## Canon

# MX450 series Online Manual

Read Me First Useful Functions Available on the Machine Overview of the Machine

#### **Read Me First**

- Notes on Online Manual Usage
- Operating Environment
- How to Print

#### **Notes on Online Manual Usage**

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- In principle, the descriptions in this guide are based on the product at the time of its initial sale.
- This guide does not disclose the manuals of all the products sold by Canon.
   See the manual supplied with the product when using a product that is not described in this guide.

#### **Operating Environment**

The following environment is recommended for the use of this guide.

• Recommended Operating System

Windows 8, Windows 7, Windows 7 SP1, Windows Vista SP1, Vista SP2, Windows XP SP3 (32-bit only)

• Recommended Web Browser

Internet Explorer 8 or later (Allow cookies and enable JavaScript in browser settings.)

#### **How to Print**

Use the print function of your Web browser to print this guide.

To print background colors and images, follow the steps below to display the **Page Setup** dialog box, then select the **Print Background Colors and Images** checkbox.

• In Internet Explorer 9 or 10

Select (Tools) > Print > Page setup....

- In Internet Explorer 8
  - 1. Press the Alt key to display the menus.
  - 2. Select Page Setup... from the File menu.

## **Symbols Used in This Document**

#### Warning

Instructions that, if ignored, could result in death or serious personal injury caused by incorrect operation of the equipment. These must be observed for safe operation.

#### Caution

Instructions that, if ignored, could result in personal injury or material damage caused by incorrect operation of the equipment. These must be observed for safe operation.

#### >>>> Important

Instructions including important information. To avoid damage and injury or improper use of the product, be sure to read these indications.

#### >>>> Note

Instructions including notes for operation and additional explanations.



Instructions explaining basic operations of your product.

#### **Trademarks and Licenses**

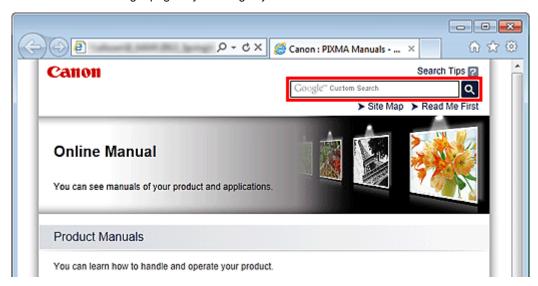
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  of their respective companies.



■ The formal name of Windows Vista is Microsoft Windows Vista operating system.

## **Search Tips**

You can search for target pages by entering keywords in the search window.



### >>>> Important

When performing a search by entering the product's model name, enter only the first two digits of the number in the model name.

Example: When searching for MX452

Enter "MX45"

#### Searching for Functions

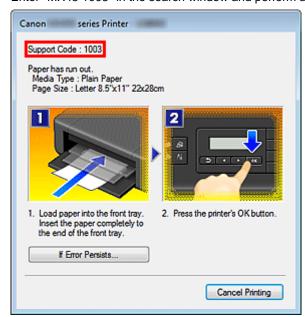
You can find target pages easily by entering your product's model name and a keyword for the function you want to learn about.

Example: When your product is MX450 series and you want to learn how to load paper Enter "MX45 load paper" in the search window and perform a search

#### Troubleshooting Errors

You can obtain more accurate search results by entering your product's model name and a support code.

Example: When your product is MX450 series the following error screen appears Enter "MX45 1003" in the search window and perform a search



#### • Searching for Application Functions

You can find target pages easily by entering your application's name and a keyword for the function you want to learn about.

Example: When you want to learn how to print collages with My Image Garden Enter "My Image Garden collage" in the search window and perform a search

#### • Searching for Reference Pages

You can search for reference pages described in this guide by entering your product's model name and a page title.

You can find reference pages more easily by entering the function name as well.

Example: When you want to browse the page referred to by the following sentence on a scanning procedure page in the *Online Manual* for MX450 series

Refer to "Color Settings Tab" for your model from Home of the *Online Manual* for details.

Enter "MX45 scan Color Settings Tab" in the search window and perform a search

# **Window Used in Operation Explanation**

In this guide, most of the operations are described based on the windows displayed when Windows 7 operating system Home Premium (called Windows 7 below) is used.

#### **Overview of the Machine**

- Main Components and Basic Operations
  - Main Components
  - About the Power Supply of the Machine
  - LCD and Operation Panel
  - Entering Numbers, Letters, and Symbols
- Loading Paper / Originals
  - Loading Paper
  - Loading Originals
  - Inserting the USB Flash Drive
- Replacing a FINE Cartridge
  - Replacing a FINE Cartridge
  - Checking the Ink Status
- Maintenance
  - When Printing Becomes Faint or Colors Are Incorrect
  - Performing Maintenance from a Computer
  - Cleaning the Machine
- Changing the Machine Settings
  - Changing Machine Settings from Your Computer
  - Changing the Machine Settings on the LCD
- Information about Network Connection
  - Useful Information about Network Connection
- About Network Communication
  - Changing and Confirming Network Settings
  - Screens for Network Connection of IJ Network Tool
  - Other Screens of IJ Network Tool
  - Appendix for Network Communication
- Tips for Ensuring Optimal Printing Quality
  - Useful Information about Ink
  - Key Points to Successful Printing
  - Be Sure to Make Paper Settings after Loading Paper
  - Canceling a Print Job
  - Key to Enjoying Consistent Printing Quality
  - Precautions for Safe Transport of the Machine
- Legal Limitations on Use of Your Product and Use of Images
- Specifications

## **Maintenance**

- When Printing Becomes Faint or Colors Are Incorrect
- Performing Maintenance from a Computer
- Cleaning the Machine

# **Changing the Machine Settings**

- Changing Machine Settings from Your Computer
- Changing the Machine Settings on the LCD

## **Changing Machine Settings from Your Computer**

- Changing the Print Options
- Registering a Frequently Used Printing Profile
- Setting the Ink Cartridge to be Used
- Managing the Machine Power
- Reducing the Machine Noise
- Changing the Machine Operation Mode

## **Changing the Machine Settings on the LCD**

- Changing the Machine Settings on the LCD
- Fax settings
- Print settings
- LAN settings
- Dev. user settings
- Mob. phone settings
- Bluetooth settings
- Firmware update
- Reset setting
- About Quiet setting

## **Information about Network Connection**

Useful Information about Network Connection

#### **Useful Functions Available on the Machine**

The following useful functions are available on the machine.

Enjoy even more pleasant photography experience by utilizing various functions.

- Print Photos Easily
- Download Content Materials
- Upload Scanned Images to the Web
- Print Easily from a Smartphone
- Print Directly from iPad, iPhone, or iPod touch
- Print Photos on Facebook

## **Print Photos Easily Using an Application**

#### • Organize Images Easily

In My Image Garden, you can register the names of people and events to photos. You can organize photos easily as you can display them not only by folder but also by calendar, event, and person. This also allows you to find the target photos easily when you search for them later on.





<Calendar View>

<People View>

#### . Display Recommended Items in Slide Shows

Based on the information registered to photos, Quick Menu automatically selects the photos on your computer and creates recommended items such as collages and cards. The created items appear in slide shows.



If there is an item you like, you can easily print it in just two steps. STEP1 In Image Display of Quick Menu, select the item you want to print. STEP2 Print the item with My Image Garden.



#### . Place Photos Automatically

Delightful items are created easily as the selected photos are placed automatically according to the theme.



#### • Other Various Functions

My Image Garden has many other useful functions. Refer to "What You Can Do with My Image Garden" for details.

#### **Download a Variety of Content Materials**

#### • CREATIVE PARK

A "printing materials site" where you can download all the printing materials for free.

Various types of content such as seasonal cards and paper crafts that can be made by assembling paper parts are provided.

It is easily accessible from Quick Menu.

#### • CREATIVE PARK PREMIUM

A service where customers using models that support PREMIUM Contents can download exclusive printing materials.

PREMIUM Contents can be downloaded easily via My Image Garden. Downloaded PREMIUM Contents can be printed directly with My Image Garden.

To print downloaded PREMIUM Contents, make sure that genuine Canon ink tanks/ink cartridges are installed for all colors on a supported printer.





■ The designs of PREMIUM Contents provided in this page are subject to change without prior notice.

#### **Upload Scanned Images Easily to the Web**

If you use Evernote or Dropbox on your computer, you can easily upload scanned images to the web. Uploaded images can be utilized from other computers, smartphones, etc.

Refer to "Online Storage Integration Function" for details.



#### Print Easily from a Smartphone with Canon Easy-PhotoPrint (for iOS/Android)

Use Canon Easy-PhotoPrint (for iOS/Android) to easily print photos saved on a smartphone wirelessly. You can also receive scanned data (PDF or JPEG) directly on a smartphone without using a computer. Canon Easy-PhotoPrint (for iOS/Android) can be downloaded from App Store and Google Play.



#### Print Directly from iPad, iPhone, or iPod touch with Apple AirPrint

The machine is compatible with the AirPrint function of Apple iOS devices.

You can directly print e-mails, photos, web pages, etc. from iPad, iPhone, or iPod touch to the machine over wireless LAN.

Refer to "Printing from AirPrint Compliant Device" for details.



#### Print Photos on Facebook Easily Using a Facebook App "Print Your Days"

Use Print Your Days to collect Facebook photos of memories of parties and travel, recent activity of your family and friends, your hobbies, etc., then create and print a work of art.

Print Your Days is available from the Print Your Days Facebook page.







## **Online Storage Integration Function**

The machine can integrate with online storage services such as Evernote.



# Integration with Online Notetaking Service 🗐 "Evernote"

If an Evernote client application is installed on your computer, you can import scanned images into the application and upload them to the Evernote server.

The uploaded images can be browsed from other computers, smartphones, etc.

To use Evernote, you need to create an account. See the "CREATE ACCOUNT" page of Evernote for account creation.

#### • Settings

In the Settings dialog box of IJ Scan Utility, select the item you want to set, then select Evernote for **Send to an application** in **Application Settings**.

Refer to "Settings Dialog Box" for details.

### >>>> Important

■ The Evernote service features are subject to change or termination without prior notice.

## **Printing from AirPrint Compliant Device**

This document explains how to use AirPrint to print wirelessly from your iPad, iPhone and iPod touch to a Canon printer.

AirPrint enables you to print photos, email, Web pages and documents from your Apple device directly to your printer without installing a driver.





#### **Checking Your Environment**

First, check your environment.

• AirPrint Operation Environment

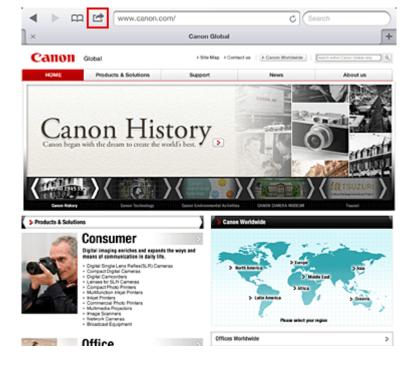
To use AirPrint, you will need one of the following Apple devices running the latest version of iOS: iPad (all models), iPhone (3GS or later), or iPod touch (3rd generation or later).

Network Environment

The Apple device (iPad, iPhone, or iPod touch) and this machine must be connected to the same Wi-Fi network.

#### **Printing with AirPrint**

- 1. Check that this machine is turned on and is connected to the LAN.
- **2.** From the application software of your Apple device, tap the operation icon to display the menu options.



3. From the menu options, tap Print.



4. From Printer Options, select the model that you are using.

#### Important

■ Because some application software does not support AirPrint, **Printer Options** may not be displayed. If an application software does not let you use printer options, you cannot print from that application software.

#### Note

- The printer options differ depending on the application software and model you are using.

  Normally, when you tap **Print** and select a model name, the displayed printer options will include up to the following four options:
  - Printer: Select a model that can be used in your wireless LAN.
  - Copies: Select the number of print copies.
  - Duplex Printing: If the model supports duplex printing, you can select On or Off.

- Range: The page range can be used only with specific application software and file types (such as PDF files).
- 5. For 1 Copy, click + or to set the number of required copies.
- **6.** For **Duplex Printing**, click **On** to enable duplex printing or click **Off** to disable the function.
- 7. When printing a file type that has multiple pages, such as a PDF file, click **Range** and then click **All Pages** or select the range of pages to be printed.
- 8. Tap the Print.

When you execute printing, the printer prints according to the specified settings.

#### **Paper Size**

With AirPrint, the paper size is selected automatically according to the application software being used on the Apple device and the region in which AirPrint is used.

When Apple's photo application software is used, the default paper size is L size in Japan, and 4"x6" or KG in other countries and regions.

When documents are printed from Apple's Safari application software, the default paper size is letter size in the U.S. region, and A4 in Japan and Europe.

#### >>>> Important

Your application software may support different paper sizes.

#### **Checking the Print Status**

During printing, a **Print** icon is displayed in the list of recently used application software, and you can use it to check the print progress.

To display the list of latest used application software, press the **Home** button on the Apple device twice. The **Print** icon is displayed at the bottom of the **Home** screen.



#### **Deleting a Print Job**

To delete a print job with AirPrint, use one of the following two methods:

• From the machine: Use the operation panel of the machine to cancel the print job.

• From an Apple device: Press the **Home** button on the Apple device twice. Tap the **Print** icon and display the print job list. Tap the print job to be canceled, and then tap **Cancel Print**.

#### **AirPrint Troubleshooting**

If the document does not print, check the following:

- 1. Check that the machine power is on. If the machine power is on, turn it off and then back on again, and check whether the issue is resolved.
- 2. Check that the machine is connected by LAN to the same network subnet as the device on which iOS is installed.
- 3. Check that the machine has enough paper and ink.
- 4. Check that no error message is displayed on the machine operation panel.

If the problem persists, use the printer driver on your computer to execute printing and check whether the document can be printed normally on the machine.

If the document cannot be printed, refer to the Online Manual for your model.

#### Note

- After you turn on the machine, it may take few minutes before the machine can communicate through a wireless LAN connection. Confirm that the machine is connected to the wireless LAN, and then try printing.
- If Bonjour on the machine is disabled, AirPrint cannot be used. Check the LAN settings on the machine, and enable Bonjour.

#### Note

■ The windows used in the explanations may differ from those displayed by your Apple product or application software.

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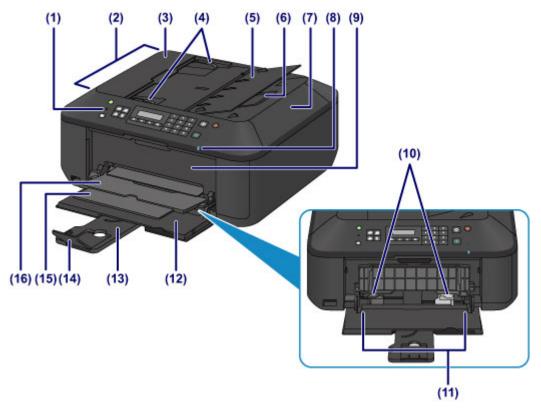
## **Main Components and Basic Operations**

- Main Components
- About the Power Supply of the Machine
- LCD and Operation Panel
- Entering Numbers, Letters, and Symbols

## **Main Components**

- Front View
- Rear View
- Inside View
- Operation Panel

#### **Front View**



#### (1) operation panel

Use to change the settings of the machine or to operate it.

→ Operation Panel

#### (2) ADF (Auto Document Feeder)

Load a document to copy, scan, or fax. The documents loaded in the document tray are scanned automatically one sheet at a time.

→ Loading Documents in the ADF (Auto Document Feeder)

#### (3) document feeder cover

Open when clearing jammed documents.

#### (4) document guides

Adjust these guides to match the width of document in the ADF.

#### (5) document tray

Open to load a document in the ADF. You can load two or more sheets of document of the same size and thickness. Load the document with the side you want to scan facing up.

#### (6) document output slot

Documents scanned from the ADF are delivered here.

#### (7) document cover

Open to load an original on the platen glass.

#### (8) Wi-Fi lamp

Lights or flashes blue to indicate the wireless LAN status.

Liahts:

#### Wireless LAN active is selected.

Flashes:

Printing or scanning over wireless LAN. Also flashes while searching for wireless LAN access point during setup and when connecting to the access point.

#### (9) paper output cover

Open to replace the FINE cartridge or remove jammed paper inside the machine.

#### (10) paper guides

Slide to align with both sides of the paper stack.

#### (11) front tray

Load various sizes or types of paper which you can use on the machine. Two or more sheets of the same size and type of paper can be loaded at the same time, and fed automatically one sheet at a time.

- ➡ Loading Plain Paper / Photo Paper
- ➡ Loading Envelopes

#### (12) front cover

Open to load paper in the front tray.

#### (13) paper support

Extend to load paper in the front tray.

#### (14) output tray extension

Open to support ejected paper.

#### (15) paper output support

Extend to support ejected paper.

#### (16) paper output tray

Printed paper is ejected.



#### (17) platen glass

Load an original to copy, scan, or fax.

#### (18) USB flash drive port

Insert a USB flash drive to this port.

➡ Inserting the USB Flash Drive

You can connect the optional Bluetooth Unit BU-30\* to print directly.

- Printing from a Bluetooth Compliant Device
- \* The Bluetooth Unit is not available in some countries or regions depending on the local laws and regulations. For details, contact the service center.

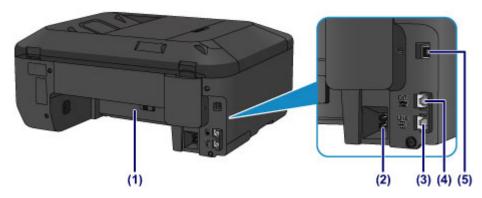
### Warning

Do not connect any equipment other than the USB flash drives and optional Bluetooth Unit BU-30 to the USB flash drive port of the machine. This may cause fire, electric shock, or damage to the machine.

#### Important

- Do not touch the metal casing.
- Do not use the USB cable longer than 10 feet (3 meters) to connect to the machine since it may affect the operation of other peripheral devices.

## **Rear View**



#### (1) transport unit

Open to remove jammed paper.

#### (2) power cord connector

Plug in the supplied power cord.

#### (3) telephone line jack

Connect the telephone line.

#### (4) external device jack

Connect an external device such as telephone or answering machine.

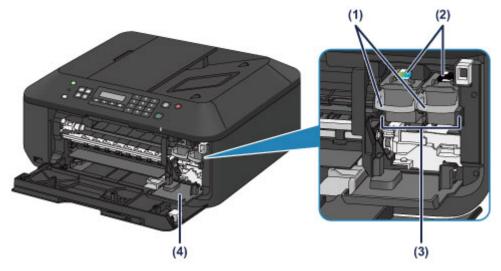
#### (5) USB port

Plug in the USB cable to connect the machine with a computer.

#### >>> Important

- Do not touch the metal casing.
- Do not plug in or unplug the USB cable while the machine is printing or scanning originals with the computer.

#### **Inside View**



#### (1) ink cartridge lock lever

Locks the FINE cartridge into place.

#### (2) FINE cartridge (ink cartridges)

A replaceable cartridge that integrates print head and ink tank.

#### (3) FINE cartridge holder

Install the FINE cartridge.

The color FINE cartridge should be installed into the left slot and the black FINE cartridge should be installed into the right slot.

#### (4) head cover

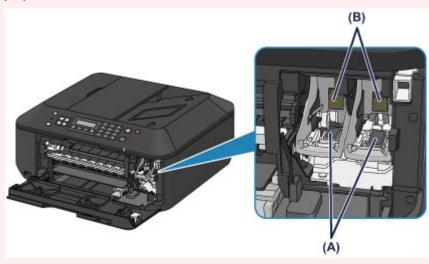
Opens to enable replacement of the FINE cartridge. The head cover will open automatically when you open the paper output cover.

## Note

For details on replacing a FINE cartridge, see Replacing a FINE Cartridge.

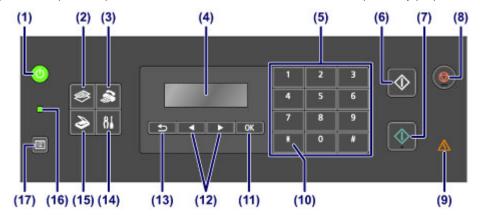
#### Important

- The area around the parts (A) may be splattered with ink. This does not affect the performance of the machine.
- Do not touch the parts (A) or the electrical contacts (B) behind them. The machine may not print properly if you touch them.



## **Operation Panel**

\* All lamps on the operation panel are shown lit in the illustration below for explanatory purposes.



#### (1) ON button (POWER lamp)

Turns the power on or off. Lights or flashes green to indicate the power status. Before turning on the power, make sure that the document cover is closed.

Turning the Machine On and Off

#### (2) COPY button

Switches the machine to the copy mode. The Copy standby screen is displayed, which lets you make copies while specifying the number of copies.

#### (3) FAX button

Switches the machine to the fax mode. The Fax standby screen is displayed, which lets you send a fax by dialing a fax/telephone number directly with the Numeric buttons.

#### (4) LCD (Liquid Crystal Display)

Displays messages, menu items, and the operational status.

Confirming that the Power Is On

#### (5) Numeric buttons

Used to enter numerical values such as the number of copies, as well as fax/telephone numbers and characters.

#### (6) Black button

Starts black & white copying, scanning, faxing, etc.

#### (7) Color button

Starts color copying, scanning, faxing, etc.

#### (8) Stop button

Cancels operation when print, copy, scan, or fax transmission/reception job is in progress.

#### (9) Alarm lamp

Lights or flashes orange when an error occurs, such as paper-out or ink-out.

#### (10) Tone button

Switches to tone dialing temporarily if your machine is connected to a rotary pulse line and changes the input mode for entering characters. This button is also used to dial with the Numeric buttons.

#### (11) OK button

Finalizes the selection of a menu or setting item.

Resolves an error when printing is in progress, resumes the machine's normal operation after removing jammed paper, or ejects documents remaining in the ADF (Auto Document Feeder).

#### (12) **◄** and **▶** buttons

Used to increase/decrease a setting value such as the number of copies, and select a menu or setting item. The  $\blacktriangleleft$  or  $\blacktriangleright$  button is also used when entering characters.

#### (13) Back button

Returns the LCD to the previous screen. This button is also used to delete a character under the cursor when entering characters, such as when entering a name for registration.

#### (14) Setup button

Displays the **Setup menu** screen. With this menu, you can perform machine maintenance and change machine settings.

- ➡ When Printing Becomes Faint or Colors Are Incorrect
- → Changing the Machine Settings on the LCD

You can also configure a wireless LAN connection.

**►** LAN settings

#### (15) SCAN button

Switches the machine to the scan mode. The Scan standby screen is displayed, which lets you start scanning by pressing the **Color** or **Black** button.

#### (16) FAX Memory lamp

Lights when there are received or unsent documents stored in the machine's memory.

#### (17) Menu button

Displays the Copy menu, FAX menu, or Scan menu screen.

**Copy menu** allows you to select various copy functions or change print settings, such as page size and media type.

**FAX menu** allows you to dial by selecting an entry from **Memory dial**, print a report/list, or change the receive mode.

**Scan menu** allows you to change the location for saving the scanned data or select the document type to be scanned.

#### Note

- The machine makes the beep sound when pressing buttons on the operation panel. The sound volume can be adjusted in **Sound control** of **Dev. user settings**.
  - → Dev. user settings

## **About the Power Supply of the Machine**

- Confirming that the Power Is On
- Turning the Machine On and Off
- Notice for the Power Plug/Power Cord
- Notice for Unplugging the Power Cord

## Confirming that the Power Is On

The **POWER** lamp is lit green when the machine is turned on. Even if the LCD is off, if the **POWER** lamp is lit, the machine is on.



#### >>> Note

- It may take a while for the machine to start printing immediately after you turn on the machine.
- The LCD will turn off if the machine is not operated for about 5 minutes. To restore the display, press any button except the **ON** button or perform the print operation. The display will be also restored when receiving faxes. You cannot change the wait time before the LCD turns off.

## **Turning the Machine On and Off**

## Turning on the machine

1. Press the ON button to turn on the machine.

The POWER lamp flashes and then remains lit green.

➡ Confirming that the Power Is On





- It may take a while for the machine to start printing immediately after you turn on the machine.
- If the Alarm lamp lights up or flashes orange and an error message is displayed on the LCD, see A Message Is Displayed.

## Turning off the machine

1. Press the ON button to turn off the machine.

When the **POWER** lamp stops flashing, the machine is turned off.



- When you unplug the power cord after turning off the machine, be sure to confirm that the POWER lamp is off.

  → Notice for Unplugging the Power Cord

## Note

- The machine cannot send or receive faxes when the power is turned off.
- The power cannot be turned off while the machine is sending or receiving a fax, or when unsent faxes are stored in the machine's memory.

## Notice for the Power Plug/Power Cord

Check the power plug/power cord once a month to confirm that it does not have anything unusual described below.

- The power plug/power cord is hot.
- The power plug/power cord is rusty.
- The power plug/power cord is bent.
- The power plug/power cord is worn.
- The power plug/power cord is split.

#### Caution

- If you find anything unusual with the power plug/power cord described above, unplug the power cord and call for service. Using the machine with one of the unusual conditions above may cause a fire or an electric shock.
  - Notice for Unplugging the Power Cord

# **Notice for Unplugging the Power Cord**

To unplug the power cord, follow the procedure below.

#### >>> Important

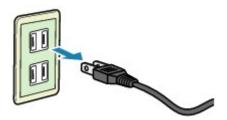
- When you unplug the power cord, press the ON button, then confirm that the POWER lamp is off. Unplugging the power cord before the POWER lamp is turned off may cause drying or clogging of the print head and print quality may be reduced.
- If the power plug is disconnected, the date/time settings will be reset and all documents stored in the machine's memory will be lost. Send or print a necessary document, or save it on a USB flash drive before disconnecting the power plug.
- 1. Press the **ON** button to turn the machine off.



2. Confirm that the POWER lamp is off.



**3.** Unplug the power cord.



The specification of the power cord differs depending on the country or region of use.

# **LCD** and Operation Panel

You can use the machine to make copies, send/receive faxes, or scan originals without a computer. You can also make good use of the various functions of the machine with menus and setting items displayed on the LCD.

The copy, scan, fax, or setup mode can be selected.

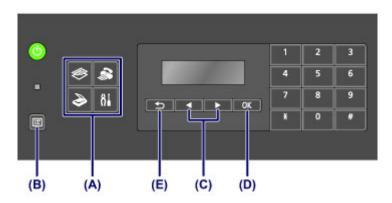
The desired mode can be selected by pressing the mode button (A) on the operation panel.

Pressing the **Menu** button **(B)** in the copy, fax, or scan mode provides access to mode-specific functions and setting options.

➡ Selecting a Menu or Setting Item

On the menu screen or settings screen, use the  $\triangleleft$  or  $\triangleright$  button (C) to select an item or option, then press the **OK** button (D) to proceed with the procedure.

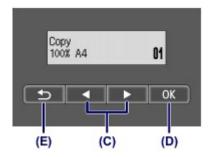
To return to the previous screen, press the Back button (E).



### Selecting a Menu or Setting Item

Pressing the **Menu** button while the Copy, Fax, or Scan standby screen is displayed brings up their respective **Copy menu**, **FAX menu**, or **Scan menu**.

Example: Starting from the Copy standby screen



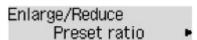
Press the **Menu** button in the Copy standby screen to display the **Copy menu** screen.



Press the or button (C) to switch between menu items.



Press the **OK** button **(D)** to finalize the desired menu item.



Press the **Back** button **(E)** to return to the previous screen.

## **Entering Numbers, Letters, and Symbols**

The machine allows you to enter characters using the Numeric buttons when entering information, such as unit name, a recipient's name for memory dial, etc.

## **Switching the Input Mode**

The machine has three input modes: lowercase mode, uppercase mode, and numeric mode. You can use the Numeric buttons to enter characters in each input mode.

Each time the **Tone** button is pressed, the input mode is switched in the following order: lowercase mode (:a), uppercase mode (:A), then numeric mode (:1).

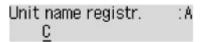


The current input mode appears at the upper right corner of the LCD.



- Here describes the procedure to enter the unit name as example.
  - ⇒ "Registering User Information" in Setting the Sender Information

## **Entering Numbers, Letters, and Symbols**



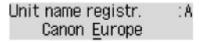
Press the **Tone** button to switch the input mode.

Use the Numeric buttons to enter the desired characters.

To enter a space, press the button three times.

To delete the last entered character, press the **Back** button.

## **Editing Entered Numbers, Letters, and Symbols**



Press the  $\blacktriangleleft$  or  $\blacktriangleright$  button to move the cursor under the position you want to edit.

- To insert a space
- Press the button three times.
- To insert a character

Move the cursor under the character to the right of the insertion position, then enter the character. The character on the cursor will move to the right and the new character will be inserted.

To delete a character

Move the cursor under the character, then press the **Back** button.

## **List of Characters Assigned to Each Numeric Button**

Button	Lowercase mode (:a)	Uppercase mode (:A)	Numeric mode (:1)	Fax/Telephone no.
1			1	1
2	abcåäáàãâæç	ABCÅÄÁÀÃÂÆÇ	2	2
3	defëéèê	DEFËÉÈÊ	3	3
4	ghiïíìî	GHIÏÍÌÎ	4	4
5	jkl	JKL	5	5

6	mnoñøöóòõô	MNOÑØÖÓÒÕÔ	6	6
7	pqrsþ	PQRSÞ	7	7
8	tuvüúùû	τυνϋύὺῦ	8	8
9	wxyzý	WXYZÝ	9	9
0			0	0
#	SP*1 *#!",;:^`_=/'?\$@%&+()[]{}<>\*2~*2			#
*	Switch the input mode.			*

<sup>\*1 &</sup>quot;SP" indicates a space.
\*2 Displayed only when entering characters in the LAN settings.

# **Loading Paper / Originals**

- Loading Paper
- Loading Originals
- Inserting the USB Flash Drive

# **Loading Paper**

- Loading Plain Paper / Photo Paper
- Loading Envelopes
- Media Types You Can Use
- Media Types You Cannot Use
- Printing Area

## **Loading Plain Paper / Photo Paper**

You can load plain paper or photo paper.

#### >>> Important

If you cut plain paper into small size such as 4" x 6" (10 x 15 cm) or 5" x 7" (13 x 18 cm) to perform trial print, it can cause paper jams.

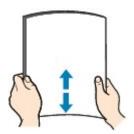
### Note

- We recommend Canon genuine photo paper for printing photos.
  For details on the Canon genuine paper, see Media Types You Can Use.
- You can use general copy paper.

  For the page size and paper weight you can use for this machine, see Media Types You Can Use.

## 1. Prepare paper.

Align the edges of paper. If paper is curled, flatten it.



### >>> Note

- Align the edges of paper neatly before loading. Loading paper without aligning the edges may cause paper jams.
- If paper is curled, hold the curled corners and gently bend them in the opposite direction until the paper becomes completely flat.
  - For details on how to flatten curled paper, see "Load the paper after correcting its curl." in Paper Is Smudged/Printed Surface Is Scratched.
- When using Photo Paper Plus Semi-gloss SG-201, even if the sheet is curled, load one sheet at a time as it is. If you roll up this paper to flatten, this may cause cracks on the surface of the paper and reduce the print quality.

#### 2. Load paper.

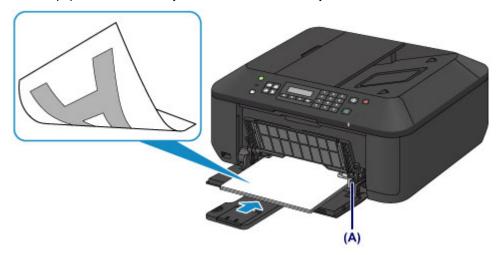
(1) Open the front cover gently, and extend the paper support.



(2) Use the right paper guide (A) to slide both paper guides all the way out.

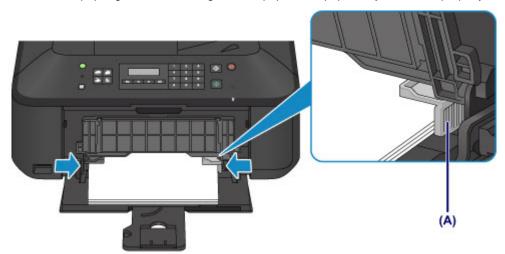
(3) Load the paper in the center of the front tray WITH THE PRINT SIDE FACING DOWN

Push the paper stack all the way to the back of the front tray.



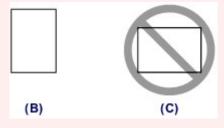
**(4)** Slide the right paper guide **(A)** to align the paper guides with both sides of the paper stack.

Do not slide the paper guides too hard against the paper. The paper may not be fed properly.



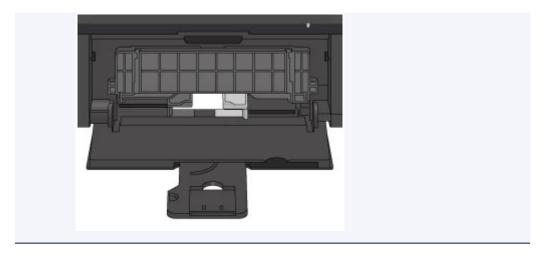
# >>> Important

Always load paper in the portrait orientation (B). Loading paper in the landscape orientation (C) can cause paper jams.



#### Note

- Do not overload paper by stacking until the top of the stack touches the paper guides.
- Load small size paper, such as 4" x 6" (10 x 15 cm), by pushing it in all the way to the back of the front tray.



(5) Open the output tray extension.



- 3. Open the paper output tray.
  - (1) Open the paper output tray gently, and extend the paper output support.



## >>> Important

Be sure to open the paper output tray when printing. If not open, the machine cannot start printing.

## >>> Note

### After loading paper

Select the size and type of the loaded paper on the print settings screen of the operation panel or printer driver.

# **Loading Envelopes**

You can load European DL and US #10 envelopes.

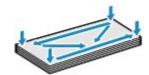
The address is automatically rotated and printed according to the envelope's direction by specifying with the printer driver properly.

## >>> Important

- Printing of envelopes from the operation panel is not supported.
- Do not use the following envelopes. They could jam in the machine or cause the machine to malfunction.
  - Envelopes with an embossed or treated surface
  - Envelopes with a double flap
  - Envelopes whose gummed flaps are already moistened and adhesive

#### 1. Prepare envelopes.

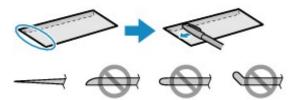
Press down on all four corners and edges of the envelopes to flatten them.



If the envelopes are curled, hold the opposite corners and gently twist them in the opposite direction.



- If the corner of the envelope flap is folded, flatten it.
- Use a pen to press the leading edge in the inserting direction flat and sharpen the crease.



The figures above show a side view of the leading edge of the envelope.

## Important

The envelopes may jam in the machine if they are not flat or the edges are not aligned. Make sure that no curl or puff exceeds 0.1 inches (3 mm).

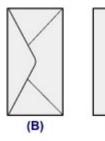
#### 2. Load envelopes.

(1) Open the front cover gently, and extend the paper support.



- (2) Use the right paper guide (A) to slide both paper guides all the way out.
- (3) Load the envelopes in the center of the front tray WITH THE ADDRESS SIDE FACING DOWN.

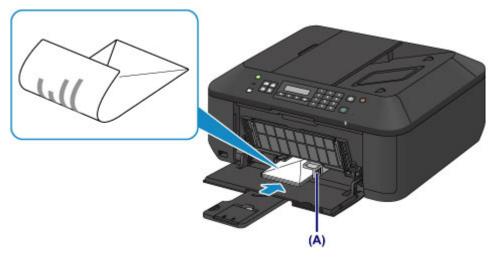
The folded flap of the envelope will be faced up on the left side.



- (B) Rear side
- (C) Address side

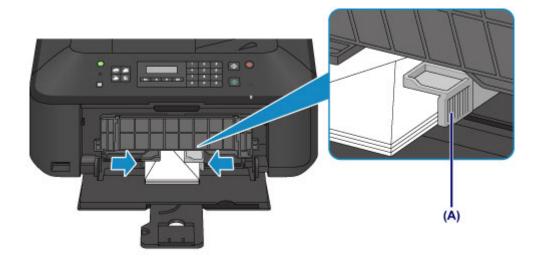
Push the envelopes all the way to the back of the front tray. Up to 5 envelopes can be loaded at once.

(C)



(4) Slide the right paper guide (A) to align the paper guides with both sides of the envelopes.

Do not slide the paper guides too hard against the envelopes. The envelopes may not be fed properly.



### Note

- Do not overload envelopes by stacking until the top of the stack touches the paper guides.
- (5) Open the output tray extension.



- 3. Open the paper output tray.
  - (1) Open the paper output tray gently, and extend the paper output support.



## >>> Important

Be sure to open the paper output tray when printing. If not open, the machine cannot start printing.

## Note

#### After loading envelopes

Select the size and type of the loaded envelopes on the print settings screen of the printer driver.

## Media Types You Can Use

Choose paper suitable for printing, for the best print results. Canon provides you various types of paper to enhance the fun of printing, such as stickers as well as papers for photo or document. We recommend the use of Canon genuine paper for printing your important photos.

#### **Media Types**

#### Commercially available papers

- Plain Paper (including recycled paper)\*1
- Envelopes\*2

#### Canon genuine papers

The Model Number of Canon genuine paper is shown in brackets. Refer to the instruction manual supplied with the paper for detailed information on the printable side and notes on handling paper. For information on the page sizes available for each Canon genuine paper, access our website.

### Note

You may not be able to purchase some Canon genuine papers depending on the country or region of purchase. Paper is not sold in the US by Model Number. Purchase paper by name.

### Paper for printing photos:

- Photo Paper Pro Platinum <PT-101>
- Glossy Photo Paper "Everyday Use" <GP-501>
- Photo Paper Glossy <GP-502>
- Photo Paper Plus Glossy II <PP-201>
- Photo Paper Pro Luster <LU-101>
- Photo Paper Plus Semi-gloss <SG-201>
- Matte Photo Paper <MP-101>

### Paper for printing business documents:

• High Resolution Paper <HR-101N>\*2

#### Paper for creating your own prints:

- T-Shirt Transfers <TR-301>\*2
- Photo Stickers <PS-101>\*2

- → Paper Load Limit
- ➡ Media Type Settings on the Operation Panel
- Setting the Media Type with the Printer Driver

#### **Page Sizes**

You can use the following page sizes.



Printing of envelopes from the operation panel is not supported.

#### Standard sizes:

Letter

<sup>\*1 100%</sup> recycled paper can be used.

<sup>\*2</sup> Printing to this paper from the operation panel is not supported.

B5

5" x 7" (13 x 18 cm)

European DL

A4

4" x 6" (10 x 15 cm)

8" x 10" (20 x 25 cm)

US Comm. Env. #10

#### Non-standard sizes:

You can print on non-standard size paper within the following ranges.

Minimum size: 3.50 x 5.00 inches (89.0 x 127.0 mm)

Maximum size: 8.50 x 26.61 inches (215.9 x 676.0 mm)

## **Paper Weight**

You can use paper in the following weight range.

• 17 to 28 lb (64 to 105 g/m²) (except for Canon genuine paper)

Do not use heavier or lighter paper (except for Canon genuine paper), as it could jam in the machine.

## **Notes on Storing Paper**

- Take out only the necessary number of paper from the package, just before printing.
- To avoid curling, when you do not print, put unused paper back into the package and keep it on a level surface. And also, store it avoiding heat, humidity, and direct sunlight.

# **Paper Load Limit**

## **Commercially Available Papers**

Media Name	Front Tray	Paper Output Tray
Plain Paper (including recycled paper)*1	Approx. 100 sheets	Approx. 50 sheets
Envelopes	5 envelopes	*2

## **Canon Genuine Papers**



We recommend that you remove the previously printed sheet from the paper output tray before continuously printing to avoid blurs and discoloration (except for High Resolution Paper <HR-101N>).

#### Paper for printing photos:

Media Name <model no.=""></model>	Front Tray
Photo Paper Pro Platinum <pt-101>*3</pt-101>	10 sheets: A4, Letter, and 8" x 10" (20 x 25 cm) 20 sheets: 4" x 6" (10 x 15 cm)
Glossy Photo Paper "Everyday Use" <gp-501>*3</gp-501>	10 sheets: A4 and Letter 20 sheets: 4" x 6" (10 x 15 cm)
Photo Paper Glossy <gp-502>*3</gp-502>	10 sheets: A4 and Letter 20 sheets: 4" x 6" (10 x 15 cm)
Photo Paper Plus Glossy II <pp-201>*3</pp-201>	10 sheets: A4, Letter, 5" x 7" (13 x 18 cm), and 8" x 10" (20 x 25 cm) 20 sheets: 4" x 6" (10 x 15 cm)
Photo Paper Pro Luster <lu-101>*3</lu-101>	10 sheets: A4 and Letter
Photo Paper Plus Semi-gloss <sg-201>*3</sg-201>	10 sheets: A4, Letter, 5" x 7" (13 x 18 cm), and 8" x 10" (20 x 25 cm) 20 sheets: 4" x 6" (10 x 15 cm)
Matte Photo Paper <mp-101></mp-101>	10 sheets: A4 and Letter 20 sheets: 4" x 6" (10 x 15 cm)

### Paper for printing business documents:

Media Name <model no.=""></model>	Front Tray	Paper Output Tray
High Resolution Paper <hr-101n></hr-101n>	80 sheets	50 sheets

### Paper for creating your own prints:

Media Name <model no.=""></model>	Front Tray
T-Shirt Transfers <tr-301></tr-301>	1 sheet
Photo Stickers <ps-101></ps-101>	1 sheet

<sup>\*1</sup> Proper feeding of paper may not be possible at the maximum capacity depending on the type of paper or environmental conditions (either very high or low temperature or humidity). In such cases, reduce the number of paper you load at a time to less than half.

<sup>\*2</sup> We recommend that you remove the previously printed envelope from the paper output tray before continuously printing to avoid blurs and discoloration.

\*3 When loading paper in stacks, the print side may become marked as it is fed or paper may not feed properly. In this case, load one sheet at a time.

# **Media Type Settings on the Operation Panel**

# **Commercially Available Papers**

Media Name	Settings in Media type
Plain Paper (including recycled paper)	Plain paper

# **Canon Genuine Papers**

# Paper for printing photos:

Media Name <model no.=""></model>	Settings in Media type
Photo Paper Pro Platinum <pt-101></pt-101>	Pro Platinum
Glossy Photo Paper "Everyday Use" <gp-501></gp-501>	Glossy
Photo Paper Glossy <gp-502></gp-502>	Glossy
Photo Paper Plus Glossy II <pp-201></pp-201>	Plus Glossy II
Photo Paper Pro Luster <lu-101></lu-101>	Plus Semi-gloss
Photo Paper Plus Semi-gloss <sg-201></sg-201>	Plus Semi-gloss
Matte Photo Paper <mp-101></mp-101>	Matte

# **Media Types You Cannot Use**

Do not use the following types of paper. Using such paper will cause not only unsatisfactory results, but also the machine to jam or malfunction.

- Folded, curled, or wrinkled paper
- Damp paper
- Paper that is too thin (weighing less than 17 lb (64 g /m²))
- Paper that is too thick (weighing more than 28 lb (105 g/m²), except for Canon genuine paper)
- Paper thinner than a postcard, including plain paper or notepad paper cut to a small size (when printing on paper smaller than A5)
- Picture postcards
- Postcards affixed with photos or stickers
- Envelopes with a double flap
- Envelopes with an embossed or treated surface
- Envelopes whose gummed flaps are already moistened and adhesive
- Any type of paper with holes
- Paper that is not rectangular
- Paper bound with staples or glue
- Paper with adhesives
- Paper decorated with glitter, etc.

# **Printing Area**

- Printing Area
- Other Sizes than Letter, Legal, Envelopes
- Letter, Legal
- Envelopes

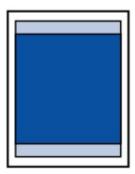
## **Printing Area**

To ensure the best print quality, the machine allows a margin along each edge of media. The actual printable area will be the area inside these margins.

Recommended printing area \_\_\_\_: Canon recommends that you print within this area.

Printable area : The area where it is possible to print.

However, printing in this area can affect the print quality or the paper feed precision.



#### Note

- When performing borderless copying, you can specify the amount of images that extends off the paper by Extended copy amt. in Print settings.
  - ➡ Print settings

#### **Borderless Printing**

- By selecting Borderless Printing option, you can make prints with no margins.
- When performing Borderless Printing, slight cropping may occur at the edges since the printed image is enlarged to fill the whole page.
- For Borderless Printing, use the following paper:
  - Photo Paper Pro Platinum <PT-101>
  - Glossy Photo Paper "Everyday Use" <GP-501>
  - Photo Paper Glossy <GP-502>
  - Photo Paper Plus Glossy II <PP-201>
  - Photo Paper Pro Luster <LU-101>
  - Photo Paper Plus Semi-gloss <SG-201>
  - Matte Photo Paper <MP-101>

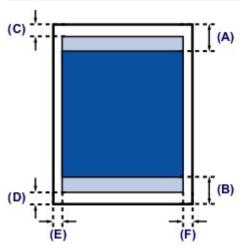
Performing Borderless Printing on any other type of paper may substantially reduce printing quality and/or result in printouts with altered color hues.

Borderless Printing on plain paper may result in printouts with reduced quality. Use them only for test printing. Borderless Printing onto plain paper from the operation panel is not supported.

- Borderless Printing is not available for legal, A5, or B5 sized paper, or envelopes.
- Depending on the type of paper, Borderless Printing may reduce the print quality at the top and bottom edges of the paper or cause these parts to become smudged.

# Other Sizes than Letter, Legal, Envelopes

Size	Printable Area (width x height)
A5	5.56 x 7.95 inches (141.2 x 202.0 mm)
A4	8.00 x 11.38 inches (203.2 x 289.0 mm)
B5	6.90 x 9.80 inches (175.2 x 249.0 mm)
4" x 6" (10 x 15 cm)	3.73 x 5.69 inches (94.8 x 144.4 mm)
5" x 7" (13 x 18 cm)	4.73 x 6.69 inches (120.2 x 169.8 mm)
8" x 10" (20 x 25 cm)	7.73 x 9.69 inches (196.4 x 246.0 mm)

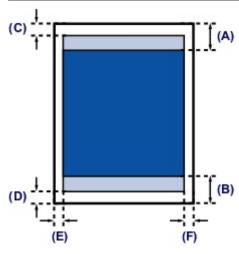


Recommended printing area

- (A) 1.28 inches (32.5 mm) (B) 1.32 inches (33.5 mm)
- Printable area
- (C) 0.12 inches (3.0 mm)
- (D) 0.20 inches (5.0 mm) (E) 0.13 inches (3.4 mm) (F) 0.13 inches (3.4 mm)

# Letter, Legal

Size	Printable Area (width x height)
Letter	8.00 x 10.69 inches (203.2 x 271.4 mm)
Legal	8.00 x 13.69 inches (203.2 x 347.6 mm)



Recommended printing area

(A) 1.28 inches (32.5 mm) (B) 1.32 inches (33.5 mm)

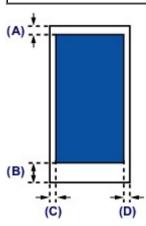
Printable area

(C) 0.12 inches (3.0 mm) (D) 0.20 inches (5.0 mm)

(E) 0.25 inches (6.4 mm) (F) 0.25 inches (6.3 mm)

# **Envelopes**

Size	Recommended Printing Area (width x height)
European DL	3.88 x 7.06 inches (98.8 x 179.5 mm)
US Comm. Env. #10	3.68 x 7.90 inches (93.5 x 200.8 mm)



Recommended printing area

- (A) 0.31 inches (8.0 mm) (B) 1.28 inches (32.5 mm) (C) 0.22 inches (5.6 mm) (D) 0.22 inches (5.6 mm)

# **Loading Originals**

- Position to Load Originals
- Loading Originals on the Platen Glass
- Loading Documents in the ADF (Auto Document Feeder)
- How to Load Originals for Each Function
- Originals You Can Load

# **Position to Load Originals**

The machine has two positions to load originals: platen glass and ADF (Auto Document Feeder). Select the position to load the original according to the size, type, or usage.

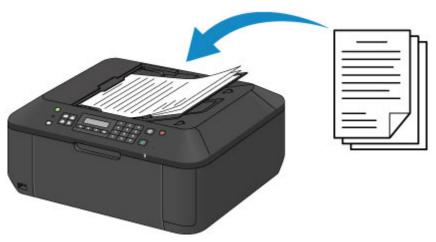
Originals You Can Load

### Loading Documents, Photos, or Book on the platen glass



# Loading Two or More Sheets of Document of the Same Size and Thickness in the ADF

You can also load a sheet of document in the ADF.



Note

■ To scan the original at optimum quality, load it on the platen glass.

# **Loading Originals on the Platen Glass**

You can load originals to copy, fax, or scan on the platen glass.

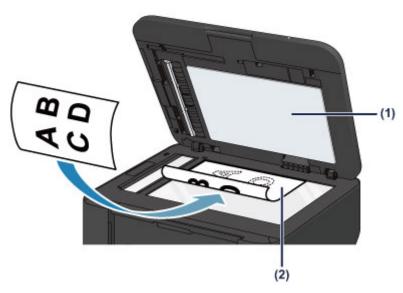
- 1. Load an original on the platen glass.
  - (1) Open the document cover.

## >>> Important

- When opening or closing the document cover, do not touch the buttons and LCD on the operation panel. Doing so may result in an unexpected operation.
- (2) Load the original WITH THE SIDE TO SCAN FACING DOWN on the platen glass.
  - Originals You Can Load

Make sure of the proper position to load the original for each function.

→ How to Load Originals for Each Function



## >>> Important

- Be sure to observe the following when loading the original on the platen glass.
  - Do not place any objects weighing 4.4 lb (2.0 kg) or more on the platen glass.
  - Do not put any pressure of 4.4 lb (2.0 kg) or more on the platen glass, such as pressing down the original.

Failure to observe the above may cause the scanner to malfunction or the platen glass to break.

2. Close the document cover gently.



# >>> Important

After loading the original on the platen glass, be sure to close the document cover before starting to copy, fax, or scan.

# **Loading Documents in the ADF (Auto Document Feeder)**

You can load documents to copy, fax, or scan in the ADF (Auto Document Feeder).

#### Note

- To scan a document at optimum quality, load it on the platen glass.
- 1. Make sure that any original has been removed from the platen glass.
- 2. Load a document in the ADF.
  - (1) Open the document tray.



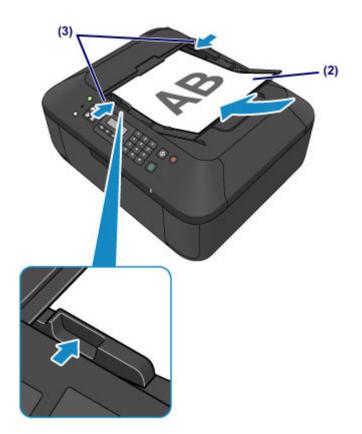
- (2) Insert the document in the document tray until you hear a beep sound.

  Load the document WITH THE SIDE TO SCAN FACING UP in the document tray.
  - → Originals You Can Load



- When you set the alarm to be silent in **Sound control** of **Dev. user settings**, the alarm will not beep even if the document is inserted in the document tray.
  - → Dev. user settings
- (3) Adjust the document guides to match the width of the document.

  Do not slide the document guides too hard against the document. The document may not be fed properly.



## **How to Load Originals for Each Function**

You may have to load the original in a different position depending on the function you selected in copying, faxing, scanning, etc. Load the original in the correct position according to the selected function. If you do not load the original correctly, it may not be scanned properly.

## Loading the Original to Be Aligned with the alignment mark 2

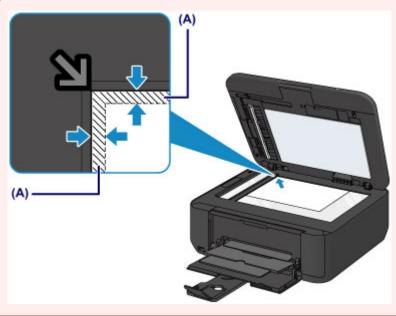
- Load originals to copy or fax
- In the scan mode,
  - select USB flash drive to scan originals
  - select Auto scan for Document type to scan text documents, magazines, or newspapers
  - select Document or Photo for Document type and specify a standard size (A4, Letter, etc.) for Scan size to scan originals
- With a software application on a computer,
  - scan text documents, magazines, or newspapers
  - select a standard size (A4, Letter, etc.) to scan originals

Load the original WITH THE SIDE TO SCAN FACING DOWN and align it with the alignment mark 2.



#### Important

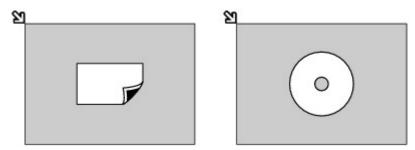
■ The machine cannot scan the shaded area (A) (0.04 inches (1 mm) from the edges of the platen glass).



#### **Loading Only One Original in the Center of the platen glass**

- In the scan mode,
  - select Auto scan for Document type to scan one printed photo, postcard, business card, or disc
  - select Photo for Document type and specify Auto scan(A) -Singl for Scan size to scan one original
- Scan one printed photo, postcard, business card, or disc with a software application on a computer

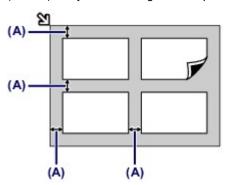
Load the original WITH THE SIDE TO SCAN FACING DOWN and place it at least 0.4 inches (10 mm) away from the edges of the platen glass.



## **Loading Two or More Originals on the platen glass**

- In the scan mode,
  - select Auto scan for Document type to scan two or more printed photos, postcards, or business cards
  - select Photo for Document type and specify Auto scan(A) -Multi for Scan size to scan two or more originals
- Scan two or more printed photos, postcards, or business cards with a software application on a computer

Load two or more originals WITH THE SIDE TO SCAN FACING DOWN and place them at least 0.4 inches (10 mm) away from the edges of the platen glass and at least 0.4 inches (10 mm) apart from each other.



(A) 0.4 inches (10 mm)

### >>> Note

- The Skew Correction function automatically compensates for the originals placed at an angle of up to approximately 10 degrees. Slanted photos with a long edge of 7.1 inches (180 mm) or more cannot be corrected.
- Non-rectangular or irregular shaped photos (such as cut out photos) may not be scanned properly.

# **Originals You Can Load**

The originals you can load on the platen glass or in the ADF (Auto Document Feeder) are as follows.

#### platen glass

Item	Details
Types of originals	- Text document, magazine, or newspaper - Printed photo, postcard, business card, or disc (BD/DVD/CD, etc.) - Documents that are not suitable for the ADF
Size (width x height)	Max. 8.5 x 11.7 inches (216 x 297 mm)
Quantity	1 sheet or multiple sheets*
Thickness	Max. 0.39 inches (10 mm)

<sup>\*</sup> Two or more originals can be loaded on the platen glass depending on the selected function.

#### **ADF**

Item	Details
Types of originals	Multipage plain-paper documents of the same size, thickness, and weight
Size (width x height)	- Max. 8.5 x 14.0 inches (216 x 356 mm) - Min. 5.8 x 5.8 inches (148 x 148 mm) Only A4 or Letter-sized documents for 2-on-1 copy and 4-on-1 copy
Quantity	<ul> <li>- A4 or Letter size: Max. 30 sheets (20 lb (75 g /m²) paper), up to 0.16 inches (4 mm) in height</li> <li>- Legal size: Max. 5 sheets (20 lb (75 g /m²) paper), up to 0.04 inches (1 mm) in height</li> <li>- Other sizes: 1 sheet</li> </ul>
Thickness	0.002 to 0.005 inches (0.06 to 0.13 mm)
Weight	13 to 24 lb (50 to 90 g /m <sup>2</sup> )

## Note

- Make sure any glue, ink, correction fluid, or the like on the document is completely dry before loading it on the platen glass or in the ADF.
  - However, do not load glued documents in the ADF even if the glue is dry, as this may cause paper iams.
- Remove all staples, paper clips, and the like before feeding the document.
- Load Legal-sized documents in the ADF.
- Do not load the following types of documents in the ADF. They will jam.
  - Wrinkled or creased paper
  - Curled paper
  - Torn paper
  - Paper with holes
  - Glued paper
  - Paper with sticky notes
  - Carbon paper or carbon-backed paper
  - Surface treated paper
  - Onion skin or thin paper
  - Photo or thick paper

<sup>→</sup> How to Load Originals for Each Function

# **Inserting the USB Flash Drive**

- Inserting the USB Flash Drive
- Removing the USB Flash Drive

# **Inserting the USB Flash Drive**

#### >>> Note

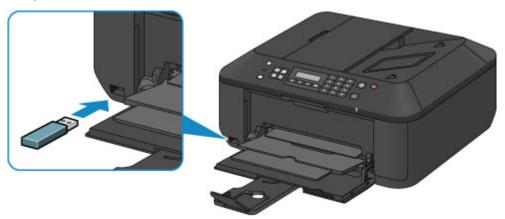
■ This device incorporates exFAT technology licensed from Microsoft.

### Before inserting the USB flash drive

- If your USB flash drive cannot be inserted into the USB flash drive port of the machine, you may be required to use an extension cable for the USB flash drive. Purchase it at electronics retail stores.
- Some USB flash drives may have recognition problem, and these devices may not guarantee proper operation of the machine.
- You may not be able to use USB flash drives with security function.

## 1. Insert the USB flash drive into the USB flash drive port.

Make sure that the USB flash drive is correctly oriented before inserting it straightforward into the USB flash drive port.



# Removing the USB Flash Drive

1. Make sure that the machine is not writing data to the USB flash drive.

A message is displayed on the LCD during such operations.

## >>> Important

Do not remove the USB flash drive or turn off the power while the machine is writing to it.

### Note

- If your USB flash drive has the access lamp, refer to the instruction manual supplied with the USB flash drive to check if the writing operation is completed on the USB flash drive.
- 2. Remove the USB flash drive.

Hold the USB flash drive and remove it straightforward from the machine.

# Replacing a FINE Cartridge

- Replacing a FINE Cartridge
- Checking the Ink Status

# Replacing a FINE Cartridge

When remaining ink cautions or errors occur, the message will appear on the LCD to inform you of the error. Take appropriate action according to the message.

A Message Is Displayed

#### Note

For information on the compatible FINE cartridge, refer to the printed manual: Getting Started.

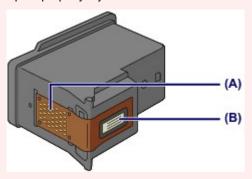
#### Replacing Procedure

When you need to replace a FINE cartridge, follow the procedure below.

#### Important

#### **Handling FINE cartridge**

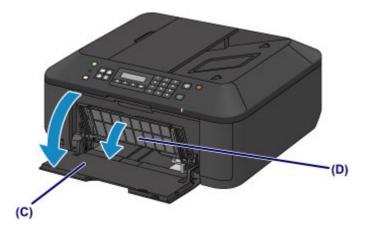
Do not touch the electrical contacts (A) or print head nozzle (B) on a FINE cartridge. The machine may not print properly if you touch them.



- If you remove a FINE cartridge, replace it immediately. Do not leave the machine with the FINE cartridge removed.
- Use a new FINE cartridge for replacement. Installing a used FINE cartridge may cause the nozzles to
  - Furthermore, with such a FINE cartridge, the machine will not be able to inform you when to replace the FINE cartridge properly.
- Once a FINE cartridge has been installed, do not remove it from the machine and leave it out in the open. This will cause the FINE cartridge to dry out, and the machine may not operate properly when it is reinstalled. To maintain optimal printing quality, use a FINE cartridge within six months of first use.

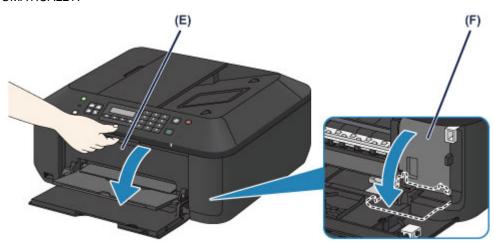
#### Note

- If a FINE cartridge runs out of ink, you can print with either color or black FINE cartridge, in whichever ink remains, only for a while. However the print quality may be reduced compared to when printing with both cartridges. We recommend to use a new FINE cartridge in order to obtain optimum
  - Even when printing with one ink only, print with leaving the empty FINE cartridge installed. If either of the color FINE cartridge or black FINE cartridge is not installed, an error occurs and the machine cannot print.
  - For information on how to configure this setting, see Setting the Ink Cartridge to be Used.
- Color ink may be consumed even when printing a black-and-white document or when black-andwhite printing is specified.
  - Both color ink and black ink are also consumed in the standard cleaning and deep cleaning of the print head, which may be necessary to maintain the performance of the machine. When ink runs out, replace the FINE cartridge immediately with a new one.
  - Useful Information about Ink
- 1. Make sure that the power is turned on, open the front cover (C), then open the paper output tray (D).



### 2. Open the paper output cover (E).

When the FINE cartridge holder moves to the replacement position, the head cover **(F)** OPENS AUTOMATICALLY.

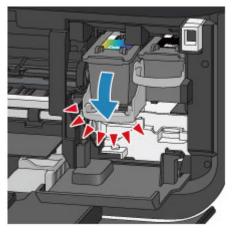


#### Caution

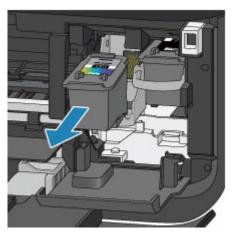
Do not hold the FINE cartridge holder to stop or move it forcibly. Do not touch the FINE cartridge holder until it stops completely.

#### >>>> Important

- The head cover will open automatically after you open the paper output cover. If you have closed the head cover while replacing a FINE cartridge, close the paper output cover, then open it again.
  - Trying to force open the head cover with your hand may cause the machine to malfunction.
- Do not touch the metallic parts or other parts inside the machine.
- If the paper output cover is left open for more than 10 minutes, the FINE cartridge holder moves to the far right and the **Alarm** lamp lights. In this case, close the paper output cover, then open it again.
- 3. Remove the empty FINE cartridge.
  - (1) Push down the ink cartridge lock lever until it clicks.

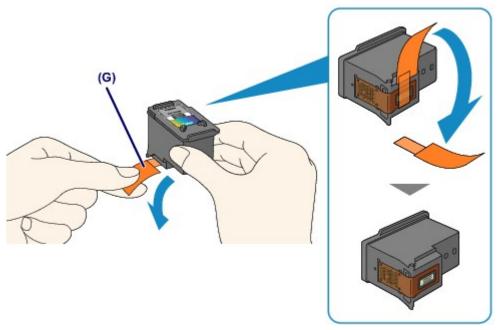


(2) Remove the FINE cartridge.



# >>> Important

- Handle the FINE cartridge carefully to avoid staining of clothing or the surrounding area.
- Discard the empty FINE cartridge according to the local laws and regulations regarding disposal of consumables.
- 4. Prepare a new FINE cartridge.
  - (1) Take a new FINE cartridge out of its package and remove the protective tape (G) gently.

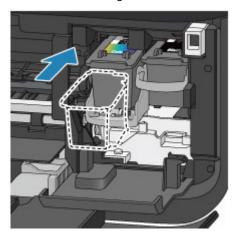


- If you shake a FINE cartridge, ink may spill out and stain your hands and the surrounding area. Handle a FINE cartridge carefully.
- Be careful not to stain your hands and the surrounding area with ink on the removed protective tape.
- Do not reattach the protective tape once you have removed it. Discard it according to the local laws and regulations regarding disposal of consumables.
- Do not touch the electrical contacts or print head nozzle on a FINE cartridge. The machine may not print properly if you touch them.

#### 5. Install the FINE cartridge.

(1) Insert the new FINE cartridge straight into the FINE cartridge holder all the way until it touches the back.

The color FINE cartridge should be installed into the left slot and the black FINE cartridge should be installed into the right slot.

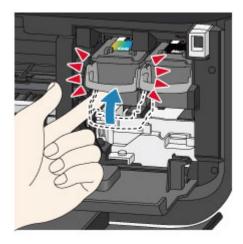


# >>> Important

Insert the FINE cartridge gently so that it does not hit the electrical contacts on the FINE cartridge holder.



(2) Push up the ink cartridge lock lever to lock the FINE cartridge into place. The FINE cartridge is locked into place when the ink cartridge lock lever clicks.



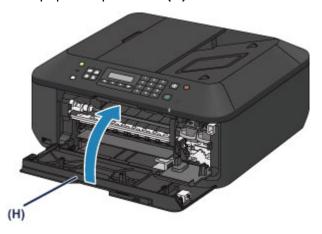
# >>> Important

Check if the FINE cartridge is installed correctly.



■ The machine cannot print unless both the color FINE cartridge and black FINE cartridge are installed. Be sure to install both cartridges.

#### 6. Close the paper output cover (H).



# Note

- If the error message appears after the paper output cover is closed, take appropriate action.
  → A Message Is Displayed
- When you start printing after replacing the FINE cartridge, the machine starts cleaning the print head automatically. Do not perform any other operations until the machine completes the cleaning of the print head.
- If the print head is out of alignment, as indicated by misaligned printed ruled lines or similar symptoms, adjust the print head position.
  - Aligning the Print Head
- The machine may make noise during operation.

# **Checking the Ink Status**

Checking the Ink Status with the LCD on the Machine

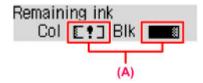
You can also check the ink status on the computer screen.

Checking the Ink Status from Your Computer

# Checking the Ink Status with the LCD on the Machine

#### Note

- The ink level detector is mounted on the machine to detect the remaining ink level. The machine considers as ink is full when a new FINE cartridge is installed, and then starts to detect a remaining ink level. If you install a used FINE cartridge, the indicated ink level of it may not be correct. In such case, refer to the ink level information only as a guide.
- When remaining ink cautions or errors occur, the message will appear to inform you of the error. Take appropriate action according to the message.
  - A Message Is Displayed
- **1.** Make sure that the power is turned on, and press the **Setup** button. The **Setup menu** screen will appear.
- 2. Use the ◀ or ▶ button to select **Ink information**, then press the **OK** button.
  - LCD and Operation Panel
- 3. Use the ◀ or ▶ button to select **Remaining ink**, then press the **OK** button. Remaining ink is shown in the area (A).



Example: [1]

The ink is running low. Prepare a new ink cartridge.

#### Note

- To access other available functions, use the mode buttons.
- To print the model number of the FINE cartridge, select **Ink information** from **Setup menu**, then select **Print ink number**.
- You can also check the ink status on the LCD when you press the COPY, FAX, SCAN, or Setup button. The current remaining ink level will be displayed on the LCD for a few seconds.
- You can also check the ink status on the computer screen.
- ➡ Checking the Ink Status from Your Computer

# **Maintenance**

- When Printing Becomes Faint or Colors Are Incorrect
- Performing Maintenance from a Computer
- Cleaning the Machine

# When Printing Becomes Faint or Colors Are Incorrect

- Maintenance Procedure
- Printing the Nozzle Check Pattern
- Examining the Nozzle Check Pattern
- Cleaning the Print Head
- Cleaning the Print Head Deeply
- Aligning the Print Head

#### **Maintenance Procedure**

If print results are blurred or colors are not printed correctly, the print head nozzle (FINE cartridge) is probably clogged. Follow the procedure below to print the nozzle check pattern, check the print head nozzle condition, then clean the print head.

If printed ruled lines are misaligned or print results are otherwise unsatisfactory, aligning the print head may improve print quality.

# Important

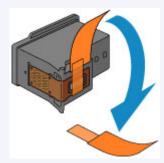
Do not rinse or wipe the FINE cartridge. This can cause trouble with the FINE cartridge.

#### Note

#### Before performing maintenance

- Check if ink remains in the FINE cartridge.
  - → Checking the Ink Status with the LCD on the Machine
- Check if the FINE cartridge is installed correctly.
  - → Replacing Procedure

Also check if the protective tape on the bottom of the FINE cartridge is removed.



- If an error message appears on the LCD, see A Message Is Displayed.
- Increasing the print quality in the printer driver settings may improve the print result.
  - ➡ Changing the Print Quality and Correcting Image Data

#### When the Print Results Are Blurred or Uneven:

# Step 1

#### Print the nozzle check pattern.

From the machine

➡ Printing the Nozzle Check Pattern

From the computer

➡ Use Your Computer to Print a Nozzle Check Pattern

#### Examine the nozzle check pattern.

→ Examining the Nozzle Check Pattern

If there are missing lines or horizontal white streaks in the pattern:



# Step 2

#### Clean the print head.

From the machine

Cleaning the Print Head

From the computer

➡ Cleaning the Print Heads from Your Computer

After cleaning the print head, print and examine the nozzle check pattern.

If the problem is not resolved after cleaning the print head twice:



# Step 3

#### Clean the print head deeply.

From the machine

➡ Cleaning the Print Head Deeply

From the computer

→ Cleaning the Print Heads from Your Computer

If the problem is not resolved, turn off the power and clean the print head deeply again after 24 hours. Do not disconnect the power plug when turning off the power.

If the problem is still not resolved:



# Step 4

#### Replace a FINE cartridge.

Replacing a FINE Cartridge



If the problem is still not resolved after replacing the FINE cartridge, contact the service center.

# When the Print Results Are Not Even such as the Ruled Lines Are Misaligned:

# Align the print head.

From the machine

Aligning the Print Head

# **Printing the Nozzle Check Pattern**

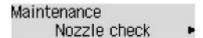
Print the nozzle check pattern to determine whether the ink ejects properly from the print head nozzle.

#### Note

- If the remaining ink level is low, the nozzle check pattern will not be printed correctly. Replace the FINE cartridge whose ink is low.
  - Replacing a FINE Cartridge

#### You need to prepare: a sheet of A4 or Letter-sized plain paper

- 1. Make sure that the power is turned on.
- 2. Load a sheet of A4 or Letter-sized plain paper in the front tray.
- **3.** Open the output tray extension, open the paper output tray, then extend the paper output support.
- **4.** Print the nozzle check pattern.
  - (1) Press the **Setup** button.
    The **Setup menu** screen will appear.
  - (2) Use the ◀ or ▶ button to select **Maintenance**, then press the **OK** button. → LCD and Operation Panel
  - (3) Use the **◄** or **▶** button to select **Nozzle check**, then press the **OK** button.



The nozzle check pattern will be printed.

- **5.** Examine the nozzle check pattern.
  - **⇒** Examining the Nozzle Check Pattern



■ To access other available functions, use the mode buttons.

# **Examining the Nozzle Check Pattern**

Examine the nozzle check pattern, and clean the print head if necessary.

1. Check if there are missing lines in the pattern (1) or horizontal white streaks in the pattern (2).



(A) Number of sheets printed so far

#### If there are missing lines in the pattern (1):

Cleaning the print head is required.

Cleaning the Print Head



- (B) Good
- (C) Bad (lines are missing)

#### If there are horizontal white streaks in the pattern (2):

Cleaning the print head is required.

➡ Cleaning the Print Head



- (D) Good
- (E) Bad (horizontal white streaks are present)

#### >>>> Note

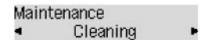
■ The total number of sheets printed so far is shown in increments of 50 sheets on the printout of the nozzle check pattern.

# **Cleaning the Print Head**

Clean the print head if lines are missing or if horizontal white streaks are present in the printed nozzle check pattern. Cleaning unclogs the nozzles and restores the print head condition. Cleaning the print head consumes ink, so clean the print head only when necessary.

- 1. Make sure that the power is turned on.
- 2. Clean the print head.
  - (1) Press the **Setup** button.

    The **Setup menu** screen will appear.
  - (2) Use the ◀ or ▶ button to select **Maintenance**, then press the **OK** button. → LCD and Operation Panel
  - (3) Use the **◄** or **▶** button to select **Cleaning**, then press the **OK** button.



The machine starts cleaning the print head.

Do not perform any other operations until the machine completes the cleaning of the print head. This takes about 1 to 2 minutes.

3. Check the print head condition.

To check the print head condition, print the nozzle check pattern.

➡ Printing the Nozzle Check Pattern

#### >>>> Note

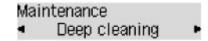
- To access other available functions, use the mode buttons.
- If the problem is not resolved after cleaning the print head twice, clean the print head deeply.
  - Cleaning the Print Head Deeply

# **Cleaning the Print Head Deeply**

If print quality does not improve by the standard cleaning of the print head, clean the print head deeply. Cleaning the print head deeply consumes more ink than the standard cleaning of the print head, so clean the print head deeply only when necessary.

- 1. Make sure that the power is turned on.
- 2. Clean the print head deeply.
  - (1) Press the **Setup** button.

    The **Setup menu** screen will appear.
  - (2) Use the ◀ or ▶ button to select **Maintenance**, then press the **OK** button. → LCD and Operation Panel
  - (3) Use the **◄** or **▶** button to select **Deep cleaning**, then press the **OK** button.



The machine starts cleaning the print head deeply.

Do not perform any other operations until the machine completes the deep cleaning of the print head. This takes about 1 to 2 minutes.

3. Check the print head condition.

To check the print head condition, print the nozzle check pattern.

➡ Printing the Nozzle Check Pattern

If the problem is not resolved, turn off the power and clean the print head deeply again after 24 hours. Do not disconnect the power plug when turning off the power.

If the problem is still not resolved, replace the FINE cartridge with a new one.

Replacing a FINE Cartridge

If the problem is still not resolved after replacing the FINE cartridge, contact the service center.



To access other available functions, use the mode buttons.

# **Aligning the Print Head**

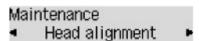
If printed ruled lines are misaligned or print results are otherwise unsatisfactory, adjust the print head position.

#### Note

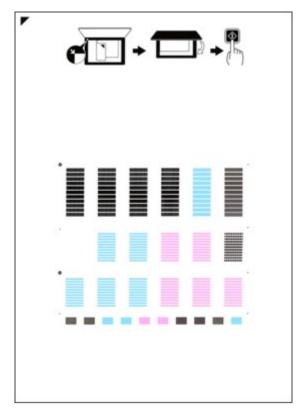
- If the remaining ink level is low, the print head alignment sheet will not be printed correctly. Replace the FINE cartridge whose ink is low.
  - Replacing a FINE Cartridge

# You need to prepare: a sheet of A4 or Letter-sized plain paper (including recycled paper)\*

- \* Be sure to use paper that is white and clean on both sides.
- 1. Make sure that the power is turned on.
- 2. Load a sheet of A4 or Letter-sized plain paper in the front tray.
- **3.** Open the output tray extension, open the paper output tray, then extend the paper output support.
- 4. Print the print head alignment sheet.
  - (1) Press the **Setup** button.
    The **Setup menu** screen will appear.
  - (2) Use the ◀ or ▶ button to select **Maintenance**, then press the **OK** button. ▶ LCD and Operation Panel
  - (3) Use the **◄** or **▶** button to select **Head alignment**, then press the **OK** button.



The print head alignment sheet will be printed.



### >>> Important

- Do not touch any printed part on the print head alignment sheet.
- Be careful not to get the print head alignment sheet dirty. If the sheet is stained or wrinkled, it may not be scanned properly.
- (4) When the message "Are the patterns fine?" appears, confirm that the pattern is printed correctly, select Yes, then press the OK button.
- **5.** Scan the print head alignment sheet to adjust the print head position.
  - (1) Confirm the message, then load the print head alignment sheet on the platen glass.

Load the print head alignment sheet WITH THE PRINTED SIDE FACING DOWN and align the mark on the upper left corner of the sheet with the alignment mark 2.



### Note

The print head alignment sheet cannot be scanned if it is loaded in the ADF (Auto Document Feeder).

#### (2) Close the document cover gently, then press the Color or Black button.

The machine starts scanning the print head alignment sheet, and the print head position will be adjusted automatically.

When adjusting the print head position is complete, remove the print head alignment sheet on the platen glass.

#### Important

- Do not open the document cover or move the print head alignment sheet on the platen glass until adjusting the print head position is complete.
- If the error message appears on the LCD, press the **OK** button to release the error, then take appropriate action.
  - A Message Is Displayed

#### Note

- To access other available functions, use the mode buttons.
- If the print results are still not satisfactory after adjusting the print head position as described above, adjust the print head position manually from the computer.
  - → Aligning the Print Head Position from Your Computer
- To print and check the current head position adjustment values, select **Print align value** from the **Maintenance** menu.

# **Performing Maintenance from a Computer**

- Cleaning the Print Heads from Your Computer
- Cleaning the Paper Feed Rollers from Your Computer
- Aligning the Print Head
- Aligning the Print Head Position from Your Computer
- Use Your Computer to Print a Nozzle Check Pattern
- Cleaning Inside the Machine

# **Cleaning the Print Heads from Your Computer**

The print head cleaning function allows you to clear up clogged print head nozzle. Perform print head cleaning if printing is faint or a specific color fails to print, even though there is enough ink.

The procedure for cleaning the print head is as follows:



#### Cleaning

#### 1. Open the printer driver setup window

#### 2. Click Cleaning on the Maintenance tab

When the **Print Head Cleaning** dialog box opens, select the ink group for which cleaning is to be performed.

Click Initial Check Items to display the items you need to check before performing cleaning.

#### 3. Execute cleaning

Make sure that the machine is on and then click **Execute**.

Print head cleaning starts.

#### 4. Complete cleaning

The Nozzle Check dialog box opens after the confirmation message.

#### 5. Check the results

To check whether the print quality has improved, click **Print Check Pattern**. To cancel the check process, click **Cancel**.

If cleaning the head once does not resolve the print head problem, clean it once more.

# **>>>>** Important

■ Cleaning consumes a small amount of ink.

Cleaning the print head frequently will rapidly deplete your printer's ink supply. Consequently, perform cleaning only when necessary.



#### **Deep Cleaning**

**Deep Cleaning** is more thorough than cleaning. Perform deep cleaning when two **Cleaning** attempts do not resolve the print head problem.

#### 1. Open the printer driver setup window

#### 2. Click Deep Cleaning on the Maintenance tab

When the **Deep Cleaning** dialog box opens, select the ink group for which deep cleaning is to be performed.

Click Initial Check Items to display the items you need to check before performing deep cleaning.

#### 3. Execute deep cleaning

Make sure that the machine is on and then click **Execute**.

Click **OK** when the confirmation message appears.

Print head deep cleaning starts.

#### 4. Complete deep cleaning

The Nozzle Check dialog box opens after the confirmation message.

#### 5. Check the results

To check whether the print quality has improved, click **Print Check Pattern**. To cancel the check process, click **Cancel**.

#### >>>> Important

■ **Deep Cleaning** consumes a larger amount of ink than **Cleaning**.

Cleaning the print head frequently will rapidly deplete your printer's ink supply. Consequently, perform cleaning only when necessary.

#### Note

If there is no sign of improvement after **Deep Cleaning**, switch off the machine, wait 24 hours, and then perform **Deep Cleaning** again. If there is still no sign of improvement, see "Ink Is Not Ejected."

### **Related Topic**

Use Your Computer to Print a Nozzle Check Pattern

# **Cleaning the Paper Feed Rollers from Your Computer**

Cleans the paper feed rollers. Perform feed roller cleaning when there are paper particles sticking to the paper feed rollers and paper is not fed properly.

The procedure for performing the feed roller cleaning is as follows:



# **Roller Cleaning**

#### 1. Prepare the machine

Remove all sheets of paper from the front tray.

#### 2. Open the printer driver setup window

#### 3. Click Roller Cleaning on the Maintenance tab

The confirmation message appears.

#### 4. Execute paper feed roller cleaning

Make sure that the machine is on and then click  ${\bf OK}.$  Paper feed roller cleaning starts.

#### 5. Complete paper feed roller cleaning

After the rollers have stopped, follow the instruction in the message, load three sheets of plain paper into the front tray, and click **OK**.

Paper will be ejected and feed roller cleaning will be completed.

# **Aligning the Print Head**

When you perform head position adjustment, errors in the print head adjustment position are corrected and conditions such as color and line streaking are improved.

If the print results appear uneven because of line shifts or other conditions, adjust the position of the print head

On this machine, you can adjust the print head either automatically or manually.

- To adjust the head position automatically, execute print head position adjustment from the operation panel of the machine.
  - Aligning the Print Head
- To adjust the head position manually, execute print head position adjustment from the computer.
  - → Aligning the Print Head Position from Your Computer

# **Aligning the Print Head Position from Your Computer**

Print head alignment corrects the installation positions of the print head and improves deviated colors and lines.

This machine supports two head alignment methods: automatic head alignment and manual head alignment.

To perform automatic head alignment, refer to "Aligning the Print Head" and then execute the function from the operation panel of the machine.

The procedure for performing manual print head alignment is as follows:



# **Print Head Alignment**

- 1. Open the printer driver setup window
- 2. Click Custom Settings on the Maintenance tab

The **Custom Settings** dialog box opens.

3. Switch head alignment to manual

Check the Align heads manually check box.

4. Apply the settings

Click **OK** and when the confirmation message appears, click **OK**.

5. Click Print Head Alignment on the Maintenance tab

The Start Print Head Alignment dialog box opens.

6. Load paper in the machine

Load three sheets of A4 size or Letter size plain paper into the front tray.

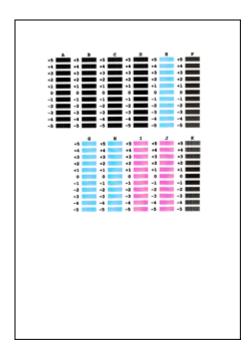
7. Execute head alignment

Make sure that the machine is on and click Align Print Head.

Follow the instruction in the message.

8. Check the printed pattern

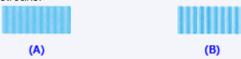
Enter the numbers of the patterns with the least amount of streaks in the associated boxes. Even if the patterns with the least amount of streaks are clicked in the preview window, their numbers are automatically entered in the associated boxes.



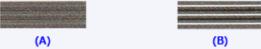
When you have entered all the necessary values, click  $\mathbf{OK}$ .



If it is difficult to pick the best pattern, pick the setting that produces the least noticeable vertical streaks.



- (A) Least noticeable vertical streaks
- (B) Most noticeable vertical streaks
- If it is difficult to pick the best pattern, pick the setting that produces the least noticeable horizontal streaks.



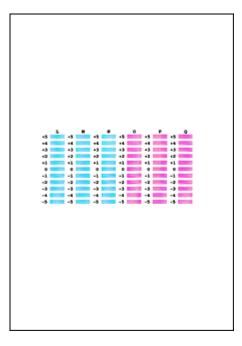
- (A) Least noticeable horizontal streaks
- (B) Most noticeable horizontal streaks

#### 9. Confirm the displayed message and click OK

The second pattern is printed.

#### 10. Check the printed pattern

Enter the numbers of the patterns with the least amount of streaks in the associated boxes. Even if the patterns with the least amount of streaks are clicked in the preview window, their numbers are automatically entered in the associated boxes.



When you have entered all the necessary values, click OK.



If it is difficult to pick the best pattern, pick the setting that produces the least noticeable vertical streaks.





(A)

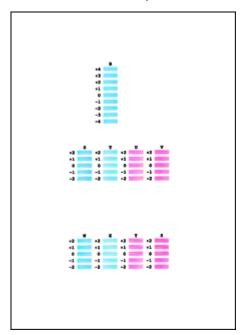
- (A) Least noticeable vertical streaks
- (B) Most noticeable vertical streaks

#### 11. Confirm the displayed message and click OK

The third pattern is printed.

#### 12. Check the printed pattern

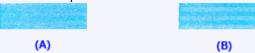
Enter the numbers of the patterns with the least noticeable horizontal stripes in the associated boxes. Even if the patterns with the least noticeable horizontal stripes are clicked in the preview window, their numbers are automatically entered in the associated boxes.



When you have entered all the necessary values, click  $\mathbf{OK}$ .



If it is difficult to pick the best pattern, pick the setting that produces the least noticeable horizontal stripes.



- (A) Least noticeable horizontal stripes
- (B) Most noticeable horizontal stripes

# Note

■ To print and check the current setting, open the **Start Print Head Alignment** dialog box, and click **Print Alignment Value**.

# **Use Your Computer to Print a Nozzle Check Pattern**

The nozzle check function allows you to check whether the print head is working properly by printing a nozzle check pattern. Print the pattern if printing becomes faint, or if a specific color fails to print.

The procedure for printing a nozzle check pattern is as follows:



#### **Nozzle Check**

#### 1. Open the printer driver setup window

#### 2. Click Nozzle Check on the Maintenance tab

The Nozzle Check dialog box opens.

Click **Initial Check Items** to display the items that you need to check before printing the nozzle check pattern.

#### 3. Load paper in the machine

Load one sheet of A4 size or Letter size plain paper into the front tray.

#### 4. Print a nozzle check pattern

Make sure that the machine is on and click Print Check Pattern.

Printing of the nozzle check pattern begins.

Click **OK** when the confirmation message appears.

The Pattern Check dialog box opens.

#### 5. Check the print result

Check the print result. When the print result is normal, click Exit.

If the print result is smudged or if there are any unprinted sections, click **Cleaning** to clean the print head.

#### **Related Topic**

Cleaning the Print Heads from Your Computer

# **Cleaning Inside the Machine**

Perform bottom plate cleaning before you execute duplex printing to prevent smudges on the back side of the paper.

Also perform bottom plate cleaning if ink smudges caused by something other than print data appear on the printed page.

For details on how to load paper into the machine, see "Cleaning the Inside of the Machine (Bottom Plate Cleaning)."

The procedure for performing bottom plate cleaning is as follows:



# **Bottom Plate Cleaning**

1. Open the printer driver setup window

#### 2. Click Bottom Plate Cleaning on the Maintenance tab

The **Bottom Plate Cleaning** dialog box opens.

#### 3. Load paper in the machine

As instructed in the dialog box, fold the A4 size or Letter size plain paper in half horizontally, and then unfold the sheet.

Fold one side of the paper in another half, aligning the edge with the center crease, then unfold the paper.

With the ridges of the creases facing up, load the paper into the front tray, so that the edge of the half with no crease faces away from you.

#### 4. Perform the bottom plate cleaning

Make sure that the machine is on and then click **Execute**. Bottom plate cleaning starts.

# **Cleaning the Machine**

- Cleaning the Exterior of the Machine
- Cleaning the Platen Glass and Document Cover
- Cleaning the ADF (Auto Document Feeder)
- Cleaning the Paper Feed Roller
- Cleaning the Inside of the Machine (Bottom Plate Cleaning)
- Cleaning the Protrusions inside the Machine

# **Cleaning the Exterior of the Machine**

Be sure to use a soft and dry cloth such as eyeglasses cleaning cloth and wipe off dirt on the surface gently. Smooth out wrinkles on the cloth if necessary before cleaning.

### >>>> Important

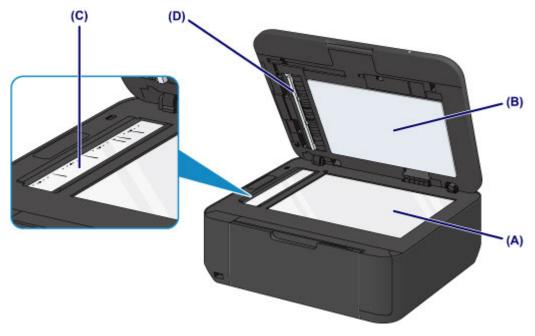
- Be sure to turn off the power and disconnect the power plug before cleaning the machine.
  - The power cannot be turned off while the machine is sending or receiving a fax, or when unsent faxes are stored in the machine's memory. Make sure if the machine completed sending or receiving all the faxes before disconnecting the power plug.
  - The machine cannot send or receive faxes when the power is turned off.
  - If the power plug is disconnected, the date/time settings will be reset and all documents stored in the machine's memory will be lost. Send or print a necessary document, or save it on a USB flash drive before disconnecting the power plug.
- Do not use tissue paper, paper towels, rough-textured cloth, or similar materials for cleaning so as not to scratch the surface. Be sure to use a soft and dry cloth.
- Never use volatile liquids such as thinners, benzene, acetone, or any other chemical cleaner to clean the machine, as this may cause a malfunction or damage the surface of the machine.

# **Cleaning the Platen Glass and Document Cover**

### Important

- Be sure to turn off the power and disconnect the power plug before cleaning the machine.
  - The power cannot be turned off while the machine is sending or receiving a fax, or when unsent faxes are stored in the machine's memory. Make sure if the machine completed sending or receiving all the faxes before disconnecting the power plug.
  - The machine cannot send or receive faxes when the power is turned off.
  - If the power plug is disconnected, the date/time settings will be reset and all documents stored in the machine's memory will be lost. Send or print a necessary document, or save it on a USB flash drive before disconnecting the power plug.
- Do not use tissue paper, paper towels, rough-textured cloth, or similar materials for cleaning so as not to scratch the surface. Be sure to use a soft and dry cloth.
- Never use volatile liquids such as thinners, benzene, acetone, or any other chemical cleaner to clean the machine, as this may cause a malfunction or damage the surface of the machine.

With a soft, clean, lint-free and dry cloth, wipe the platen glass (A), the inner side of the document cover (white sheet) (B), the glass of the ADF (Auto Document Feeder) (C), and the inner side of the ADF (white area) (D) gently. Make sure not to leave any residue, especially on the glass surface.



### Important

- The inner side of the document cover (white sheet) (B) is easily damaged, so wipe it gently.
- If any foreign substances such as glue, ink or correction fluid are adhered to the glass of the ADF (C) as shown in the figure above, some black streaks will appear on the scanned image.
  In this case, wipe the dirt off gently.

# **Cleaning the ADF (Auto Document Feeder)**

### Important

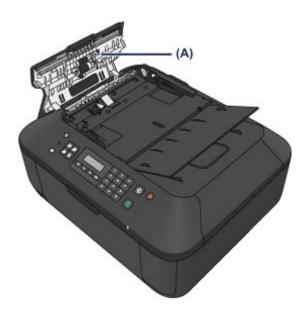
- Be sure to turn off the power and disconnect the power plug before cleaning the machine.
  - The power cannot be turned off while the machine is sending or receiving a fax, or when unsent faxes are stored in the machine's memory. Make sure if the machine completed sending or receiving all the faxes before disconnecting the power plug.
  - The machine cannot send or receive faxes when the power is turned off.
  - If the power plug is disconnected, the date/time settings will be reset and all documents stored in the machine's memory will be lost. Send or print a necessary document, or save it on a USB flash drive before disconnecting the power plug.
- Do not use tissue paper, paper towels, rough-textured cloth, or similar materials for cleaning so as not to scratch the surface. Be sure to use a soft and dry cloth.
- Never use volatile liquids such as thinners, benzene, acetone, or any other chemical cleaner to clean the machine, as this may cause a malfunction or damage the surface of the machine.
- 1. Open the document tray.



2. Open the document feeder cover.



3. With a soft, clean, lint-free and dry cloth, wipe off any paper dust from the inside of the document feeder cover (A).



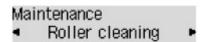
- **4.** After wiping, close the document feeder cover by pushing it until it clicks into place.
- **5.** Close the document tray.

# **Cleaning the Paper Feed Roller**

If the paper feed roller is dirty or paper powder is attached to it, paper may not be fed properly. In this case, clean the paper feed roller. Cleaning will wear out the paper feed roller, so perform this only when necessary.

#### You need to prepare: three sheets of A4 or Letter-sized plain paper

- 1. Make sure that the power is turned on and remove any paper from the front tray.
- 2. Open the paper output tray.
- 3. Clean the paper feed roller without paper.
  - (1) Press the Setup button. The Setup menu screen will appear.
  - (2) Use the ◀ or ▶ button to select **Maintenance**, then press the **OK** button. ▶ LCD and Operation Panel
  - (3) Use the ◀ or ▶ button to select Roller cleaning, then press the OK button.



The paper feed roller will rotate as it is cleaned.

- **4.** Clean the paper feed roller with paper.
  - (1) Make sure that the paper feed roller has stopped rotating, close the paper output tray, then load three or more sheets of A4 or Letter-sized plain paper in the front tray.
  - (2) Open the output tray extension, open the paper output tray, then extend the paper output support.
  - (3) Make sure that **Roller cleaning** is selected, then press the **OK** button. The machine starts cleaning. The cleaning will be complete when the paper is ejected.

#### Note

■ To access other available functions, use the mode buttons.

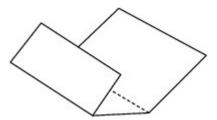
If the problem is not resolved after cleaning the paper feed roller, contact the service center.

# **Cleaning the Inside of the Machine (Bottom Plate Cleaning)**

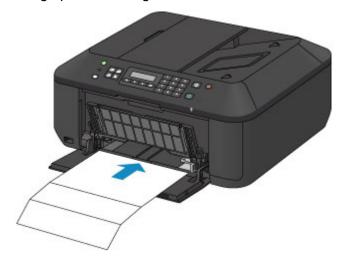
Remove stains from the inside of the machine. If the inside of the machine becomes dirty, printed paper may get dirty, so we recommend performing cleaning regularly.

#### You need to prepare: a sheet of A4 or Letter-sized plain paper\*

- \* Be sure to use a new piece of paper.
- 1. Make sure that the power is turned on and remove any paper from the front tray.
- 2. Prepare paper.
  - (1) Fold a single sheet of A4 or Letter-sized plain paper in half widthwise, then unfold the paper.
  - (2) Fold one side of the opened paper in another half, aligning the edge with the center crease, then unfold the paper.



(3) Load only this sheet of paper in the front tray with the ridges of the creases facing up and the edge of the half with no crease facing away from you.



- **3.** Open the output tray extension, open the paper output tray, then extend the paper output support.
- 4. Clean the inside of the machine.
  - (1) Press the **Setup** button.
    The **Setup menu** screen will appear.
  - (2) Use the ◀ or ▶ button to select **Maintenance**, then press the **OK** button. → LCD and Operation Panel
  - (3) Use the **◄** or **▶** button to select **Bottom cleaning**, then press the **OK** button.

#### Maintenance

Bottom cleaning

The paper cleans the inside of the machine as it feeds through the machine.

Check the folded parts of the ejected paper. If they are smudged with ink, perform Bottom Plate Cleaning again.

If the problem is not resolved after performing cleaning again, the protrusions inside the machine may be stained. Clean them according to instructions.

→ Cleaning the Protrusions inside the Machine

## Note

- To access other available functions, use the mode buttons.
- When performing Bottom Plate Cleaning again, be sure to use a new piece of paper.

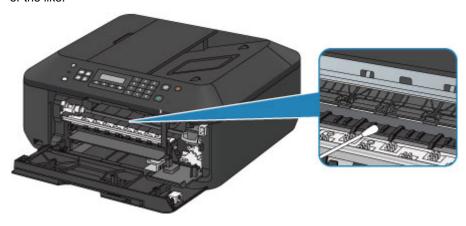
## **Cleaning the Protrusions inside the Machine**

## Important

- Be sure to turn off the power and disconnect the power plug before cleaning the machine.
  - The power cannot be turned off while the machine is sending or receiving a fax, or when unsent faxes are stored in the machine's memory. Make sure if the machine completed sending or receiving all the faxes before disconnecting the power plug.
  - The machine cannot send or receive faxes when the power is turned off.
  - If the power plug is disconnected, the date/time settings will be reset and all documents stored in the machine's memory will be lost. Send or print a necessary document, or save it on a USB flash drive before disconnecting the power plug.

## You need to prepare: cotton swab

If the protrusions inside the machine are stained, wipe off any ink from the protrusions using a cotton swab or the like.



# **Changing the Machine Settings**

- Changing Machine Settings from Your Computer
- Changing the Machine Settings on the LCD

# **Changing Machine Settings from Your Computer**

- Changing the Print Options
- Registering a Frequently Used Printing Profile
- Setting the Ink Cartridge to be Used
- Managing the Machine Power
- Reducing the Machine Noise
- Changing the Machine Operation Mode

## **Changing the Print Options**

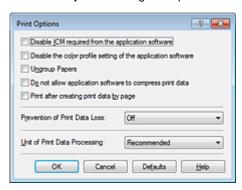
You can change the detailed print driver settings for print data that is sent from an application software. Specify this option if you encounter print failures such as part of an image data being cut off.

The procedure for changing the print options is as follows:

- 1. Open the printer driver setup window
- 2. Click Print Options... on the Page Setup tab



The Print Options dialog box opens.





- When you use the XPS printer driver, the functions available to you are different.
- 3. Change the individual settings

If necessary, change the setting of each item, and then click **OK**.

The Page Setup tab is displayed again.

## Registering a Frequently Used Printing Profile

You can register the frequently used printing profile to **Commonly Used Settings** on the **Quick Setup** tab. Unnecessary printing profiles can be deleted at any time.

The procedure for registering a printing profile is as follows:

## Registering a Printing Profile

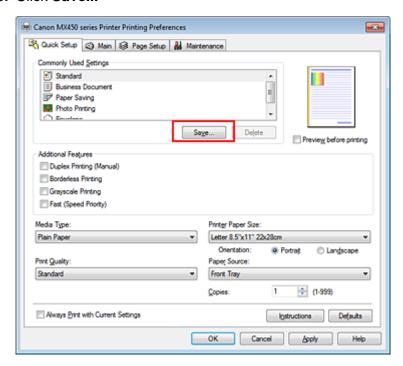
1. Open the printer driver setup window

## 2. Set the necessary items

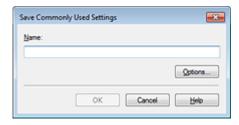
From **Commonly Used Settings** on the **Quick Setup** tab, select the printing profile to be used and if necessary, change the settings after **Additional Features**.

You can also register necessary items on the Main and Page Setup tabs.

#### 3. Click Save...



The Save Commonly Used Settings dialog box opens.



## 4. Save the settings

Enter a name in the **Name** field. If necessary, click **Options...**, set the items, and then click **OK**. In the **Save Commonly Used Settings** dialog box, click **OK** to save the print settings and return to the **Quick Setup** tab.

The name and icon are displayed in **Commonly Used Settings**.

■ To save the page size, orientation, and number of copies that was set in each sheet, click **Options...**, and check each item.

## Note

settings again.

When you install the printer driver again or upgrade the version of the printer driver, the print settings you registered will be deleted from Commonly Used Settings.Registered print settings cannot be saved and preserved. If a profile is deleted, register the print

## **Deleting Unnecessary Printing Profile**

1. Select the printing profile to be deleted

Select the printing profile you want to delete from the **Commonly Used Settings** list on the **Quick Setup** tab.

2. Delete the printing profile

Click **Delete**. When the confirmation message appears, click **OK**. The selected printing profile is deleted from the **Commonly Used Settings** list.

## Note

Printing profiles that are registered in the initial settings cannot be deleted.

## Setting the Ink Cartridge to be Used

This feature enables you to specify the most appropriate FINE cartridge among installed cartridges according to an intended use.

When one of the FINE cartridges becomes empty and cannot be replaced immediately by a new one, you can specify the other FINE cartridge that still has ink and continue printing.

The procedure for specifying the FINE cartridge is as follows:



## **Ink Cartridge Settings**

- 1. Open the printer driver setup window
- 2. Click Ink Cartridge Settings on the Maintenance tab

The Ink Cartridge Settings dialog box appears.

3. Select the FINE cartridge to be used

Select the FINE cartridge to be used for printing and click **OK**. The specified FINE cartridge will be used from the next printing.

## Important

- When the following settings are specified, **Black Only** does not function because the machine uses the color FINE cartridge to print documents.
  - Other than Plain Paper, Envelope, Hagaki A, or Hagaki is selected for Media Type on the Main tab
  - Borderless is selected from the Page Layout list on the Page Setup tab
- Do not detach the FINE cartridge that is not in use. Printing cannot be performed while either FINE cartridge is detached.

## **Managing the Machine Power**

This function allows you to manage the machine power from the printer driver.

The procedure for managing the machine power is as follows:



#### Power Off

The **Power Off** function turns off the machine. When you use this function, you will not be able to turn the machine on from the printer driver.

- 1. Open the printer driver setup window
- 2. Execute power off

Click **Power Off** on the **Maintenance** tab. When the confirmation message appears, click **OK**. The machine power switches off, and the **Maintenance** tab is displayed again.



You cannot receive faxes when the machine is switched off.

## **Reducing the Machine Noise**

The silent function allows you to reduce the operating noise of this machine. Select when you wish to reduce the operating noise of the printer at night, etc.

Using this function may lower the print speed.

The procedure for using the guiet mode is as follows:



## **Quiet Settings**

1. Open the printer driver setup window

## 2. Click Quiet Settings on the Maintenance tab

The Quiet Settings dialog box opens.



■ If the machine is off or if communication between the machine and the computer is disabled, an error message may appear because the computer cannot collect the machine status.

## 3. Set the quiet mode

If necessary, specify one of the following items:

#### Do not use quiet mode

Select this option when you wish to use the machine with volume of normal operating noise.

### Always use quiet mode

Select this option when you wish to reduce the operating noise of the machine.

## Use quiet mode during specified hours

Select this option when you wish to reduce the operating noise of the machine during a specified period of time.

Set the **Start time** and the **End time** of the quiet mode you wish to be activated. If both are set to the same time, the quiet mode will not function.

## >>> Important

You can set the quiet mode from the operation panel of the machine, the printer driver, or ScanGear (scanner driver).

No matter how you use to set the quiet mode, the mode is applied when you perform operations from the operation panel of the machine or printing and scanning from the computer.

## 4. Apply the settings

Make sure that the machine is on and click **OK**.

Click **OK** when the confirmation message appears.

The settings are enabled hereafter.



■ The effects of the quiet mode may be less depending on the print quality settings.

## **Changing the Machine Operation Mode**

If necessary, switch between various modes of machine operation.

The procedure for configuring **Custom Settings** is as follows:



## **Custom Settings**

- 1. Open the printer driver setup window
- Make sure that the machine is on, and then click Custom Settings on the Maintenance tab

The Custom Settings dialog box opens.



- If the machine is off or if communication between the machine and the computer is disabled, an error message may appear because the computer cannot collect the machine status.
  If this happens, click **OK** to display the most recent settings specified on your computer.
- **3.** If necessary, complete the following settings:

#### Prevent paper abrasion

The machine can increase the gap between the print head and the paper during high-density printing to prevent paper abrasion.

Check this check box to prevent paper abrasion.

#### Align heads manually

Usually, the **Print Head Alignment** function on the **Maintenance** tab is set to automatic head alignment, but you can change it to manual head alignment.

If the printing results are unsatisfactory even after you execute automatic head alignment, see "Aligning the Print Head Position from Your Computer," and execute manual head alignment. Check this check box to perform the manual head alignment. Uncheck this check box to perform the automatic head alignment.

#### Prevent paper double-feed

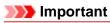
Select this check box only if the machine is feeding multiple sheets of plain paper at the same time.



Using this function slows down the print speed.

#### Rotate 90 degrees left when orientation is [Landscape]

On the **Page Setup** tab, you can change the rotation direction of the **Landscape** in the **Orientation**. To rotate the print data 90 degrees to the left during printing, select this item. To rotate the print data 90 degrees to the right during printing, clear this item.



■ Do not change this setting while the print job is displayed in the print wait list. Otherwise, characters may be omitted or the layout may become corrupt.

#### **Ink Drying Wait Time**

You can set the length of the machine rest time until printing of the next page begins. Moving the slider to the right increases the pause time, and moving the slider to the left decreases the time. If the paper gets stained because the next page is ejected before the ink on the printed page dries, increase the ink drying wait time.

Reducing the ink drying wait time speeds up printing.

## **4.** Apply the settings

Click  $\mathbf{OK}$  and when the confirmation message appears, click  $\mathbf{OK}.$ 

The machine operates with the modified settings hereafter.

# **Changing the Machine Settings on the LCD**

- Changing the Machine Settings on the LCD
- Fax settings
- Print settings
- LAN settings
- Dev. user settings
- Mob. phone settings
- Bluetooth settings
- Firmware update
- Reset setting
- About Quiet setting

## **Changing the Machine Settings on the LCD**

This section describes the procedure to change the settings in the **Device settings** screen, taking the steps to specify **Extended copy amt.** as an example.

## Note

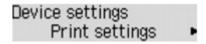
- The \* (asterisk) on the LCD indicates the current setting.
- 1. Make sure that the machine is turned on.
  - Confirming that the Power Is On
- 2. Press the **Setup** button.

The **Setup menu** screen is displayed.

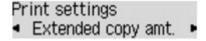
3. Use the ◀▶ button to select **Device settings**, then press the **OK** button.

When you change the fax settings, press the **Setup** button, then select **Fax settings**.

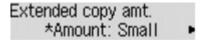
**4.** Use the **◄▶** button to select **Print settings**, then press the **OK** button.



5. Use the **◄▶** button to select **Extended copy amt.**, then press the **OK** button.



6. Use the **◄►** button to select a setting item, then press the **OK** button.



For details on each setting item:

- ➡ Fax settings
- Print settings
- **►** LAN settings
- → Dev. user settings
- → Mob. phone settings
- ➡ Bluetooth settings
- Firmware update
- ➡ Reset setting

## **Fax settings**

This section describes the setting items in Fax settings.

- **⇒** Easy setup
- TEL no. registration
- **⇒** FAX user settings
- Adv. FAX settings
- **➡** Auto print settings
- **➡** Auto save setting
- **⇒** Security control

## Note

- Before changing the settings, you can confirm the current settings by printing USER'S DATA LIST.
- → Summary of Reports and Lists

## Easy setup

The machine must be set up depending on your telephone line and use of the faxing function. Follow the procedure according to the instructions on the LCD.

## Note

- You can specify the setup setting individually or the advanced setting. For details on how to specify the setting:
- Preparing for Faxing

## TEL no. registration

You can register the recipient's fax/telephone number to the machine.

Registering Recipients Using the Operation Panel of the Machine

## **FAX user settings**

Unit TEL no. registr.

Registers your fax/telephone number printed on sent faxes.

- Registering User Information
- Unit name registr.

Registers your name printed on sent faxes.

Registering User Information

## • Telephone line type

Selects the telephone line type setting for the machine.

Setting the Telephone Line Type



■ This setting may not be available depending on the country or region of purchase.

## Adv. FAX settings

#### Auto redial

Enables/disables automatic redialing.

If you select **ON**, you can specify the maximum number of redial attempts and the length of time the machine waits between redial attempts.

#### · Dial tone detect

Avoids mistransmission when reception and transmission occur at the same time.

If you select **ON**, the machine transmits the fax after confirming the dial tone.



■ This setting may not be available depending on the country or region of purchase.

### Pause time settings

Sets the length of pause time for each when you enter "P" (pause).

#### TTI position

Selects the position of the sender information (outside or inside the image area).

#### Remote RX

Enables/disables remote reception.

If you select **ON**, you can specify the remote reception ID.

Remote Reception

## Color transmission

When faxing color documents using the ADF, selects whether to convert them into black & white data if the recipient's fax machine does not support color faxing.

If you select **If incompatible, end**, the machine does not send color documents when the recipient's fax machine does not support color faxing.

## RX image reduction

Enables/disables automatic reduction of incoming faxes so that they fit in the selected paper.

If you select **ON**, you can select the image reduction direction.

#### Adv. communication

## • ECM TX

Selects whether to send faxes in Error Correction Mode (ECM).

➡ Transmission/Reception of Faxes Using ECM

#### • ECM RX

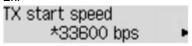
Selects whether to receive faxes in Error Correction Mode (ECM).

Transmission/Reception of Faxes Using ECM

#### TX start speed

Selects the fax transmission speed.

Ex:



The following settings are available.

## 33600 bps/14400 bps/9600 bps/4800 bps

The \* (asterisk) on the LCD indicates the current setting.

The fax transmission start speed will be faster as the value is bigger.

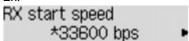
Some of settings are not available depending on the country or region of purchase.

When the telephone line condition or connection is poor, selecting a lower transmission start speed may solve transmission problems.

#### RX start speed

Selects the fax reception speed.

Ex:



The following settings are available.

#### 33600 bps/14400 bps/9600 bps/4800 bps

The \* (asterisk) on the LCD indicates the current setting.

The fax reception start speed will be faster as the value is bigger.

Some of settings are not available depending on the country or region of purchase.

When the telephone line condition or connection is poor, selecting a lower reception start speed may solve reception problems.

## **Auto print settings**

#### · Received documents

Selects whether to print the received fax automatically when receiving a fax.

If you select **Do not print**, the received fax is stored in the machine's memory.

For details on the received fax stored in the machine's memory:

➡ Document Stored in Machine's Memory

#### Activity report

Selects whether to print ACTIVITY REPORT automatically.

If you select **Print**, the machine prints ACTIVITY REPORT for the 20 histories of sent and received faxes automatically.

For details on the procedure to print ACTIVITY REPORT manually:

Summary of Reports and Lists

## TX report

Selects whether to print TX REPORT/ERROR TX REPORT automatically after sending a fax.

If you print the report, select Print error only or Print for each TX.

If you select **Print error only** or **Print for each TX**, you can specify the print setting that the first page of the fax is printed along with the report.

## RX report

Selects whether to print RX REPORT automatically after receiving a fax.

If you print RX REPORT, select Print error only or Print for each RX.

#### · Print when no ink

Sets whether to continue printing the received fax without storing it in the machine's memory when the ink has run out.

However, part or all of the fax may not be printed since the ink has run out.

#### Auto save setting

Selects whether to save the received fax on the USB flash drive automatically after receiving a fax.

⇒ Saving Received Faxes Automatically on a USB Flash Drive

## Security control

#### FAX no. re-entry

If you select  $\mathbf{ON}$ , you can set the machine to send faxes after using the Numeric buttons to enter the number twice. By using this setting, you can avoid the mistransmission of faxes.

#### Check RX FAX info

If you select **ON**, the machine checks whether the recipient's fax machine information matches the dialed number. If it matches the number, the machine starts to send faxes.

➡ Preventing Mistransmission of Faxes

#### · On-hook setting

If you select **Enable**, you can use the on hook function.

## FAX RX reject

If you select **ON**, the machine rejects the reception of faxes with no sender information or faxes from specific senders.

Rejecting Fax Reception

## Caller rejection

If you subscribe to the Caller ID service, the machine detects the sender's Caller ID. If the sender's ID matches the condition specified in this setting, the machine rejects the phone call or fax reception from the sender.

If you select Subscribed, you can specify the settings of rejection.

→ Using the Caller ID Service to Reject Calls

## >>>> Note

■ This setting may not be supported depending on the country or region of purchase. Contact your telephone company to confirm whether it provides this service.

## **Print settings**

## Prevent abrasion

Use this setting only if the print surface becomes smudged.

## >>>> Important

Be sure to set this back to OFF after printing since it may result in lower printing speed or lower print quality.

## Extended copy amt.

Selects the amount of image that extends off the paper when copying in Borderless (full).

Slight cropping may occur at the edges since the copied image is enlarged to fill the whole page. You can change the width to be cropped from the borders of the original image as needed.

Cropped area will be larger if Amount: Large is selected.

## Note

■ If printouts contain margins even though you are copying in Borderless, specifying **Amount:** Large for this setting may help solve the problem.

## · Prevent double-feed

Select **ON** to prevent double-feed of plain paper.

## >>>> Important

■ Select **ON** only when double-feed of plain paper occurs.

## LAN settings

## WLAN activ./inactiv.

Activates/deactivates wireless LAN.

## Wireless LAN setup

If your access point is compatible with WPS, set up wireless LAN following the on-screen instructions. If not, select one of the setup methods below.

#### Standard setup

Select when you perform settings for wireless LAN manually using the operation panel of the machine.

#### • WPS

Select when you perform settings for wireless LAN using Wi-Fi Protected Setup (WPS). Select **Push button method** or **PIN code method** according to the method your access point supports, then follow the on-screen instructions.

#### Other setup

Select Manual setup, then follow the on-screen instructions.

## Print LAN details

You can print out the network settings of the machine such as its IP address and SSID.

For more information on the machine's network setting is printed out, refer to Printing Out Network Setting Information.

## >>> Important

■ This printout contains valuable information about your computer. Handle it with care.

## Other settings

#### Set printer name

Specifies the printer name. You can use up to 15 characters for the name.

#### Note

- You cannot use the same printer name as that already used for other LAN connected devices.
- You cannot use a hyphen for the initial or last character of the printer name.

#### TCP/IP settings

Performs IPv4 or IPv6 setting.

## WSD setting

Setting items when you use WSD (one of the network protocols supported in Windows 7 and Windows Vista).

#### **Enable/disable WSD**

Selects whether WSD is enabled or disabled.

## >>> Note

■ When this setting is activated, the printer icon is displayed on the Network Explorer in Windows 7 and Windows Vista.

#### WSD scan from dev.

Selecting Active allows you to transfer the scanned data to the computer using WSD.

#### Timeout setting

Specifies the timeout length.

## Bonjour settings

Setting items for LAN using Bonjour for Mac OS.

#### Enab./disab. Bonjour

Selecting **Active** allows you to use Bonjour to perform the network settings.

#### Enter service name

Specifies the Bonjour service name. You can use up to 48 characters for the name.



■ You cannot use the same service name as that already used for other LAN connected devices.

#### LPR setting

Activates/deactivates the LPR setting.

#### DRX setting

Selecting **Active** allows you to activate discontinuous reception when using wireless LAN. It allows you to save electricity.

## >>> Note

- Depending on the access point you are using, discontinuous reception may not be activated even though **Active** is selected.
- Discontinuous reception is activated only while the machine is on standby. (The LCD is in the screen saver mode.)

## Reset LAN settings

Initializes the network settings on the machine.

## >>>> Important

■ Note that initialization erases all connection settings with computers, and printing or scanning operation may become impossible. To use the machine over network, perform setup with the Setup CD-ROM. Be careful when you initialize the network settings on the machine.

## Note

- When you initialize the network settings using IJ Network Tool:
- → Initializing the Network Settings of the Machine

## Dev. user settings

## Date/time setting

Sets the current date and time.

Setting the Sender Information

## Date display format

Sets the format of dates displayed on the LCD and printed on sent faxes and photos.

## Summer time setting

Enables/disables the summer time setting. If you select **ON**, you can select additional sub-settings. This setting may not be available depending on the country or region of purchase.

#### · Start date/time

Sets the date and time that summer time starts.

**Set month**: Specify the month. **Set week**: Specify the week.

**Set day of week**: Specify the day of the week. **Set shift time**: Specify the hour (24-hour clock).

End date/time

Sets the date and time that summer time ends.

**Set month**: Specify the month. **Set week**: Specify the week.

**Set day of week**: Specify the day of the week. **Set shift time**: Specify the hour (24-hour clock).

## Sound control

Selects the volume.

## Keypad volume

Selects the beep volume when pressing the buttons on the operation panel.

#### Alarm volume

Selects the alarm volume.

## • Line monitor volume

Selects the line monitor volume.

#### Offhook alarm

Selects the alarm volume when the phone receiver is not put on the hook properly.

## Country or region

Selects the country or region where you are using the machine.



■ This setting may not be available depending on the country or region of purchase.

## Language selection

Changes the language for LCD messages and menus.

Japanese / English / German / French / Italian / Spanish / Dutch / Portuguese / Norwegian / Swedish / Danish / Finnish / Russian / Ukrainian / Polish / Czech / Slovak / Hungarian /Slovene / Romanian / Bulgarian / Turkish / Greek / Estonian / Latvian / Lithuanian / Simplified Chinese / Traditional Chinese / Korean / Indonesian

## Key repeat

Enables/Disables continuous input by pressing and holding down the button when setting the number of copies, the zoom ratio, etc.

## Mob. phone settings

When printing from a mobile phone through Bluetooth communication, select the print settings such as page size, media type, and so on.

For details on how to print from a mobile phone through Bluetooth communication:

⇒ Printing from Mobile Phone via Bluetooth Communication

## Note

- This menu is displayed only when the optional Bluetooth Unit is attached.
- After a setting item is fixed using the button and press the **OK** button, the next setting item appears. Specify each item in sequence.

## Page size

Select the page size for printing photos saved on a mobile phone.

## Media type

Select the media type for printing photos saved on a mobile phone.

## Borderless print

Select the bordered/borderless layout for printing photos saved on a mobile phone.



You can select the bordered/borderless layout when the media type other than Plain paper is selected for Media type.

## Image optimizer

Select **ON** to correct and smooth out the jagged contours when printing.

## **Bluetooth settings**

You can change the device name of the machine, passkey, and so on in the Bluetooth settings.

For details on how to print from a mobile phone through Bluetooth communication:

Printing from Mobile Phone via Bluetooth Communication

For details on how to print from a computer through Bluetooth communication:

→ About Bluetooth Communication



■ This menu is displayed only when the optional Bluetooth Unit is attached.

#### Device name

Specifies the name of this machine that is displayed on a Bluetooth-compatible device.

For example, if you set it to "XXX-2", the machine will be displayed as "Canon XXX-2" on the Bluetooth device. The default value is "XXX-1" (where "XXX" is your machine's name).

#### Access refusal

Selecting **ON** will disable searching of this machine by a Bluetooth-compatible device.

## Security settings

When you select **Enable**, the passkey set on the **Passkey** screen becomes effective. Setting the passkey prevents unwanted access from other Bluetooth devices. You can choose either of the security modes below.

### • Mode 3 (recommend)

This mode is activated on link level enforced security.

The passkey will be required when a Bluetooth device communicates with the machine. Normally select this mode.

## Mode 2

This mode is activated on service level enforced security.

The passkey will be required when printing through Bluetooth communication.

After setting the security mode, we recommend making a trial print through Bluetooth communication.

If printing does not start, change the security mode and try again.

## Passkey

Changes the passkey. The passkey is a four-digit number used to prevent unwanted access from other Bluetooth devices.

The initial value is "0000".

After you change the passkey, you may be required to input the new passkey on a Bluetooth device, even though it had previous access to the machine. In this case, enter the new passkey on the device.

## Firmware update

You can update the firmware of the machine, check the firmware version, or perform settings of a DNS server and a proxy server.

## Note

Only Current version is available when WLAN inactive is selected for WLAN activ./inactiv. in LAN settings.

## Install update

Performs the firmware update of the machine. If you press the **OK** button and select **Yes**, the firmware update starts. Follow the on-screen instructions to perform the update.

## Important

- When you use this function, make sure that the machine is connected to the Internet.
- If the firmware update is carried out, all faxes stored in the machine's memory are deleted.
- You cannot start the firmware update under the following conditions:
  - While the machine is sending or receiving a fax
  - While the machine is storing the unprinted fax in machine's memory (memory reception)
  - When the unsent faxes are stored in the machine's memory

## Note

- If the firmware update is not complete, check the following and take an appropriate action.
  - Check the network settings such as an access point or a router.
  - If Cannot connect to the server; try again is displayed on the LCD, press the OK button, then try again after a while.

## Current version

You can check the current firmware version.

## DNS server setup

Performs settings for a DNS server. Select **Auto setup** or **Manual setup**. If you select **Manual setup**, follow the display on the LCD to perform settings.

## Proxy server setup

Performs settings for a proxy server. Follow the display on the LCD to perform settings.

## **Reset setting**

Reverts all settings you made to the machine back to default. However, some data may not be changed, depending on the current usage state of your machine.

## LAN settings

Reverts the LAN settings back to the default.



You can also change LAN settings back to the default from Reset LAN settings under LAN settings.

## · Telephone no. data

Reverts the telephone/fax number settings to default.

## Setting data

Reverts the machine settings other than the telephone number settings to default.

## All data

Reverts all settings you made to the machine back to default.

## Note

- You cannot change the following setting items back to the default:
  - The language displayed on the LCD
  - The current position of the print head
  - The country selected for Country or region
  - The registered user's telephone number
  - The registered user's name

## **About Quiet setting**

Enables this function on the machine if you want to reduce the operating noise, such as when printing at night. In addition, you can specify the time range to reduce the operating noise.

## Important

- Set the current date and time in advance.
- ⇒ Setting the Sender Information

Follow the procedure below to perform setting.

- 1. Make sure that the machine is turned on.
  - → Confirming that the Power Is On
- 2. Press the **Setup** button.

The **Setup menu** screen is displayed.

- 3. Use the **b** button to select **Quiet setting** then press the **OK** button.
- Use the 
   ■ button to select ON or Use in specified hrs, then press the OK button.
  - When **ON** is selected:

The LCD returns to the **Setup menu** screen.

• When **Use in specified hrs** is selected:

The screen to specify starting/ending time is displayed. Use the button to move the cursor under the desired position, then use the Numeric buttons to enter the time.

Start time 21:00 End time 07:00

Press the **OK** button, then the LCD returns to the **Setup menu**.

Activate this setting to reduce the operating noise while printing is in progress.

## >>> Important

Operating speed may be reduced compared to when **OFF** is selected.
This function may not be so effective depending on the machine's setting. Furthermore, certain noise, such as when the machine is preparing for printing, is not reduced.

## Note

■ You can set the quiet mode from the operation panel of the machine, the printer driver, or ScanGear (scanner driver). No matter how you use to set the quiet mode, the mode is applied when you perform operations from the operation panel of the machine or printing and scanning from the computer.

## **Information about Network Connection**

Useful Information about Network Connection

## **Useful Information about Network Connection**

- Initial Values Set at Factory (Network)
- Connecting the Machine to the Computer Using a USB Cable
- When Detecting the Printers Have the Same Name during Setup
- Connecting to Other Computer with LAN/Changing the Connection Method from USB to LAN
- Printing Out Network Setting Information

# **Initial Values Set at Factory (Network)**

Item	Initial Values
WLAN activ./inactiv.	WLAN inactive
SSID	BJNPSETUP
Communication mode	Infrastructure
Wireless LAN security	Disable
IP address (IPv4)	Auto setup
IP address (IPv6)	Auto setup
Set printer name	XXXXXX000000
TCP/IP settings	IPv4/IPv6
Enable/disable WSD	Active
Timeout setting	1 minute
Enab./disab. Bonjour	Active
Service name	Canon MX450 series
LPR setting	Active
DRX setting	Active

<sup>(&</sup>quot;X" is the last six digits of MAC address.)

# Connecting the Machine to the Computer Using a USB Cable

Connect the machine and the computer using a USB cable as the illustration below. The USB port is located on the rear of the machine.



# When Detecting the Printers Have the Same Name during Setup

When the printer is detected during setup, you may see multiple printers of the same name on the detection result screen.

Select a printer with checking the MAC address set to the printer against the MAC address on detection result screen.

To check the MAC address of the printer, print out the network setting information using the operation panel of the printer.

➡ Printing Out Network Setting Information

# Connecting to Other Computer with LAN/Changing the Connection Method from USB to LAN

To add the computer connecting the printer with LAN or to change the connection method between the printer and the computer from USB to LAN, setup with the Setup CD-ROM.

## **Connecting to Other Computer with LAN**

To add the computer connecting the printer with LAN, insert the Setup CD-ROM into the computer to connect with LAN and setup the network setting.

## Changing the Connection Method from USB to LAN

To change the connection method between the printer and the computer from USB to LAN, setup with the Setup CD-ROM.

To change the connection method, insert the Setup CD-ROM into the computer to connect with LAN and select **Change Connection Method** to setup.

## **Printing Out Network Setting Information**

You can print out the network settings of the machine such as its IP address and SSID.

## >>>> Important

- This print out contains valuable information about your computer. Handle it with care.
- 1. Make sure that the machine is turned on.
  - ➡ Confirming that the Power Is On
- 2. Load a sheet of A4 or Letter-sized plain paper.
  - **➡** Loading Paper
- 3. Press the **Setup** button.

The **Setup menu** screen is displayed.

- **4.** Use the **◄▶** button to select **Device settings**, then press the **OK** button.
- **5.** Use the **I** button to select **LAN settings**, then press the **OK** button.
- 6. Use the **◄►** button to select **Print LAN details**, then press the **OK** button.

The machine starts printing the network setting information.

The following information on the machine's network setting is printed out.

Item	Explanations of the item	Setting
Wireless LAN	Wireless LAN	Enable/Disable
Connection	Status of the Wireless LAN	Active/Inactive
MAC Address	MAC Address	XX:XX:XX:XX:XX
SSID	SSID	SSID of the wireless LAN
Communication Mode	Communication Mode	Infrastructure
Channel	Channel	XX (1 to 13)
Encryption	Method of the Encryption	none/WEP/TKIP/AES
WEP Key Length	WEP Key Length	Inactive/128/64
Authentication	Method of the Authentication	none/auto/open/shared/WPA-PSK/ WPA2-PSK
Signal Strength	Signal Strength	0 to 100 [%]
TCP/IP Version	TCP/IP Version	IPv4 & IPv6/IPv4
IPv4 IP Address	Selected IP Address (IPv4)	XXX.XXX.XXX
IPv4 Default Gateway	Default Gateway (IPv4)	XXX.XXX.XXX
Subnet Mask	Subnet Mask	XXX.XXX.XXX
IPv6 IP Address *1	Selected IP Address (IPv6)	XXXX:XXXX:XXXX XXXX:XXXX:XXXX
IPv6 Default Gateway *1	Default Gateway (IPv6)	XXXX:XXXX:XXXX XXXX:XXXX:XXXX
Subnet Prefix Length*1	Subnet Prefix Length	XXX
IPsec*2	IPsec setting	Active
Security Protocol*2	Method of the Security Protocol	ESP/ESP & AH/AH
Wireless LAN DRX	Discontinuous reception (wireless LAN)	Enable/Disable

Other Settings	Other settings	-
Printer Name	Printer name	Printer name (Up to 15 characters)
WSD	WSD setting	Enable/Disable
WSD Timeout	Timeout	1/5/10/15/20 [min]
LPR Protocol	LPR protocol setting	Enable/Disable
Bonjour	Bonjour setting	Enable/Disable
Bonjour Service Name	Bonjour service name	Bonjour service name (Up to 52 characters)
DNS Server	Getting DNS Server automatically	Auto/Manual
Primary Server	Primary server address	XXX.XXX.XXX
Secondary Server	Secondary server address	XXX.XXX.XXX
Proxy Server	Proxy Server setting	Enable/Disable
Proxy Port	Specifying Proxy Port	1 to 65535
Proxy Address	Proxy Address	XXXXXXXXXXXXXXXXX
IP Address Filtering	IP Address Filtering	Enable/Disable

<sup>(&</sup>quot;XX" represents alphanumeric characters.)

\*1 Only when IPv6 is activated, the status of the network is printed.

\*2 Only IPv6 and the IPsec setting are activated, the status of the network is printed.

## **About Network Communication**

- Changing and Confirming Network Settings
- Screens for Network Connection of IJ Network Tool
- Other Screens of IJ Network Tool
- Appendix for Network Communication

# **Changing and Confirming Network Settings**

- IJ Network Tool
- Changing the Settings in the Wireless LAN Sheet
- Changing the WEP Detailed Settings
- Changing the WPA or WPA2 Detailed Settings
- Changing the Settings in the Wired LAN Sheet
- Changing the Settings in the Admin Password Sheet
- Monitoring Wireless Network Status
- Initializing the Network Settings of the Machine
- Viewing the Modified Settings

# **IJ Network Tool**

IJ Network Tool is a utility that enables you to display and modify the machine network settings. It is installed when the machine is set up.

# **Important**

- To use the machine over LAN, make sure you have the equipment necessary for the connection type, such as an access point or a LAN cable.
- Do not start up IJ Network Tool while printing.
- Do not print when IJ Network Tool is running.
- If the firewall function of your security software is turned on, a message may appear warning that Canon software is attempting to access the network. If the warning message appears, set the security software to always allow access.
- IJ Network Tool has been verified to work on Windows XP, however, it does not support Fast User Switching. It is recommended to exit IJ Network Tool when switching users.

## Starting up IJ Network Tool

 Click Start and select All programs, Canon Utilities, IJ Network Tool, and then IJ Network Tool.



You can also start up IJ Network Tool by clicking Settings & Maintenance on Quick Menu.



Network Settings from Device

# Changing the Settings in the Wireless LAN Sheet

To change the wireless network settings of the printer, connect the printer and the computer with a USB cable temporarily. If you modify the wireless network settings of the computer over wireless connection without USB connection, your computer may not be able to communicate with the machine after modifying the settings.

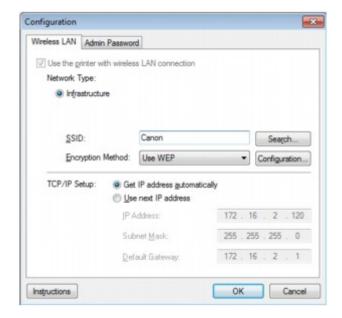
# Note

- This screen is not available depending on the printer you are using.
- Activate the wireless LAN setting of the printer to change the settings in the Wireless LAN sheet
- 1. Start up IJ Network Tool.
  - Starting up IJ Network Tool
- 2. Select the printer in **Printers**:.

When the printer is connected to the computer with a USB cable temporarily, select the printer with "USBnnn" (where "n" is a number) appearing in the **Port Name** column.

- 3. Select Configuration... from the Settings menu.
- 4. Click the Wireless LAN tab.

The Wireless LAN sheet is displayed.



For details on the Wireless LAN sheet, see Wireless LAN Sheet.

5. Change the settings or confirm.

#### SSID:

Enter the same value that was set for the target access point.

When the printer is connected with USB, the **Search** screen appears by clicking **Search...**. Set the SSID of the access point by selecting the one of the detected access points.

**⇒** Search Screen



■ Enter the same SSID that the access point is configured to use. The SSID is casesensitive.

#### **Encryption Method:**

Select the encryption method used over the wireless LAN.

You can change WEP settings with selecting Use WEP and clicking Configuration....

➡ Changing the WEP Detailed Settings

You can change WPA or WPA2 settings with selecting **Use WPA** or **Use WPA2** and clicking **Configuration...**.

➡ Changing the WPA or WPA2 Detailed Settings

# >>>> Important

- If all encryption types of the access point, printer, or computer do not match, the printer cannot communicate with the computer. If the printer cannot communicate with the computer after the encryption type of the printer was switched, make sure that encryption types for the computer and the access point matches that set to the printer.
- If you connect to a network that is not protected with security measures, there is a risk of disclosing data such as your personal information to a third party.

#### TCP/IP Setup:

Sets the IP address of the printer to be used over the LAN. Set a value appropriate for your network environment.

#### 6. Click OK.

After changing configuration, a screen is displayed asking you for confirmation before the settings are sent to the printer. If you click **Yes**, the settings are sent to the printer and the **Transmitted Settings** screen is displayed.

# >>> Note

■ Changing the network settings with the USB cable temporarily may switch the default printer. In this case, reset **Set as Default Printer**.

# **Changing the WEP Detailed Settings**

# >>> Note

■ This screen is not available depending on the printer you are using.

To change the wireless network settings of the printer, connect the printer and the computer with a USB cable temporarily. If you modify the wireless network settings of the computer over wireless connection without USB connection, your computer may not be able to communicate with the machine after modifying the settings.

## 1. Start up IJ Network Tool.

Starting up IJ Network Tool

## 2. Select the printer in **Printers**:.

When the printer is connected to the computer with a USB cable temporarily, select the printer with "USBnnn" (where "n" is a number) appearing in the **Port Name** column.

# 3. Select Configuration... from the Settings menu.

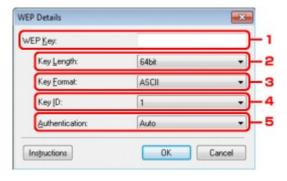
### 4. Click the Wireless LAN tab.

## 5. Select Use WEP in Encryption Method: and click Configuration....

The WEP Details screen is displayed.

### 6. Change the settings or confirm.

When changing the password (WEP key), the same change must be made to the password (WEP key) of the access point.



### 1. WEP Key:

Enter the same key as the one set to the access point.

The number of characters and character type that can be entered differ depending on the key length and key format.

		Key Length	
		64bit	128bit
Key Format	ASCII	5 characters	13 characters
	Hexadecimal ( <b>Hex</b> )	10 digits	26 digits

### 2. Key Length:

Select either 64bit or 128bit.

### 3. Key Format:

Select either ASCII or Hex.

### 4. **Key ID:**

Select the Key ID (index) set to the access point.

## 5. Authentication:

Select the authentication method to authenticate the printer's access to the access point. Normally, select **Auto**. If you want to specify the method manually, select **Open System** or **Shared Key** according to the setting of the access point.

# 7. Click OK.

# >>> Important

If the printer cannot communicate with the computer after the encryption type of the printer was switched, make sure that encryption types for the computer and the access point matches that set to the printer.

# Note

■ Changing the network settings with the USB cable temporarily may switch the default printer. In this case, reset **Set as Default Printer**.

# **Changing the WPA or WPA2 Detailed Settings**

### Note

■ This screen is not available depending on the printer you are using.

To change the wireless network settings of the printer, connect the printer and the computer with a USB cable temporarily. If you modify the wireless network settings of the computer over wireless connection without USB connection, your computer may not be able to communicate with the machine after modifying the settings.

The example screenshots in this section refer to the WPA detailed settings.

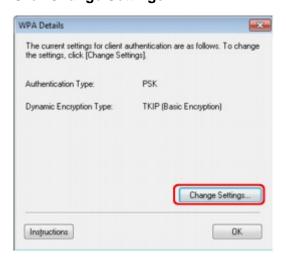
- 1. Start up IJ Network Tool.
  - Starting up IJ Network Tool
- 2. Select the printer in **Printers**:.

When the printer is connected to the computer with a USB cable temporarily, select the printer with "USBnnn" (where "n" is a number) appearing in the **Port Name** column.

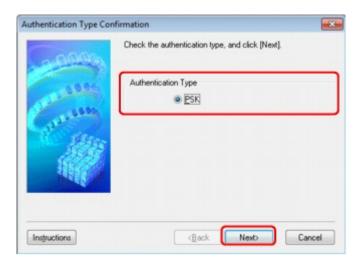
- 3. Select Configuration... from the Settings menu.
- 4. Click the Wireless LAN tab.
- Select Use WPA or Use WPA2 in Encryption Method: and click Configuration....

The **WPA Details** screen is displayed (For WPA2, the **WPA2 Details** screen is displayed). If encryption is not set to the printer, the **Authentication Type Confirmation** screen is displayed. Go to step 7.

6. Click Change Settings....



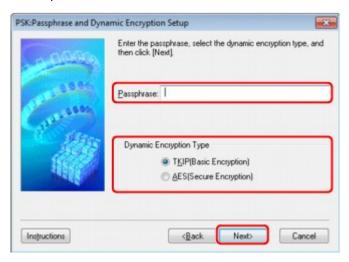
7. Check the client authentication type and click Next>.



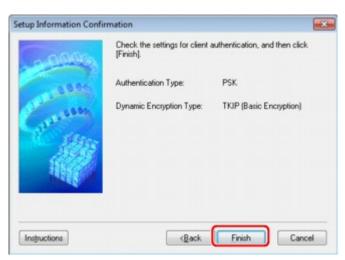
8. Enter the passphrase, confirm the type of dynamic encryption and click **Next>**.

Enter the passphrase set to the access point. The passphrase should be a string of 8 to 63 alphanumeric characters or a 64-digit hexadecimal value.

If you do not know the access point passphrase, refer to the instruction manual provided with the access point or contact its manufacturer.



### 9. Click Finish.



## >>>> Important

■ If the printer cannot communicate with the computer after the encryption type of the printer was switched, make sure that encryption types for the computer and the access point matches that set to the printer.



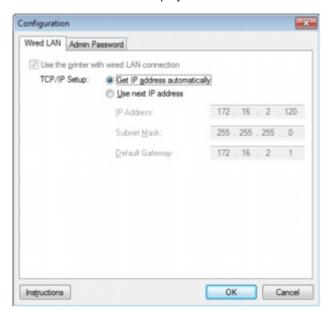
■ Changing the network settings with the USB cable temporarily may switch the default printer. In this case, reset **Set as Default Printer**.

# **Changing the Settings in the Wired LAN Sheet**

# Note

- This screen is not available depending on the printer you are using.
- Activate the wired LAN setting of the printer to change the settings in the Wired LAN sheet.
- 1. Start up IJ Network Tool.
  - Starting up IJ Network Tool
- 2. Select the printer in **Printers**:.
- 3. Select Configuration... from the Settings menu.
- 4. Click the Wired LAN tab.

The Wired LAN sheet is displayed.



For details on the Wired LAN sheet, see Wired LAN Sheet.

5. Change the settings or confirm.

Sets the IP address of the printer to be used over the LAN. Set a value appropriate for your network environment.

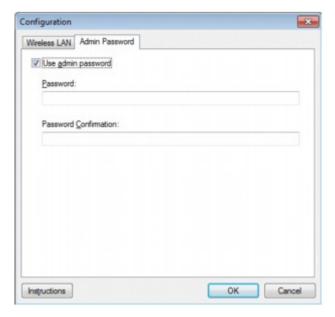
6. Click OK.

After changing configuration, a screen is displayed asking you for confirmation before the settings are sent to the printer. If you click **Yes**, the settings are sent to the printer and the **Transmitted Settings** screen is displayed.

# **Changing the Settings in the Admin Password Sheet**

- 1. Start up IJ Network Tool.
  - ⇒ Starting up IJ Network Tool
- 2. Select the printer in **Printers**:.
- 3. Select Configuration... from the Settings menu.
- 4. Click the Admin Password tab.

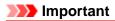
The Admin Password sheet is displayed.



For details on the Admin Password sheet, see Admin Password Sheet.

**5.** Change the settings or confirm.

To use admin password, select the Use admin password check box and enter a password.



■ The password should consist of alphanumeric characters and be no longer than 32 characters. The password is case-sensitive. Do not forget the password you set.

## 6. Click OK.

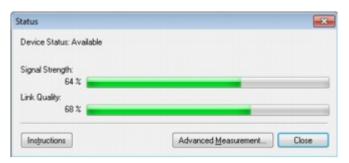
A screen is displayed asking you for confirmation before the settings are sent to the printer. If you click **Yes**, the settings are sent to the printer and the **Transmitted Settings** screen is displayed.

# **Monitoring Wireless Network Status**

# Note

- This screen is not available depending on the printer you are using.
- When using the machine over the wired LAN, you cannot monitor network status.
- 1. Start up IJ Network Tool.
  - Starting up IJ Network Tool
- 2. Select the printer in **Printers**:.
- 3. Select Status from the View menu.

The **Status** screen is displayed and you can check the printer status and connection performance.



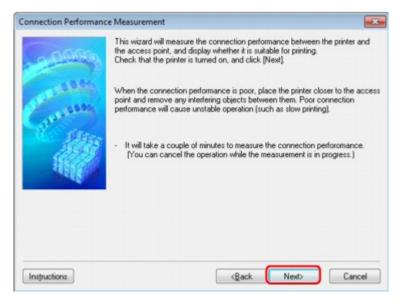
# >>>> Important

- If the indicated value is low, move your printer closer to the wireless network device.
- **4.** If you measure the connection performance in detail, click **Advanced Measurement...**.

The Connection Performance Measurement screen is displayed.

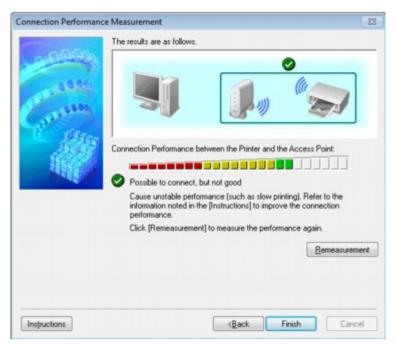
5. Click Next>.

The measurement starts and the status displays. Measurement takes a few minutes.



#### 6. Check the status.

When the measurement is complete, the status is displayed.



When sis displayed in Connection Performance between the Printer and the Access Point:, the printer can communicate with the access point. Otherwise, refer to displayed comments and the following to improve the status of communication link, and click Remeasurement.

- Check that the printer and the access point are located within the wireless connectivity range with no obstacles between them.
- Check if the distance between the printer and the access point is not too far. If they are too far, move them closer together (within 164 ft./50 m).
- Check that there is no barrier or obstacle between the printer and the access point.
   In general, connection performance decreases for communications through walls or between different floors. Adjust the locations to avoid such situations.
- Check that there are no sources of radio interference near the printer and the access point.
  - The wireless connection may use the same frequency band as microwave ovens and other sources of radio interference. Try to keep the printer and the access point away from such sources.
- Check if the radio channel of the access point is close to that of other access points nearby.
  - If the radio channel of the access point is close to that of other access points nearby, the connection performance may become unstable. Be sure to use a radio channel that does not interfere with other access points.
- Check that the printer and the access point face each other.
   Connection performance may depend on the orientations of the wireless devices. Replace the access point and the printer in another direction to achieve the best performance.
- Check whether other computers are not accessing the printer.
  - If 2 appears in the result of the measurement, check whether other computers are not accessing the printer.

If still appears even if you have tried the above, finish the measurement, then restart the IJ Network Tool to start over the measurement.

### 7. Click Finish.



If any messages appear on Overall Network Performance:, move the machine and access point as instructed to improve the performance.

# **Initializing the Network Settings of the Machine**

# Important

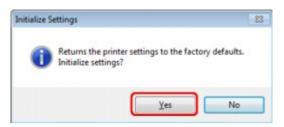
- Note that initialization erases all network settings on the machine, printing, scanning, or faxing operation from a computer over network may become impossible. To use the machine over network, setup with the Setup CD-ROM.
- 1. Start up IJ Network Tool.
  - Starting up IJ Network Tool
- 2. Select the printer in **Printers**:.
- 3. Select Maintenance... from the Settings menu.

The Maintenance screen is displayed.

4. Click Initialize.



5. When the confirmation screen is displayed, click Yes.



The network settings of the printer is initialized.

Do not turn off the printer during initialization.

Click **OK** when initialization is complete.

Performing initialization when connected over wireless LAN will break the connection, so setup with the Setup CD-ROM.

# Note

■ You can change the network settings of the printer using IJ Network Tool with USB connection after initializing the LAN settings. To change the network settings using Canon IJ Network Tool, activate wireless LAN in advance.

# **Viewing the Modified Settings**

The **Confirmation** screen is displayed when you modified the printer settings on the **Configuration** screen. When you click **Yes** on the **Confirmation** screen, the following screen is displayed for confirming the modified settings.



# **Screens for Network Connection of IJ Network Tool**

- Canon IJ Network Tool Screen
- Configuration Screen
- Wireless LAN Sheet
- Search Screen
- WEP Details Screen
- WPA Details Screen
- WPA2 Details Screen
- Authentication Type Confirmation Screen
- PSK: Passphrase and Dynamic Encryption Setup Screen
- Setup Information Confirmation Screen
- Wired LAN Sheet
- Admin Password Sheet
- Network Information Screen
- Access Control Sheet
- Edit Accessible MAC Address Screen/Add Accessible MAC Address Screen
- Edit Accessible IP Address Screen/Add Accessible IP Address Screen

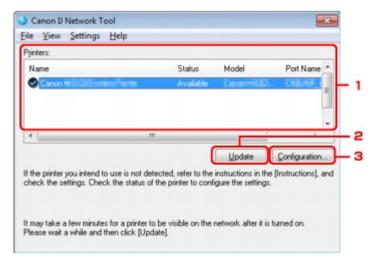
# Canon IJ Network Tool Screen

This section describes the items and menus displayed on the Canon IJ Network Tool screen.

- Items on the Canon IJ Network Tool Screen
- **⇒ Canon IJ Network Tool** Menus

### Items on the Canon IJ Network Tool Screen

The following item is displayed on the Canon IJ Network Tool screen.



#### 1. Printers:

The printer name, status, printer model name, and port name are displayed. A check mark next to the printer in the **Name** list indicates it is set as the default printer. Configuration changes are applied to the selected printer.

### 2. Update

Performs printer detection again. Click this button if the target printer is not displayed.

# >>>> Important

- To change the printer's network settings using IJ Network Tool, it must be connected via a LAN.
- If **No Driver** is displayed for the name, associate the port with the printer.
- ➡ When the Printer Driver Is Not Associated with a Port
- If **Not Found** is displayed for the status, check the followings:
  - The access point is turned on.
  - When using wired LAN, the LAN cable is connected properly.
- If the printer on a network is not detected, make sure that the printer is turned on, then click **Update**. It may take several minutes to detect printers. If the printer is not yet detected, connect the machine and the computer with a USB cable, then click **Update**.
- If the printer is being used from another computer, a screen is displayed informing you of this condition.

### Note

■ This item has the same function as **Refresh** in the **View** menu.

# 3. Configuration...

Click to configure settings of the selected printer.

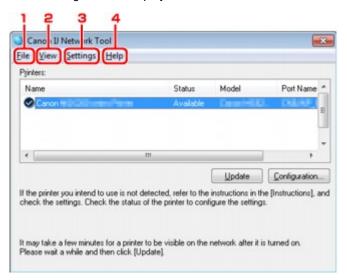
→ Configuration Screen

### Note

You cannot configure a printer that has the status **Not Found**.

#### **Canon IJ Network Tool Menus**

The following menu is displayed from the Canon IJ Network Tool screen.



#### 1. File menu

#### Exit

Exits IJ Network Tool.

#### 2. View menu

#### **Status**

Displays the **Status** screen to confirm the printer connection status and wireless communication status.

→ Status Screen

#### Refresh

Updates and displays the contents of **Printers:** on the **Canon IJ Network Tool** screen to the latest information.

# >>> Important

- To change the printer's network settings using IJ Network Tool, it must be connected via a LAN.
- If **No Driver** is displayed for the name, associate the port with the printer.
- ➡ When the Printer Driver Is Not Associated with a Port
- If Not Found is displayed for the status, check the followings:
  - The access point is turned on.
  - When using wired LAN, the LAN cable is connected properly.
- If the printer on a network is not detected, make sure that the printer is turned on, then select **Refresh**. It may take several minutes to detect printers. If the printer is not yet detected, connect the machine and the computer with a USB cable, then select **Refresh**.
- If the printer is being used from another computer, a screen is displayed informing you of this condition.

# >>> Note

■ This item has the same function as **Update** in the **Canon IJ Network Tool** screen.

#### **Network Information**

Displays the **Network Information** screen to confirm the network settings of the printer and the computer.

Network Information Screen

## **Display Warning Automatically**

Enables or disables automatic display of the instruction screen.

When this menu is selected, the instruction screen is displayed if one or more ports are unavailable for printing.

### 3. Settings menu

### Configuration...

Displays the **Configuration** screen to configure settings of the selected printer.

➡ Configuration Screen



■ This item has the same function as **Configuration...** in the **Canon IJ Network Tool** screen.

#### Associate Port...

Displays the **Associate Port** screen and you can associate a port with the printer.

→ Associate Port Screen

This menu is available when **No Driver** is displayed for the selected printer. Associating a port with the printer enables you to use it.

### Maintenance...

Displays the **Maintenance** screen to revert the network settings of the printer to factory default and to mount the card slot as the network drive.

→ Maintenance Screen

### 4. Help menu

### Instructions

Displays this guide.

#### **About**

Displays the version of IJ Network Tool.

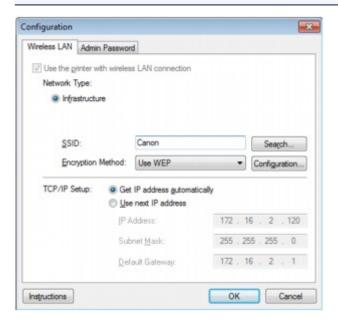
# **Configuration Screen**

You can change the configuration of the printer selected on the **Canon IJ Network Tool** screen. Click the tab to select the sheet to change the settings.

The following screen is the example to change the setting on the Wireless LAN sheet.

### Note

■ This screen is not available depending on the printer you are using.



For details on each sheet, see the following.

- **➡** Wireless LAN Sheet
- **➡** Wired LAN Sheet
- Admin Password Sheet

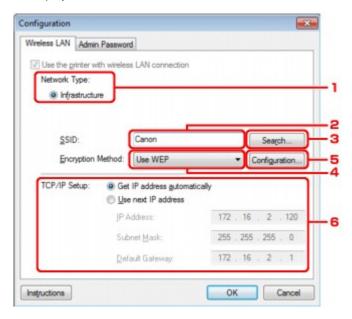
# **Wireless LAN Sheet**

# Note

■ This screen is not available depending on the printer you are using.

Allows you to set the printer with wireless LAN connection.

To display the Wireless LAN sheet, click the Wireless LAN tab on the Configuration screen.



### 1. Network Type:

#### Infrastructure

Connects the printer to the wireless LAN with an access point.

#### 2. SSID:

The SSID of the wireless LAN is displayed. As the initial settings, the unique value is displayed.

#### Note

■ Enter the same SSID that the access point is configured to use. The SSID is case-

### 3. Search...

The **Search** screen is displayed to select an access point to connect to.

**⇒** Search Screen



■ When IJ Network Tool runs over a LAN, the button is grayed out and cannot be selected. Connect the printer and the computer with a USB cable temporarily to change the settings.

### 4. Encryption Method:

Select the encryption method used over the wireless LAN.

### Do not use

Select to disable encryption.

#### **Use WEP**

Transmission is encrypted using a WEP key you specified.

If a WEP key has not been set, the **WEP Details** screen is displayed automatically. To change WEP settings set before, click **Configuration...** to display the screen.

➡ Changing the WEP Detailed Settings

#### Use WPA/Use WPA2

Transmission is encrypted using a WPA or WPA2 key you specified.

The security has been strengthened more than WEP.

If a WPA or WPA2 key has not been set, the **Authentication Type Confirmation** screen is displayed automatically. To change WPA or WPA2 settings set before, click **Configuration...** to display the **WPA Details** screen or **WPA2 Details** screen.

Changing the WPA or WPA2 Detailed Settings

### 5. Configuration...

The detailed settings screen is displayed. The WEP, the WPA, or the WPA2 key selected in **Encryption Method:** can be confirmed and changed.

### For details on WEP setting:

➡ Changing the WEP Detailed Settings

#### For details on WPA or WPA2 setting:

➡ Changing the WPA or WPA2 Detailed Settings

# 6. TCP/IP Setup:

Sets the IP address of the printer to be used over the LAN. Set a value appropriate for your network environment.

#### Get IP address automatically

Select this option to use an IP address automatically assigned by a DHCP server. DHCP server functionality must be enabled on your wireless LAN router or access point.

#### Use next IP address

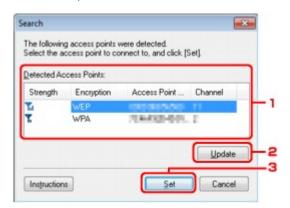
If no DHCP server functionality is available in your setup where you use the printer or you want to use a particular IP address, select this option to use a fixed IP address.

# Search Screen

### Note

■ This screen is not available depending on the printer you are using.

The access points detected are listed.



#### 1. Detected Access Points:

The signal strength from the access point, encryption type, name of access point, and the radio channel can be confirmed.

# Important

If you connect to a network that is not protected with security measures, there is a risk of disclosing data such as your personal information to a third party.

### Note

Signal strength is displayed as follows.

Good
Fair
Poor

Type of encryption is displayed as follows.

Blank: No encryption WEP: WEP is set WPA: WPA is set WPA2: WPA2 is set

## 2. Update

Click to update the list of access points when your target access point is not detected. If the target access point is set to the stealth mode, click **Cancel** to return to the previous screen and enter the access point's Service Set Identifier in **SSID**: on the **Wireless LAN** sheet.

**➡** Wireless LAN Sheet

#### Note

■ When detecting your target access point, make sure that the access point is turned on.

## 3. Set

Click to set the access point's SSID in SSID: on the Wireless LAN sheet.

## Note

■ The **WEP Details** screen, the **WPA Details** screen, or the **WPA2 Details** screen appears if the selected access point is encrypted. In this case, configure the details to use the same encryption settings set to the access point.

Access points that cannot be used by this machine (including those configured to use different encryption methods) are displayed grayed out and cannot be configured.

# **WEP Details Screen**

# Note

■ This screen is not available depending on the printer you are using.

Specify the printer WEP settings.



# >>> Note

■ When changing the password (WEP key) of the printer, the same change must be made to the password (WEP key) of the access point.

# 1. WEP Key:

Enter the same key as the one set to the access point.

The number of characters and character type that can be entered differ depending on the key length and key format.

		Key Length	Key Length	
		64bit	128bit	
Key Format	ASCII	5 characters	13 characters	
	Hexadecimal (Hex)	10 digits	26 digits	

# 2. Key Length:

Select either 64bit or 128bit.

# 3. Key Format:

Select either ASCII or Hex.

# 4. Key ID:

Select the Key ID (index) set to the access point.

#### 5. Authentication:

Select the authentication method to authenticate the printer's access to the access point. Select **Auto** or **Open System** or **Shared Key**.

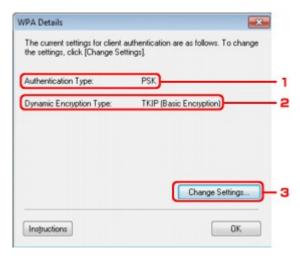
# **WPA Details Screen**

# Note

■ This screen is not available depending on the printer you are using.

Specify the printer WPA settings.

The value displayed on the screen differs depending on the present settings.



# 1. Authentication Type:

Displays the type of authentication used for client authentication. This machine supports the PSK authentication method.

# 2. Dynamic Encryption Type:

Displays the dynamic encryption method.

## 3. Change Settings...

Displays the Authentication Type Confirmation screen.

**⇒** Authentication Type Confirmation Screen

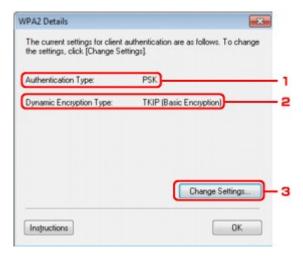
# **WPA2 Details Screen**

# Note

■ This screen is not available depending on the printer you are using.

Specify the printer WPA2 settings.

The value displayed on the screen differs depending on the present settings.



# 1. Authentication Type:

Displays the type of authentication used for client authentication. This machine supports the PSK authentication method.

# 2. Dynamic Encryption Type:

Displays the dynamic encryption method.

## 3. Change Settings...

Displays the Authentication Type Confirmation screen.

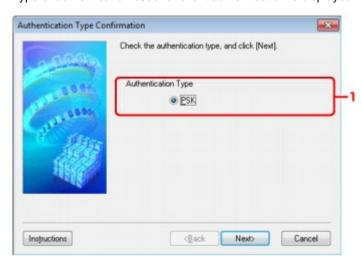
**⇒** Authentication Type Confirmation Screen

# **Authentication Type Confirmation Screen**

# Note

■ This screen is not available depending on the printer you are using.

Type of authentication used for client authentication is displayed.



# 1. Authentication Type Confirmation Screen

Type of authentication used for client authentication is displayed.

## **PSK**

This machine supports the **PSK** authentication method.

This authentication type **PSK** uses a passphrase.

# **PSK: Passphrase and Dynamic Encryption Setup Screen**

# Note

■ This screen is not available depending on the printer you are using.

Enter the passphrase and select the dynamic encryption method.



# 1. Passphrase:

Enter the passphrase set to the access point. The passphrase should be a string of 8 to 63 alphanumeric characters or a 64-digit hexadecimal value.

If you do not know the access point passphrase, refer to the instruction manual provided with the access point or contact its manufacturer.

# 2. Dynamic Encryption Type

Select the dynamic encryption method from either TKIP (Basic Encryption), or AES (Secure Encryption) according to the setting of the access point.

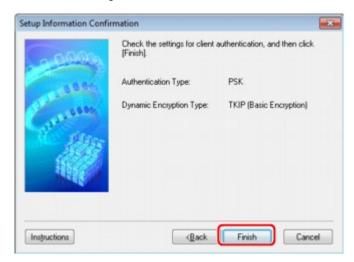
# **Setup Information Confirmation Screen**

# >>>> Note

■ This screen is not available depending on the printer you are using.

Displays the settings used for client authentication.

Confirm the settings and click Finish.



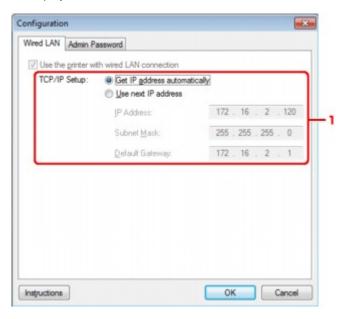
# **Wired LAN Sheet**

## Note

■ This screen is not available depending on the printer you are using.

Allows you to set the printer with wired LAN connection.

To display the Wired LAN sheet, click the Wired LAN tab on the Configuration screen.



# 1. TCP/IP Setup:

Sets the IP address of the printer to be used over the LAN. Set a value appropriate for your network environment.

### Get IP address automatically

Select this option to use an IP address automatically assigned by a DHCP server. DHCP server functionality must be enabled on your router.

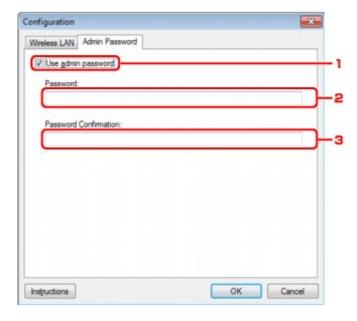
#### Use next IP address

If no DHCP server functionality is available in your setup where you use the printer or you want to use a particular IP address, select this option to use a fixed IP address.

# **Admin Password Sheet**

Set a password for the printer to allow specific people to perform setup and configurations operation.

To display the **Admin Password** sheet, click the **Admin Password** tab on the **Configuration** screen.



# 1. Use admin password

Set a password for the administrator with privileges to set up and change detailed options. To use this feature, select this check box and enter a password.

### 2. Password:

Enter the password to set.

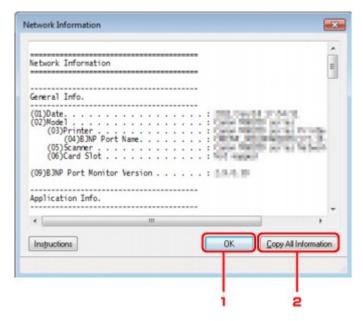
### 3. Password Confirmation:

Enter the password again for confirmation.

# **Network Information Screen**

Display the network information that is set for the printers and the computers.

To display the Network Information screen, select Network Information from the View menu.



# 1. OK

Returns to the Canon IJ Network Tool screen.

# 2. Copy All Information

All network information displayed is copy to the clipboard.

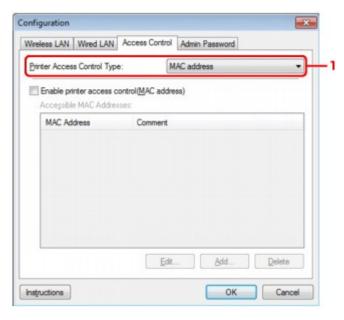
# **Access Control Sheet**

### Note

■ This screen is not available depending on the printer you are using.

You can register the MAC addresses or the IP addresses of computers or network devices to allow access.

To display the Access Control sheet, click the Access Control tab on the Configuration screen.



## 1. Printer Access Control Type:

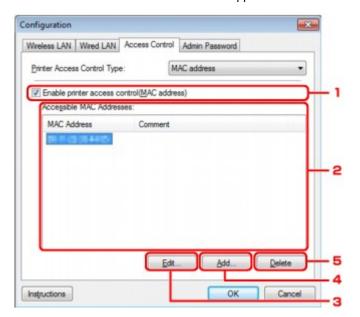
Select the type of access control with which to limit access of computers or network devices to the printer over a network.

The setting items may differ depending on the choice of access control methods.

- ➡ When Selecting MAC address
- ➡ When Selecting IP address

## When Selecting MAC address

The accessible computers or network devices are specified by their MAC addresses. Computers or network devices whose MAC addresses appear on the list are allowed access.



#### 1. Enable printer access control(MAC address)

Select to enable access control to the printer by MAC address.

### Note

■ The two types of access control (i.e., by MAC address and by IP address) can be enabled at the same time.

An access control type is enabled as long as the **Enable printer access control** check box is selected, regardless of the type currently displayed by selecting in **Printer Access Control Type:**.

■ When both access control types are enabled at the same time, a computer or a network device whose address is registered to either list will be allowed access to the printer.

#### 2. Accessible MAC Addresses:

Shows the registered MAC addresses and any comments.

#### 3. Edit...

The **Edit Accessible MAC Address** screen is displayed to edit the settings selected in **Accessible MAC Addresses:**.

➡ Edit Accessible MAC Address Screen/Add Accessible MAC Address Screen

#### 4. Add...

The **Add Accessible MAC Address** screen is displayed to register the MAC address of a computer or a network device from which to access the printer over the network.

# >>>> Important

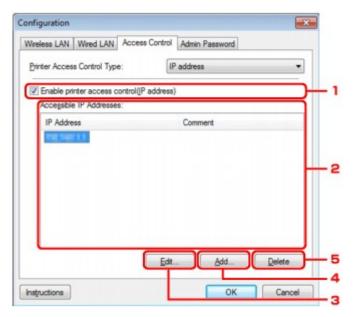
Add the MAC address of all computers or network devices within the network from which to access the printer. The printer cannot be accessed from a computer or a network device that is not on the list.

#### 5. Delete

Deletes the selected MAC address from the list.

### When Selecting IP address

The accessible computers or network devices are specified by their IP addresses. Computers or network devices whose IP addresses appear on the list are allowed access.



# 1. Enable printer access control(IP address)

Select to enable access control to the printer by IP address.



■ The two types of access control (i.e., by MAC address and by IP address) can be enabled at the same time.

An access control type is enabled as long as the Enable printer access control check box is selected, regardless of the type currently displayed by selecting in **Printer Access Control Type:**.

■ When both access control types are enabled at the same time, a computer or a network device whose address is registered to either list will be allowed access to the printer.

## 2. Accessible IP Addresses:

Shows the registered IP addresses and any comments.

#### 3. Edit...

The **Edit Accessible IP Address** screen is displayed to edit the settings selected in **Accessible IP Addresses:**.

➡ Edit Accessible IP Address Screen/Add Accessible IP Address Screen

#### 4. Add...

The **Add Accessible IP Address** screen is displayed to register the IP address of a computer or a network device from which to access the printer over the network.

# >>> Important

- Add the IP address of all computers or network devices within the network from which to access the printer. The printer cannot be accessed from a computer or a network device that is not on the list.
- Up to 16 IP addresses can be registered. IP addresses specified by Range Specification are counted as one address. Use Range Specification when you intend to register 17 or more IP addresses.

#### 5. Delete

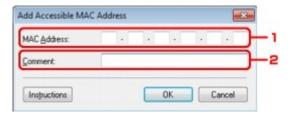
Deletes the selected IP address from the list.

# **Edit Accessible MAC Address Screen/Add Accessible MAC Address Screen**

# >>> Note

■ This screen is not available depending on the printer you are using.

The example screenshots in this section refer to the Add Accessible MAC Address Screen.



#### 1. MAC Address:

Enter the MAC address of a computer or a network device to allow access.

#### 2. Comment:

Optionally enter any information to identify the device, such as the name of the computer.



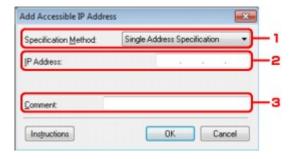
■ Comments will be displayed only on the computer used to enter them.

# Edit Accessible IP Address Screen/Add Accessible IP Address Screen

#### Note

■ This screen is not available depending on the printer you are using.

The example screenshots in this section refer to the Add Accessible IP Address Screen.



#### 1. Specification Method:

Select either Single Address Specification or Range Specification to add the IP address(es).

#### **Single Address Specification**

Specify each IP address separately.

#### **Range Specification**

Specify a range of successive IP addresses.

#### 2. IP Address:

Enter the IP address of a computer or a network device to allow access when you selected **Single Address Specification** in **Specification Method:**.

An IP address is expressed as four values ranging from 0 to 255.

#### Start IP Address:

Enter the first IP address in the range of addresses of the computers or network devices to allow access when you selected **Range Specification** in **Specification Method**:.

An IP address is expressed as four values ranging from 0 to 255.

### **End IP Address:**

Enter the last IP address in the range of addresses of the computers or network devices to allow access when you selected **Range Specification** in **Specification Method:**.

An IP address is expressed as four values ranging from 0 to 255.



■ The Start IP Address: must be a smaller value than the End IP Address:.

#### 3. Comment:

Optionally enter any information to identify the device, such as the name of the computer.

# Important

Comments will be displayed only on the computer used to enter them.

# **Other Screens of IJ Network Tool**

- Canon IJ Network Tool Screen
- Status Screen
- Connection Performance Measurement Screen
- Maintenance Screen
- Network Setup of the Card Slot Screen
- Associate Port Screen
- Network Information Screen

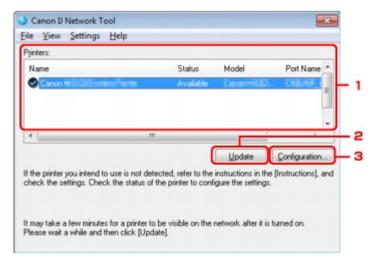
#### Canon IJ Network Tool Screen

This section describes the items and menus displayed on the Canon IJ Network Tool screen.

- Items on the Canon IJ Network Tool Screen
- **➡ Canon IJ Network Tool** Menus

#### Items on the Canon IJ Network Tool Screen

The following item is displayed on the Canon IJ Network Tool screen.



#### 1. Printers:

The printer name, status, printer model name, and port name are displayed. A check mark next to the printer in the **Name** list indicates it is set as the default printer. Configuration changes are applied to the selected printer.

#### 2. Update

Performs printer detection again. Click this button if the target printer is not displayed.

# >>>> Important

- To change the printer's network settings using IJ Network Tool, it must be connected via a LAN.
- If **No Driver** is displayed for the name, associate the port with the printer.
- ➡ When the Printer Driver Is Not Associated with a Port
- If **Not Found** is displayed for the status, check the followings:
  - The access point is turned on.
  - When using wired LAN, the LAN cable is connected properly.
- If the printer on a network is not detected, make sure that the printer is turned on, then click **Update**. It may take several minutes to detect printers. If the printer is not yet detected, connect the machine and the computer with a USB cable, then click **Update**.
- If the printer is being used from another computer, a screen is displayed informing you of this condition.

#### Note

■ This item has the same function as **Refresh** in the **View** menu.

# 3. Configuration...

Click to configure settings of the selected printer.

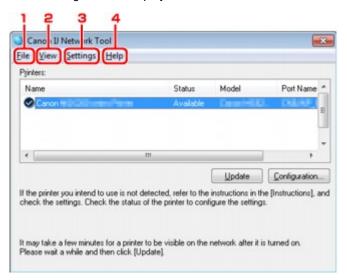
**➡** Configuration Screen

#### Note

You cannot configure a printer that has the status **Not Found**.

#### **Canon IJ Network Tool Menus**

The following menu is displayed from the Canon IJ Network Tool screen.



#### 1. File menu

#### Exit

Exits IJ Network Tool.

#### 2. View menu

#### **Status**

Displays the **Status** screen to confirm the printer connection status and wireless communication status.

→ Status Screen

#### Refresh

Updates and displays the contents of **Printers:** on the **Canon IJ Network Tool** screen to the latest information.

# >>> Important

- To change the printer's network settings using IJ Network Tool, it must be connected via a LAN.
- If **No Driver** is displayed for the name, associate the port with the printer.
- ➡ When the Printer Driver Is Not Associated with a Port
- If Not Found is displayed for the status, check the followings:
  - The access point is turned on.
  - When using wired LAN, the LAN cable is connected properly.
- If the printer on a network is not detected, make sure that the printer is turned on, then select **Refresh**. It may take several minutes to detect printers. If the printer is not yet detected, connect the machine and the computer with a USB cable, then select **Refresh**.
- If the printer is being used from another computer, a screen is displayed informing you of this condition.

#### >>> Note

■ This item has the same function as **Update** in the **Canon IJ Network Tool** screen.

#### **Network Information**

Displays the **Network Information** screen to confirm the network settings of the printer and the computer.

Network Information Screen

#### **Display Warning Automatically**

Enables or disables automatic display of the instruction screen.

When this menu is selected, the instruction screen is displayed if one or more ports are unavailable for printing.

#### 3. Settings menu

#### Configuration...

Displays the **Configuration** screen to configure settings of the selected printer.

➡ Configuration Screen



■ This item has the same function as **Configuration...** in the **Canon IJ Network Tool** screen.

#### Associate Port...

Displays the **Associate Port** screen and you can associate a port with the printer.

→ Associate Port Screen

This menu is available when **No Driver** is displayed for the selected printer. Associating a port with the printer enables you to use it.

#### Maintenance...

Displays the **Maintenance** screen to revert the network settings of the printer to factory default and to mount the card slot as the network drive.

→ Maintenance Screen

#### 4. Help menu

#### Instructions

Displays this guide.

#### **About**

Displays the version of IJ Network Tool.

# **Status Screen**

You can check the printer status and connection performance.

To display the **Status** screen, select **Status** from the **View** menu.

#### >>> Note

- This screen is not available depending on the printer you are using.
- When using wired LAN, **Signal Strength:**, **Link Quality:** and **Advanced Measurement...** are not available.



#### 1. Device Status:

The device status is displayed as Available or Unavailable.

#### 2. Signal Strength:

Indicates the strength of the signal received by the printer, ranging from 0% to 100%.

#### 3. Link Quality:

Indicates the signal quality excluding the noise while communicating, ranging from 0% to 100%.

#### 4. Advanced Measurement...

To examine the connection performance between the printer and the access point or between the printer and the computer.

When you click, the Connection Performance Measurement is displayed.

→ Connection Performance Measurement Screen

# **Connection Performance Measurement Screen**

#### Note

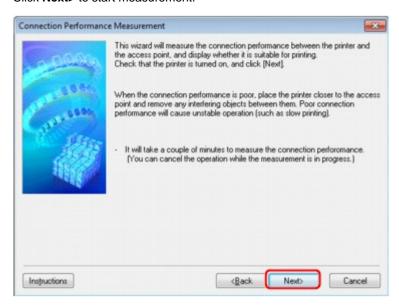
■ This screen is not available depending on the printer you are using.

Displays to execute the connection performance measurement.

- **➡ Connection Performance Measurement** Screen (Initial Screen)
- **➡ Connection Performance Measurement** Screen (Completion Screen)

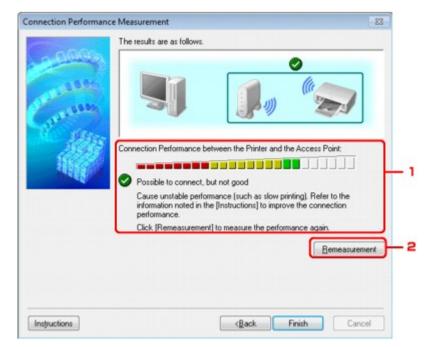
### **Connection Performance Measurement Screen (Initial Screen)**

Click **Next>** to start measurement.



#### **Connection Performance Measurement Screen (Completion Screen)**

Displays when the measurement is finished.



1. Connection Performance between the Printer and the Access Point:

A mark indicates the result of the connection performance measurement between the printer and the access point.

School connection performance

1. Unstable connection performance

S: Cannot connect

?: Measurement is canceled, or cannot measure

#### 2. Remeasurement

Measures the connection performance again.

# Note

■ If any messages appear on **Overall Network Performance:**, move the machine and access point as instructed to improve the performance.

# **Maintenance Screen**

Displays to perform Setting Initialization and Network Setup of the Card Slot.

To display the Maintenance screen, select Maintenance from the Settings menu.



#### 1. Setting Initialization

Reverts all the network settings of the printer to factory default. Click **Initialize** to display the **Initialize Settings** screen and click **Yes** to initialize the network settings of the printer. Do not turn off the printer during initialization. Click **OK** when initialization is complete. Performing initialization when connected over wireless LAN will break the connection, so setup with the Setup CD-ROM.

#### 2. Network Setup of the Card Slot



■ This item is not available depending on the printer you are using.

**Status** displays whether the card slot is mapped as a network drive. When you click, the **Network Setup of the Card Slot** is displayed.

Network Setup of the Card Slot Screen

# **Network Setup of the Card Slot Screen**

#### Note

■ This screen is not available depending on the printer you are using.

Displays settings of the card slot and allows you to map a card slot on the network as a network drive on the computer.

Displays when you click **Setup** on the **Maintenance** screen.

- Network Setup of the Card Slot Screen (Setup Screen)
- ➡ Network Setup of the Card Slot Screen (Setup Failed Screen)

## Note

■ You can change the network settings of the printer using IJ Network Tool with USB connection after initializing the LAN settings. To change the network settings using IJ Network Tool, activate the LAN settings in advance.

#### **Network Setup of the Card Slot Screen (Setup Screen)**



#### 1. Drive:

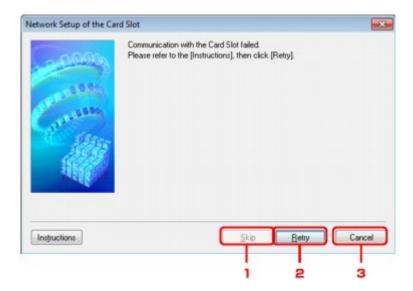
Select the drive letter to assign to the network drive.

#### 2. Update

Reloads the drive letters that are unassigned in **Computer** (**My Computer** in Windows XP) and displays them in the **Drive:** list.

# Network Setup of the Card Slot Screen (Setup Failed Screen)

Display when the network setup of the card slot is failed.



#### 1. Skip

Completes the setup without mapping a network drive to the card slot.

#### 2. Retry

Returns to Network Setup of the Card Slot screen and re-executes the network drive mapping.

#### 3. Cancel

Cancels the card slot setup. When IJ Network Tool is running over LAN, the **Cancel** button is displayed grayed out and cannot be clicked.

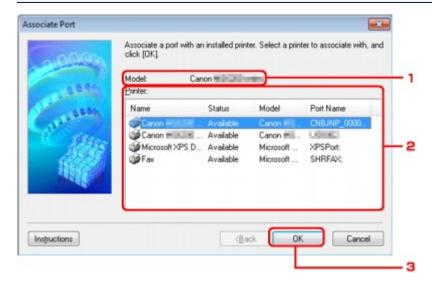
# **Associate Port Screen**

Allows you to associate a created port with a printer driver.

Select the printer for which you want to change the association, then click **OK**.

### Note

■ You cannot print with the printer unless the printer driver is associated with the port.



#### 1. Model:

Displays the name of device specified as a destination port. It is blank if the name of device is not detected.

#### 2. Printer:

Displays the printer driver installed in the computer. Select the printer for which you want to change the association.

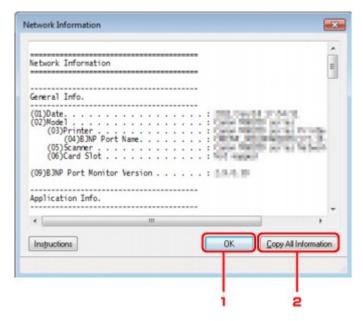
#### 3. OK

Performs association.

# **Network Information Screen**

Display the network information that is set for the printers and the computers.

To display the Network Information screen, select Network Information from the View menu.



## 1. OK

Returns to the Canon IJ Network Tool screen.

# 2. Copy All Information

All network information displayed is copy to the clipboard.

# **Appendix for Network Communication**

- Using the Card Slot over a Network
- When the Printer Driver Is Not Associated with a Port
- About Technical Terms
- Restrictions
- About Firewall

# **Using the Card Slot over a Network**

#### Note

- This screen is not available depending on the printer you are using.
- ➡ Mounting the Card Slot as the Network Drive
- Restrictions on Card Slot Use over a Network

#### Mounting the Card Slot as the Network Drive

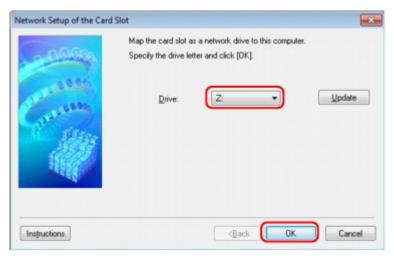
The card slot must be mounted to use it over a network.

To mount the card slot as the network drive, follow the procedure below.

- 1. Insert a memory card into the card slot of the machine.
- 2. Start up IJ Network Tool.
  - ➡ Starting up IJ Network Tool
- 3. Select the machine in Printers:.
- 4. Select Maintenance on the Settings menu.
- 5. Click Setup.

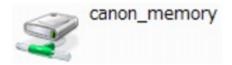


6. Specify the drive letter, then click **OK**.



7. Make sure that the card slot is mounted.

When the card slot is mounted, the following icon appears on **Computer** (or **My Computer**).



#### **Restrictions on Card Slot Use over a Network**

- The card slot can be shared by multiple computers, if the machine is connected to a network.
   Multiple computers can read files from a memory card in the card slot at the same time.
   However, while one computer is writing a file into a memory card, other computers cannot access the same file.
- If your computer joins a domain, the card slot may not be mounted as the network drive.
- If you use the memory card stored the large size files or many files, a large amount of card access may be generated. In this case, the operation in the memory card may be impossible or slow. Operate after the **Access** lamp of the machine is lit.
- When you access the network drive for the card slot over the network, file names consisting of
  eight or less lowercase letters (not including its extension) may be shown in uppercase.
   For example, a file name such as "abcdefg.doc" will be "ABCDEFG.DOC", while a name such as
  "AbcdeFG.doc" will appear the same.
- The file is not actually renamed, but merely appears to be changed.
- When you enable a memory card in the card slot of the machine to be writable only from a USB-connected computer, you cannot access the network drive of the card slot. On the other hand, when you enable it to be writable only from a LAN-connected computer, the card slot is not detected via USB. Make sure that the card slot setting is selected properly according to your connection method.
  - To read files from a memory card via USB and over a network, disable the function to write files to a memory card from a computer. You cannot write files to a memory card in either way with this setting.
- When you enable a memory card in the card slot of the machine to be writable only from a LANconnected computer, you can write files to a memory card from a computer connected to a
  network. Note that it may increase the risk that the data on the memory card is infected by
  computer viruses or accessed illegally.
  - It is recommended to use the access control function of the machine or connect to the Internet via a router. For information on using a router, contact your Internet service provider or a network device manufacturer.
- If you write files to a memory card over a network when IJ Network Scanner Selector EX is not running, the Date Modified of the files may not be proper. Make sure to start up IJ Network Scanner Selector EX before you write files to a memory card over the network. Refer to "IJ Network Scanner Selector EX Menu and Setting Screen" for your model from the Home of the Online Manual for details.

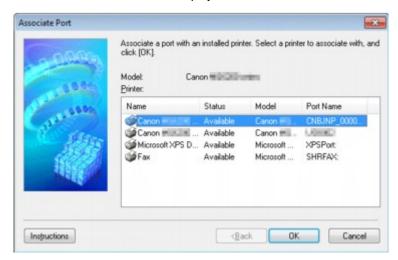
## When the Printer Driver Is Not Associated with a Port

If **No Driver** is displayed for the printer's name on the **Canon IJ Network Tool** screen, the printer driver is not associated with a created port.

To associate a port with a printer driver, follow the procedure below.

- 1. Start up IJ Network Tool.
  - → Starting up IJ Network Tool
- 2. Select the printer displayed as No Driver on Name.
- 3. Select Associate Port... on the Settings menu.

The Associate Port screen is displayed.



4. Select a printer to associate with a port.

The list of the printers that the printer driver is installed is displayed at **Printer**: on the **Associate Port** screen. Select a printer to associate with a created port.

5. Click OK.

## **About Technical Terms**

In this section, technical terms used in the manual are explained.

- **➡** A
- **⇒**B
- **⇒**C
- **⇒**D
- ⇒F
- **⇒**
- ⇒K
- -
- **→**M
- **→** O
- **⇒**P
- **⇒**R
- ⇒S ⇒T
- ⇒U
- **→**W

#### Α

#### Access Point

A wireless transceiver or base station that receives information from wireless clients/the machine and rebroadcasts it. Required in an infrastructure network.

#### Ad-hoc

Client computer and machine setting where wireless communication occurs on a peer-topeer basis, i.e., all clients in with the same SSID/network name communicate directly with each other. No access point is required. This machine does not support ad-hoc communication.

#### Admin Password

Administration password in IJ Network Tool to restrict access to network users. It must be entered to access the printer and change printer settings.

When the printer's network settings are factory default, the admin password does not have to been entered.

### AES

An encryption method. It is optional for WPA. Strong cryptographic algorithm adopted within U.S. government organizations for information processing.

#### Authentication Method

The method that an access point uses to authenticate a printer through a wireless LAN. The methods are agreeable each other.

When using WEP as an encryption method, the authentication method is able to fix to **Open System** or **Shared Key**.

For WPA/WPA2, authentication method is PSK.

#### • Auto

The printer automatically changes its authentication method to match the access point.

#### Open System

In this authentication method, the communication partner is authenticated without using WEP key even if **Use WEP** is selected.

Shared Key

In this authentication method, the communication partner is authenticated using the WEP key that was set for encryption.

#### В

#### • Bonjour

A service built into Mac OS X operating system to detect the connectable devices on a network automatically.

#### C

#### Channel

Frequency channel for wireless communication. In the infrastructure mode, the channel is automatically adjusted to match that set to the access point. This machine supports channels 1 to 13. Note that the number of channels that can be used for your wireless LAN varies depending on the region or country.

#### D

#### Default Gateway

A relay device to connect to another network such as a router or a computer.

#### DHCP server functionality

The router or the access point assigns an IP address automatically whenever the printer or the personal computer on a network starts up.

#### DNS server

A server that converts device names into IP addresses. When specifying IP addresses manually, specify the addresses of both a primary and a secondary server.

#### F

#### Firewall

It is a system that prevents an unlawful computer access in the network. To prevent, you can use the firewall function of a broadband router, the security software installed in the computer, or operation system for computer.

#### ī

#### IEEE 802.11b

International standard for wireless LAN using the 2.4 GHz frequency range with a throughput of up to 11 Mbps.

#### • IEEE 802.11g

International standard for wireless LAN using the 2.4 GHz frequency range with a throughput of up to 54 Mbps. Compatible with 802.11b.

#### • IEEE 802.11n

International standard for wireless LAN using the 2.4 GHz and 5 GHz frequency ranges. Even when using two or more antennas simultaneously or obtaining a bigger transfer rate than before by using multiple communication channels at the same time, the transmission speed may be influenced by the connected apparatus.

At the maximum transfer rate of 600 Mbps, it is possible to communicate with multiple computer terminals within a dozen or so metre radius.

Compatible with 802.11b and 802.11g.

#### Infrastructure

Client computer and machine setup where all wireless communications pass through an access point.

#### IP Address

A unique number with four parts separated by dots. Every network device that is connected to the Internet has an IP address. Example: 192.168.0.1

An IP address is usually assigned by an access point or a DHCP server of the router automatically.

#### IPv4/IPv6

They are internetwork-layer protocol used on the internet. IPv4 uses 32-bit addresses and IPv6 uses 128-bit addresses.

#### K

#### Key Format

Select either **ASCII** or **Hex** as the WEP key format. The character that can be used for the WEP key differs depending on the selected key formats.

- ASCI
  - Specify with a 5 or 13-character string that can include alphanumeric and underscore "\_" characters. It is case-sensitive.
- Hex
   Specify a 10-digit or 26-digit string that can contain hexadecimal (0 to 9, A to F, and a to f).

#### Key Length

Length of the WEP key. Select either 64 bits or 128 bits. Longer key length allows you to set a more complex WEP key.

#### L

#### Link Quality

The status of connection between the access point and the printer excluding noise (interference) is indicated with a value from 0 to 100%.

#### • LPR

A platform-independent printing protocol used in TCP/IP networks. It is not supported bidirectional communication.

#### M

#### MAC Address

Also known as the physical address. A unique and permanent hardware identifier that is assigned to network devices by its manufacturer. MAC addresses are 48 bits long and are written as a hexadecimal number separated by colons, i.e., 11:22:33:44:55:66.

#### 0

#### Operation Status

Indicates the status on whether the printer can be used.

#### P

#### Proxy server

A server that links a LAN-connected computer to the Internet. When using a proxy server, specify the address and the port number of the proxy server.

#### PSK

#### R

#### Router

A relay device to connect to another network.

#### S

#### Signal Strength

The strength of the signal received by the printer from the access point is indicated with a value from 0 to 100%.

#### SSID

Unique label for wireless LAN. It is often represented such as a network name or an access point name.

SSID distinguishes one wireless LAN from another to prevent interference.

The printer and all clients on a wireless LAN must use the same SSID in order to communicate with each other. The SSID can be up to 32 characters long, and is made up of alphanumeric characters. The SSID may also be referred to by its network name.

#### Stealth

In the stealth mode, an access point hides itself by not broadcasting its SSID. The client must specify the SSID set to the access point to detect it.

#### Subnet Mask

IP address has two components, the network address and the host address. Subnet Mask used to calculate the Subnet Mask address from the IP address. A Subnet Mask is usually assigned by an access point or a DHCP server of the router automatically.

Example:

IP Address: 192.168.127.123 Subnet Mask: 255.255.255.0

Subnet Mask Address: 192.168.127.0

#### Т

#### • TCP/IP

Suite of communications protocols used to connect hosts on the Internet or the LAN. This protocol allows different terminals to communicate with each other.

#### • TKIP

An encryption protocol employed by WPA/WPA2.

#### U

#### • USB

Serial interface designed to enable you to "hot-swap" devices, i.e., by plugging and unplugging them without turning off the power.

#### W

#### WCN (Windows Connect Now)

Users running Windows Vista or later can obtain the setting information directly via wireless network (WCN-NET).

#### WEP/WEP Key

An encryption method employed by IEEE 802.11. Shared security key used to encrypt and decrypt data sent over wireless networks. This printer supports key length of 64 bits or 128 bits, key format of ASCII code or Hexadecimal, and key number of 1 to 4.

#### • Wi-Fi

International association that certifies interoperability of wireless LAN products based on the IEEE 802.11 specification.

This machine is a Wi-Fi authorized product.

#### Wireless LAN

A network that, instead of being connected by physical wires, is connected by a wireless technology, such as Wi-Fi.

#### • WPA

Security framework announced by the Wi-Fi Alliance in October 2002. The security has been strengthened more than WEP.

- Authentication
  - WPA defines the following authentication methods: PSK that can be used without an authentication server, plus WPA-802.1x that do require an authentication server. This machine supports WPA-PSK.
- Passphrase

This encrypted key is used to perform WPA-PSK authentication. The passphrase should be a string of 8 to 63 alphanumeric characters or a 64-digit hexadecimal value.

#### • WPA2

Security framework released by the Wi-Fi Alliance in September 2004 as a later version of WPA. Provides a stronger encryption mechanism through Advanced Encryption Standard (AES).

- Authentication
  - WPA2 defines the following authentication methods: PSK that can be used without an authentication server, plus WPA2-802.1x that do require an authentication server. This machine supports WPA2-PSK.
- Passphrase

This encrypted key is used to perform WPA2-PSK authentication.

The passphrase should be a string of 8 to 63 alphanumeric characters or a 64-digit hexadecimal value.

#### • WPS (Wi-Fi Protected Setup)

WPS is a standard for easy and secure establishment of a wireless network.

There are 2 primary methods used in the Wi-Fi Protected Setup:

PIN entry: a mandatory method of setup for all WPS certified devices

Push button configuration (PBC): an actual push button on the hardware or through a simulated push button in the software.

# **Restrictions**

If you use a printer over the wireless LAN, the printer may recognize nearby wireless systems, you should set a network key (WEP, WPA, or WPA2) to the access point to encrypt wireless transmission. Wireless communication with a product that does not comply with the Wi-Fi standard cannot be guaranteed.

Connecting with too many computers may affect the printer performance, such as printing speed.

### **About Firewall**

A firewall is a function of the security software installed in the computer or operation system for computer, and is a system that is designed to prevent unauthorized access to a network.

#### Precautions When a Firewall Function is Enabled

- A firewall function may limit communications between a printer and a computer. This may disable printer setup and communications.
- During the printer setup, you may be prompted to enable or disable communications, depending on the firewall function of the security software or operation system. If so, choose to enable communications
- When using IJ Network Tool, you may be prompted to enable or disable communications, depending on the firewall function of the security software. If so, choose to enable communications.
- If you cannot set up the printer, temporarily disable the firewall function of the security software or operation system.

# >>> Important

- If you disabled the firewall function, disconnect your network from the Internet.
- Some applications (like the network configuration software) override firewall settings. Check the
  application's settings beforehand.
- If the printer you use is set to **Get IP address automatically**, the IP address changes every time the printer connects to the network. This may disable printer setup and communications, depending on the firewall settings. In this case, either change the firewall settings or assign a fixed IP address to the printer. An IP address can be set using IJ Network Tool.
  - ➡ Changing the Settings in the Wireless LAN Sheet
  - → Changing the Settings in the Wired LAN Sheet

When assigning a fixed IP address to the printer, you will need to specify an IP address with which the computer can communicate.

#### Note

■ For the operation system firewall settings or the security software firewall settings, refer to the instruction manual of the computer or software, or contact its manufacturer.

# **Tips for Ensuring Optimal Printing Quality**

- Useful Information about Ink
- Key Points to Successful Printing
- Be Sure to Make Paper Settings after Loading Paper
- Canceling a Print Job
- Key to Enjoying Consistent Printing Quality
- Precautions for Safe Transport of the Machine

# **Useful Information about Ink**

# How is ink used for various purposes other than printing?

Ink may be used for purposes other than printing. Ink is not only used for printing, but also for cleaning the print head to maintain the optimal printing quality.

The machine has the function to automatically clean the ink jet nozzles to prevent clogging. In the cleaning procedure, ink is pumped out from the nozzles. Used ink for nozzle cleaning is limited to a small amount.

# Does black-and-white printing use color ink?

Black-and-white printing may use ink other than black ink depending on the type of printing paper or the settings of the printer driver. So, color ink is consumed even when printing in black-and-white.

# **Key Points to Successful Printing**

# Check the machine status before printing!

Is the print head OK?

If a print head nozzle is clogged, print will be faint and papers will be wasted. Print the nozzle check pattern to check the print head.

- → Maintenance Procedure
- Is the inside of the machine smeared with ink?

After printing large quantities of paper or performing borderless printing, the area where papers go through may get smeared with ink. Clean the inside of your machine with Bottom Plate Cleaning.

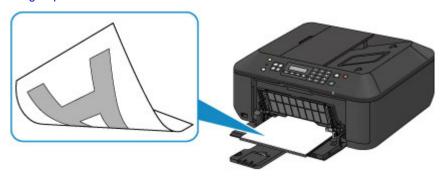
→ Cleaning the Inside of the Machine (Bottom Plate Cleaning)

# Check how to load the paper correctly!

Is the paper loaded in the correct orientation?

To load paper in the front tray, load paper WITH THE PRINTING SIDE FACING DOWN.

**➡** Loading Paper



Is the paper curled?

The curled paper causes paper jam. Flatten the curled paper, then reload it.

→ "Load the paper after correcting its curl." in Paper Is Smudged/Printed Surface Is Scratched

# Be Sure to Make Paper Settings after Loading Paper

If the media type setting is not the one for the loaded paper, printing results may not be satisfactory. After loading paper, be sure to select the appropriate media type setting for the loaded paper.

➡ Print Results Not Satisfactory

There are various types of paper: paper with special coating on the surface for printing photos with optimal quality and paper suitable for documents.

Each media type has specific preset settings, such as how ink is used and sprayed, distance from nozzles, etc., so that you can print on that type with optimal image quality.

This allows you to print with the settings best suited for the loaded media type just by selecting that media type.

# **Canceling a Print Job**

**Never press the ON button!**If you press the **ON** button while printing is in progress, the print data sent from the computer queues in the machine and you may not be able to continue to print.

Press the **Stop** button to cancel printing.

# **Key to Enjoying Consistent Printing Quality**

The key to printing with the optimal printing quality is to prevent the print head from drying or clogging. Always observe the following rules for optimal printing quality.

## Never disconnect the power plug until the power is turned off!

If you press the **ON** button to turn off the power, the machine caps the print head (nozzles) automatically to prevent from drying. If you disconnect the power plug from the wall outlet before the **POWER** lamp is turned off, the print head will not be capped properly and this will cause drying or clogging.

When disconnecting the power plug, make sure that the POWER lamp is not lit.

Notice for Unplugging the Power Cord

# Important

If the power plug is disconnected, the date/time settings will be reset and all documents stored in the machine's memory will be lost. Send or print a necessary document, or save it on a USB flash drive before disconnecting the power plug.

# Print periodically!

Just as the tip of a felt pen becomes dry and unusable if it has not been used for a long time, even if it is capped, the print head too, may become dried or clogged if the machine has not been used for a long time.

We recommend you to use the machine at least once a month.



Depending on the type of paper, ink may blur if you trace the printed area with a highlight pen or paint-stick, or bleed if water or sweat comes in contact with the printed area.

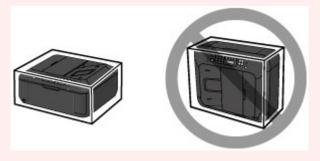
# **Precautions for Safe Transport of the Machine**

When relocating the machine, make sure of the following.

#### >>> Important

#### When sending the machine for repair

- Pack the machine in a sturdy box so that it is placed with its bottom facing down, using sufficient protective material to ensure safe transport.
- With the FINE cartridge left installed in the machine, press the ON button to turn off the power. This allows the machine to automatically cap the print head, thus preventing it from drying.
- After packing, do not tilt the box containing the machine or turn it on its side or upside down. Doing so may cause the ink to leak during transport and cause damage to the machine.
- When a shipping agent is handling transport of the machine, have its box marked "THIS SIDE UP" to keep the machine with its bottom facing down. Mark also with "FRAGILE" or "HANDLE WITH CARE".



- 1. Turn the machine off.
- 2. Confirm that the **POWER** lamp is off and unplug the machine.
  - Notice for Unplugging the Power Cord

# >>> Important

- Do not unplug the machine while the POWER lamp is lit or flashing green, as it may cause malfunction or damage to the machine, making the machine unable to print.
- **3.** Retract the paper output support, then close the paper output tray. Retract the paper support with the output tray extension closed.
- 4. Close the front cover.
- **5.** Disconnect the printer cable from the computer and from the machine, then disconnect the power plug from the machine.
- **6.** Use adhesive tape to secure all the covers on the machine to keep them from opening during transportation. Then pack the machine in the plastic bag.
- **7.** Attach the protective material to the machine when packing the machine in the box.

# Legal Limitations on Use of Your Product and Use of Images

It may be unlawful to make copies of, scan, print, or use reproductions of the following documents. The list provided is non-exhaustive. When in doubt, check with a legal representative in your jurisdiction.

- Paper money
- Money orders
- Certificates of deposit
- Postage stamps (canceled or uncanceled)
- Identifying badges or insignias
- Selective service or draft papers
- Checks or drafts issued by governmental agencies
- Motor vehicle licenses and certificates of title
- Traveler's checks
- Food stamps
- Passports
- Immigration papers
- Internal revenue stamps (canceled or uncanceled)
- Bonds or other certificates of indebtedness
- Stock certificates
- Copyrighted works/works of art without permission of copyright owner

# **Specifications**

# **General Specifications**

	4900* (horizontal) v 1200 (vortical)	
Printing resolution (dpi)	4800* (horizontal) x 1200 (vertical)  * Ink droplets can be placed with a pitch of 1/4800 inch at minimum.	
	This droplets can be placed with a pitch of 1/4600 inch at minimum.	
	USB Port:	
	Hi-Speed USB *1	
Interface	USB Flash Drive Port:	
	Bluetooth v2.0 (Option) *2*3	
	USB flash drive	
	LAN Port:	
	Wireless LAN: IEEE802.11n/IEEE802.11g/IEEE802.11b *4	
	*1 A computer that complies with Hi-Speed USB standard is required. Since the Hi-Speed USB interface is fully upwardly compatible with USB 1.1, it can be used at USB 1.1.	
	*2 Maximum speed: 1.44 Mbps	
	*3 Bluetooth connection is for printing only.	
	*4 Setup possible through Standard setup, WPS (Wi-Fi Protected Setup) or WCN (Windows Connect Now).	
Print width	8 inches/203.2 mm	
Print width	(for Borderless Printing: 8.5 inches/216 mm)	
	Temperature: 5 to 35 °C (41 to 95 °F)	
Operating environment	Humidity: 10 to 90 % RH (no condensation)	
	Trainiary. To to 90 % INTT (no condensation)	
Storage environment	Temperature: 0 to 40 °C (32 to 104 °F)	
Storage environment	Temperature: 0 to 40 °C (32 to 104 °F) Humidity: 5 to 95 % RH (no condensation)	
Storage environment  Power supply	· · · · · · · · · · · · · · · · · · ·	
-	Humidity: 5 to 95 % RH (no condensation)	
-	Humidity: 5 to 95 % RH (no condensation)  AC 100-240 V, 50/60 Hz	
-	Humidity: 5 to 95 % RH (no condensation)  AC 100-240 V, 50/60 Hz  Printing (Copy): Approx. 18 W	
Power supply	Humidity: 5 to 95 % RH (no condensation)  AC 100-240 V, 50/60 Hz  Printing (Copy): Approx. 18 W  Standby (minimum): Approx. 1.1 W *1*2	
Power supply	Humidity: 5 to 95 % RH (no condensation)  AC 100-240 V, 50/60 Hz  Printing (Copy): Approx. 18 W  Standby (minimum): Approx. 1.1 W *1*2  OFF: Approx. 0.3 W *1	
Power supply	Humidity: 5 to 95 % RH (no condensation)  AC 100-240 V, 50/60 Hz  Printing (Copy): Approx. 18 W  Standby (minimum): Approx. 1.1 W *1*2  OFF: Approx. 0.3 W *1  *1 USB connection to PC  *2 The wait time for standby cannot be changed.	
Power supply	Humidity: 5 to 95 % RH (no condensation)  AC 100-240 V, 50/60 Hz  Printing (Copy): Approx. 18 W Standby (minimum): Approx. 1.1 W *1*2  OFF: Approx. 0.3 W *1 *1 USB connection to PC *2 The wait time for standby cannot be changed.  Approx. 18.1 (W) x 15.2 (D) x 7.9 (H) inches	
Power supply  Power consumption	Humidity: 5 to 95 % RH (no condensation)  AC 100-240 V, 50/60 Hz  Printing (Copy): Approx. 18 W  Standby (minimum): Approx. 1.1 W *1*2  OFF: Approx. 0.3 W *1  *1 USB connection to PC  *2 The wait time for standby cannot be changed.	
Power supply  Power consumption	Humidity: 5 to 95 % RH (no condensation)  AC 100-240 V, 50/60 Hz  Printing (Copy): Approx. 18 W  Standby (minimum): Approx. 1.1 W *1*2  OFF: Approx. 0.3 W *1  *1 USB connection to PC  *2 The wait time for standby cannot be changed.  Approx. 18.1 (W) x 15.2 (D) x 7.9 (H) inches  Approx. 458 (W) x 385 (D) x 200 (H) mm  * With the Front Cover retracted.	
Power supply  Power consumption	Humidity: 5 to 95 % RH (no condensation)  AC 100-240 V, 50/60 Hz  Printing (Copy): Approx. 18 W  Standby (minimum): Approx. 1.1 W *1*2  OFF: Approx. 0.3 W *1  *1 USB connection to PC  *2 The wait time for standby cannot be changed.  Approx. 18.1 (W) x 15.2 (D) x 7.9 (H) inches  Approx. 458 (W) x 385 (D) x 200 (H) mm  * With the Front Cover retracted.  Approx. 8.4 kg (Approx. 18.5 lb)	
Power supply  Power consumption  External dimensions	Humidity: 5 to 95 % RH (no condensation)  AC 100-240 V, 50/60 Hz  Printing (Copy): Approx. 18 W  Standby (minimum): Approx. 1.1 W *1*2  OFF: Approx. 0.3 W *1  *1 USB connection to PC  *2 The wait time for standby cannot be changed.  Approx. 18.1 (W) x 15.2 (D) x 7.9 (H) inches  Approx. 458 (W) x 385 (D) x 200 (H) mm  * With the Front Cover retracted.	
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Power supply  Power consumption  External dimensions  Weight	Humidity: 5 to 95 % RH (no condensation)  AC 100-240 V, 50/60 Hz  Printing (Copy): Approx. 18 W Standby (minimum): Approx. 1.1 W *1*2  OFF: Approx. 0.3 W *1  *1 USB connection to PC  *2 The wait time for standby cannot be changed.  Approx. 18.1 (W) x 15.2 (D) x 7.9 (H) inches  Approx. 458 (W) x 385 (D) x 200 (H) mm  * With the Front Cover retracted.  Approx. 8.4 kg (Approx. 18.5 lb)  * With the FINE Cartridges installed.  Total 1792 nozzles (BK 640 nozzles, C/M/Y each 384 nozzles)  A4 or Letter size: max. 30 sheets (20 lb/75 g /m² paper), up to 0.16	
Power supply  Power consumption  External dimensions  Weight  Canon FINE Cartridge	Humidity: 5 to 95 % RH (no condensation)  AC 100-240 V, 50/60 Hz  Printing (Copy): Approx. 18 W  Standby (minimum): Approx. 1.1 W *1*2  OFF: Approx. 0.3 W *1  *1 USB connection to PC  *2 The wait time for standby cannot be changed.  Approx. 18.1 (W) x 15.2 (D) x 7.9 (H) inches  Approx. 458 (W) x 385 (D) x 200 (H) mm  * With the Front Cover retracted.  Approx. 8.4 kg (Approx. 18.5 lb)  * With the FINE Cartridges installed.  Total 1792 nozzles (BK 640 nozzles, C/M/Y each 384 nozzles)  A4 or Letter size: max. 30 sheets (20 lb/75 g /m² paper), up to 0.16 inches/4 mm in height	

# **Copy Specifications**

Multiple copy	max. 99 pages
Intensity adjustment	9 positions, Auto intensity (AE copy)
Reduction/Enlargement	25 % - 400 % (1 % unit)

# **Scan Specifications**

Scanner driver	TWAIN 1.9 Specification/WIA (for Windows 8/Windows 7/Windows Vista/Windows XP)
Maximum scanning size	<b>Platen Glass:</b> A4/Letter, 8.5" x 11.7"/216 x 297 mm <b>ADF:</b> A4/Letter/Legal, 8.5" x 14.0"/216 x 356 mm
Scanning resolution	Optical resolution (horizontal x vertical) max: 1200 x 2400 dpi *1 Interpolated resolution max: 19200 x 19200 dpi *2 *1 Optical Resolution represents the maximum sampling rate based on ISO 14473. *2 Increasing the scanning resolution will limit the maximum possible scanning area.
Gradation (Input/Output)	Gray: 16 bit/8 bit Color: 48 bit/24 bit (RGB each 16 bit/8 bit)

# **Fax Specifications**

Applicable line	Public Switched Telephone Network (PSTN)	
Communication mode	Super G3, G3	
Data compressing system	Black: MH, MR, MMR Color: JPEG	
Modem speed	max. 33.6 kbps (Automatic fallback)	
Transmission speed	Black: Approx. 3 seconds/page at 33.6 kbps (Based on ITU-T No.1 chart for US specifications and Canon FAX Standard chart No.1 for others, both in standard mode.) Color: Approx. 1 minute/page at 33.6 kbps (Based on Canon COLOR FAX TEST SHEET.)	
Gradation	Black: 256 levels Color: 24 bit Full Color (RGB each 8 bit)	
Density adjustment	3 levels	
Memory	Transmission/reception: approx. 50 pages (Based on ITU-T No.1 chart for US specifications and Canon FAX Standard chart No.1 for others, both in standard mode.)	
Fax resolution	Black Standard: 203 pels/inch x 98 lines/inch (8 pels/mm x 3.85 lines/mm)  Black Fine, Photo: 203 pels/inch x 196 lines/inch (8 pels/mm x 7.70 lines/mm)  Black Extra fine: 300 x 300 dpi  Color: 200 x 200 dpi	
Dialing	Automatic dialing - Memory dial (max. 20 destinations) - Group dial (max. 19 destinations) Regular dialing (with Numeric buttons) Automatic redialing Manual redialing (max. 10 destinations)	
Others	Activity report (after every 20 transactions) Sequential broadcasting (max. 21 destinations) Rejected numbers (max. 10 destinations)	

# **Network Specifications**

Communication protocol	TCP/IP
Wireless LAN	Supported Standards: IEEE802.11n/IEEE802.11g/IEEE802.11b

Frequency bandwidth: 2.4 GHz
Channel: 1-11 or 1-13
* Frequency bandwidth and available channels differ depending on country or region.
Transfer speed (Standard value):
IEEE802.11n: max. 150 Mbps
IEEE802.11g: max. 54 Mbps
IEEE802.11b: max. 11 Mbps
* These values are a theoretical maximum transmission speed between the printer and an equivalent network device, and do not indicate the actual transmission speed obtained.
Communication distance: Indoors 164 feet/50 m
* Effective range varies depending on the installation environment and location.
Security:
WEP (64/128 bits)
WPA-PSK (TKIP/AES)
WPA2-PSK (TKIP/AES)
Setup:
Standard setup
WPS (Push button configuration/PIN code method)
WCN (WCN-NET)
Other Features: Administration password

**Minimum System Requirements**Conform to the operating system's requirements when higher than those given here.

# **Windows**

Operating System	Windows 8 Windows 7, Windows 7 SP1 Windows Vista SP1, Vista SP2 Windows XP SP3 32-bit only Refer to the Canon web site for details on operation with Windows RT.
Browser	Internet Explorer 8 or later
Hard Disk Space	3 GB Note: For bundled software installation. The necessary amount of hard disk space may be changed without notice.
CD-ROM Drive	Required
Display	XGA 1024 x 768

# Mac OS

Operating System	Mac OS X v10.6.8 or later
Browser	Safari 5 or later
Hard Disk Space	1.5 GB     Note: For bundled software installation.     The necessary amount of hard disk space may be changed without notice.
CD-ROM Drive	Required
Display	XGA 1024 x 768

# **Mobile Printing Capability**

Apple AirPrint	
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- Windows: Operation can only be guaranteed on a computer with Windows 8, Windows 7, Windows Vista or Windows XP pre-installed.
- Windows: Internet Explorer 7, 8 or 9 is required to install Easy-WebPrint EX. Easy-WebPrint EX for Internet Explorer 9 can be downloaded from the Canon web site.
- Windows: Some functions may not be available with Windows Media Center.
- Windows: .NET Framework 4 or 4.5 must be installed to use the Windows software.
- Windows: XPS Essentials Pack is required to print on Windows XP.
- Mac OS: Hard Disk must be formatted as Mac OS Extended (Journaled) or Mac OS Extended.
- Mac OS: For Mac OS, an internet connection is required during software installation.
- Windows: The TWAIN driver (ScanGear) is based on the TWAIN 1.9 Specification and requires the Data Source Manager bundled with the operating system.

Specifications are subject to change without notice.