

Canon

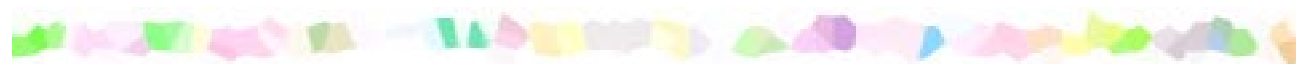


BUBBLE JET PRINTER

S520

User's Guide

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Introduction

Thank you for purchasing the Canon S520 Bubble Jet Printer. This User's Guide provides complete explanations of the features and functions of the printer.

This guide uses the following symbols to indicate important information. Always observe these instructions.

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

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

Important ➤ Prohibited actions that, inadvertently performed, could result in equipment damage, faults or impaired product quality.
Must be avoided for correct operation.

Windows


Information for Windows users only.


Macintosh


Information for Macintosh (USB users only).

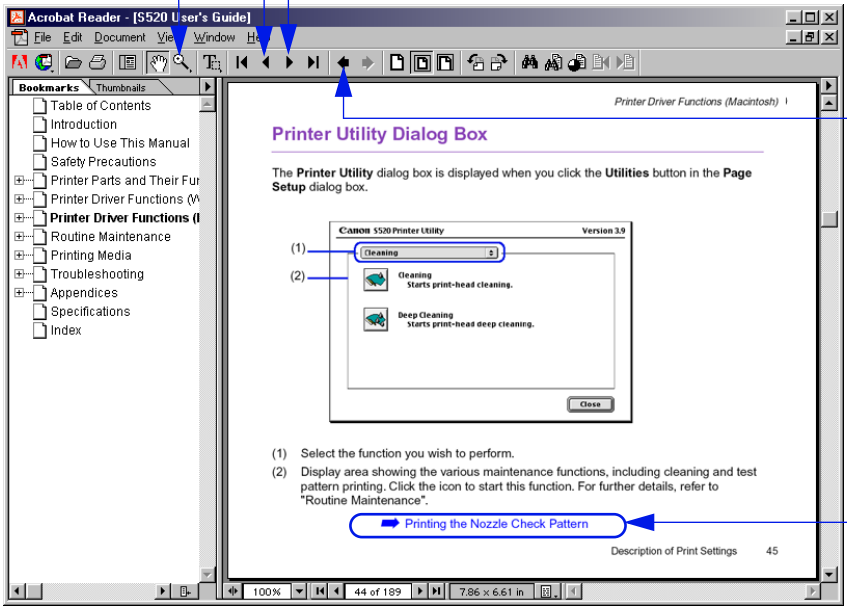
How to Use This Manual


To view this User's Guide, we recommend that you use Acrobat Reader 3.0 or later. The screens shown below are for Acrobat Reader 4.0. Please note that screens displayed by Acrobat Reader 3.0 or 5.0 are slightly different.


 Use this button to enlarge the viewing screen. Select this button in the tool bar and click within the screen.

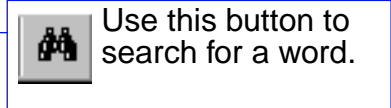
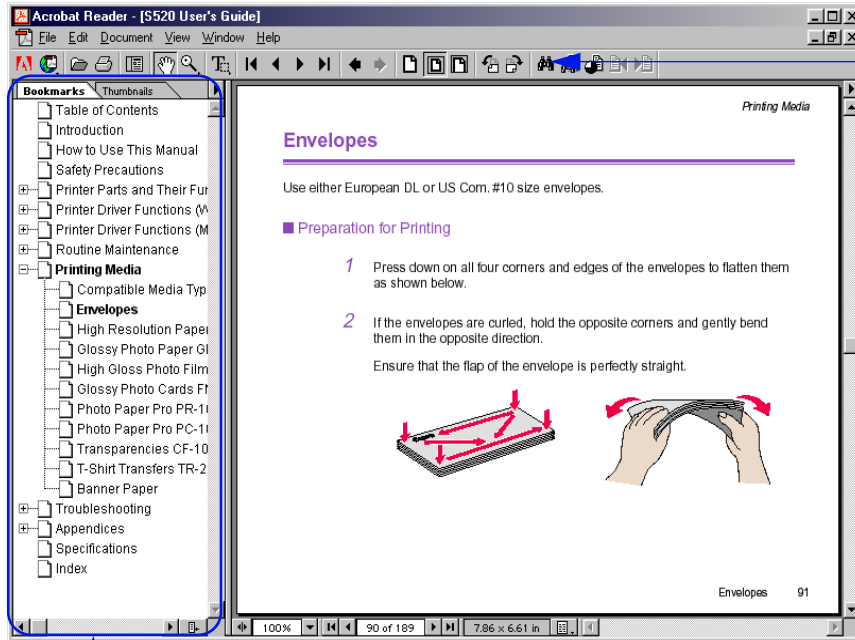
 Displays the previous page.

 Displays the next page.



 Returns to the page you were previously viewing.

 Click to jump straight to this page.



Displays the table of contents.
 Click the heading to jump to the topic.
 Click the "+" symbol to see the headings for each chapter.
 Click the "-" symbol to close the headings.

Safety Precautions

Please read the safety warnings and cautions provided in this manual to ensure that you use the printer safely. Do not attempt to use the printer in any way not described in this manual.

Warning ► You may cause an electric shock/fire or damage the printer if you ignore any of these safety precautions.

■ Choosing a location

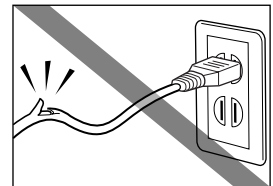
Do not place the printer close to flammable solvents such as alcohol or thinners.

■ Power supply

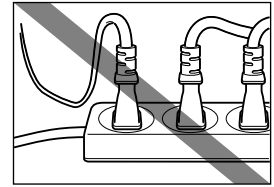
Never attempt to plug in or unplug the printer from the power supply when your hands are wet.

Always push the plug all the way into the power outlet.

Never damage, modify, stretch or excessively bend or twist the power cord. Do not place heavy objects on the power cord.



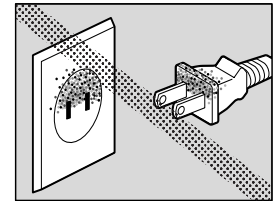
Never plug the printer into a power socket that is shared with other equipment (extension lead, double adapter, etc.).



Never use the printer if the power cord is bundled or knotted.

If you detect smoke, unusual smells or strange noises around the printer, immediately unplug the printer at the power supply and call for service.

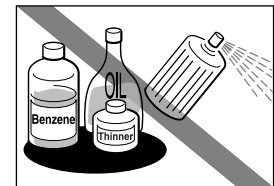
Periodically, unplug the printer and use a dry cloth to wipe off any dust or dirt collects on the plug and the power outlet. If the printer is placed at a location exposed to a lot of dust, smoke, or high humidity, the dust that collects on the plug absorbs moisture and may cause insulation failure and fire.



■ Cleaning the printer

Use a damp cloth to clean the printer. Never use flammable solvents such as alcohol, benzene or thinners.

If flammable solvents come in contact with electrical components inside the printer, it could cause a fire or electric shock.



Always unplug the printer from the power outlet before cleaning the printer.

If you accidentally switch the printer on while cleaning it, you could injure yourself or damage the printer.

■ Maintaining the printer

Do not attempt to disassemble or modify the printer. There are no user serviceable parts inside the printer.

The printer contains high-voltage components. Never attempt any maintenance procedure not described in this guide.

■ Working around the printer

Do not use inflammable sprays near the printer.

This could cause a fire or electric shock if the spray comes into contact with electrical components inside the printer.

Caution ► You may cause injury or damage the printer if you ignore any of these safety precautions.

■ Choosing a location

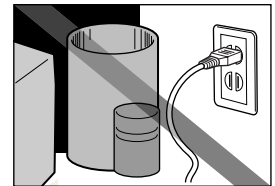
Do not install the printer in a location that is unstable or subject to excessive vibration.

Do not install the printer in locations that are very humid or dusty, in direct sunlight, outdoors, or close to a heating source.

To avoid the risk of fire or electric shocks, install the printer in a location with an ambient temperature range of 5°C to 35°C (41°F to 95°F) and humidity of 10% to 90% (condensation free).

Do not place the printer on a thick rug or carpet.

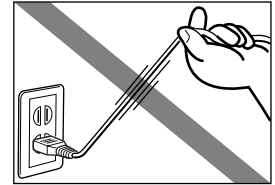
Ensure that the area around the power outlet is kept clear at all times so you can easily unplug the power cord if necessary.



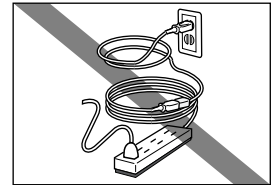
When moving the printer, carry the printer at both ends.

■ Power supply

Never remove the plug by pulling on the cord.



Do not use an extension lead.



Never use a power supply voltage other than that supplied in the country of purchase.

The correct power supply voltages and frequencies are as follows:

Europe: AC 230V \pm 10%, 50Hz

USA/Canada: AC 120V, 60Hz

Australia: AC 240V, 50Hz

■ Working around the printer

Never put your hands or fingers in the printer while it is printing.

Do not place metal objects (paper clips, staples, etc.) or containers of flammable solvents (alcohol, thinners, etc.) on top of the printer.

If any foreign object (metal or liquid) falls into the printer, unplug the power cord and call for service.

■ Print heads and ink tanks

For safety reasons store print heads and ink tanks out of the reach of small children.

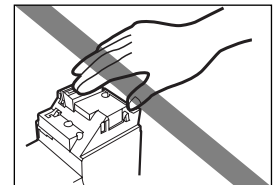
If a child ingests any ink, consult a doctor immediately.

Do not shake print heads or ink tanks.

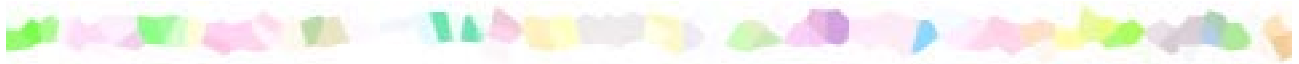
Ink may leak out and stain clothing or the surrounding area.

Never touch the electrical contacts on a print head after printing.

The metal parts may be very hot and could cause burns.



Printer Parts and Their Functions



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

Front View

Operation Panel
For details, refer to
"Operation Panel."

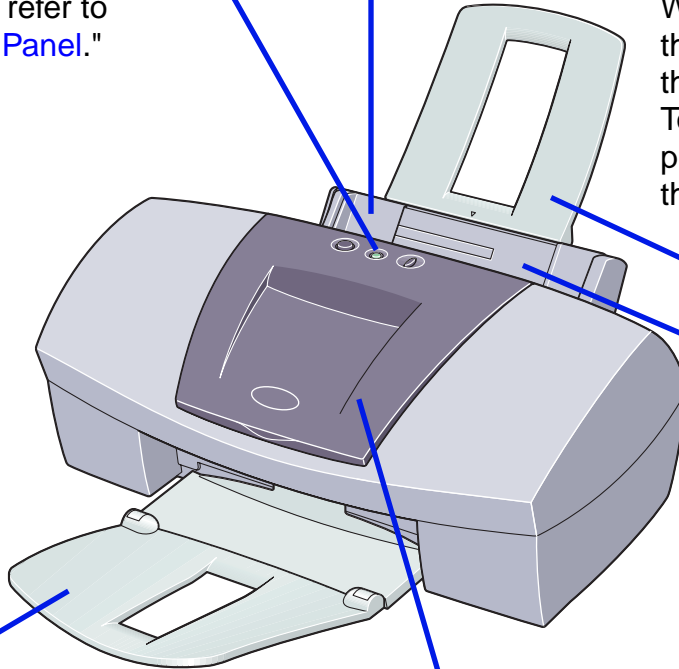
Paper Guide
When loading paper, ensure
the left edge just touches
this guide.
To move the paper guide,
pinch the knob and slide in
the appropriate direction.

Paper Rest

Sheet Feeder
Load paper here.
Paper feeds
automatically, one sheet
at a time.

Paper Output Tray

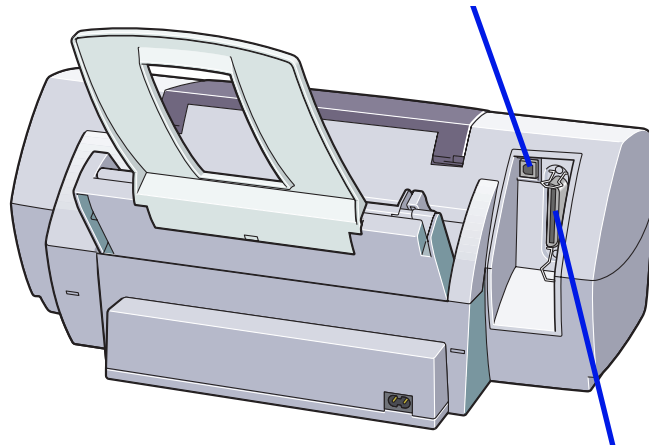
Front Cover
Open to replace the
ink tanks or remove
jammed paper.



Rear View

USB Port

Used to connect the printer to a computer through a USB interface.



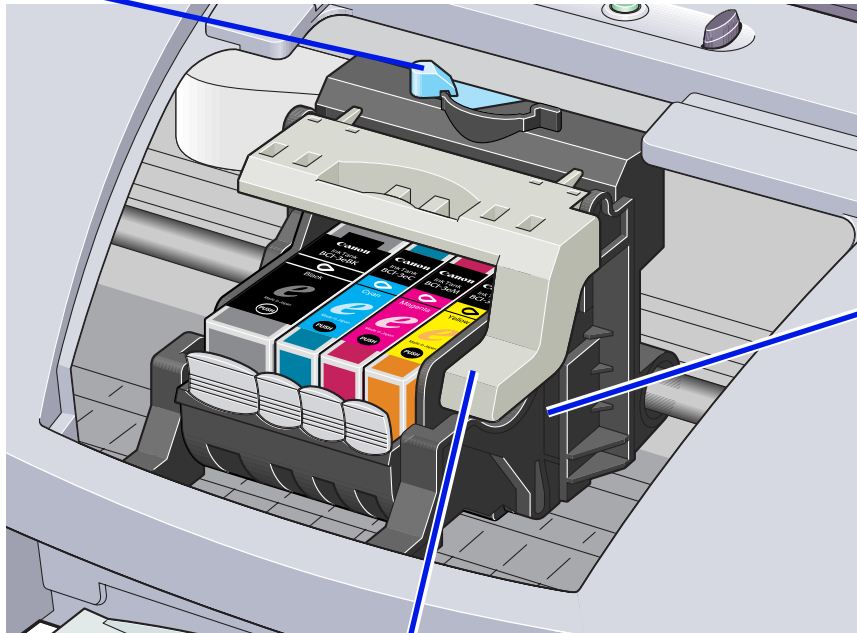
Printer Port (Parallel)

Used to connect the printer to a computer through a parallel interface.

Inside the Printer

Paper Thickness Lever

Adjusts the gap between the print head and the surface of the printing paper.



Print Head Holder

Install the print head here.

Print Head Lock Lever

Locks the print head into the holder.

Once the print head is installed, do not touch this lever.

Operation Panel

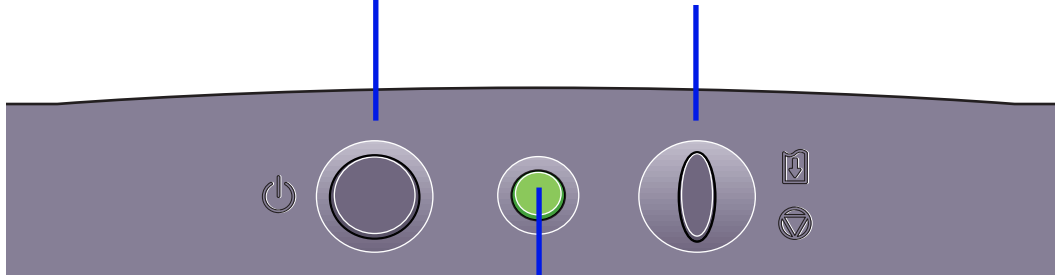
POWER Button

Press to turn the printer on or off.

RESUME/CANCEL Button

Press to resume printing once an error has been cleared. The printer will then initialise ready for printing.

Also, to cancel printing in progress, press this button.



POWER Lamp

Off: the printer is turned off.

Green: the printer is ready to print.

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

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

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

Printer Driver Functions (Windows)



- Opening the Printer Properties Dialog Box
- Printer Properties Dialog Box Description
- BJ Status Monitor Functions
- Cancelling a Print Job
- Uninstalling Printer Drivers

Opening the Printer Properties Dialog Box

The Printer Properties dialog box can be opened from either within an application, or directly from the Windows **Start** menu.

■ Opening the Printer Properties dialog box from your application program

This method is generally used to specify printer settings just before printing. The operations may vary slightly depending on your application program. This section describes only the general procedure for opening the Printer Properties dialog box.

- 1 In your application, select the command to print a document.

The **Print** dialog box can usually be opened by selecting **Print** from the **File** menu.

- 2 Ensure that **Canon S520** is selected in the **Name** field. Then click the **Properties** button.

The Printer Properties dialog box opens.

Note ➤ Depending on your application program, the command and menu names may differ, and there may be more steps involved in opening the Printer Properties dialog box. For further details, see the user's manual for your application.

■ Opening the Printer Properties dialog box directly from the Start menu

This method is used for maintenance operations such as print head cleaning, or to specify printer settings common to all application programs.

When the Printer Properties dialog box is opened from the **Start** menu, the Windows operating system adds several tabs, including the **Details** tab. These do not appear when the Printer Properties dialog box is opened from within an application.

For further information about these additional tabs, refer to your Windows documentation.

- 1 Click the **Start** button, then select **Settings, Printers**.

For Windows XP, click **Start** and select **Control Panel, Printers and Other Hardware**, and then **Printers and Faxes**.

- 2 Select the **Canon S520** icon.

- 3 Open the **File** menu and select:

- Windows Me/Windows 98/Windows 95 → **Properties**
- Windows XP/Windows 2000 → **Printing Preferences...**
- Windows NT4.0 → **Document Defaults...**

The Printer Properties dialog box opens.

Printer Properties Dialog Box Description

The screenshot shows the 'Canon S520 Properties' dialog box with the following settings and features:

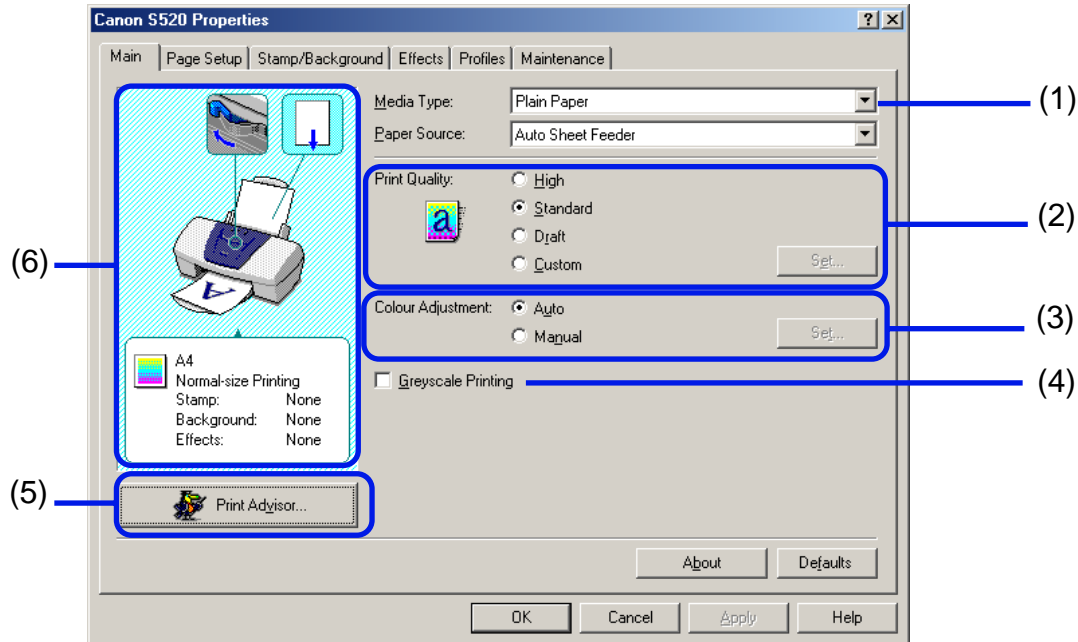
- Media Type:** Plain Paper
- Paper Source:** Auto Sheet Feeder
- Print Quality:** Standard (Selected), High, Draft, Custom
- Colour Adjustment:** Auto (Selected), Manual
- Greyscale Printing:** Unchecked
- Stamp/Background/Effects:** All set to None
- Buttons:** About, Defaults, OK, Cancel, Apply, Help

Blue arrows from the list on the right point to the following elements in the dialog box:

- Main Tab
- Page Setup Tab
- Stamp/Background Tab (Not Available in Windows NT 4.0)
- Effects Tab
- Profiles Tab
- Maintenance Tab

Note ➤ The screens in this section refer to Windows Me/Windows 98/Windows 95 operation. The equivalent screens for Windows XP, Windows 2000 and Windows NT4.0 may look slightly different.

Main Tab



- (1) **Media Type**
Ensure this setting matches the type of media loaded in the printer.
- (2) **Print Quality**
Select the print quality you require from among the different options. To select custom Print quality, select **Custom** and click the **Set...** button.

(3) **Colour Adjustment**

Select the method of colour adjustment. To make detailed colour adjustments, select **Manual**, then click the **Set...** button.

(4) **Greyscale Printing**

Select to print a greyscale version of a colour document.

(5) **Print Advisor...**

Click to start the Print Advisor.

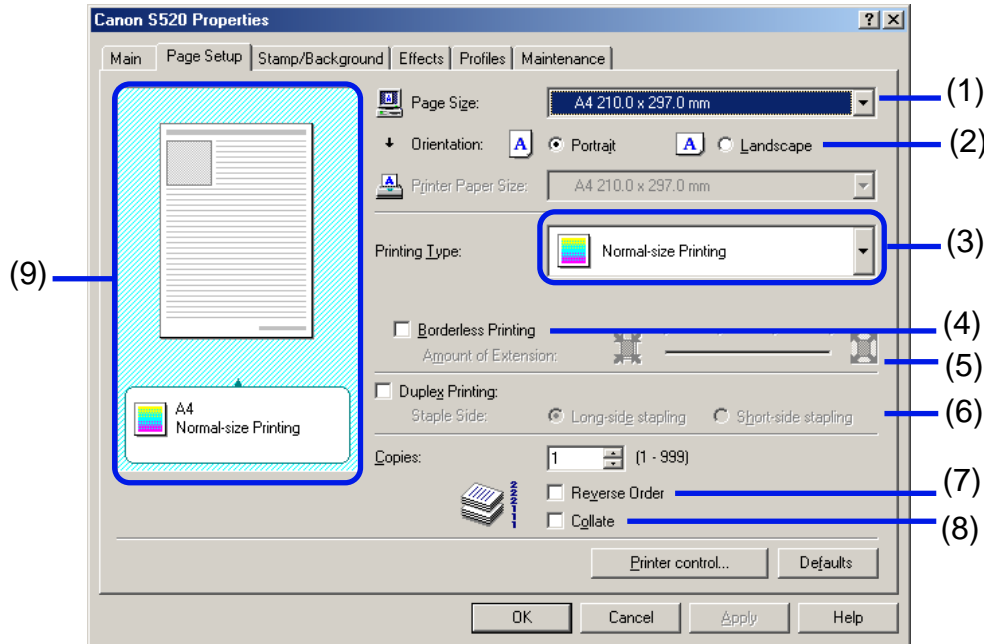
The Print Advisor simplifies configuration of the printer driver. By having the user answer a series of questions, the Print Advisor automatically configures the printer driver settings.

(6) **Preview Area**

Before starting printing, verify that settings such as the lever position are correct.

Note ▶ To see a description of any item in the Printer Properties dialog box, click the **?** mark then click the desired item. To see a description of operating procedures, click the **Help** button. If the button does not appear when using Windows XP, Windows 2000 or Windows NT4.0, click the **Start** button then select **Programs - Canon S520 - Guide**.

Page Setup Tab



- (1) **Page Size**
Ensure the correct paper size is selected.
- (2) **Orientation**
Select landscape or portrait printing and ensure it is the same orientation used in the application.

(3) **Printing Type**

Select the printing method from among the following.

- Normal-size Printing** The document is printed according to the original dimensions. This setting is usually selected by default.
- Fit-to-Page Printing** The document is automatically resized to fit the paper size. When using this function, ensure you correctly specify the **Page Size** and the **Printer Paper Size**.
- Scaled Printing** The document is resized when printed. When this is selected, you can specify the **Printer Paper Size** and **Scaling**.
- Page Layout Printing** Pages are reduced and printed so that 2 to 16 document pages fit on each printed page.
- Booklet Printing** The multiple-page document is printed so that two pages of the document fit on each printed page. The print order is set automatically. After the document is printed, you can create a booklet by folding and saddle-stitching the document.
- Poster Printing** This enlarges and splits the print image across several sheets of paper. The printed sheets can then be assembled to make a large poster. (Not available in Windows NT 4.0)
- Banner Printing** Select this when printing on banner paper.

(4) **Borderless Printing**

The image is printed on the entire paper surface, so that no margins are left on the four sides of the paper. The media types available for Borderless Printing are PR-101 and GP-301 / GP-301N. For all other media types, the print quality may decrease.

(5) **Amount of Extension**

When you select Borderless Printing, the sections that extend beyond the paper are not printed because the image is enlarged to a size slightly larger than the paper size. You can use the slide bar to adjust how much the image extends beyond the paper. It is recommended that you normally set the slide bar to the right end. If you move the slide bar to the left to reduce the extension amount, a border may appear.

(6) **Duplex Printing**

The document is printed on both sides of the paper. After printing one side, turn the ejected page over, and print on the other side.

(7) **Reverse Order**

When selected, the document starts printing with the last page.

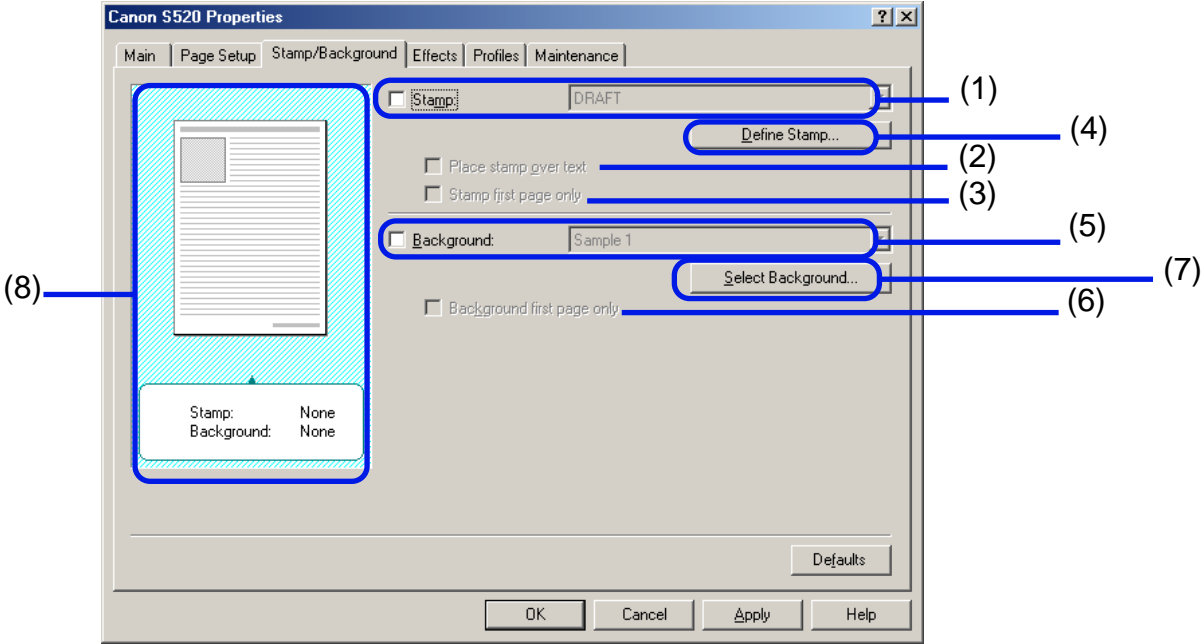
(8) **Collate**

Select to print multiple copies of the document one copy at a time.

(9) **Preview Area**

Verify the overall layout, stamps, background, etc., to be applied to the print job.

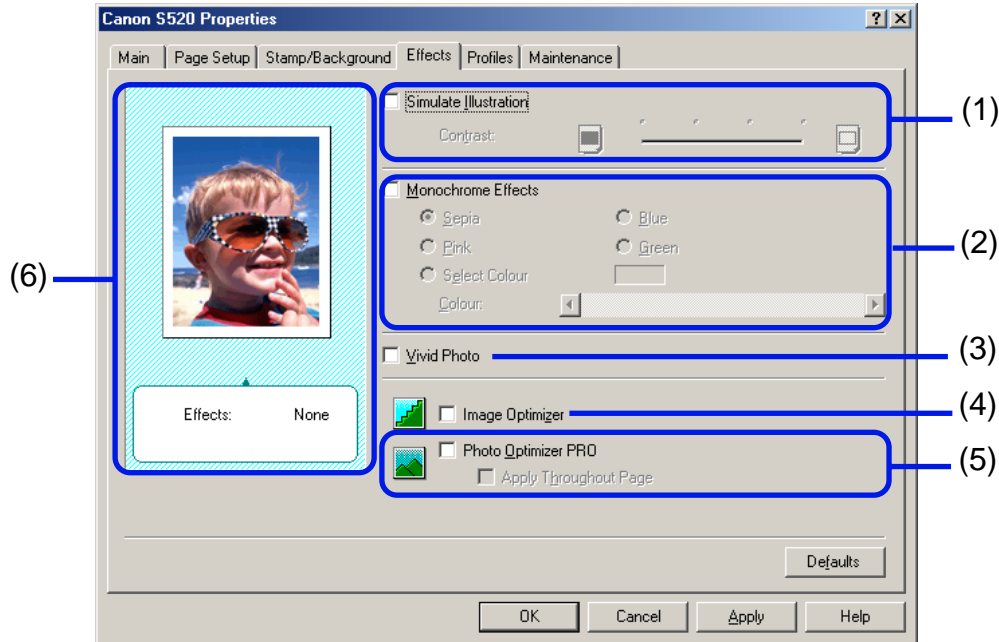
Stamp/Background Tab (Not Available in Windows NT 4.0)



- (1) **Stamp**
Select the check box and choose the stamp.
- (2) **Place stamp over text**
When selected, the stamp is printed over the print data.

- (3) **Stamp first page only**
Prints the stamp only on the first page.
- (4) **Define Stamp...**
This allows you to create new stamps, or modify details of a selected stamp.
- (5) **Background**
Select the check box and choose the background image you wish to use.
- (6) **Background first page only**
Prints the background image only on the first page.
- (7) **Select Background...**
This allows you to register a new background, or to display details of the background you have selected.
- (8) Preview Area

Effects Tab

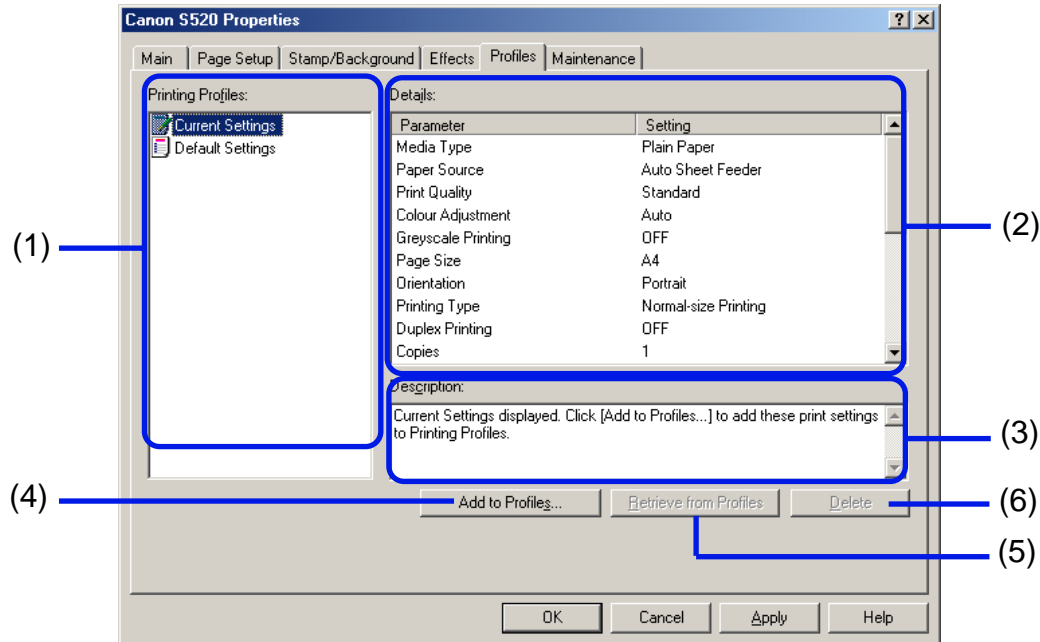


(1) Simulate Illustration

Select the check box to manipulate colour image data with certain effects. Adjust the brightness of the image with the **Contrast** slide bar.

- (2) **Monochrome Effects**
Prints a colour image in a single colour. Select the check box and choose a colour or use a custom colour using **Select Colour**.
- (3) **Vivid Photo**
By using this function, you can reproduce breathtaking sceneries in which colours, especially blues and greens, appear even more vibrant. A major feature of this function is its ability to create vivid backgrounds of fields, trees, oceans, and sky, while maintaining the natural skin tones of people that appear in the images.
- (4) **Image Optimizer**
Improves the contours and jaggedness that occur when photographic or graphic image data is enlarged within an application.
- (5) **Photo Optimizer PRO**
Optimises the colour of images taken from a digital camera or scanner. It is especially effective for images affected by colour imbalance and over- or under exposure. When printing several images on one page, optimisation is usually applied to each image according to its requirements. However, if the image data has been manipulated using cut and paste, rotation or other such operations, group optimisation of all images on the one page is recommended. In such cases, select the **Apply Throughout Page** check box.
- (6) Preview Area

Profiles Tab

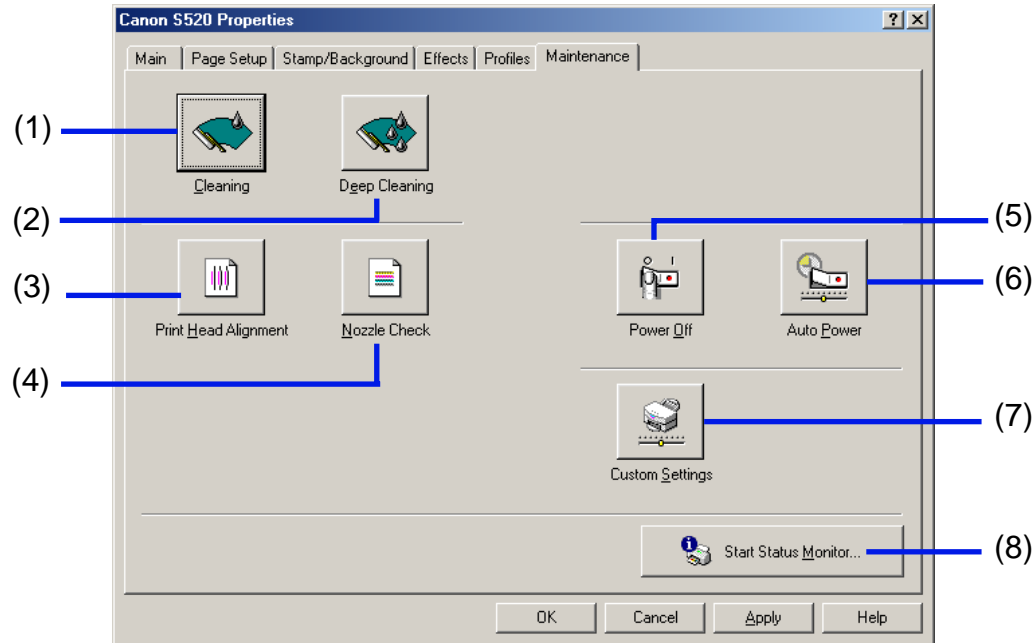


(1) Printing Profiles

This list displays the printing settings currently registered in the Profiles tab. The **Current Settings** profile contains the settings currently specified in the **Main**, **Page Setup** and **Effects** tabs. The **Default Settings** profile contains the factory default settings.

- (2) **Details**
Displays all the printer settings selected in **Printing Profiles**.
- (3) **Description**
Displays a description of the printer settings selected in **Printing Profiles**. You can enter the description when saving the printer settings.
- (4) **Add to Profiles...**
Click to save the settings currently specified in the **Main**, **Page Setup** and **Effects** tabs. Select **Current Settings** in the **Printing Profiles** list then click this button. The **Add to Profiles** dialog box appears.
- (5) **Retrieve from Profiles**
Click to activate registered printer settings. The contents of the **Main**, **Page Setup** and **Effects** tabs are changed by selecting the printer settings in **Printing Profiles** and then clicking this button.
This button is disabled when **Current Settings** is selected.
- (6) **Delete**
Click to delete unwanted printer settings. Select the unwanted item in the **Printing Profiles** list and click the **Delete** button.
Current Settings and **Default Settings** cannot be deleted.

Maintenance Tab



- (1) **Cleaning**
Click to start print head cleaning.
- (2) **Deep Cleaning**
Click to start print head deep cleaning.
Use this function only if **Cleaning** has not improved the print quality.

- (3) **Print Head Alignment**
Aligns the print head. For details on print head alignment, refer to *Quick Start Guide*.
- (4) **Nozzle Check**
Prints the nozzle check pattern to ensure the print head nozzles are ejecting ink normally. For details, refer to “[Examining the Nozzle Check Pattern](#)”.
- (5) **Power Off**
Click to turn the printer off.
- (6) **Auto Power**
Set to automatically turn the printer off when it remains idle for a period of time, or turn back on again when data is sent to the printer.
- (7) **Custom Settings**
Click to modify the printer mode. Change the settings in the **Custom Setting** dialog box and click **Send** to change printer mode.
- (8) **Start Status Monitor...**
Click to start the BJ Status Monitor, to check the printer status and the progress of printing jobs.

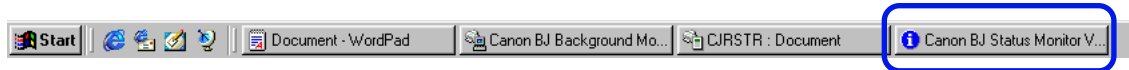
BJ Status Monitor Functions

The BJ Status Monitor allows you to check the status of the printer. If an error occurs, the status monitor indicates the nature of the error and suggests an appropriate solution. The status monitor also checks the ink tanks and displays a warning message when the ink is low.

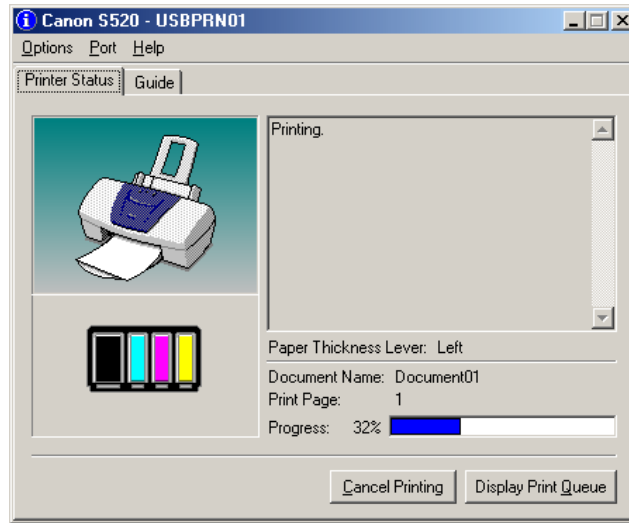
■ Launching the BJ Status Monitor

The BJ Status Monitor launches automatically when data is sent to the printer. When launched, the BJ Status Monitor appears as an icon on the Task Bar.

- 1 Click the **Canon BJ Status Monitor** icon on the Task Bar.



The BJ Status Monitor appears.



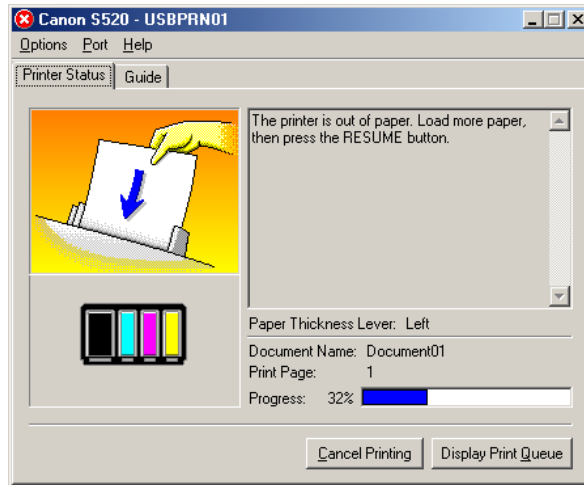
Note ➤ To open the BJ Status Monitor when the printer is not printing, click the **Maintenance** tab in the Printer Properties dialog box and click the **Start Status Monitor** button.

■ When errors occur or ink runs low

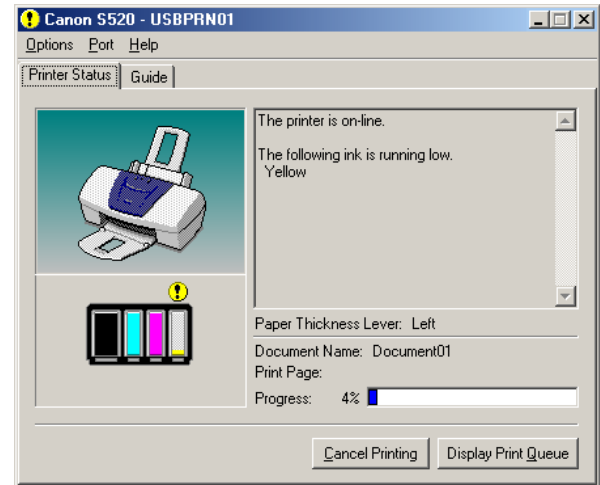
The BJ Status Monitor is automatically displayed when an error occurs, e.g. if the printer runs out of paper or ink is low.

In such cases, take the appropriate action as described in the **Printer Status** tab. In Windows 95, Windows 98 or Windows Me, click the **Guide** tab and follow the instructions on screen.

When paper has run out:



When the ink level is low:



Note ➤ For details on the BJ Status Monitor, select the **Help** menu and click on the topic of interest.

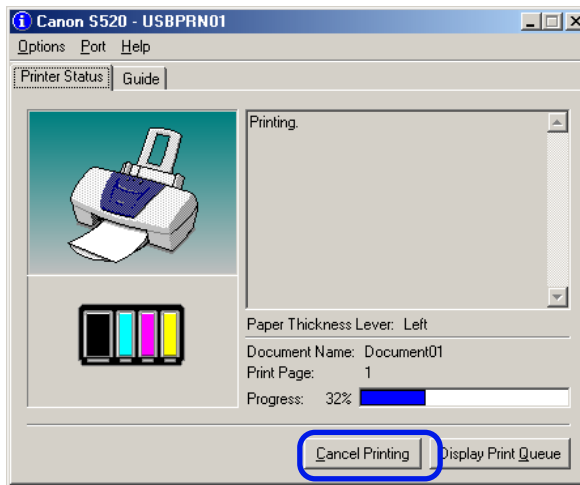
Cancelling a Print Job

To cancel the current print job, first open the BJ Status Monitor.

- 1 Click the **Canon BJ Status Monitor** icon on the Task Bar.



- 2 Click **Cancel Printing**.



Note ➤ If **Cancel Printing** is greyed out, press the printer's RESUME/CANCEL button to terminate the print job.

Uninstalling Printer Drivers

Use the Uninstaller to delete any unwanted printer drivers. This allows you to delete all the files associated with the printer driver at the same time.

- 1 Click the **Start** button and select **Programs, Canon S520, Uninstall**.
For Windows XP, click the **Start** button and select **All Programs, Canon S520, Uninstall**.
- 2 Click **Yes** when the confirmation message appears.
- 3 When all the files have been deleted, click **OK**.
The deletion of the printer driver is complete.

If a message prompts you to restart your computer, click **OK** to restart your computer.

Note ➤ In Windows 95, Windows 98 or Windows Me, you can also start the Uninstaller by double-clicking on **Uninstall** in the **Canon S520** folder on the desktop.

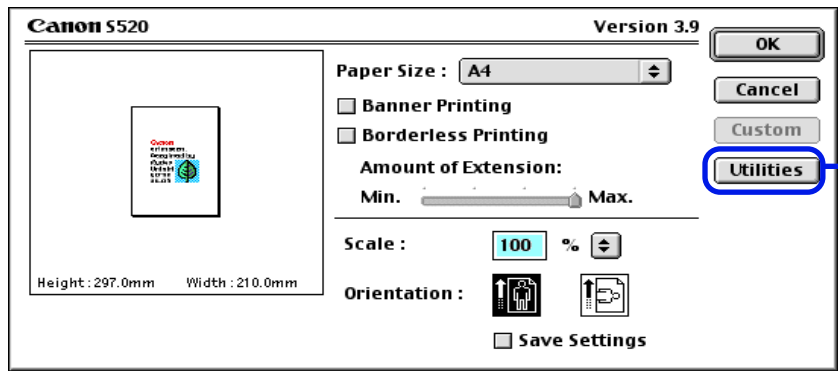
Printer Driver Functions (Macintosh)



- Description of Print Settings
- BJ Print Monitor
- Cancelling a Print Job
- Using the Printer with a Network
- Uninstalling Printer Drivers

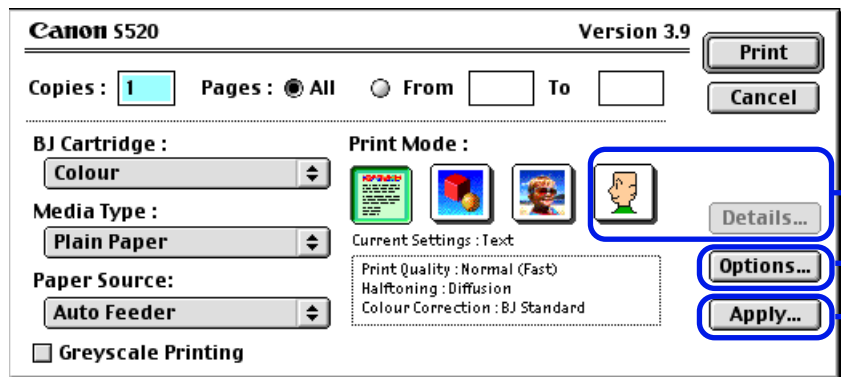
Description of Print Settings

- Page Setup Dialog Box



• Printer Utility Dialog Box

- Print Dialog Box



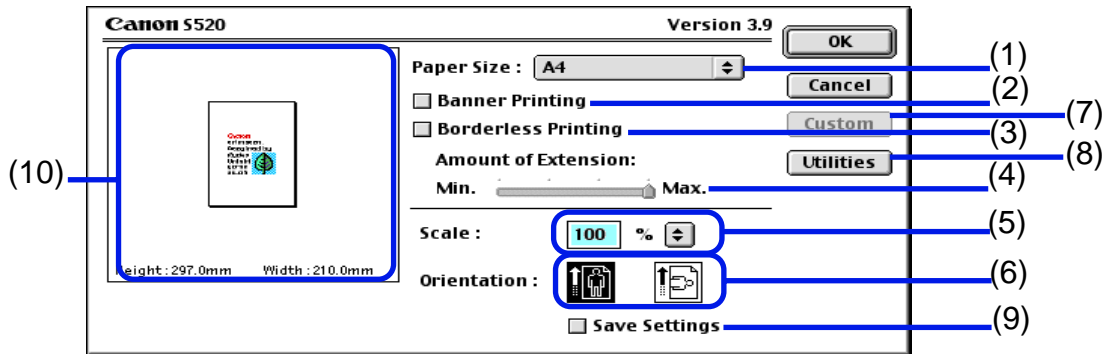
• Detailed Setting Dialog Box

• Options Dialog Box

• Register Settings Dialog Box

Page Setup Dialog Box

The Page Setup dialog box contains settings for the printed page, such as the size of the print media, and resizing the printed image. To open the Page Setup dialog box, select **Page Setup** from the **File** menu in your application program.



- (1) **Paper Size**
Select the size of the paper for the print job. To enter the size manually, select **Custom 1 - Custom 3** and click **Custom**.
- (2) **Banner Printing**
Select this check box when printing on banner paper.
- (3) **Borderless Printing**
The image is printed on the entire paper surface, so that no margins are left on the four sides of the paper. The media types available for Borderless Printing are PR-101 and GP-301 / GP-301N. For all other media types, the print quality may decrease.

(4) **Amount of Extension**

When you select Borderless Printing, the sections that extend beyond the paper are not printed because the image is enlarged to a size slightly larger than the paper size. You can use the slide bar to adjust how much the image extends beyond the paper. It is recommended that you normally set the slide bar to the right end. If you move the slide bar to the left to reduce the extension amount, a border may appear.

(5) **Scale**

Specify the scaling percentage to resize the document for printing.

(6) **Orientation**

Select landscape or portrait printing.

(7) **Custom**

To specify a custom paper size, click this button to open the **Custom** dialog box after selecting **Custom 1** to **Custom 3** in the **Paper Size** popup menu. The **Custom** Dialog Box allows you to specify the length and width of the paper.

(8) **Utilities**

Click to open the **Printer Utility** dialog box for maintenance operations such as print head cleaning and nozzle check pattern printing, as well as for changing the print mode.

(9) **Save Settings**

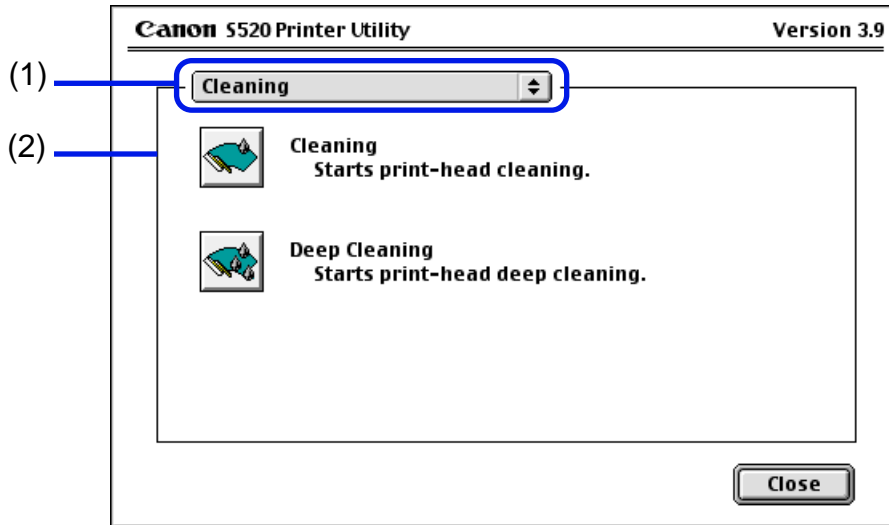
Saves the settings specified in the **Page Setup** dialog box.

(10) **Preview Area**

This image allows you to confirm how the document will print with the selected paper settings.

Printer Utility Dialog Box

The **Printer Utility** dialog box is displayed when you click the **Utilities** button in the **Page Setup** dialog box.



- (1) Select the function you wish to perform.
- (2) Display area showing the various maintenance functions, including cleaning and test pattern printing. Click the icon to start this function. For further details, refer to "Routine Maintenance".

[▶ Printing the Nozzle Check Pattern](#)

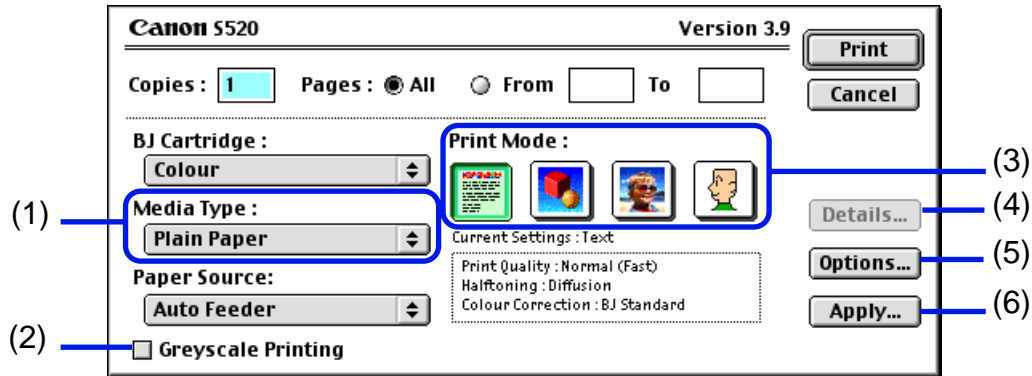
 Print Head Cleaning

 Print Head Deep Cleaning

Note  For information about Print Head Alignment, refer to the *Quick Start Guide*.

Print Dialog Box


The **Print** dialog box specifies the media type and print settings to be used for your print job. To open the **Print** dialog box, select **Print** from the **File** menu in your application program.

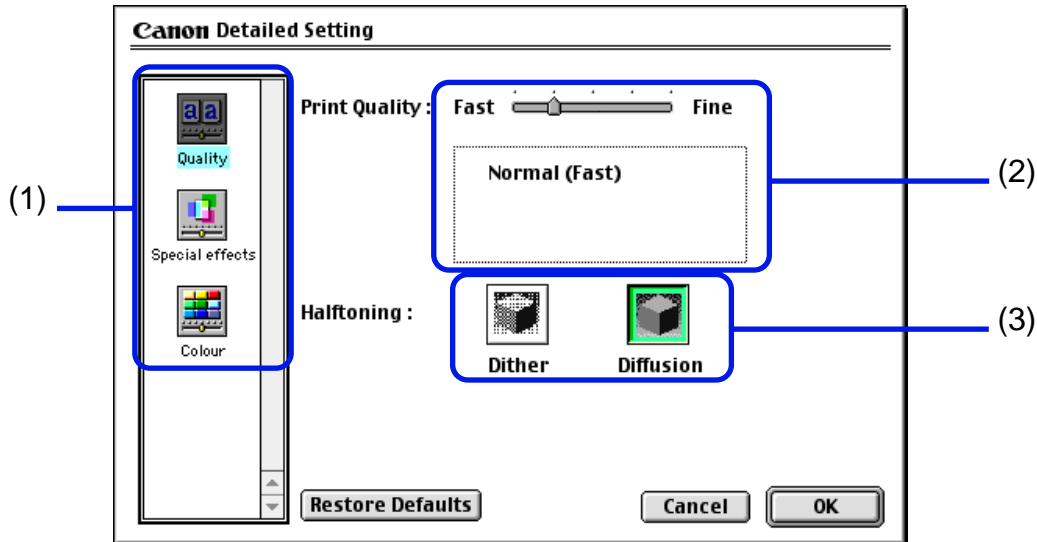


- (1) **Media Type**
Ensure this setting matches the type of paper media loaded in the printer.
- (2) **Greyscale Printing**
Select to print a greyscale version of a colour document.
- (3) **Print Mode**
Select the icon that most closely resembles your document and required print results.

- (4) **Details...**
Allows you to manually set the print quality and colour settings in the [Detailed Setting Dialog Box](#).
- (5) **Options...**
Specify the output destination, print order and page layout for the document you are printing.
- (6) **Apply...**
Allows you to register print settings or to implement a previously registered print setting.

Detailed Setting Dialog Box

To open the **Detailed Setting** dialog box, select **Manual**  in the **Print** dialog box and then click **Details....**



- (1) Panel display icons
Click these icons to switch between panels in the **Detailed Setting** dialog box.

(2) **Print Quality**

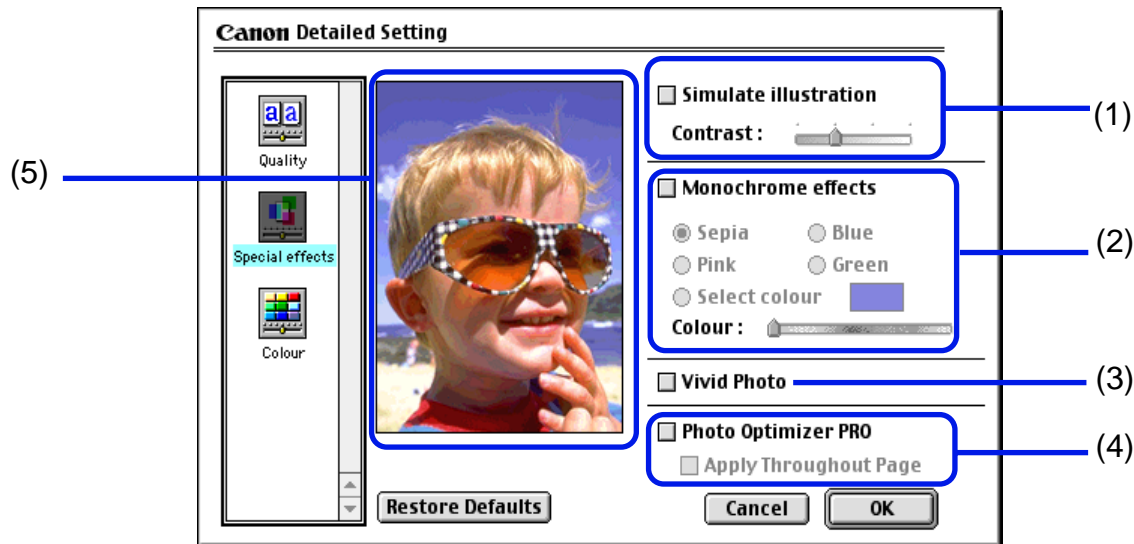
Move the slide bar to adjust the balance between print quality and speed. Moving the bar to the right enhances print quality, and moving it to the left increases printing speed.

(3) **Halftoning**

Select either **Dither** or **Diffusion** ink dot configurations.

■ Special Effects Panel

To display the **Special Effects** panel, click the **Special effects** display icon.



(1) Simulate illustration

Select the check box to manipulate colour image data to produce illustration effects. Adjust the brightness of the image with the **Contrast** slide bar.

(2) **Monochrome effects**

Prints a colour image in a single colour. Select the check box and choose the colour you wish to use.

(3) **Vivid Photo**

By using this function, you can reproduce breathtaking sceneries in which colours, especially blues and greens, appear even more vibrant. A major feature of this function is its ability to create vivid backgrounds of fields, trees, oceans, and sky, while maintaining the natural skin tones of people that appear in the images.

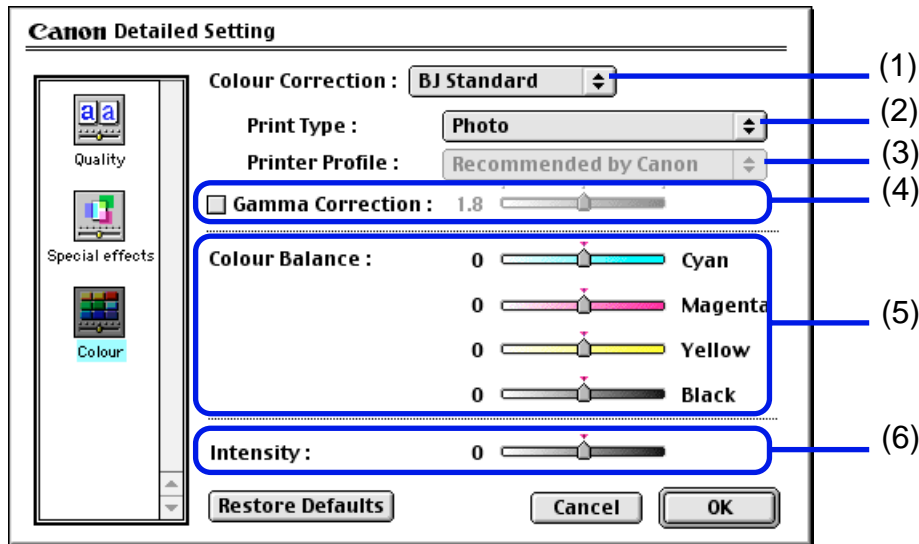
(4) **Photo Optimizer PRO**

Optimises the colour of images taken from a digital camera or scanner. It is especially effective for images affected by colour imbalance and over- or under exposure. When printing several images on one printing page, optimisation is usually applied to each image according to its requirements. However, if the image data has been manipulated using cut and paste, rotation or other such operations, group optimisation of all images on the page is recommended. In such cases, select the **Apply Throughout Page** check box.

(5) Preview Area

■ Colour Panel

To display the **Colour** panel, click the **Colour** display icon.



(1) Colour Correction

Select a colour correction method: **BJ Standard**, **ColorSync** or **None**. **BJ Standard** is usually the optimum colour correction method for printing with a BJ printer. When **ColorSync** is selected, you should also specify the **Print Type** and **Printer Profile** settings.

(2) **Print Type**

For printing that emphasises intermediate colours, select **Photo**. For printing that emphasises the brightness of primary colours, select **Graphics**. For documents that contain large amounts of a basic colour, select **Spot Colour**.

(3) **Printer Profile**

Select optimised colour characteristics (a profile) for the media type and other factors.

(4) **Gamma Correction**

This function adjusts the colour contrast (not including pure black and white). To adjust the contrast, select the check box and move the slide bar. Moving the bar to the right darkens the entire image while increasing contrast in the lighter areas and decreasing contrast in the darker areas.

(5) **Colour Balance**

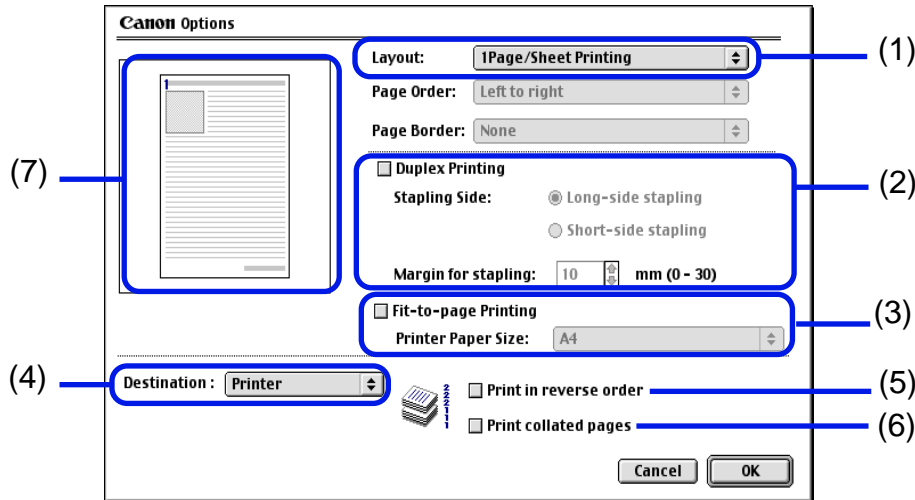
Move the bar for each colour to adjust the balance of colour intensity. Moving the bar to the right intensifies the colour.

(6) **Intensity**

Move the slide bar to adjust the print density. Moving the bar to the right increases the density.

Options Dialog Box

To open the **Options** dialog box, click the **Options...** button in the **Print** dialog box.



(1) Layout

Allows you to print two or four pages of a document on a single page, or to enlarge printing so that a single page spans multiple sheets of paper (Poster Printing). If you select **2Page/Sheet Printing** or **4Page/Sheet Printing**, you should also set the **Page Order** to specify the document page order for printing. The **Border** option allows you to select whether to print a border around the individual document pages.

(2) **Duplex Printing**

The document is printed on both sides of the paper. After printing one side, turn the ejected page over, and print on the other side.

(3) **Fit-to-page Printing**

The document is automatically resized to fit the paper size. When using this function, ensure you correctly specify the **Printer Paper Size**.

(4) **Destination**

Select the print output destination. **Printer** is the usual selection.

To check the layout or other image elements before printing, select **Preview**. To save the document as a PICT file, select **PICT File**.

(5) **Print in reverse order**

Prints the document starting with the last page.

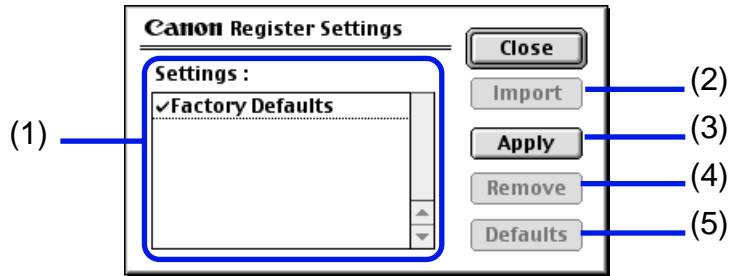
(6) **Print collated pages**

Prints multiple copies of the document one copy at a time.

(7) Preview Area

Register Settings Dialog Box

To open the **Register Settings** dialog box, click the **Apply...** button in the **Print** dialog box.



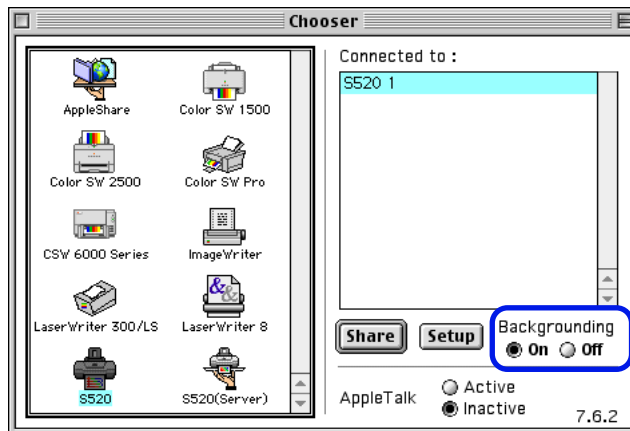
- (1) **Settings**
Displays a list of the registered print settings.
- (2) **Import**
Imports a set of print settings. To use the settings, select the desired settings in the **Settings** list and click the **Import** button.
- (3) **Apply**
Saves the settings currently specified in the **Print** dialog box. After clicking the button, enter the name under which the settings are to be saved.
- (4) **Remove**
Deletes unwanted print settings. To delete unwanted settings, select the settings in **Settings** and click the **Remove** button.
- (5) **Defaults**
Restores the print settings selected in **Settings** to defaults. A check mark appears next to the selected print settings.

BJ Print Monitor

The BJ Print Monitor allows you to check the progress of print jobs. You can launch the BJ Print Monitor if background printing is enabled in the **Chooser** utility.

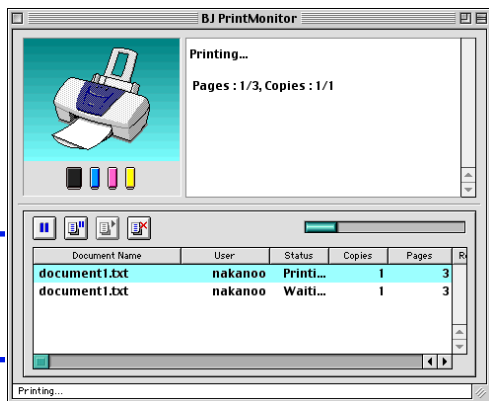
■ Opening the BJ Print Monitor

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



- 3 After starting a print job, select **BJ Print Monitor** in the Application Menu.
The BJ Print Monitor launches.

■ BJ Print Monitor Functions



... Click to pause printing of the specified document.



... Click to resume printing.



... Click to cancel printing of the specified document.

Displays the printer status. If an error occurs, instructions on what to do are displayed.

Displays the printer status and ink status with images.

Displays information about the documents queued for printing.

The BJ Print Monitor allows you to change the print order of documents queued for printing. To change the print order, place the mouse pointer over the name of the document, hold the mouse button down while dragging the document name to the new position, then release. Note, however, that you cannot change the print order of a document already printing.


Note





If you select **Print** from the **File** menu, you can print the PICT file saved in Destination of the Option dialog box.

Cancelling a Print Job

When the BJ Print Monitor is running, you can use it to cancel or suspend the currently printing job.

- 1 Select **BJ Print Monitor** in the Application Menu.
- 2 Click the name of the print job you wish to cancel, then click .

The document selected in the Print Monitor is deleted from the print list and the print job is cancelled.

Note ▶ To suspend printing, click the name of the document being printed then click . To resume printing, click .

Using the Printer with a Network

The printer can be used with an Ethernet network environment. Follow the steps described below to connect the printer to the network.

■ Before Setting up the Printer

- Install the printer driver on each network computer that will use the printer. For information on installation, refer to the *Quick Start Guide*.
- Use a USB cable to connect the printer to the computer that will function as the print server.

■ Printer Setup

To use the printer on a network, first set up the print server, then set up each client machine.

- Print server setup procedure

- 1 Select **Chooser** in the Apple Menu.
- 2 Select **Active** in **AppleTalk**.
- 3 Select the **S520** icon, then select the printer name in **Connected to:**.

- 4 Click **Share**.
- 5 Confirm that **S520 server** is selected in **Enter new print server name:** then click **Send**.
- 6 Confirm that the new print server name has been added to **Current print servers** then click **Close**.
- 7 Click the close box to close the Chooser.

- Client setup procedure

- 1 Select **Chooser** in the Apple Menu.
- 2 Select **Active** in **AppleTalk**.
- 3 Select the **S520 (Server)** icon, then select the printer server in **Connected to:**.
- 4 Click the close box to close the Chooser.

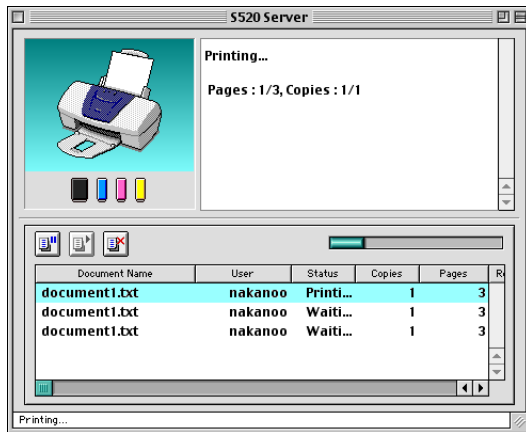
■ Checking Print Status

- Checking print status from the print server
 - To check the status of a print job from the print server, start the BJ Print Monitor. Select **BJ Print Monitor** in the Application Menu.
 - To close the BJ Print Monitor, select **Close Status Window** in the **File** menu.
- Checking print status from a client
 - To check the status of a print job from a client, start the BJ Status Monitor. Click the **BJ Status Monitor** icon in the **BJ Extras** folder.
 - To close the BJ Status Monitor, select **Quit** in the **File** menu.
- The BJ Print Monitor and BJ Status Monitor
 - The BJ Print Monitor and the BJ Status Monitor both display a list of information concerning documents queued for printing. This information includes the document name, number of pages, number of copies and the time when the print job was accepted. The total number of queued documents is also displayed.
 - The BJ Print Monitor allows you to change the print order of the queued documents.

 [BJ Print Monitor Functions](#)

 [BJ Status Monitor Functions](#)

■ BJ Status Monitor Functions



.... Click to pause printing of the specified document.



.... Click to resume printing.



.... Click to cancel printing of the specified document.

- Note** ▶
- You can determine the owner of a computer by selecting the **File Sharing** control panel and checking the **Owner Name** item.
 - If you are using two or more printer servers, you can switch between the BJ Status Monitor displays. Select **Print Server** in the **File** menu, then select the desired print server and click **OK**.

Uninstalling Printer Drivers

When a printer driver is no longer needed, use the Installer to delete, all the program files associated with it at the same time.

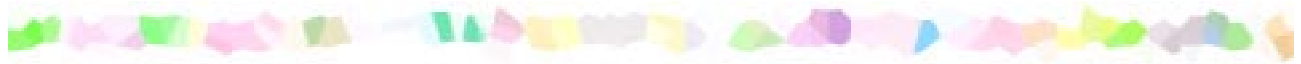
Before proceeding, ensure you save any unsaved files in any currently running applications.

- 1 Load the *Setup Software & User's Guide CD-ROM*.
- 2 Double-click the **Printer Driver** folder.
- 3 Double-click the **Installer** icon.
- 4 When the Software License Agreement is displayed, click **Accept**.
- 5 Select **Uninstall** from the popup menu and then click **Uninstall**.

Note

- If a warning message appears indicating that other applications are running:
- Click **Cancel** and save the document(s) if there are any unsaved documents open in the other applications.
 - Click **Continue** to continue the uninstall operation.
- 6 After the uninstall is complete, a message appears prompting you to restart your computer. Click **Restart**.

Routine Maintenance



- When to Replace Ink Tank and Maintain Print Head
- Replacing an Ink Tank
- Printing the Nozzle Check Pattern
- Print Head Cleaning
- Print Head Deep Cleaning
- Cleaning the Printer
- Transporting the Printer

When to Replace Ink Tank and Maintain Print Head

When an ink tank is empty, it must be replaced.

The BJ Status Monitor (Windows) or the BJ Print Monitor (Macintosh) will initially advise you of a low ink level. At this stage, you can still continue to print.

Once an ink tank is empty, the BJ Status Monitor (Windows) or the BJ Print Monitor (Macintosh) will tell you to replace the ink tank. Attempting to print causes the POWER lamp to flash four times.

➡ Replacing an Ink Tank

If printing becomes faint or a specific colour is no longer printing, even though there is still enough ink, the print head nozzles are probably clogged. Follow the procedures below to clean the nozzles.

➡ Printing the Nozzle Check Pattern

↓ If the print quality is poor

➡ Print Head Cleaning

↓ If the problem remains

➡ Print Head Deep Cleaning

If print head deep cleaning does not resolve the problem, the print head may be worn out. Contact a Canon service representative.

Replacing an Ink Tank

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

With this printer, ink tanks must be installed from the right in the order indicated below.

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

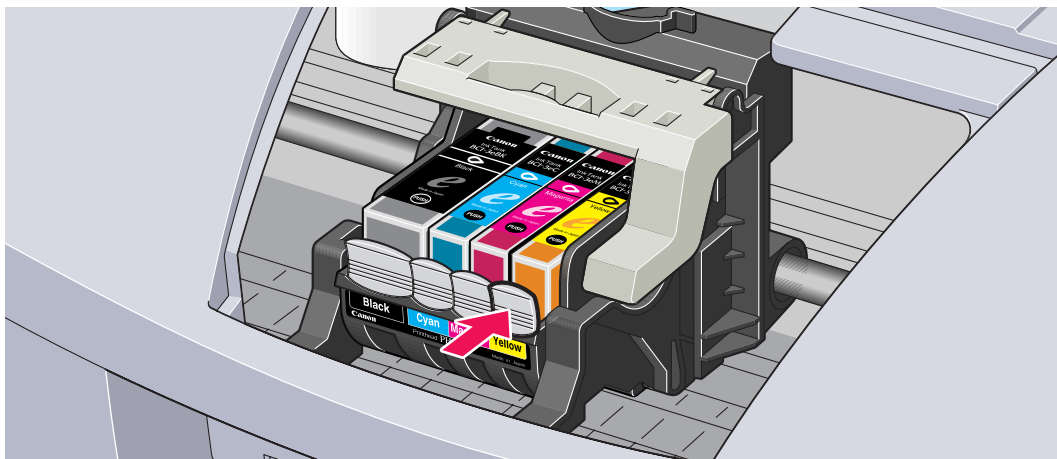
Note ▶ Damage caused by using a refilled cartridge is not covered by the Canon warranty. Canon recommends using only original Canon ink tanks to ensure the best quality.

1 Ensure that the printer is on, and then open the front cover.

The print head holder moves to the centre.

2 Remove the empty ink tank.

Push the tab and remove the ink tank.

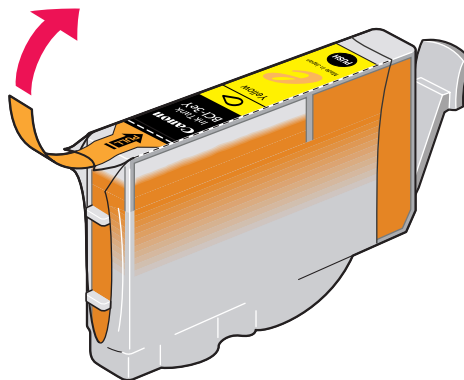


Do not touch the lock lever; remove only the ink tank.

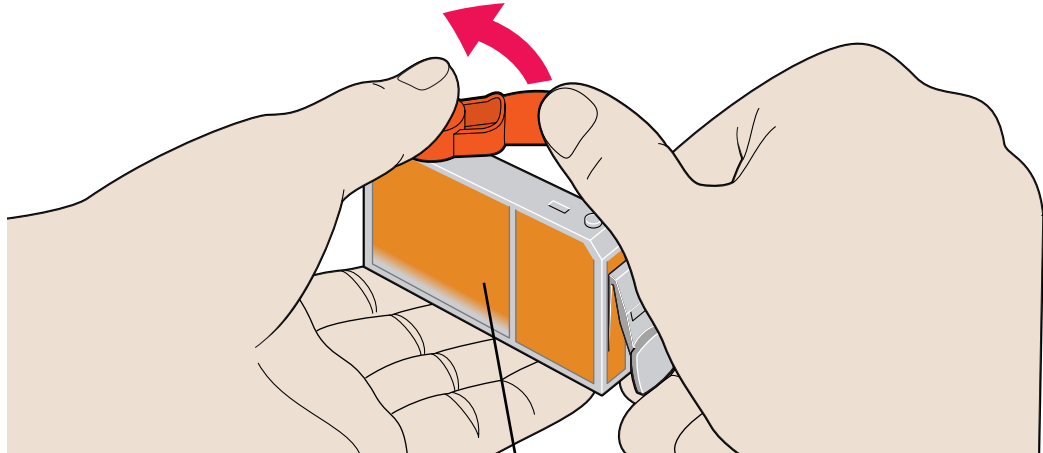
Important ►

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

- 3 Unpack the new ink tank and pull off the orange tape.



- 4 Remove the orange protective cap from the bottom of the ink tank.



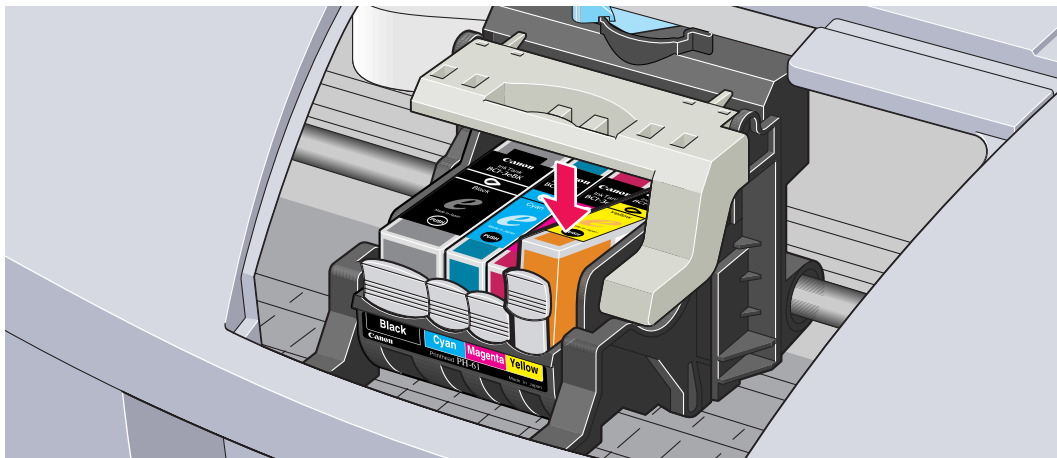
Never press here!
Ink may squirt out of the tank.

Important ▶

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

5 Insert the ink tank in the print head holder.

Press on the "PUSH" mark until the ink tank snaps firmly into place.



6 Close the front cover.

The print head holder moves to the right. The ink tank installation process is now complete.

Note

- ▶ To maintain optimal print quality, use an ink tank within six months of first use.
- ▶ Once an ink tank has been used, do not remove it from the printer and leave it out in the open. An ink tank left out in the open and then reinstalled in the printer may not function.

Printing the Nozzle Check Pattern

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

Nozzle check pattern printing can be executed from the Windows and Macintosh printer drivers, or from the printer itself.

■ Printing the Nozzle Check Pattern from the Printer Drivers

Windows

- 1 With the printer on, load a sheet of A4 or Letter paper in the printer.
- 2 Open the Printer Properties dialog box.
[➡ Opening the Printer Properties Dialog Box](#)
- 3 Click the **Maintenance** tab and then click the **Nozzle Check** icon.
- 4 When the confirmation message is displayed, click **OK**.
[➡ Examining the Nozzle Check Pattern](#)

Macintosh

1 With the printer on, load a sheet of A4 or Letter paper in the printer.

2 Open the Page Setup dialog box.

The Page Setup dialog box can normally be opened by selecting **Page Setup...** in the **File** menu.

3 Click the **Utilities** button to open the Printer Utilities dialog box.

4 Select **Test Print** from the pull-down menu, and then click the **Nozzle Check** icon.

5 When the confirmation message is displayed, click **OK**.

 [Examining the Nozzle Check Pattern](#)

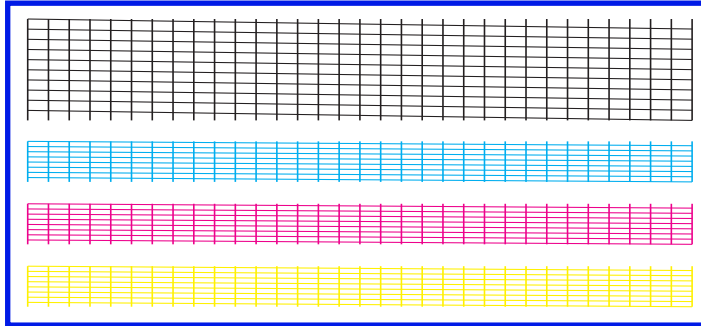
■ Printing the Nozzle Check Pattern through the Printer

- 1 With the printer on, load a sheet of A4 or Letter paper in the printer.
- 2 Hold the RESUME/CANCEL button down until the POWER lamp flashes twice.

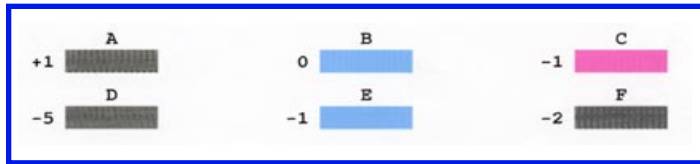
 [Examining the Nozzle Check Pattern](#)

■ Examining the Nozzle Check Pattern

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



Lines missing here indicate the print head requires cleaning.



Unevenness in these patterns indicates the print head requires alignment.

Print Head Cleaning

Clean the print head if you suspect that the nozzles might be clogged. Head cleaning can be performed either from the printer drivers or from the printer itself.

Note ➤ Cleaning the head consumes ink, so perform head cleaning only when necessary.

■ Cleaning the Print Head from the Printer Drivers

Windows

- 1 Ensure that the printer is on.
- 2 Open the Printer Properties Dialog Box.
➡ [Opening the Printer Properties Dialog Box](#)
- 3 Click the **Maintenance** tab and then click the **Cleaning** icon.

- 4 Select the ink nozzles to be cleaned, and then click **Execute**.

All Colours: All nozzles
Black: Black ink nozzles
Colour: Colour ink nozzles

- 5 When the confirmation message is displayed, click **OK**.

Macintosh

- 1 Ensure the printer is on.
- 2 Open the Page Setup dialog box.
The Page Setup dialog box can normally be opened by selecting **Page Setup...** in the **File** menu.
- 3 Click the **Utilities** button to open the Printer Utility dialog box.
- 4 Select **Cleaning** from the pull-down menu, and then click the **Cleaning** icon.

- 5 Select the ink nozzles to be cleaned, and then click **OK**.

All Colours: All nozzles
Black: Black ink nozzles
Colour: Colour ink nozzles

■ Cleaning the Print Head from the Printer

This operation cleans all nozzles, both black and colour. Because this method also resets the printer, any print data stored in the printer is lost.

- 1 Ensure the printer is on.
- 2 Hold down the RESUME/CANCEL button until the POWER lamp flashes once.

Now the POWER lamp starts flashing and print head cleaning begins. Do not perform any other operations until the head cleaning finishes. This takes about 40 seconds.

After print head cleaning finishes, print the nozzle check pattern to verify that the print head is clean. If not, repeat print head cleaning. If the head is still not clean after the third cleaning, perform print head deep cleaning.

 [Printing the Nozzle Check Pattern](#)

 [Print Head Deep Cleaning](#)

Print Head Deep Cleaning

If print quality does not improve by standard print head cleaning, try deep cleaning, which is a more powerful process. Perform print head deep cleaning from the printer driver.

Note ➤ Print head deep cleaning consumes more ink than standard print head cleaning, so perform this procedure only when necessary.

Windows

- 1 Ensure the printer is on.
- 2 Open the Printer Properties dialog box.
[➡ Opening the Printer Properties Dialog Box](#)
- 3 Click the **Maintenance** tab and then click the **Deep Cleaning** icon.
- 4 When the confirmation message is displayed, click **OK**.

Macintosh

- 1 Ensure the printer is on.
- 2 Open the Page Setup dialog box.

The Page Setup dialog box can normally be opened by selecting **Page Setup...** in the **File** menu.
- 3 Click the **Utilities** button to open the Printer Utility dialog box.
- 4 Select **Cleaning** from the pull-down menu, and then click the **Deep Cleaning** icon.
- 5 Click **OK**.

Now the POWER lamp starts flashing and print head deep cleaning begins. The process takes one or two minutes to complete, so simply wait until the POWER lamp stops flashing.

After print head deep cleaning finishes, print the nozzle check pattern to verify that the head is clean. If not, check that there are sufficient ink levels in all ink tanks before turning off printer. Be sure to perform another print head deep cleaning 24 hours after turning off printer. If the head is still not clean, the print head may be worn out. Contact a Canon service representative.

 [Printing the Nozzle Check Pattern](#)

Cleaning the Printer

During normal printing, ink and small scraps of paper accumulate in the printer. When the accumulated debris becomes clearly visible, clean the printer by the following procedure.

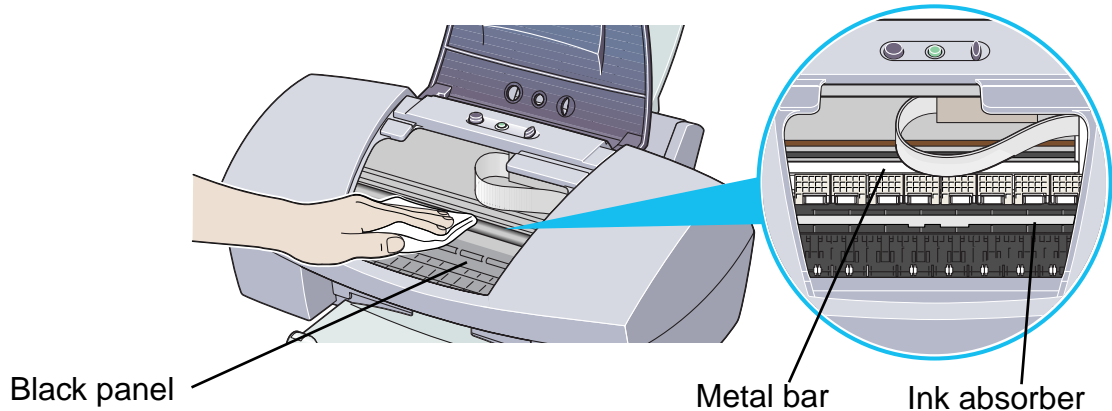
- 1 Turn the printer off.
- 2 Ensure that the POWER lamp is off and unplug the printer.

Caution ► Always ensure you unplug the printer before cleaning the printer to avoid an electric shock.

- 3 Open the front cover, and wipe the interior of the printer with a dry cloth.

Wipe away any stray drops of ink, scraps of paper, and dust. Pay special attention to cleaning the black panel that can easily become dirty. While cleaning, be careful not to touch the ink absorber (sponge part). Never touch any parts inside, such as the metal bar, etc.

Warning ► Do not use any flammable solvents such as paint thinner, benzene or alcohol.



Transporting the Printer

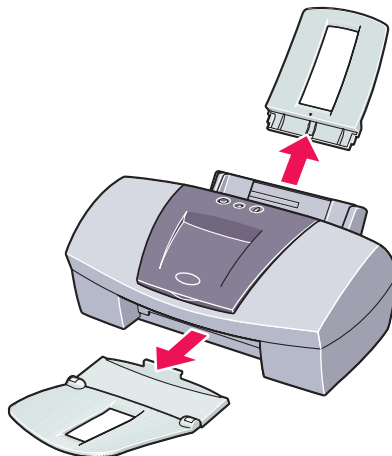
Pack the printer carefully in its original packing materials.

If you do not have the original packing materials, pack the printer carefully and thoroughly in protective material and place inside a sturdy box.

- 1 Turn the printer off.
- 2 Ensure that the POWER lamp is off and unplug the printer.

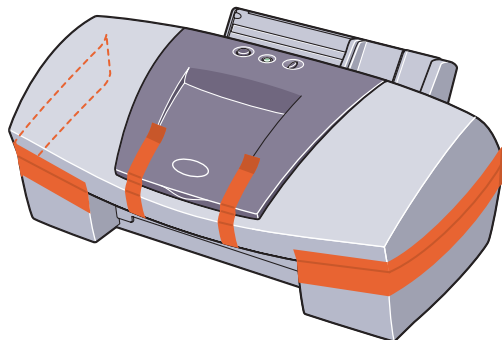
Important ► Do not unplug the printer while the POWER lamp is lit or flashing to protect the printer from damage.

- 3 Remove the paper rest and the paper output tray.



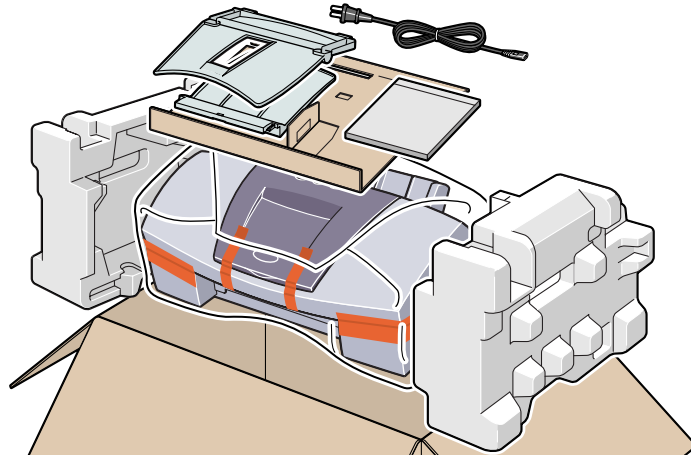
- 4 Disconnect the printer cable from the computer and from the printer, and then disconnect the power cord from the printer.

- 5 Secure the printer with adhesive tape as shown, and then pack it in a plastic bag.

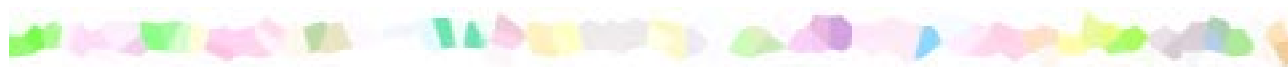


- 6 Attach protective material to both sides of the printer when packing the printer.

Clearly label the box as "Fragile", if using a transport company.



Printing Media



- Compatible Media Types
- Envelopes
- High Resolution Paper HR-101N
- Glossy Photo Paper GP-301 / GP-301N
- High Gloss Photo Film HG-201
- Glossy Photo Cards FM-101
- Photo Paper Pro PR-101
- Photo Paper Pro PC-101S
- Transparencies CF-102
- T-Shirt Transfers TR-201
- Banner Paper

Compatible Media Types

You can use the following types of paper and other media.

■ Size

- Standard paper: From A5 size (148.0 x 210.0 mm / 5.83 x 8.27 in) to legal size (215.9 x 355.6 mm / 8.5 x 14.0 in)
- Non-standard paper: From 90.0 x 120.0 mm to 215.9 x 584.2 mm (From 3.54 x 4.72 in to 8.5 x 23.0 in)
- Others: Envelopes (European DL and US Com. #10)

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

- Folded, curled or wrinkled paper
 - Wet paper
 - Paper that is too thin (less than 64 gsm / 17 lb)
 - Paper that is too thick* (more than 105 gsm / 28 lb)
 - Picture postcards
 - Postcards with an adhered photo or sticker
 - Envelopes with a double flap
 - Sealed envelopes
 - Envelopes with an embossed or treated surface
 - Paper with holes (such as loose-leaf paper)
- *non-Canon branded paper

■ Weight

64 to 105 gsm (17 to 28 lb)

Do not use paper heavier than this (except for supported Canon-brand media), as it could jam in the printer.

■ Types

The following types of media can be used.

For more information about the media and the printing methods, refer to the specific sections.

Plain paper: Refer to the *Quick Start Guide*.

- ➡ Envelopes
- ➡ High Resolution Paper HR-101N
- ➡ Glossy Photo Paper GP-301 / GP-301N
- ➡ High Gloss Photo Film HG-201
- ➡ Glossy Photo Cards FM-101
- ➡ Photo Paper Pro PR-101
- ➡ Photo Paper Pro PC-101S
- ➡ Transparencies CF-102
- ➡ T-Shirt Transfers TR-201
- ➡ Banner Paper

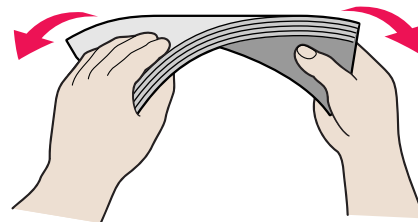
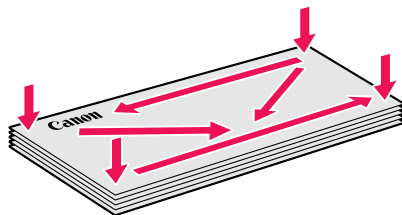
Envelopes

Use either European DL or US Com. #10 size envelopes.

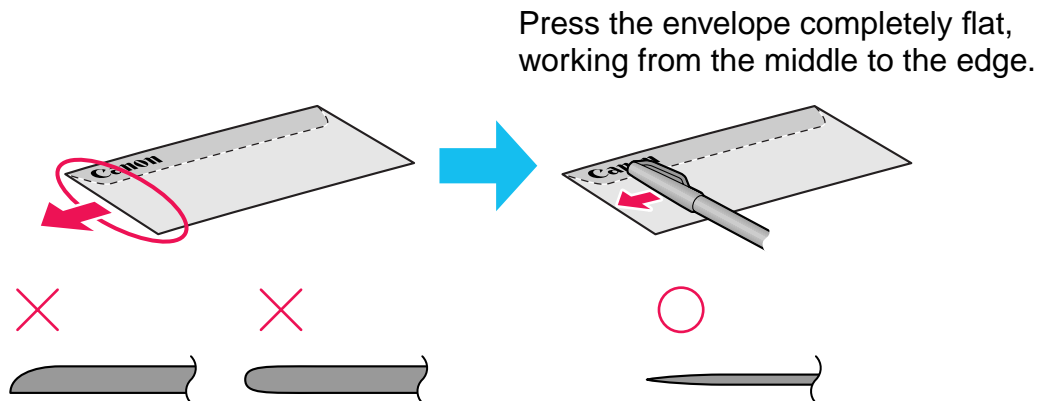
■ Preparation for Printing

- 1 Press down on all four corners and edges of the envelopes to flatten them as shown below.
- 2 If the envelopes are curled, hold the opposite corners and gently bend them in the opposite direction.

Ensure that the flap of the envelope is perfectly straight.



- 3 If the leading edge of an envelope is puffed up or curled, use a pen to press the envelope flat and sharpen the crease.



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

The envelopes may jam in the printer if they are not completely flat and the edges are not aligned.

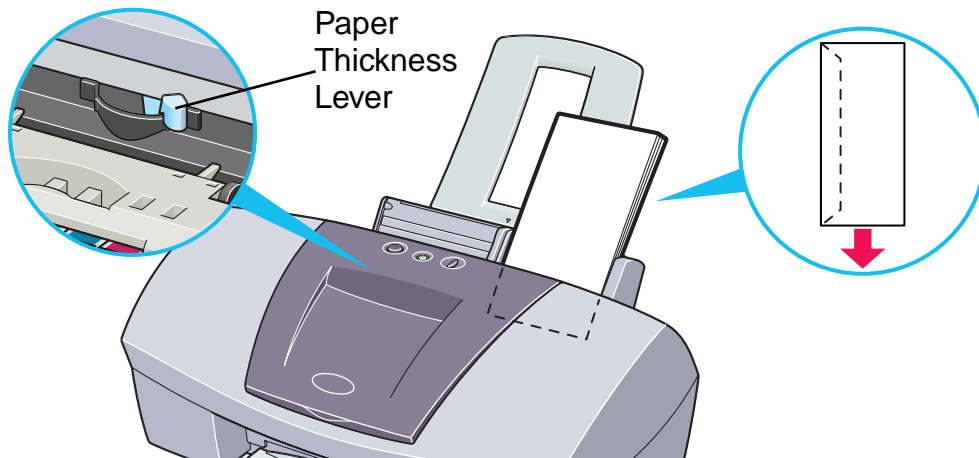
Ensure that no curl or puff exceeds 5 mm (0.2 in).

■ Unsuitable Envelopes

- Envelopes with an embossed or treated surface
- Envelopes with a double flap or pressure seals

■ Loading

- Place envelopes lengthwise with the flap to the left and the address side facing upwards.
- Set the Paper Thickness Lever to the right.
- Up to 10 envelopes can be loaded at once.



Note



If even after removing any curl in the envelopes they still will not feed properly, clean the paper feed roller.

- 1** Ensure the printer is turned on. If any paper is loaded in the printer, remove the paper.
- 2** Hold down the RESUME/CANCEL button; when the POWER lamp flashes three times, release the RESUME/CANCEL button.

The paper roller will rotate ten times as it cleans.
Repeat this operation three times.

- 3 Load a sheet of A4 or Letter plain paper in the printer.
- 4 Hold down the RESUME/CANCEL button; when the POWER lamp flashes three times, release the RESUME/CANCEL button.
The paper that is loaded in the printer will feed through the printer and be ejected.
Repeat this operation three times.

If the printer still will not feed envelopes through even after cleaning the paper feed roller, perform the procedure described in step 4 again.

■ Printer Driver Settings

- **Media Type:** Envelope
- **Page Size:** Select either **DL Env.** or **#10 Env** according to the envelope size you are using.
- **Orientation:** Landscape

■ Handling of Printed Output

Remove each envelope as it is printed.

■ Printable Area

 Printing Area

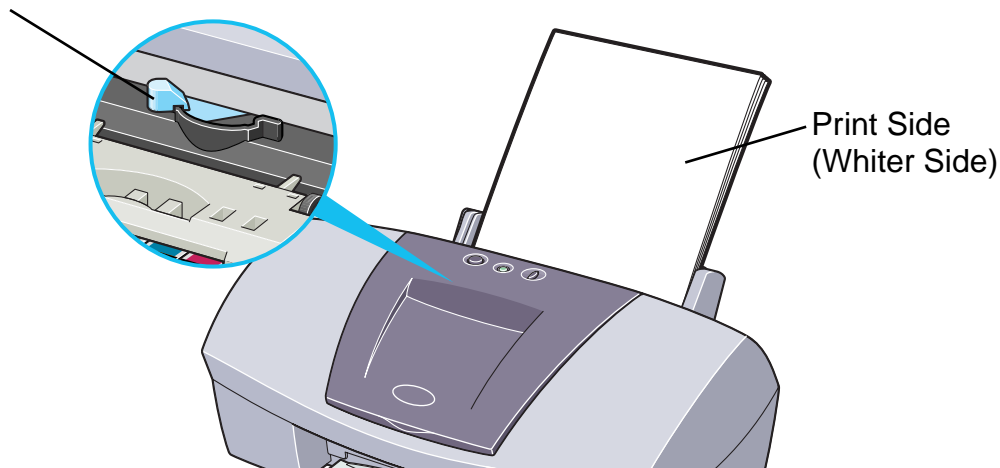
High Resolution Paper HR-101N

This type of paper provides better colour reproduction than plain paper. It is suitable for printing business documents that feature graphics, and for photographs.

■ Loading

- Load the paper with the whiter side facing up.
- Set the Paper Thickness Lever to the left.
- Do not load paper higher than the limit mark. A maximum of 80 sheets can be loaded.

Paper Thickness Lever



■ Printer Driver Settings

- **Media Type:** High Resolution Paper
- **Page Size:** Ensure the setting matches the size set in the application.

■ Handling of Printed Output

Do not stack more than 50 sheets in the paper output tray. If the output paper is curled, it may prevent the next sheet being ejected. In this case, or if the ink takes a long time to dry, remove each sheet as soon as it is printed.

■ Printable Area

With some images the trailing edge of the image may be blurred if printing extends into the printable area. Canon recommends that you print within the printing area.

 [Printing Area](#)

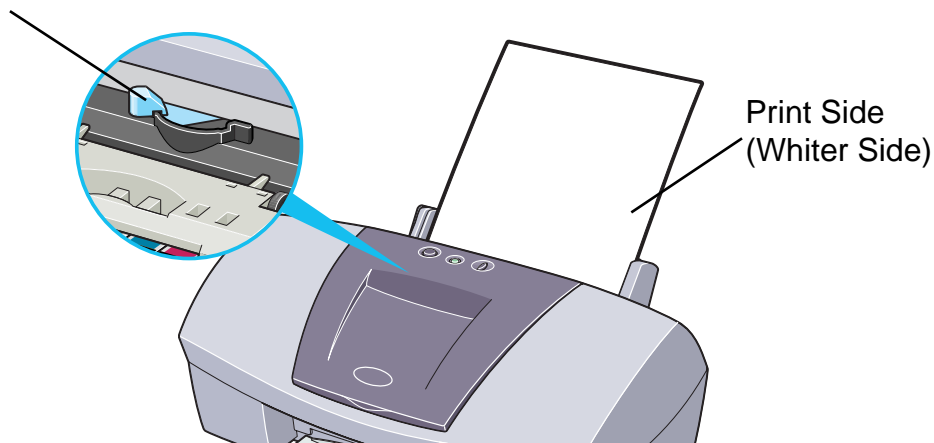
Glossy Photo Paper GP-301 / GP-301N

This media is still thicker than High Resolution Paper with a glossy printing surface to produce printouts close to photograph quality.

■ Loading

- Load only one sheet at a time.
- Load the paper with the whiter side facing up.
- Set the Paper Thickness Lever to the left.
- Do not use the loading support sheet provided with the package.

Paper Thickness Lever



■ Printer Driver Settings

- **Media Type:** Glossy Photo Paper
- **Page Size:** Ensure the setting matches the size set in the application.


■ Handling of Printed Output

- Remove each sheet as soon as it is printed.
- Do not touch the printed surface until the ink is fixed (approx. two minutes).

■ Printable Area

With some images the trailing edge of the image may be blurred if printing extends into the printable area. Canon recommends that you print within the printing area.

 [Printing Area](#)

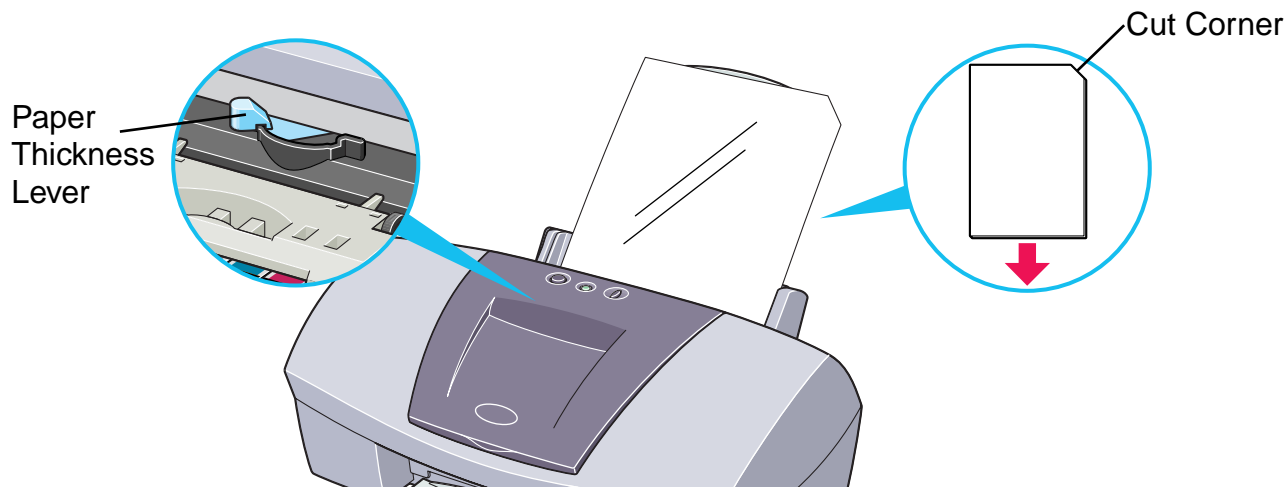
Note  For photograph and illustration data that you want to print with Borderless Printing, create the data by using the same size as the paper size, and paste the data so that it fills the editing screen without leaving any margins. If you are using an application that allows you to set margins, set the left, right, top and bottom margins to 0 mm. For instructions on setting margins, refer to the user's manual for your application.

High Gloss Photo Film HG-201

This film has an extremely glossy surface, ideal for printing photographs with outstanding results.

■ Loading

- Load only one sheet at a time.
- Load the film with the cut corner at the upper right.
- If the film is curled, flatten it by curling in the opposite direction.
- Set the Paper Thickness Lever to the left.



■ Printer Driver Settings

- **Media Type:** High Gloss Photo Film
- **Page Size:** Ensure the setting matches the size set in the application.

■ Handling of Printed Output

- Remove each sheet as soon as it is printed.
- Do not touch the printed surface until the ink is fixed.

■ Printable Area

With some images the trailing edge of the image may be blurred if printing extends into the printable area. Canon recommends that you print within the printing area.

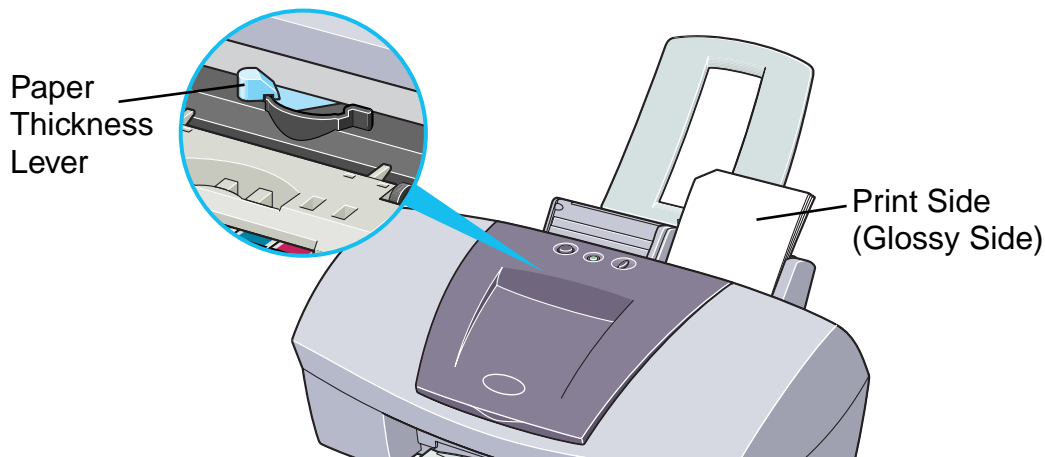
 [Printing Area](#)

Glossy Photo Cards FM-101

This photo-size paper is intended for printing images that cover the entire surface of the card, without a white border. When printing, use the original application software, ZoomBrowser EX/PhotoRecord (for Windows) or ImageBrowser (for Macintosh).

■ Loading

- Load the paper with the glossy side facing up.
- Set the Paper Thickness Lever to the left.
- A maximum of 20 sheets can be loaded at once.
- Do not use the loading support sheet provided with the package.



■ Handling of Printed Output

- Do not stack more than 20 sheets in the paper output tray.
- Do not touch the printed surface until the ink is fixed (approx. two minutes).

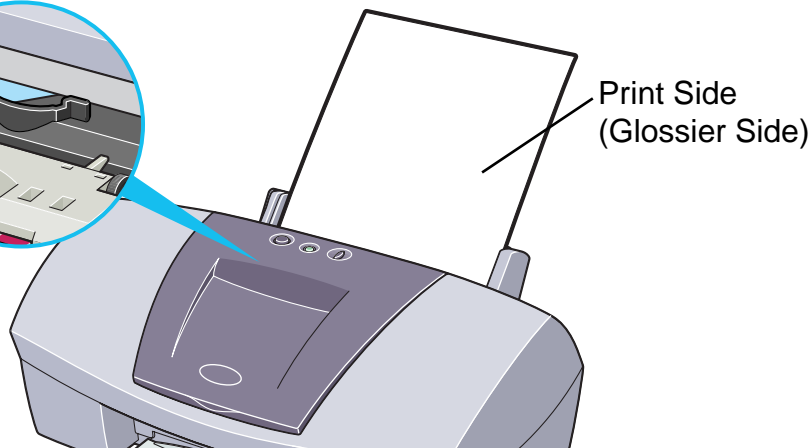
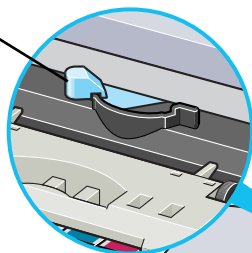
Photo Paper Pro PR-101

This is thick paper with a treated surface that enhances gloss and provides superior colour reproduction. It is ideal for printing high quality photographs. This media is available in A4/ Letter and 4 x 6 sizes.

■ Loading

- Load only one sheet of A4/Letter at a time. Up to 20 sheets of 4 x 6 size paper can be loaded at once.
- Load the paper with the glossier side facing up.
- Set the Paper Thickness Lever to the left.

Paper Thickness Lever



■ Printer Driver Settings

- **Media Type:** Photo Paper Pro
- **Page Size:** Ensure the setting matches the size set in the application.

■ Handling of Printed Output

- Remove each sheet as soon as it is printed.
- Do not stack more than 20 sheets of 4 x 6 size paper in the output tray.
- Do not touch the printed surface until the ink is fixed (approx. 30 minutes). Colours in dark images may appear indistinct at first, but become clearer after about 30 minutes.
- Images may smudge if you place them in an album before the ink is completely dry. It is recommended that you allow the ink to dry for 24 hours.
- Do not attempt to dry the ink with a hairdryer or by exposing printed sheets to direct sunlight.

■ Storing Printed Output

- Do not store or display printouts in hot, damp or humid conditions. Never expose them to heat or direct sunlight.
- Store printouts in photo albums, photo frames or presentation binders to protect them from direct exposure to air or sunlight.
- Do not mount printouts in an adhesive-type album, as you may not be able to remove them.

- Be aware that some types of clear plastic folders and albums may cause the edges of the paper to turn yellow.

■ Printable Area

With some images the trailing edge of the image may be blurred if printing extends into the printable area. Canon recommends that you print within the printing area.

Printing Area


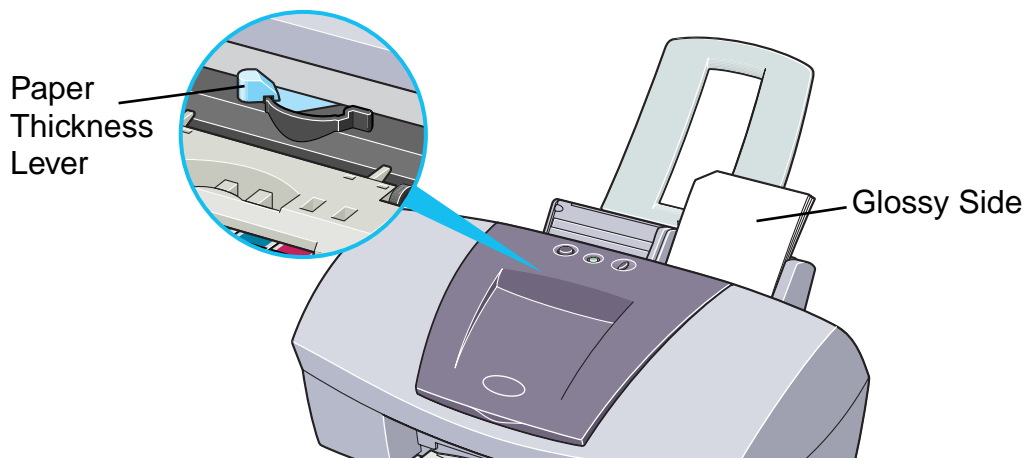
- Note**  For photograph and illustration data that you want to print with Borderless Printing, create the data by using the same size as the paper size, and paste the data so that it fills the editing screen without leaving any margins. If you are using an application that allows you to set margins, set the left, right, top and bottom margins to 0 mm. For instructions on setting margins, refer to the user's manual for your application.

Photo Paper Pro PC-101S

Made of the same material as Photo Paper Pro PR-101, this photo-size paper is intended for printing images that cover the entire surface of the card, without a white border. When printing, use the original application software, ZoomBrowser EX/PhotoRecord (for Windows) or ImageBrowser (for Macintosh).

■ Loading

- Load the paper with the glossy side facing up.
- Set the Paper Thickness Lever to the left.
- A maximum of 20 sheets can be loaded at once.



■ Handling of Printed Output

Follow the instructions described in "[Photo Paper Pro PR-101](#)".

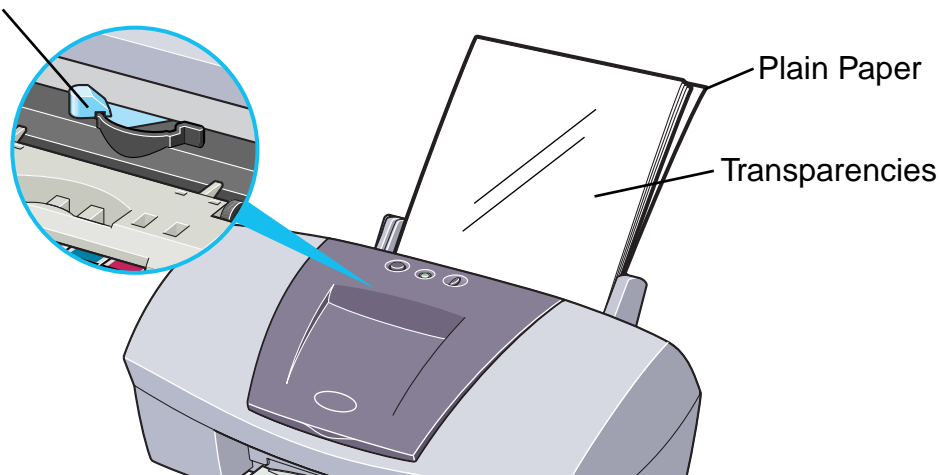
Transparencies CF-102

This film is ideal for printing presentation material for use with overhead projectors.

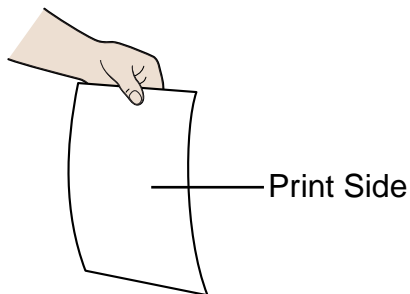
■ Loading

- Place one sheet of plain A4 or Letter paper under the transparencies in the sheet feeder.
- Set the Paper Thickness Lever to the left.
- A maximum of 30 sheets can be loaded at once.

Paper Thickness Lever



- Although you can print on either side of CF-102, best results can be obtained by printing on the side toward which it curls when held by the edge.



■ Printer Driver Settings

- **Media Type:** Transparency
- **Page Size:** Ensure the setting matches the size set in the application.

■ Handling of Printed Output

- Remove each transparency as soon as it is printed.
- Do not touch the printed surface until the ink is fixed (approx. 15 minutes).

■ Printable Area

➡ Printing Area

T-Shirt Transfers TR-201

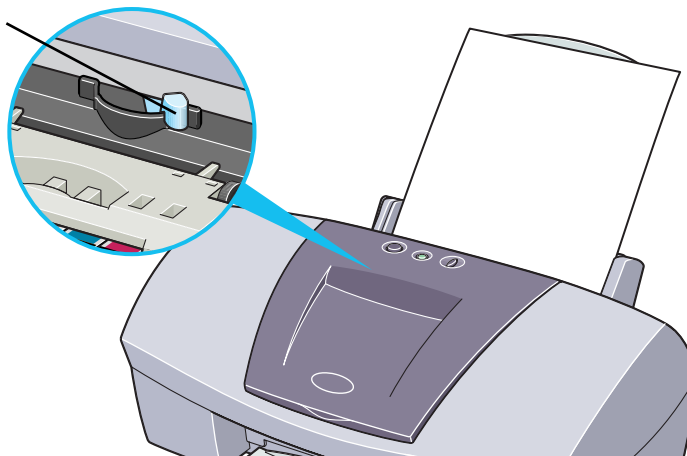
This paper is used to produce iron-on transfers. The image is printed backwards when **Media Type** is set to T-Shirt Transfer in the printer driver.

Note ➤ For the customers in the United States, refer to the *Quick Start Guide* for instructions on using TR-101 T-shirt transfers.

■ Loading

- Load only one sheet at a time.
- If the T-shirt transfer is curled, flatten it by curling it in the opposite direction.
- Load the paper with the side that does not have green lines facing up.
- Set the Paper Thickness Lever to the right.

Paper Thickness Lever



■ Printer Driver Settings

- **Media Type:** T-Shirt Transfer
- **Page Size:** Ensure the setting matches the size set in the application.

■ Handling of Printed Output

- Remove each T-shirt transfer as soon as it is printed.
- The T-shirt transfer should be used as soon as it is printed. Refer to the supplied instructions for details on how to use this media.

■ Printable Area

 Printing Area

Banner Paper

This is long paper that consists of consecutive sheets of A4 or Letter size paper, ideal for printing long posters or banners (up to six sheets long).

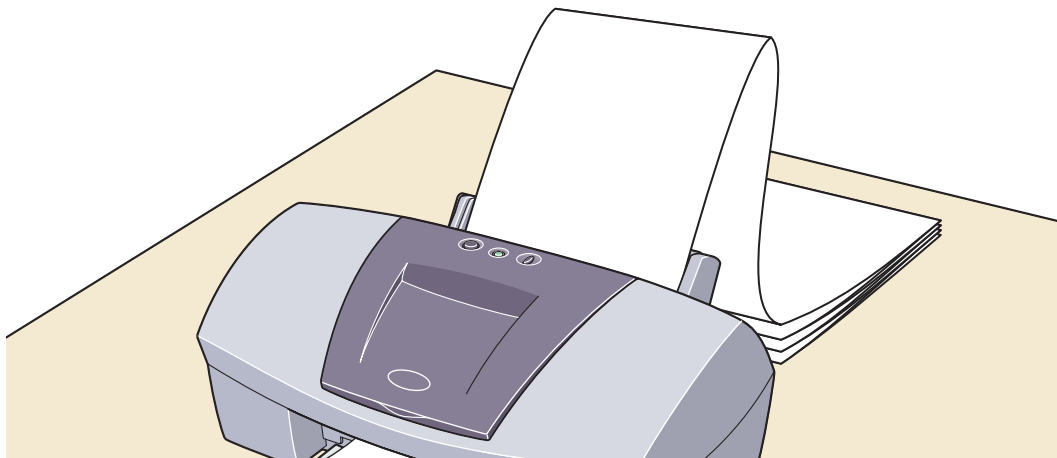
■ Preparation for Printing

- When tearing the banner paper, tear off one more sheet than you actually need to print.
- The maximum length for one print job is six sheets, so if you will be printing on six sheets, tear off a seven-sheet length.

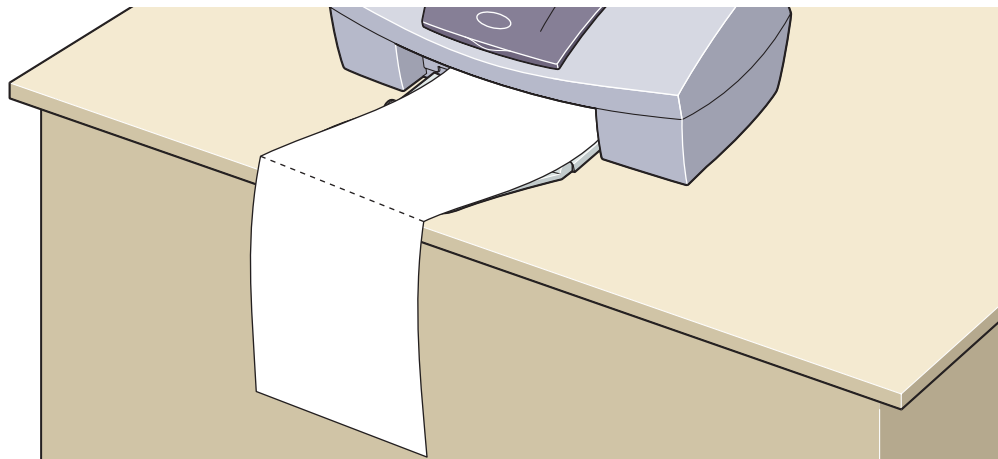
■ Loading

- 1 Set the Paper Thickness Lever to the right.
- 2 Load the banner paper with the printing side facing up. Gently fold the perforation between the first and second sheets.

Leave the rest of the paper folded up.



- 3 Place the printer where the printed banner output can hang over the edge of the table.



Ensure the ink does not stain the table or floor.

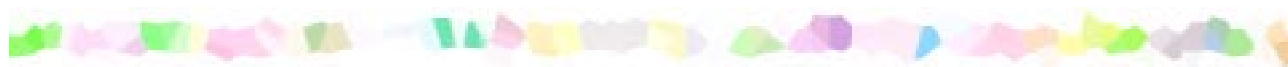
■ Printer Driver Settings

- **Media Type:** Plain Paper
- **Page Size:** When using A4 banner paper: A4
When using letter size banner paper: Letter
- **Copies:** Must be set to "1" to print correctly.
- In Windows, select **Banner Printing** for **Printing Type** on the **Page Setup** tab.
- On a Macintosh, before creating the document, select **Banner Printing** in the **Page Setup** dialog box.

■ Printable Area

 Printing Area

Troubleshooting



- Cannot Install the Printer Driver
- Print Quality is Poor or Contains Errors
- Printer Does Not Start or Stops During Print Jobs
- Paper Does Not Feed Properly or Paper Jams
- The POWER Lamp Flashes Orange
- An Error Message is Displayed on the Screen
- Problems Unique to Windows Windows
- Problems Unique to the Macintosh Macintosh


Cannot Install the Printer Driver

■ Follow the installation procedure correctly.

Install the printer driver carefully following the procedures described in the *Quick Start Guide*.

If the printer driver was not installed correctly, reinstall it. If you are using Windows, delete the printer driver before reinstalling it.

 [Uninstalling Printer Drivers](#)

Note  If the Installer was forcibly terminated due to an error in Windows, Windows may be unstable and this will prevent the printer driver from being installed. Restart the computer before reinstalling the printer driver.

■ Close any other applications before installation.

Sometimes the printer driver cannot be installed because another application is running.

- If the Installer for the printer driver does not start up automatically when you insert the *Setup Software & User's Guide CD-ROM*, open the My Computer window, and then double-click the CD-ROM icon.

Windows

Note ➤ If you are typing in the file name, you must specify the CD-ROM drive letter and the installation program ("MSetup.exe"). The CD-ROM drive letter is computer dependent.

- Confirm that there are no problems with the *Setup Software & User's Guide CD-ROM*.

In Windows, use Windows Explorer to ensure that the CD-ROM can be read. In a Macintosh, check that the CD-ROM icon is visible. If there is a problem with the CD-ROM, contact a Canon service representative.

Print Quality is Poor or Contains Errors

- Cannot Print to End of Job
- Colours are Unclear
- Meaningless Characters or Symbols are Printed
- Printing is Blurred/Colours are Wrong
- Straight Lines are Misaligned
- Printed Paper Curls or Ink Blots
- Back of Paper is Smudged
- Printed Surface is Scratched
- White Streaks
- Colours are Uneven or Streaked

Cannot Print to End of Job

■ Confirm the Page Size setting matches the size of the paper loaded in the printer.

First, check the Page Size setting in the application.

Then check the **Page Size** setting in the Printer Properties dialog box for Windows or the Page Setup dialog box for Macintosh.

Note ➤ When using an ECP printer port in Windows, you may not be able to print due to the computer environment. For details, refer to "[Problems Unique to Windows](#)".

■ Check the amount of the space on the hard disk.

You may need to increase the amount of free space by deleting any unnecessary files.

Colours are Unclear

- **Confirm the Media Type setting in the printer driver matches the type of paper loaded in the printer.**

If you are printing a photograph or an illustration from a Windows environment, also increase **Print Quality** on the **Main** tab.

If you are working in a Macintosh environment, select the **Photo** or **Graphic** icon for the **Print Mode** in the Print dialog box.

- **Confirm the specified ink tank is installed.**

When an ink tank runs out of ink, replace it with a new one.

Note ▶ Printed colours may not match screen colours perfectly due to basic differences in the methods used to produce colours. Colour control settings and environmental differences can also affect how colours appear on the screen.

Meaningless Characters or Symbols are Printed

- **If the problem only occurs when printing a specific document, try editing the document and then printing it.**

If this does not resolve the problem, there may be a problem with your application program.

Printing is Blurred/Colours are Wrong

- **If a specific colour does not print, check whether the corresponding ink tank is empty. Replace if necessary.**


- **Print the nozzle check pattern to ensure that ink is output correctly.**

If the nozzle check pattern does not print correctly, clean the print head.

 [Printing the Nozzle Check Pattern](#)

 [Print Head Cleaning](#)

If the problem is not resolved after cleaning the print head several times, the print head may be worn out. Contact a Canon service representative.

Note  Always ensure you dispose of the protective cap and protective tape from a print head.

- **Ensure you are printing on the correct side of the media.**

You can only print on one side of certain media.

Straight Lines are Misaligned

■ Align the print head.

Ensure you align the print head every time you install a new print head.

Windows

- 1 Open the Printer Properties dialog box.
- 2 Click the **Maintenance** tab.
- 3 Click **Print Head Alignment**.
Follow the instructions on the screen.

Macintosh

- 1 Open the Page Setup dialog box.
- 2 Click **Utilities**.
- 3 Select **Test Print** from the pull-down menu, and then click **Print Head Alignment**.

Follow the instructions on the screen.

■ In the printer driver settings, select a higher print quality setting.

Windows

- 1 Open the Printer Properties dialog box.
- 2 On the **Main** tab, click **High** for the **Print Quality** setting.

Macintosh

- 1 Open the Print dialog box.
- 2 For **Print Mode**, select **Manual** and then click **Details**.
- 3 Click the **Quality** icon and then drag the **Print Quality** slide bar to the **Fine** end.

Printed Paper Curls or Ink Blots

- Use high resolution paper or photo paper to print images that require a lot of ink, (i.e. pictures with intense colours or photographs).
- Reduce the Intensity setting in the printer driver and try printing again.

Windows

- 1 Open the Printer Properties dialog box.
- 2 On the **Main** tab, select **Manual** for **Colour Adjustment**, and then click **Set**.
- 3 Drag the **Intensity** slide bar to adjust the intensity.

Macintosh

- 1 Open the Print dialog box.
- 2 For **Print Mode**, select **Manual** and then click **Details**.
- 3 Click the **Colour** icon and then drag the **Intensity** slide bar to set the intensity.

Back of Paper is Smudged

- If the next page prints before the ink is dry, enable the **Pause Page** printer driver setting.

You can either remove each printed sheet from the output tray as soon as it is printed, or enable **Pause Page** to pause after each sheet has printed.

Windows

- 1 Open the Printer Properties dialog box.
- 2 Click the **Maintenance** tab.
- 3 Click **Custom Settings** to open the Custom Setting dialog box.
- 4 Select **Pause Page**, and then click **Send**.

Macintosh

- 1 Open the Page Setup dialog box.
- 2 Click the **Utilities** button.
- 3 Select **Custom Settings** from the pull-down menu.
- 4 Select **Pause between pages.**, and then click **Send**.

■ You may need to clean some internal parts of the printer. Follow the procedure below.

- 1 Load sheets of A4 or Letter plain paper in the printer.
- 2 Hold down the RESUME/CANCEL button until the POWER lamp flashes three times, and release the button.
- 3 Repeat this operation until there are no more smudges on the test page.

Printed Surface is Scratched

■ Ensure you are using suitable paper.

- The paper weight must be less than 105 gsm (28 lb).

If you use non-Canon brand paper heavier than 105 gsm (28 lb), the print head may scratch the printed surface.

Clean the print head first and print with the correct paper.

- The paper must not be curled.

This problem can be resolved by simply turning the paper over.

■ Before starting Borderless Printing, check the paper that you are using.

With Borderless Printing, the print quality may decrease or smudging may occur at the top and bottom edges of the paper. Use Photo Paper Pro or Glossy Photo Paper. If smudging still occurs, set the Paper Thickness Lever to the right and try printing again.

■ When printing on thick paper, set the paper thickness lever to the "✉" mark.

This widens a gap between the print head and the paper. If the paper is scratched even when printing on plain paper, also try this.

■ Reduce the Intensity setting in the printer driver and try printing again.

When printing an image with high intensity, especially on plain paper, the paper may absorb too much ink and become wavy. This may cause the printed surface to become scratched.

Windows

- 1 Open the Printer Properties dialog box.
- 2 On the **Main** tab, select **Manual** for **Colour Adjustment**, and then click **Set**.
- 3 Drag the **Intensity** slide bar to adjust the intensity.

Macintosh

- 1 Open the Print dialog box.
- 2 For **Print Mode**, select **Manual** and then click **Details**.
- 3 Click the **Colour** icon and drag the **Intensity** slide bar to set the intensity.

■ Ensure you are printing within the recommended printing area.



White Streaks

■ Print the nozzle check pattern to check the ink output.

If a specific colour does not print in the nozzle check pattern, clean the print head.

 [Printing the Nozzle Check Pattern](#)

 [Print Head Cleaning](#)

The problem can also be resolved by aligning the print head. For details on print head alignment, refer to "[Straight Lines are Misaligned](#)".

Colours are Uneven or Streaked

- **Increase the print quality setting in the printer driver settings.**

Windows

- 1 Open the Printer Properties dialog box.
- 2 On the **Main** tab, click **High** for the **Print Quality** setting.

Macintosh

- 1 Open the Print dialog box.
- 2 For **Print Mode**, select **Manual** and then click **Details**.
- 3 Click the **Quality** icon and then drag the **Print Quality** slide bar to the **Fine** end.

■ Set the halftoning method to Diffusion in the printer driver settings.

Windows

- 1 Open the Printer Properties dialog box.
- 2 On the **Main** tab, select **Custom** for the **Print Quality** setting, and click **Set**.
- 3 Click **Diffusion** for the **Halftoning** setting.

Macintosh

- 1 Open the Print dialog box.
- 2 For **Print Mode**, select **Manual** and then click **Details**.
- 3 Click the **Quality** icon and then click **Diffusion** for the **Halftoning** setting.

Printer Does Not Start or Stops During Print Jobs

- Printing Does Not Start
- Printing Stops Before It is Completed
- Printer Moves But Does Not Print
- Print Head Holder Does Not Move to the Centre

Printing Does Not Start

■ Ensure the printer is turned on.

If the POWER lamp is off, press the POWER button.

If the POWER lamp is flashing green, the printer is initialising. Wait until the POWER lamp stops flashing.

Note ➤ When printing a large amount of data such as a photo or graphics, it takes longer than usual to begin printing. While the POWER lamp is flashing, the computer processes the data and sends it to the printer. Simply wait until the processing is completed.

■ Ensure the printer is securely connected to the computer.

Note ➤ If you are using a switch box or other device, remove and reconnect the printer directly to the computer. Try printing again. If printing is now successful, there may be a problem with the device. Also there could be a problem with the cable(s). Replace the cable(s) and try printing again.

■ Ensure the correct printer driver is selected.

In Windows, ensure that **Canon S520** is selected in the **Print** dialog box.

In Macintosh, ensure that **S520** is selected in the **Chooser**.

Note ➤ In Windows, you can set the Canon S520 as the default printer.

■ Ensure the printer port is set correctly. Windows

If using a parallel interface printer cable, set "LPT1" as the printer port.

If using a USB cable, set "USBPRNnn" or "USBnnn" ("n" represents a number) as the printer port.

- 1 Open the Printer Properties dialog box from the **Start** menu.
 - ➡ Opening the Printer Properties dialog box directly from the Start menu
- 2 Click the **Details** tab (or **Ports** tab) and set the printer port.

Printing Stops Before It is Completed

■ Check the status of the POWER lamp.

When the POWER lamp is flashing green, the printer is processing data. Printing a large amount of data such as a photo or graphics takes time for the computer to process the data, during which the printer may appear to not be functioning.

In addition, when continuously printing material that uses a large amount of black ink on plain paper, the printer will sometimes pause. In either case, simply wait until the processing is completed.

■ Halt the print job and turn the printer off for at least 15 minutes to cool the print head down.

The print head can overheat when continuously printing for long time. To protect the print head, the printer will sometimes pause automatically at a line break before resuming. In this event, interrupt the print job at a convenient time and turn the printer off for at least 15 minutes.

Furthermore, when continuously printing graphics or photos with intense colours, printing may stop to protect the print head. In this case, printing will not resume. Turn the printer off and wait for at least 15 minutes.

Caution ► Inside the printer, the area around the print head can become extremely hot. Do not touch the print head or nearby components.

Printer Moves But Does Not Print

- **Check the ink tanks. If empty, replace them.**
- **Ensure that the ink tanks snap into place when you install them.**
- **If there is plenty of ink but the printer does not print, clean the print head.**

After cleaning the print head, print the nozzle check pattern to check that ink is being output normally.

 [Print Head Cleaning](#)

 [Printing the Nozzle Check Pattern](#)

If the problem is not resolved by cleaning the print head several times, the print head may be worn out. Contact a Canon service facility.

- **Check the protective tape has been removed from the print head.**

Ensure that you align the print head after removing the tape and reinstalling the print head.

For details on print head alignment, refer to "[Straight Lines are Misaligned](#)".

Print Head Holder Does Not Move to the Centre

■ Ensure the printer is turned on.

The print head holder will not move unless the power is on. If the POWER lamp is off, close the front cover and turn the power on.

If the POWER lamp is flashing green, the printer is initialising. When the POWER lamp stops flashing, open the front cover again.

■ If the front cover has been left open for a while, close and reopen it.

If the front cover is left open for more than 10 minutes, the print head holder moves to the right to prevent the print head from drying out. Close and reopen the front cover to return the holder to the centre.

Paper Does Not Feed Properly or Paper Jams

- Paper Does Not Feed Properly
- Paper Jams

Paper Does Not Feed Properly

■ Confirm the paper conditions.

- If non-Canon brand media, the paper is not too thick (less than 105 gsm / 28 lb).
- The number of sheets loaded does not exceed the recommended level.
- The paper is not creased, curled or wrinkled.

 [Compatible Media Types](#)

■ Ensure that the left edge of the paper just touches the paper guide.

■ When printing envelopes, refer to "[Envelopes](#)" in "[Printing Media](#)," and prepare the envelopes before printing.

Once you have prepared the envelopes, load them in the printer in portrait orientation. If the envelopes are placed in landscape orientation, they may not feed properly.

■ When using transparencies, load one sheet of plain paper in the printer first, and then place the transparencies on top of it.

The last transparency may not feed properly unless there is a sheet of plain paper beneath it.

Paper Jams

Remove the paper according to the following procedure.

- 1 Slowly pull the paper out, either from the sheet feeder or from the paper output slot, whichever is easier.

If the paper tears and a piece remains inside the printer, open the front cover and remove it.

If you cannot pull the paper out, press the POWER button twice to eject the paper automatically.
- 2 After removing all paper, close the front cover.
- 3 Reload the paper into the printer and press the RESUME/CANCEL button.

Note ➤ When reloading the paper into the printer, refer to "[Paper Does Not Feed Properly](#)" to confirm that you are using the correct paper and are loading it into the printer correctly.

The POWER Lamp Flashes Orange

An error has occurred in the printer. The number of flashes indicates the type of error, as outlined below. Check the cause and take the appropriate action.

■ Two flashes: Out of paper, paper jam or paper feed error

Replace the paper correctly and press the RESUME/CANCEL button.

If paper has jammed in the printer, clear the jam and press the RESUME/CANCEL button.

■ Three flashes: Paper jam

If paper has jammed in the printer, clear the jam, replace the paper in the printer correctly and press the RESUME/CANCEL button.

 [Paper Jams](#)

■ Four flashes: Empty ink tank

One of the ink tanks is empty. Replace it.

 [Replacing an Ink Tank](#)

■ Six flashes: No print head installed

Install a print head.

■ Seven flashes: Defective print head

Remove and reinstall the print head.

Also, ensure that the protective tape has been removed. If reinstalling the print head does not resolve the problem, replace it with a new one.

■ Eight flashes: Waste ink tank almost full

The printer has a built-in waste ink tank for the ink used during print head cleaning. Eight flashes indicates that the waste ink tank is nearly full. Press the RESUME/CANCEL button to cancel the error so you can continue printing. Before the waste ink tank becomes completely full, contact a Canon service representative to have the waste ink tank replaced.

Note ► Canon recommends to call for service as soon as this error occurs. Once the waste ink tank becomes completely full, printing will be no longer possible.

- **POWER lamp flashes alternate green and orange:**
An error that requires contacting a Canon service representative may have occurred.

Turn the printer off and unplug the printer from the power supply. Plug the printer back in and turn the printer back on.

If the problem remains, contact a Canon service representative.

An Error Message is Displayed on the Screen

- Error Writing to LPT1 or USBxxx Windows
- Application Error or General Protection Fault Windows
- Other Error Messages Windows
- Other Error Messages Macintosh

Error Writing to LPT1 or USBxxx

Windows

■ Ensure the printer is turned on.

If the POWER lamp is off, turn the printer on.

If the POWER lamp is flashing green, the printer is initialising. Wait until the POWER lamp stops flashing.

■ Ensure the printer is securely connected to the computer.

Note ➤ If you are using a switch box or other devices, remove and reconnect the printer directly to the computer and try printing again. If printing is now successful, there may be a problem with the device. Also there could be a problem with the cable(s). Replace the cable(s) and try printing again.

■ If spooling is enabled, disable it to send the print data directly to the printer and try printing again.

1 Open the Printer Properties dialog box from the **Start** menu.

➔ Opening the Printer Properties dialog box directly from the Start menu

- 2 On the **Details** tab, click **Spool Settings** and then select **Print directly to printer**.
In Windows XP, Windows 2000 or Windows NT4.0, click the **Advanced** tab or **Scheduling** tab and then click **Print directly to the printer**.

■ Verify the printer port status.

- When using the parallel interface (in Windows Me/Windows 2000/Windows 98/Windows 95)
Refer to the Windows NT 4.0 manual for information on operating Windows NT 4.0.

- 1 Right-click **My Computer** and select **Properties**.
- 2 Click the **Device Manager** tab.
In Windows 2000, click the **Hardware** tab, then click **Device Manager....**
- 3 Double-click **Ports (COM/LPT)**, and then double-click **Printer Port (LPT1)***.

* The printer port name depends on your system environment.
- 4 On the **General** tab, check for any indication of a problem with the port and if the connected device is available.

5 Click the **Resources** tab, and check the **Conflicting device list**. An error is generated if there are any device conflicts. If necessary, delete any conflicting devices. For details on how to delete a device, refer to the instruction manual for that device.

- When using the USB interface (in Windows XP/Windows Me/Windows 2000/Windows 98)

1 Right-click **My Computer** and select **Properties**.

2 On the **Device Manager** tab, double-click **Universal serial bus controller**, and then double-click **Canon S520**.

If you are using Windows XP or Windows 2000, click Device Manager on the Hardware tab, double-click Universal serial bus controllers, and then double-click USB Print Support.

3 On the **General** tab, check for any indication of a problem with the device.

If an error has occurred, reinstall the printer driver according to the instruction of "Notes on Handling the USB Interface (for Windows Users)" in the *Quick Start Guide*.

■ **Ensure that the printer port setting corresponds to the printer interface connection.**

Open the Printer Properties dialog box from the **Start** menu, and click the **Details** tab (or **Ports** tab). If **LPT1:(ECP Printer Port)** is displayed in the **Print to the following port** field, the parallel port is selected. If **USBPRNnn (Canon S520)** or **USBnnn (Canon S520)** ("n" represents a number) is displayed, the USB port is selected.

 [Opening the Printer Properties dialog box directly from the Start menu](#)

If the setting is incorrect, shut down Windows, turn off the printer and either connect the printer to the interface selected in the printer driver, or install the correct printer driver corresponding to the interface.

■ **There may be a problem in the printer driver. Uninstall the printer driver and reinstall it.**

 [Uninstalling Printer Drivers](#)

If the printer is connected to the USB interface, follow the procedure “Notes on Handling the USB Interface (for Windows Users)” in the *Quick Start Guide*.

■ If the WPS driver or CAPT driver is installed, either uninstall it or change the driver port to FILE as follows.

- 1 Click the **Start** button, then click **Settings** and **Printers**.
- 2 Display the WPS or CAPT driver properties, and click the **Details** tab.
- 3 Change the **Print to the following port** field to **FILE**.

Application Error or General Protection Fault

Windows

- **Ensure the application program you are using is intended for your operating system.**

For example, if you attempt to print with a Windows 3.1 application under Windows 98, the application may not function correctly and an error may occur. Use an application program intended for your operating system.

- **If other applications are running, close them to increase available memory and try printing again.**

- **Ensure that enough memory is allocated to the application.**

Refer to the memory requirements of your application.

■ Check the amount of free space on the hard disk.

You may need to increase the amount of free space by deleting any unnecessary files.

■ If the problem only occurs when printing a specific document, try editing the document and then printing it.

If this resolves the problem, there may have been a problem in the original document. If the same problem occurs with the edited document, contact the manufacturer of your application.

■ There may be a problem in the printer driver. Uninstall the printer driver and reinstall it.

If the printer is connected to the USB interface, follow the procedure “Notes on Handling the USB Interface (for Windows Users)” in the *Quick Start Guide*.

 [Uninstalling Printer Drivers](#)

Other Error Messages

Windows

■ If the BJ Status Monitor is displayed, follow the instructions on screen.

If an error occurs during printing, the BJ Status Monitor displays the error on the **Printer Status** tab. Follow the instructions on screen.

In Windows 95, Windows 98 or Windows Me, click the **Guide** tab for action to be taken in response to the error.

■ **If one of the following messages is displayed outside of the BJ Status Monitor:**

Could not spool successfully due to insufficient disk space

Increase the amount of free space on the disk by deleting any unnecessary files.

Could not spool successfully due to insufficient memory

Increase available memory by closing any other applications currently running.

Printer driver could not be found

Uninstall the printer driver and reinstall it.

 [Uninstalling Printer Drivers](#)

Background printing failed (Windows 95/Windows 98/Windows Me only)

Restart Windows and try printing again.

Could not print [application name] – [file name]

Try printing again once the current job is finished.

Other Error Messages

Macintosh

- If a message with the format "Error No.: Xn" (where "X" represents a letter and "n" represents a number) is displayed:

Error No.: X202

Not enough memory for printing. Increase available memory by closing any other applications currently running.

Error No.: X203

There is a problem with the printer driver. Uninstall the printer driver and reinstall it.

 [Uninstalling Printer Drivers](#)

Error No.: X300

Ensure the power is on, and that the printer and the computer are securely connected. If the problem remains, verify the Chooser setting.

- 1 In the Apple menu, select **Chooser**.
- 2 Click the S520 icon and ensure S520 is selected as the connected destination.

If it is not selected, select it.

If the problem remains, delete all unnecessary documents from the Extensions and Control Panels folder.

Problems Unique to Windows

- The BJ Status Monitor is Not Displayed
- Cannot Print in Background (Windows 95/Windows 98/Windows Me only)
- Cannot Print Normally

The BJ Status Monitor is Not Displayed

■ Ensure "Enable bi-directional support for this printer" is selected.

- 1 Open the Printer Properties dialog box from the **Start** menu.
 - ➔ Opening the Printer Properties dialog box directly from the Start menu
- 2 On the **Details** tab (or **Ports** tab), click **Spool Settings** and select "Enable bi-directional support for this printer."

■ If the printer is connected to the parallel interface, ensure the printer cable supports bi-directional communication.


The BJ Status Monitor is displayed only when the computer and cable support bi-directional communication. If you do not know whether your computer and printer cable support bi-directional communication, contact your dealer or computer manufacturer.

Cannot Print in Background (Windows 95/Windows 98/Windows Me only)

■ Check the amount of free space on the hard disk.

Background printing requires a certain amount of disk space. You may need to delete unnecessary files, or disable background printing.

■ Ensure that background printing is enabled.

- 1 Open the Printer Properties dialog box.
 [Opening the Printer Properties Dialog Box](#)
- 2 On the **Page Setup** tab, click **Printer control...** and select **Background Printing**.

Cannot Print Normally

- **When the printer port is set to "ECP", cancel ECP mode and then try printing again.**

Sometimes ECP mode disrupts normal printing.

- 1 Open the Printer Properties dialog box.
- 2 Click the **Maintenance** tab.
- 3 Click **Custom Settings** to open the Custom Setting dialog box.
- 4 Clear the **Set printer to ECP mode** check box, and then click **Send**.
- 5 Turn the printer off and back on again.

- **If the WPS driver or CAPT driver is installed, either uninstall it or change the driver port to FILE as follows.**

The WPS (Windows Printing System) driver or CAPT (Canon Advanced Printing Technology) driver may disrupt normal printing.

- 1 Click the **Start** button, then click **Settings** and **Printers**.
For Windows XP, click **Start** and select **Control Panel, Printers and Other Hardware**, and then **Printers and Faxes**.
- 2 Display the WPS or CAPT driver properties, and click the **Details** tab.
- 3 Change the **Print to the following port** field to **FILE**.

Problems Unique to the Macintosh

- Jagged Text/Graphics, or Banded Gradations
- Cannot Print in Background

Jagged Text/Graphics, or Banded Gradations

■ Ensure your application supports Quick Draw.

If you are using a PostScript-compatible application, printed text and lines may appear jagged and gradations may appear banded. As S520 is not a PostScript printer but a Quick Draw printer, use an application compatible with Quick Draw for printing.

Cannot Print in Background

■ Ensure background printing is enabled.

- 1 In the Apple menu, select **Chooser**.
- 2 Click **Backgrounding** on.

■ Check the amount of free space on the hard disk.

Background printing requires a certain amount of disk space. You may need to remove unnecessary files, or disable background printing.

Appendices



- For Faster Printing

Windows

For Faster Printing

The USB interface provides the quickest printing with Windows 98, Windows Me and Windows 2000. Refer to the *Quick Start Guide* for USB connection details.

When using the parallel printer interface, use the ECP data transfer mode for faster printing.

Note ➤ The ECP mode may not speed up printing on some computers.

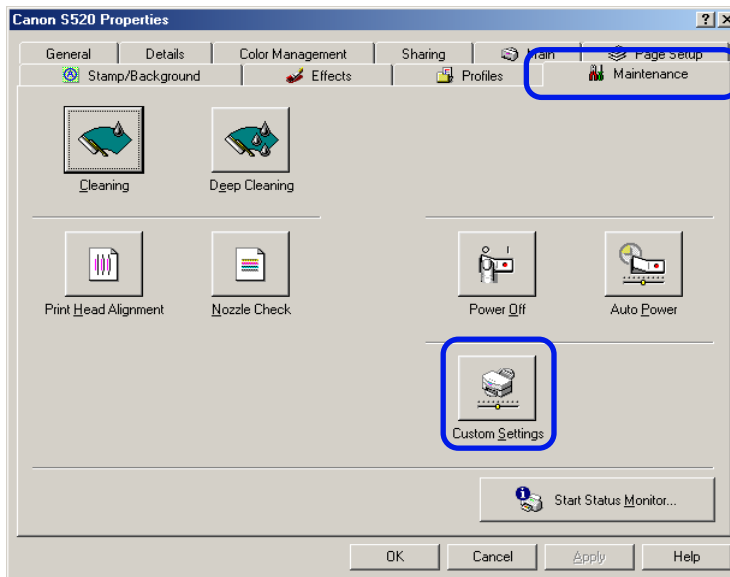
- 1 To enable the ECP mode, first confirm the following:
 - The printer and computer are connected with a parallel printer cable.
 - The printer driver has been installed.
 - The printer port of the computer supports the ECP mode.
 - The parallel port is set to ECP mode in the BIOS settings.

Note ➤ Refer to your computer manual for details on printer port specifications and BIOS settings.

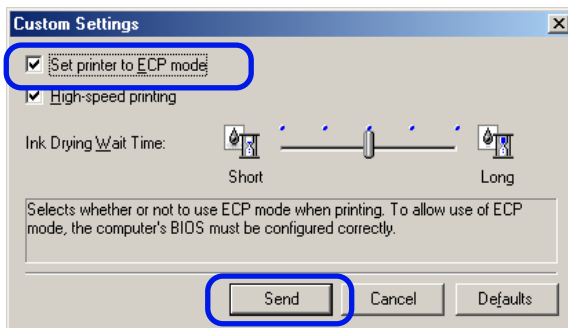
- 2 Open the Printer Properties dialog box from the **Start** menu.

➡ Opening the Printer Properties dialog box directly from the Start menu

- 3 Click the **Maintenance** tab and click the **Custom Settings** icon.



- 4 Select the **Set printer to ECP mode** check box and click **Send**.



Note

- Some computers may have problems printing in the ECP mode. In this case, clear the **Set printer to ECP mode** check box in the screen above, and click **Send**. Turn the printer off and back on to cancel the ECP mode.
- With Windows 95, a problem may remain after you cancel the ECP mode setting. See also “Unable to Print from the Canon BJ Printer Port” in the on-line Help.

Specifications



Printing method:

Bubble Jet on-demand

Printing resolution:

2400 (horizontal) × 1200 (vertical) dpi. max.

Print speed (printing with Canon standard pattern):

Black printing	Fast:	14 ppm
	Standard:	12 ppm
Colour printing	Fast:	9 ppm
	Standard:	6 ppm

Print direction:

Bi-directional

Print width:

203.2 mm / 8.0 in max.
(for borderless printing: 216.0 mm / 8.5 in)

Resident print control mode:

Canon extended mode

Receive buffer:

56 KB

Interface (parallel):

IEEE 1284-compatible

Interface (USB):

USB 1.10-compatible

Interface connector (parallel):

Amphenol 57-40360 or equivalent

Interface connector (USB):

USB standard Series B receptacle (USB interface)

Recommended printer cable (parallel):

Material: AWG28 or larger

Type: Twisted-pair shielded cable

Length: Up to 2.0 m (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 5.0 m (16.4 ft)

Connectors: USB standard Series B pluggable

Acoustic noise level:

Approx. 42 dB (A) (in the best quality mode)

Operating environment:

Temperature: 5 to 35°C (41 to 95°F)

Humidity: 10 to 90%RH (no condensation)

Storage environment:

Temperature: 0 to 40°C (32 to 104°F)

Humidity: 5 to 90% RH (no condensation)

Power supply:

Europe AC 230 V \pm 10%, 50 Hz

USA/Canada AC 120 V, 60 Hz

Australia AC 240 V, 50 Hz

Power consumption:

Standby: 3 W

Printing: 33 W

Dimensions (without a paper rest and paper output tray):

430 (W) \times 294 (D) \times 177 (H) mm

16.9 (W) \times 11.6 (D) \times 7.0 (H) in

Weight:

Approx. 5 kg (11 lb.)

■ Feed method:

Continuous feed through auto sheet feeder

For Plain Paper, Envelopes, High Resolution Paper,
Glossy Photo Paper, High Gloss Photo Film,
Glossy Photo Cards, Photo Paper Pro,
Transparencies, T-shirt Transfers, Banner Paper

■ Sheet feeder capacity:

Plain Paper (75 gsm)	100 sheets max.
High Resolution Paper	80 sheets max.
Envelopes	10 pieces max.
Glossy Photo Paper	1 sheet
High Gloss Photo Film	1 sheet
Glossy Photo Cards	20 sheets max.
Photo Paper Pro PR-101	A4: 1 sheet 4" × 6": 20 sheets max.
Photo Paper Pro PC-101S	20 sheets max.
Transparencies	30 sheets max.
T-Shirt Transfers	1 sheet
Banner Paper	1 sheet

■ Ordinary print media:

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

Custom size: width: 90.0 to 215.9 mm (3.54 to 8.5 in)
height: 120.0 to 584.2mm (4.72 to 23.0 in)

Weight: 64 to 105 gsm (17 to 28 lb) for non-Canon brand media

Canon Special media:

High Resolution Paper	HR-101N
Glossy Photo Paper	GP-301 / GP-301N
High Gloss Photo Film	HG-201
Glossy Photo Cards	FM-101
Photo Paper Pro	PR-101
Photo Paper Pro	PC-101S
Transparencies	CF-102
T-Shirt Transfers	TR-201
Banner Paper	

■ Graphic image printing:

Data format: Canon extended mode: Raster image format

Resolution: Canon extended mode: 300, 600, 1200, 2400 dpi

■ Print Head:

Black: 320 nozzles (600 dpi)

Cyan, Magenta, Yellow: 256 nozzles (1200 dpi)

■ Ink Tanks:

Capacity (pages):

Black (BCI-3eBK)	approx. 695 ^{*1} , approx. 1250 ^{*2}
Cyan (BCI-3eC)	approx. 460 ^{*2}
Magenta (BCI-3eM)	approx. 395 ^{*2}
Yellow (BCI-3eY)	approx. 300 ^{*2}

*1 1500 characters per page, normal text, at standard and plain paper mode with Windows 95/Windows 98/Windows Me

*2 Based on printing the ISO JIS-SCID No.5 pattern at standard and plain paper mode with Windows 95/Windows 98/Windows Me

■ Printer driver operating environment:

IBM PC/AT-compatible computer running on Windows Me, Windows 2000, Windows 98, Windows NT 4.0, Windows 95 or Macintosh computers with USB interface running on Mac OS 8.6 - 9.x

■ Hard disk space:

Approx. 15 MB to install on Windows Me, Windows 98 and Windows 95, 30 MB on Mac OS, or approx. 25 MB on Windows XP, Windows 2000 and Windows NT 4.0 (including temporary files)

Note ➤ When connecting printer and computer through USB interface, use the system under the following operating environment.

Windows

Computer with Microsoft Windows XP, Windows 2000, Windows Me or Windows 98, which is preinstalled by a computer manufacturer on purchase. (USB port operation also needs to be assured by the manufacturer.)

Macintosh

Macintosh computers with USB and Mac OS 8.6 - 9.x, which is preinstalled by a computer manufacturer on purchase.

Specifications subject to change without prior notice.

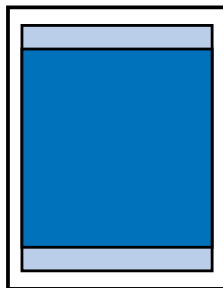
■ Printing Area

To ensure the best print quality, the printer allows a margin along each edge of media.

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 may degrade the print quality and paper feed accuracy, or cause ink to adhere on the printing surface.



➡ A4, B5, A5, 4" x 6"

➡ Letter, Legal

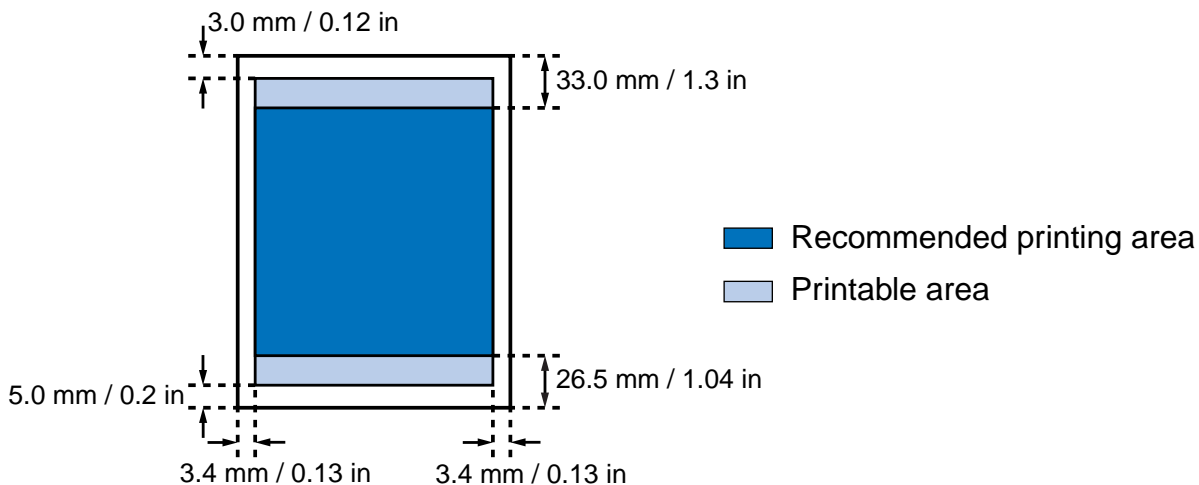
➡ Envelopes

➡ Banner Paper

A4, B5, A5, 4" x 6"

Size	Printable Area (width x height)
A4	203.2 × 289.0 mm / 8.0 × 11.4 in
B5	175.2 × 249.0 mm / 6.9 × 9.8 in
A5	141.2 × 202.0 mm / 5.6 × 7.9 in
4" × 6"	94.8 × 144.4 mm / 3.7 × 5.7 in

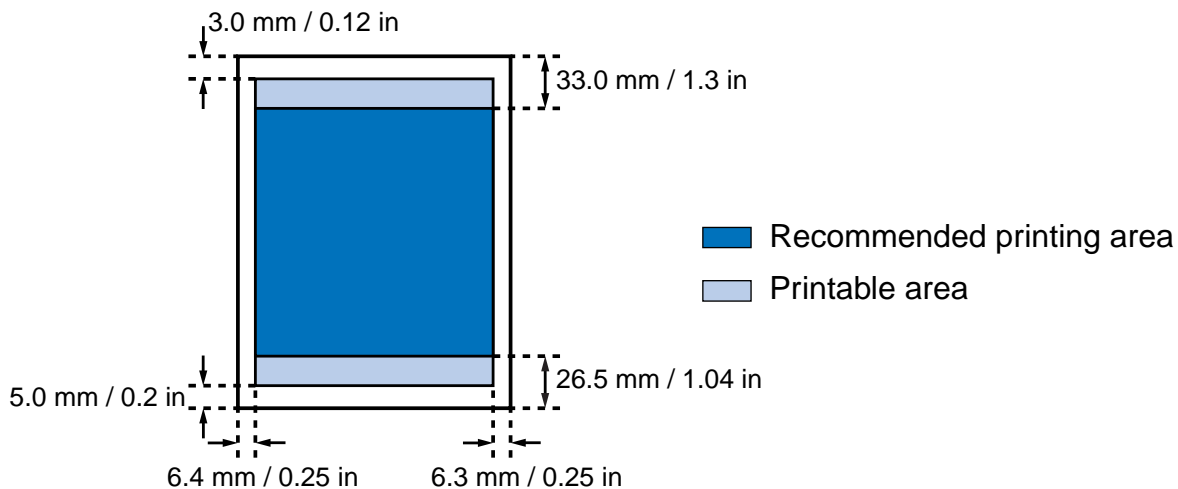
Note ➤ When printing on PR-101 and GP-301 / GP-301N, selection of "Borderless Printing" enables you to make prints with no margins. However, borderless printing may cause the top and bottom edges of paper to decrease in print quality or become soiled.



Letter, Legal

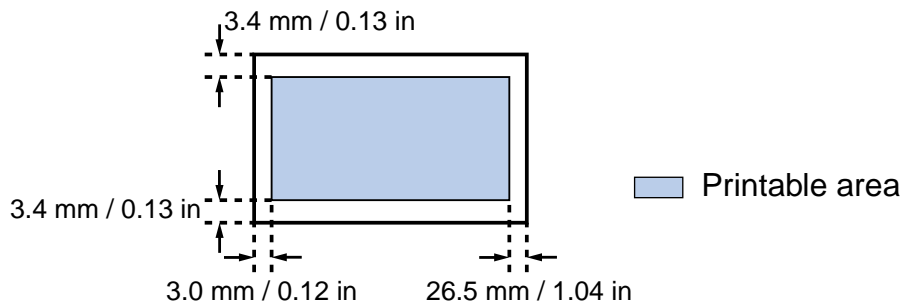
Size	Printable Area (width x height)
Letter	203.2 × 271.4 mm / 8.0 × 10.7 in
Legal	203.2 × 347.6 mm / 8.0 × 13.7 in

Note ► When printing on PR-101 and GP-301 / GP-301N, selection of "Borderless Printing" enables you to make prints with no margins. However, borderless printing may cause the top and bottom edges of paper to decrease in print quality or become soiled.



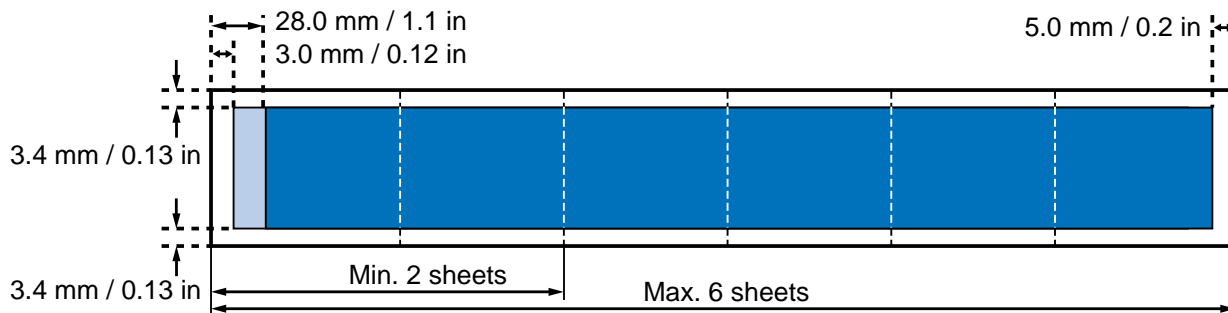
Envelopes

Size	Printable Area (width x height)
European DL	190.5 × 103.2 mm / 7.5 × 4.1 in
US Com. #10	211.8 × 98.0 mm / 8.3 × 3.9 in



Banner Paper

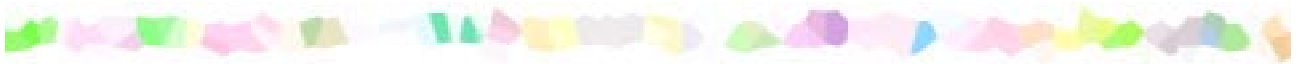
Size	Printable Area (width x height)
Banner Paper	A4: 203.2 × 1774.0 mm / 8.0 × 69.8 in
	Letter: 203.2 × 1668.4 mm / 8.0 × 65.7 in



Recommended printing area

Printable area

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