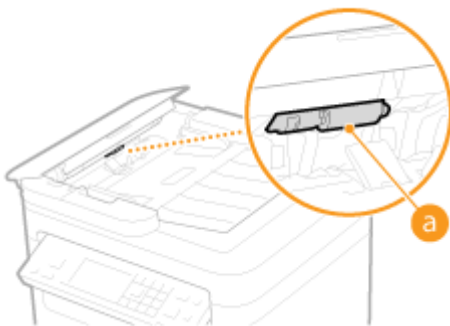
- When you turn OFF the machine, data that is waiting to be printed is deleted.

### 2 Open the feeder cover.



### 3 Wipe roller (a) inside feeder.

- Clean the areas with a well-wrung-out cloth dampened with water. Then, wipe the area with a soft, dry cloth.



### 4 Gently close the feeder cover.

### 5 Reconnect the power cord and turn ON the machine.

## Fixing Assembly

15A8-06J







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 paper larger than plain A4 or Letter size paper. Set the paper in the manual feed slot before performing the following procedure.

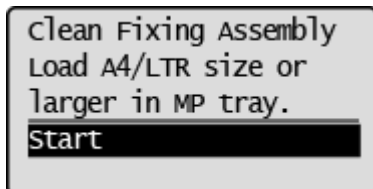
### NOTE


- Cleaning consumes the toner cartridge. Make sure that there is sufficient toner cartridge remaining beforehand.
- It takes approximately 90 seconds to clean the fixing assembly.

▶ **Checking Toner cartridge Level(P. 387)**

▶ **Loading Paper in the Manual Feed Slot(P. 47)**

- 1** Press .
- 2** Use  /  to select <Adjustment/Maintenance>, and press .
- 3** Select <Clean Fixing Assembly>, and press .
- 4** Load paper (A4/LTR or larger) in the manual feed slot, and press .



- After cleaning is completed and the message <Finished.> appears, press  to return to the copy mode screen.

## Machine Interior

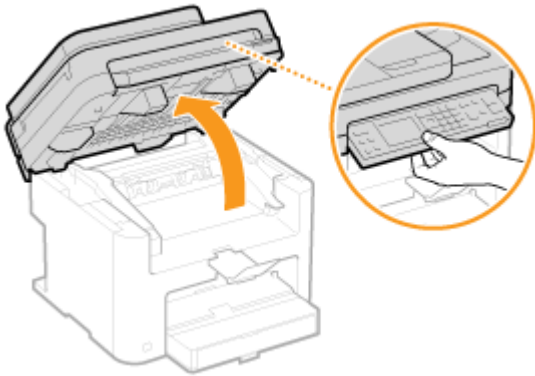
15A8-06K

Clean the interior of the machine regularly so that toner/paper dust does not collect.

### 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 Lift the operation panel.

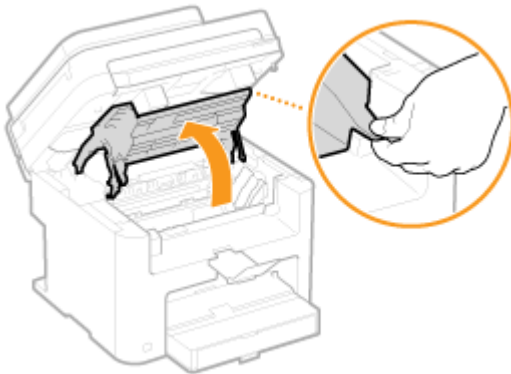


#### NOTE:

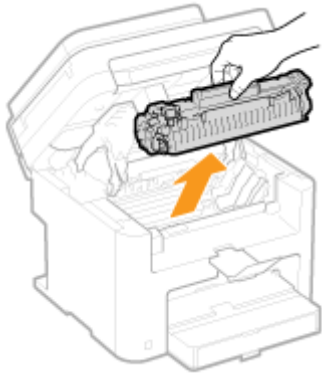
#### If you cannot lift the operation panel

Make sure the feeder or platen glass cover is completely closed. If a thick original such as a book is placed on the platen glass, remove the original. Forcing the operation panel up may cause damage.

### 3 Open the toner cover by the grip at the front right of the toner cover.



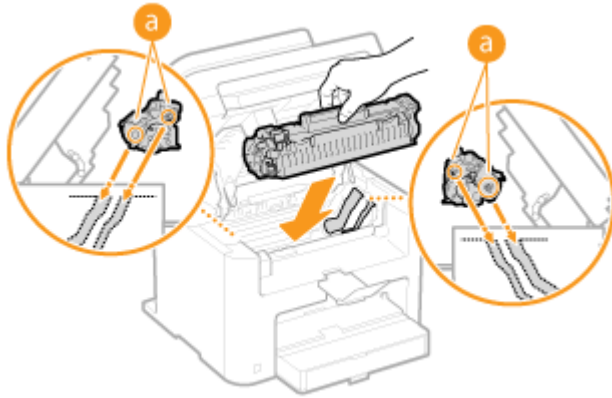
### 4 Pull the toner cartridge out of the machine.



**5** Using a lint-free clean, soft, dry cloth, wipe away toner/paper dust from the inside.

**6** Install the toner cartridge.

- Align the right and left projections (a) with the toner cartridge guides, and push securely all the way in.



**7** Close the toner cover, and lower the operation panel.

**NOTE:**

**If you cannot close the toner cover**

Make sure that the toner cartridge is inserted properly. Forcing it closed may cause damage.

**8** Reconnect the power cord and turn ON the machine.

# Replacing Toner Cartridges

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 remaining toner cartridge level on the display.

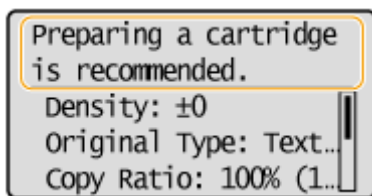
- ▶ **When a Message Appear(P. 386)**
- ▶ **If Printouts Are Poor in Quality(P. 386)**
- ▶ **Checking Toner cartridge Level(P. 387)**

## ■ 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. ▶ **Before Replacing the Toner Cartridge(P. 388)** ▶ **How to Replace Toner Cartridges(P. 390)** ▶ **Consumables(P. 424)**

### <Preparing a cartridge is recommended.>

This message notifies you that a toner cartridge needs to be replaced soon. Shake the toner cartridge to evenly distribute the toner inside the cartridge. Replace the toner cartridge if you see this message before you start to print a large job.



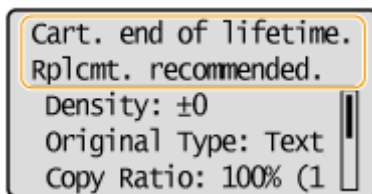
#### NOTE:

#### 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. ▶ **Displ. Timing for Cartridge Prep. Notif.(P. 324)**

### <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 nearly empty. Replace the nearly empty toner cartridge even if no message is displayed.

- ▶ **Before Replacing the Toner Cartridge(P. 388)**
- ▶ **How to Replace Toner Cartridges(P. 390)**

White streaks appear

Partially faded

Uneven density







Toner smudges and splatters appear

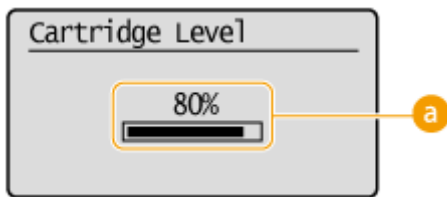
Blank space of originals becomes grayish in printouts



### ■ Checking Toner cartridge Level

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.


 ▶ <Device Information> ▶ **OK** ▶ <Cartridge Level> ▶ **OK** ▶ Check the amount remaining in the toner cartridge ▶ 



#### **a** Cartridge Level

Displays the amount remaining in the toner cartridges. 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

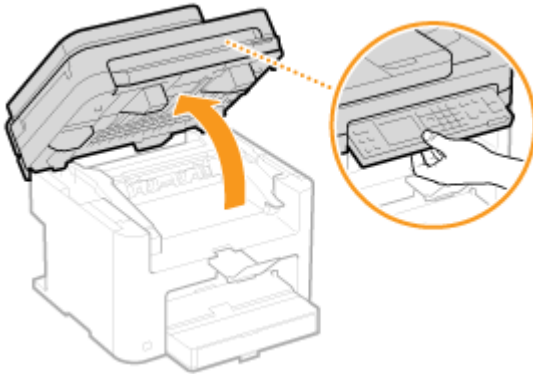
▶ **Consumables(P. 9)**

## Before Replacing the Toner Cartridge

15A8-06R

Perform the following before replacing the toner cartridge. The message may no longer appear, or print quality may be improved. Review cautions for handling the toner cartridge before starting. **➤Maintenance and Inspections(P. 8)**  
**➤Consumables(P. 9)**

### 1 Lift the operation panel.

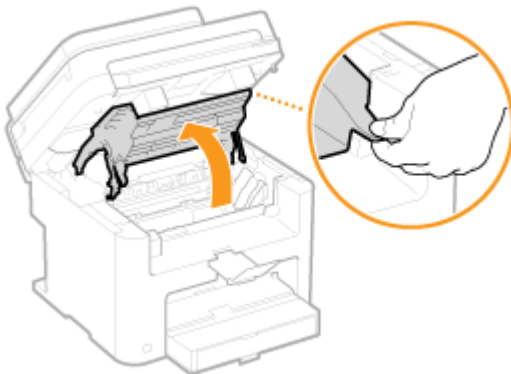


#### NOTE:

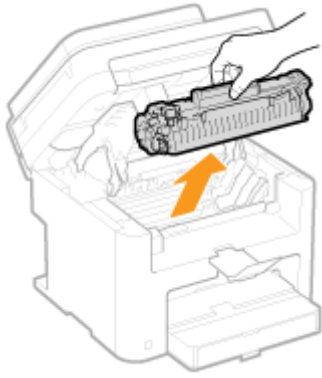
#### If you cannot lift the operation panel

Make sure the feeder or platen glass cover is completely closed. If a thick original such as a book is placed on the platen glass, remove the original. Forcing the operation panel up may cause damage.

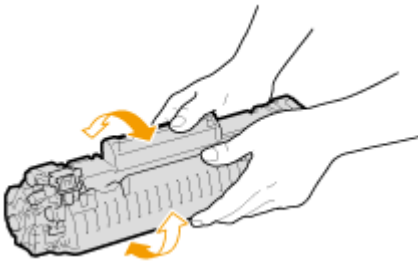
### 2 Open the toner cover by the grip at the front right of the toner cover.



### 3 Pull the toner cartridge out of the machine.

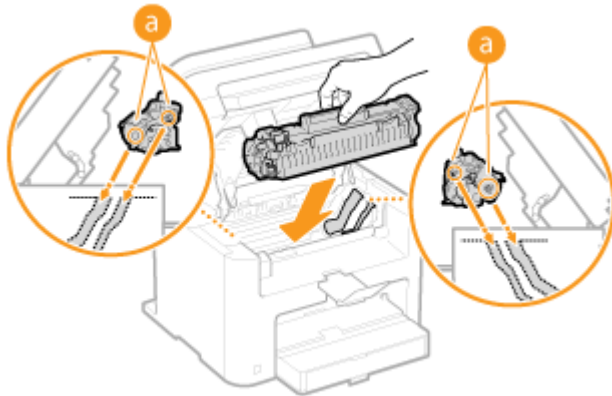


**4** Shake the toner cartridge 5 or 6 times as shown below to evenly distribute the toner inside the cartridge.



**5** Install the toner cartridge.

- Align the right and left projections (a) with the toner cartridge guides, and push securely all the way in.



**6** Close the toner cover, and lower the operation panel.

**NOTE:**

**If you cannot close the toner cover**

Make sure that the toner cartridge is inserted properly.

Forcing it closed may cause damage.

**LINKS**

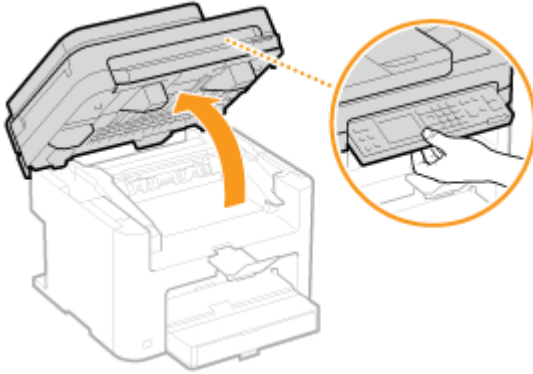
- [Replacing Toner Cartridges\(P. 386\)](#)

# How to Replace Toner Cartridges

15A8-06S

Read the precautions in **►Maintenance and Inspections(P. 8)** and **►Consumables(P. 9)** before replacing the toner cartridges.

## 1 Lift the operation panel.

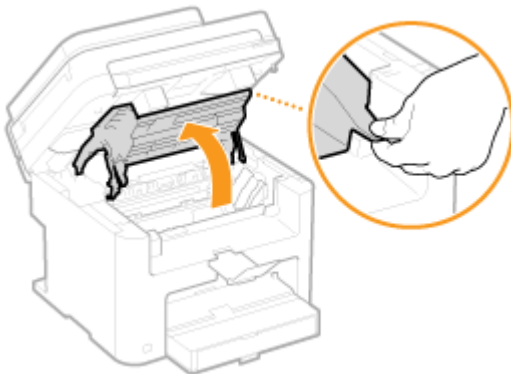


### NOTE:

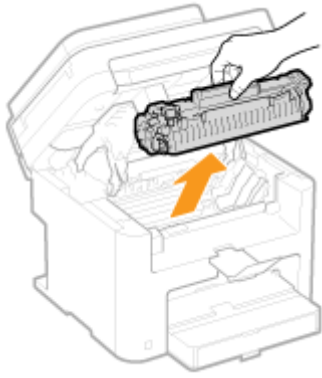
#### If you cannot lift the operation panel

Make sure the feeder or platen glass cover is completely closed. If a thick original such as a book is placed on the platen glass, remove the original. Forcing the operation panel up may cause damage.

## 2 Open the toner cover by the grip at the front right of the toner cover.



## 3 Pull the toner cartridge out of the machine.



**4** Remove the replacement toner cartridge from the protective bag.

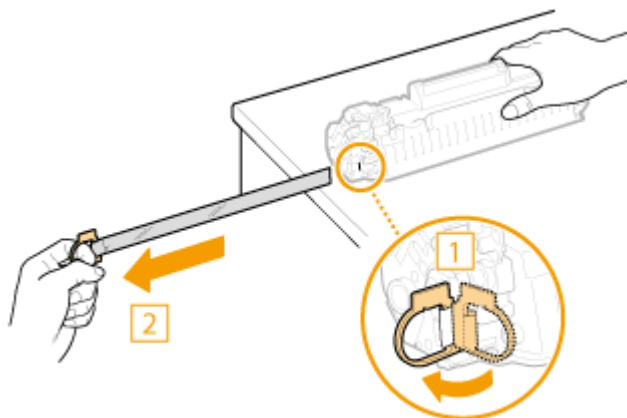


**5** Shake the toner cartridge 5 or 6 times as shown below to evenly distribute the toner inside the cartridge, and then place it on a flat surface.



**6** Pull the sealing tape straight out.

- The full length of the sealing tape is approximately 50 cm.

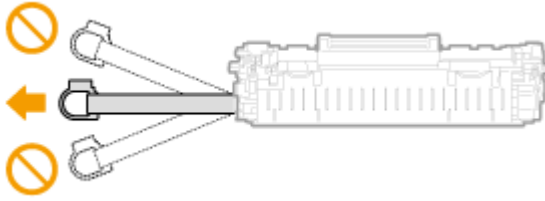


**IMPORTANT:**

**When pulling out the sealing tape**

If the sealing tape remains inside the toner cartridge, the quality of printouts may deteriorate.

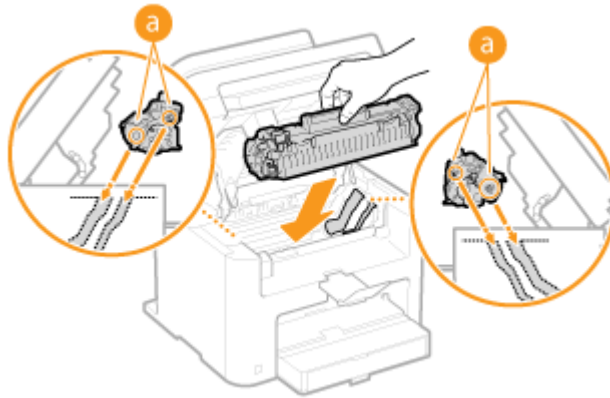
- Do not pull out the sealing tape at an angle or sideways. If the tape breaks, you may not be able to pull it out completely.



- If the sealing tape becomes stuck when pulling it out, keep pulling until it is completely removed.

**7 Install the toner cartridge.**

- Align the right and left projections (a) with the toner cartridge guides, and push securely all the way in.

**8 Close the toner cover, and lower the operation panel.****NOTE:****If you cannot close the toner cover**

Make sure that the toner cartridge is inserted properly. Forcing it closed may cause damage.

**LINKS**

- **Before Replacing the Toner Cartridge(P. 388)**

# Relocating the Machine

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)**

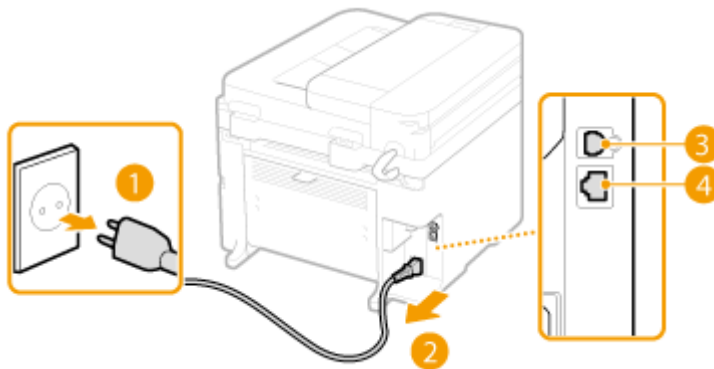
## 1 Turn OFF the machine and computer.

- 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.

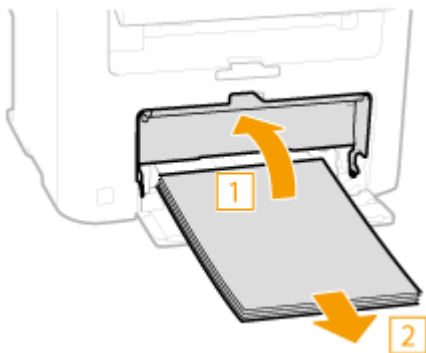
- 1 Power plug
- 2 Power cord
- 3 USB cable\*
- 4 LAN cable\*



## 3 When transporting the machine across a long distance, remove the toner cartridges. **▶How to Replace Toner Cartridges(P. 390)**

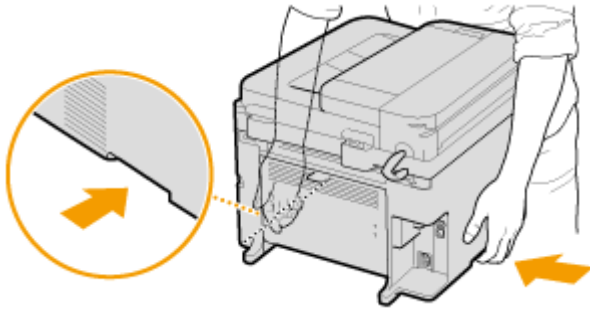
## 4 Open the paper cover and remove any paper.

- If the paper guides are extended, return them so that they fit in the paper drawer.



## 5 Close all the open covers, and move the machine to the new location.

- Check how heavy the machine is and carry it without straining. **▶Machine Specifications(P. 414)**
- Lift by the carrying grips on the front of the machine.



## 6 Carefully place the machine at the new installation site.

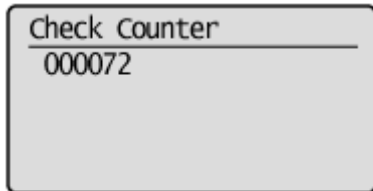
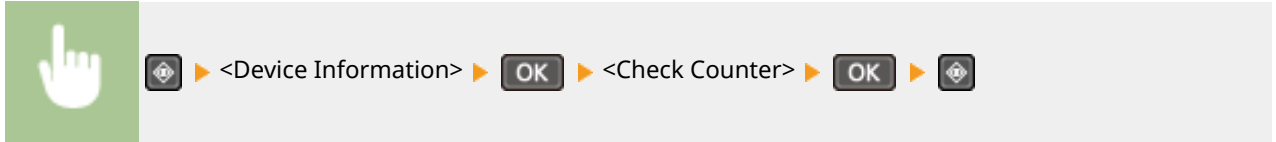
- For installation steps after moving, see "Getting Started". ▶ **Manuals Included with the Machine(P. 425)**



## Viewing the Counter Value

15A8-06W

You can check total for the number of pages used for printouts. This total includes lists in addition to copies and printouts of data from computers.



## Initializing Settings

---

15A8-06X

You can restore the following settings:

- ▶ **Initializing Menu(P. 397)**
- ▶ **Initialize Eco Report Counter (MF244dw / MF232w)(P. 399)**
- ▶ **Initializing All Data/Settings(P. 400)**

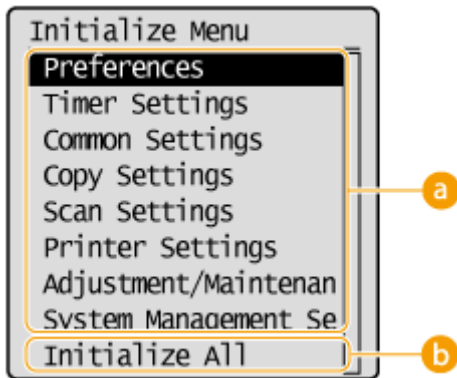
# Initializing Menu

15A8-06Y

You can restore the settings of the machine ( ▶ **Setting Menu List(P. 285)** ). Depending on the settings selected, you may need to restart the machine after initialization.

## NOTE

- If a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press **OK** . ▶ **Setting the System Manager PIN(P. 229)**

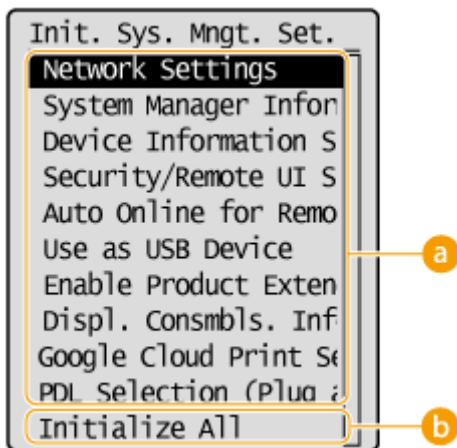


### a Items for initializing

Select the setting you want to initialize.

### ■ When <System Management Settings> is selected

Select the specific system management settings that you want to initialize and 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 (MF244dw / MF232w)(P. 231)**

**NOTE**

- You can use the procedure below to restore the default <Network Settings>.

 ▶ <Network Settings> ▶  ▶ <Initialize Network Settings> ▶  ▶ <Yes> ▶  ▶ Restart the machine

**b <Initialize All>**

Initializes all the settings.

## Initialize Eco Report Counter MF244dw / MF232w

15A8-070

You can initialize the number of printouts appearing in the Eco Report and return it to its factory default setting. The number of printouts returns to 0 after being initialized.

### NOTE

If a screen appears prompting you to enter a PIN, enter the correct PIN using the numeric keys, and press

**OK** . [▶ Setting the System Manager PIN\(P. 229\)](#)



 ▶ <System Management Settings> ▶ **OK** ▶ <Initialize Eco Report  
 Counter> ▶ **OK** ▶ <Yes> ▶ **OK** ▶ 

### LINKS


[▶ Eco Report\(P. 298\)](#)

## Initializing All Data/Settings






15A8-071

To make changes to registered data and settings all at once such as when changing the installation location of the machine, you can delete registered data and initialize all settings ( ▶ **Setting Menu List(P. 285)** ) together at the same time. You are required to restart the machine after initializing all data/settings.

### NOTE

If a screen for entering a PIN is displayed, enter the PIN with the numeric keys and press  . ▶ **Setting the System Manager PIN(P. 229)**



 ▶ <System Management Settings> ▶  ▶ <Initialize All Data/Settings>  
▶  ▶ <Yes> ▶  ▶ <Yes> ▶  ▶ Restart the machine.

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## Appendix

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15A8-072

This chapter contains technical specifications of this machine, instructions on how to use the User's Guide, disclaimers, copyright information, and other important information for customers.



## Third Party Software MF244dw / MF232w

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15A8-085

For information related to third-party software, click the following icon.



## Feature Highlights

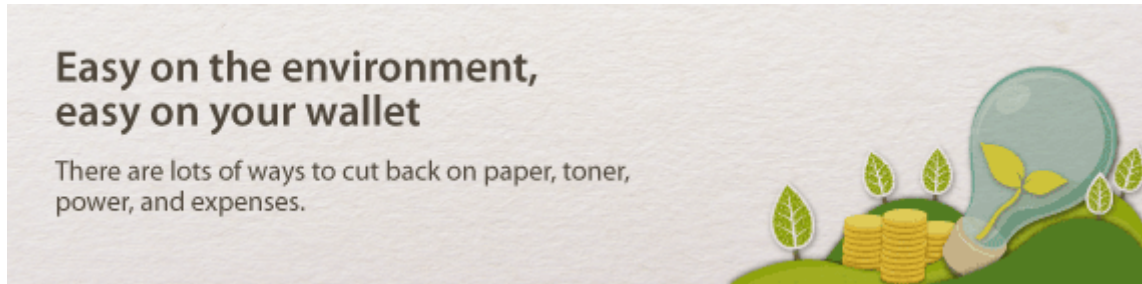
---

15A8-073

Give the features that are described in this section. The features are grouped under four headings: "Going Green and Saving Money", "Improving Efficiency", "Going Digital", and "So Much More".

# Going Green and Saving Money

15A8-074



01



## 2-Sided Printing (MF244dw)

You can use 2-sided printing for copies, print jobs sent from your computer. Because you'll only be using half the paper you would otherwise, you can cut your paper costs in half. The **Paper Save Copy** key enables you to save even more paper by allowing you to simultaneously select the settings for 2-sided copying and for copying multiple pages onto one sheet.



- To make 2-sided copies: **2-Sided Copying (MF244dw)(P. 75)**
- To save paper when you copy: **Using the [Paper Save Copy] Key (MF244dw / MF231)(P. 79)**
- To print 2-sided documents from your computer: **Switching 1-Sided and 2-Sided Printing (MF244dw) (P. 99)**

02



## Print Multiple Pages on a Single Sheet

To really start saving paper, shrink multiple pages onto a single sheet - 2 or 4 pages for copies, and up to 16 pages for print jobs sent from your computer. This is even more effective when used together with 2-sided printing.




- To copy multiple pages of a document onto one sheet: **Copying Multiple Documents onto One Sheet (2 on 1/4 on 1)(P. 77)**
- To save paper when you copy: **Using the [Paper Save Copy] Key (MF244dw / MF231)(P. 79)**
- To print multiple pages of a document onto one sheet: **Printing Multiple Pages onto One Sheet(P. 103)**

03



## Sleep Mode

For saving energy and money, a sleep mode that powers down a machine when nobody is using it has become an essential feature. This machine will enter sleep mode automatically, and can also be put to sleep whenever you want. Press  once to put the machine to sleep. Press it again to instantly wake the machine back into action.



For more information about this function, see [▶ Entering Sleep Mode\(P. 59\)](#) .

04



## Save Toner

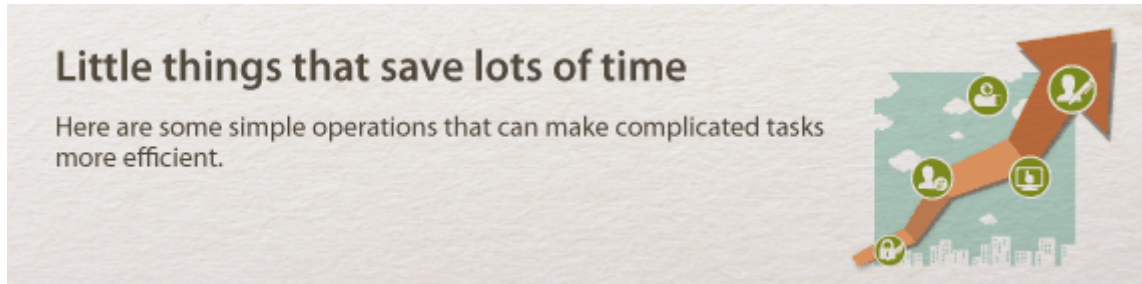
Got multi-page documents or drafts that don't need presentation-quality printing? There's a setting that uses less toner. Give it a try and save toner and money.



For more information about this function, see [▶ Saving Toner\(P. 116\)](#) .

## Improving Efficiency

15A8-075



01



### Shortcut Keys for Copying and Scanning

Take advantage of the shortcut keys on the operation panel so you don't have to reconfigure the same settings over and over again. Use the **Paper Save Copy** key to save paper by copying two or four pages onto one sheet. If you are using a machine capable of 2-sided printing, you can also copy on both sides of the sheet. For scanning, use the **Scan → PC** key to preset your favorite save destinations, scan types, and file formats. Just place your document and press the shortcut key to scan.



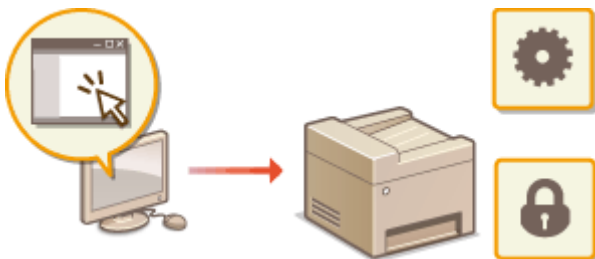
- To save paper when you copy: ▶ **Using the [Paper Save Copy] Key (MF244dw / MF231)(P. 79)**
- To easily scan documents: ▶ **Scanning Using the [Scan → PC] Key(P. 133)**

02



### Remote Management with Remote UI (MF244dw / MF232w)

Remote UI lets you manage a lot from your computer, all without having to go over to the machine. Configure settings and keep an eye on the machine's status with an intuitive, easy-to-understand Web browser interface that you'll master immediately. Save your time and energy for things other than taking care of the machine.



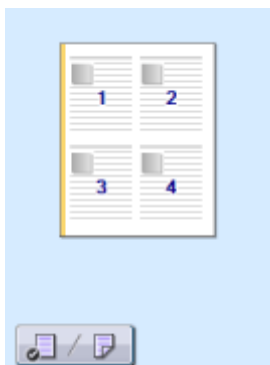
For more information about this function, see ▶ **Using Remote UI (MF244dw / MF232w)(P. 272)** .

03



### Make Print Settings Quickly with Intuitive Operation

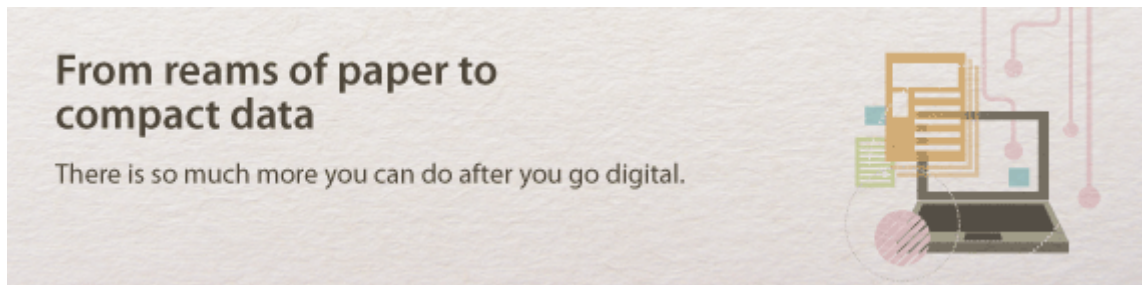
You can easily specify the page layout as well as binding position, switching between 1-sided and 2-sided printing, etc. intuitively on the preview image in the printer driver. The simple click-operation allows you to conveniently make settings while viewing how settings are applied.



For more information ▶ **Printing a Document(P. 87)**

## Going Digital

15A8-076



01

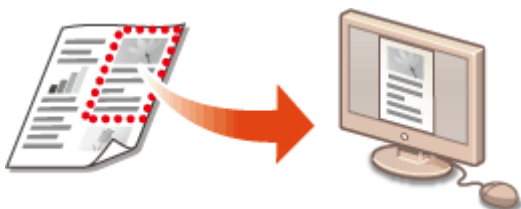


### Scan Only What You Need

What if you're scanning a whole page of a newspaper but all you're really interested in is a headline and a photo? Use ScanGear MF. You can select what you want from a preview, and then have the scanner disregard the rest. Otherwise you'll have to use an editing program to crop out everything you don't need.

#### IMPORTANT

Using your product to scan, print or otherwise reproduce certain documents, and the use of such images as scanned, printed or otherwise reproduced by your product, may be prohibited by law and may result in criminal and/or civil liability. If you are uncertain about the legality of using your product to scan, print or otherwise reproduce any particular document, and/or of the use of the images scanned, printed or otherwise reproduced, you should consult in advance with your legal advisor for guidance.



For more information about this function, see [▶Configuring Scan Settings in ScanGear MF\(P. 140\)](#) .

02



### Searchable PDFs

Searching of text in a PDF can be done with a "searchable PDF\*". By scanning an original with both text and images, text portions are converted by OCR into text data. In addition to being able to search for text information, you can also copy required portions into an Excel spreadsheet or Word document in Microsoft Office. Eliminate the need to type in customer data, addresses, etc. from scratch.

\* You cannot create a searchable PDF in the Mac OS environment.



For more information about scanning from a computer, see [▶Scanning from a Computer\(P. 137\)](#) .

03



### Add Images to a Work in Progress

Some applications work with the machine to let you easily import scanned images directly into documents you're working on. This way you can skip the steps of opening a separate application just for receiving the scanned images and then exporting them to the application you're really using.

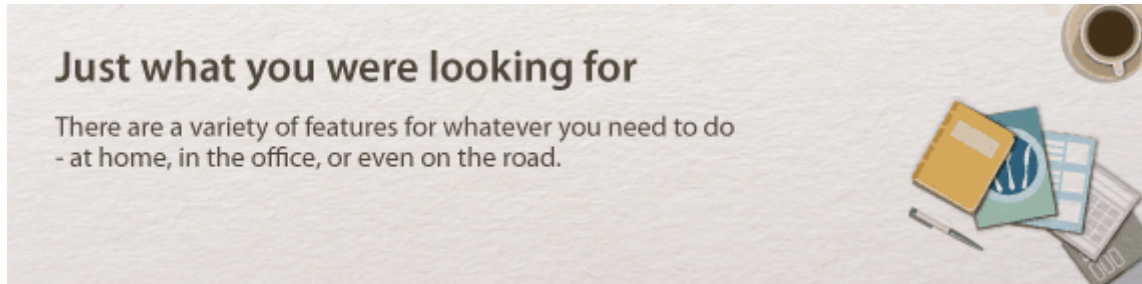


For more information about this function, see [▶ Scanning Using an Application \(P. 138\)](#).



## So Much More

15A8-077



### Just what you were looking for

There are a variety of features for whatever you need to do  
- at home, in the office, or even on the road.

01



Using a smartphone/tablet (MF244dw / MF232w)

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 PRINT Business or Canon Print Service 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 ▶ **Can Be Used Conveniently with a Mobile Device (MF244dw / MF232w)(P. 142)**

02



Easy Printing with Google Cloud Print (MF244dw / MF232w)

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. 159)** .

03



Go Wireless (MF244dw / MF232w)

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.



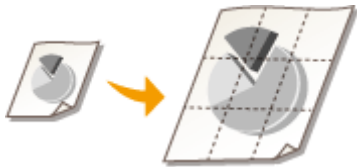
For more information about this function, see [▶Connecting to a Wireless LAN\(P. 170\)](#) .

04



#### 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\(P. 105\)](#) .

05



#### Make Booklets (MF244dw)

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 \(MF244dw\)\(P. 107\)](#) .

# Specifications

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15A8-078

The machine specifications are subject to change without prior notice due to improvements of the machine.

- ▶ **Machine Specifications(P. 414)**
- ▶ **Wireless LAN Specifications (MF244dw / MF232w)(P. 416)**
- ▶ **Document Type(P. 417)**
- ▶ **Scan Area(P. 418)**
- ▶ **Paper(P. 419)**
- ▶ **Copy Specifications(P. 421)**
- ▶ **Scanner Specifications(P. 422)**
- ▶ **Printer Specifications(P. 423)**

# Machine Specifications

15A8-079

<b>Type</b>	Personal Desktop
<b>Power Supply</b> <sup>*1</sup>	220 to 240 V, 50/60 Hz (Power requirements differ depending on the country in which you purchased the product.)
<b>Power Consumption</b>	<p><b>Maximum</b></p> <p>- <b>MF244dw</b> 1,150 W or less</p> <p>- <b>MF232w / MF231</b> 1,120 W or less</p> <p><b>Average consumption during standby mode</b></p> <p>- <b>MF244dw</b> Approx. 4.1 W</p> <p>- <b>MF232w / MF231</b> Approx. 4.2 W</p> <p><b>Average consumption during sleep mode</b></p> <p>- <b>MF244dw</b> Approx. 1.3 W (by USB Connections) Approx. 1.4 W (by Wired Connections) Approx. 2.1 W (by Wireless Connections)</p> <p>- <b>MF232w</b> Approx. 1.2 W (by USB Connections) Approx. 1.3 W (by Wired Connections) Approx. 2.0 W (by Wireless Connections)</p> <p>- <b>MF231</b> Approx. 1.2 W</p> <p><b>When the power switch is turned OFF</b> 0.5 W or less</p>
<b>Warm-up Time</b> <sup>*2</sup> (From power ON until machine enters standby)	<p>- <b>MF244dw / MF232w</b> 13.5 seconds or less</p> <p>- <b>MF231</b> 12.0 seconds or less</p>
<b>Weight</b> <sup>*3</sup>	<p>- <b>MF244dw</b> Approx. 12.7 kg</p> <p>- <b>MF232w</b> Approx. 10.8 kg</p> <p>- <b>MF231</b> Approx. 10.7 kg</p>
<b>Dimensions</b> (W x D x H)	<p>- <b>MF244dw</b> 390 x 371 x 360 mm</p> <p>- <b>MF232w / MF231</b> 390 x 371 x 312 mm</p>

\*1 The current value displayed on the rating label indicates average current consumption.

\*2 Warm-up time may vary depending on the use conditions and environment of the machine.

\*3 The value indicates the mass of the main unit including toner cartridges.

\*4 MF244dw / MF232w only

\*5 Indicates that the sound pressure level of each bystander position is below the ISO 7779 absolute criteria for the background noise level.

Appendix

<b>Environmental Conditions</b>	Temperature: 10 to 30°C Humidity: 20% to 80% RH (no condensation)
<b>Host Interface</b>	100BASE-TX*4 10BASE-T*4 Hi-Speed USB IEEE 802.11b/g/n (Infrastructure mode)*4
<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> - <b>MF244dw</b> During standby mode: Inaudible*5 During printing: 6.6 B or less (1-sided) During printing: 6.6 B or less (2-sided)</p> <p>- <b>MF232w / MF231</b> During standby mode: Inaudible*5 During printing: 6.6 B or less (1-sided)</p> <p><b>LpAm (Declared A-weighted emission sound pressure level (Bystander position))</b> - <b>MF244dw</b> During standby mode: Inaudible*5 During printing: Approx. 52 dB (1-sided) During printing: Approx. 52 dB (2-sided)</p> <p>- <b>MF232w / MF231</b> During standby mode: Inaudible*5 During printing: Approx. 51 dB (1-sided)</p>
<b>Acceptable Documents</b>	▶Supported Document Types(P. 417)
<b>Acceptable Paper Stock</b>	▶Paper(P. 419)
<b>Printable Range</b>	▶Printable Area(P. 420)
<b>Scan Range</b>	▶Scan Area(P. 418)

\*1 The current value displayed on the rating label indicates average current consumption.

\*2 Warm-up time may vary depending on the use conditions and environment of the machine.

\*3 The value indicates the mass of the main unit including toner cartridges.

\*4 MF244dw / MF232w only

\*5 Indicates that the sound pressure level of each bystander position is below the ISO 7779 absolute criteria for the background noise level.

## Wireless LAN Specifications MF244dw / MF232w

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15A8-07A

<b>Standard</b>	IEEE 802.11g, IEEE 802.11b, IEEE 802.11n
<b>Frequency Range</b>	2,412 to 2,472 MHz
<b>Communication Mode</b>	Infrastructure Mode / Access Point Mode
<b>Security</b>	<b>Infrastructure Mode</b> WEP, WPA-PSK (TKIP/AES-CCMP), WPA2-PSK (TKIP/AES-CCMP) <b>Access Point Mode</b> WPA2-PSK (AES-CCMP)
<b>Connection Method</b>	WPS (Wi-Fi Protected Setup), Manual setup

## Document Type

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15A8-07C

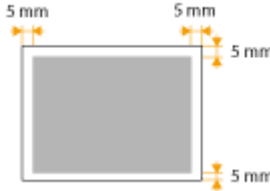
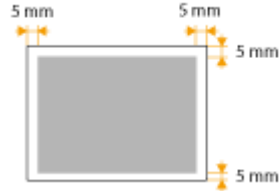
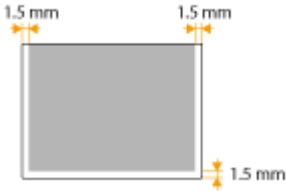
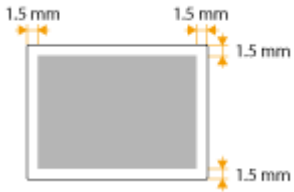
### ■ Supported Document Types

	<b>Platen Glass</b>	<b>Feeder (MF244dw)</b>
<b>Size (W x L)</b>	Up to 216 x 297 mm	Maximum size: 216 x 356 mm Minimum size: 148 x 105 mm
<b>Weight</b>	—	50 to 105 g/m <sup>2</sup>
<b>Paper Capacity</b>	1 sheet	Up to 35 sheets (A4, 80 g/m <sup>2</sup> )

# Scan Area

15A8-07E

The shaded areas in the table below indicate the scan area of the document. Make sure that text and images in your documents fit within the shaded area. The scan area varies depending on the function used and where documents are placed.

	Platen Glass	Feeder (MF244dw)
<b>Copy</b>	 <p><b>NOTE:</b> The scan area for copying may differ from the printable area. ▶ <b>Printable Area(P. 420)</b></p>	 <p><b>NOTE:</b> The scan area for copying may differ from the printable area. ▶ <b>Printable Area(P. 420)</b></p>
<b>Scan</b>		



# Paper

15A8-07F

## ■ Supported Paper Sizes

Paper sizes that can be loaded in the paper drawer, and the manual feed slot are listed below.

A4 (210 x 297 mm)<sup>\*1</sup>  
 B5 (182 x 257 mm)  
 A5 (148 x 210 mm)  
 Legal (216 x 356 mm)<sup>\*1</sup>  
 Letter (216 x 279 mm)<sup>\*1</sup>  
 Statement (140 x 216 mm)  
 Executive (184 x 267 mm)  
 Oficio (216 x 318 mm)<sup>\*1</sup>  
 Oficio (Brazil) (216 x 355 mm)<sup>\*1</sup>  
 Oficio (Mexico) (216 x 341 mm)<sup>\*1</sup>  
 Letter (Government) (203 x 267 mm)  
 Legal (Government) (203 x 330 mm)  
 Foolscap (216 x 330 mm)<sup>\*1</sup>  
 Foolscap (Australia) (206 x 338 mm)  
 Legal (India) (215 x 345 mm)<sup>\*1</sup>  
 F4A (216 x 343 mm)<sup>\*1</sup>  
 Envelope No. 10 (COM10) (104.7 x 241.3 mm)  
 Envelope Monarch (98.4 x 190.5 mm)<sup>\*2</sup>  
 Envelope C5 (162 x 229 mm)  
 Envelope DL (110 x 220 mm)  
 3x5inch (76 x 127 mm)<sup>\*2</sup>  
 Custom<sup>\*3</sup>

<sup>\*1</sup> Only in MF244dw, automatic 2-sided printing is available without replacing paper.

<sup>\*2</sup> You can load Envelope Monarch and 3x5inch only in the manual feed slot.

<sup>\*3</sup> Custom paper size of 76.2 to 216.0 mm in width and 210 to 356 mm in length can be loaded in the paper drawer. Custom paper size of 76.2 to 216.0 mm in width and 127 to 356.0 mm in length can be loaded in the manual feed slot.

### 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(P. 53)**

## ■ Paper Type and Paper Source Capacity

Chlorine-free paper can be used with this machine.

Paper Type		Paper Capacity for Paper Drawer	Paper Capacity for Manual Feed Slot
Plain paper* <sup>1</sup>	60 to 80 g/m <sup>2</sup>	250 sheets	1 sheet
	81 to 89 g/m <sup>2</sup>	170 sheets	1 sheet
Heavy paper* <sup>2</sup>	90 to 105 g/m <sup>2</sup>	170 sheets	1 sheet
	106 to 163 g/m <sup>2</sup>	100 sheets	1 sheet
Recycled paper* <sup>1</sup>	60 to 80 g/m <sup>2</sup>	250 sheets	1 sheet
	81 to 89 g/m <sup>2</sup>	170 sheets	1 sheet
Color paper* <sup>1</sup>	60 to 80 g/m <sup>2</sup>	250 sheets	1 sheet
	81 to 89 g/m <sup>2</sup>	170 sheets	1 sheet
Bond paper* <sup>3</sup>	60 to 163 g/m <sup>2</sup>	100 sheets	1 sheet
Label		100 sheets	1 sheet
Envelope		20 sheets	1 sheet

\*<sup>1</sup> Only in MF244dw, automatic 2-sided printing is available without replacing paper.

\*<sup>2</sup> Only in MF244dw, automatic 2-sided printing is available for heavy paper 1 (90 to 120 g/m<sup>2</sup>).

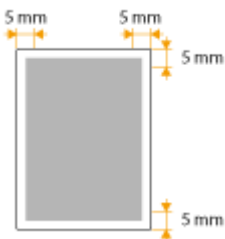
\*<sup>3</sup> Only in MF244dw, automatic 2-sided printing is available for bond paper 1 (60 to 90 g/m<sup>2</sup>) and bond paper 2 (91 to 120 g/m<sup>2</sup>).

## ■ Paper Type and Setting for the Machine

### ➤ **Loading Paper(P. 42)**

### ■ Printable Area

The shaded areas in the image below indicate the printable area of the document.



# Copy Specifications

15A8-07H

<b>Scan Resolution</b>	<b>Text/Photo (High Speed)</b> 300 x 600 dpi <b>Text/Photo, Photo, Text</b> 600 x 600 dpi
<b>Output Resolution</b>	600 x 600 dpi
<b>Copy Ratio</b>	100% 1:1, 400% Max, 200%, 141% A5->A4, 70% A4->A5, 50%, 25% Min
<b>Copy Speed*<sup>1</sup></b> (A4 Plain 1:1)	<b>MF244dw</b> 27 cpm <b>MF232w / MF231</b> 23 cpm
<b>Continuous Copying Capacity</b>	Maximum 999 copies
<b>First Copy Time</b> (A4)	Platen glass: 9 seconds or less Feeder* <sup>2</sup> : 14 seconds or less

\*<sup>1</sup> The copy speed on A4 size plain paper on one-side printing is measured during continuous copying. Copy speeds vary depending on the output resolution, the paper type and size, and the paper feeding direction. Copy speeds on smaller paper sizes may be slower. Plus, the machine may experience downtime or decrease the copy speed in the middle of a continuous copy run to adjust the temperature inside the machine or maintain the optimal print quality.

\*<sup>2</sup> MF244dw only.

## Scanner Specifications

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15A8-07J


<b>Type</b>	Color scanner
<b>Maximum Scan Size</b>	Platen glass: up to 216 x 297 mm Feeder*1: up to 216 x 356 mm
<b>Scan Resolution</b>	<b>Optical resolution</b> Platen glass: up to 600 x 600 dpi Feeder*1: up to 300 x 300 dpi <b>Software interpolation resolution</b> 9,600 x 9,600 dpi
<b>Scan Speed</b> *2 (A4, 300 x 300 dpi)	Color: Approx. 4 seconds/sheet Black and White: Approx. 3 seconds/sheet
<b>Driver</b>	TWAIN WIA 2.0 ICA

\*1 MF244dw only.

\*2 Speed of scanning via the platen glass. The communication time is not included.

# Printer Specifications

15A8-07K

<b>Output Tray Capacity</b> *1 (a fresh stack of A4 size paper)	Approx. 100 sheets (68 g/m <sup>2</sup> )
<b>Print Speed</b> *2 (A4 Plain 1:1)	<b>MF244dw</b> 27 ppm <b>MF232w / MF231</b> 23 ppm
<b>First Print Time</b> *3 (A4)	6 seconds or less
<b>Print Resolution</b>	600 dpi x 600 dpi (1,200 dpi equivalent x 1,200 dpi equivalent)
<b>Gradation</b>	256 gradations
<b>Toner Cartridges</b>	 <b>Consumables(P. 424)</b>

\*1 May vary depending on the installation environment and paper type used.

\*2 The print speed on A4 size plain paper on one-side printing is measured during continuous printing. Print speeds vary depending on the output resolution, the paper type and size, and the paper feeding direction. Print speeds on smaller paper sizes may be slower. Plus, the machine may experience downtime or decrease the print speed in the middle of a continuous print run to adjust the temperature inside the machine or maintain the optimal print quality.

\*3 May vary depending on the output environment.

# Consumables

15A8-07L

The following is a guide to the estimated replacement time for the consumables used in this machine. Purchase consumables at your local authorized Canon dealer. Observe safety and health precautions when storing and handling consumables ( [▶Consumables\(P. 9\)](#) ).

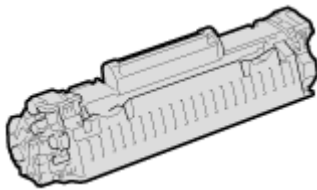
For optimum print quality, using Canon genuine Toner, Cartridge and Parts is recommended.



## 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.
- Replacement toner cartridges are different from the supplied toner cartridges, so the yield may also differ.

## ■ Toner Cartridges



### Supplied Toner Cartridges

The average yield\* of the toner cartridge that comes with the machine is 900 sheets.

\* The average yield is based on "ISO/IEC 19752" (the global standard related to "Method for the determination of toner cartridge yield for monochromatic electrophotographic printers and multi-function devices that contain printer components" issued by ISO [International Organization for Standardization]) when printing A4 size paper with the default print density setting.

### Replacement Toner Cartridges

For optimum print quality, using Canon genuine toner cartridges is recommended.

Canon Genuine Toner Cartridge	Average yield of toner cartridge *
Canon Cartridge 737	2,400 sheets

## NOTE

When replacing toner cartridges [▶How to Replace Toner Cartridges\(P. 390\)](#)

## LINKS




[▶Replacing Toner Cartridges\(P. 386\)](#)

## Manuals Included with the Machine

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15A8-07R

The manuals listed below are included with the machine. Refer to them as necessary.

Getting Started		Read this manual first. It describes basic setup procedures, from removing the packing materials to setting up the machine.
Wireless LAN Setting Guide (MF244dw / MF232w)		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.
User's Guide (This Manual)		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 User's Guide(P. 426)</b>

# Using User's Guide

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15A8-07S

The User's Guide is a manual that can be viewed on your computer, smartphone, or other similar device.

## How to Find the Topic You Are Looking for

---

You can find the page you are looking for using the following 2 methods.

### Search the contents

You can find the page you are looking for by selecting the topic from [Contents] on the left side of the screen.

#### ▶ **Top Page(P. 427)**

#### ▶ **Topic Page(P. 429)**

### Search by keyword

Perform a search by entering a keyword, such as "copy" or "wireless LAN", 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(P. 429)**

## NOTE

### System Requirements

- 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.



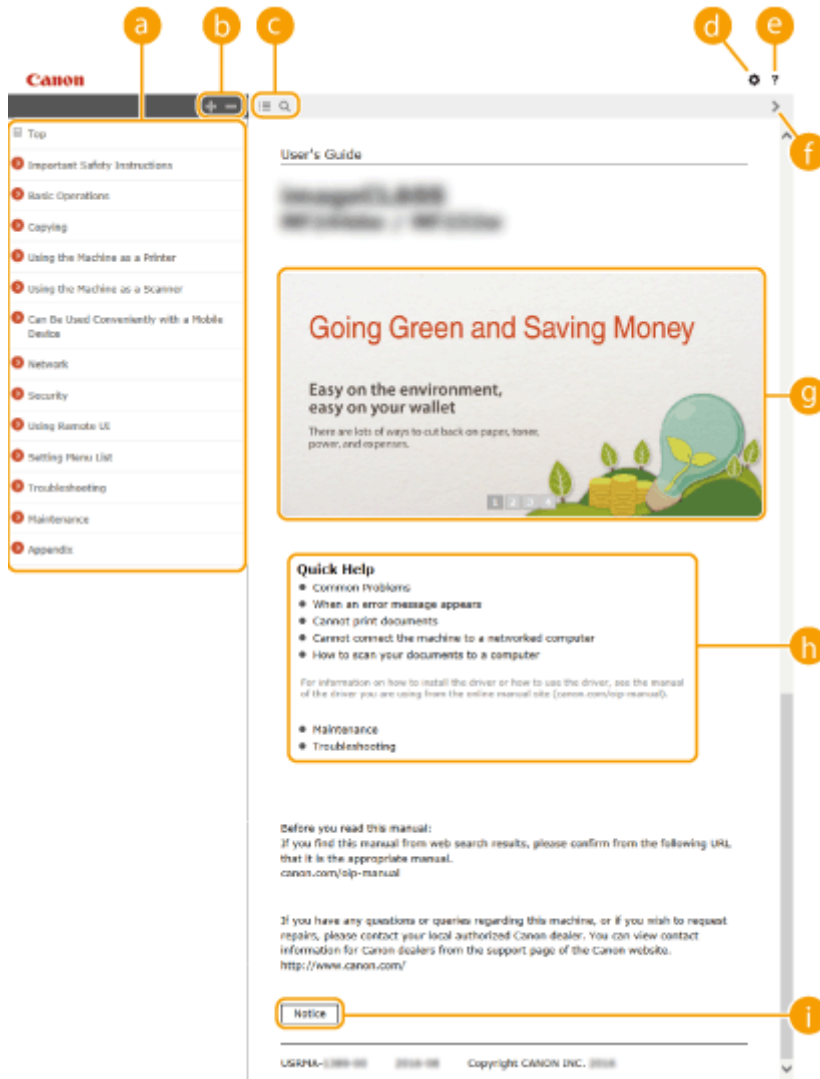
# Screen Layout of User's Guide

15A8-07X

The User's Guide is divided into different screens, and the content of each screen varies.

## Top Page



Appears when the User's Guide starts.



### a Contents

The titles of chapters are displayed.

### b

Click  to display all items, including those nested underneath other items. Click  to return to the original list.

### c

Click to switch between the table of contents and the search display.



Click to specify settings such as text size, layout, and display method for the User's Guide.



Click to display information on how to view the User's Guide, how to perform a search, and other information.



Click to display the previous or following topic.

### g Feature Highlights

Provides a variety of practical examples of ways to use the machine. Click **1** / **2** / **3** / **4** to toggle the display 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. 428)**

### h [Quick Help]

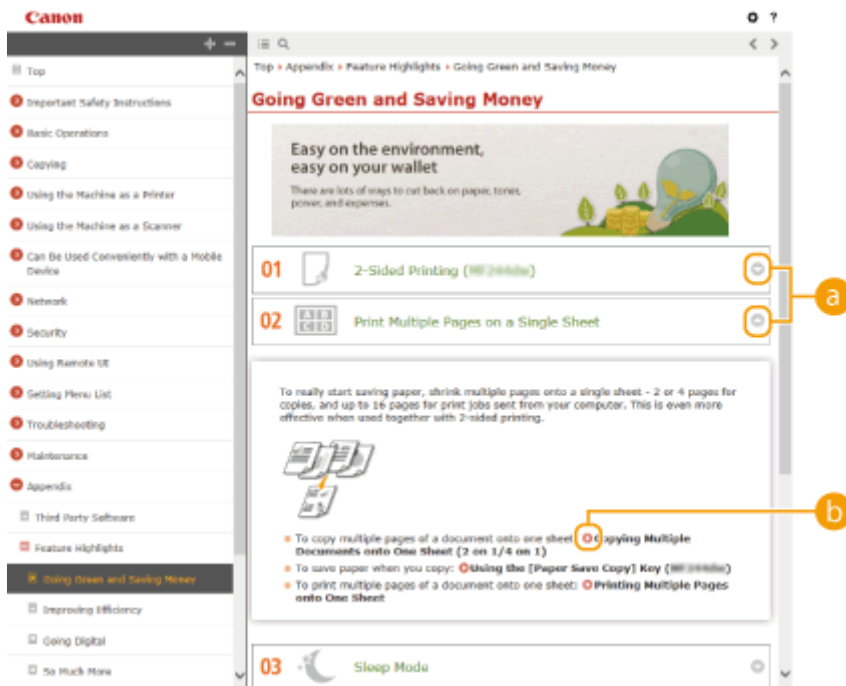
Click to view how to solve problems.

### i [Notice]

Click to view important information you should know when using the machine.

## Feature Highlights

Provides a variety of practical examples of ways to use the machine.



Click ◀ to display the detailed information. Click ▶ to close the window.



Click to display the corresponding topic page.

## Topic Page

Contains information about how to configure and use the machine.



### a Navigation

See what chapter topic you are currently viewing.



Click  to display the hidden detailed descriptions. Click  to close the detailed descriptions.




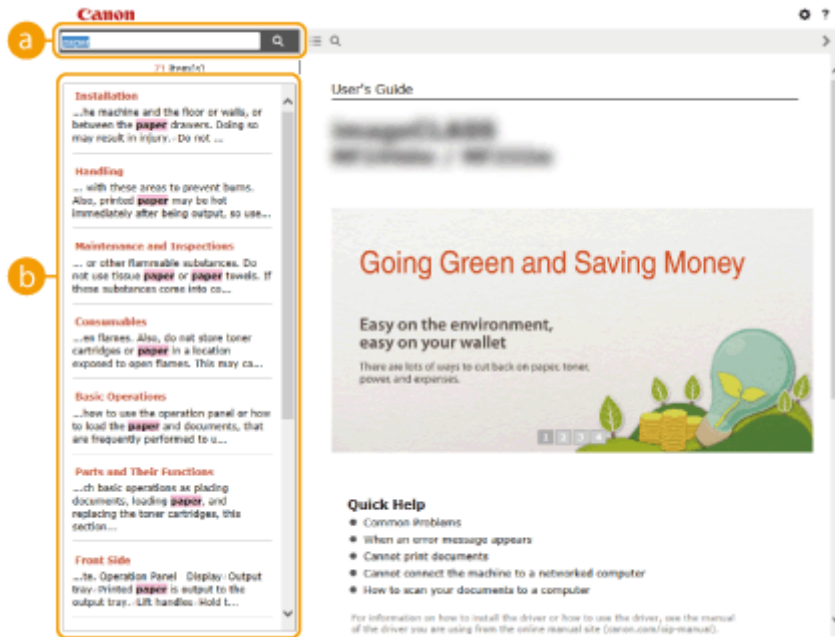
Click to go to the corresponding page. To return to the previous page, click "Back" on your Web browser.




Click to return to the page top.

## Search

Click  to display the search screen. Contains a text box to perform a search by keyword 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. Search for pages containing all keywords by spacing keywords apart. Search for only pages with exact matches by enclosing keyword phrases in double quotation marks.

**b Search result**

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.

**NOTE:**

- Specified keywords appear in bold in search results.

# Viewing User's Guide

15A8-07Y

## 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	 
Settings displayed on the operation panel	<Timer Settings> <Specify destination.>
Buttons and other text interfaces displayed on the computer display	[Preferences]

## Screens Used in This Manual

Unless otherwise noted, displays used in the User's Guide are those for the MF244dw. 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

Unless otherwise noted, illustrations used in the User's Guide are those for the MF244dw. When differences are significant, multiple illustrations are used with the model names, such as "MFXXXX / MFXXXX."

# Manual Display Settings

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15A8-080

## Others

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15A8-081

This section describes basic Windows operations and includes disclaimers, copyright information, and other information.

# Basic Windows Operations

15A8-082

- ▶ **Displaying the Printer Folder**(P. 434)
- ▶ **Enabling [Network discovery]**(P. 434)
- ▶ **Displaying Shared Printers in the Print Server**(P. 435)
- ▶ **Displaying the [Software Programs/Manuals Setup] Screen**(P. 435)
- ▶ **Printing a Test Page in Windows**(P. 436)
- ▶ **Checking the Bit Architecture**(P. 437)
- ▶ **Checking the Computer Name**(P. 438)
- ▶ **Checking the Printer Port**(P. 439)
- ▶ **Checking Bidirectional Communication**(P. 440)
- ▶ **Checking the SSID to Which Your Computer Is Connected**(P. 441)

## ■ 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 10

Right-click [ ] ▶ select [Control Panel] ▶ [Hardware and Sound] ▶ [Devices and printers].

### Windows Server 2003

[Start] ▶ select [Printers and Faxes].

### Windows Server 2008

[Start] ▶ select [Control Panel] ▶ double-click [Printers].

## ■ Enabling [Network discovery]

If you are using Windows Vista/7/8/10/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 10



Right-click [  ] ▶ 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

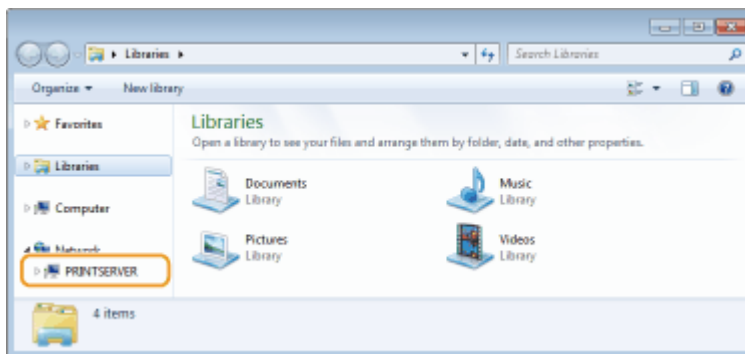
Right-click [Start] ▶ select [File Explorer].

#### Windows 10

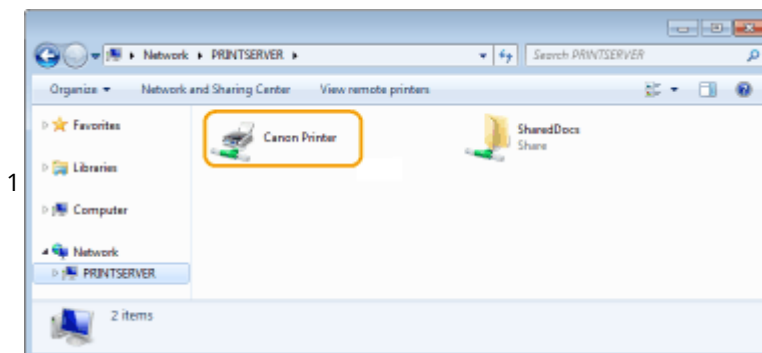
Click [  ] ▶ select [File Explorer].

### 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 provided 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 10

Click [Search the web and Windows] ► enter "D:\MInst.exe" ► click "D:\MInst.exe" displayed in the search results

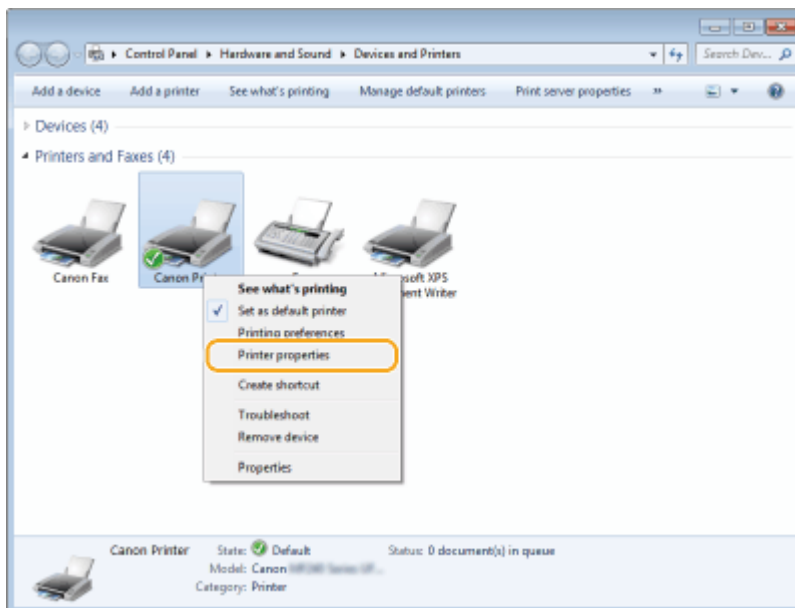
### Windows Server 2003

[Start] ► [Run] ► enter "D:\MInst.exe" ► click [OK]

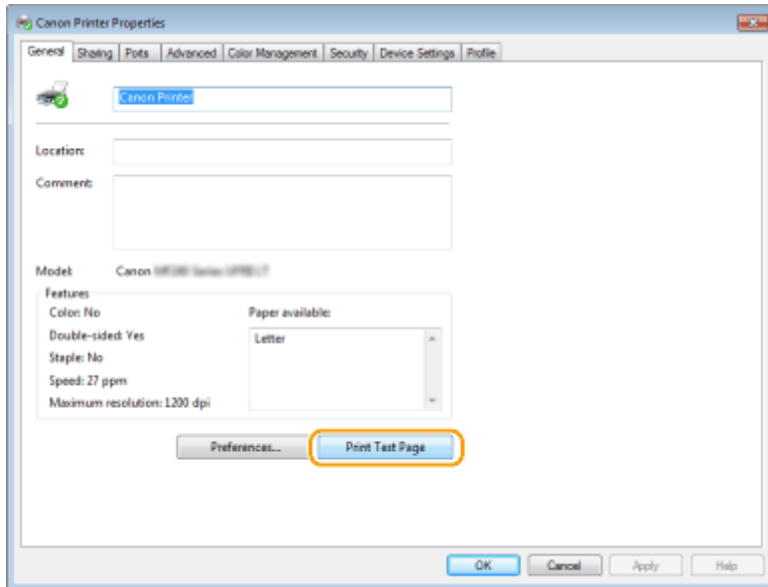
## ■ Printing a Test Page in Windows

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 Manual Feed Slot(P. 47)
- 2 Open the printer folder. ◀ Displaying the Printer Folder(P. 434)
- 3 Right-click the printer driver icon for this machine 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].

#### Windows 10

Proceed to step 2.

### 2 Display [System].

#### Windows Vista/7/8/Server 2008 R2/Server 2012

Click [System and Maintenance] or [System and Security] ► [System].

#### Windows 10

Click [ ] ► select [Settings] ► [System] ► [About].

#### Windows Server 2008

Double-click [System].

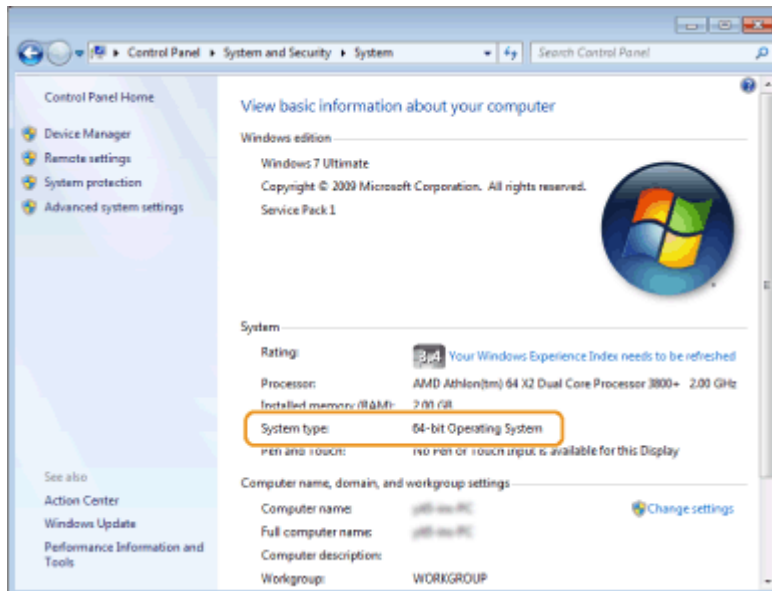
### 3 Check the bit architecture.

#### For 32-bit versions

[32-bit Operating System] is displayed.

#### For 64-bit versions

[64-bit Operating System] is displayed.



## ■ Checking the Computer Name

### Windows Vista/7/8/10/Server 2008/Server 2012

---

- 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].

#### Windows 10

Proceed to step 2.

- 2 Display [System].

#### Windows Vista/7/8/Server 2008 R2/Server 2012

Click [System and Maintenance] or [System and Security] ► [System].

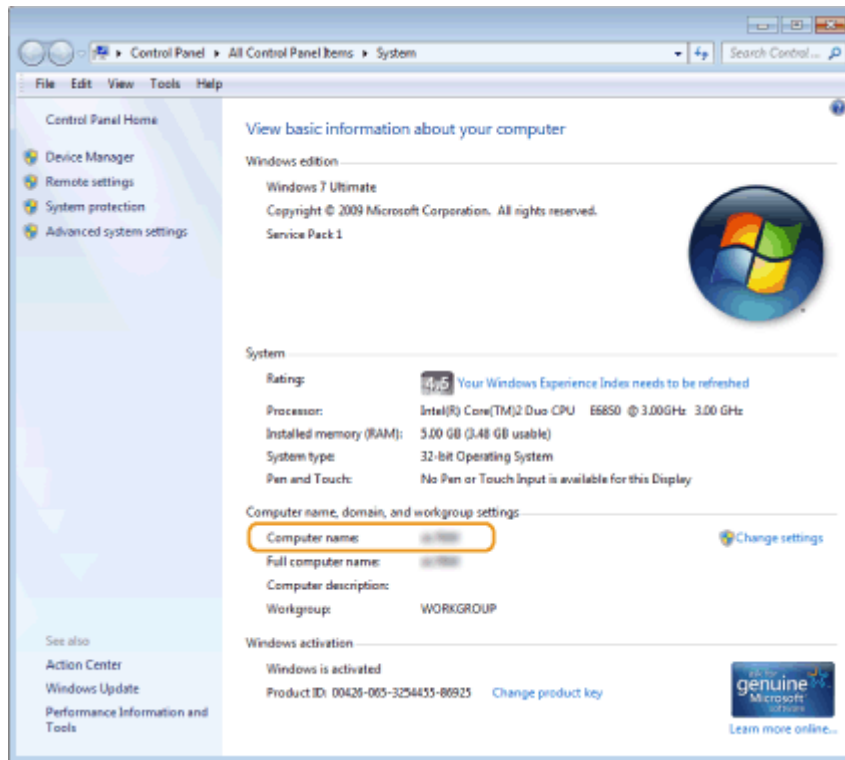
#### Windows 10

Click [Start] ► select [Settings] ► [System] ► [About].

#### Windows Server 2008

Double-click [System].

- 3 Check the computer name.



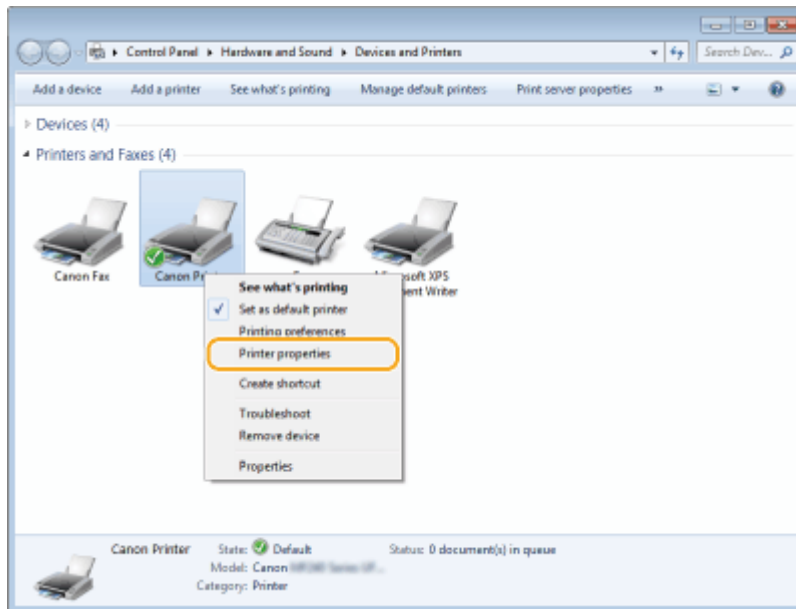
## Windows Server 2003

---

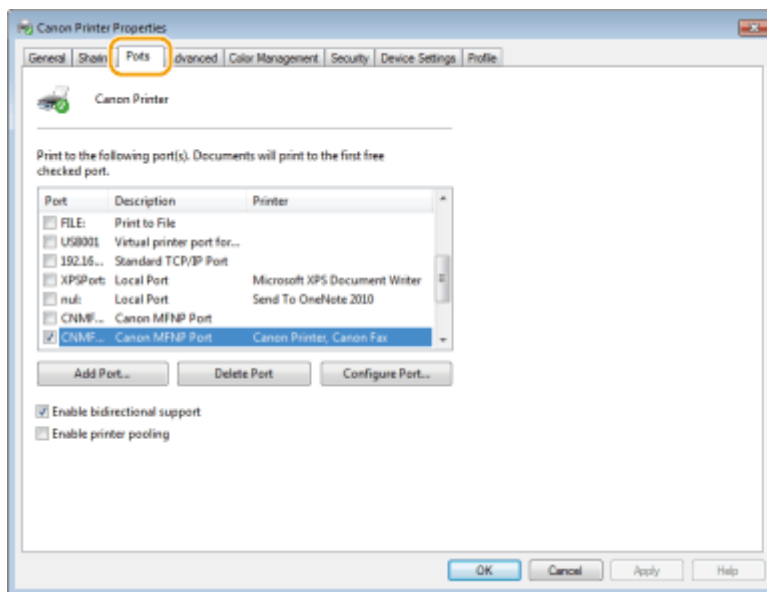
- 1 [Start] ► select [Control Panel] ► [System].
- 2 Click [Change] in [Computer Name] tab.
- 3 Check the computer name.

### ■ Checking the Printer Port

- 1 Open the printer folder. ► **Displaying the Printer Folder(P. 434)**
- 2 Right-click the printer driver icon for this machine and click [Printer properties] or [Properties].



### 3 In the [Ports] tab, check that the port is selected correctly.



## NOTE

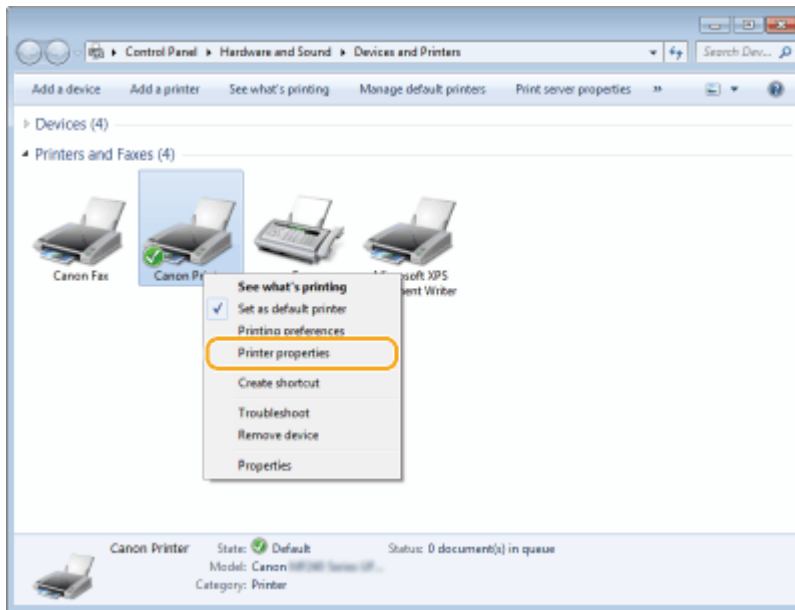
### If you are using a network connection and have changed the machine's IP address

- 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. 201)**

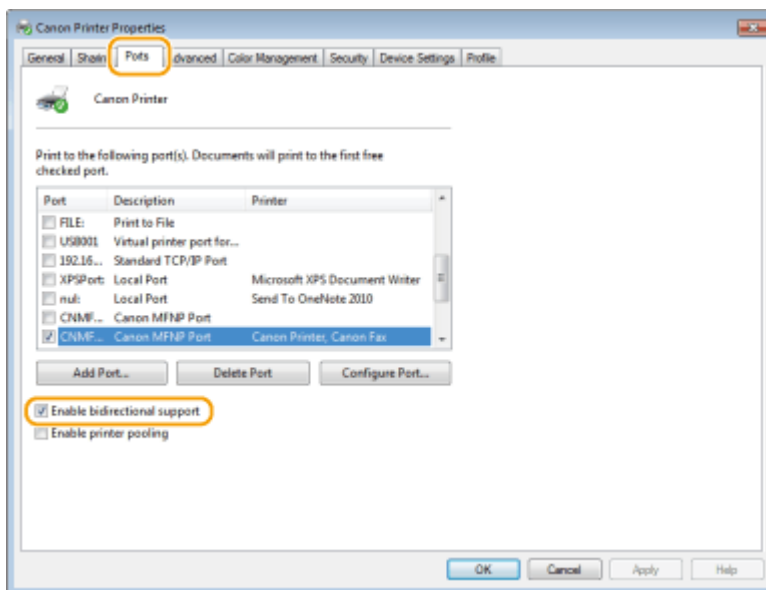
## ■ Checking Bidirectional Communication

### 1 Open the printer folder. ▶ **Displaying the Printer Folder(P. 434)**




- 2** Right-click the printer driver icon for this machine 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.

# Appendix





## Notice

15A8-084

### ■ 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.

### ■ IPv6 Ready Logo



The protocol stack included in this machine has obtained the IPv6 Ready Logo Phase-1 established by the IPv6 Forum.

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† Batteries are not included in MF231.

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## Reducing your environmental impact while saving money

### Power Consumption and Activation Time

The amount of electricity a device consumes depends on the way the device is used. This product is designed and set in a way to allow you to reduce your electricity costs. After the last print it switches to Ready Mode. In this mode it can print again immediately if required. If the product is not used for a time, the device switches to its Power Save Mode.

The devices consume less power (Watt) in these modes.

If you wish to set a longer Activation Time or would like to completely deactivate the Power Save Mode, please consider that this device may then only switch to a lower energy level after a longer period of time or not at all. Canon does not recommend extending the Activation Times from the optimum ones set as default.

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The Energy Star® programme is a voluntary scheme to promote the development and purchase of energy efficient models, which help to minimise environmental impact.

Products which meet the stringent requirements of the Energy Star® programme for both environmental benefits and the amount of energy consumption will carry the Energy Star® logo accordingly.

### Paper types

This product can be used to print on both recycled and virgin paper (certified to an environmental stewardship scheme), which complies with EN12281 or a similar quality standard. In addition it can support printing on media down to a weight of 64g/m<sup>2</sup>.

Lighter paper means less resources used and a lower environmental footprint for your printing needs.

### Duplex printing (Standard duplex printing products only)

Duplex printing capability enables you to print on both sides automatically, and therefore helps to reduce the use of valuable resources by reducing your paper consumption.

The duplex function has been auto enabled during the set up and driver installation and Canon strongly recommends that you do not disable this function. You should continue to use the duplex function to reduce the environmental impact of your work with this product at all times.

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snmp

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