

Canon

***i*470D**

Photo Printer

Direct Printing Guide

Contents

Operation Panel Names and Functions

Operation Panel	3
Icons on the LCD	4

Printing Flow 6

Using a Memory Card

Types of Available Memory Cards	8
Inserting a Memory Card	8
Removing a Memory Card	10

Printing a Photograph

Printing an Image List – Print Index	11
Selecting and Printing an Image – Print One	12

Loading Paper..... 15

Using the Photo Viewer 18

Other Useful Functions

Printing According to the Settings Made on the Camera – DPOF Printing	20
Changing the Date Style.....	22
Setting up the Card Slot as the Memory Card Drive of the Computer	23

Printing Photographs Directly from a Digital Camera..... 25

Printing Maintenance

When Printing Becomes Faint or Colors are Incorrect	28
Printing the Nozzle Check Pattern.....	29
Examining the Nozzle Check Pattern	29
Print Head Cleaning	30
Print Head Deep Cleaning	31
Aligning the Print Head	32

Replacing an Ink Tank

Replacing Ink Tanks	34
How Low Ink Setting Works	37

Troubleshooting

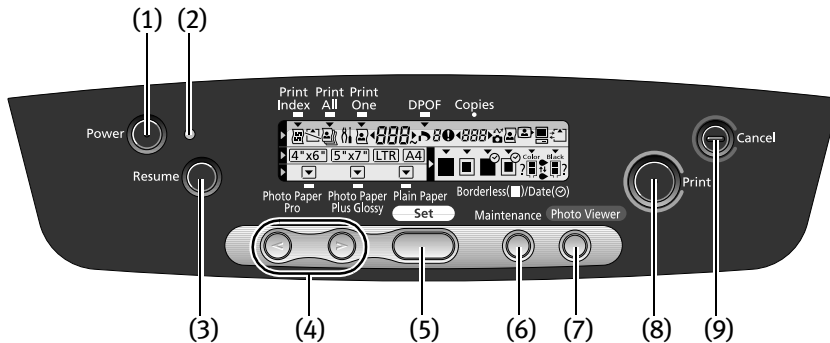
An Error Message is Displayed on the Operation Panel	38
Cannot Print Properly from the Digital Camera	41
An Error Message is Displayed While Using the Photo Viewer.....	42

Index 43

Operation Panel Names and Functions

Names and functions of the controls on the operation panel and meanings of the icons displayed on the LCD are summarized below.

Operation Panel



(1) Power Button

Press to turn the printer on or off.

(2) Power Lamp

Off: the printer is turned off.

Green: the printer is ready to print.

Flashing green: the printer is preparing to print, or is currently printing.

Flashing orange: an error has occurred and the printer is not ready to print.

Flashing orange and green alternately: an error has occurred that may require a service call.

(3) Resume Button

Press this button after resolving a printer problem to resume printing. If this button is pressed during printing, the printer aborts printing.

(4) Cursor Buttons

These buttons are used to select setting items and enter numeric values.

(5) Set Button

Press this button to allow the setting you have just made to take effect and proceed to the next setting item. To return to the previous setting item, keep pressing this button until the desired setting item is displayed.

(6) Maintenance Button

Press this button when you want to perform maintenance such as printing a nozzle check pattern, print head cleaning, and print head alignment. Also press this button when you want to change the date style.

(7) Photo Viewer Button

Press this button to start/exit the Photo Viewer. This button is also used to save the data stored in the memory card on the hard disk of the computer.

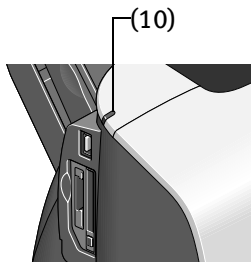
For details about the Photo Viewer, see “Using the Photo Viewer” on page 18.

(8) Print Button

Press this button to start printing according to the settings displayed on the LCD.

(9) Cancel Button

Press this button to cancel printing.

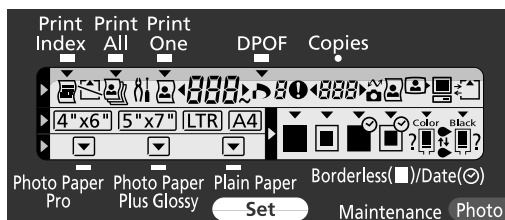


(10) Indicator Lamp



The indicator lamp is lit when memory card reading is enabled and flashes while the memory card is being read.















Important Removing the memory card or turning off the printer while the Indicator Lamp is flashing can damage the data stored in the memory card.

Icons on the LCD



Meanings of the icons displayed on the LCD on the operation panel are as follows:

	Print Index	A list of images stored in the memory card in the card slot is printed, allowing you to check image numbers.
	Print All	All images stored in the memory card in the card slot are printed (one copy per image).

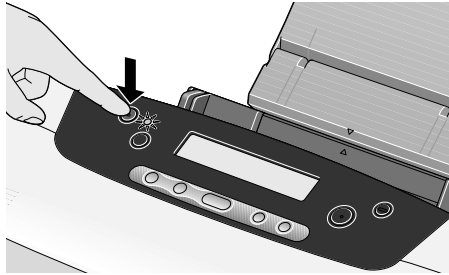
	Print One	The image with the image number you have specified is printed. You can specify a number of copies.
	DPOF	This icon appears when a memory card containing DPOF information is inserted in the card slot. Images are printed according to the DPOF information edited on the digital camera.
	Borderless printing	When Print All , Print One or DPOF is specified, each image is printed without border.
	Bordered printing	When Print All , Print One or DPOF is specified, each image is printed with border.
	Borderless printing with date	When Print All or Print One is specified, each image is printed without border with the date of photographing added.
	Bordered printing with date	When Print All or Print One is specified, each image is printed with border with the date of photographing added.
	Maintenance Mode	This icon appears when the Maintenance button is pressed. Using the cursor buttons, enter the number of the maintenance you want to perform. See “Printing Maintenance” on page 28.
	Remaining ink levels	These icons indicate the remaining levels of color ink and black ink. If the ink volume is low,  is displayed. If the remaining level of either ink is unknown, the “?” mark is displayed beside its ink tank icon. Replace the ink tank and reset the ink counter. Then, the “?” mark will disappear. See “An Error Icon is Displayed on the Operation Panel.” on page 39.
	No memory card/data	This icon is displayed when no memory card is inserted in the card slot. It flashes when the memory card in the card slot has no data that can be printed.
	Error number indication	The number of the error related to the printer or memory card, that occurs when a digital camera is connected, is displayed. See “Troubleshooting” on page 38.
	Digital camera connected	This icon is displayed when a Canon “Bubble Jet Direct” compatible digital camera or digital video camcorder is connected. See “Printing Photographs Directly from a Digital Camera” on page 25.
	Photo Viewer running	This icon is displayed when Photo Viewer is running with the printer connected to the computer with a USB cable. See “Using the Photo Viewer” on page 18.
	Card slot in use	The memory card inserted in the card slot is in use from the computer. To use the printer, start the memory card utility from the computer and stop using the memory card.

Printing Flow

Let's take a look at the procedure for printing images from the memory card inserted in the card slot of the printer.

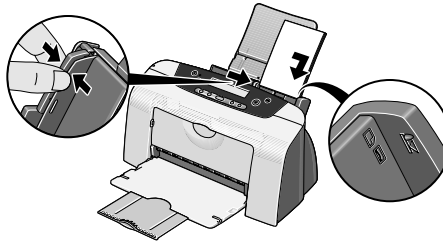
Step 1

Turn on the Printer.



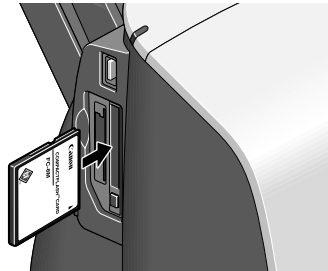
Step 2

Load the paper.



Step 3

Insert the memory card.



Step 4

Make print settings.

Print index



A list of images stored in the memory card in the card slot is printed with an image number added to each image.

Print All



All images stored in the memory card are printed (one copy per image).

Print One



The image with the image number you have specified is printed.

DPOF



This icon appears when the memory card inserted in the card slot contains DPOF information. See “Printing According to the Settings Made on the Camera – DPOF Printing” on page 20.

Specify an image number.

Specify a number of copies.

Select a paper size.

Select a media type.

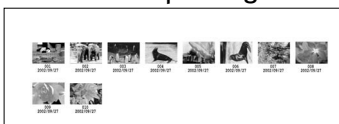
Select “bordered” or “borderless” and select “with date” or “without date.”

Select “bordered” or “borderless”.

Step 5

Start printing.

Index printing



All-image printing



One-image printing

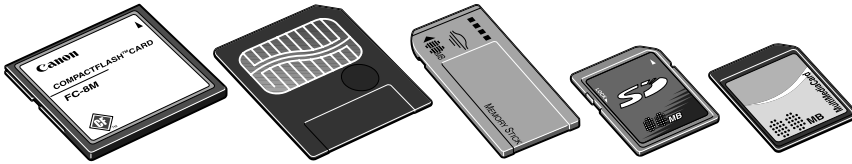


Using a Memory Card

Let's take a look at types of available memory cards and how to insert and remove them.

Types of Available Memory Cards


Types of available memory cards are as follows:



- CompactFlash™ (CF) Card/Microdrive™
* Ready for TYPE I/TYPE II (3.3V or 5V).
- SmartMedia™ Card
* Ready for 3.3V card only (Not ready for 1MB and 2MB cards)
- Memory Stick®
- Secure Digital™ (SD) Card
- MultiMedia™ Card

- Important**
- Images stored in a memory card not supported by the digital camera may fail in loading or damage. For types of memory cards supported by the digital camera, refer to your digital camera user's manual.
 - To format a memory card, use the digital camera. Memory card formats are not compatible with computer-specific formats.
 - Images edited on the computer may result in improper printing.
 - Please use only one type of memory card at a time. If you use more than 2 types of memory cards at the same time, you could lose data or data could be read incorrectly from the cards.

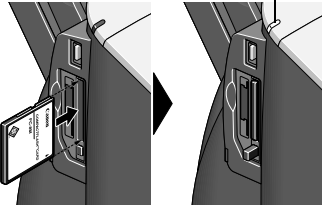
Inserting a Memory Card

-  **Notes**
- When **Read/write mode** is selected in the Memory Card Utility (Windows) or BJ Utility (Macintosh), neither printing nor maintenance can be done. After completion of the operation of the card slot used as the memory card drive of the computer, be sure to select **Read-only mode** again. See “Setting up the Card Slot as the Memory Card Drive of the Computer” on page 23.
 - If you used a computer to edit or process the data stored in the memory card, be sure to print images from the computer. Using the operation panel to print images may result in improper printing.

1 Turn on the printer.

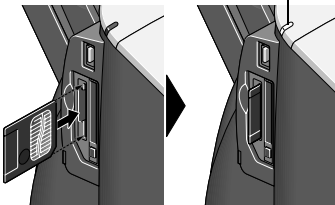
2 Insert the memory card in the card slot.

The Indicator lamp lights.



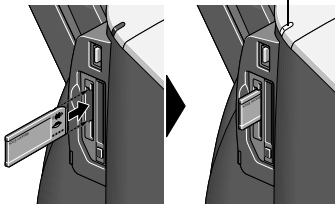
- If you use CompactFlash (CF) card/Microdrive, insert it as far as it will go as shown left.

The Indicator lamp lights.



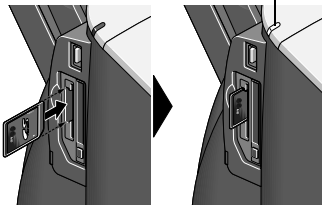
- If you use a SmartMedia card, insert it until it stops with its end projecting as shown left.

The Indicator lamp lights.




- If you use a Memory Stick, insert it until it stops with its end projecting as shown left.

The Indicator lamp lights.



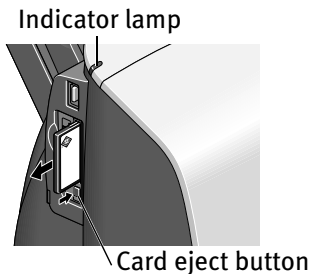
- If you use SD card/MultiMedia card, insert it until it stops with its end projecting as shown left.

Removing a Memory Card

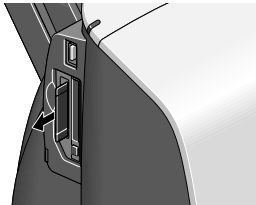
 **Note** If you use the printer and memory card slot as a removable disk drive, follow the instructions for removal of the memory card from the computer. For the procedure, refer to the electronic *User's Guide* on the CD-ROM.

1 Ensure that the Indicator lamp is not flashing, then remove the memory card.

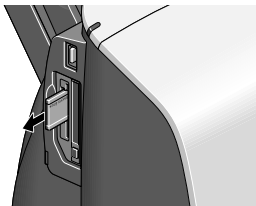
Important Removing the memory card or turning off the printer while the Indicator lamp is flashing can damage the data stored in the memory card.



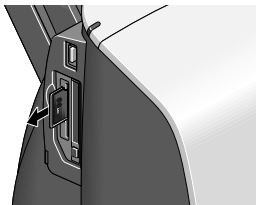
- If you use CompactFlash (CF) card/Microdrive, push the card eject button to remove the card.



- If you use a SmartMedia card, remove the card holding the exposed portion of the card with your fingers.




- If you use a Memory Stick, remove the card holding the exposed portion of the card with your fingers.



- If you use SD card/MultiMedia card, remove the card holding the exposed portion of the card with your fingers.

Printing a Photograph

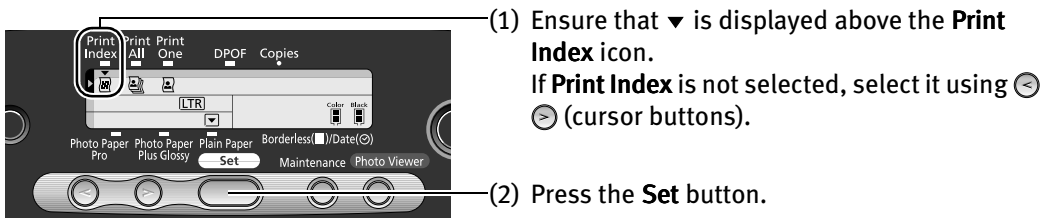
Let's select an image from the images stored on the memory card of the digital camera and print it. First, make an index print to confirm the image number of the image you want to print. Specify the image number of the image you want to print and print the image.

 **Note** The settings made on the Operation Panel will be remembered until they are set again.

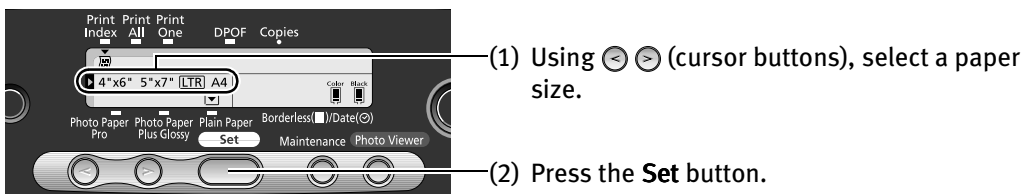
Printing an Image List – Print Index

Make an index print of all images stored on the memory card together with their image numbers.

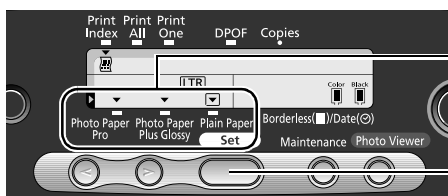
- 1 Turn on the printer.
- 2 Load the paper.
See “Loading Paper” on page 15.
- 3 Insert the memory card in the card slot.
See “Using a Memory Card” on page 8.
- 4 Select Print Index.



- 5 Select a paper size.



6 Select a media type.



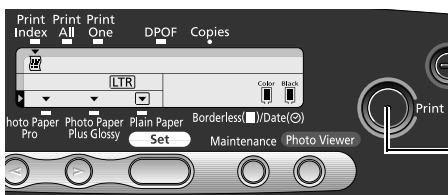
(1) Using ◀ ▶ (cursor buttons), locate ▼ above the type of the printing media.

(2) Press the **Set** button.

7 Start printing.

(1) Confirm the settings.

To modify a setting that has already been made, keep pressing the **Set** button to display the setting.



(2) Press the **Print** button.

All images stored in the memory card are printed as an index print.

Selecting and Printing an Image – Print One

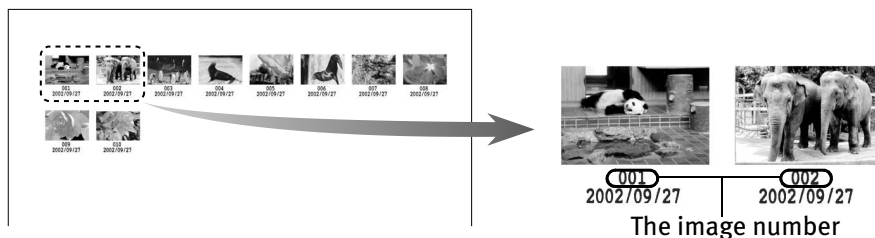
After confirming the images (stored in the memory card) by printing an index, specify the image number of the image you want to print and then print it.

1 Load the paper.

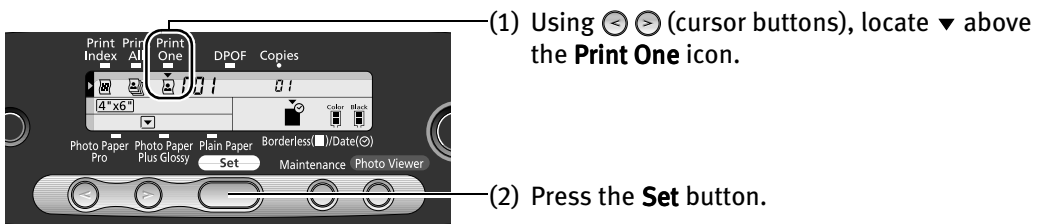
See “Loading Paper” on page 15.

2 Confirm the image number.

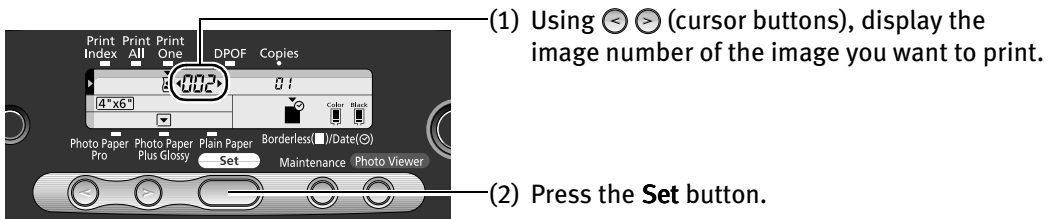
Make an index print following the procedure described in “Printing an Image List – Print Index” and confirm the image number of the image you want to print.



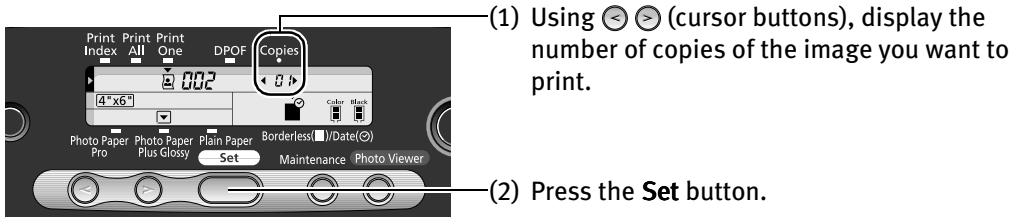
3 Select Print One as a print mode.



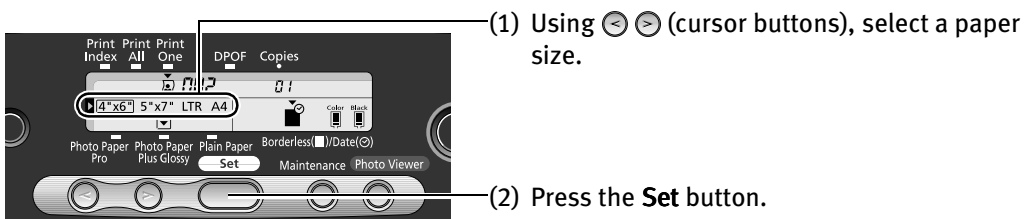
4 Specify the image number of the image you want to print.



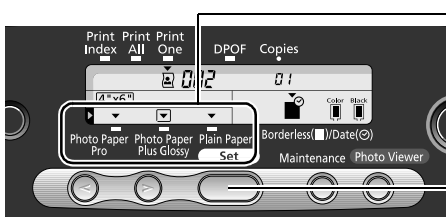
5 Specify a number of copies.



6 Select a paper size.



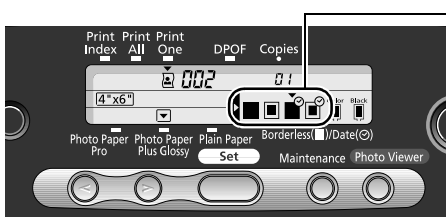
7 Select a media type.



(1) Using < > (cursor buttons), locate ☒ above the type of the printing media.

(2) Press the **Set** button.

8 Determine whether the image is to be printed with or without a border. Also determine whether the image is to be printed with the date added.



(1) Using < > (cursor buttons), select “bordered” or “borderless.” Also select “with date” or “without date.”

☐ : The image is printed without border.

☒ : The image is printed with border.

☐ : The image is printed without border with the date added.

☒ : The image is printed with border with the date added.

Important When **Plain Paper** is selected as a media type, the image cannot be printed without border.

9 Start printing.

(1) Confirm the settings.

To modify the setting made previously, keep pressing the **Set** button to display the setting.

(2) Press the **Print** button.

The specified number of copies of the image with the specified image number will be printed.

Loading Paper

This section describes how to load the paper, select the paper sizes and types that can be set up from the operation panel.

■ Print Media to Avoid

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

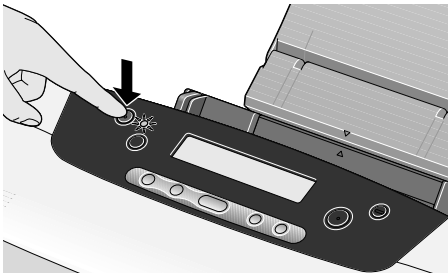
- Folded, curled or wrinkled paper
- Damp paper
- Excessively thin paper (less than 64 gsm or 17 lb)
- Excessively thick paper* (more than 105 gsm or 28 lb)
*non-Canon branded paper
- Picture postcards
- Postcards affixed with photos or stickers
- Any type of paper with holes (such as loose-leaf)

■ Loading the Print Media


In this example, description is provided using Photo Paper Plus Glossy 4" x 6"/101.6 x 152.4 mm in your printer.

- Refer to “Media Types for Card Direct Printing” on page 17 for compatible paper.

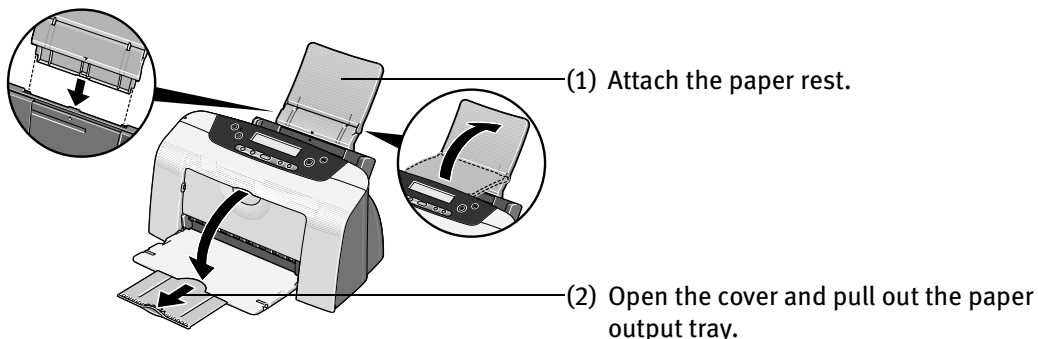
1 Turn on the printer.



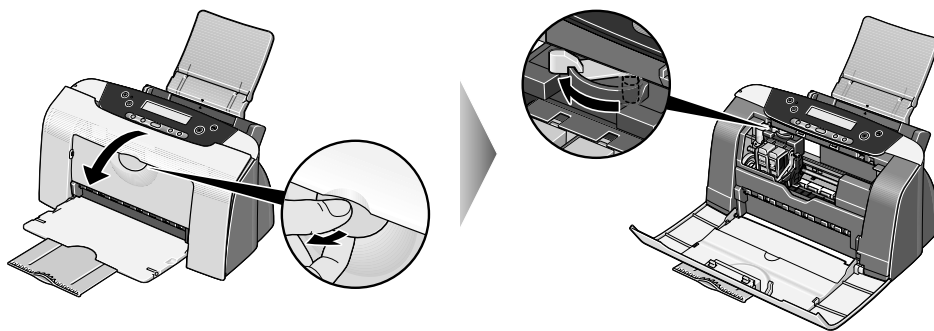
2 Flatten the four corners of the paper before loading it.

 **Note** When paper is curled, gently bend them in the opposite direction until the paper becomes completely flat.

3 Preparing to Load Paper

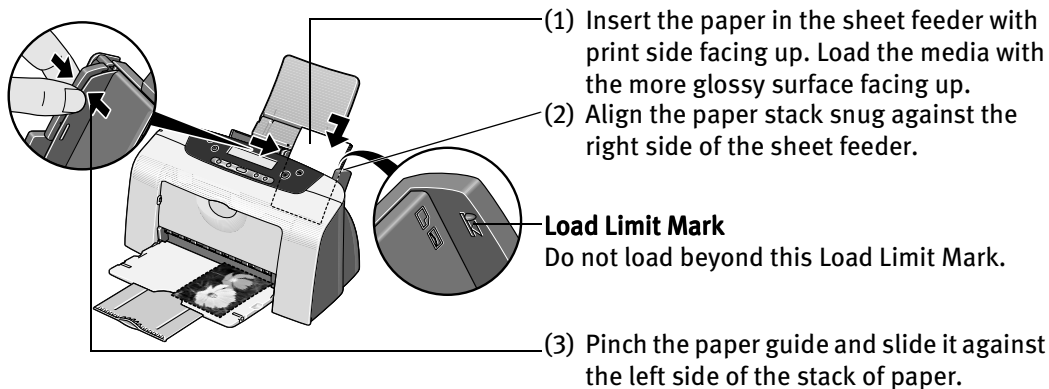



- (3) Open the front cover and ensure that the paper thickness lever is to the left position.



- (4) Close the front cover.

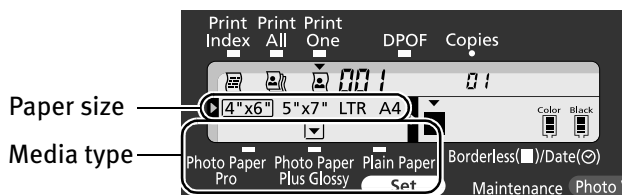
4 Loading the Paper



 **Note** Do not touch the printed surface until the ink dries. For specific drying times, refer to the instructions packaged with your media.

Media Types for Card Direct Printing

You can use the following Canon media:



Media Type	Paper Rest Load Limit	Paper Size	Paper Type
Plain Paper	Up to 100 sheets	[LTR]/[A4]	[Plain Paper]
Photo Paper Pro	Letter/A4: up to 10 sheets*	[LTR]/[A4]	[Photo Paper Pro]
	4" x 6" / 101.6 x 152.4 mm: up to 20 sheets	[4" x 6"]	
Photo Paper Plus Glossy	Letter/A4: up to 10 sheets*	[LTR]/[A4]	[Photo Paper Plus Glossy]
	4" x 6" / 101.6 x 152.4 mm: up to 20 sheets	[4" x 6"]	
	5" x 7" / 127 x 177.8 mm: up to 20 sheets	[5" x 7"]	



Note

- Set the paper thickness lever to the left for all of the above papers.
- *: When loading Letter/A4 size paper on the auto sheet feeder, do not load the paper at once. To avoid sticking, load the necessary number of paper (up to 10 sheets) one at a time.

Using the Photo Viewer

The Photo Viewer allows you to preview the print image on the display of the computer. In addition, photos can be printed at high speed through the use of the computer's performance.

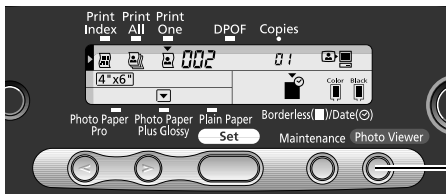
Previewing the Print Image

Important To use the Photo Viewer, the printer must be connected to the computer and the printer driver must have been installed the computer. If the printer driver has not been installed, install it following the procedure described in the Quick Start Guide.

1 Ensure that the printer and the computer are turned on.

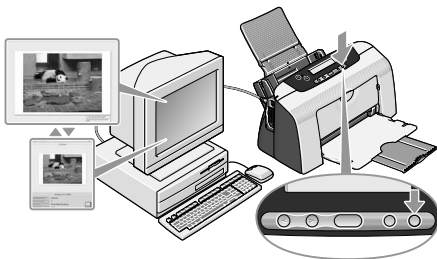
2 Start the Photo Viewer.

- (1) Insert the memory card in the card slot.
See "Using a Memory Card" on page 8.



- (2) Press the **Photo Viewer** button.
The current information is displayed on the display of the computer.

- Print Image Displayed on the Display of the Computer

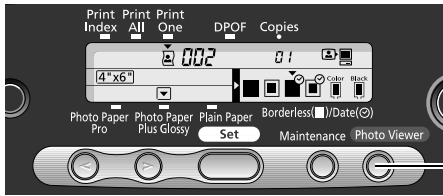


3 Make print settings and start printing.

Use the operation panel to make print settings.

- (1) Make print settings (media size and type, bordered/borderless, with/without date). See "Printing a Photograph" on page 11.
The print image on the display changes according to the settings you make.
- (2) Press the **Print** button to start printing.

4 Exit the Photo Viewer.

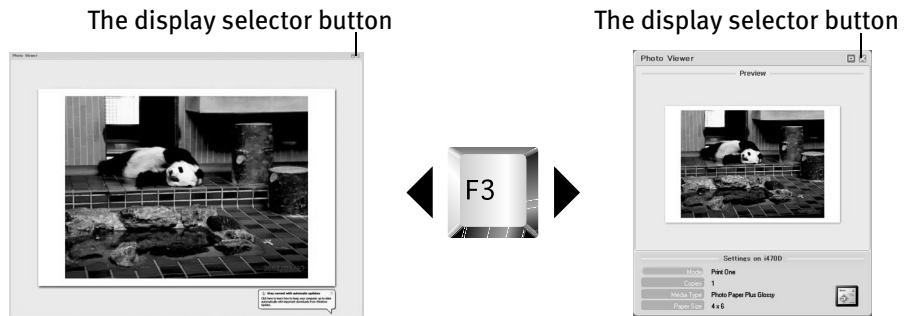


- (1) After printing finishes, press the **Photo Viewer** button to exit the Photo Viewer. To exit the Photo Viewer before printing finishes, cancel printing and then press the **Photo Viewer** button.



Note Changing the Display Mode

To change the display mode of the Photo Viewer, press the [F3] key on the keyboard of the computer or click the display selector button on the screen.



The Photo Viewer is terminated forcibly in the following cases:

- When a Canon “Bubble Jet Direct” compatible digital camera or digital video camcorder is connected
- When **Read/write mode** is selected in the Memory Card Utility (Windows) or BJ Utility (Macintosh)
- When a USB cable is disconnected

Saving the data stored in the memory card to the hard disk of the computer


- The image data (JPEG/TIFF)/the movie data (AVI/MPEG)/the sound data (WAVE) stored in the memory card in the card slot can be saved on the hard disk of the computer.
- Keep pressing the **Photo Viewer** button on the operation panel for 3 seconds or longer. Saving of the image data starts and the name of the file currently being saved and the name of the destination folder are displayed in the **Photo Viewer** window.
- If you keep pressing the **Photo Viewer** button for 3 seconds or longer while in the middle of a saving operation, the save operation will be stopped.
- The images will be saved in the location specified below. A folder will be created with a name and the date of the images were saved (YYYY_MM_DD).
 - Windows XP/Windows 2000/Windows Me: **My Pictures** folder
 - Windows 98: **\\My Document\\My Pictures** folder
 - Mac OS 8.6-9.2: Desk Top
 - Mac OS X 10.2.1or later: **Pictures** folder

Other Useful Functions

When printing from the memory card, you can use the following functions:

Printing According to the Settings Made on the Camera – DPOF Printing

If DPOF (Digital Print Order Format) settings are made on the camera, images are printed automatically according to those settings.

-  **Notes**
- This printer allows you to make the following DPOF settings:
 - Image format : CIFF, Exif (JPEG), JFIF, and Exif (Tiff)
 - Print type – Standard : The images for which you specified “Standard” using the DPOF function are printed.
 - Print type – Index : The images for which you specified “Index” using the DPOF function are printed according to the index print layout of this printer.
 - Images to print : Only the images specified using the DPOF function are printed (images cannot be specified on the operation panel.)
 - Copies : Images are printed by the numbers of copies specified using the DPOF function (numbers of copies cannot be specified on the operation panel).
 - Other functions (addition of comment, title, trimming, rotation, and etc.) are not supported.
 - Images are automatically scaled according to the paper size. The upper, lower, left, and/or right portion(s) of the image may be missing depending on the size of the paper you use.

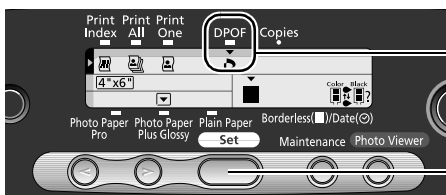
1 Turn on the printer.

2 Load the paper.

See “Loading Paper” on page 15.

3 Select the DPOF mode.

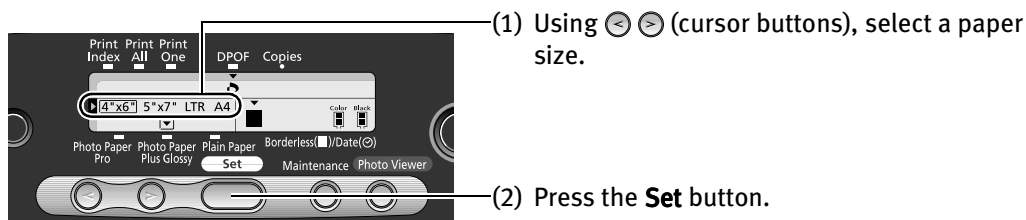
- (1) Insert the memory card with DPOF information in the memory card slot.
See “Using a Memory Card” on page 8.



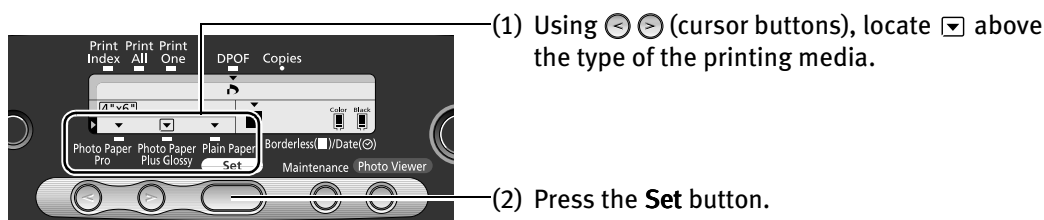
(2) Ensure that ▼ is displayed above the **DPOF** mark.

(3) Press the **Set** button.

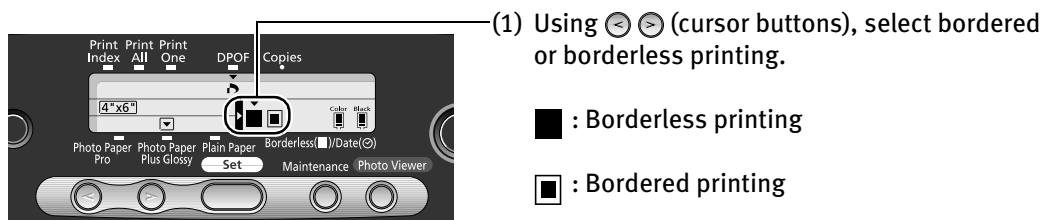
4 Select a paper size.



5 Select a media type.



6 Select bordered or borderless printing.



- Important**
- When DPOF settings have been made, the date of photographing cannot be set from the operation panel. Either the date or file number is printed according to the DPOF setting made on the digital camera. If both are specified, only the date is printed.
 - When **Plain Paper** is selected as a media type, borderless printing cannot be selected.

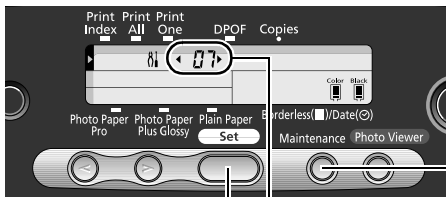
7 Start printing.

- Confirm the settings.
To modify the setting made previously, keep pressing the **Set** button to display the setting.
- Press the **Print** button.
Images will be printed according to the DPOF settings.


Changing the Date Style

You can change the order of year, month, and day to be printed.

- 1 Turn on the printer.
- 2 Select the date style selection mode.

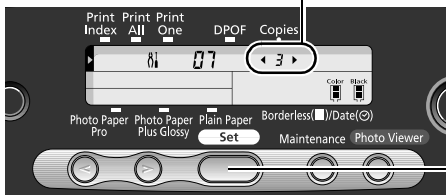




(1) Press the **Maintenance** button.

(2) Press  six times to display **07** on the LCD.

(3) Press the **Set** button.

- 3 Select a date style.



(1) Using   (cursor buttons), select the number of the desired date style.

1: YYYY/MM/DD (2002/11/23)

2: MM/DD/YYYY (11/23/2002)

3: DD/MM/YYYY (23/11/2002)

(2) Press the **Set** button.

The selected date style is saved and **07** appears on the LCD.

- 4 Press the **Maintenance** button.

You can exit the maintenance mode.

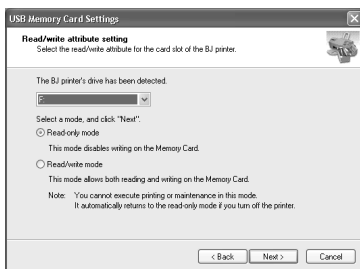
Setting up the Card Slot as the Memory Card Drive of the Computer

The card slot of the printer can be set up as the memory card drive of the computer.

- Important**
- To use the card slot of the printer as the memory card drive of the computer, the printer must be connected to the computer and a Memory Card Utility (Windows) or BJ Utility (Macintosh) must have been installed in the computer. If the utility is not installed, install it following the installation procedure explained in the Quick Start Guide.
 - When **Read/write mode** is selected, neither printing nor maintenance can be done.
After you are finished with using the card slot as a memory card drive for your computer, be sure to select **Read-only mode** again.

Windows

- 1 Ensure that the printer and the computer are turned on.
- 2 Open the USB memory card setup window.
 - (1) Ensure that no memory card is inserted in the card slot. If a memory card is inserted in the card slot, remove it. See “Removing a Memory Card” on page 10.
 - (2) Select **All Programs** (or **Program**) from the **Start** menu. Next, select **Canon Utilities, Memory Card Utility**, and then **USB Memory Card Settings**. The **USB Memory Card Settings** window appears.
- 3 Specify the read/write attribute.
 - (1) Click **Next**.
The **Read/write attribute setting** window appears.



- (2) Specify the read/write attribute.

Read-only mode
...The card slot is used only for read.
Be sure to select this mode when printing images.

Read/write mode
...The card slot is used as the memory card drive of the computer. Image data can be written into the memory card.
- (3) Click **Next**.
When you have selected **Read/write mode**, read the precaution and click **Next**.

- (4) Click **Complete**.
The selected read/write attribute is saved.

Macintosh

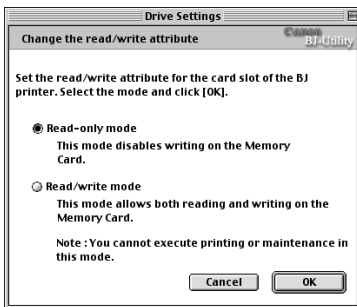
1 Ensure that the printer and the computer are turned on.

2 Start the BJ Utility.

- (1) Ensure that no memory card is inserted in the card slot. If a memory card is inserted in the card slot, remove it. See “Removing a Memory Card” on page 10.
- (2) Select **BJ Utility** from the **Apple** menu.
The BJ Utility is displayed.

3 Specify the read/write attribute.

- (1) Click **Change the drive's read/write attribute**.
The **Drive Settings** dialog appears.



- (2) Specify the read/write attribute.

Read-only mode

...The card slot is used only for read.

Be sure to select this mode when printing images.

Read/write mode

...The card slot is used as the memory card drive of the computer. Image data can be written into the memory card.

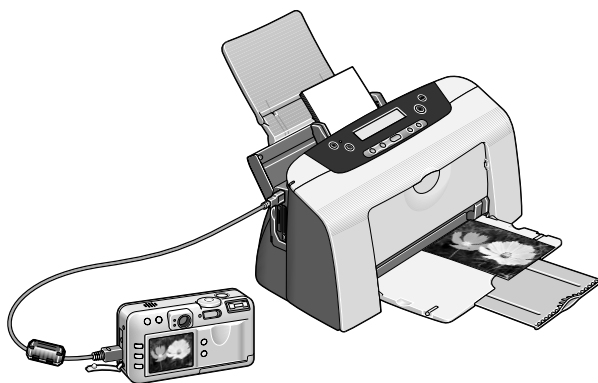
- (3) Click **OK**.

The selected read/write attribute is saved.

Printing Photographs Directly from a Digital Camera

Connecting a Canon digital camera with the Bubble Jet Direct function to the printer allows you to print captured images directly without using a computer. Use the USB cable that came with your digital camera.

- Notes**
- To print directly from a digital camera or digital video camcorder, use only Canon “Bubble Jet Direct” compatible digital cameras or digital video camcorders.
 - When you print directly from a digital camera, you need to operate from the camera itself.
 - You are recommended to use a household power source rather than the battery pack to power the camera when it is connected to a printer. If you do use a battery pack, ensure that it is fully charged.



Media Types for Digital Camera

When you connect a digital camera, you can use the following media:

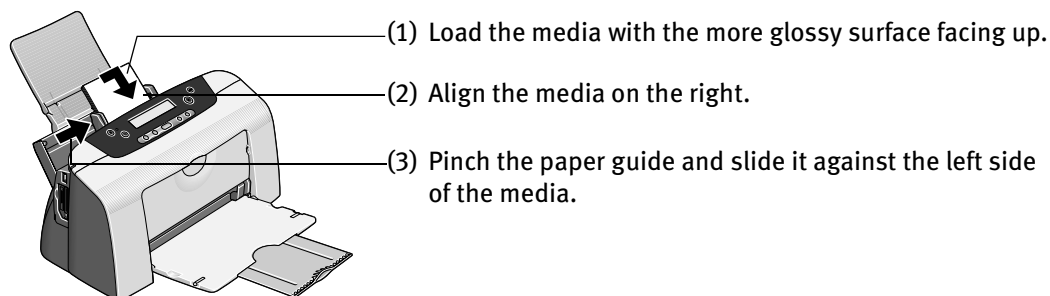
Digital Camera Setting	Media Type
Card #1	Photo Paper Pro 4" x 6"/101.6 x 152.4 mm
Card #2	Photo Paper Plus Glossy 4" x 6"/101.6 x 152.4 mm
Card #3	Photo Paper Plus Glossy 5" x 7"/127 x 177.8 mm
LTR	Photo Paper Pro or Photo Paper Plus Glossy Letter
A4	Photo Paper Pro or Photo Paper Plus Glossy A4

Printing from a Digital Camera

1 Ensure that the printer is turned on.

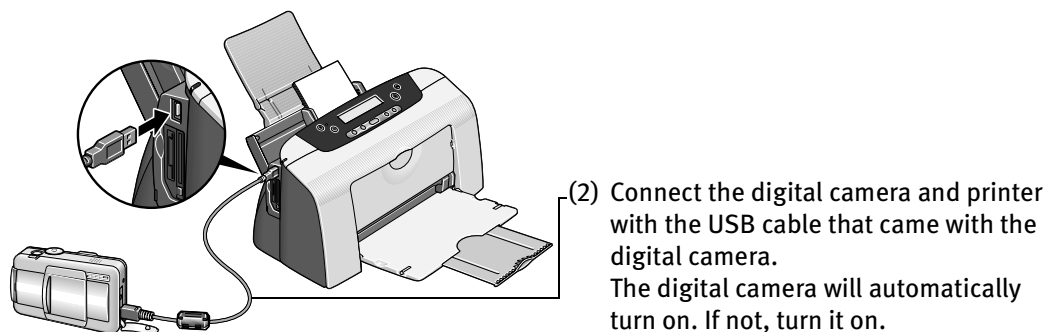
2 Load the paper.

Load the Photo Paper Pro paper as shown below.



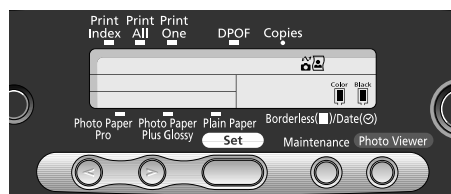
3 Connect the digital camera and the printer.


(1) Ensure that the digital camera is turned off.



4 Start printing using the print function of the digital camera.

The icon indicating that a digital camera is connected appears on the operation panel.



- (1) Display the image you want to print in the **Replay** mode.
If the camera will not change to the **Replay** mode, refer to your digital camera user's manual's instructions for changing the camera to the **Replay** mode.
 will display on the LCD display of the digital camera when the printer is correctly connected.
- (2) Press the **SET** button to display the **Print** menu.
- (3) Select **Style** and specify the **paper** size, **Bordered** or **Borderless** printing, and date printing On or Off.
- (4) After specifying the style, specify a number of copies, select **Print** and then press the **SET** button.

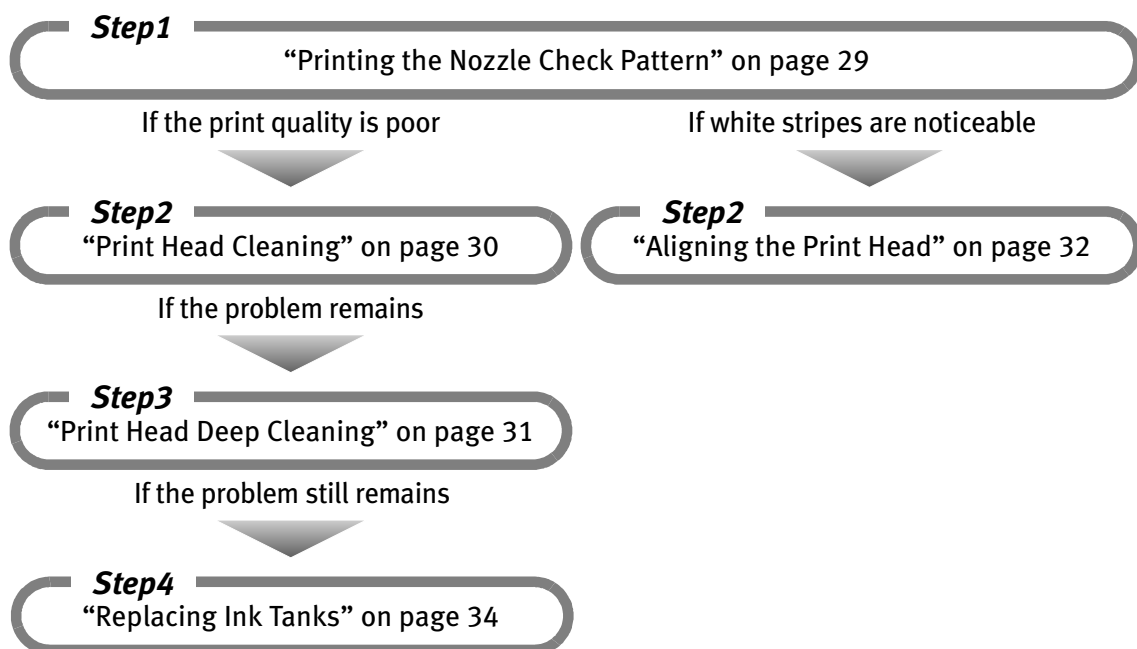



- Notes**
- For the digital camera operation and troubleshooting, refer to your digital camera manual. For print error message, refer to “Cannot Print Properly from the Digital Camera” on page 41.
 - For the digital video camcorder operation, print error messages, and troubleshooting, refer to your digital video camcorder manual.
 - By operating the digital camera, you can make the following prints:
 - You can make a standard print from the image displayed in the single display mode or in the index display mode.
 - You can print specified numbers of images, or make an index print using the DPOF function.
 - * Images other than Exif may not be index printed.
 - The images taken with an Exif 2.2 compatible digital camera will be adjusted by using the Photo Optimizer PRO function.
 - If date printing is set on the digital camera, the date of photographing will be printed (excluding the index print).
 - Images will be scaled automatically according to the size of the media set on the digital camera.
 - The digital camera does not support the following functions:
 - Print quality setting
 - Maintenance
 - * The print head cannot be aligned through the digital camera. To align the print head, use the operation panel of the printer.
 - To disconnect the cable connected between the digital camera and printer, follow the procedure below:
 1. Disconnect the cable from the printer.
 2. Turn off the digital camera.
 3. Disconnect the cable from the digital camera. When disconnecting the cable, be sure to hold the connector by its sides.

Printing Maintenance

When Printing Becomes Faint or Colors are Incorrect

When printing becomes faint or colors are incorrect, even if ink remains in the ink tanks, the print head nozzles are probably clogged. Follow the procedures below to clean the nozzles.

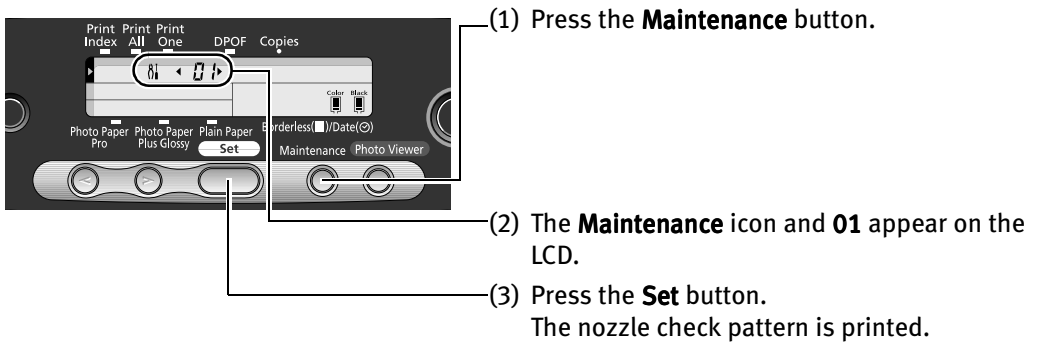


-  **Notes**
- If ink tank replacement does not resolve the problem, contact the Customer Care Center.
 - You will be alerted if low ink warning is enabled.
 - When the Maintenance Button on the operation panel is pressed, the maintenance mode is shown. Numbers and functions that can be selected on the maintenance mode are as follows:
 - 01: Printing the Nozzle Check Pattern on page 29
 - 02: Print Head Cleaning on page 30
 - 03: Print Head Deep Cleaning on page 31
 - 04: Aligning the Print Head on page 32
 - 05: Reset the ink counter on page 36
 - 06: 'Display' or 'Not Display' remaining ink volume on page 37
 - 07: Date and order setting on page 22

Printing the Nozzle Check Pattern

Print the nozzle check pattern to determine whether the ink ejects properly from the print head nozzles and to verify print head alignment. Use this function when printed results are blurred or the color is incorrect.

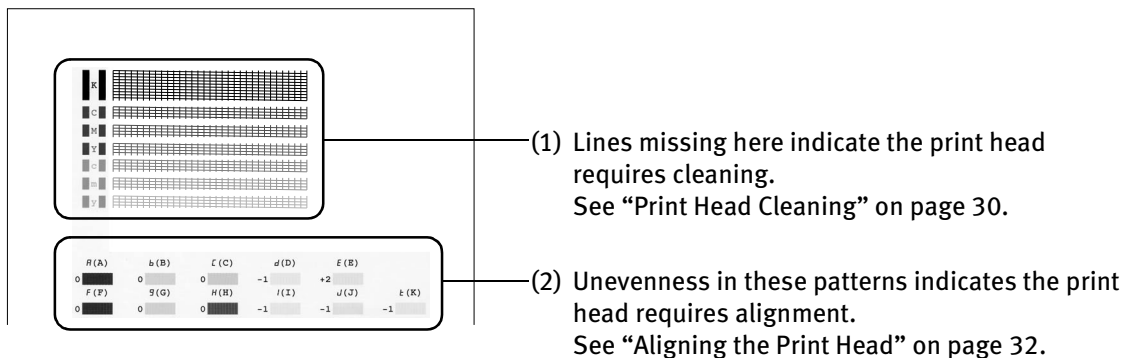
- 1 With the printer on, load a sheet of Letter paper in the printer.
- 2 Print the Nozzle Check Pattern.



See “Examining the Nozzle Check Pattern.”

Examining the Nozzle Check Pattern

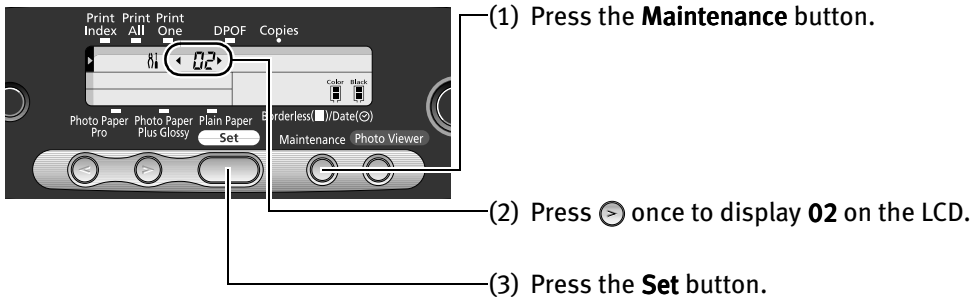
The nozzle check pattern should appear as follows when ink is discharged properly. Examine the nozzle check pattern output by the printer.




Print Head Cleaning

Clean the print head if you suspect that the nozzles might be clogged.
Cleaning the print head consumes ink, so perform print head cleaning only when necessary.

- 1 Ensure that the printer is on.
- 2 Start print head cleaning.



Important Do not perform any other operations until the print head cleaning finishes. This takes about 50 seconds.

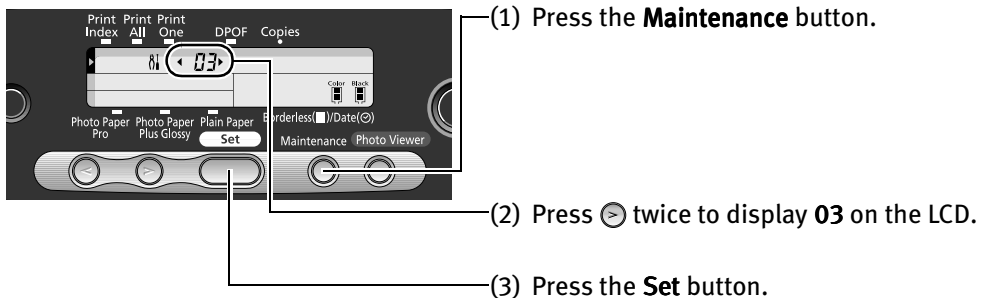
 **Note** After print head cleaning finishes, print the nozzle check pattern to verify that the print head nozzles are clean. See “Printing the Nozzle Check Pattern” on page 29.

If the problem persists, perform print head deep cleaning. See “Print Head Deep Cleaning” on page 31.

Print Head Deep Cleaning

If print quality does not improve by standard print head cleaning, try print head deep cleaning, which is a more powerful process. Print head deep cleaning consumes ink, so perform this procedure only when necessary.

- 1 Ensure that the printer is on.
- 2 Start Print Head Deep Cleaning.



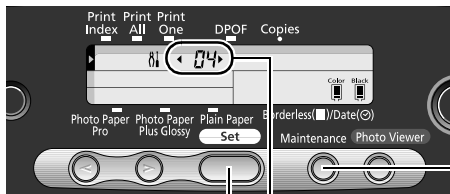
Important The process takes one or two minutes to complete, so simply wait until the **Power** lamp stops flashing.

Note After print head deep cleaning finishes, print the nozzle check pattern to verify that the print head nozzles are clean. See “Printing the Nozzle Check Pattern” on page 29. If the print head is still not clean after the second deep cleaning, replace the ink tank. See “Replacing an Ink Tank” on page 34. If ink tank replacement does not resolve the problem, the print head may be worn out. Contact the Customer Care Center.


Aligning the Print Head

Aligning the print head position allows you to print without shifts in the color registration.

- 1 With the printer on, load a sheet of Letter paper in the printer.
- 2 Print the Pattern.

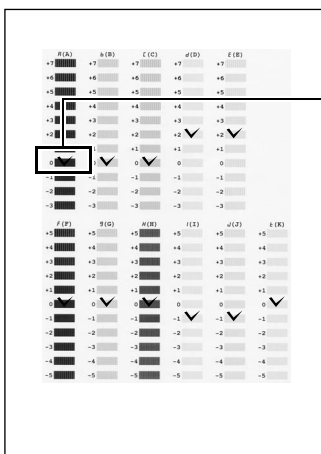


(1) Press the **Maintenance** button.

(2) Press  three times to display **04** on the LCD.

(3) Press the **Set** button.
The pattern is printed.

- 3 Align the Print Head.



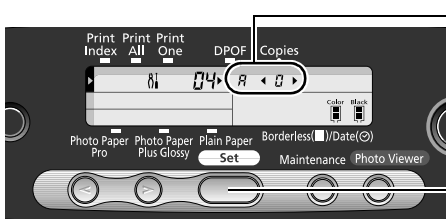
(1) Observe the printed patterns and check the pattern in which vertical stripes are least noticeable. If the patterns in column “H” are not uniform, select the pattern in which white stripes are least noticeable.



Less noticeable
white stripes



More noticeable
white stripes

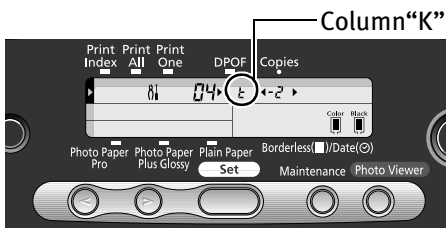


(2) Using \leftarrow \rightarrow (cursor buttons), display the pattern number (+7 to -3) of the checked pattern in column A.

(3) Press the **Set** button.
The screen for selecting a pattern in column B ("b") appears.



Note To cancel an operation, press the **Maintenance** button and retry the procedure from the beginning.

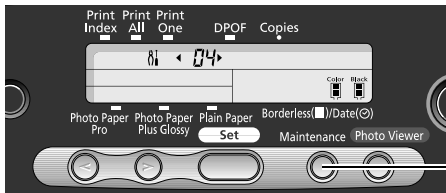


Column "K"

(4) Repeat the above procedure to determine the pattern numbers (+7 to -3) of the checked patterns in columns B through E and the pattern numbers (+5 to -5) of the checked patterns in columns F through K.

When pattern numbers have been determined up to column K, maintenance mode number **04** is displayed again and head alignment is complete.

4 Exit the maintenance mode.



(1) Press the **Maintenance** button.
You can exit the maintenance mode.

Replacing an Ink Tank

When replacing an ink tank, check the model number very carefully. The printer will not print properly if the wrong ink tank is used, or installed in the incorrect position.

- Black: BCI-24 Black



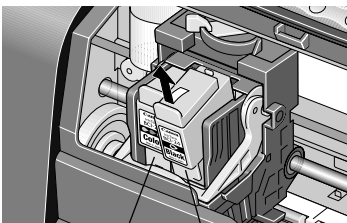
- Color: BCI-24 Color



Replacing Ink Tanks

When ink tanks run out of ink, replace them using the following steps.

- 1** Ensure that the printer is on, and then open the front cover.
The print head holder moves to the left.
- 2** Remove the empty ink tank.

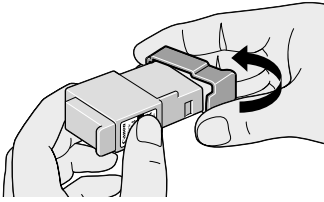


color black

- Important**
- Handle ink tanks carefully to avoid staining clothing or the surrounding area.
 - Discard empty ink tanks according to the local laws and regulations regarding disposal of consumables.

3 Prepare a replacement tank.

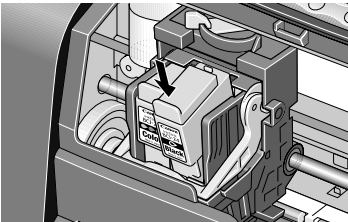
Unpack a new ink tank and remove the orange protective cap.



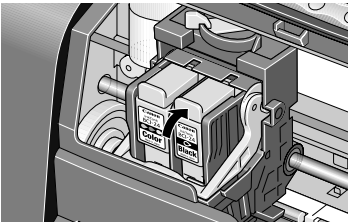
- Important**
- Do not re-attach the protective cap once you have removed it.
 - Once the protective cap is removed, do not touch the open ink port.


4 Insert the ink tank.

(1) Insert the ink tank into a slot.



(2) Push in the tab until the ink tank snaps firmly into place.

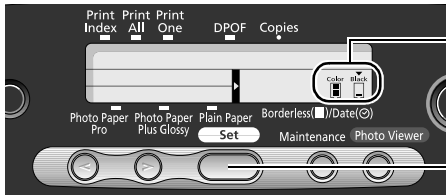


-  **Notes**
- Once an ink tank has been used, do not remove it from the printer and leave it out in the open. This will cause the ink tank to dry out and the printer may not function properly if it is reinstalled.
 - Color ink consumption may occur even when black-and-white or grayscale printing is specified.
Color ink is consumed in the head cleaning and deep cleaning, which are necessary to maintain the printer's capabilities.

5 Reset the ink counter.

Important After replacing an ink tank, be sure to reset the ink counter with the front cover open.

The remaining ink volume display on the operation panel is displayed properly only if the ink counter is reset.



(1) Using ◀ ▶ (cursor buttons), locate ▼ above the ink tank you replaced.

(2) Press the **Set** button.

A full ink tank icon appears under ▼ and the ink counter is reset.



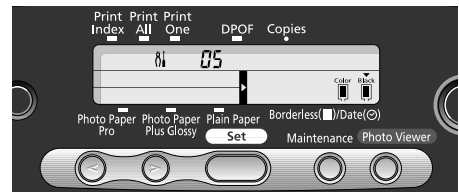
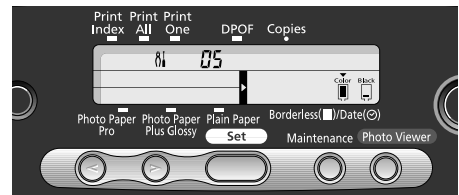
Note If you have replaced both black and color ink tanks, press the cursor buttons and after both ink tanks have the ▼ mark set above them, press the **Set** button.

6 Close the front cover.

Note **Resetting the Ink Counter in the Maintenance Mode**

If you have closed the front cover after replacing an ink tank, reset the ink counter in the maintenance mode as described below.

1. Press the **Maintenance** button.
2. Press ▶ four times to display 05. Next, press the **Set** button. Then, ▼ appears above the ink tank on the operation panel.
3. Using the cursor buttons, locate ▼ above the replaced ink tank. Next, press the **Set** button. A full ink tank icon appears under ▼ and the counter is reset. If you have replaced both black and color ink tanks, reset the ink counters of both ink tanks in the same manner as above.
4. Press the **Maintenance** button. Now you are finished with resetting of the ink counter.



How Low Ink Setting Works

The remaining ink volume display on the operation panel is a function that monitors how much ink is used, and indicates the remaining ink volume.

When you reset the ink counter, it will assume that the ink tank is full regardless of how much ink actually remains. The reset is the only way to match the counter value with an actual ink volume. Reset the ink counter when installing a new ink tank.

■ When the remaining ink volume is low;

The ink volume remaining in the indicated tank is low. A new ink tank should be prepared.

When the color ink volume is low;



When the black ink volume is low;



■ How to Display Low Ink Correctly

- Reset the ink counter every time you install a new ink tank.
The ink counter cannot work correctly unless you synchronize it with the actual ink level. The ink counter can only be adjusted when it is reset at the time a new ink tank is installed.
- Do not reset the ink counter of an ink tank in use.
Synchronization of the counter and the actual ink level will not work properly.

Important If you did not reset the counter when you installed the current ink tanks, the low ink may not function correctly, until the next time you replace the ink tanks. Also, be sure to treat both counters separately. Refer to the section “The ? mark is displayed beside the ink tank icon.” on page 39

Troubleshooting

Let's take a look at countermeasures against the troubles that may occur during use of the printer.

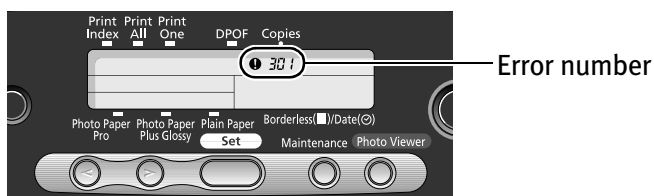
Note Here, we will discuss errors indicated on the operation panel, problems that might occur during direct printing from the digital camera, and problems that are also likely to occur while using the Photo Viewer. If you cannot find the symptom corresponding to a certain problem, refer to the User's Guide.

- “An Error Message is Displayed on the Operation Panel” on page 38
- “Ink does not come out/ Printing is Blurred/ Colors are Wrong/ White Streaks” on page 40
- “Cannot Print Properly from the Digital Camera” on page 41
- “An Error Message is Displayed While Using the Photo Viewer” on page 42

An Error Message is Displayed on the Operation Panel

■ An Error Number is Displayed.

If an error number is displayed on the operation panel, take the corresponding countermeasure described below.








Error Number/Problem	Try This
102 The paper thickness lever position is wrong.	Setting the paper thickness lever at the correct position will start printing. Pressing the Cancel button will stop printing.
202 The waste ink tank is almost full.	Press the Resume button to recover from the error. You can print images for a while but you cannot print any more image when the waste ink tank becomes full. Contact the Customer Care Center.
301 There is no paper or paper cannot be fed.	Load paper and press the Resume button.

Error Number/Problem	Try This
302 Paper jammed.	Remove the jammed paper, load paper, and press the Resume button.
402 No print head is installed.	Install the print head following the instructions given in the Easy Setup Instructions.
403 The print head is faulty.	Turn off the printer by pressing the Power button, then turn on the printer again. If the same error persists, the print head may be faulty. Contact the Customer Care Center.
611 A specified period of time has lapsed without receiving a response from the digital camera.	Press the Resume button. The digital camera will automatically turn on. If not, turn it on.
612 This printer is not ready for the connected digital camera or digital video camcorder.	Disconnect the camera connection cable, press the Resume button, and then connect the cable once more. If the error is still unresolved, there is a possibility that you are using a digital camera or digital video camcorder that is not supported by this printer. Connect a Canon "Bubble Jet Direct" compatible digital cameras or digital video camcorders.
802/804/806/807/808/809 An error requiring a service may have occurred.	Turn off the printer, remove the power cord plug from the outlet, plug the power cord back in, and then turn on the printer again. If the same error persists, contact the Customer Care Center.

Note If the Same Error Persists


If the same error persists after a countermeasure is taken according to the above error number, turn off the printer, remove the power cord plug from the outlet, plug the power cord back in, and then turn on the printer again.

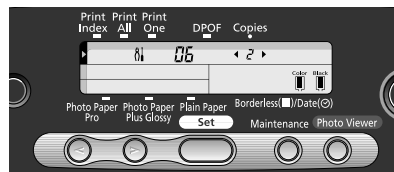
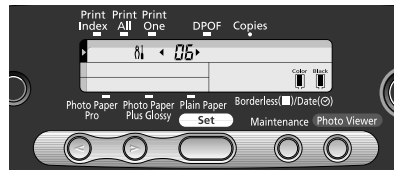
■ An Error Icon is Displayed on the Operation Panel.

Error Icon/Problem	Try This
 stays lit. The memory card is inserted incorrectly.	Insert an available memory card after checking its orientation. See "Using a Memory Card" on page 8. If a memory card has already been inserted, remove it and then insert it again. Next, check that the Indicator lamp stays on.  Note Never remove the card while image data is being read (the Indicator lamp is flashing).
 is flashing. The memory card cannot be read.	Image data edited/processed on the computer must also be printed from the computer.
The ? mark is displayed beside the ink tank icon. Color Black   An ink counter has not been reset after replacement of the relevant ink tank.	After replacing an ink tank with a new one, reset the relevant ink counter. See "Replacing an Ink Tank" on page 34.


Note Display/Non-display of Remaining Ink Level

The ? mark is displayed beside the ink tank icon from the moment an ink tank is replaced with a new one to the moment the relevant ink tank is reset. If you do not want to display the ? mark and remaining ink level, follow the procedure below.

1. Press the **Maintenance** button.
2. Press  five times to display **06**, then press the **Set** button.
3. Using the cursor buttons, display **2**.
 - 1: The remaining ink level is displayed.
 - 2: The remaining ink level is not displayed.
4. Press the **Set** button.
When **2** is selected, the remaining ink level is not displayed.
5. Press the **Maintenance** button.
You can exit the maintenance mode.




■ Ink does not come out/ Printing is Blurred/ Colors are Wrong/ White Streaks

Possible Cause	Try This
Ink tank is not seated properly	Check that the ink tanks are firmly seated in the print head and reseal them if necessary.
Print head nozzles clogged or misaligned	Print the nozzle check pattern to check for uneven ink output. When a specific color is missing from the nozzle check pattern, clean the print head. <ul style="list-style-type: none"> • If ink supply is uneven: See "Print Head Cleaning" on page 30. • If straight lines are misalign: See "Aligning the Print Head" on page 32.
Media not loaded print-side up	Check that your paper is loaded with the correct print side facing up.  Note Follow the instructions packaged with your specialty media for loading and handling.
Incorrect paper type	On the operation panel, confirm that the Media Type selected matches the paper loaded.

Cannot Print Properly from the Digital Camera

The following messages may be displayed on the digital cameras or digital video camcorders when images are printed directly from them. Take the appropriate action to correct the error.

-  **Notes**
- Images can be printed directly from Canon “Bubble Jet Direct” compatible digital cameras and digital video camcorders connected to this printer.
 - If the connected digital camera or digital video camcorder does not support “Bubble Jet Direct” the **Power** lamp on the printer will flash eleven times. If this happens, disconnect the connection cable and press the **Resume** button.
 - If the operation time or data transmission time is too long when the digital camera or digital video camcorder is connected to this printer, a communication time error may occur and no more images can be printed. If this error occurs, press the **Resume** button.
The digital camera will automatically turn on. If not, turn it on.
 - A low ink warning is not displayed on the digital camera.
 - After replacing an ink tank, cancel the connection with the digital camera and reset the ink counter. See “Reset the ink counter.” on page 36.
If the ink counter is not reset, the remaining ink level may not be displayed properly.
 - For more details, also refer to the user’s manual for the digital camera or digital video camcorder.

Error message on camera	Try This
Printer in use	Images are printed from the computer. Wait until printing ends.
Printer warming up	Wait until warm-up ends.
No Paper	Load the paper in the printer and press the Resume button on the printer.
Paper Jam	Remove the jammed paper, load new media, and press the Resume button.
Printer cover open	Close the front cover.
No print head	No print head is installed. (The Power lamp on the printer flashes six times.) Install a print head according to the Easy Setup Instructions. The print head is defective. (The Power lamp on the printer flashes seven times.) Contact the Customer Care Center.
Waste tank full	The waste ink tank is nearly full. Press the Resume button on the printer to recover from the error. Contact the Customer Care Center as soon as possible.
Paper lever error	Incorrect position of the paper thickness lever. Open the front cover and adjust the paper thickness lever to the left position.
Printer error	An error requiring servicing has occurred. (The Power lamp on the printer flashes alternately orange and green.) Turn off the printer, unplug the power cord from the power supply, plug the power cord back in, and then turn on the printer. If the same error occurs, contact the Customer Care Center.

An Error Message is Displayed While Using the Photo Viewer

If one of the following messages appears while using the Photo Viewer, printing may be disabled or the Photo Viewer may be terminated forcibly.

Error Message	Try This
Executing maintenance.	Printing cannot be done in the maintenance mode. After completion of maintenance, pressing the Maintenance button allows you to exit the maintenance mode.
Insert a memory card.	Insert a memory card after checking its orientation. See "Using a Memory Card" on page 8. If a memory card has already been inserted, remove it and then insert it again. Next, check that the indicator lamp stays on.
The printer's card slot has been write-enabled.	The memory card utility started on the computer has write-enabled the card slot. When the card slot is write-enabled, the printer cannot print images. When you have finished writing data to the card, cancel the write-enable mode. For the cancellation procedure, See "Setting up the Card Slot as the Memory Card Drive of the Computer" on page 23.
There is a problem with the memory card or it is not.	<ul style="list-style-type: none"> The memory card is inserted incorrectly. Insert the memory card after checking its orientation. See "Using a Memory Card" on page 8. If a memory card has already been inserted, remove it and then insert it again. Next, check that the indicator lamp stays on. The memory card cannot be read. Image data edited/processed on the computer must also be printed from the computer.
Insufficient disk space.	The hard disk of the computer does not have a sufficient free space. Delete unnecessary files on the hard disk to create a sufficient free space, then start the Photo Viewer again.
Insufficient memory.	The computer does not have sufficient free memory. Close some applications or increase virtual memory, then start the Photo Viewer again.
A digital camera is connected to the printer.	Printing from a computer or the operation panel cannot be done when a digital camera or digital video camcorder is connected to the printer. After completion of operation from the digital camera, disconnect the connection cable.
Failed to communicate with the printer.	The computer cannot communicate with the printer. Check whether the cable is connected securely between the printer and computer. Turn the printer off and on again, then start the Photo Viewer again.
Failed to print.	An unexpected error occurred during printing. Turn the printer off and on again.
An internal error (code = nnnn) occurred. (n: Alphanumeric character)	An internal error occurred. Turn the printer off and on again, then start the Photo Viewer again. If the same error persists, reboot the computer and then start the Photo Viewer again.

Index

A

Aligning the Print Head	32
An Error Icon is Displayed	39
An Error Message is Displayed While Using the Photo Viewer	42
An Error Number is Displayed	38

B

BCI-24 Black	34
BCI-24 Color	34
BJ Utility	24
Bordered printing	5
Bordered printing with date	5
Borderless printing	5
Borderless printing with date	5

C

Cancel Button	4
Cannot Print Properly from the Digital Camera	41
Card slot in use	5
Changing the Date Style	22
Changing the Display Mode	19
Cleaning	30
CompactFlash (CF) Card	8
Cursor Buttons	3

D

Date style	22
Deep Cleaning	31
Digital camera	25
Digital camera connected	5
Digital Camera Setting	25
Digital video camcorder	25
Display/Non-display of Remaining Ink Level	40
DPOF	5
DPOF Printing	20
Drive Settings dialog	24

E

Error message on camera	41
Error number indication	5
Examining the Nozzle Check Pattern	29

I

Icons on the LCD	4
Image number	12
Indicator Lamp	4
Ink Tank	34

Ink volume	37
Inserting a Memory Card	8

L

Load Limit Mark	16
Loading the Print Media	15
Low Ink Setting	37

M

Maintenance Button	3
Maintenance Mode	5, 28
Media Type	17
Media Types for Card Direct Printing	17
Media Types for Digital Camera	25
Memory Card	8
Memory Card Utility	23
Memory Stick	8
Microdrive	8
MultiMedia Card	8

N

No memory card/data	5
Nozzle Check Pattern	29

O

Operation Panel	3
-----------------------	---

P

Paper Rest Load Limit	17
Paper Size	17
Paper thickness lever	16
Paper Type	17
Photo Paper Plus Glossy	17, 25
Photo Paper Pro	17, 25
Photo Viewer	18
Photo Viewer Button	4
Photo Viewer running	5
Plain Paper	17
Power Button	3
Power Lamp	3
Previewing the Print Image	18
Print All	4
Print Button	4
Print Head Cleaning	30
Print Head Deep Cleaning	31
Print Index	4, 11
Print Media to Avoid	15
Print One	5, 12
Printing from a Digital Camera	26

Index

Printing Photographs Directly from a Digital Camera ...	25
Printing the Nozzle Check Pattern	29

R

Read/write attribute setting	23
Read/write mode	23, 24
Read-only mode	23, 24
Remaining ink levels	5
Removing a Memory Card	10
Replacing an Ink Tank	34
Reset the ink counter	36
Resume Button	3

S

Saving the data stored in the memory card	19
Secure Digital (SD) Card	8
Set Button	3
Setting up the Card Slot as the Memory Card Drive of the Computer	23
SmartMedia Card	8

T

Troubleshooting	38
Turn on the printer	15
Types of Available Memory Cards	8

U

USB Memory Card Settings	23
--------------------------------	----