

# *Reference Guide*

**Canon**

BUBBLE JET PRINTER

**S400**

V01

# Contents



## Introduction

## How to Use This Manual

## Parts and Functions of the Printer

- Front View
- Rear View
- Inside the Printer
- Operation Panel

## Printing on Paper and Other Media

- Media Sizes You Can Use with the Printer
- Media Types You Can Use with the Printer
- Media Types You Cannot Use with the Printer
- Loading Paper and Other Media
- Printing Area
- Using Plain Paper or High Resolution Paper
- Using Envelopes
- Using Transparencies or Back Print Film
- Using Glossy Photo Paper
- Using High Gloss Photo Film
- Using Glossy Photo Cards
- Using Banner Paper
- Using T-Shirt Transfers

## Using the BJ Cartridges

- BJ Cartridges You Can Use with the Printer
- Notes on Handling BJ Cartridges

## Printing Photographs

- Tips on Printing Photographic Images
- Printing Photographic Images
- About Photo Optimizer PRO

## Using the Scanner

- Scanner Driver Basics
- Before Using the Scanner
- Installing the IS Scan Software
- About the Scanning Area
- Launching IS Scan
- Performing White Level Calibration
- Scanning an Image
- Saving an Image

## Routine Maintenance

- Prolonging the Service Life of the Printer
- BJ Cartridge Maintenance
- When to Replace a BJ Cartridge
- Printing a Nozzle Check Pattern
- Cleaning the Print Head
- Replacing Ink Tanks

- Replacing the BJ Cartridge
- Aligning the Print Head
- Cleaning the Printer
- Cleaning the Paper Feed Rollers
- Transporting the Printer

## Troubleshooting

- Printout is Unsatisfactory
- Printer Does Not Start or Stops in Mid-job
- Paper Jams or Does Not Feed
- The POWER Lamp Flashes Orange
- An Error Message Appears
- Scanner Problems
- Scanning result is unsatisfactory
- Cannot be used with TWAIN-compatible application program
- Other scanner problems
- Other Problems

## Specifications

## Index

## Appendix

- Driver and Utility Guide for Windows Users
- Driver and Utility Guide for Macintosh Users

# Introduction



Thank you for purchasing the S400 Bubble Jet Printer.

This Reference Guide provides complete descriptions of the features and functions of the printer. To maximise the life of your printer, familiarise yourself fully with its functions and how to use it.

## Note

This manual uses the following symbols depending on the computer system you are using. Always observe the instructions indicated by these symbols.

Windows

Indicates information for Windows Me, Windows 98 and Windows 95 users only.

Macintosh

Indicates information for Macintosh computers with USB interface only.

For detailed information on the printer driver settings, see the "Driver and Utility Guide for Windows Users" section or the "Driver and Utility Guide for Macintosh Users" section in this Reference Guide.

If you are a Windows 2000 or Windows NT 4.0 user, refer to the Guide for details on printer driver functions. After installing the driver, the Guide can be accessed by pointing to Start menu → Program → S400 → Guide.

# How to Use This Manual

To view this Reference Guide, we recommend that you use Acrobat Reader 3.0 or higher. The screens displayed by Acrobat Reader 3.0 are slightly different.



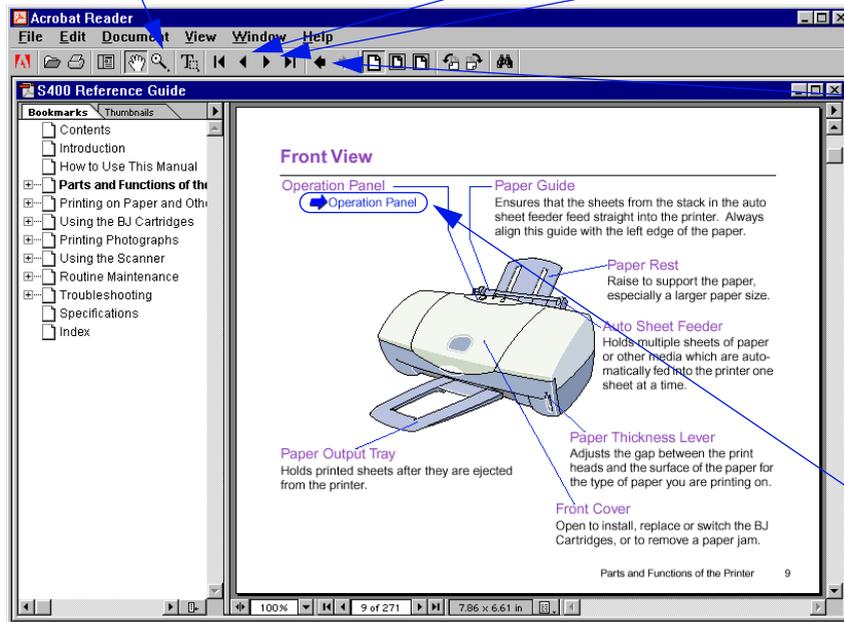
Use this button when you wish to enlarge the instruction screen of the Reference Guide. Select this button in the tool bar, and click within the screen of the Reference Guide.



Displays the previous page.

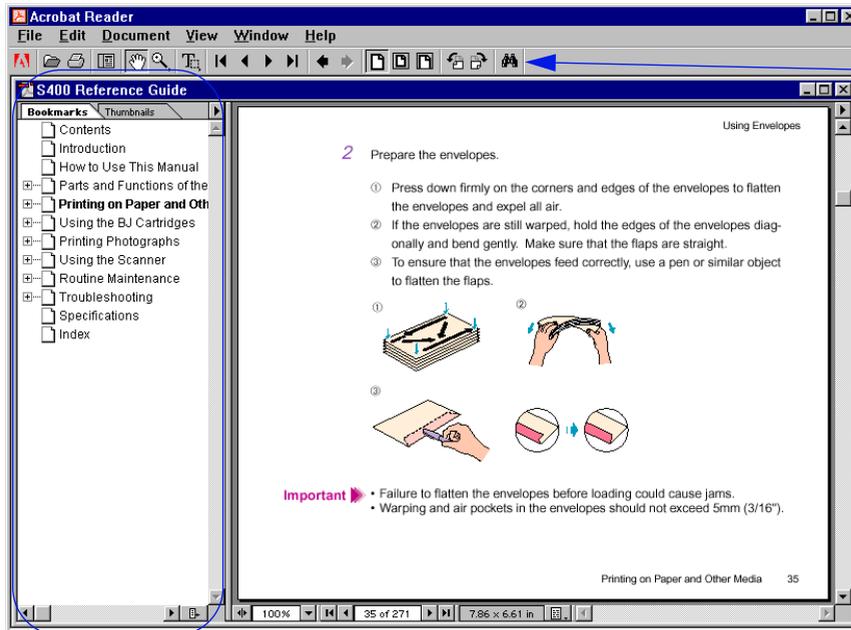


Displays the next page.



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Indicates a link to jump to a page about the topic shaded in blue.



Use this button to search for a word.

Displays a table of contents for the Reference Guide. Click the desired item to jump to the topic. Click the "+" symbol when you wish to see detailed headings for each chapter. Click the "-" symbol when you wish to return to the original display.

# Parts and Functions of the Printer



Front View

Rear View

Inside the Printer

Operation Panel

## Front View

Operation Panel



Paper Guide

Ensures that the sheets from the stack in the auto sheet feeder feed straight into the printer. Always align this guide with the left edge of the paper.

Paper Rest

Raise to support the paper, especially a larger paper size.

Auto Sheet Feeder

Holds multiple sheets of paper or other media which are automatically fed into the printer one sheet at a time.

Paper Thickness Lever

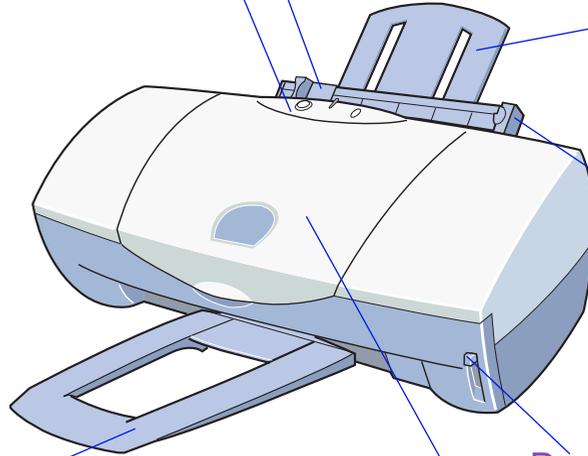
Adjusts the gap between the print heads and the surface of the paper for the type of paper you are printing on.

Front Cover

Open to install, replace or switch the BJ Cartridges, or to remove a paper jam.

Paper Output Tray

Holds printed sheets after they are ejected from the printer.



## Rear View

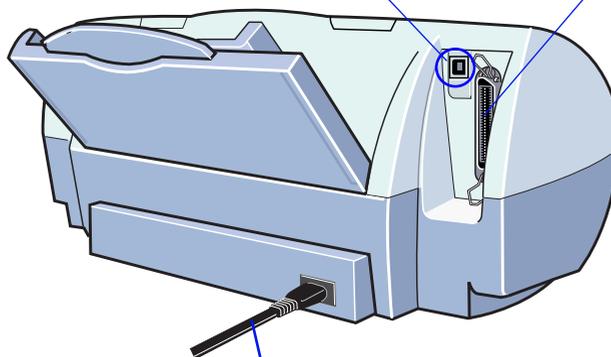
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### Printer Cable Connector (Parallel Interface)

Provides a connection point for connecting a parallel interface cable to the printer.

### Printer Cable Connector (USB Interface)

Provides a connection point for connecting a USB interface cable to the printer.



### Power Connector

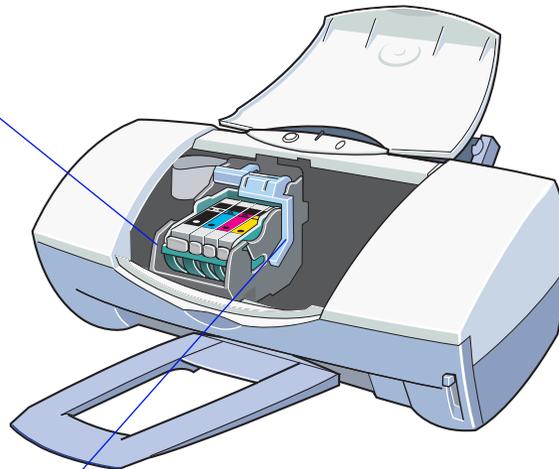
Provides a connection point for connecting the power cord to the AC power outlet. The power cord may or may not be permanently attached to the printer, depending on the country of purchase.

## Inside the Printer

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### Cartridge Holder

Set the BJ Cartridge (colour, photo, black) or scanner cartridge.



### Cartridge Lock Lever

Locks the BJ Cartridges onto the cartridge holder.

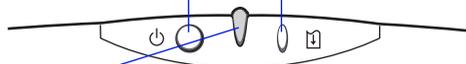
# Operation Panel

## POWER button

Press to switch the printer on and off.

## RESUME button

After you have removed the cause of a printer error, press the RESUME button to resume printing.



## POWER lamp

Lights to indicate the status of the printer.

Off:	Printer power off.
On (green):	Ready for operation.
Flashing (green):	Standby status or print job in progress.
Flashing (orange):	Printer error. Remove the cause of the error before printing is resumed.
Flashing (orange and green):	Service error. Contact a Canon service facility.

## Note ►►

Press and hold the RESUME button for the required number of flashes and release to perform these special tasks:

- One flash: [Cleaning the Print Head](#)
- Two flashes: [Printing a Nozzle Check Pattern](#)
- Three flashes: [Cleaning the Paper Feed Rollers](#)

These important tasks can also be performed with the printer driver.

## Printing on Paper and Other Media



Media Sizes You Can Use with the Printer

Media Types You Can Use with the Printer

Media Types You Cannot Use with the Printer

Loading Paper and Other Media

Printing Area

Using Plain Paper or High Resolution Paper

Using Envelopes

Using Transparencies or Back Print Film

Using Glossy Photo Paper

Using High Gloss Photo Film

Using Glossy Photo Cards

Using Banner Paper

Using T-Shirt Transfers

## Media Sizes You Can Use with the Printer

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The following table lists the standard paper sizes that can be used with the printer.

Paper	Width x Height
A5	148.0mm x 210.0mm
B5	182.0mm x 257.0mm
A4	210.0mm x 297.0mm
Letter	8.5" x 11.0" (215.9mm x 279.4mm)
Legal	8.5" x 14.0" (215.9 x 355.6mm)
Envelope (European DL)	220mm x 110mm
Envelope (US Com. #10)	9.5" x 4.1" (241.3mm x 104.77mm)
Glossy Photo Cards	118.6mm x 213.9mm (with borders) 101.6mm x 152.4mm (final size without borders)

You can also use custom paper sizes within the following ranges.

Width: 100.0mm to 241.3mm (3.94" to 9.50")

Height: 100.0mm to 584.2mm (3.94" to 23.00")

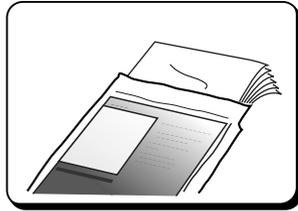
Media of the following weight can be loaded for printing: 64g/m<sup>2</sup> to 105g/m<sup>2</sup>

## Media Types You Can Use with the Printer

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Plain paper and special Canon media are recommended for use with the printer. Specify the media name and size when you purchase Canon special media.

Refer to the instructions provided with special media for details about handling and printing.



### ■ Ordinary Paper

- Plain Paper  
Provides the standard print quality.  
Standard photocopier paper can be used if its weight is within the range of 64 and 105 g/m<sup>2</sup>. (Canon Bubble Jet Paper LC-301 can also be used.)  
[➡ Using Plain Paper or High Resolution Paper](#)
- Envelopes  
The standard European DL and US Commercial #10 sizes can be used.  
Do not use other envelope sizes.  
[➡ Using Envelopes](#)

## ■ Canon Special Media

Canon offers a range of special paper and films for the reproduction of superb images in vibrant colours. For best results when printing photographs, use the Photo BJ Cartridge.

- High Resolution Paper HR-101  
Provides more vivid colours than plain paper.  
Ideal for printing photographs or business documents that include large numbers of colour illustrations and graphs.  
 [Using Plain Paper or High Resolution Paper](#)
- Glossy Photo Paper GP-301  
Slightly heavier than High Resolution Paper because a gloss coating is applied to the print side of the paper. Provides near-photographic quality images with the glossy feel of a photographic print.  
 [Using Glossy Photo Paper](#)
- High Gloss Photo Film HG-201  
A film sheet with a higher gloss than Glossy Photo Paper GP-301.  
To obtain the highest quality reproduction of photographs, use this media with only the Color BJ Cartridge BC-33e. The Black BJ Cartridge BC-30e cannot be used with this media.  
 [Using High Gloss Photo Film](#)

- Glossy Photo Cards FM-101

A special card made of the same stock as Glossy Photo Paper GP-301. You can create a photo card printed over its entire area by printing the image so that it extends beyond the perforations and then trimming off the unwanted white margins. Use this card when you want to print a colour or a photo over the entire card.

 [Using Glossy Photo Cards](#)

- Transparencies CF-102

These can be used to prepare materials for use with an overhead projector. To avoid paper jams and other problems, never use transparencies intended for use with other Canon BJ printers (e.g., CF-101), laser beam printers or photocopiers.

 [Using Transparencies or Back Print Film](#)

- Back Print Film BF-102

This white translucent film is ideal for displays that use backlighting to show a printed image in the same way as slides and stained glass. The original image is reversed horizontally (mirrored) when printed.

 [Using Transparencies or Back Print Film](#)

- Banner Paper

This banner paper allows you to print on up to six connected sheets of A4 or Letter size paper to create party or advertising banners.

 [Using Banner Paper](#)

- T-Shirt Transfer TR-201

This is a media for creating iron-on prints for T-shirts. You can make an original T-shirt simply by printing your favourite photograph or illustration onto this media. The original image is reversed horizontally (mirrored) when printed.

 [Using T-Shirt Transfers](#)

## Media Types You Cannot Use with the Printer

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To avoid poor print quality and possible damage to the printer, never use the types of media listed below.

- Folded paper
- Curled paper
- Creased or crumpled paper
- Damp or wet paper
- Excessively thin media (weight less than 64g/m<sup>2</sup>)
- Excessively thick media (more than 0.6 mm thick)
- Continuous feed paper (tractor feed)
- Punched paper (loose-leaf folder inserts, etc.)
- Reply-paid postcards (i.e., double postal card)
- Postcards with a photograph printed on the reverse side
- Postcards with a photograph or sticker pasted on
- Envelopes with overlapping flaps
- Envelopes with pressure seals
- Envelopes with embossed or treated surfaces

# Loading Paper and Other Media

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## ■ Landscape and Portrait

There are two methods of orientation you can use to load the printer, depending on the type of media you intend to load.

- When the short edge of the paper is fed into the auto sheet feeder, this is called Portrait orientation.
- When the long edge of the paper is fed into auto sheet feeder, this is called Landscape orientation.

Paper	Portrait (vertical)	Landscape (horizontal)
A5	Yes	No
B5	Yes	No
A4	Yes	No
Letter	Yes	No
Legal	Yes	No
Envelope (European DL)	No	Yes
Envelope (US Com. #10)	No	Yes
Glossy Photo Cards	Yes	No

## ■ Print Side

The following media must be printed on the correct side.

- Envelope Must be printed on the address side.
- High resolution paper Must be printed on the whiter side.
- Back print film Must be printed on the matte side.
- Glossy photo paper Must be printed on the whiter (glossy) side.
- High gloss photo film Must be loaded and printed with the glossy side facing up and the cut corner aligned against the right of the auto sheet feeder.
- Glossy photo card Must be printed on the whiter (glossy) side.
- T-shirt transfers Must be loaded and printed with green lines facing down and the cut corner aligned against the right of the auto sheet feeder.

## ■ Number of sheets that can be loaded

The type of paper feed and the number of sheets that can be loaded vary according to the type of media. Make sure that the paper stack is not higher than the load limit mark on the auto sheet feeder and set the paper thickness lever Up or Down as listed below.

Media type	Max. capacity	Paper Thickness lever
Plain paper	Approximately 100 sheets (64 g/m <sup>2</sup> )	Up
Envelope	Approximately 10 pieces (European DL or US Com. #10)	Down
High Resolution Paper	Approximately 80 sheets	Up
Glossy Photo Paper	Approximately 10 sheets	Up
High Gloss Photo Film	1	Up
Glossy Photo Card	1	Up
Transparencies	Approximately 30 sheets	Up
Back Print Film	Approximately 10 sheets	Up
Banner Paper	1 sheet (2 to 6 sheets in length)	Down
T-shirt Transfers	1 sheet	Down

## Printing Area

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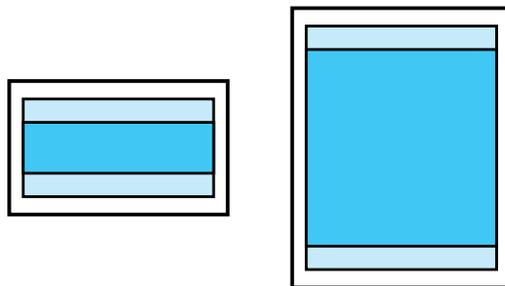
To ensure the best print quality, the printer allows a margin along each edge of the media. (The printing area varies according to the media size.)

Note that the term "printing area" represents both the recommended area for the optimum print quality and the entire area where the printer can technically print.

The following key is provided to show you how these areas are shown in the illustrations that follow.

Printing area (dark blue): Canon recommends that you print within this area. (  )

Printable area (light blue): The area where it is possible to print. However, printing in this area can adversely affect the print quality or the paper feed precision. (  )

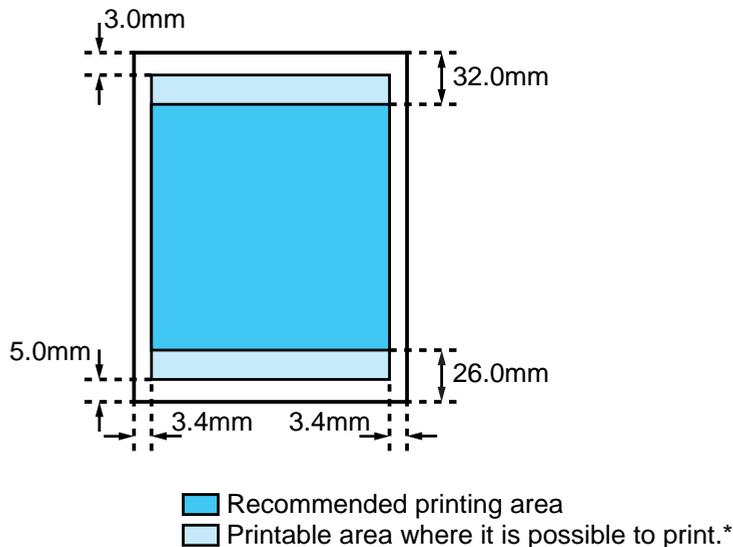


 A5, B5, A4  
 Letter, Legal  
 Glossy Photo Cards

 Envelope  
 Banner Paper

■ A5, B5, A4

Printable Area (width x height)	Size (mm)
A5	141.2mm x 202.0mm
B5	175.2mm x 249.0mm
A4	203.2mm x 289.0mm



**Note** ▶▶

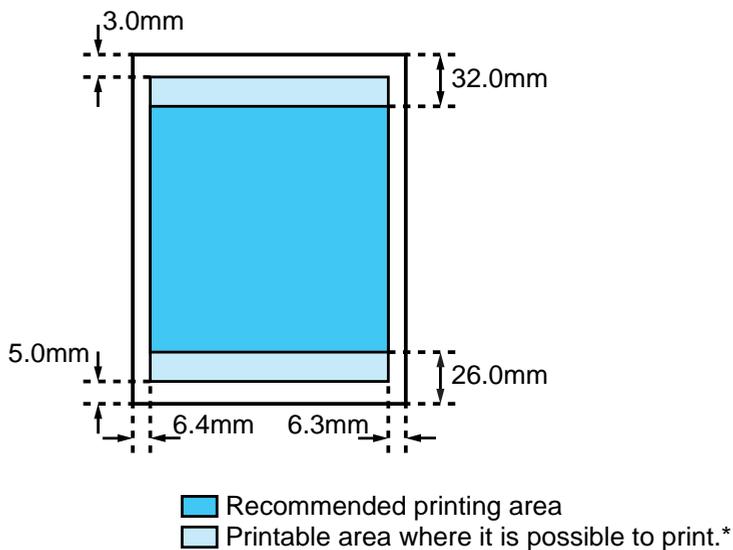
\*: Printing in this area can adversely affect the print quality or the paper feed precision.

## ■ Letter, Legal

Printable Area (width x height) Size (mm)

Letter 203.2mm x 271.4mm

Legal 203.2mm x 347.6mm



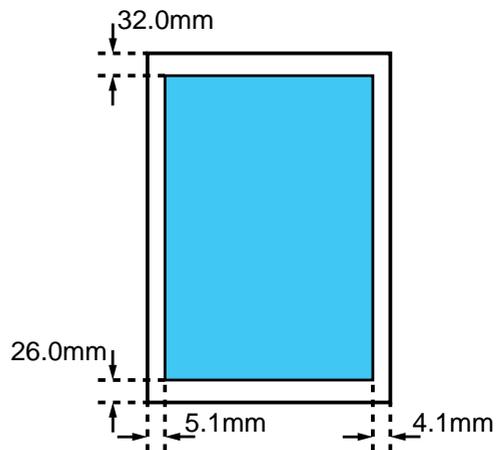
### Note ►►

\* Printing in this area could adversely affect the print quality or the paper feed precision.

## ■ Glossy Photo Cards

Printable Area (width x height) Size (mm)

Glossy Photo Cards 109.4mm x 159.9mm



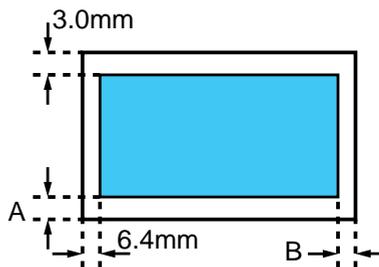
 Recommended printing area  
(Printable and recommended printing areas are identical.)

## ■ Envelope

Printable Area (width x height) Size (mm)

European DL 203.2mm x102.0mm

US Com. #10 203.2mm x 96.7mm



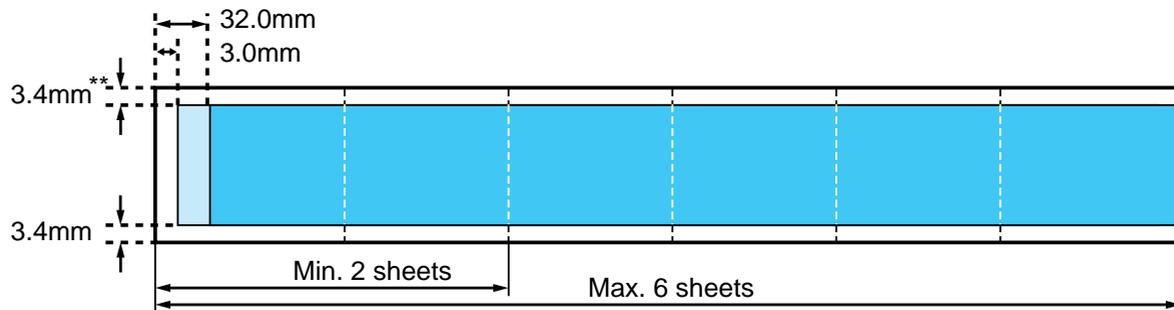
	A	B
DL	7.0mm	10.4mm
Com #10	7.0mm	31.7mm

Recommended printing area  
(Printable and recommended printing areas are identical.)

## ■ Banner Paper

Printable Area (width x height) Size (mm)

Banner Paper 203.2mm x 1779.0mm (A4)  
 203.2mm x 1673.4mm (Letter)



Recommended printing area

Printable area where it is possible to print.\*

### Note ►►

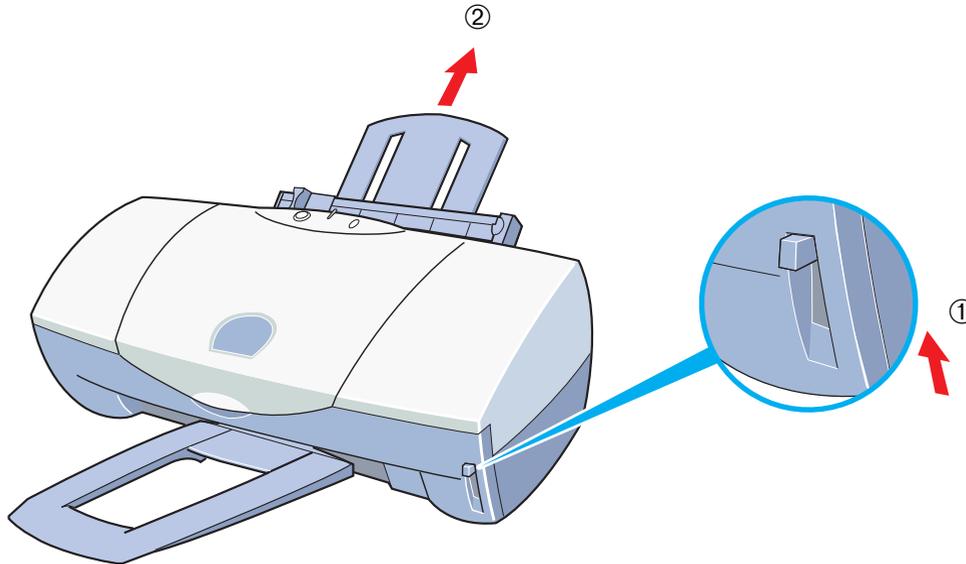
\* Printing in this area could adversely affect the print quality or the paper feed precision.

\*\* 9.3mm for Letter size

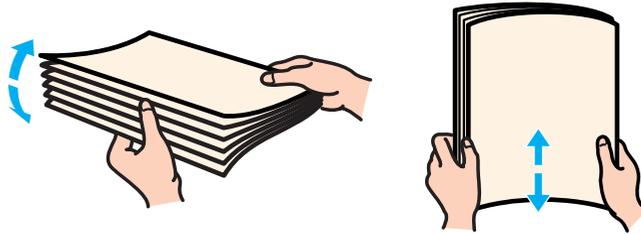
## Using Plain Paper or High Resolution Paper

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- 1 Make sure that the printer is switched on and the paper thickness lever ① is set to the Up position. Raise the paper rest ②.



- 2 Fan the stack to remove static cling and align the edges of the stack by tapping them on a flat surface. Loading the paper without first fanning and aligning the edges could cause paper jams.



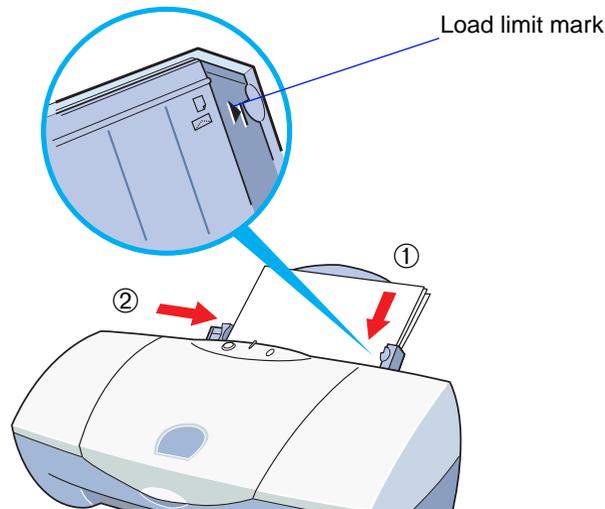
**Important** ►► To avoid touching the print surface, always handle media by the edges. Unclean or scratched print surfaces can adversely affect print quality.

### 3 Load the stack of paper.

- ① Align the stack with the right side of the auto sheet feeder and insert it into the auto sheet feeder.
  - Plain paper You can print on either side.
  - High Resolution Paper Load the paper with the whiter side facing up.
- ② Slide the paper guide to the left side of the stack until it is snug.

**Important** ▶▶ Make sure that the top of the stack is not higher than the load limit mark. Maximum load capacity is as follows.

- Plain paper Approximately 100 sheets (64g/m<sup>2</sup>)
- High Resolution Paper Approximately 80 sheets



## Windows

- 4 Open the Printer Properties dialogue box and select the most appropriate icon in the Choose Print Mode box under the Main tab. Select Plain Paper or High Resolution Paper in the Media Type box. Make sure that the BJ Cartridge Type setting matches the BJ Cartridge you are using.

## Macintosh

- 4 Select the most appropriate icon that indicates the print mode in the Printer Properties dialogue box. Specify the media type (Plain Paper for plain paper, or High Resolution Paper for High Resolution Paper), and the BJ Cartridge you are using.

- 5 Start the print job.
- 6 Check the printed sheets as they are ejected from the printer.

As soon as about 20 sheets have stacked on the paper output tray, remove them. If the printed sheets are excessively curled after they are ejected from the printer, remove each sheet immediately to prevent curled sheets from blocking other sheets ejected from the printer.

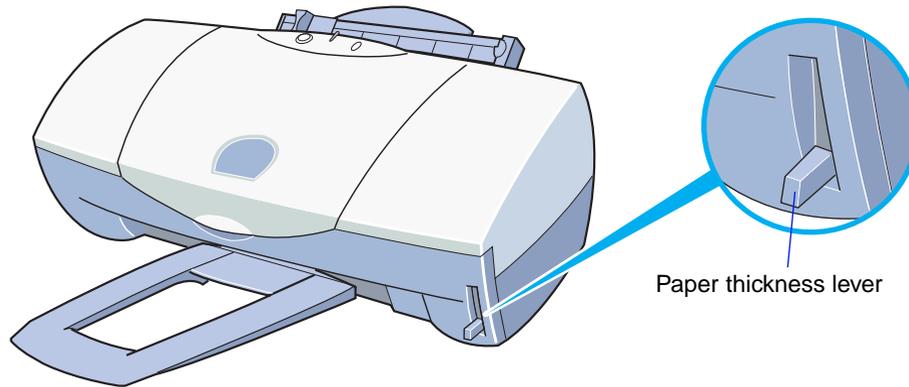
**Note** 

- Store unused paper and other media flat in the original package in a dry, cool location away from direct sunlight, high temperature and high humidity.
- The package of High Resolution Paper HR-101 includes the cleaning sheet. You can use the cleaning sheet to clean the feed rollers of the printer.

# Using Envelopes

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- 1 Make sure that the printer is switched on and the paper thickness lever is set to the Down position.

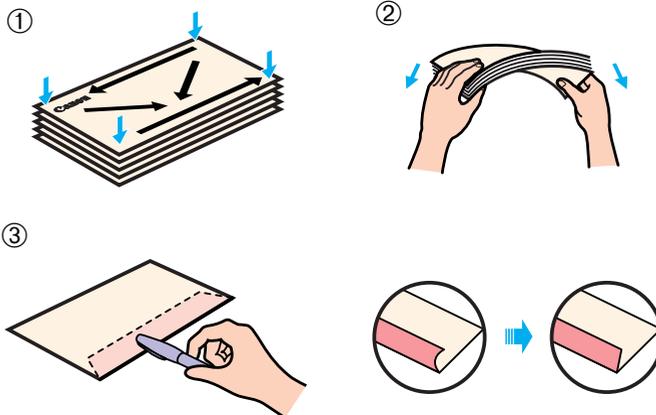


Paper thickness lever

- Important** ▶▶
- To avoid poor print results, do not attempt to print on envelopes with embossed or treated surfaces.
  - To avoid misfeeds and jams, do not use envelopes with overlapping flaps or pressure seals.

## 2 Prepare the envelopes.

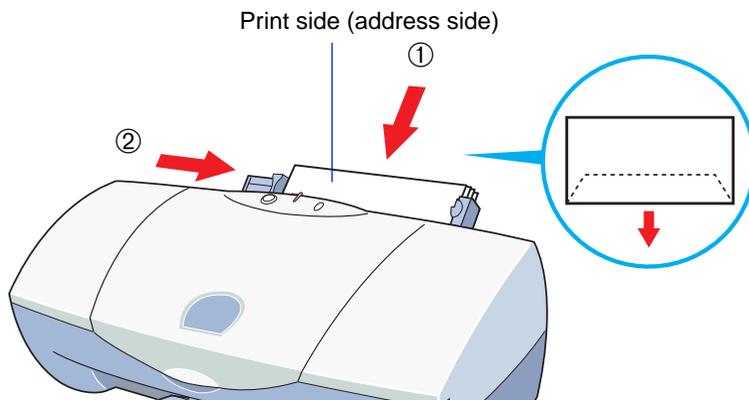
- ① Press down firmly on the corners and edges of the envelopes to flatten the envelopes and expel all air.
- ② If the envelopes are still warped, hold the edges of the envelopes diagonally and bend gently. Make sure that the flaps are straight.
- ③ To ensure that the envelopes feed correctly, use a pen or similar object to flatten the flaps.



- Important** ►►
- Failure to flatten the envelopes before loading could cause jams.
  - Warping and air pockets in the envelopes should not exceed 5mm (3/16").

### 3 Load the envelopes as follows.

Load top edges of the address sides (flap sides down) into the auto sheet feeder ① and align the stack with the right side of the auto sheet feeder. Slide the paper guide ② to the left side of the stack until it is snug.



**Important** ►► The maximum number of envelopes you can load is 10 pieces.

## Windows

- 4 Open the Printer Properties dialogue box and select the most appropriate icon in the Choose Print Mode box under the Main tab. Select Envelope in the Media Type box. Make sure that the BJ Cartridge Type setting matches the BJ Cartridge you are using.

## Macintosh

- 4 Select the most appropriate icon that indicates the print mode in the Printer Properties dialogue box. Specify the media type (Envelope), and the BJ Cartridge you are using.

## Windows

- 5 Click the Page Layout tab, then select "DL Env. 220.0 x 110.0 mm" or "#10 Env. 241.3 x 104.6 mm" in the Page Size.

Normally you can set the envelope size with the application program. However, if the setting on the Page Layout tab does not match the setting in the application program, change the setting here.

## Macintosh

- 5 Select "DL Env. 220.0 x 110mm" or "#10 Env. 9.50 x 4.12 in" for the envelope size.

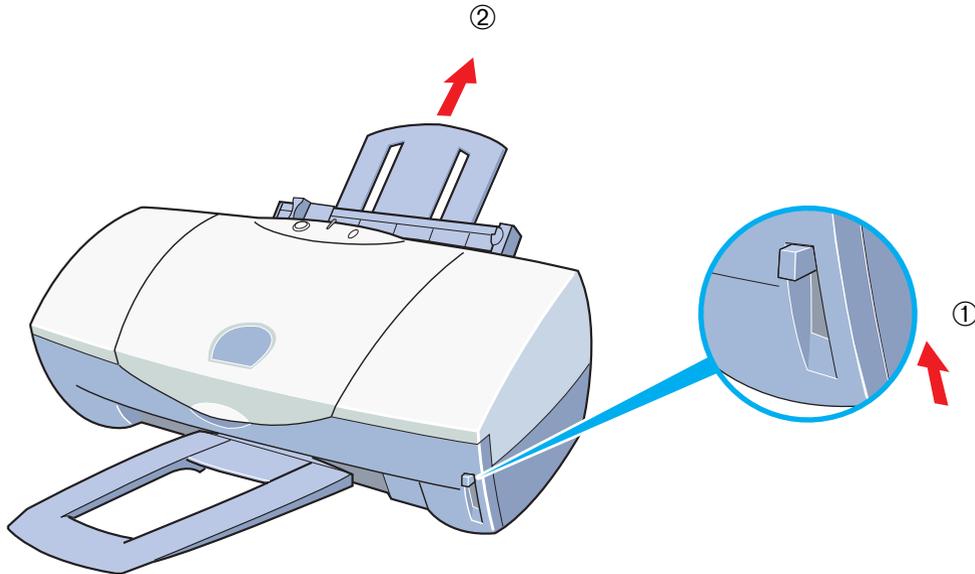
Normally you can set the envelope size with the application program. Start the print job.

- 6 Remove each printed envelope as it is ejected from the printer.

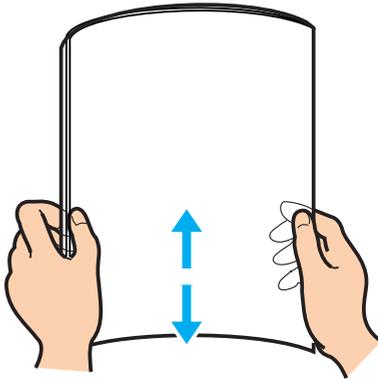
## Using Transparencies or Back Print Film

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- 1 Make sure that the printer is switched on and the paper thickness lever ① is set to the Up position. Raise the paper rest ②.



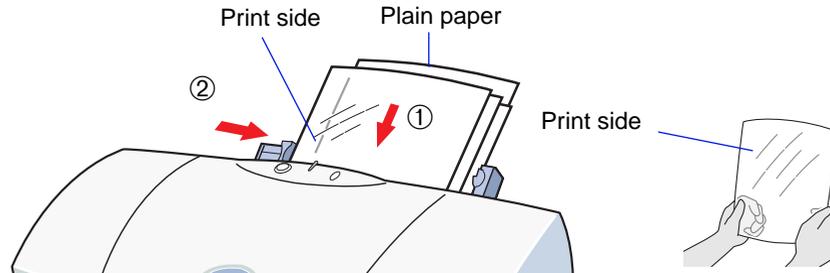
- 2 Fan the transparencies to remove static cling and tap the edges against a flat surface to align them neatly. Fanning and aligning the sheets prevents misfeeds and paper jams.



- Important** ▶▶
- To avoid touching the print surface, always handle the sheets by the edges. Unclean or scratched print surfaces can adversely affect print quality.
  - Do not remove transparencies from the package until you are ready to load them in the auto sheet feeder, especially in humid conditions.
  - The matte side of the back print film is the print side which should be loaded face up.

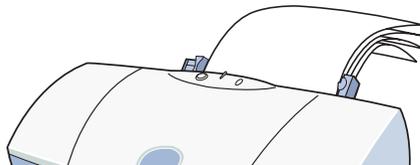
### 3 Load the transparencies.

- ① With the print side (matte side for back print film) facing up, place one sheet of A4 or Letter size paper under the stack. Load the stack with the edges aligned against the right side of the auto sheet feeder.
- ② Slide the paper guide to the left side of the stack until it is snug. (You can print on either side of transparencies, but using a slightly curled surface as the print side is recommended. On the other hand, you must print on the matte side of the back print film.)



#### Note ►►

- You can load up to 30 transparencies or 10 sheets of back print film in the auto sheet feeder.
- When the auto sheet feeder feeds two or more transparencies at a time, lower the paper rest as shown.



## Windows

- 4 Open the Printer Properties dialogue box, then select the most appropriate icon in the Choose Print Mode box under the Main tab. Select Transparency or Back Print Film in the Media Type box. Make sure that the BJ Cartridge Type setting matches the BJ Cartridge you are using.

## Macintosh

- 4 Select the most appropriate icon that indicates the print mode in the Printer Properties dialogue box. Specify the media type (Transparency or Back Print Film), and the BJ Cartridge you are using.
- 5 Start the print job.
- 6 Remove each printed transparency as it is ejected from the printer.

Do not touch the printed side until the ink is completely dry. About 15 minutes is required for drying.

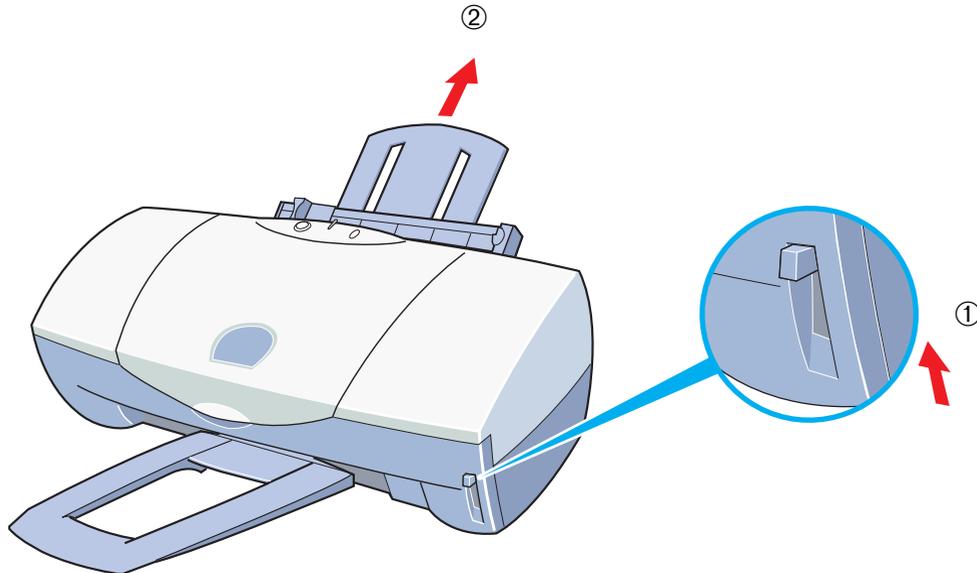
**Note** ►►

- An image is reversed when printed on back print film in order to display correctly when lit with a backlight.
- After drying cover each transparency with one sheet of plain paper (uncoated) to prevent sticking and abrasion. Cover each transparency as well if you are storing them in plastic pockets to prevent the transparencies from sticking to the plastic.
- Store unused transparencies or back print films in the original package in a dry, cool location away from direct sunlight, high temperature and high humidity.

## Using Glossy Photo Paper

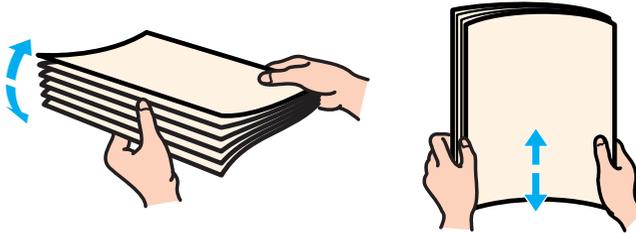
---

- 1 Make sure that the printer is switched on and the paper thickness lever ① is set to the Up position. Raise the paper rest ②.



- 2 Fan the glossy photo paper to remove static cling and tap the edges against a flat surface to align them neatly. Fanning and aligning the sheets prevents misfeeds and paper jams.

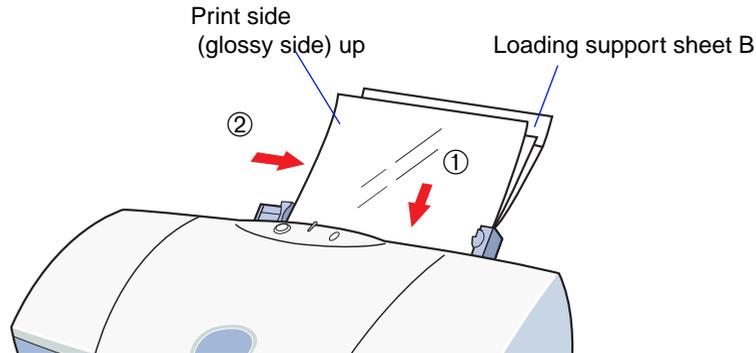
If the film is curled, bend it slightly in the opposite direction of the curl to straighten it.



**Important** ►► To avoid touching the print surface, always handle the sheets by the edges. Unclean or scratched print surfaces can adversely affect print quality.

### 3 Load the glossy photo paper as follows.

- ① With the print side (glossy side) facing up, place the Loading Support Sheet B provided with the package under the stack. Load the stack with the edges aligned against the right side of the auto sheet feeder. (For details, refer to the instructions provided with the package.)
- ② Slide the paper guide to the left side of the stack until it is snug.



#### Note ▶▶

- You can load up to 10 sheets in the auto sheet feeder.
- Do not use Support Sheet A provided with the package.

## Windows

- 4 Open the Printer Properties dialogue box and select the most appropriate icon in the Choose Print Mode box under the Main tab. Select Glossy Photo Paper in the Media Type box. Make sure that the BJ Cartridge Type setting matches the BJ Cartridge you are using.

## Macintosh

- 4 Select the most appropriate icon that indicates the print mode in the Printer Properties dialogue box. Specify the media type (Glossy Photo Paper), and the BJ Cartridge you are using.
- 5 Start the print job.
- 6 Remove each printed sheet as it is ejected from the printer.

Do not touch the printed side until the ink is completely dry. About 2 minutes is required for drying.

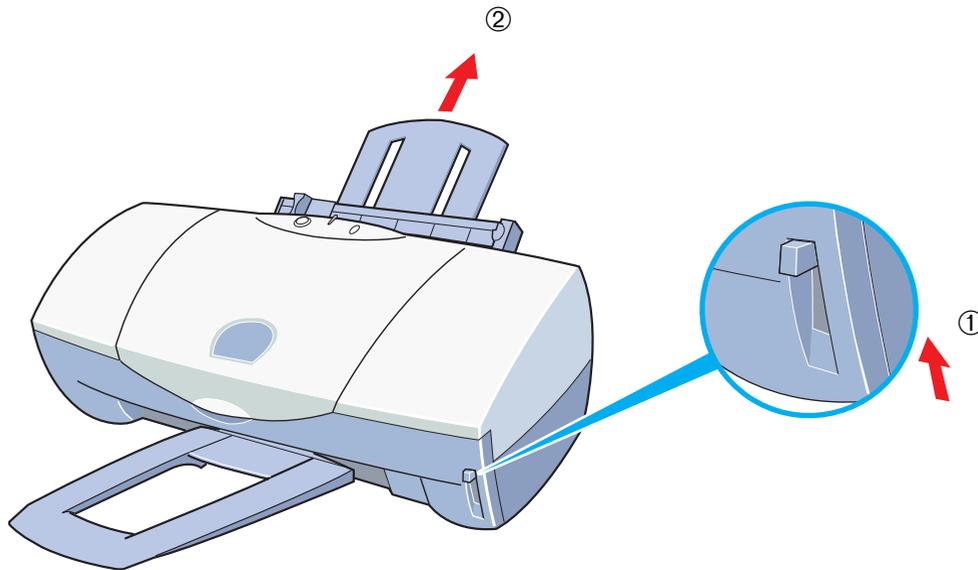
**Note** ►►

Store unused film in the original package in a dry, cool location away from direct sunlight, high temperature, and high humidity.

## Using High Gloss Photo Film

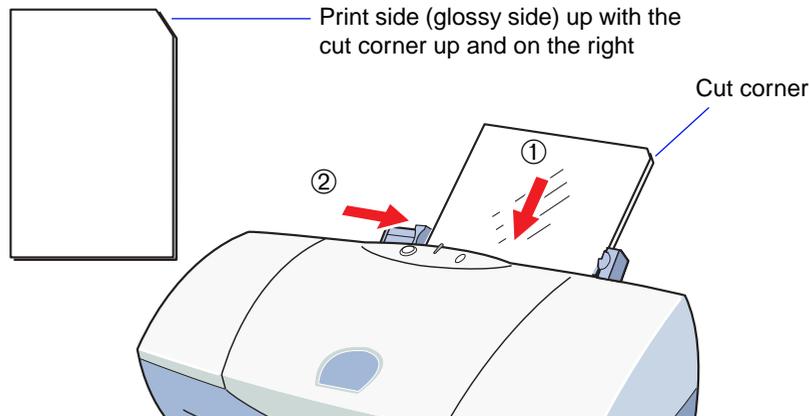
---

- 1 Make sure that the printer is switched on and the paper thickness lever ① is set to the Up position. Raise the paper rest ②.



## 2 Load one sheet of high gloss photo film.

- ① Remove one sheet from the package and hold the glossy side up with the cut corner up and on the right. Align the right edge with the right side of the auto sheet feeder and insert the sheet into the auto sheet feeder.
- ② Slide the paper guide to the left side of the sheet until it is snug. If the sheet is curled, bend it slightly against the curl to straighten it.



**Important** ►► Always handle the sheet by the edges. An unclean or scratched print surface can adversely affect print quality.

## Windows

- 3 Open the Printer Properties dialogue box, then select the most appropriate icon in the Choose Print Mode box under the Main tab. Select High Gloss Photo Film in the Media Type box. Make sure that the BJ Cartridge Type setting matches the BJ Cartridge you are using.

## Macintosh

- 3 Select the most appropriate icon that indicates the print mode in the Printer Properties dialogue box. Specify the media type (High Gloss Photo Film), and the BJ Cartridge you are using.
- 4 Start the print job.
- 5 Remove each printed sheet as it is ejected from the printer.

Do not touch the printed side until the ink is completely dry. About 10 minutes is required for drying.

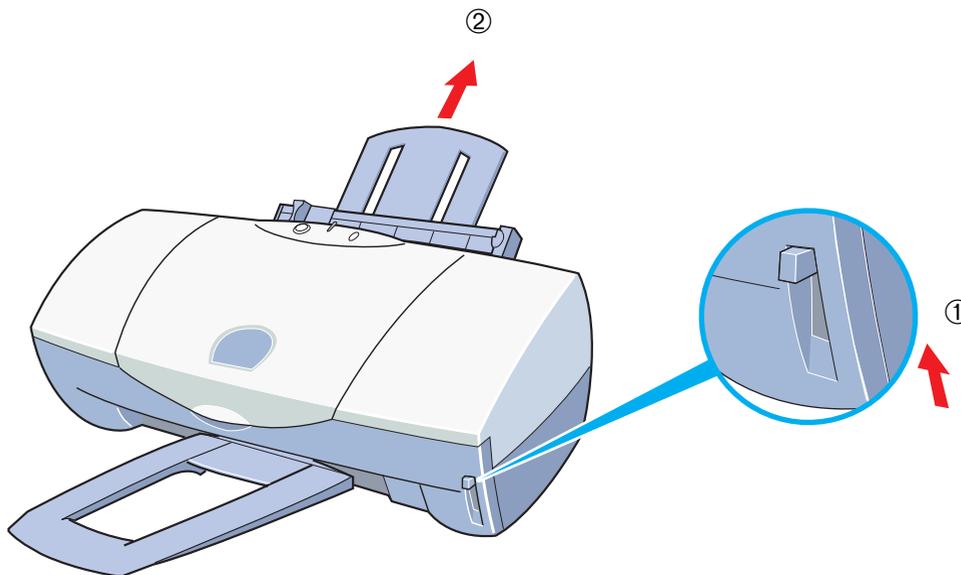
## Note ►►

Store unused film in the original package in a dry, cool location away from direct sunlight, high temperature, and high humidity. After storing the unused film in the package, place it on a stable, horizontal surface so that the film is not curled or creased in the package.

## Using Glossy Photo Cards

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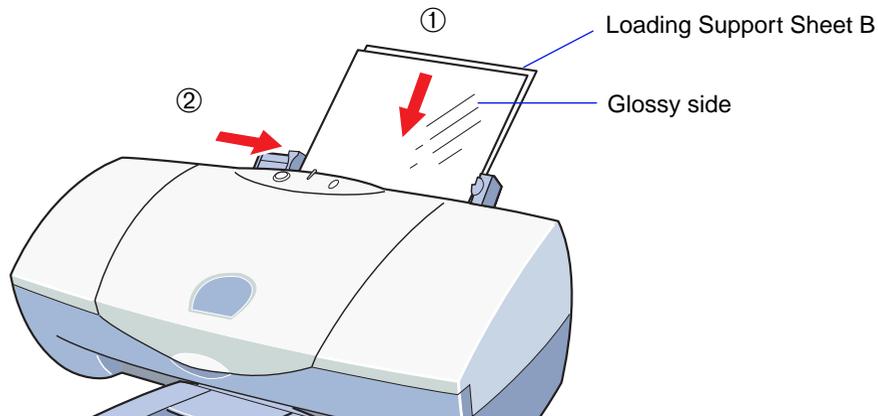
- 1 Make sure that the printer is switched on and the paper thickness lever ① is set to the Up position. Raise the paper rest ②.



## 2 Load the glossy photo cards.

- ① With the print side (glossy side) facing up, place the Loading Support Sheet B provided with the package under the stack. Load the stack with the edges aligned against the right side of the auto sheet feeder. (For details, refer to the instructions provided with the Glossy Photo Cards package.)
- ② Slide the paper guide to the left side of the stack until it is snug.

- Important** ►►
- Do not remove the borders from the photo card before printing.
  - To avoid touching the print side (glossy side), always handle the sheet by the edges.
- Unclean or scratched print surfaces can adversely affect print quality.



## Windows

- 3 Open the Printer Properties dialogue box and select the most appropriate icon in the Choose Print Mode box under the Main tab. Select Glossy Photo Cards in the Media Type box. Make sure that the BJ Cartridge Type setting matches the BJ Cartridge you are using.
- 4 Click the Page Layout tab and make sure that the Page Size setting is "Canon 101.6 x152.4mm (4 x 6 in)".

## Macintosh

- 3 Select the most appropriate icon that indicates the print mode in the Printer Properties dialogue box. Specify the media type (Glossy Photo Cards), and the BJ Cartridge you are using.
- 4 In the Page Setup dialogue select "Glossy Photo Cards" for the Paper Size.

Normally you can set the paper size with the application program. However, if the paper size setting does not match the setting in the application program, or if your application program does not provide a size selection for Glossy Photo Cards, do the setting here.

- 5 Start the print job.
- 6 Remove each printed card as it is ejected from the printer.

Do not touch the printed side until the ink is completely dry. About 2 minutes is required for drying.

- 7 Tear away the strips of the glossy photo card. For more details, see the instructions provided with the Glossy Photo Cards package.

**Note** ▶▶

Store unused glossy photo cards in the original package in a dry, cool location away from direct sunlight, high temperature, and high humidity.

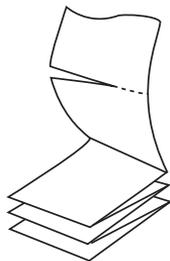
## Using Banner Paper

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- 1 Make sure that the printer is switched on and the paper thickness lever is set to the Down position. Lower the paper rest.
- 2 Before you tear off the sheets, make sure that you take one more sheet than you need for printing. (For example, if you wish to print three sheets, tear off a length of four sheets, one more than you need for printing.)

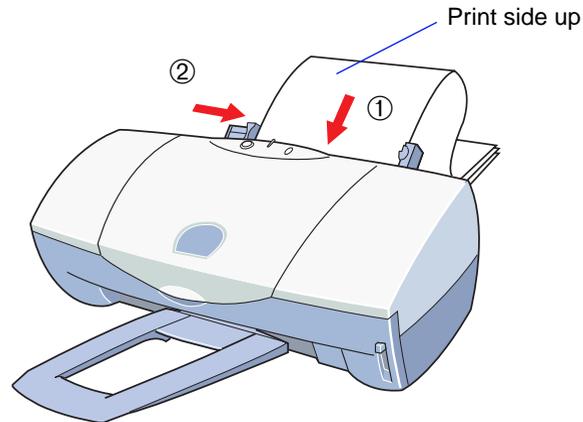
### Note ►►

You can print on up to six sheets. If you want to print a banner of maximum length (six sheets), tear off a length of seven sheets, one more than you need for printing.



### 3 Load the banner paper.

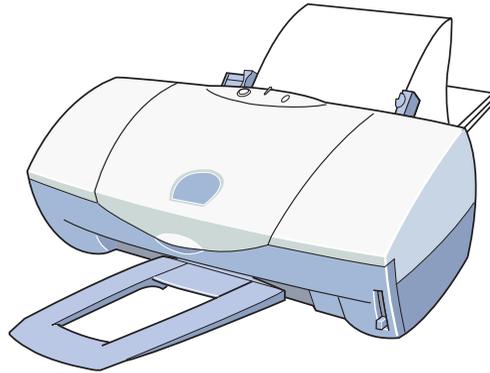
- ① Align the right side of the first sheet with the right side of the auto sheet feeder and insert it into the auto sheet feeder until it stops.
- ② Slide the paper guide to the right until it is snug against the side of the sheet.



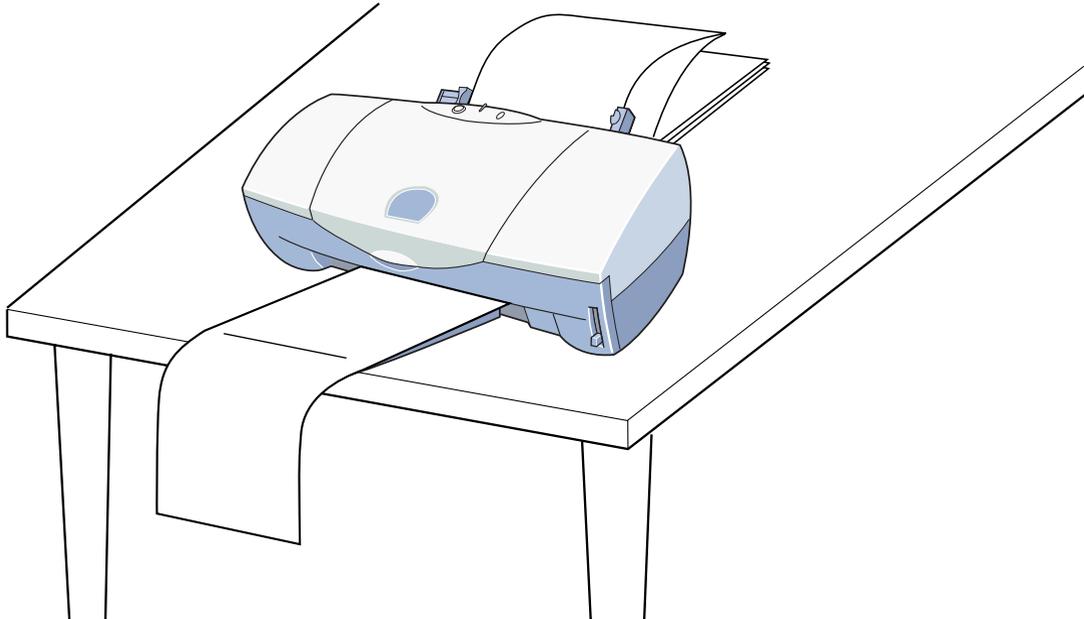
#### Note ►►

- You can print on either side of banner paper.
- Neatly fold the unprinted paper behind the printer and do not allow it to hang over the edge of the table

- 4 Gently fold over the perforations between the first and second sheet.



- 5 Provide ample space in front of the printer so each sheet is supported as it comes out of the printer and allowed to hang over the edge of the table as shown.



**Important** ► A dense print will require more time to dry. Be careful that wet ink does not stain the desk or the floor.

## Windows

- 6 Open the Printer Properties dialogue box, then click the Page Layout tab. Check the radio button for Banner Printing in the Printing Type. When a confirmation message appears, click the OK button. If you need detailed information on banner printing, click the Help button.

## Macintosh

- 6 Check the radio button for Banner Printing in the Page Setup dialogue box. When a confirmation message appears, click the OK button. If you need detailed information on banner printing, click the Help button.

## Windows

- 7 Select the most appropriate icon in the Choose Print Mode box under the Main tab. Select Plain Paper in the Media Type box. Make sure that the BJ Cartridge Type setting matches the BJ Cartridge you are using.

## Macintosh

- 7 Select the most appropriate icon that indicates the print mode in the Printer Properties dialogue box. Specify the media type (Plain Paper), and the BJ Cartridge you are using.

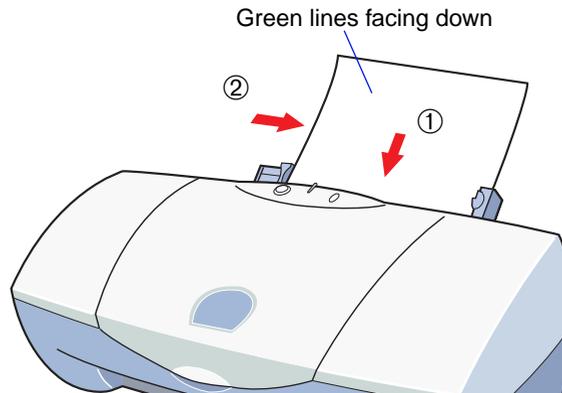
**Note** ▶▶

When using a Macintosh computers with USB interface, select Banner Printing before creating a document using an application program.

## Using T-Shirt Transfers

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- 1 Make sure that the printer is switched on and the paper thickness lever is set to the Down position. Raise the paper rest.
- 2 Load the transfer sheet.
  - ① Remove one transfer sheet from the package and hold it with the green lines down and the print side up. Align the right side of the transfer sheet with the right side of the auto sheet feeder and insert it into the auto sheet feeder.
  - ② Slide the paper guide to the right until it is snug. If the sheet is curled, bend it slightly against the curl to straighten it.



## Windows

- 3 Open the Printer Properties dialogue box and select the most appropriate icon in the Choose Print Mode box under the Main tab. Select T-Shirt Transfer in the Media Type box. Make sure that the BJ Cartridge Type setting matches the BJ Cartridge you are using.

## Macintosh

- 3 Select the most appropriate icon that indicates the print mode in the Printer Properties dialogue box. Specify the media type (T-Shirt Transfer), and the BJ Cartridge you are using.
- 4 Start the print job.
- 5 Remove each transfer sheet as it is ejected from the printer.

Follow the instructions provided with the T-Shirt Transfers package to complete transfer of the image to the T-shirt.

**Note** ►►

- The image is printed reversed horizontally (mirrored) so it will appear as the original image after it is transferred to the T-shirt.
- Store unused transfer sheets flat in the original package in a dry, cool location away from direct sunlight, high temperature and high humidity.

## Using the BJ Cartridges



[BJ Cartridges You Can Use with the Printer](#)

[Notes on Handling BJ Cartridges](#)

## BJ Cartridges You Can Use with the Printer

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Three types of BJ Cartridge (Color BJ Cartridge, Photo BJ Cartridge, and Black BJ Cartridge) can be used with this printer. Use whichever cartridge is appropriate for the work you are doing.

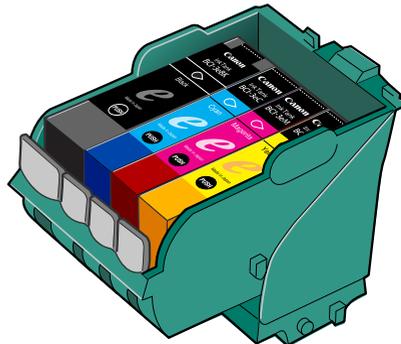
- Color BJ Cartridge BC-33e  
This BJ Cartridge includes pigment black ink and inks in the usual three colours (Cyan, Magenta, and Yellow). This is best for printing general colour documents and graphics.

The Color BJ Cartridge BC-33e is composed of the print head and four replaceable ink tanks.

When a colour runs out, only that colour's ink tank needs to be replaced.

Black:	Ink Tank BCI-3eBK
Cyan:	Ink Tank BCI-3eC
Magenta:	Ink Tank BCI-3eM
Yellow:	Ink Tank BCI-3eY

### Replacing Ink Tanks



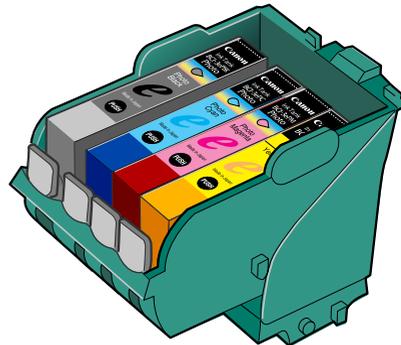
- **Color BJ Cartridge BC-34e Photo**  
This BJ Cartridge includes four colors, that is Photo Cyan, Photo Magenta, which are slightly lighter than ordinary Cyan and Magenta, normal Yellow, and dye black. This is best for realistically producing natural images such as photographs.

The Color BJ Cartridge BC-34e Photo is composed of the print head and four replaceable ink tanks.

When a colour runs out, only that colour's ink tank needs to be replaced.

Photo Black:	Ink Tank BCI-3ePBK Photo
Photo Cyan:	Ink Tank BCI-3ePC Photo
Photo Magenta:	Ink Tank BCI-3ePM Photo
Yellow:	Ink Tank BCI-3eY

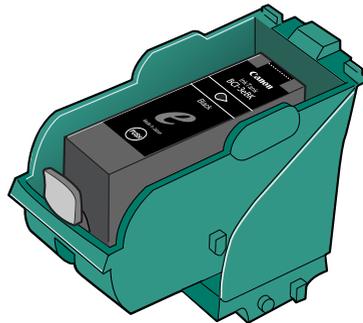
### ➡ Replacing Ink Tanks



- **Black BJ Cartridge BC-30e**  
This BJ Cartridge contains pigment black ink which takes longer to dry than general dye ink, but produces extremely sharp, water-resistant text and graphics. This is intended for printing monochrome documents.

The Black BJ Cartridge BC-30e is composed of two distinct parts, the print head and one replaceable ink tank, the Ink Tank BCI-3eBK. When this BJ Cartridge runs out of black ink, only the ink tank needs to be replaced.

### Replacing Ink Tanks



## Notes on Handling BJ Cartridges

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All BJ Cartridges contain replaceable ink tanks. Ink tanks and BJ Cartridges are consumable items. After an ink tank runs out of ink, or after a print head wears out, it should be replaced.

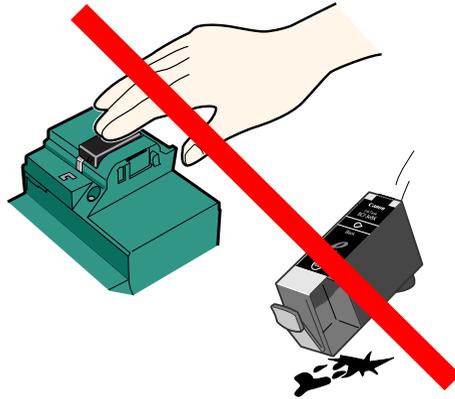
### ■ When you purchase extra ink tanks...

- Check the name of the ink tank(s) to ensure that you get the correct ink tank(s) for your BJ Cartridges before purchase. In order to print correctly, you must have the correct ink tanks installed for each BJ Cartridge.
- When you purchase a Canon Photo BJ Cartridge, make sure that you specify the Color BJ Cartridge BC-34e Photo. Other Photo BJ Cartridges cannot be used with this printer.

## ■ Handling the BJ Cartridges...

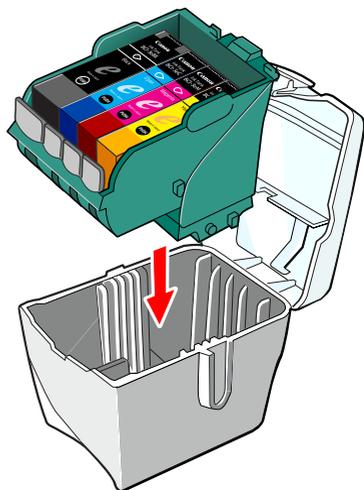
### ⚠ Caution

- To avoid personal injury or damage to the print heads, never touch the print heads of a BJ Cartridge. The print heads become very hot during printing and can cause a minor burn. Touching a print head could damage it and make further printing impossible.
- To avoid ink spills and stains on your clothing or the surrounding area, do not drop or shake BJ Cartridges or ink tanks.



## ■ Storing the unused BJ Cartridges...

After you replace the BJ Cartridge with another one, always store the unused BJ Cartridge in a BJ Cartridge container. If the BJ Cartridge is not properly stored in the container, the ink will dry out and the BJ Cartridge can no longer be used. Also, after removing the seal on the ink tank, always insert it into a BJ Cartridge to prevent the ink tank from drying out.



Always store BJ Cartridges and ink tanks out of the reach of small children. If any ink enters the eye or is accidentally ingested, seek medical assistance immediately.

- Important** ▶▶
- Do not attempt to reattach the protective cap and protective tape after removing them. Observe all local regulations regarding the location and method of disposing of these items.
  - Do not leave an empty ink tank in a BJ Cartridge. Remove it immediately after ink runs out.
  - If a used ink tank which is still usable must be removed for some reason, keep the ink tank installed in the BJ Cartridge. Otherwise the ink will dry out and print jobs may not be performed properly after the ink tank is installed again.

 [Replacing Ink Tanks](#)

# Printing Photographs



[Tips on Printing Photographic Images](#)

[Printing Photographic Images](#)

[About Photo Optimizer PRO](#)

## Tips on Printing Photographic Images

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To produce the best possible print quality for printing photographic images from a digital camera or scanner, or photographic images downloaded from a home page on the Internet, observe the following three points:

- Use the Photo BJ Cartridge.
- Use special media designed for reproducing photographs.
- Use the correct print settings in the printer driver.

# Printing Photographic Images

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- 1 Make sure that the printer is switched on. Make sure that the Photo BJ Cartridge is installed in the cartridge holder.
  
- 2 Load special print media in the auto sheet feeder of the printer. Excellent prints of photographs can be obtained with plain paper, but for superior colour reproduction, use of one of the following special media is recommended.
  - High Resolution Paper HR-101
  - Glossy Photo Paper GP-301
  - High Gloss Photo Film HG-201
  - Glossy Photo Cards FM-101

For more details on how to load special media, see the "Loading Paper and Other Media" section.

 [Loading Paper and Other Media](#)

## Windows



Super Photo

- 3 Open the Printer Properties dialogue box and select SuperPhoto in the Choose Print Mode box under the Main tab.

When SuperPhoto is selected, the BJ Cartridge setting automatically changes to Photo so you can use the four different types of inks provided by the Photo BJ Cartridge.

- 4 Click the OK button to close the Printer Properties dialogue box.
- 5 Start the print job.

## Macintosh



- 3 From the File menu select Print.
- 4 In the print dialogue select the Photo icon under Print Mode.
- 5 For the BJ Cartridge setting select Photo and click the Print button.

**Note** ►►

For optimum reproduction of all the colour tones, make sure that the Media Type setting is correct for the media you have loaded in the printer.

## About Photo Optimizer PRO

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The Photo Optimizer PRO optimizes a photographic images created with a digital camera device when it is printed out. Use the Photo Optimizer PRO to compensate for unsatisfactory halftone contrast, colour balance or over- or under-exposure before printing photo data.

### Windows

- 1 Open the Printer Properties dialogue box and click the Main tab.
- 2 Click the Advanced button.
- 3 Select Photo Optimizer PRO in the Quality tab.
- 4 Check the Whole Page checkbox, if necessary.

**Enabled:** When the Whole Page setting is enabled, the Photo Optimizer PRO adjusts multiple photographic images appearing on the same page separately. Use this setting when any trimmed or rotated images are on the page.

**Disabled:** When the Whole Page setting is disabled, the Photo Optimizer PRO adjusts multiple graphic images appearing on the same page as a whole.

## Macintosh

- 1 Select Photo Optimizer PRO on the Quality panel. The Photo Optimizer PRO feature works on the image that is edited using the edit menu such as "Cut" and "Rotate" in a graphics application program.

Disabled



Enabled



# Using the Scanner



Scanner Driver Basics

Before Using the Scanner

Installing the IS Scan Software

About the Scanning Area

Launching IS Scan

Performing White Level Calibration

Scanning an Image

Saving an Image

## Scanner Driver Basics

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Installing the Color Image Scanner Cartridge IS-32 in the printer makes it possible to scan and save images such as your favourite photographs and greeting cards. The Color Image Scanner Cartridge IS-32 operates in combination with the special IS Scan Software, the IS Scan scanner driver and IS Scan Plus utility program. These two programs provide many features that allow you to perform simple colour adjustments to improve the quality of the original image or enhance the image for artistic effect.

### Windows

- If you are using a TWAIN\*-compatible graphics application program, you need the IS Scan scanner driver. You can run IS Scan from within a TWAIN-compatible graphics application program. After scanning the image, transfer the image data to the application program to edit, enhance and save images.
- If you are not using a TWAIN-compatible graphics application program, use the IS Scan Plus utility for Windows. IS Scan Plus allows you to scan, edit, enhance and save images.

### Macintosh

You need the IS Scan scanner driver. IS Scan allows you to scan, edit, enhance and save images. You can run IS Scan directly as a stand-alone application program, or you can run it from within a TWAIN-compatible graphics application program.

### Note ►►

- \* TWAIN is the name of the group that defined the standards for passing data from digital devices like scanners to software applications running on 32-bit platforms.

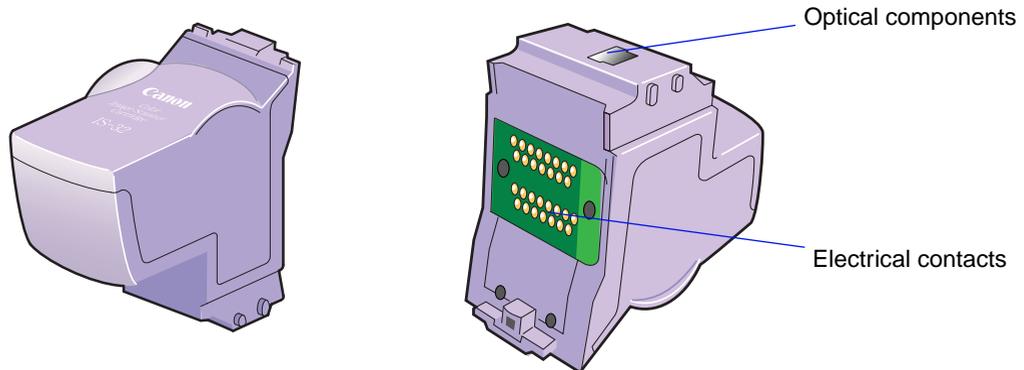
## Before Using the Scanner

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Check the following items before using the scanner.

**Important** ►► The scanner cartridge is composed of precision components. Do not touch the electrical contacts and optical components, such as lenses, to avoid poor scanning results, poor contact and static electricity.

### ■ Color Image Scanner Cartridge IS-32



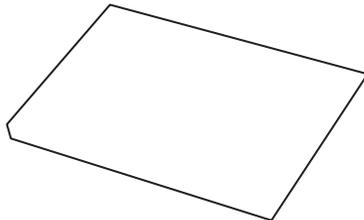
Install this scanner cartridge to use the printer as a scanner.

## ■ White calibration sheet

Used for maintaining the correct colour balance of scanned images.

- Important** ▶▶
- Do not leave the white calibration sheet in locations that are exposed to direct sunlight or that are subject to high temperatures or humidity.
  - Do not bend or fold the white calibration sheet.
  - When cleaning the white calibration sheet, use a soft cloth dipped in a weak, neutral detergent solution, and then wipe the wet surface off with a dry, soft cloth.

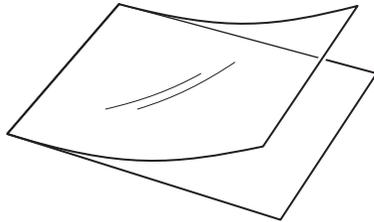
### ➡ Performing White Level Calibration



## ■ Scanning holder

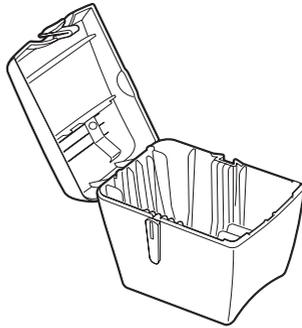
Used for holding the original that you wish to scan or the white calibration sheet. If you wish to scan images larger than the A5, scanning holders for other paper sizes may be optionally available depending on the country of purchase.

- Important** ▶▶
- To prevent paper jams, always insert the image you wish to scan into the scanning holder before scanning.
  - Do not spread the overlay of the scanning holder excessively when the image is inserted.
  - Do not leave the scanning holder in locations that are exposed to direct sunlight or subject to high temperatures or humidity.



## ■ BJ Cartridge container

Used for storing the Color Image Scanner Cartridge IS-32 or another BJ Cartridge when not in use. The BJ Cartridge container comes with the printer. If you need additional containers, the BJ Cartridge container may be optionally available depending on the country of purchase.



# Installing the IS Scan Software

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Before using the printer as a scanner, you must install the IS Scan Software.

## Note ►►

- Before installing the IS Scan Software, quit any application programs that are running.
- If another IS Scan Software is installed in the system, uninstall the old version of the IS Scan Software and then install the new version.

## Windows

- 1 Load the Setup Software & Reference Guide CD-ROM into the CD-ROM drive, and make sure that the printer is switched on.

The CD-ROM starts automatically and a menu screen is displayed. If the CD-ROM does not start automatically, click the My Computer icon on the Windows desktop and then double-click the CD-ROM icon.

- 2 Click Install Software at the menu screen.

- 3 Make sure that the IS Scan Software button is red.  
Click IS Scan Software (if the button is not red), click the Start button.

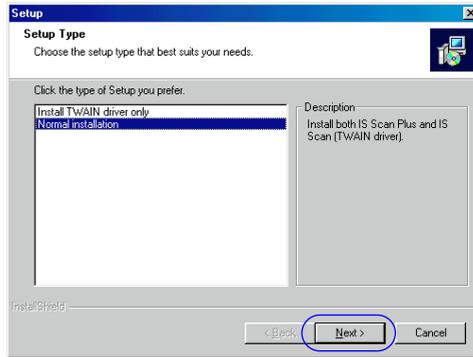
Check that this button is lit red.



### Note ►►

If you want to know more about handling the scanner, click the Readme button.

- 4 Select the desired item, then click the Next button.
- Install TWAIN driver only  
Select this item if you are using a TWAIN-compatible application program for processing image data. This installs the IS Scan scanner driver only.
  - Normal installation  
Select this item if you are not using a TWAIN-compatible application program for processing image data. This installs the IS Scan scanner driver and IS Scan Plus utility program.

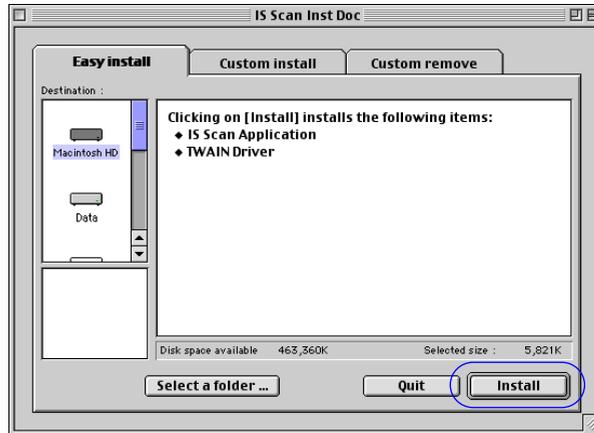


For the rest of the installation procedure, follow the instructions on the screen.

### Macintosh

- 1 Load the Setup Software & Reference Guide CD-ROM into the CD-ROM drive.
- 2 Double-click the CD-ROM icon.
- 3 Double-click the IS Scan folder.
- 4 Double-click the folder of your language.

- 5 Double-click Installer.
- 6 Click Agree in the Software Licence Agreement screen.
- 7 Click Install, and then follow the instructions on the screen.



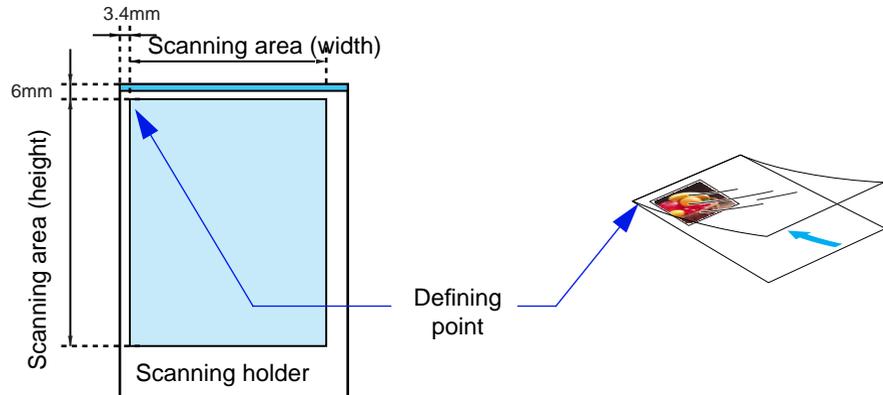
## About the Scanning Area

The size of the scanning area may vary depending on the scanning and display resolution.

Paper size	Scanning area
A6 (105 x 148mm)	98 x 138mm
A5 (148 x 210mm)	141 x 200mm
A4 (210 x 297mm)	203 x 287mm
B5 (182 x 257mm)	175 x 247mm
Letter (215.9 x 279.4mm)	208x 269mm

### Note ►►

- Always position the original on the scanning holder 3.4mm from the left margin and 6.0mm from the top margin.
- Scanning results may be blurred or distorted within the area of 32mm away from the top margin of the scanning holder. Images cannot be scanned within the area of 26mm away from the bottom margin.



# Launching IS Scan

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If you have a TWAIN-compatible graphics application program, you can use the scanner function in combination with IS Scan. Otherwise, you can use IS Scan Plus for Windows and IS Scan directly as a stand-alone application program for Macintosh.

## ■ Using IS Scan Plus for Windows

- 1 Select Programs from the Start menu.
- 2 Point to IS Scan Plus, then select IS Scan Plus.
- 3 Select Capture Image from the Main menu screen.

## ■ Using IS Scan directly as a stand-alone application program for Macintosh

- 1 Double-click IS Scan in the folder you specified during the installation procedure.

## ■ Using IS Scan from within a TWAIN-compatible graphics application program

### Note ►►

- Some TWAIN-compatible graphics application programs do not display the Main dialogue box of IS Scan but display a different screen. If you are using this type of application program, read the documentation of the application program carefully and perform prescanning or normal scanning.
- After launching IS Scan from within a TWAIN-compatible application program, do not close the application program. If you do, the system may not be able to respond.

1

Start up the TWAIN-compatible graphics application program.

If multiple TWAIN-compatible device drivers are installed in your system, go to Step 2. If not, go to Step 3.

### Note ►►

Depending on the application program you may use, you may need to proceed with step 2 even though a single TWAIN-compatible graphics application program is installed in the system. For details, refer to the documentation of your application program.

2

Select the device you use. This displays a dialogue box to select the device driver. (Normally the "Acquire" or "TWAIN" command is selected from the File menu. The dialogue box to select the device driver varies according to the application program.)

Windows

Select Canon IS Scan2, then click the OK or Select button to enable the settings.

Macintosh

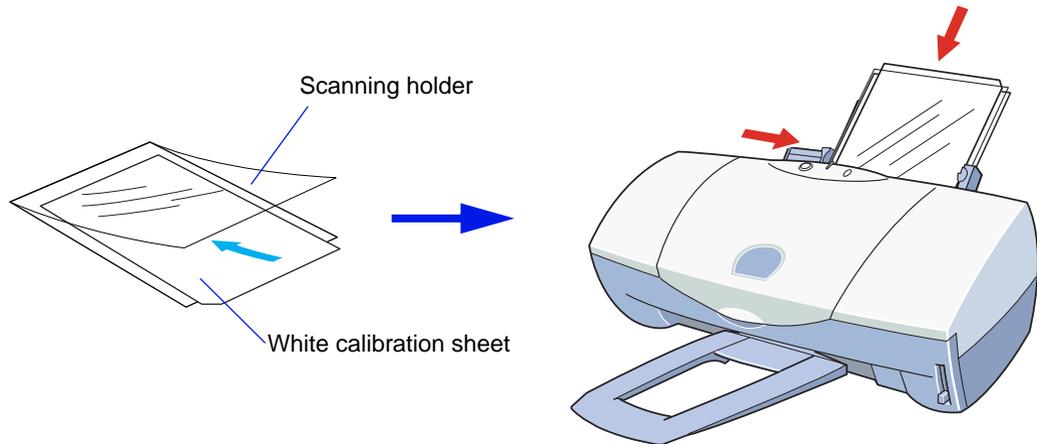
Select Canon IS Scan DS, then click the OK or Select button to enable the settings.

## Performing White Level Calibration

---

The white calibration sheet provided with the scanner cartridge is used for maintaining the correct colour balance of scanned images. White level calibration is required when the scanner cartridge is used for the first time.

Place the white calibration sheet in the scanning holder, and load it in the auto sheet feeder of the printer.



**Important** ►► To prevent possible damage to the printer, white level calibration sheet or scanning holder, always insert the scanning holder into the auto sheet feeder with its top edge (seamed side) facing down.

## 2 Perform white level calibration.

- When using IS Scan Plus

### Windows

Select Capture Image from the Main menu screen. Click the Custom button in the Scanning Mode box, and then select White Level from in the Custom dialogue box.

- When using IS Scan directly as a stand-alone application program

### Macintosh

Select Settings from the Main menu screen, then select White Level in the dialogue box.

- When using IS Scan from within a TWAIN-compatible graphics application program

### Windows

Select White Level from the Option menu.

### Macintosh

Select Settings from the Main menu screen, then select White Level in the dialogue box.

### Note ►►

### Windows

When the printer is connected with both the parallel interface and USB interface, the Select connecting cable dialog box is displayed. Select the desired port and click the OK button.

- 3 When a message appears and prompts you to load the white calibration sheet, click the OK button.  
The sheet is scanned and ejected from the paper output tray.

**Note** ►►

When the system needs to update the white level calibration data, a message appears and prompts you to load the white calibration sheet. Click the OK button and perform white level calibration.

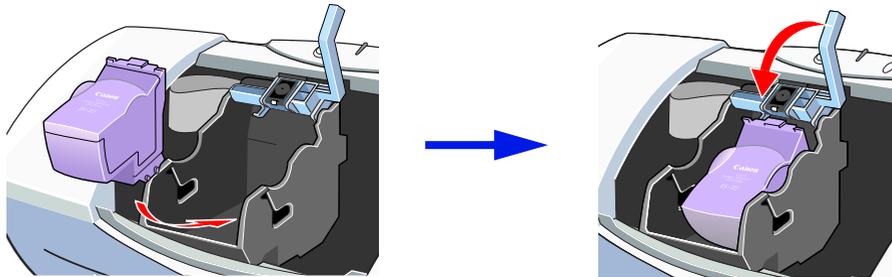
## Scanning an Image

This section describes the basic operation procedures to install the Scanner Cartridge and to scan the image.

### Warning

- Scanning and printing certain documents, such as bank notes (bank bills) and government bonds, may be considered "criminal" offences with considerable penalties.
- You may be required by law to obtain authorization from the person who has the copyright or other legal right to the documents being scanned.

- 1 Remove the BJ Cartridge installed in the cartridge holder and then install the Color Image Scanner Cartridge IS-32.



- (1) Open the front cover of the printer. Remove the BJ Cartridge installed in the cartridge holder.
- (2) Store the removed BJ Cartridge in the BJ Cartridge container.
- (3) Install the Color Image Scanner Cartridge IS-32.
- (4) Make sure that the paper thickness lever is set to the Up position.
- (5) Close the front cover.

**Note** ▶▶

Make sure that the paper thickness lever is set to the Up position. If you scan the image with the paper thickness lever set in the Down position, scanning results may be unsatisfactory.

2 Launch the IS Scan Software.

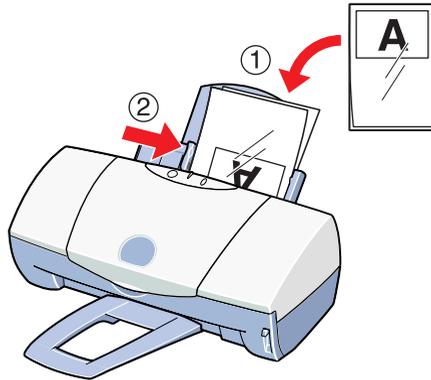
 [Launching IS Scan](#)

3 Perform white level calibration.

 [Performing White Level Calibration](#)

## 4 Load the image you wish to scan in the auto sheet feeder of the printer.

- ① Place the image in the scanning holder.
- ② Insert the scanning holder in the auto sheet feeder of the printer.



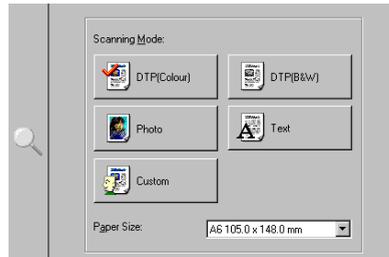
### Important ►►

- The maximum thickness of the original must be within 0.45mm, including the scanning holder. (The scanning holder is 0.2mm thick so the image you wish to scan must be up to 0.25mm thick.)
- To prevent possible damage to the printer or Scanner Cartridge, do not scan the image with paper clips or staples attached.
- To prevent possible damage to the scanning holder, always insert the scanning holder into the auto sheet feeder with its top, seamed edge down.

## 5 Perform prescanning.

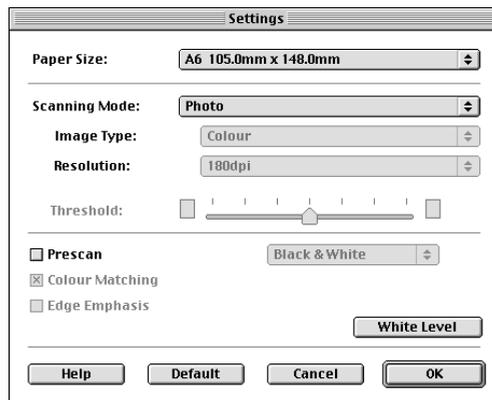
### Windows

- (1) Select the most appropriate mode in the Scanning Mode box. Then select the most appropriate size in Paper Size. Click the Prescan button.



### Macintosh

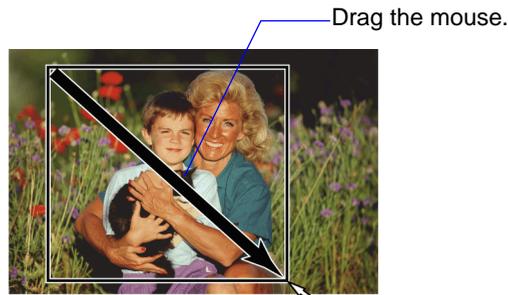
- (1) Select the most appropriate mode in Scanning Mode. Select the appropriate size in Paper Size. Check the Prescan checkbox and click the OK button.



- (2) After the scanning holder with the original is ejected from the paper output tray, the prescanned image is displayed.  
Make sure that the image is properly placed in the scanning area.

**6** To scan only a portion of the entire image, drag the mouse to specify the portion. Follow the procedure below.

- (1) Point to a corner of the rectangle for the area on the image you want to select.
- (2) Drag the mouse to the opposite corner of the rectangle.
- (3) Release the mouse button. The specified rectangle appears on the image.



**Note** ►►

- To change the portion you specified, place the mouse pointer within the portion and drag the mouse to the desired position.
- To cancel the portion you specified, follow the procedure below.

## Windows

Right-click the image. The rectangle disappears and you can specify the portion of the image again.

## Macintosh

While pressing the Control key, click on the image. The rectangle disappears and you can specify the portion of the image again.

7 Load the original in the auto sheet feeder again.

Make sure the original does not move in the scanning holder.

8 Click Scan in the dialogue box.

After the scanning holder is ejected from the paper output tray, the scanned image is displayed.

**Note** ►►

- When you are using IS Scan from within a TWAIN-compatible graphics application program, click the Transfer button. IS Scan closes automatically and then the scanned image is displayed in the application program.
- When you scan originals from books and magazines, the scanned image may appear shaded. To solve the problem, use a lower resolution setting and try again.

If you wish to adjust and enhance the scanned image, refer to the on-line Help or the documentation of the graphics application program.

# Saving an Image

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After scanning is completed, save the image for using it in your graphics application program.

## ■ When using IS Scan Plus

### Windows

- 1 Click the Save button.
- 2 When the Save As dialogue box is displayed, enter a file name, drive or folder name and file format type.
- 3 Click the Save button in the Save As dialogue box.

## ■ When using IS Scan directly as a stand-alone application program

### Macintosh

- 1 Click the Save button.
- 2 Enter a file name, drive or folder name and file format type in the dialogue box.
- 3 Click the Save button in the dialogue box.

## ■ Using IS Scan from within a TWAIN-compatible graphics application program

- 1 Click the Transfer button. The scanned image is displayed in the TWAIN-compatible graphics application program.
- 2 Select the command for saving, and save the image.  
For details, refer to the documentation of your application program.

## Routine Maintenance



Prolonging the Service Life of the Printer

BJ Cartridge Maintenance

When to Replace a BJ Cartridge

Printing a Nozzle Check Pattern

Cleaning the Print Head

Replacing Ink Tanks

Replacing the BJ Cartridge

Aligning the Print Head

Cleaning the Printer

Cleaning the Paper Feed Rollers

Transporting the Printer

# Prolonging the Service Life of the Printer

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To ensure a long service life for your printer, clean it frequently and replace consumable items such as the BJ Cartridges when required. Before you move the printer to a new location, pack it in its original box and packing material to prevent damage during shipping.

Guidelines for replacement of consumable items

 [BJ Cartridge Maintenance](#)

 [When to Replace a BJ Cartridge](#)

How to maintain the printer

 [Cleaning the Printer](#)

 [Cleaning the Paper Feed Rollers](#)

How to move the printer safely

 [Transporting the Printer](#)

# BJ Cartridge Maintenance

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Over time ink tanks run out and require replacement and eventually the BJ Cartridges also require replacement after the print heads wear out. The following topics regarding BJ Cartridge maintenance describe how to check the status of the BJ Cartridges and correct problems.

- ➡ Printing a Nozzle Check Pattern
- ➡ Cleaning the Print Head
- ➡ Replacing Ink Tanks
- ➡ Replacing the BJ Cartridge
- ➡ Aligning the Print Head

## When to Replace a BJ Cartridge

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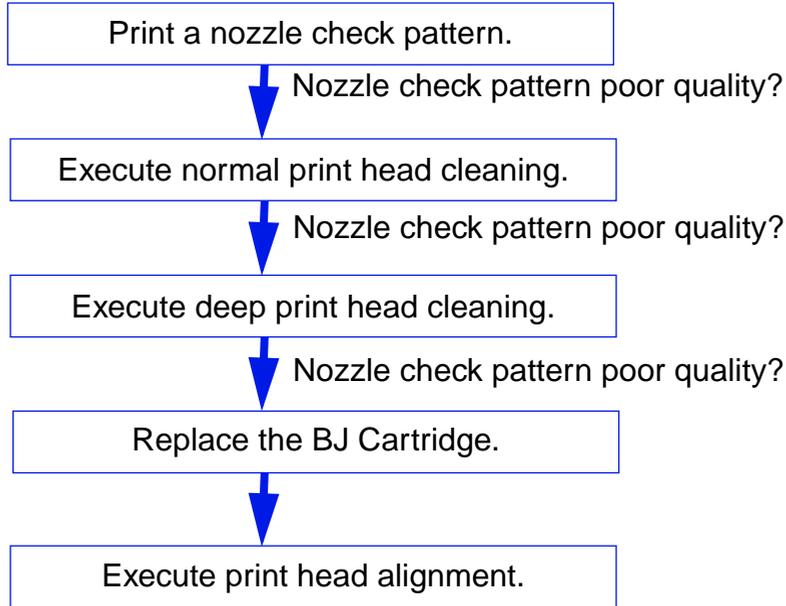
If the printout appears streaked or blurred, open the front cover of the printer and visually check the level of the ink in all the ink tanks. If remaining ink is low or has run out, replace it.

### Replacing Ink Tanks

#### **Note**

If an ink tank runs out of ink, the POWER lamp may flash orange four times and the BJ Status Monitor for Windows starts up to display a message to warn you that an ink tank has run out of ink.

After you replace the ink tank(s), if there are still signs of poor quality in your printing follow the procedure outlined in the flow chart on the next page.



➡ Printing a Nozzle Check Pattern

➡ Cleaning the Print Heads (Normal print head cleaning)

➡ Cleaning the Print Heads (Deep print head cleaning)

➡ Replacing the BJ Cartridge

➡ Aligning the Print Head

## Printing a Nozzle Check Pattern

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The nozzle check pattern confirms whether the inks are being correctly ejected from the print head nozzles and whether the print head on the BJ Cartridge is correctly aligned. Print the nozzle check pattern when your printouts are streaked or the colour tones are not correct, or after print head cleaning was performed.

### Windows

- 1 Open the Printer Properties dialogue box.
- 2 Click the Maintenance tab.
- 3 Click the nozzle check pattern icon.

### Macintosh

- 1 Select Page Setup from the File menu.
- 2 Click the Utilities button.
- 3 Select Test Print by clicking the up or down- arrow.
- 4 Select the Nozzle Check icon.

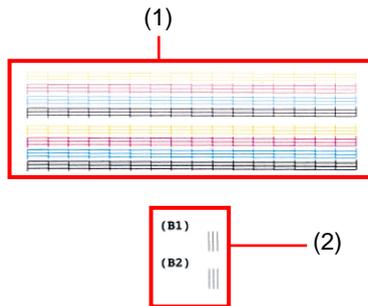
### Note

You can print a nozzle check pattern with the print driver or with the RESUME button on the printer. To print the nozzle check pattern with the button, press and hold down the RESUME button until the POWER lamp flashes twice, and release it.

- 5 When a confirmation message appears, make sure that paper is loaded in the printer and the printer is switched on.
- 6 Click the OK button.
- 7 Look at the check patterns and perform the correction procedure.

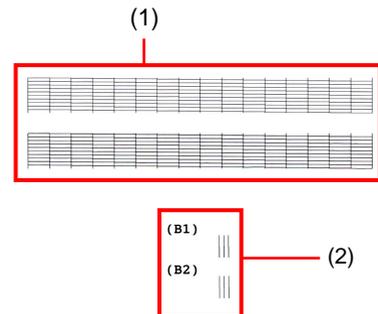
Separate patterns are printed to display the status of the BJ Cartridge.

- Color Cartridge BC-33e or Color Cartridge BC-34e Photo



- (1) Nozzle check pattern
- (2) Print head alignment check pattern for BJ Cartridge

- Black Cartridge BC-30e



- (1) Nozzle check pattern
- (2) Print head alignment check pattern for BJ Cartridge

If patterns (1) are broken or missing, print head cleaning is required.

 [Cleaning the Print Head](#)

If patterns (2) are not overlapped perfectly, print head alignment is required.

 [Aligning the Print Head](#)

**Note** 

Each pattern indicates the status of the nozzles of the BJ Cartridges installed in the printer.

# Cleaning the Print Head

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Cleaning the print head clears the nozzles. There are two ways to clean the print head: normal print head cleaning and deep print head cleaning. Always execute normal print head cleaning first. If this does not correct the problem then execute deep print head cleaning.

**Important** ►► Cleaning the print head consumes ink so clean the print heads only when necessary.

## ■ Normal print head cleaning

### Windows

- 1 Open the Printer Properties dialogue box.
- 2 Click the Maintenance tab.
- 3 Click the normal print head cleaning icon.

## Macintosh

- 1 Select Page Setup from the File menu.
- 2 Click the Utilities button.
- 3 Select the Cleaning icon.

**Note** ►►

You can also start print head cleaning with the RESUME button on the printer. Press and hold down the RESUME button until the POWER lamp flashes once, and release it. This cleans the print heads of all colours at one time.

- 4 When the confirmation message appears, make sure that the printer is switched on then click the OK button. Print head cleaning begins. (It takes about 40 seconds until print head cleaning is completed and the POWER lamp stops flashing.)
- 5 Print a nozzle check pattern to confirm success of normal print head cleaning.

 [Printing a Nozzle Check Pattern](#)

## ■ Deep print head cleaning

**Note** ►► Always execute normal print head cleaning first. Only when the normal print head cleaning does not correct the problem, perform deep print head cleaning.

### Windows

- 1 Open the Printer Properties dialogue box.
- 2 Click the Maintenance tab.
- 3 Click the print head deep cleaning icon in the Print Head Cleaning box.

### Macintosh

- 1 Select Page Setup from the File menu.
- 2 Click the Utilities button.
- 3 Select the Deep Cleaning icon.

- 4 When the confirmation message appears, make sure that the printer is switched on then click the OK button. Print head cleaning begins. (It takes about a few minutes until print head cleaning is completed and the POWER lamp stops flashing.)
- 5 Print a nozzle check pattern to confirm the success of print head deep cleaning.

#### Printing a Nozzle Check Pattern

#### Note

If the deep cleaning had no effect, perform normal print head cleaning and deep print head cleaning again. After cleaning the print head up to five times, if the nozzle check pattern is not satisfactory, the print heads may be worn out and the BJ Cartridge must be replaced.

#### Replacing the BJ Cartridge

## Replacing Ink Tanks

---

The following pages describe how to replace empty ink tanks.

**Note** ►► When you purchase extra ink tanks, make sure that you get the correct ink tanks for each BJ Cartridge.

- For Color BJ Cartridge BC-33e
  - Ink Tank BCI-3eBK
  - Ink Tank BCI-3eC
  - Ink Tank BCI-3eM
  - Ink Tank BCI-3eY

### ► Color BJ Cartridge BC-33e

- For Color BJ Cartridge BC-34e Photo
  - Ink Tank BCI-3ePBK Photo
  - Ink Tank BCI-3ePC Photo
  - Ink Tank BCI-3ePM Photo
  - Ink Tank BCI-3eY

### ► Color BJ Cartridge BC-34e Photo

- For Black BJ Cartridge BC-30e
  - Ink Tank BCI-3eBK

### ► Black BJ Cartridge BC-30e

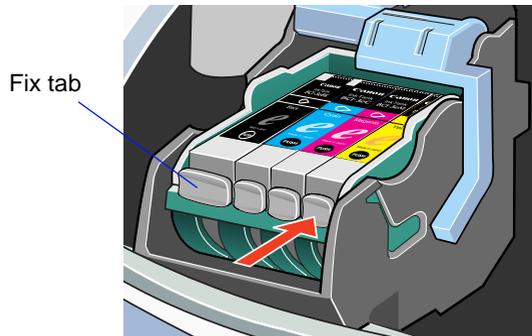
- 1 Make sure that the printer is switched on and open the front cover. The cartridge holder moves to the centre.

**Note** ▶▶

- If you need to replace two ink tanks or more, do not remove the ink tanks together. Remove and replace each ink tank one by one to ensure that each new ink tank is inserted in the correct slot. If you insert an ink tank in the wrong slot, colours will not print correctly.
- To avoid interfering with the ink supply from a tank, never touch the open ink port on an ink tank.

- 2 To remove the empty ink tank, press in on the tab on the ink tank to release and pull it out of the slot.

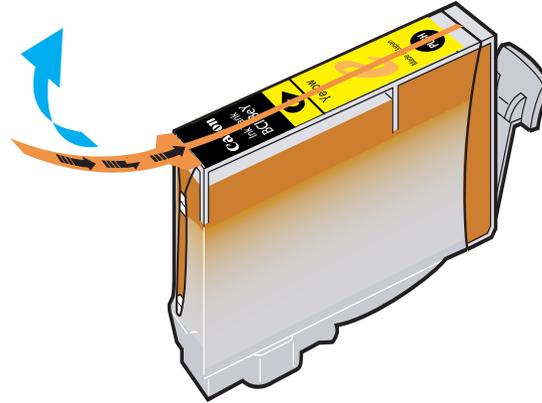
Do not remove the BJ Cartridge! Leave the BJ Cartridge installed in the printer and remove only the ink tank(s).



**Note** ►► Discard empty ink tanks according to the local laws and regulations regarding disposal of consumables.

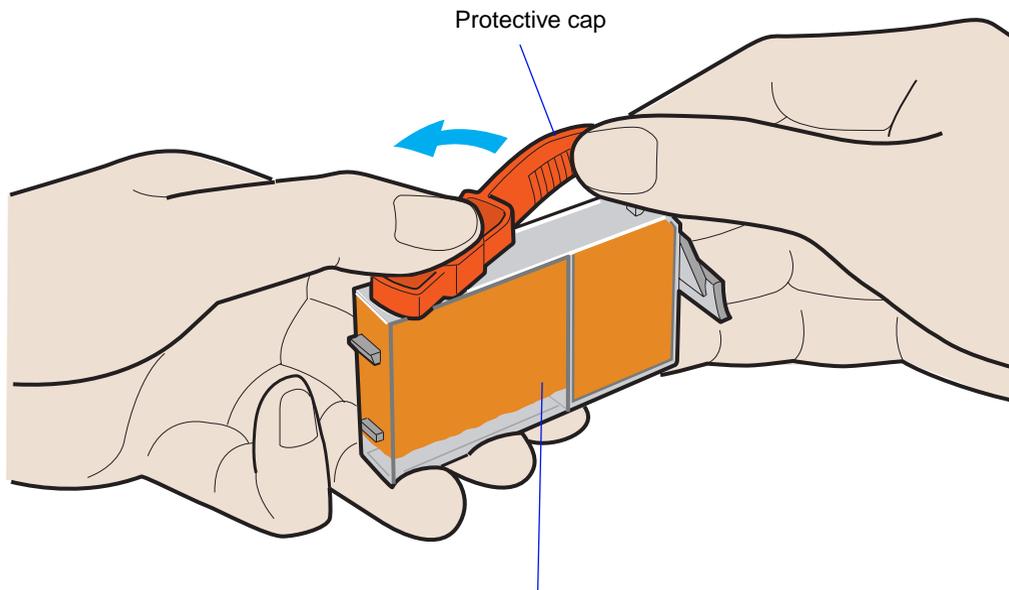
**Important** ►► To avoid staining your hands, clothing, or areas of the work site, do not shake or drop ink tanks.

- 3 Remove the new ink tank from its package. Pull the orange tape up and against the perforations to open the packing film.



- Important** ►►
- Remove the film carefully so you do not remove the label from the ink tank. The label is needed to match the ink tank with the correct slot of the BJ Cartridge.
  - Remove the film by pulling on the orange tape. Do not attempt to remove the film before you remove the orange tape.

- 4 Grip the bottom of the ink tank and twist off the orange protective cap in the direction of the arrow.



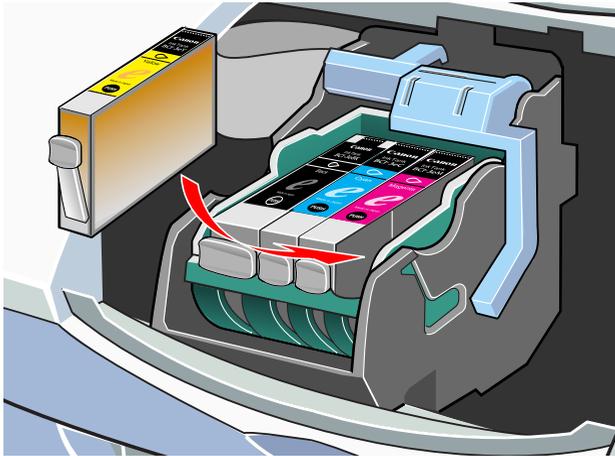
To prevent spilling ink, never press this side of the ink tank.

**Note** ►►

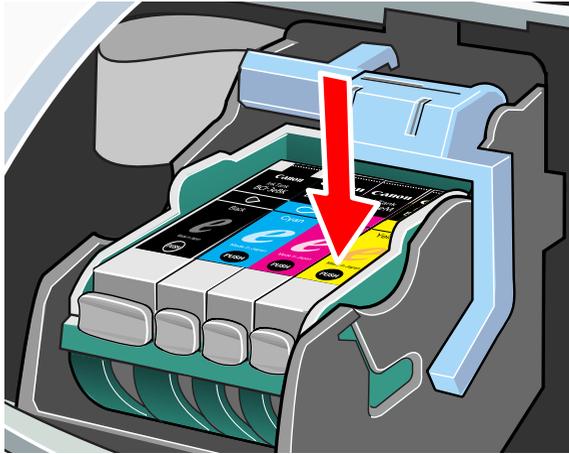
Never attempt to reattach a protective cap to an ink tank. Discard the protective cap according to the local laws and regulations regarding disposal of consumables.

- 5 Hold the new ink tank at a slight angle, align it with the correct slot, then press down gently on top of the ink tank until it locks in place.

Make sure that you insert the ink tank in the correct slot of the cartridge holder.



- 6 Press down until the ink tank locks in place with a click.



- 7 Close the front cover.  
The cartridge holder returns to the home position.

## Replacing the BJ Cartridge

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If the print quality remains poor even after replacing the ink tanks and cleaning the print heads, the print heads are worn out and you must replace the BJ Cartridge.

**Note** ►► Canon recommends that you use the following BJ Cartridges with this printer.

Black BJ Cartridge BC-30e

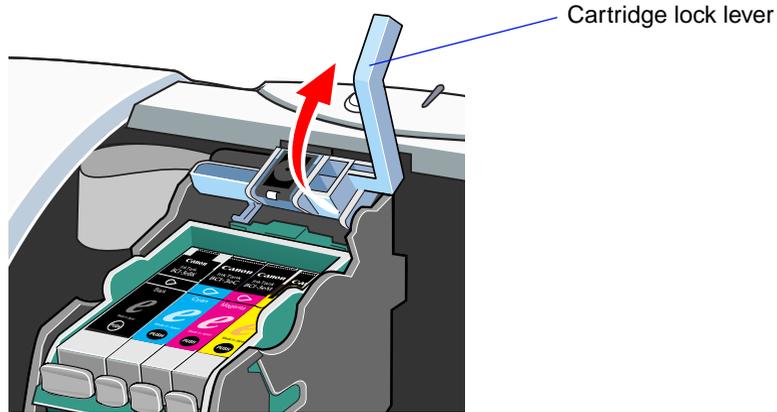
Color BJ Cartridge BC-33e

Color BJ Cartridge BC-34e Photo

- 1 Make sure that the printer is switched on and open the front cover. The cartridge holder moves to the centre.

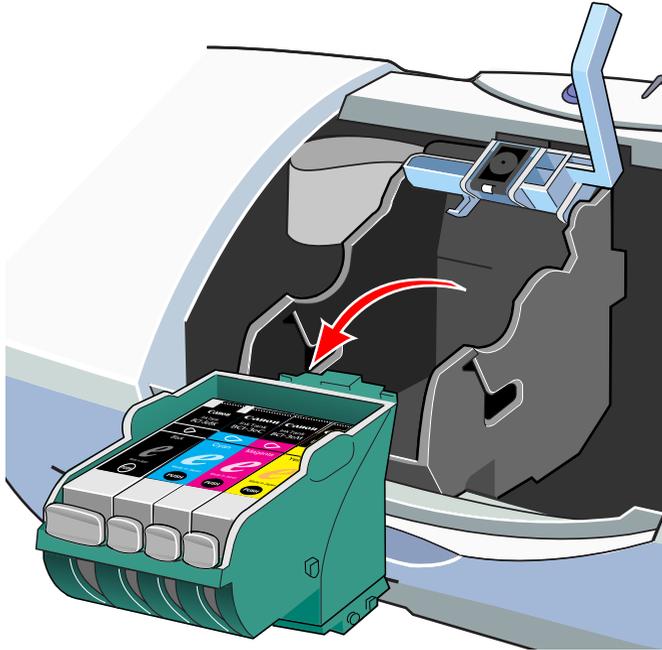
- 2 Raise the cartridge lock lever to unlock the BJ Cartridge.

Make sure that you raise the lever all the way up.



**Important** ►► To avoid staining your hands, clothing, or areas in the work site, handle the BJ Cartridge carefully. Avoid dropping or shaking the BJ Cartridge.

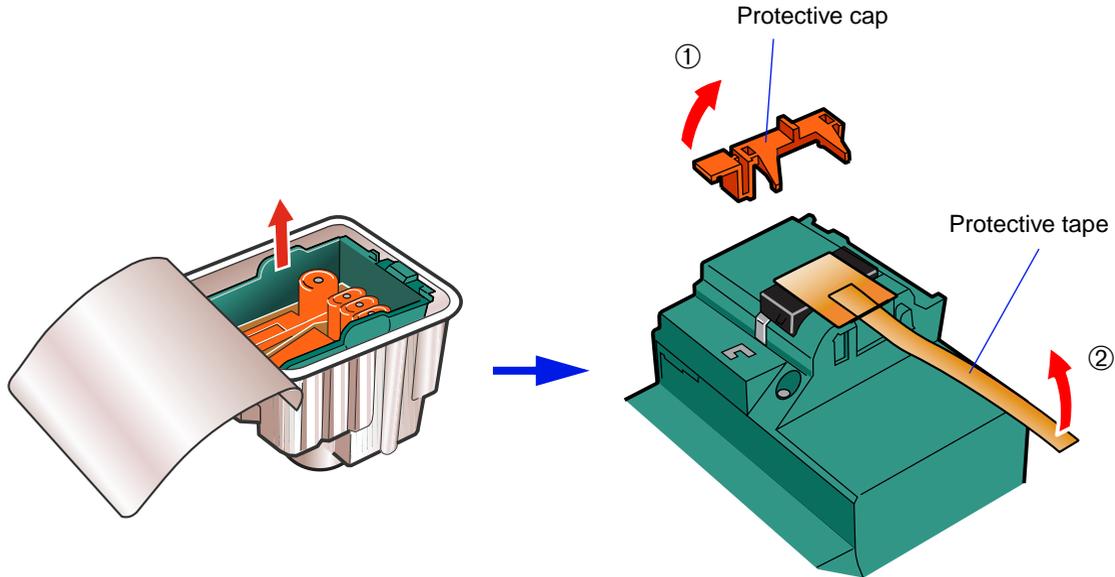
- 3 Remove the entire BJ Cartridge with the ink tanks in place.



**Note** ▶▶

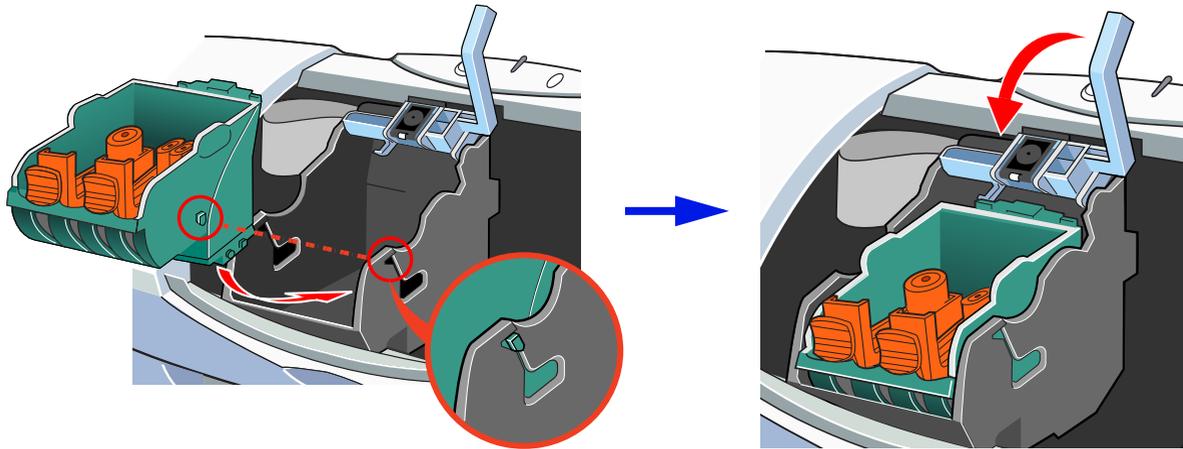
- If you are removing a partially used BJ Cartridge, store it in the BJ Cartridge container.
- Always hold the BJ Cartridge by the circles embossed on the left and right sides of the BJ Cartridge. Do not touch the metal contacts or the print head on the BJ Cartridge.

- 4 Remove a new BJ Cartridge from its package. Remove the orange protective cap ① then slowly remove the orange protective tape ②.



- Important** ▶▶
- Never attempt to reattach the tape or cap to the BJ Cartridge. Discard the protective cap and tape according to the local laws and regulations regarding disposal of consumables.
  - To avoid poor print quality, never touch the print heads of the BJ Cartridge.

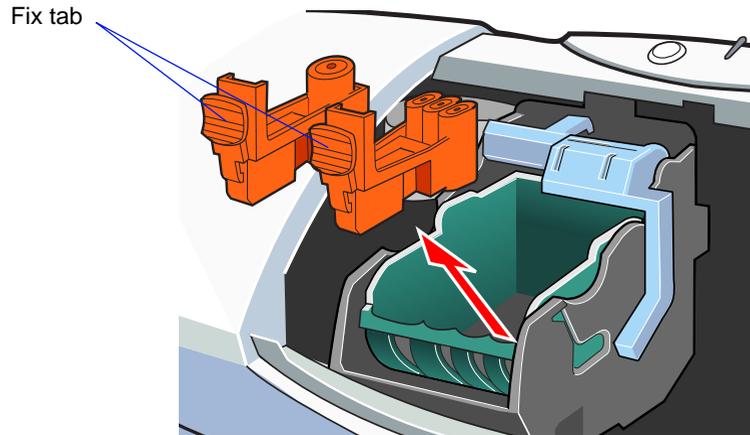
- 5 Insert the BJ Cartridge into the cartridge holder, then lower the cartridge lock lever until it locks in place.



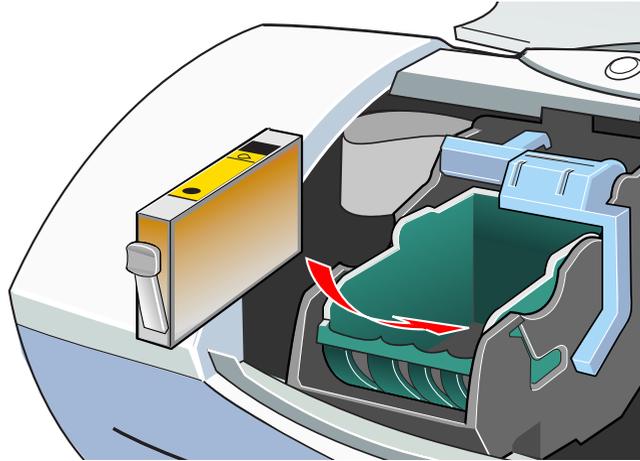
**Note** ▶▶

When you install the Black BJ Cartridge, insert it into the right side of the cartridge holder.

- 6 Press in the tab of the plastic insert and remove them.



- 7 Insert the ink tank(s) in the new BJ Cartridge.



You can use new ink tanks or the ink tanks in the worn BJ Cartridge, and install them in the new BJ Cartridge.

#### Replacing Ink Tanks

#### Note

Install an ink tank immediately after removing it from the worn BJ Cartridge or its package. If an ink tank remains exposed for a long period, it may run out of ink quickly after it is installed.

- 8 Close the front cover.  
The cartridge holder returns to the home position.

#### Aligning the Print Head

## Aligning the Print Head

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Each time you replace a BJ Cartridge or switch BJ Cartridges for a special print job, you must align the print heads to ensure optimum printing.

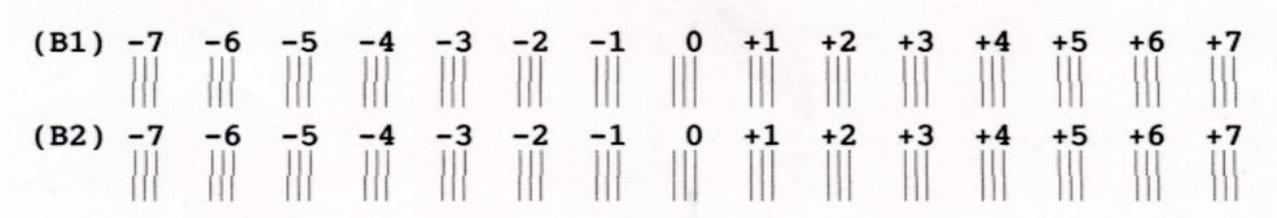
### Windows

- 1 Open the Printer Properties dialogue box.
- 2 Click the Maintenance tab.
- 3 Click the print head alignment icon.

### Macintosh

- 1 Select Page Setup from the File menu.
- 2 Click the Utilities button, then select Test Print by clicking the up- or down-arrow.
- 3 Select the Print head alignment icon.

- 4 When a confirmation message appears, make sure that the printer is switched on and at least two sheets of A4 or Letter size plain paper are loaded, and then click the OK button. The printer starts to print the standard head alignment pattern. During print head alignment, do not open the front cover.
- 5 When this pattern is printed, click the Yes button.
- 6 Check all the patterns in lines of (B1) and (B2). For each line enter the appropriate number where you see the lines perfectly aligned.



(B1)

Correct:

Incorrect:

## 7 When you finish entering numbers...

Windows

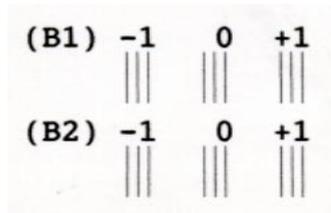
Click the OK button to save the settings.

Macintosh

Save the settings.

## 8 Make sure that the printer is switched on and A4 or Letter size plain paper is loaded, and then click the OK button. The printer starts to print the high-resolution head alignment pattern.

## 9 Check all the patterns in lines of (B1) and (B2). For each line enter the appropriate number where you see the lines perfectly aligned.



Correct: (B1)  
           -1  
           |||

Incorrect: +1  
           |||

10 When you finish entering numbers...

Windows

Click the OK button to save the settings.

Macintosh

Save the settings.

11 Click the OK button. This completes the print head alignment procedure.

**Note** ▶▶

When you wish to switch the printer off after head alignment, always press the POWER button to switch the printer off. If you do not switch the printer off correctly with the POWER button, the print head alignment settings cannot be saved.

## Cleaning the Printer

---

After long use, paper dust and room dust may accumulate around the paper output tray and other parts of the printer. Clean the printer periodically.



To avoid personal injury from burns or electrical shock or damage to the printer during cleaning, never use a flammable solvent such as thinner, benzene or alcohol.

- 1 Press the POWER button  to switch the printer off. Check the POWER lamp and make sure that it is not on or flashing.

### Important

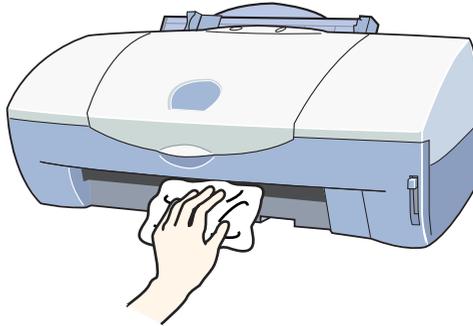
To prevent failure of the printer to operate, never unplug the power cord when the POWER lamp is on or flashing. Printing may no longer be possible.

- 2 Make sure that the POWER lamp is off then unplug the power cord from the power outlet.



To avoid personal injury from touching live printer components, always unplug the printer before cleaning.

- 3 Use a soft, dry cloth to wipe the area around the paper output part and other parts of the printer.



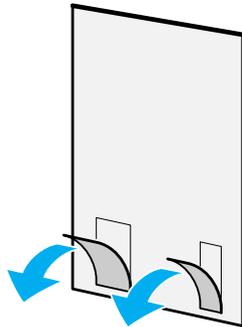
## Cleaning the Paper Feed Rollers

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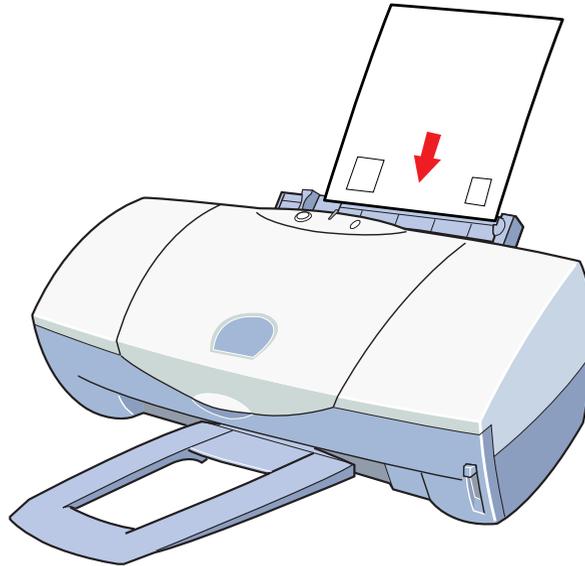
With frequent use of high resolution paper and other coated paper, paper dust from the coated surfaces of such media accumulates around the paper feed rollers and may cause misfeeds and paper jams. If this occurs, use the special cleaning plate to clean the paper feed rollers inside the printer.

**Note** ►► When you clean the paper feed rollers, Canon recommends that you use the cleaning sheet provided with each pack of High Resolution Paper HR-101.

- 1 Raise the paper rest.
- 2 Remove the two stickers, on the cleaning sheet.



- 3 Set the paper guide to the A4 position.
- 4 Slide the cleaning sheet into the sheet feeder until it stops.



**5** Make sure that the POWER lamp is lit green.

Press and hold down the RESUME button until the POWER lamp flashes three times, then release it. The paper feed rollers of the printer start rotating and then stops. Wait for approximately 15 to 30 seconds.

**6** The cleaning sheet feeds into the sheet feeder, and paper dust will cling to the cleaning sheet as it rotates.

**Important** ►► The Cleaning Sheet CK-101 cannot be used again. Discard the cleaning sheet according to the local laws and regulations regarding disposal of consumables after it is used for cleaning the feed rollers once.

## Transporting the Printer

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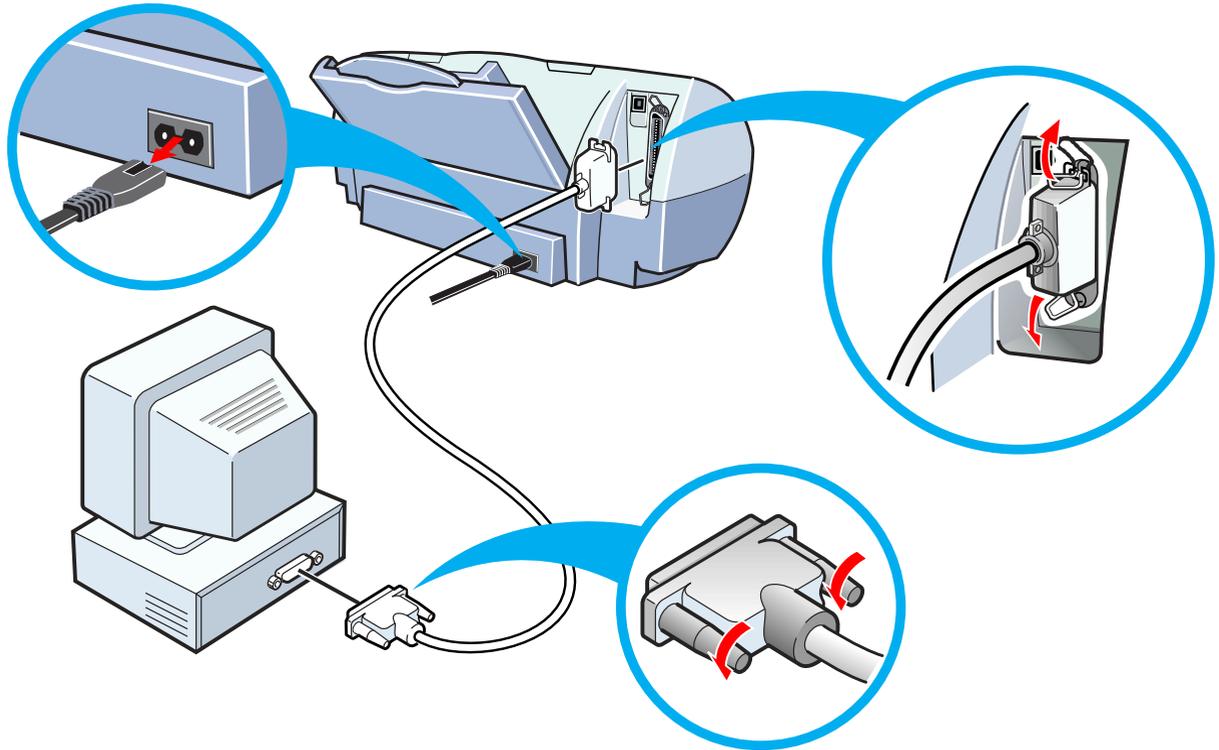
Use the original box and packing material to repack the printer for shipping or moving to another location. When you do not use the original box, make sure that the printer is packaged properly so that it does not get damaged during the transportation.

- 1 Press the POWER button  to switch the printer off.
- 2 Lower the paper rest.
- 3 Remove the paper output tray.
- 4 Make sure that the POWER lamp is off then unplug the power cord from the power outlet.

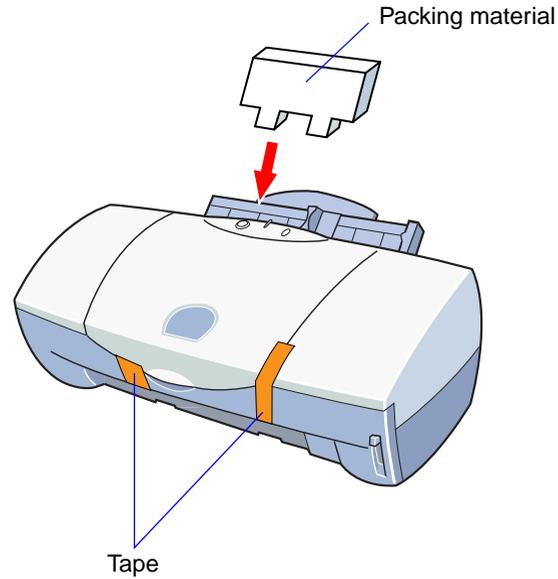
**Important** ►► Check the POWER lamp and make sure that the printer is off. To prevent failure of the printer to operate, never remove the power plug from the power outlet when the POWER lamp is on or flashing. Printing may no longer be possible.

- 5 Disconnect the printer cable from the computer and printer, and remove the power cord.

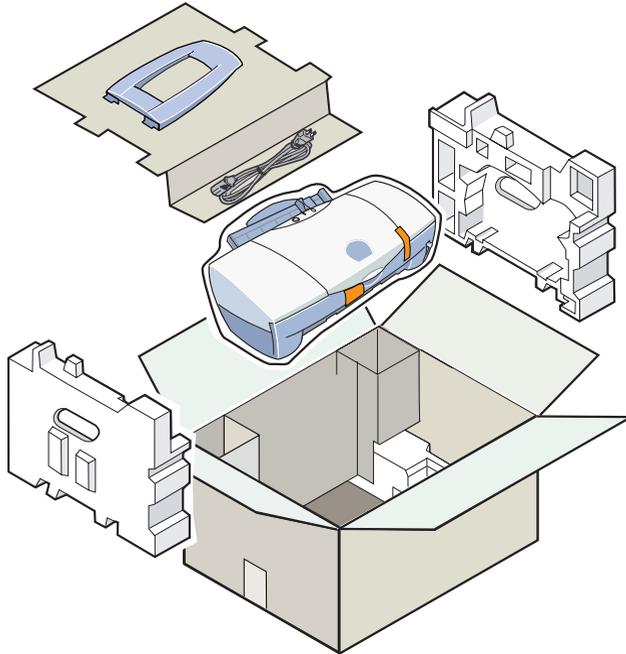
When using a parallel printer cable



- 6 Reattach the tape and packing material to the printer and insert the printer into its plastic bag.



- 7 Fit the packing material on either end of the printer and pack the printer into the original box.

**Note** ▶▶

If you are shipping the printer through a shipping agent, mark the box with "FRAGILE" or "HANDLE WITH CARE".

# Troubleshooting



If you experience a problem during operation of the printer, refer to the following topics.

[Printout is Unsatisfactory](#)

[Printer Does Not Start or Stops in Mid-job](#)

[Paper Jams or Does Not Feed](#)

[The POWER Lamp Flashes Orange](#)

[An Error Message Appears](#)

[Scanner Problems](#)

[Scanning result is unsatisfactory](#)

[Cannot be used with TWAIN-compatible application program](#)

[Other scanner problems](#)

[Other Problems](#)

## Printout is Unsatisfactory

---

Colours not clear

Printed and on-screen colour do not match

Meaningless characters, symbols printed

Text cut off at bottom right corner, right edge or bottom edge

Single file page prints over two or more pages

Colours streaked or wrong

Straight lines are broken

Printed pages curled

Backs of pages stained with ink

Ink blurred

Printed surface scratched

White streaks visible

Colours streaked or uneven

Last part of print job not printing

Characters and figures notched / gradation streaked or unnatural

Macintosh

## Colours not clear

---

The colours in printed photographs and illustrations are not as clear as you expected.

- Check 1**      BJ Cartridge and media correct for the print job?
- Check 2**      Printer driver settings correct for media and print job?
- Check 3**      Re-filled ink tank installed in the BJ Cartridge?

**Check 1****BJ Cartridge and media correct for the print job?**

---

For printing photographs, illustrations, use of High Resolution Paper, Glossy Photo Paper or High Gloss Photo Film is recommended. These media provide better colour reproduction and brighter colours than plain paper.

For best results, use the Color BJ Cartridge BC-34e Photo.

For printing colour graphs, charts with text, use the Color BJ Cartridge BC-33e to print reports and research papers.

A clogged or worn BJ Cartridge may also cause printing problems. Print a nozzle check pattern and check the printed patterns.

 [Printing a Nozzle Check Pattern](#)

## Check 2 Printer driver settings correct for media and print job?

---

Open the Printer Properties dialogue box and select the print mode best suited for the print job in the Choose Print Mode box under the Main tab. Make sure that the BJ Cartridge and Media Type settings match the BJ Cartridge and media currently set in the printer.

-  [Printing on Paper and Other Media](#)
-  [Using the BJ Cartridges](#)
-  [Printing Photographs](#)

### Note

#### Windows

You may also want to click the Advanced button in the Main tab. Click the Colour tab, make sure Colour Adjustment is enabled and then adjust the colour settings such as Colour Balance, Output Style and Brightness.

#### Macintosh

Select the Colour panel and change the settings such as the Matching method.

## Check 3 Re-filled ink tank installed in the BJ Cartridge?

---

You may not be able to achieve satisfactory performance with an ink tank that has been re-filled by a third party. It is recommend that you use ink tanks especially designed for use with the BJ Cartridge.

-  [Using the BJ Cartridges](#)

## Printed and on-screen colour do not match

---

The colour you see on the screen do not match the colours you see in the printed copy of the same image. For example, objects that appear blue on the screen are printed purple and objects that appear pale green on the screen are printed dark green.

A colour display and printer do not reproduce colour in the same way. The printed colour tones may not perfectly match the colours you see on the screen because screen colour varies how the screen is viewed and calibrated.

If the differences between displayed and printed colours are extreme, check the following.

**Check 1**      Is the ink of BJ Cartridge on good condition?

**Check 2**      Are the printer driver settings correct?

## **Check 1** Is the ink of BJ Cartridge on good condition?

---

If there are wide differences between the screen colours and printed colours, one of the ink tanks may have run out of ink or some of the print head nozzles may be clogged. Print a nozzle check pattern and check the results.

 [Printing a Nozzle Check Pattern](#)

## **Check 2** Are the printer driver settings correct?

---

Open the Printer Properties dialogue box and select the print mode best suited for the print job in the Choose Print Mode box under the Main tab. Make sure that the BJ Cartridge and Media Type settings match the BJ Cartridge and media currently set in the printer.

 [Printing on Paper and Other Media](#)

 [Using the BJ Cartridges](#)

 [Printing Photographs](#)

### **Note**

Windows

You may also want to click the Advanced button in the Main tab, click the Colour tab and adjust the colour settings such as Colour Balance, Output Style and Brightness. If Colour Adjustment is off, click the checkbox to turn it on.

Macintosh

Use Manual for printing.

## Meaningless characters, symbols printed

---

The document is displayed correctly on the screen but meaningless text and symbols are printed.

**Check 1** Are you using the correct printer driver?

Windows

**Check 2** Are the printer and computer securely connected?

**Check 3** Is the problem in the original file?

**Check 1** Are you using the correct printer driver?

Meaningless characters and symbols may print if you have selected the wrong printer driver for the print job. Start the print procedure again and make sure that "Canon S400" is displayed in the Name entry box of the Print dialogue box.

If another driver is selected, click the down-arrow and select "Canon S400" from the pull-down list.

**Note** ►►

To avoid this problem, you may find it convenient to set the S400 as the default printer.

**Check 2** Are the printer and computer securely connected?

Check the printer cable connections at the printer and computer. A faulty or loose connection can generate meaningless characters and symbols.

**Check 3** Is the problem in the original file?

If meaningless character or symbols are printed only when you print a certain file, the cause of the problem may be in the file or the application program you are using. Rebuild the file and print it again.

If the rebuilt file prints correctly, the original file was probably faulty.

If the rebuilt file does not print correctly, contact the software manufacturer.

## Text cut off at bottom right corner, right edge or bottom edge

---

The text is printing in the bottom right corner of the page or printing beyond the right or bottom margins and cut off from view.

### **Check**

Is Scaled Printing set for enlargement in the printer driver?

If Scaled Printing is set for enlargement in the printer driver, the document is enlarged and printed in the bottom right corner, or cut off at the bottom or right edge of the paper.

#### Windows

To disable Scaled Printing, open the Printer Properties dialogue box, click the Page Layout tab, and click the radio button for Normal-size Printing.

#### Macintosh

To disable Scaled Printing, select Page Setup from the File menu and set 100% in the Scale box.

If you want to use Scaled Printing with enlargement, make sure that the correct percentage is set and confirm that the Page Size selection or the Paper Size selection is correct.

For details, refer to the Driver and Utility Guide for Windows Users or Driver and Utility Guide for Macintosh Users.

## Single file page prints over two or more pages

---

### **Check**

Does the Page Size setting in the application program and printer driver match?

Windows

Set the same Page Size setting for the application program and the printer driver.

Open the Printer Properties dialogue box, click the Page Layout tab, and select the Page Size that matches the Page Size setting in the application program.

## Colours streaked or wrong

---

The text appears scratched, streaked, or the wrong colours are printed.

**Check 1** Is the ink of BJ Cartridge on good condition?

**Check 2** Have the protective tape or cap been reattached?

**Check 3** Did you print on the correct print side of the media?

### **Check 1** Is the ink of BJ Cartridge on good condition?

---

If text or images are streaked, scratched, faint, or if the wrong colours are printing, one of the ink tanks may have run out of ink, the print nozzles may be clogged, or the print heads may be worn out.

Print a nozzle check pattern and check the printed patterns.

 [Printing a Nozzle Check Pattern](#)

### **Check 2** Have the protective tape or cap been reattached?

---

After removed, the orange protective cap and tape should never be re-attached to the BJ Cartridge. Re-attaching the tape or cap can cause air bubble or trap dirt or dust into the ink and clog the ink nozzles.

If the protective tape or cap has been re-attached, remove it. Install the BJ Cartridge in the printer and clean the print head immediately.

After cleaning the print head, if printing is patchy or streaked replace the BJ Cartridge.

### **Check 3** Did you print on the correct print side of the media?

---

The correct print side is different for each type of media. Make sure that the correct print side is facing up when you load the media in the auto sheet feeder.

 [Printing on Paper and Other Media](#)

## Straight lines are broken

---

- Check 1** Has the print head been aligned?
- Check 2** Is Print Quality set to Fast in the printer driver?
- Check 3** Is the paper thickness lever set correctly?

## **Check 1** Has the print head been aligned?

---

Each time you install a print head, you must align the print head. If you do not align the print head, straight lines may appear broken or uneven.

### [Aligning the Print Head](#)

## **Check 2** Is Print Quality set to Fast in the printer driver?

---

Changing Print Quality to Fine in the printer driver may improve the quality of printed straight lines.

### Windows

- 1 Open the Printer Properties dialogue box.
- 2 Click the Advanced button in the Main tab.
- 3 In the Quality tab, drag the slide bar to right to select Fine.

### Macintosh

- 1 When using Manual for printing, click the Details button in the Print dialogue box.
- 2 In the Quality panel, drag the slide bar to right to select Fine.

### **Check 3**

Is the paper thickness lever set correctly?

---

If straight lines are printed uneven or broken after changing the setting of the paper thickness lever on the front of the printer, re-align the print head.

 [Aligning the Print Head](#)

## Printed pages curled

---

As printed pages are ejected from the printer, they are curled or wavy.

**Check 1**      Are you printing on thin paper?

**Check 2**      Is the printer driver set for high density printing?

**Check 1** Are you printing on thin paper?

---

The large amount of ink used to print colour photographs and illustrations can cause printed pages to curl or warp. For such print jobs you should use special media such as High Resolution Paper or Glossy Photo Paper.

**Note** ▶▶

When you use High Resolution Paper, Glossy Photo Paper or other special media, always load the sheets with the print side (whiter side) facing up. Only one side of these media is treated with a special coating for better ink absorption.

## Check 2 Is the printer driver set for high density printing?

---

Move the Intensity setting (print density) in the Colour tab to a lower setting and execute the print job again. A lower intensity setting uses less ink thus preventing curling of the printed page. To lower the intensity, follow the procedure below.

### Windows

- 1 Open the Printer Properties dialogue box and click the Advanced button in the Main tab.
- 2 Click the Colour tab.
- 3 Use the Intensity slide bar to change the Intensity setting.

### Macintosh

- 1 When using Manual for printing, click the Details button in the Print dialogue box.
- 2 Click the Colour panel, and use the Intensity slide bar to change the intensity setting.

### Note ►►

Curling occurs most frequently with small paper sizes such as A5. To avoid curling, we recommend that you do not use small paper sizes to print documents that contain photographs or illustrations.

## Backs of pages stained with ink

---

The backs of pages are stained after they are printed and ejected from the printer.

**Check** Is greyscale printing being performed?

If you are using greyscale printing, the backs of the pages may be stained with ink. You may be able to eliminate this problem by reducing the black density.

### Windows

- 1 Open the Printer Properties dialogue box and click the Advanced button in the Main tab.
- 2 Click the Colour tab.
- 3 Use the Black slide bar to change the print density setting.

If this does not correct the problem, remove the BJ Cartridge and use the Photo BJ Cartridge.

### Macintosh

- 1 When using Manual for printing, click the Details button in the Print dialogue box.
- 2 In the Colour panel, use the Black slide bar to change the print density setting.

## Ink blurred

---

The ink is blurred, images are not sharp, and the ink has spread and run together.

**Check 1** Are you using plain paper?

**Check 2** Is the print head dirty?

**Check 3** Is the printer driver set for high-density printing?

**Check 1** Are you using plain paper?

---

If you are using plain paper, use another type of print media. To minimise ink spread, use High Resolution Paper, Glossy Photo Paper or High Gloss Photo Film.

**Check 2** Is the print head dirty?

---

Clogged print head nozzles can cause ink spread and blurring, so clean the print head.

 [Cleaning the Print Head](#)

**Check 3** Is the printer driver set for high-density printing?

---

The Intensity setting in the printer driver can be used to adjust print density, the amount of ink used to print. Lowering the print density setting can reduce the tendency for ink to spread in colour photographs or illustrations.

## Windows

- 1 Open the Printer Properties dialogue box and click the Advanced button in the Main tab.
- 2 Click the Colour tab.
- 3 Use the Intensity slide bar to change the intensity setting.

## Macintosh

- 1 When using Manual for printing, click the Details button in the Print dialogue box.
- 2 In the Colour panel, use the Intensity slide bar to change the print density setting.

## Printed surface scratched

---

The print side of the paper is scratched and stained.

- Check 1**      Are you printing on thick paper?
- Check 2**      Is the paper thickness lever set correctly?
- Check 3**      Are you printing on curled plain paper?
- Check 4**      Are you executing a high-density print on plain paper?
- Check 5**      Are you printing outside the recommended printing area?

**Check 1** Are you printing on thick paper?

---

If you print on paper thicker than the allowed maximum weight of 105g/m<sup>2</sup>, the print head may scratch the printed surface of the page. If you experience difficulty when printing on thick paper, clean the print head.

**Check 2** Is the paper thickness lever set correctly?

---

When you use thick paper such as envelopes, T-shirt transfers and banner paper for printing, set the paper thickness lever to the Down position. If the printed surface is scratched or stained on plain paper, it is also helpful to set the paper thickness lever to the Down position.

**Check 3** Are you printing on curled plain paper?

---

If curled plain paper is loaded with the curl up, the print head may scratch bottom edge of the paper. Remove the plain paper, turn it over, and load it in the auto sheet feeder again.

#### **Check 4** Are you executing a high-density print on plain paper?

---

If you execute a high-density print job on plain paper, the paper may absorb too much ink and curl, the print head may scratch the surface of the curled page. Lower the Intensity setting.

- 1 Open the Printer Properties dialogue box, and click the Advanced button in the Main tab.
- 2 Click the Colour tab.
- 3 Use the Intensity slide bar to change the print density setting.

#### **Check 5** Are you printing outside the recommended printing area?

---

If you print outside the recommended printing area, the print head may scratch the bottom edge of the page. To avoid problems, print only in the recommended printing area.

**Note** ►► When you print on High Gloss Photo Film, Back Print Film, or T-shirt Transfers, the bottom margin should be larger than 27mm (1.1 in.).

 [Printing Area](#)

## White streaks visible

---

### Check

Print a nozzle check pattern.

- If colours are broken or missing, clean the print head.
- If lines are not aligned properly, align the print head.
- If any portion of the nozzle check pattern is streaked, the print head could be clogged, may not be aligned properly, or the BJ Cartridge may be worn out.

### Note

If the nozzle check pattern prints normally, there may be a problem in the application program. For details, refer to the troubleshooting sections of the documentation of your application program.

 [Printing a Nozzle Check Pattern](#)

## Colours streaked or uneven

---

Patterns of uneven or streaked colouring appear on the printout.

**Check 1** Is Print Quality on the Quality tab set to Fast?

**Check 2** Is Halftoning set for optimum performance?

## **Check 1** Is Print Quality on the Quality tab set to Fast?

---

Set Print Quality to Fine and print again. This reduces uneven coloration you may see in a document where a large amount of ink is used.

### Windows

- 1 Open the Printer Properties dialogue box.
- 2 Click the Advanced button in the Main tab.
- 3 In the Quality tab, drag the slide bar to the right toward Fine and click the OK button.

### Macintosh

- 1 When using Manual for printing, click the Details button in the Print dialogue box.
- 2 In the Quality panel, drag the slide bar to the right toward Fine.

## Check 2 Is Halftoning set for optimum performance?

---

Check the Halftoning setting in the Quality tab of the printer driver. The Diffusion setting smoothes uneven or streaked colours.

### Windows

- 1 Open the Printer Properties dialogue box.
- 2 Click the Advanced button in the Main tab.
- 3 In the Halftoning box under the Quality tab, disable Auto if it is checked on.
- 4 Click Diffusion on and click the OK button.

### Macintosh

- 1 When using Manual for printing, click the Details button in the Print dialogue box.
- 2 In the Quality panel, set Halftoning to Scatter.

## Last part of print job not printing

---

The last part of each page in the document is not printed.

**Check 1** Are you using the paper size specified in the Page Size setting?

**Check 2** Are the computer and printer securely connected?

**Check 3** Is a WPS printer driver installed?

Windows

## **Check 1** Are you using the paper size specified in the Page Size setting?

---

If the size of the paper loaded in the printer does not match the Page Size setting in the printer driver, part of each page may not print. Check the Page Size or Paper Size setting. If it does not match the size of the paper you are using, select the correct size from the pull-down list.

The Page Size or Paper Size can be found at the following location:

Windows

Page Layout tab

Macintosh

Page Setup dialogue box

### **Note** ▶▶

Set the same Page Size setting for the application program and the printer driver. Select the Page Size that matches the Page Size setting in the application program.

## **Check 2** Are the computer and printer securely connected?

---

Check the connection of the printer cable at the computer and printer. A loose connection can cause losing part of a print job.

**Check 3**

Is a WPS printer driver installed?

Windows

You may not be able to print correctly with a WPS (Windows Printing System) printer driver installed in your system. Confirm whether or not a WPS driver is installed in your system.

Change the WPS driver port setting to FILE or delete the WPS driver.

- 1 Open the WPS Driver Properties window.
- 2 In the Details tab, select FILE in the Print to Port setting.
- 3 To delete the WPS driver, select Programs and then Windows Printing System from the Windows Start menu and click Uninstall.

## Characters and figures notched / gradation streaked or unnatural

---

Macintosh

Characters and figures print with unnatural notches, or gradation appears streaked.

### **Check**

Are you using the application program that only supports PostScript?

The S400 is a QuickDraw printer and is not a PostScript printer. Therefore, if you use the application program that only supports PostScript, lines of characters and figures may print with unnatural notches. Always use the application program that supports QuickDraw.

Some PostScript application programs have a setting that allows you to use ATM fonts or TrueType fonts. When you specify the ATM fonts or TrueType fonts in the application program, characters, figures and gradation can be reproduced properly.

## Printer Does Not Start or Stops in Mid-job

---

Printer does not switch on

Print job does not start

Printing halts

Printing starts but nothing printing

Cartridge holder does not move to centre

## Printer does not switch on

---

The printer does not switch on after the POWER button is pressed.

**Check 1**      Have you pressed the POWER button firmly?

**Check 2**      Is the power cord plugged in correctly?

**Check 1** Have you pressed the POWER button firmly?

---

Press the POWER button fully down, then release it. If you do not press the button hard enough, the printer may not turn on.

**Check 2** Is the power cord plugged in correctly?

---

Make sure that the power cord is plugged into a power outlet.

## Print job does not start

---

Printer does not operate after print job executed from the computer.

- Check 1**      Is the printer switched on?
- Check 2**      Are you printing a very large file?
- Check 3**      Are the printer and computer securely connected?
- Check 4**      Are you using the correct printer driver?
- Check 5**      Is the correct printer port selected?

Windows

**Check 1** Is the printer switched on?

---

Check the POWER lamp to see if it is lit green.  
If the POWER lamp is flashing green, the printer is still warming up.  
After the POWER lamp is lit, the printer is ready to use.

**Check 2** Are you printing a very large file?

---

A very large file may require more time to process before printing begins. Photographs and illustrations can increase the size of a file. For a very large file, wait a few minutes for the print job to begin. Check the POWER lamp. If the POWER lamp flashes green, the computer is sending print data to the printer and the job is executing normally.

**Check 3** Are the printer and computer securely connected?

---

Check the printer cable connections at the printer and computer. A faulty or loose connection can prevent a print job from starting.

## **Check 4** Are you using the correct printer driver?

---

A print job may not start if you have selected the wrong printer driver for the print job.

### Windows

Make sure "Canon S400" is displayed in the Name entry box of the Print dialogue box. If another driver is selected, click the down-arrow and select "Canon S400" from the pull-down list. If S400 does not appear in the list, you must install the printer driver.

### Note ►►

If you use only the S400, select the S400 as the default printer.

### Macintosh

Select S400 from Chooser of the Apple menu.

**Check 5**

Is the correct printer port selected?

---

Windows

If the printer and computer are connected directly with a printer cable, specify LPT1 or USBPRN01 as the printer port. Follow the procedure below.

- 1 Open the Printer Properties dialogue box directly from the Start menu.
- 2 Click the Details tab and select LPT1 or USBPRN01 in the Print to the port box.

For more details on how to open the Printer Properties dialogue box directly from the Start menu, refer to the Driver and Utility Guide for Windows Users.

## Printing halts

---

The printer stops printing before the print job is completed.

**Check 1** Is the print job a finely detailed photograph or illustration?

**Check 2** Has the printer been operating for a long time?

**Check 1** Is the print job a finely detailed photograph or illustration?

---

The printer requires more time to process a finely detailed illustration or photograph. Check the POWER lamp. If the POWER lamp is flashing green, the computer is sending print data to the printer and the job is executing normally.

If the print job requires using a large amount of black ink on plain paper, the print job may require more time.

**Check 2** Has the printer been operating for a long time?

---

The print heads may occasionally overheat during a long print job.

If the print head overheats, printing pauses at the end of a pass across the page to allow time for the print head to cool and then restarts after a brief interval. Interrupt printing at a convenient point, switch the printer off and wait for at least 15 minutes for the print head to cool.

If the printer overheats while printing a densely coloured photograph or illustration, the printer may beep and stop printing to protect the print head. In this case, you cannot continue printing. Switch the printer off and wait at least 15 minutes for the print head to cool.

**Caution**

To avoid minor burns, never touch the print head or the surrounding area.

## Printing starts but nothing printing

---

The printer operates but nothing is printed on the page.

**Check 1** Is the ink of BJ Cartridge in good condition?

**Check 2** Did you remove the orange protective tape from the print head?

**Check 1**

Is the ink of BJ Cartridge in good condition?

---

The print head nozzles may be clogged, one or more of the ink tanks may be low, or the BJ Cartridge may be worn. Visually check the level of the ink in the ink tanks. If the tanks are empty, replace them. Next, print a nozzle check pattern to check the status of the print head and clean the print head.

-  [Printing a Nozzle Check Pattern](#)
-  [Cleaning the Print Head](#)

If the problem is not solved, replace ink tanks or BJ Cartridge.

-  [Replacing Ink Tanks](#)
-  [Replacing the BJ Cartridge](#)

If you can print a nozzle check pattern normally, check that the printer is connected to the computer securely. If the connection is loose, printing starts but nothing may be printed.

Make sure there is no problem with the original file.

**Check 2**

Did you remove the orange protective tape from the print head?

---

If the orange protective tape is not removed from the BJ Cartridge, ink cannot be ejected from the BJ Cartridge. Remove the BJ Cartridge and check the print head. If the tape has not been removed, remove it. Align the print heads before you resume printing.

-  Replacing the BJ Cartridge
-  Aligning the Print Head

## Cartridge holder does not move to centre

---

You want to switch the BJ Cartridge, replace an ink tank, or replace the BJ Cartridge, but the cartridge holder does not move to the centre when you open the front cover.

**Check 1** Is the printer switched on?

**Check 2** Has the front cover been open longer than 10 minutes?

**Check 1** Is the printer switched on?

---

Check the POWER lamp and make sure that it is green. If the POWER lamp is off, switch on the printer. If you have just turned on the printer and the POWER lamp is flashing green, the printer is warming up. Wait until the POWER lamp stops flashing.

**Check 2** Has the front cover been open longer than 10 minutes?

---

If the front cover remains open longer than 10 minutes, the cartridge holder automatically returns to the home position to prevent the print head from drying out. Close the front cover and open it again. The cartridge holder moves to the centre.

## Paper Jams or Does Not Feed

---

Paper does not feed from auto sheet feeder

Paper skewing during feeding

Multiple sheets feed together

Paper jam

## Paper does not feed from auto sheet feeder

---

After the print job is started, the paper loaded in the auto sheet feeder does not feed.

- Check 1**      Is the paper too thick?
- Check 2**      Is the sheet feeder overloaded?
- Check 3**      Did you raise the paper rest?
- Check 4**      Is the paper folded or curled?

**Check 1** Is the paper too thick?

---

Thick paper does not feed. You cannot attempt to print on paper or other media thicker than 105g/m<sup>2</sup>.

**Check 2** Is the sheet feeder overloaded?

---

The number of sheets you can load in the auto sheet feeder depends on the media you are using. The media does not feed correctly if you exceed the prescribed number of sheets.

 [Number of sheets that can be loaded](#)

**Check 3** Did you raise the paper rest?

---

Before you load media other than envelopes in the auto sheet feeder, you should always raise the paper rest. If you do not raise the paper rest before loading, the media does not completely enter the paper feed slot during feeding.

## **Check 4**

Is the paper folded or curled?

---

To avoid misfeeds and paper jams, never load paper in the auto sheet feeder that is folded, curled or wrinkled.

 [Media Types You Can Use with the Printer](#)

 [Media Types You Cannot Use with the Printer](#)

## Paper skewing during feeding

---

The paper or other media does not feed straight into the paper feed slot.

**Check 1** Is the auto sheet feeder overloaded?

**Check 2** Is the paper folded or curled?

**Check 3** Is the paper guide set correctly?

**Check 1** Is the auto sheet feeder overloaded?

---

The number of sheets you can load in the auto sheet feeder depends on the media you are using. The media does not feed correctly if you exceed the prescribed number of sheets.

 [Number of sheets that can be loaded](#)

**Check 2** Is the paper folded or curled?

---

To avoid misfeeds and paper jams, never load paper in the auto sheet feeder that is folded, curled or wrinkled.

 [Media Types You Cannot Use with the Printer](#)

**Check 3** Is the paper guide set correctly?

---

If the paper guide on the auto sheet feeder is not set correctly, the paper does not feed straight or may jam in the printer. The paper guide must be snug against the side of the stack and not too tight.

## Multiple sheets feed together

---

During a multiple feed, more than one sheet feed from the stack at the same time.

**Check 1** Did you fan the stack before loading?

**Check 2** Is the auto sheet feeder overloaded?

**Check 3** Is the paper folded or curled?

**Check 4** Are you printing on transparencies?

**Check 1** Did you fan the stack before loading?

---

Before loading a stack of media in the auto sheet feeder, always fan the pages to remove static cling and align the edges. Fanning the stack separates the sheets so they can feed smoothly from the auto sheet feeder.

**Check 2** Is the auto sheet feeder overloaded?

---

The number of sheets you can load in the auto sheet feeder depends on the media you are using.

 [Number of sheets that can be loaded](#)

**Check 3** Is the paper folded or curled?

---

To avoid misfeeds and paper jams, never load paper in the auto sheet feeder that is folded, curled or wrinkled.

 [Media Types You Cannot Use with the Printer](#)

**Check 4** Are you printing on transparencies?

---

When more than one transparency feeds from a stack at the same time, lower the paper rest, set the stack, and try again.

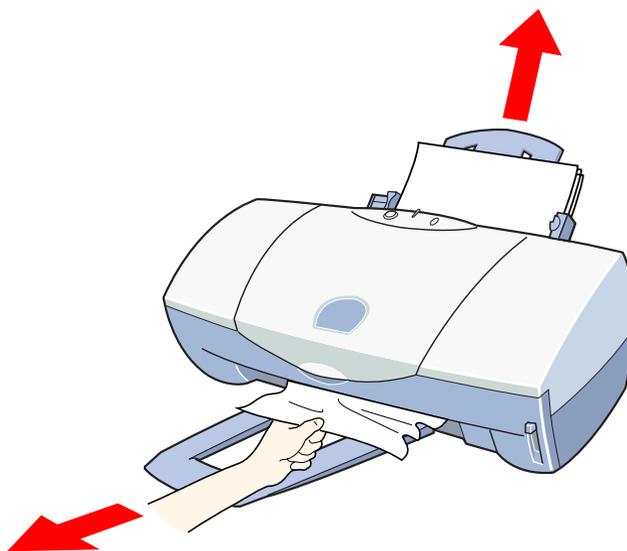
 [Using Transparencies or Back Print Film](#)

## Paper jam

---

If paper jams in the printer, remove it.

- 1 Slowly pull the paper out of the printer from the auto sheet feeder or the paper output slot, whichever is easier. If the paper tears or shreds, open the front cover and remove all the fragments of paper.
- 2 Close the front cover, load the paper and then press the RESUME button.



**Note** ▶▶

- If the paper cannot be removed, press the POWER button twice to eject the paper automatically and start the print job again.
- Paper within the range of 64 to 105g/m<sup>2</sup> can be loaded in the auto sheet feeder.

 **Media Sizes You Can Use with the Printer**

- To avoid misfeeds and paper jams, do not load wrinkled, folded, or curled paper in the auto sheet feeder.

 **Media Types You Cannot Use with the Printer**

## The POWER Lamp Flashes Orange

---

When an error occurs, the POWER lamp flashes orange. The number of flashes indicates the cause of the problem.

Two flashes: Out of paper or paper feed error

Three flashes: Paper jam

Four flashes: BJ Cartridge out of ink

Five flashes: Cartridge not installed correctly

Six flashes: BJ Cartridge not installed

Seven flashes: BJ Cartridge defective

Eight flashes: Waste ink tank almost full

The POWER lamp flashes orange and green alternately: Service error

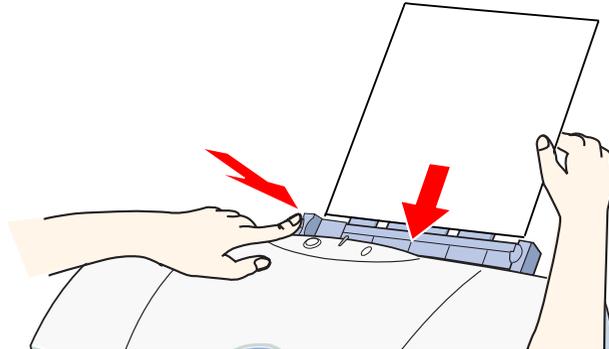
## ■ Two flashes: Out of paper or paper feed error

If no paper is loaded in the auto sheet feeder, or if the paper is not loaded correctly, set the paper correctly and press the RESUME button. If paper has jammed in the printer, remove the jam and press the RESUME button.

➡ Paper Jams or Does Not Feed

### Note ▶▶

If paper cannot be inserted completely into the auto sheet feeder, push the paper guide and insert paper.



## ■ Three flashes: Paper jam

If paper has jammed in the printer, remove the jam and press the RESUME button.

➡ Paper Jams or Does Not Feed

## ■ Four flashes: BJ Cartridge out of ink

An ink tank in the BJ Cartridge has run out of ink.  
Replace the depleted ink tank and press the RESUME button.

 [Replacing Ink Tanks](#)

## ■ Five flashes: Cartridge not installed correctly

The correct cartridge is not installed. When printing is to be performed, install the BJ Cartridge for the S400. When scanning is to be performed, install the scanner cartridge.

 [BJ Cartridges You Can Use with the Printer](#)  
 [Scanning an Image](#)

## ■ Six flashes: BJ Cartridge not installed

No BJ Cartridge is installed. Select and install the BJ Cartridge (colour, photo, or black) according to the work that you are doing.

## ■ Seven flashes: BJ Cartridge defective

There is a problem with one of the BJ Cartridges mounted in the printer. Remove each BJ Cartridge and check that the contacts on the BJ Cartridge and cartridge holder are clean. Also check that the orange protective tape has been removed from the print head then install the BJ Cartridge again. If the error occurs again after you resume operation, replace the BJ Cartridge.

 Replacing the BJ Cartridge

## ■ Eight flashes: Waste ink tank almost full

The printer has a built-in waste ink tank to hold the ink that was consumed during print head cleaning. Eight flashes indicate the waste ink tank is nearly full. Press the RESUME button to skip the error so you can continue printing. To prevent the ink waste tank from becoming full, call for help to have the waste ink tank replaced immediately.

### Note

When the waste ink tank becomes full, the POWER lamp flashes orange and green alternately, and printing will no longer be possible. Call for help to have the waste ink tank replaced immediately.

## ■ The POWER lamp flashes orange and green alternately: Service error

A service error means the printer requires the attention of a qualified technician. Contact a Canon service facility. Count the number of flashes. (You may be asked for this information.)

## An Error Message Appears

---

Error writing to LPT1 or USBPRN

Windows

Application error, General protection fault

Windows

Other error messages

## Error writing to LPT1 or USBPRN

---

You cannot print when this message appears.

- Check 1**      Is the printer switched on?
- Check 2**      Are the printer and computer connected properly?
- Check 3**      Is print spooling operating correctly?
- Check 4**      Is the printer port operating correctly?
- Check 5**      Is the printer driver installed correctly?
- Check 6**      Is the printer port setting identical to the interface you are using?
- Check 7**      Is a WPS driver installed?

**Check 1** Is the printer switched on?

---

Check the POWER lamp to see if it is lit green.  
If the POWER lamp is flashing green, the printer is warming up.  
After the POWER lamp is lit, the printer is ready to use.

**Check 2** Are the printer and computer connected properly?

---

Check the connections of the printer cable at the computer and the printer.

**Check 3** Is print spooling operating correctly?

---

Cancel spooling and send the print job directly to the printer.

- 1 Open the Printer Properties dialogue box directly from the Start menu.
- 2 Click the Details tab and click the Spool Settings button. Click the radio button for "Print directly to the printer".

For details on how to open the Printer Properties dialogue box directly from the Start menu, refer to the Driver and Utility Guide for Windows Users.

## **Check 4** Is the printer port operating correctly?

---

Check the status of the printer port.

- When you are using the parallel interface:

- 1 Right-click the My Computer icon and select Properties from the pop-up menu.
- 2 Click the Device Manager tab.
- 3 Select Ports (COM & LPT), then double-click Canon BJ LPT Printer Port (LPT1).
- 4 In the General tab, make sure Original Configuration (Current) is enabled. An error occurs if this item is disabled. Read the message under Device Status and verify no problem is indicated there.
- 5 Click the Resources tab and read the message under “Conflicting device list”. If a conflict is indicated, delete the competing device.

- When you are using the USB interface:

- 1 Right-click the My Computer and then select Properties.
- 2 Double-click “Universal serial bus controller” on the Device manager tab, and then double-click Canon S400.
- 3 Note what is displayed on the General tab.  
If the system indicates that there is an error, apply the countermeasures described in "Quick Start Guide."  
For details, refer to the on-line Help.

**Check 5** Is the printer driver installed correctly?

---

There may be a problem with the printer driver. Uninstall the printer driver and install it again.

Refer to the "Additional Notes on Handling the USB Interface" manual provided with the printer.

**Check 6** Is the printer port setting identical to the interface you are using?

---

If the printer port setting is not identical to the interface connected to the printer, an error message appears. To check the printer port setting, open the Printer Properties dialogue box and click the Details tab.

- If "LPT1" is displayed in the "Print to the following port" box, the printer port is set to the parallel port.
- If "USBPRN nn" (nn: numerals) is displayed in the "Print to the following port" box, the printer port is set to the USB port.

If the printer port setting does not match the interface connected to the printer, shut down Windows and switch the printer off. Then connect the printer using the correct interface specified in the printer driver again, or install the correct printer driver that matches the connected interface.

**Check 7** Is a WPS driver installed?

---

You may not be able to print correctly if a WPS (Windows Printing System) driver is installed in your computer.

- 1 Click Start, point to Settings, and click Printers.
- 2 If a WPS driver is installed, right-click the icon and then select Properties from the pop-up menu.
- 3 Click the Details tab and check the "Print to the following port" setting. If the selected port is the port also used by the S400, change the WPS driver port setting to FILE or delete the WPS driver.

# Application error, General protection fault

---

Windows

- Check 1**      Are you using a Windows 3.1 application program?
- Check 2**      Are several application programs running in the background?
- Check 3**      Does the computer have sufficient memory?
- Check 4**      Is there sufficient free space on the hard disk?
- Check 5**      Is there a problem in the file you are trying to print?
- Check 6**      Is the printer driver installed correctly?

**Check 1** Are you using a Windows 3.1 application program?

---

Attempting to print from a Windows 3.1 application program installed on the Windows Me, Windows 98 or Windows 95 platform may cause an error. Use a Windows Me, Windows 98 or Windows 95 compatible application program.

**Check 2** Are several application programs running in the background?

---

If you are running several application programs at the same time, there may not be enough memory available for the print job. Quit the other application programs and try again.

**Check 3** Does the computer have sufficient memory?

---

Make sure that you have the required amount of memory installed for the application program you are using to print. For details, refer to the user's manual for your application program. If the amount of memory is insufficient, install more memory.

**Check 4** Is there sufficient free space on the hard disk?

---

An error may occur if there is not enough free space available on the hard disk. Check the amount of free space on the hard disk. If there is little free space available on the disk, delete any unneeded files.

**Check 5** Is there a problem in the file you are trying to print?

---

If one of these errors occurs only when you try to print a particular file, there may be a problem in the file or the application program. Rebuild the file and try printing it again. If there is no problem with the new file, the old file was probably faulty.

If the same error occurs with the new file, call for help.

## ***Check 6***

Is the printer driver installed correctly?

---

There may be a problem with the printer driver.  
Uninstall the printer driver and install it again.

Refer to the Quick Start Guide provided with the printer.

## Other error messages

---

**Check 1** An error displayed in the BJ Status Monitor?

Windows

**Check 2** An error displayed in any screens other than the BJ Status Monitor?

Windows

**Check 3** Error number (xxxx:) displayed?

Macintosh

**Check 1**

An error displayed in the BJ Status Monitor?

---

Windows

When an error occurs, the BJ Status Monitor screen opens.

The Print Status tab displays a short description of the error and other information about the print job. Click the Guide tab to display instructions on how to solve the problem.

For problems that require more than one step in correcting the problem, click the Next button to see the next screen, or click the Back button to see the previous screen.

**Check 2** An error displayed in any screens other than the BJ Status Monitor?

Windows

One of the following messages may be displayed.

✘ Insufficient disk space. ...

Delete any unneeded file to make more disk space available.

✘ Insufficient memory. Cannot spool normally. ...

Quit any other application programs you are running in the background.

✘ Cannot read printer driver. ...

Uninstall the printer driver and reinstall it.  
Refer to Driver and Utility Guide for Windows Users.

✘ Background printing failed.

Restart Windows and try again.

✘ [Application name] cannot print. ...

Try printing again after the current job is finished.

**Check 3**

Error number (xxxx:) displayed?

Macintosh

Error number (\*202)

Sufficient memory not available for the application program. Make sure the required amount of memory is allocated to the application program. If there is not enough memory installed, install more memory. Refer to the user's manual for your computer for information on installing additional memory.

Error number (\*203)

Installed printer driver not operating correctly. Remove the installed BJ printer driver and then install the printer driver again. For details, refer to the Driver and Utility Guide for Macintosh Users.

Error number (\*300)

Check the following.

- Printer is switched on?
- Printer cable is connected securely?

Make sure that the printer cable is securely fastened to the computer and the printer.

If the problem cannot be solved, check the settings in Chooser.

- 1 Select Chooser from the Apple menu.
- 2 Click the S400 icon.
- 3 Make sure that S400 is specified in the “Connect to box”.

If the problem still cannot be solved, remove unneeded documents from Control Panels folder, and try again.

# Scanner Problems

---

Scanning result is unsatisfactory

Cannot be used with TWAIN-compatible application program

Other scanner problems

Other Problems

## Scanning result is unsatisfactory

---

Scanned image blurred or distorted

Scanned image is of uneven quality

White portion becomes greyish

Parts of an image are missing or not aligned properly

Image contains unexpected colors, or is too light or too dark

## Scanned image blurred or distorted

---

**Check 1** Are you using a clear image for scanning?

**Check 2** Is the scanning holder unstained and undamaged?

**Check 3** Are you scanning thick paper?

**Check 1** Are you using a clear image for scanning?

---

Blurry images are not suited for scanning. For best scanning results, always use a clear, sharp images. A scanned image cannot be better than the original image.

**Check 2** Is the scanning holder unstained and undamaged?

---

As you use the scanning holder with originals, it is bound to get dirty. Clean the scanning holder using a soft cloth dipped in a weak, neutral detergent solution, and then wipe its wet surface off with a dry, soft cloth. If the scanning holder is scratched or damaged, replace it.

**Note** ▶▶

Additional scanning holders in A5 and A4 sizes can be purchased optionally. Note that the availability differs from area to area.

**Check 3** Are you scanning thick paper?

---

For scanning, an image you use must be thinner than 0.25mm. Note that the thickness including the scanning holder must be thinner than 0.45mm.

## Scanned image is of uneven quality

---

The scanned image is coarse and blurry.

### **Check**

Is the resolution setting high enough?

Resolution determines the precision of the scanned image.

The greater the number of dots used to draw an image, the greater the precision and the higher the quality of the scanned image. For a better quality image, select a high number.

Note that the scanning speed becomes slower and the file size of the scanned image becomes larger when you use a higher resolution.

## White portion becomes greyish

---

- Check 1** Did you perform white level calibration?
- Check 2** Did you adjust the brightness and contrast?
- Check 3** Did you scan a monochrome image using the Colour or Greyscale setting?

**Check 1** Did you perform white level calibration?

---

White level calibration is used for maintaining the correct colour balance of scanned images. This white level calibration is needed when using the scanner cartridge is used for the first time after purchase or when the system needs to update the white level calibration data.

**Check 2** Did you adjust the brightness and contrast?

---

Depending on the image you scan, a white portion is not recognised as white because the scanner detects and scans even the small differences of the density between white and other colours.  
Adjust the brightness and contrast.

**Note** 

- When you are using IS Scan Plus, refer to the on-line Help.
- When you are using a TWAIN-compatible graphics application program, refer to the user's manual of the application program.

### **Check 3**

Did you scan a monochrome image using the Colour or Greyscale setting?

---

If the scanning mode is set to Colour or Greyscale, the scanner detects and scans gradations evenly, and white may not be recognised as white. When you scan a monochrome image, always set Black & White in the scanning mode so the scanner can scan using only two values between white and black. For details on how to set black and white in the scanning mode, refer to the on-line Help.

## Parts of an image are missing or not aligned properly

---

**Check 1** Did you position the original within the proper scanning area?

**Check 2** Did you specify the scanning area correctly?

**Check 1** Did you position the original within the proper scanning area?

---

Make sure the original is positioned in the proper scanning area.

**Check 2** Did you specify the scanning area correctly?

---

If the Paper Size setting is smaller than the paper size of original, parts of the image will be missing.

If you position the original outside the scanning area mistakenly, parts of the image may not be aligned properly. Always make sure the original is positioned correctly.

## Image contains unexpected colors, or is too light or too dark

---

The appearance of the scanned image is not what you expected, or the image is too light or too dark.

**Check 1**      Is the number of display colours set to High Color or True Color?

**Check 2**      Is Colour Matching turned on?

## **Check 1** Is the number of display colours set to High Color or True Color?

---

### Windows

Check the number of display colours.

- 1 From the Start menu, select Settings and then select Control Panel.
- 2 Double-click the Display icon, then click the Settings tab.
- 3 Make sure Colors is set to High Color or True Color in the Colors box.

### Macintosh

Check the Colour Depth setting.

- 1 From the Apple menu, select Control Panels.
- 2 Select Monitors & Sound.
- 3 Make sure Thousands or Millions are set for Colour Depth.

## **Check 2** Is Colour Matching turned on?

---

The colours displayed on your display may not match the actual scanned colours. Colour Matching attains the best match between the colours displayed on your display and the actual colours in the scanned image. Color Matching can be used when the Scanning Mode is set for Color.

### Windows

- 1 Click the Custom Setting button.
- 2 Make sure that Colour Matching is enabled in the Custom Setting dialogue box.

### Macintosh

- 1 Select Settings from the Menu screen.
- 2 Make sure that Colour Matching is enabled.

## Cannot be used with TWAIN-compatible application program

---

Cannot launch IS Scan from within the TWAIN-compatible graphics application program

Cannot transfer to TWAIN-compatible graphics application program

## Cannot launch IS Scan from within the TWAIN-compatible graphics application program

---

### **Check**

Does the TWAIN-compatible graphics application program you are using support the latest 32-bit TWAIN specifications or TWAIN Source Manager (Version 1.5 or later)?

#### Windows

When IS Scan is used as a TWAIN interface, you must use the latest 32-bit TWAIN-compatible graphics application program. Refer to the user's manual of your application program.

#### Macintosh

When IS Scan is used as a TWAIN interface, you must use the graphics application program that supports the TWAIN Source Manager (Version 1.5 or later). Refer to the user's manual of your application program.

## Cannot transfer to TWAIN-compatible graphics application program

---

### **Check**

Does the TWAIN-compatible graphics application program you are using support the file format type and resolution of the image data?

Some TWAIN-compatible graphics application programs support specific file format types and resolution settings only. For example, the resolution settings of some OCR (optical character reader) application programs are limited to 300 to 400dpi.

Check the file format types and resolution settings of the TWAIN-compatible graphics application program first, and then scan and transfer the image again.

## Other scanner problems

---

Cannot install the scanner driver

Does not launch with default settings

Windows

Improper colours are displayed in the dialogue box

Scanning is too slow

Communication error occurs

An error message appears

## Cannot install the scanner driver

---

**Check 1** Did you follow the scanner driver installation instructions?

**Check 2** Are any other application programs running?

**Check 3** Did you specify the correct CD-ROM drive for installation?

Windows

**Check 4** Is there a problem with the Setup Software & Reference Guide CD-ROM?

**Check 1** Did you follow the scanner driver installation instructions?

---

This Reference Guide provides step-by-step instructions for installing the scanner driver.

 [Installing the IS Scan Software](#)

**Note**  If an error occurred during installation and you had to forcibly shut down the installation procedure, you may not be able to install the scanner driver because Windows is no longer stable. Restart Windows and then reinstall the scanner driver.

**Check 2** Are any other application programs running?

---

The scanner driver installation program may not execute successfully if it is run with other applications running in the background. Before you run the installation program again, shut down all other application programs.

**Check 3**

Did you specify the correct CD-ROM drive for installation?

Windows

---

If the scanner driver installation program did not start automatically when you loaded the CD-ROM, double-click the My Computer icon, then double-click the CD-ROM icon on the Windows desktop.

**Note** ▶▶

- The drive name (E: for example) varies according to how your system is set up.
- When you install the scanner driver from Run in the Start menu, specify the CD-ROM drive and file name (Msetup.exe) correctly.

**Check 4**

Is there a problem with the Setup Software & Reference Guide CD-ROM?

---

The Setup Software & Reference Guide CD-ROM may be damaged. On the Windows desktop, double-click the My Computer icon then double-click the CD-ROM icon. If Windows cannot read the CD-ROM, call for help.

## Does not launch with default settings

Windows

### **Check**

Did you launch IS Scan from a TWAIN-compatible graphics application program?

This problem occurs when IS Scan is launched from a TWAIN-compatible graphics application program.

Depending on the TWAIN-compatible graphics application program, Previous Settings selected in the Standard Value box under the Custom Settings dialogue box may be cleared, and standard settings characteristic of the TWAIN-compatible program you are using may be used when launching IS Scan.

If you wish to use the settings selected in the Custom Settings dialogue box when launching IS Scan, follow the procedure below.

- 1 Select Save Settings File from the Settings menu.
- 2 Next time you launch IS Scan, select Open Settings File from the Settings menu.

## Improper colours are displayed in the dialogue box

---

### **Check**

Is the number of display colours set to High Color or True Color?

#### Windows

This problem occurs when IS Scan is launched from a TWAIN-compatible application program.

If the problem is not solved, change the number of display colours of your computer.

- 1 From the Start menu, select Settings and then select Control Panel.
- 2 Double-click the Display icon, then click the Settings tab.
- 3 Check that the Colors setting is High Color or True Color in the Colors box.

Or, you may be able to solve the problem by minimising the IS Scan window and then return to the original size.

#### Macintosh

Check the Colour Depth setting as follows.

- 1 From the Apple menu, select Control Panels.
- 2 Select Monitors & Sound.
- 3 Check that Thousands or Millions are set for Colour Depth.

## Scanning is too slow

---

Scanning is requiring an unusually long time.

### **Check**

Are you using a higher resolution than required?

In order to scan an image, your computer must be able to receive a large amount of data. Therefore, the scanning speed varies according to the performance of the computer.

To shorten the time required for scanning:

- Use the appropriate resolution setting. Make sure that the resolution is not set higher than you require.
- Use the Prescanning feature to confirm and specify only a portion of the entire image before you scan.

## Communication error occurs

---

**Check 1** Did you launch IS Scan or IS Scan Plus immediately after it was closed?

**Check 2** Is the printer switched on and on-line?

**Check 3** Are you using the USB interface running under Windows Me/Windows 98?

Windows

**Check 1** Did you launch IS Scan or IS Scan Plus immediately after it was closed?

---

Do not attempt to launch IS Scan or IS Scan Plus again immediately after it is closed. Wait for a few seconds and then launch again.

**Check 2** Is the printer switched on and on-line?

---

Make sure the printer is switched on and on-line.  
For details on the off-line status, refer to the on-line Help of your operating system.

**Check 3** Are you using the USB interface running under Windows Me/Windows 98?

---

A purple rounded rectangular button with the word "Windows" in white text.

When using the USB interface running under Windows Me or Windows 98, a communication error may occur if the hardware acceleration setting is Full. To solve the problem, follow the procedure below.

- 1 Double-click the System icon in the Control Panel for Windows.
- 2 When the System Properties window is displayed, click the Performance tab.
- 3 Click the Graphics button.
- 4 If "Hardware acceleration" is set to Full in the Advanced Graphics Settings dialogue box, set to None.

## An error message appears

---

### **Check**

Refer to the on-line Help.

#### Windows

When you install the IS Scan Software using the default installation procedures, the on-line Help for IS Scan(Bjscan2.hlp) exists in the IS Scan folder. Follow the procedure below.

- 1 Open the Program Files folder in Drive C.
- 2 Open the Canon folder in the Program Files folder.
- 3 Open the IS Scan folder in the Canon folder.
- 4 Open the "Bjscan2.hlp" file.
- 5 Click Messages to select the appropriate item.

#### Macintosh

Open the on-line Help.

## Other Problems

---

Cannot install the printer driver

BJ Status Monitor does not open

Cannot execute background printing

Windows

## Cannot install the printer driver

---

- Check 1** Did you follow the printer driver installation instructions in the Quick Start Guide?
- Check 2** Are any other application programs running?
- Check 3** Did you specify the correct CD-ROM drive for installation? 
- Check 4** Is there a problem with the Setup Software & Reference Guide CD-ROM?

**Check 1** Did you follow the printer driver installation instructions in the Quick Start Guide?

---

The Quick Start Guide provides step-by-step instructions for installing the printer driver. If you are reinstalling the printer driver, remove any other bubble jet printer drivers which have been installed on the computer before reinstalling the printer driver.

For details on how to uninstall the printer driver, refer to the Driver and Utility Guide for Windows Users or Driver and Utility Guide for Macintosh Users.

**Note** ►► If an error occurred during installation and you had to forcibly shut down the installation procedure, you may not be able to install the printer driver because Windows is no longer stable. Restart Windows and then reinstall the printer driver.

**Check 2** Are any other application programs running?

---

The installation program may not execute successfully if it is run with other applications running in the background.

Before you run the installation program again, shut down all other application programs. If other BJ printer drivers are installed in your system, uninstall them before you run the installation program again.

For details on how to uninstall the printer driver, refer to the Driver and Utility Guide for Windows Users or Driver and Utility Guide for Macintosh Users.

**Check 3** Did you specify the correct CD-ROM drive for installation?

---

Windows

If the printer driver installation program did not start automatically when you loaded the CD-ROM, double-click the My Computer icon, then double-click the CD-ROM icon on the Windows desktop.

For details about the installation procedure, refer to the Quick Start Guide.

**Note** ▶▶

- The drive name (E: for example) varies according to how your system is set up.
- When you install the printer driver from Run in the Start menu, specify the CD-ROM drive and file name (Msetup.exe) correctly.

**Check 4** Is there a problem with the Setup Software & Reference Guide CD-ROM?

---

The Setup Software & Reference Guide CD-ROM may be damaged. On the Windows desktop, double-click the My Computer icon then double-click the CD-ROM icon. If Windows cannot read the CD-ROM, call for help.

## BJ Status Monitor does not open

---

Windows

The BJ Status Monitor does not open and displays messages and guidance.

**Check 1** Do your computer and printer cable support bi-directional communication?

**Check 2** Is the bi-directional option selected in the printer driver?

## **Check 1** Do your computer and printer cable support bi-directional communication?

---

Check the hardware specifications for your computer and printer cable. Operation of the BJ Status Monitor depends on bi-directional data transfer between the computer and printer. The computer and printer cable must both be capable of effecting bi-directional data transfer.

### **Note** ▶▶

If you are unsure as to whether your computer or printer cable supports bi-directional communication, contact your hardware manufacturer.

## **Check 2** Is the bi-directional option selected in the printer driver?

---

To set the bi-directional option, follow the procedure below.

- 1** Open the Printer Properties dialogue box directly from the Start menu.
- 2** Click the Details tab and click the Spool Settings button.
- 3** In the Spool Settings dialogue box, click the radio button for "Enable bi-directional support for this printer".

For details on how to open the Printer Properties dialogue box directly from the Start menu, refer to the Driver and Utility Guide for Windows Users.

## Cannot execute background printing

---

The BJ Backgrounder is not displayed during a print job and you cannot use background printing.

**Check 1**      Is there enough free space available on the hard disk?

**Check 2**      Is background printing enabled in the printer driver?

**Check 1** Is there enough free space available on the hard disk?

---

You may not be able to print if there is not enough free space on the hard disk. Delete unneeded files to create more space.

**Note** ►► If you are unable to make more space available on your hard disk by deleting files, switch background printing off.

**Check 2** Is background printing enabled in the printer driver?

---

**Windows**

- 1 Open the Printer Properties dialogue box, then click the Page Layout tab.
- 2 Check Background Printing in the Background checkbox.

**Macintosh**

- 1 Select Chooser from the Apple menu.
- 2 Set Backgrounding to On.

# Specifications

**Printing method:**

Bubble Jet on-demand

**Printing resolution:**

1440 (horizontal) x 720 (vertical) dpi.

**Print speed (printing with Canon standard pattern):**

Black printing using Black BJ Cartridge BC-30e

Fast: 9 ppm

Normal: 6.8 ppm

Colour printing using Color BJ Cartridge BC-33e

Fast 4 ppm

Normal: 2.2 ppm

Photo colour printing using Color BJ Cartridge BC-34e Photo

Normal: 0.25 ppm

**Print direction:** Bi-directional

**Print width:** 203 mm max. (8.0 in.)

**Resident print control mode:** Canon extended mode

**Receive buffer:** 128 kB

**Interface (parallel):** IEEE 1284-compatible

**Interface (USB):** USB 1.0-compatible

**Interface connector (parallel):** Amphenol 57-40360 or equivalent

**Interface connector (USB):** USB standard Series B receptacle

**Recommended printer cable (parallel):**

Material: AWG28 or larger  
Type: Twisted-pair shielded cable  
Length: Up to 2.0m (6.5 ft)  
Connectors: Amphenol 30360 or equivalent

**Recommended printer cable (USB):**

Material: AWG28 (data wiring pair) or AWG20 to 28 (distribution pair)  
Type: Twisted-pair shielded cable  
Length: Up to 5.0m (16.4 ft)  
Connectors: USB standard Series B pluggable

**Acoustic noise level:** Approx. 45 dB (per ISO 9296)

**Operating environment:**

Temperature: 5°C to 35°C (41°F to 95°F)  
Humidity: 10% to 90% (no condensation)

**Storage environment:**

Temperature: 0°C to 35°C (32°F to 95°F)  
Humidity: 5% to 90% (no condensation)

**Power supply:**

Europe AC 230V±10%, 50Hz  
USA/Canada AC 120V, 60Hz  
Australia AC 240V, 50Hz

**Power consumption:**

off\*: Approx. 1W (AC 230±10%)  
Approx. 1W (AC 120V)  
Standby\*\*: Approx. 2W (AC 230±10%)  
Approx. 2W (AC 120V)  
Printing: Approx. 30 W

\* To shut down power completely, remove the power cord from the wall outlet.

\*\* This printer is provided with an automatic power off feature. If the printer does not receive any data for a specified length of time, the printer automatically powers down to the standby mode. You can set the printer to power down automatically if it does not receive a print job for 1, 10, 30 or 60 minutes.

For details about switching on the Auto Power Off feature and setting the time interval to elapse before powering down to standby, refer to on-line Help.

**Dimensions (with paper rest and paper output tray retracted):**

418 mm(W) x 306 mm(D) x 173 mm (H)

16.5"(W) x 12.0"(D) x 6.6"(H)

**Weight:** Approx. 3.7 kg (8.16 lb.)**Feed method:**

Continuous feed through auto sheet feeder

For High resolution paper, plain paper, envelopes, Transparencies,  
Glossy photo paper, high gloss photo film, Back print film, Glossy  
photo cards, T-shirt transfers**Sheet feeder capacity:**

Plain paper (64 g/m <sup>2</sup> )	100 sheets max.
High resolution paper	80 sheets max.
Envelopes	10 pieces max.
Transparencies	30 sheets max.
Back print film	10 sheets max.
Glossy photo paper	10 sheets max.
High gloss photo film	1 sheet
Glossy photo cards	1 sheet
Banner paper	1 sheet
T-shirt transfers	1 sheet

**Ordinary print media:**

Regular size: A4, A5, B5, Letter, Legal,  
European DL, US Com.#10

Custom size:

width: 100.0mm to 241.3mm (3.94" to 9.50")

height: 100.0mm to 584.2mm (3.94" to 23.0")

Weight: 64 to 105 g/m<sup>2</sup>

**Special Canon media:**

High Resolution Paper HR-101

Glossy Photo Paper GP-301

High Gloss Photo Film HG-201

Glossy Photo Cards FM-101

Transparencies CF-102

Back Print Film BF-102

T-Shirt Transfers TR-201

Banner Paper

**Graphic image printing:**

Data format:

Canon extended mode: Raster image format

Resolution:

Canon extended mode: 180, 360, 720, 1440 dpi

**Compatible BJ Cartridges:**

Color BJ Cartridge BC-33e:

Nozzles: 48 per colour

Ink colours: Cyan, Yellow, Magenta

Capacity of each ink tank\*:

Black Approx. 1520 sheets

Cyan Approx. 550 sheets

Magenta Approx. 410 sheets

Yellow Approx. 310 sheets

- \* When printing the ISO JIS-SCID No. 5 pattern on plain paper with Standard selected for Choose Print Mode in the Windows 98/Windows 95 printer driver.

Color BJ Cartridge BC-34e Photo:

Nozzles: 48 per color

Ink colours: Photo Black, Photo Cyan, Photo Magenta

Capacity of each ink tank\*:

Photo Black Approx. 920 sheets

Photo Cyan Approx. 380 sheets

Photo Magenta Approx. 210 sheets

Yellow Approx. 450 sheets

- \* When printing the ISO JIS-SCID No. 5 pattern on plain paper with Plain Paper selected for Paper Type and Super Photo selected for Choose Print Mode in the Windows 98/Windows 95 printer driver.

**Capacity of each ink tank\*\*:**

Photo Black	Approx. 730 sheets
Photo Cyan	Approx. 210 sheets
Photo Magenta	Approx. 130 sheets
Yellow	Approx. 270 sheets

\*\* When printing the ISO JIS-SCID No. 5 pattern on High resolution paper with Super Photo selected for Choose Print Mode in the Windows 98/ Windows 95 printer driver.

**Black BJ Cartridge BC-30e:**

Nozzles:	60
Ink colours:	Black only
Capacity:	Approx. 1150 sheets (1500 characters per page, normal text)

**Printer driver operating environment:**

IBM PC/AT-compatible computer running Windows Me, Windows 98, Windows 95, Windows NT 4.0, Windows 2000, or Macintosh computers with USB interface computer running Mac OS 8.1 or later

**Minimum system requirements for printing with PC:**

Windows 95 / Windows 98

486, 16MB RAM, 40MB free HD space (for printer driver installation), CD-ROM drive, Parallel or USB interface\*, VGA display.

Windows Me

Pentium 150MHz or greater, 32 MB RAM, 40 MB free HD space (for printer driver installation), CD-ROM drive, Parallel or USB interface\*, VGA display.

#### Windows NT4.0

Pentium, 16MB RAM, 25 MB free HD space (for printer driver installation), CD-ROM drive, Parallel interface, VGA display.

#### Windows 2000

Pentium 133MHz or greater, 32MB RAM for Professional, 64MB RAM for Server, 25 MB free HD space (for printer driver installation), CD-ROM drive, Parallel or USB interface\*, VGA display.

### Note ►►

- The BJ Status Monitor cannot be used when printer is used in network environment.
- When the connecting printer and computer through USB interface, use the system in the following operating environment.

### Windows

USB operation can only be guaranteed on a PC with pre-installed Windows 98, Windows Me or Windows 2000. (This includes Windows Me and Windows 2000 upgraded from pre-installed Windows 98.) This product supports the majority of USB equipped PC's; however, due to differences in USB implementation, full compatibility can not be guaranteed on some PC's.

#### **Minimum system requirements for printing with Apple Macintosh:**

Macintosh with USB, Mac OS 8.1 or later, 10 MB available RAM, 30MB free HD space (for printer driver installation)

Specifications are subject to change without notice.

# Index

## A

Application error	209
ATM font	173
Auto sheet feeder	9

## B

Back Print Film BF-102	17, 39
Using	39
Background printing	250
Banner Paper	18, 28, 54
Using	54
BCI-3eBK (ink tank for Black BJ Cartridge BC-30e)	65, 113
BCI-3eBK (ink tank for Color BJ Cartridge BC-33e)	113
BCI-3eC (ink tank for Color BJ Cartridge BC-33e)	63, 113
BCI-3eM (ink tank for Color BJ Cartridge BC-33e)	63, 113
BCI-3ePBK Photo (ink tank for Color BJ Cartridge BC-34e Photo)	64, 113
BCI-3ePC Photo (ink tank for Color BJ Cartridge BC-34e Photo)	64, 113
BCI-3ePM Photo (ink tank for Color BJ Cartridge BC-34e Photo)	64, 113
BCI-3eY (ink tank for Color BJ Cartridge BC-33e)	63, 113
BCI-3eY (ink tank for Color BJ Cartridge BC-34e Photo)	64, 113
Bi-directional communication	248, 249
BJ Cartridge	
BJ Cartridges You Can Use with the Printer	63

Black BJ Cartridge BC-30e	65, 120
Color BJ Cartridge BC-31e	120
Color BJ Cartridge BC-33e	63
Color BJ Cartridge BC-34e Photo	64, 120
Notes on Handling the	66
Replacing the	120
Using the	62
BJ Cartridge Container	68, 81
BJ Status Monitor	248
Bjscan2.hlp	243
Black BJ Cartridge BC-30e	65, 120

## C

Canon Special Media	16
Cartridge Holder	11
Cartridge Lock Lever	11
Cleaning	
the paper feed rollers	133
the print head	109
the printer	131
Color BJ Cartridge BC-31e	120
Color BJ Cartridge BC-33e	63
Color BJ Cartridge BC-34e Photo	64, 120
Color Image Scanner Cartridge IS-32	78
Connecting	
the Power Cord	10
the Printer	10

**D**

Deep print head cleaning	111
Default printer	
Setting the S400 as the	148, 179
Driver	
scanner driver basics	77

**E**

Envelopes	15
Using	34
Error message	203, 213
European DL Envelope	15, 27, 34

**F**

Front cover	9
-------------	---

**G**

Glossy Photo Cards FM-101	17, 50
Using	50
Glossy Photo Paper GP-301	16, 43
Using	43

**H**

Halftoning	169
High Color	229
High Gloss Photo Film HG-201	16, 47
Using	47
High Resolution Paper HR-101	16, 33

## I

Ink Tank	
Ink Tank BCI-3eBK (For Black BJ Cartridge BC-30e)	65, 113
Ink Tank BCI-3eBK (For Color BJ Cartridge BC-33e)	63, 113
Ink Tank BCI-3eC (For Color BJ Cartridge BC-33e)	63, 113
Ink Tank BCI-3eM (For Color BJ Cartridge BC-33e)	63, 113
Ink Tank BCI-3ePBK Photo (For Color BJ Cartridge BC-34e Photo)	64, 113
Ink Tank BCI-3ePC Photo (For Color BJ Cartridge BC-34e Photo)	64, 113
Ink Tank BCI-3ePM Photo (For Color BJ Cartridge BC-34e Photo)	64, 113
Ink Tank BCI-3eY (For Color BJ Cartridge BC-33e)	63, 113
Ink Tank BCI-3eY (For Color BJ Cartridge BC-34e Photo)	64, 113
Installing the IS Scan Software	82
Intensity	158, 162, 165
Interface cable	10
Parallel	10
USB	10
IS Scan	77
Launching	87
Plus	77

## L

Landscape	20
Load limit mark	22
Loading Paper and Other Media	20
LPT1	204

## M

Macintosh	5
-----------	---

Maintenance	101
Aligning the Print Head	127
BJ Cartridge Maintenance	103
Printing a Nozzle Check Pattern	106
Prolonging the Service Life of the Printer	102
Replacing Ink Tanks	113
Replacing the BJ Cartridge	120
Transporting the Printer	136
When to Replace a BJ Cartridge	104
Media	14, 15, 16
Back Print Film BF-102	17
Banner Paper	18
Glossy Photo Cards FM-101	17
Glossy Photo Paper GP-301	16
High Gloss Photo Film HG-201	16
High Resolution Paper HR-101	16
Transparencies	39
Transparencies CF-102	17
T-Shirt Transfer TR-201	18
T-Shirt Transfers	60
Media Sizes You Can Use with the Printer	14
Sizes	14
Weight	14
Media Types You Can Use with the Printer	15
Media Types You Cannot Use with the Printer	19
<b>N</b>	
Normal print head cleaning	109

	Nozzle check pattern	106
	Number of sheets that can be loaded	22
<b>O</b>		
	Operation panel	12
	Ordinary paper	15
	Orientation	20
<b>P</b>		
	Packing material	136
	Paper guide	9
	Paper output tray	9
	Paper rest	9
	Paper thickness lever	9
	Setting the	22
	Parallel interface	10
	Parts and Functions	8
	Front view	9
	Inside the printer	11
	Operation panel	12
	Rear view	10
	Photo Optimizer PRO	74
	Photographs	
	Printing Photographic Images	72
	Tips on Printing Photographic Images	71
	Plain paper	15
	Using	29
	Portrait	20
	PostScript printer	173

POWER button	12
Power connector	10
POWER lamp	12
Print head	109, 127
Aligning the	127
Cleaning the	109
Print side	21
Printable area	23
A4	24
A5	24
B5	24
Banner Paper	28
Envelope	27
Glossy Photo Cards	26
Legal	25
Letter	25
Printer (Parts and Functions)	8
Front view	9
Inside the printer	11
Operation panel	12
Rear view	10
Printer cable connector	10
Parallel interface	10
USB interface	10
Printer port (LPT1)	204
Printing area	
A4	24
A5	24

	B5	24
	Banner Paper	28
	Envelope	27
	Glossy Photo Cards	26
	Legal	25
	Letter	25
	Printing on Paper and Other Media	13
	Loading Paper and Other Media	20
	Protective cap	69, 117
	Protective tape	69
<b>Q</b>		
	QuickDraw printer	173
<b>R</b>		
	Replacing	
	the BJ Cartridges	120
	the Ink Tanks	113
	Resolution	
	scanning	86, 222
	RESUME button	12
<b>S</b>		
	Scan	
	About the Scanning Area	86
	Launching IS Scan	87
	Performing White Level Calibration	90
	Prescanning	96
	Scanning	86, 93

Scanning an Image	93
Scanner Cartridge	
Using the	78
Scanner driver	
Installing the	82
IS Scan	77
IS Scan Plus	77
Scanning holder	
Using the	80
Specifications	252
<b>T</b>	
Transparencies CF-102	17
Using	39
Troubleshooting	140
An Error Message Appears	203
Application error, General protection fault	209
Error writing to LPT1 or USBPRN	204
Other error messages	213
Other Problems	244
BJ Status Monitor does not open	248
Cannot execute background printing	250
Cannot install the printer driver	245
Paper Jams or Does Not Feed	188
Multiple sheets feed together	194
Paper does not feed from auto sheet feeder	189
Paper jam	196
Paper skewing during feeding	192

Printer Does Not Start or Stops in Mid-job	174
Cartridge holder does not move to centre	186
Print job does not start	177
Printer does not switch on	175
Printing halts	181
Printing starts but nothing printing	183
Printout is Unsatisfactory	141
Backs of pages stained with ink	159
Characters and figures notched / gradation streaked or unnatural	173
Colours not clear	142
Colours streaked or uneven	167
Colours streaked or wrong	151
Ink blurred	160
Last part of print job not printing	170
Meaningless characters, symbols printed	147
Printed and on-screen colour do not match	145
Printed pages curled	156
Printed surface scratched	163
Single file page prints over two or more pages	150
Straight lines are broken	153
Text cut off at bottom right corner, right edge or bottom edge	149
White streaks visible	166
Scanner Problems	218
Cannot be used with TWAIN-compatible application program	231
Cannot launch IS Scan from within the TWAIN-compatible graphics application program	232
Cannot transfer to TWAIN-compatible graphics application program	233

Other scanner problems	234
An error message appears	243
Cannot install the scanner driver	235
Communication error occurs	241
Does not launch with default settings	238
Improper colours are displayed in the dialogue box	239
Scanning is too slow	240
Scanning result is unsatisfactory	219
Image contains unexpected colors, or is too light or too dark	228
Parts of an image are missing or not aligned properly	226
Scanned image blurred or distorted	220
Scanned image is of uneven quality	222
White portion becomes greyish	223
The POWER Lamp Flashes Orange	198
Eight flashes: Waste ink tank almost full	201
Five flashes: Cartridge not installed correctly	200
Four flashes: BJ Cartridge out of ink	200
Seven flashes: BJ Cartridge defective	201
Six flashes: BJ Cartridge not installed	200
The POWER lamp flashes orange and green alternately:	
Service error	202
Three flashes: Paper jam	199
Two flashes: Out of paper or paper feed error	199
True Color	229
TrueType font	173
T-Shirt Transfer TR-201	18
Using	60

**U**

US Commercial #10 Envelope	34
USB interface	10
USBPRN (nn: numerals)	204

**W**

Waste ink tank almost full	201
White calibration sheet	79, 90
White level calibration	90
WPS driver	172, 208