

EPSON STYLUS COLOR 980

Color Ink Jet Printer

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Printed on Recycled Paper.

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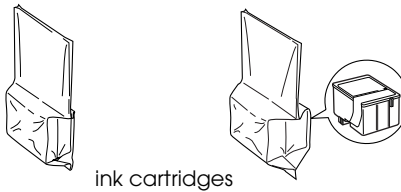
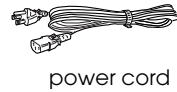
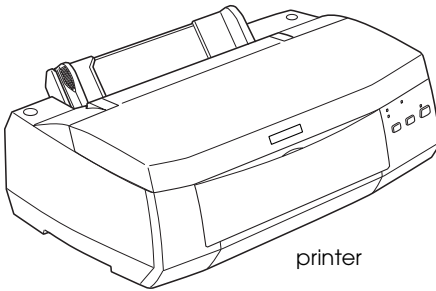
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Glossary

Printer Parts and Functions

Unpacking the Printer

The box that your printer is packed in should include a printer software CD-ROM and the items shown in the illustration below.

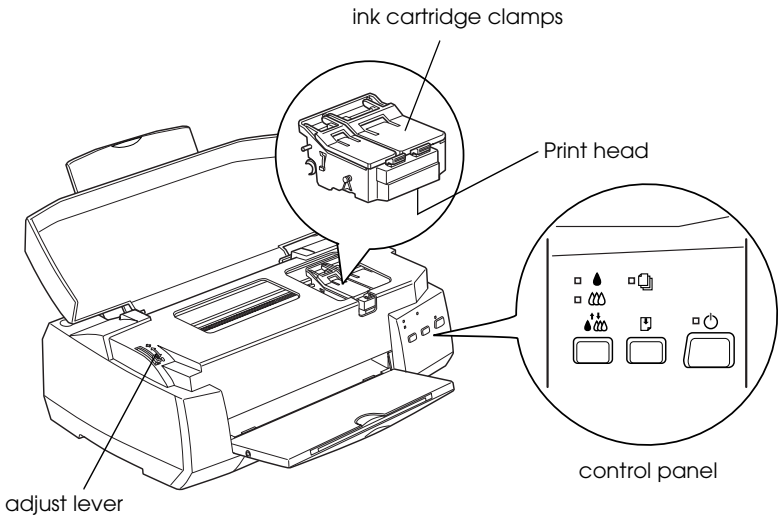
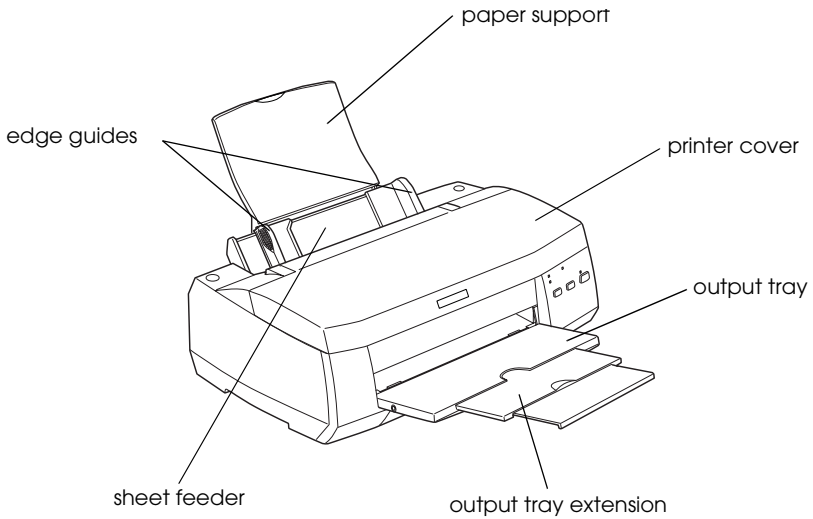


Note:








- ❑ *In some locations, the power cord comes attached to the printer.*
- ❑ *Because the shape of the AC plug varies by country, make sure that the plug included is the right shape for the AC outlets in your location.*

Before setting up and turning on the printer, remove all protective materials packaged with your printer according to the instructions included with the printer. Save all packaging and protective materials for transporting the printer in the future.




Printer Parts and Control Panel Functions





Buttons

Button	Function
 power	Turns the printer on and off. Clears the printer's memory if pressed twice while the power is on.
 load/eject	Loads or ejects paper if pressed and released within 2 seconds. Resumes printing if pressed and released after a paper out error.
 cleaning	Moves the print head to the ink cartridge replacement position if pressed for 3 seconds while the  black or  color ink out light is flashing or on. Returns the print head to its home position after ink cartridge replacement. Performs print head cleaning if pressed for 3 seconds when the  black or  color ink out light is off.

Lights

Light	Description
 power	On when the printer is on. Flashing when printer is receiving data, printing, replacing an ink cartridge, charging ink, or cleaning the print head.
 paper out	On when the printer is out of paper. Load paper in the sheet feeder, then press the  load/eject button to resume printing. Flashing when the paper is jammed. Take all of the paper out of the feeder, then reload the paper. If the light continues to flash, turn off the printer and gently pull all of the paper out of the printer.

 black ink out	On when the black ink cartridge is empty. Replace the black ink cartridge (T003). Flashing when the black ink cartridge is nearly empty.
 color ink out	On when the color ink cartridge is empty. Replace the color ink cartridge (T005). Flashing when the color ink cartridge is nearly empty.

Safety Instructions

Important Safety Instructions

Read all of the instructions in this section before using your printer. Also, be sure to follow all warnings and instructions that are marked on the printer.

- ❑ Do not block or cover the openings in the printer's cabinet. Do not insert objects through the slots.
- ❑ Do not spill liquid on the printer.
- ❑ Use only the type of power source that is indicated on the printer's label.
- ❑ Connect all equipment to properly grounded power outlets. Avoid using outlets that are on the same circuit as photocopiers or air control systems that regularly switch on and off.
- ❑ Avoid electrical outlets that are controlled by wall switches or automatic timers.
- ❑ Keep the entire computer system away from potential sources of electromagnetic interference, such as loudspeakers or the base units of cordless telephones.
- ❑ Do not use a damaged or frayed power cord.
- ❑ If you use an extension cord with the printer, make sure that the total ampere rating of the devices that are plugged into the extension cord does not exceed the cord's ampere rating. Also, make sure that the total ampere rating of all devices that are plugged into the wall outlet does not exceed the wall outlet's ampere rating.

- ❑ Do not attempt to service the printer yourself.
- ❑ Unplug the printer and refer servicing to qualified service personnel under the following conditions:

The power cord or plug is damaged; liquid has entered the printer; the printer has been dropped or the cabinet damaged; the printer does not operate normally or exhibits a distinct change in performance.

- ❑ If you plan to use the printer in Germany, the building installation must be protected by a 10 or 16 amp circuit breaker to provide adequate short-circuit protection and over-current protection for this printer.

Note for German-speaking users:

Bei Anschluss des Druckers an die Stromversorgung muss sichergestellt werden, dass die Gebäudeinstallation mit einer 10 A- oder 16 A-Sicherung abgesichert ist.




A Few Precautions

Read the information in this section before using the printer, handling the ink cartridges, or choosing a location for the printer.

Using the printer

Observe the following when using the printer.

- ❑ Do not put your hand inside the printer or touch the ink cartridges during printing.
- ❑ Do not move the print head by hand; otherwise, you may damage the printer.

- ❑ Always turn the printer off using the  power button. When this button is pressed, the  power light flashes briefly and then goes off. Do not unplug the printer or turn off the power to the outlet until the  power light stops flashing.
- ❑ Before transporting the printer, make sure that the print head is in the home (far right) position and that the ink cartridges are in place.

Handling the ink cartridges

Observe the following when handling the ink cartridges.

- ❑ Keep ink cartridges out of the reach of children. Do not allow children to drink from or otherwise handle the cartridges.
- ❑ Be careful when you handle the used ink cartridges, as there may be some ink around the ink supply port. If ink gets on your skin, wash the area thoroughly with soap and water. If ink gets in your eyes, flush them immediately with water. If discomfort or vision problems remain after a thorough flushing, see a doctor immediately.
- ❑ Do not shake an ink cartridge; this can cause leakage.
- ❑ Install an ink cartridge immediately after you remove it from its package. Leaving the cartridge unpacked for a long time before use may result in reduced print quality.
- ❑ Once you install an ink cartridge, do not open the clamp or remove the cartridge except to replace it with a new one. Otherwise, the cartridge may become unusable.
- ❑ Do not use an ink cartridge beyond the date printed on the cartridge carton: otherwise, it may result in reduced print quality. For best results, use up the ink cartridges within six months of first installing them.

- ❑ After bringing an ink cartridge inside from a cold storage site, allow it to warm up at room temperature for at least three hours before using it.
- ❑ Store ink cartridges in a cool, dark place.
- ❑ Do not dismantle the ink cartridges or try to refill them. This could damage the print head.

Choosing a place for the printer

Observe the following when choosing a place for the printer.

- ❑ Place the printer on a flat, stable surface that extends beyond the printer base in all directions. The printer will not operate properly if it is tilted or at an angle.
- ❑ Avoid places that are subject to rapid changes in temperature and humidity. Also, keep the printer away from direct sunlight, strong light, and heat sources.
- ❑ Avoid places that are subject to shocks and vibrations.
- ❑ Leave enough room around the printer to allow for sufficient ventilation.
- ❑ Avoid places subject to dust.
- ❑ Place the printer near a wall outlet where the plug can be easily unplugged.

Note for French-speaking users:

Placez l'imprimante près d'une prise de contact où la fiche peut être débranchée facilement.

ENERGY STAR Compliance



As an ENERGY STAR Partner, EPSON has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

The International ENERGY STAR Office Equipment Program is a voluntary partnership with the computer and office equipment industry to promote the introduction of energy-efficient personal computers, monitors, printers, fax machines, copiers, and scanners, in an effort to reduce air pollution caused by power generation.

For United Kingdom Users

Use of options

EPSON (UK) Limited shall not be liable against any damages or problems arising from the use of any options or consumable products other than those designated as Original EPSON Products or EPSON Approved Products by EPSON (UK) Limited.

Safety information



Warning:

This appliance must be earthed. Refer to the rating plate for voltage and check that the appliance voltage corresponds to the supply voltage.

Important:

The wires in the mains lead fitted to this appliance are coloured in accordance with the following code:

Green and yellow — Earth

Blue — Neutral

Brown — Live

If you have to fit a plug:

As the colours of the mains lead for this appliance may not match the coloured markings used to identify the terminals in a plug, please proceed as follows:

The green and yellow wire must be connected to the terminal in the plug that is marked with the letter E or the earth symbol (\perp).

The blue wire must be connected to the terminal in the plug that is marked with the letter N.

The brown wire must be connected to the terminal in the plug that is marked with the letter L.

If damage occurs to the plug, replace the cord set or consult a qualified electrician.

Replace fuses only with a fuse of the correct size and rating.

Warnings, Cautions, and Notes

**Warnings**

must be followed carefully to avoid bodily injury.

**Cautions**

must be observed to avoid damage to your equipment.

Notes

contain important information and useful tips on the operation of your printer.

Chapter 1

Paper Handling

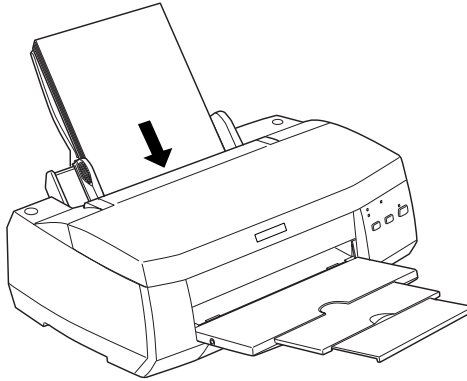
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Loading Plain Paper

Follow the steps below to load plain paper in the printer.

1. Lower the output tray and slide out the extension. Next, slide the left edge guide so that the distance between the edge guides is slightly wider than the width of your paper.
2. Fan a stack of paper, then tap it on a flat surface to even the edges.

3. Load the stack of paper in the sheet feeder with the printable side up and the right edge of the paper resting against the right edge guide. Then slide the left edge guide against the left edge of the paper.



Note:

- Always load paper into the sheet feeder short edge first.*
- Make sure that the paper stack fits under the arrow mark inside the edge guide.*

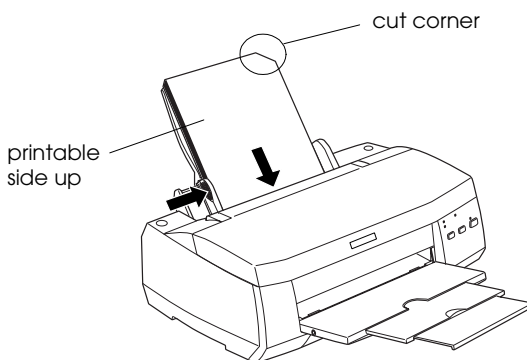
Loading Special Paper and Other Media

You can achieve good results with most types of plain bond paper. However, using coated paper and glossy film will result in higher quality printouts because these types of media absorb smaller amounts of ink.

EPSON provides special type of media that are formulated for the ink used in EPSON ink jet printers. EPSON recommends using media that is distributed by EPSON to ensure high-quality results. See “Media types” on page 11-4 for a complete list of these products.

When loading special media that is distributed by EPSON, read the instruction sheets packed with the media first and keep the points listed below in mind.

- ❑ Make sure that the printable side of the paper is facing up when loading media into the sheet feeder. See the instruction sheets packed with the media to determine which side is the printable surface. Some types of media have cut corners to help identify the correct loading direction, as shown in the illustration.

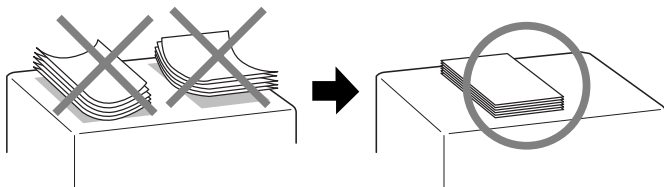


Note:

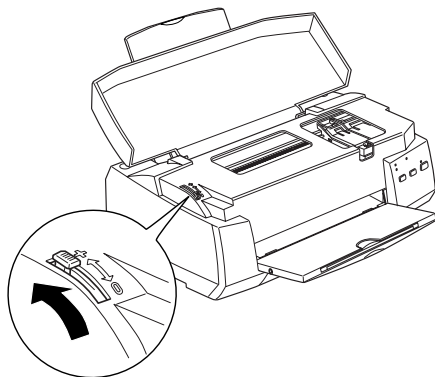
If you extend the printable area by selecting Maximum as the Printable Area setting in the printer driver, the cut corner on special paper may mar your printout.

- ❑ Make sure that the paper stack fits under the arrow mark that is located on the inside surface of the left edge guide.

- ❑ If the paper is curled, flatten it or curl it slightly toward the opposite side before loading it. Printing on curled paper may smear your printout, especially when printing with Maximum selected as the Printable Area setting.



- ❑ If ink smears on your documents when printing on thick media, set the adjust lever to the “+” position. To set the adjust lever, open the printer cover and position the lever as shown in the illustration.



Note:

- ❑ *Return the adjust lever to the “0” position before printing on media of normal thickness. Leaving the lever in the “+” position may cause gaps in the printed image.*

- ❑ *When the adjust lever is in the “+” position, make sure that the High Speed check box in the printer driver’s Advanced dialog box is cleared. To clear this check box, you may also need to change the Print Quality setting or align the print head using the Print Head Alignment utility.*
- ❑ *If you wish to print on the reverse side of an Ink Jet Card with Maximum selected as the Printable Area setting, flatten the card or curl it slightly toward the opposite side before loading. Set the adjust lever to the “+” position before printing.*

Loading capacities for EPSON special media

See below to find the loading capacities for EPSON special media.

Media Type	Loading Capacity
360 dpi Ink Jet Paper and Photo Quality Ink Jet Paper	Up to the arrow mark on the left edge guide.
Photo Quality Ink Jet Cards, Ink Jet Note Cards, and Ink Jet Greeting Cards	Up to 30 cards. Always place the included support sheet* under the cards.
Photo Quality Glossy Film	One sheet at a time or a maximum of 20 sheets. When loading multiple sheets, set the minimum top margin of the page to 30 mm. Always put a support sheet* or a sheet of plain paper under the glossy film.
Ink Jet Transparencies	Up to 30 transparencies. Always put a sheet of plain paper under the stack of transparencies.
Photo Quality Self Adhesive Sheets	One sheet at a time.
Photo Paper	Up to 20 sheets. For 200 × 300 mm Photo Paper, you can only load one sheet at a time. Always put a support sheet* under the stack of Photo Paper.
Premium Glossy Photo Paper	One sheet at a time.
Photo Stickers 16 and Photo Stickers 4	One sheet at a time.
Panoramic Photo Paper and Iron-On Cool Peel Transfer Paper	One sheet at a time.
Matte Paper-Heavyweight	Up to 20 sheets. Always put a support sheet* under the stack of Matte Paper-Heavyweight.

* Do not print on support sheets that are loaded under special media.

About special media cleaning sheets

Cleaning sheets that are packaged with EPSON special media should not be used with this printer. The cleaning function performed by these sheets is not necessary with this type of printer and the sheets may jam in the printer.

Loading Envelopes

When printing on envelopes, please note the following:

- You can load up to 10 envelopes in the sheet feeder.

Note:

The folding quality and thickness of envelopes varies widely. If the total thickness of the stack of envelopes exceeds 10 mm, press each envelope in the stack flat before loading.

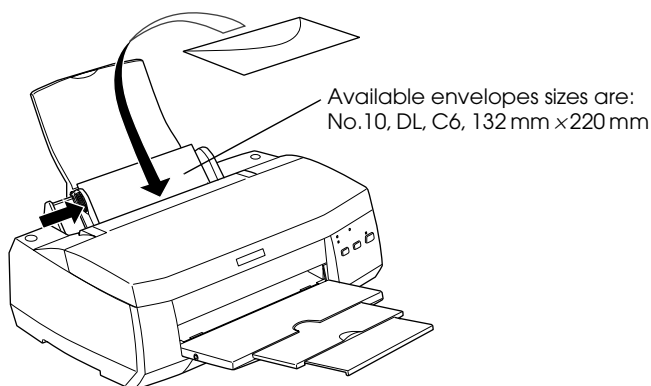
- Set the adjust lever to the “+” position. To do this, open the printer cover and reposition the lever.

Note:

- Return the adjust lever to the “0” position, which is the normal position, after you finish printing on envelopes. Leaving the lever in the “+” position may cause gaps to appear in images that are printed on other media.*

- When the adjust lever is in the “+” position, make sure that the High Speed check box in the printer driver’s Advanced dialog box is cleared. To clear this check box, you may also need to change the Print Quality setting.*

- ❑ Load envelopes flap edge first with the flap side down, as shown in the illustration.



- ❑ Do not use envelopes that are curled or folded. Flatten the envelope flaps before loading. Avoid using envelopes that are too thin as they may curl during printing.
- ❑ Select Plain Paper as the Media Type setting in the printer driver.

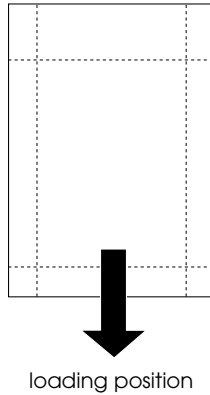
Using EPSON Photo Paper (4 x 6 inch, 200 x 300 mm)

EPSON Photo Paper (S041134, S041254) is perforated around the margins so that you can trim your printed images to look like 4 × 6 inch (102 × 152 mm) or 200 × 300 mm photographs.

Loading Photo Paper

Note the following when loading EPSON Photo Paper.

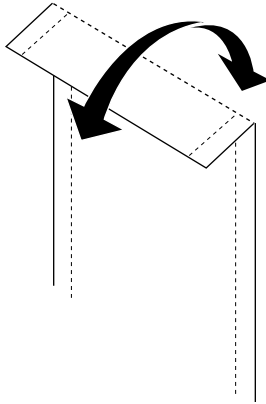
- ❑ Load the paper printable side up with the perforated margins positioned as shown in the illustration.



- ❑ Use flat, undamaged paper. If the paper or the support sheet is curled, flatten it before loading to avoid paper feeding problems.
- ❑ Always place the included support sheet under the stack of Photo Paper, but do not print on it.
- ❑ You can load up to 20 sheets of 4 × 6 inch Photo Paper or one sheet of 200 × 300 mm Photo Paper in the sheet feeder.
- ❑ Do not fold the paper before printing.
- ❑ Cut or tear the paper at the perforation only after printing.
- ❑ Select Photo Paper as the Media Type setting and Photo Paper 4 × 6 in or Photo Paper 200 × 300 mm as the Paper Size setting in your printer driver.

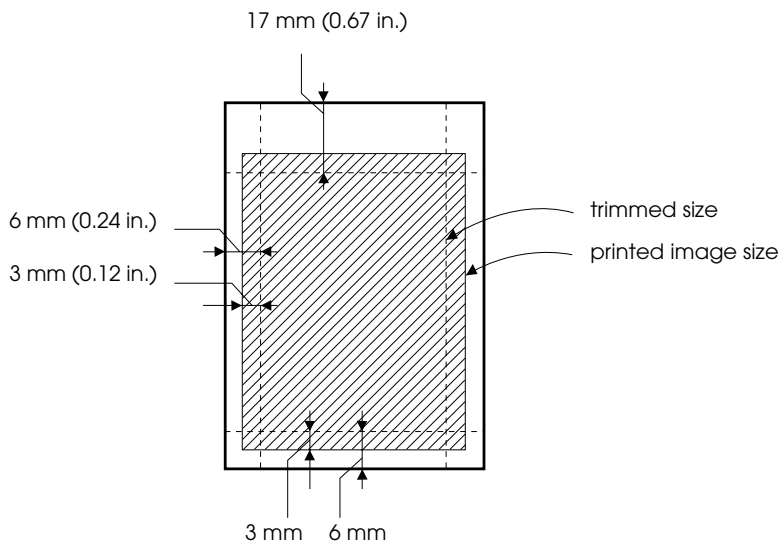
Removing the perforated margins

To remove the perforated margins, fold the paper back and forth a few times along the perforations, then carefully tear the margins off. You can also remove the margins by cutting along the perforations.

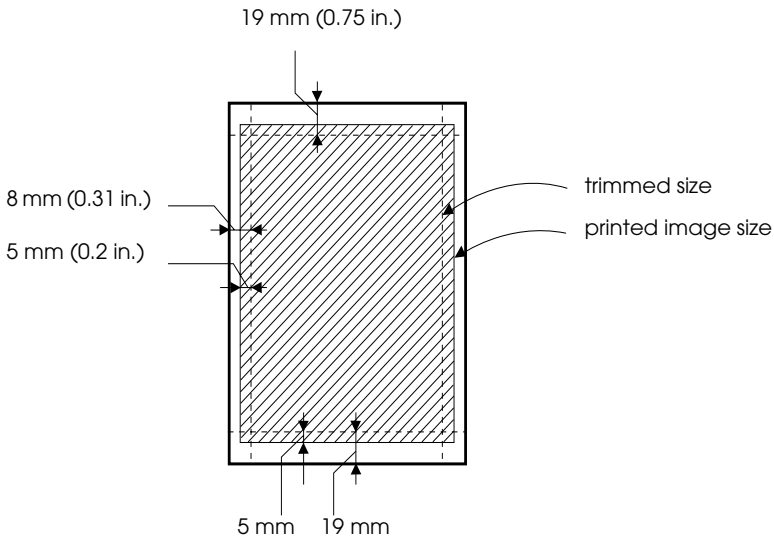


Keep in mind that the edges of your image might be cut off when you remove the perforated margins. Refer to the illustrations below for the dimensions of Photo Paper.

4 x 6 inch Photo Paper



200 x 300 mm Photo Paper



Storing EPSON Photo Paper

Keeps the following points in mind when storing Photo Paper.

- ❑ Return unused paper to its original package as soon as you finish printing and avoid storing it in places exposed to high temperature, humidity, or direct sunlight.
- ❑ EPSON recommends storing your printouts in a resealable plastic bag and keeping them away from high temperatures, humidity, and direct sunlight.

Double-Sided Printing

Using Double-Sided Printing. 2-1

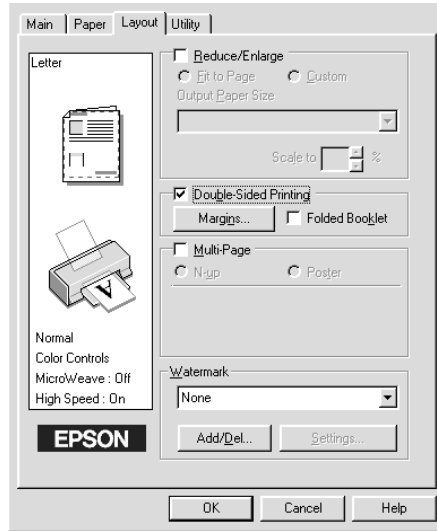
Using Double-Sided Printing

The EPSON Stylus COLOR 980 allows double-sided printing. There are two types of double-sided printing available. Standard double-sided printing allows you to print the odd-numbered pages first. Once these are printed, you can reload the printouts in the sheet feeder and print the even-numbered pages on the other side of the paper. Folded Booklet double-sided printing allows you to make single-fold booklets. For more details about making single-fold booklets and double-sided printing, refer to “Making the Layout menu settings” on page 3-23 for Windows, or “Making the Page Setup settings” on page 5-12 for Macintosh.

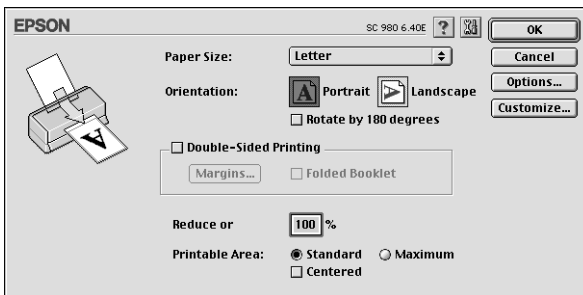
Note:

- ❑ *Double-sided printing via a network is possible when the High-Speed Printing is set to ON in EpsonNet Direct Print Version 2 or higher, running on the server. For details, please refer to the Readme file on the Printer software CD-ROM.*
- ❑ *You can load up to 30 sheets of paper at one time when double-sided printing; however, the loading capacity of the sheet feeder varies, depending on the media type.*
- ❑ *Only use media types which are suitable for double-sided printing. Otherwise, the printout quality may deteriorate.*
- ❑ *This feature is not available for Windows 3.1 users.*
- ❑ *Depending on the type of paper and the amount of ink used to print text and images, ink may bleed through to the other side of the paper.*

For Windows users, select the Double-Sided Printing check box on the Layout menu of your printer driver to use the double-sided printing feature. To access your printer driver, see “Accessing the printer software” on page 3-2.



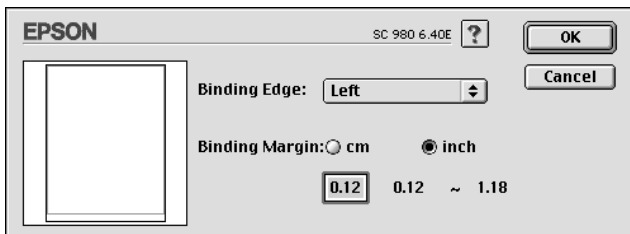
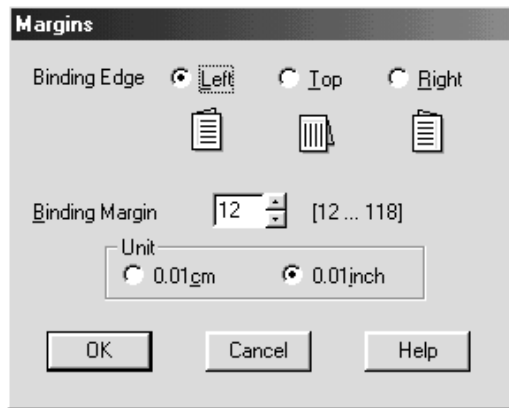
For Macintosh users, select the Double-Sided Printing check box in the Page Setup dialog box. For information on making settings in this dialog box, see “Making Changes to Printer Settings” on page 5-2.



Once the Double-Sided Printing check box is selected, it is possible to make the following double-sided printing settings.

Margins

Click this button to open the Margins dialog box, where you can specify which edge the binding will be on. You can choose between Left, Top, and Right. You can also specify the width of the binding margin by entering a value in the Binding Margin text box.



Folded Booklet

Select this check box to make single-fold booklets. For more details on this feature, refer to “Making the Layout menu settings” on page 3-23 for Windows, or “Making the Page Setup settings” on page 5-12 for Macintosh.

Once you have made your settings, click **OK** to save them. Load paper in the sheet feeder, then send the print job from your application. The odd-numbered pages will print first, unless **Folded Booklet** is selected. While the printer is printing the odd-numbered pages, instructions are displayed which explain how to reload the paper correctly. Follow the instructions to reload the paper, then click **Resume** to print the even-numbered pages.

Chapter 3

Using the Printer Software for Windows

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Printer Software Introduction

The printer software CD-ROM which comes with your printer includes a printer driver and printer utilities. The printer driver lets you choose from a wide variety of settings to achieve the best results with your printer. The printer utilities help you to check the printer and keep it in top condition.

Getting more information

For information on using the printer driver, see “Making Changes to Printer Settings” on page 3-4.

For information on using the printer utilities, see “Using the Printer Utilities” on page 3-37.

Note:

The specific features available in the printer software vary, depending on the version of Windows that you are using.

Online help provides more information about the printer software. See “Getting Information Through Online Help” on page 3-43 for instructions on accessing help.

Accessing the printer software

You can access the printer software from most Windows applications, from the Windows Start menu (Windows 98, 95, 2000, and NT 4.0), or from the Control Panel (Windows 3.1).

When you access the printer software from a Windows application, the settings that you make apply only to the application that you are using.

When you access the printer software from the Start menu, the settings that you make apply to all of your Windows applications.

Refer to the appropriate section below.

From Windows applications

Follow the steps below to access the printer software from Windows applications.

1. From the File menu, click Print or Print Setup.
2. In the dialog box that appears, click Printer, Setup, Options, or Properties. (Depending on your application, you may need to click a combination of these buttons.) The printer driver opens.

From the Windows Start menu (Windows 98, 95, 2000, and NT 4.0)

Follow the steps below to access the printer software from the Start menu.

1. Click Start, point to Settings, then click Printers.
2. For Windows 98 and 95, select your printer, then click Properties on the File menu. For Windows 2000, select your printer, then click Printing Preferences on the File menu. For Windows NT 4.0, select your printer, then click Document Defaults on the File menu. The printer driver opens.

From the Control Panel (Windows 3.1)

Follow the steps below to access the printer software from the Control Panel in Windows 3.1.

1. Double-click the Control Panel icon in the Main program group.
2. Double-click the Printers icon.
3. Select your printer in the Installed Printers list.

4. Click Setup. The printer driver opens.

Making Changes to Printer Settings

The printer driver features the following menus and settings.

Main: Media Type, Ink, Mode, Print Preview

Paper: Paper Size, Copies, Orientation, Printable Area

Layout: Reduce/Enlarge, Double-Sided Printing, Multi-Page, Watermark

Note:

The Layout menu is available only for Windows 98, 95, 2000, and NT 4.0 users.

The Mode settings on the Main menu are arranged to give you three levels of control over the printer driver, as explained below.

Automatic	This mode provides the quickest and easiest way to start printing. See "Using the Automatic mode" on page 3-9 for details.
PhotoEnhance	This mode lets you choose from a variety of image-correction settings specially designed for printing photos. See "Using the PhotoEnhance mode" on page 3-10 for details.
Custom	This mode lets you choose from a list of ready-made or personalized settings suited to the kind of document that you want to print. When Custom is selected, the Advanced button is enabled, allowing you to access the Advanced dialog box. See "Using the Custom mode" on page 3-11 for details.

In addition to making comprehensive Mode settings that affect overall print quality, you can also modify individual aspects of your printout using the Paper and Layout menus. See “Modifying the printout style” on page 3-21.

Making the Media Type setting

The Media Type setting determines what other settings are available, so you should always make this setting first.

On the Main menu, select the Media Type setting that matches the media that is loaded in the printer. To determine what Media Type you are using, locate your media in the list below, and refer to the corresponding Media Type under which it is grouped (shown in larger type). For some types of media, there are several Media Type settings to choose from.

Note:

For Windows 3.1 users, if the Media Type that you wish to select does not appear in the list, make the Print Quality setting in the More Settings dialog box first. To access this dialog box, click the Advanced button on the Main menu, then click More Settings.

Plain Paper

Plain paper

Envelopes

EPSON Premium Ink Jet Plain Paper (A4)

S041214

360 dpi Ink Jet Paper

EPSON 360 dpi Ink Jet Paper (A4)	S041059 S041025
EPSON 360 dpi Ink Jet Paper (Letter)	S041060 S041028
EPSON Iron-On Cool Peel Transfer Paper (A4)	S041154
EPSON Iron-On Cool Peel Transfer Paper (Letter)	S041153 S041155

Photo Quality Ink Jet Paper

EPSON Photo Quality Ink Jet Paper (A4)	S041061 S041026
EPSON Photo Quality Ink Jet Paper (Letter)	S041062 S041029
EPSON Photo Quality Ink Jet Paper (Legal)	S041067 S041048
EPSON Photo Quality Ink Jet Cards (A6)	S041054
EPSON Photo Quality Ink Jet Cards (5 × 8")	S041121
EPSON Photo Quality Ink Jet Cards (8 × 10")	S041122
EPSON Photo Quality Self Adhesive Sheets (A4)	S041106
EPSON Ink Jet Note Cards A6 (with envelopes)	S041147
EPSON Ink Jet Greeting Cards 5 × 8" (with envelopes)	S041148
EPSON Ink Jet Greeting Cards 8 × 10" (with envelopes)	S041149

Matte Paper-Heavyweight

EPSON Matte Paper-Heavyweight (A4)	S041256
	S041258
	S041259

EPSON Matte Paper-Heavyweight (Letter)	S041257
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Photo Paper

EPSON Photo Paper (A4)	S041140
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EPSON Photo Paper (Letter)	S041141
----------------------------	---------

EPSON Photo Paper (4 × 6")	S041134
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EPSON Photo Paper (100 × 150 mm)	S041255
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EPSON Photo Paper (200 × 300 mm)	S041254
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EPSON Panoramic Photo Paper (210 × 594 mm)	S041145
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EPSON Photo Paper Cards (A4)	S041177
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Photo Quality Glossy Film

EPSON Photo Quality Glossy Film (A4)	S041071
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EPSON Photo Quality Glossy Film (Letter)	S041072
------------------------------------------	---------

EPSON Photo Quality Glossy Film (A6)	S041107
--------------------------------------	---------

EPSON Photo Stickers 16 (A6)	S041144
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EPSON Photo Stickers 4 (A6)	S041176
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Ink Jet Transparencies

EPSON Ink Jet Transparencies (A4) S041063

EPSON Ink Jet Transparencies (Letter) S041064

Premium Glossy Photo Paper

EPSON Premium Glossy Photo Paper (A4) S041287

S041297

EPSON Premium Glossy Photo Paper (Letter) S041286

Note:

The availability of special media varies by location.

Using the Automatic mode

When Automatic is selected as the Mode setting on the Main menu, the printer driver takes care of all detailed settings based on the current Media Type and Ink settings. To make the Ink setting, select **Color** to print in color, or **Black** to print in black-and-white or grayscale. To make the Media Type setting, see “Making the Media Type setting” on page 3-5.

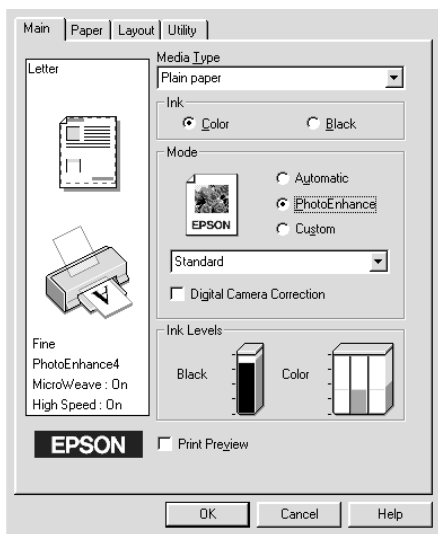


Note:

- ❑ Depending on the media that is selected in the Media Type list (while Automatic is selected), a slider appears under the Custom radio button that lets you choose either Quality or Speed. Select Quality when print quality is more important than speed.
- ❑ Most Windows applications feature paper size and page layout settings that override similar settings in the printer driver. However, if your application does not have these settings, verify the settings on the printer driver's Paper menu.

Using the PhotoEnhance mode

The PhotoEnhance mode provides a variety of image-correction settings that you can apply to your photo images before printing. PhotoEnhance does not affect your original data.



Note:

- ❑ This mode is only available when printing 16-, 24-, or 32-bit color data.
- ❑ Printing with PhotoEnhance selected may increase the time required for printing, depending on your computer system and the amount of data contained in your image.

You can select from the following PhotoEnhance settings.

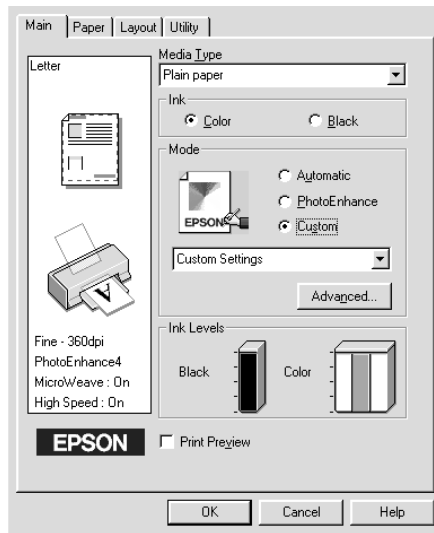
Standard	This setting provides standard image correction for most photos. Try this first.
People	This setting is best for photos of people.
Nature	This setting is best for outdoor scenery such as mountains, sky, and oceans.

Soft Focus	This setting makes your photos look as if they were taken with a soft-focus lens.
Sepia	This setting applies a sepia tone to your photos.

Selecting PhotoEnhance also enables the Digital Camera Correction check box. Select this check box when you are printing photos taken with a digital camera to give your printed images the smooth, natural appearance of photographs taken with a film camera.

Using the Custom mode

The Custom mode offers ready-made settings designed for printing text and graphs and for applying a color-matching method. You can also create and save your own custom settings. Refer to the appropriate section below.



You can select from the following ready-made settings.

Text/Graph	This setting is good for printing presentation documents such as graphs and charts.
Economy	This setting is best for printing drafts of text.
ICM (For Windows 98, 95, and 2000)	This setting automatically adjusts printout colors to match the colors on your screen. ICM stands for Image Color Matching.
sRGB	This setting is best for color matching with other sRGB devices.

When you select a Custom setting, other settings such as Print Quality, Halftoning, and Color Adjustment are made automatically. Changes to these settings are reflected in the display on the left side of the Main menu.

Follow the steps below to select a Custom setting.

1. Select Custom as the Mode setting on the Main menu.

Note:

For Windows 3.1 users, the Custom radio button referred to above appears as the Advanced radio button in the printer driver.

2. Click anywhere in the list box to open it, then select the most appropriate setting for the type of document or image that you will print.
3. Verify the Media Type and Ink settings before printing, as these settings may be affected by the Custom setting that you select. See “Making the Media Type setting” on page 3-5 for details.

Making Advanced settings

Note:

In the Windows 3.1 driver, the names of the buttons on the Main menu differ from those described here. The Custom radio button appears as the Advanced radio button, and the Advanced button appears as the More Settings button.

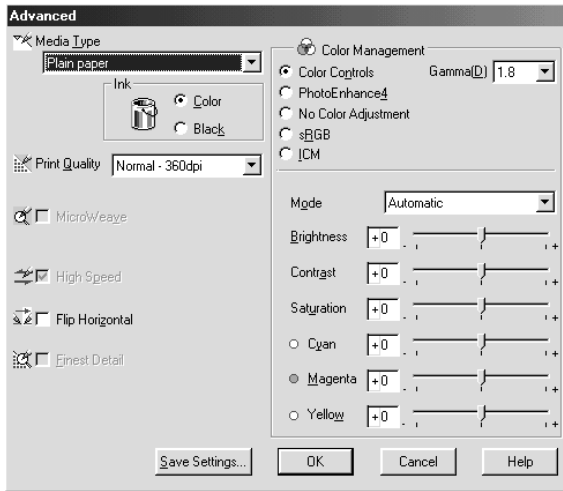
The settings in the Advanced dialog box give you complete control over your printing environment. Use these settings to experiment with new printing ideas or to fine-tune a range of print settings to meet your individual needs. Once you are satisfied with your new settings, you can give them a name and add them to the Custom Settings list on the Main menu.

Follow the instructions in this section to make Advanced settings.

Note:

The printer driver screens that appear in this procedure are for Windows 98 and 95. The Windows 3.1, 2000, and NT 4.0 printer driver screens differ slightly in appearance. The instructions for the Windows 3.1 printer driver differ as noted below.

1. Select Custom as the Mode setting on the Main menu and then click Advanced. For Windows 3.1 users, select Advanced, then click More Settings. The following dialog box appears.



2. Select the Media Type that is loaded in the printer. For details, see “Making the Media Type setting” on page 3-5.
3. Choose Color or Black as the Ink setting.
4. Specify a Print Quality setting.
5. Make other settings as necessary. For details, see online help.

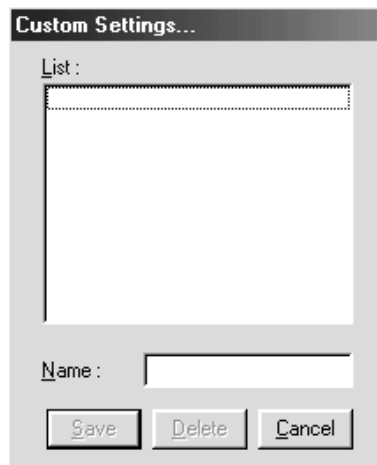
Note:

- ❑ *The PhotoEnhance option under Color Management only affects images, not text or graphs. For example, if Monochrome is selected in the Tone list (enabled when PhotoEnhance is selected), only the images in a document will be printed in monochrome. Any colored text or graphs in the same document will be printed in color.*

- ❑ *Some settings may be unavailable, depending on the Media Type, Ink, and Print Quality settings that you make.*
6. Click OK to apply your settings and return to the Main menu. If you want to return to the Main menu without applying your settings, click Cancel. To save your Advanced settings, proceed to the next section.

Saving and deleting your settings

To save your Advanced settings in the Custom Settings list, click Save Settings in the Advanced dialog box. For Windows 3.1 users, click Save Settings on the Main menu. The Custom Settings dialog box appears.



Type a unique name for your settings in the Name text box, then click Save. Your Advanced settings will be added to the Custom Settings list.

Note:

- ❑ *You cannot apply the names of EPSON ready-made settings to your custom settings.*

- ❑ *You cannot delete the ready-made settings from the Custom Settings list.*

To delete a setting from the Custom Settings list, select it in the Custom Settings dialog box and click Delete.

Using your saved settings

To use your saved settings, select Custom as the Mode setting on the Main menu, then select your settings in the Custom Settings list, located to the right of the Custom radio button.

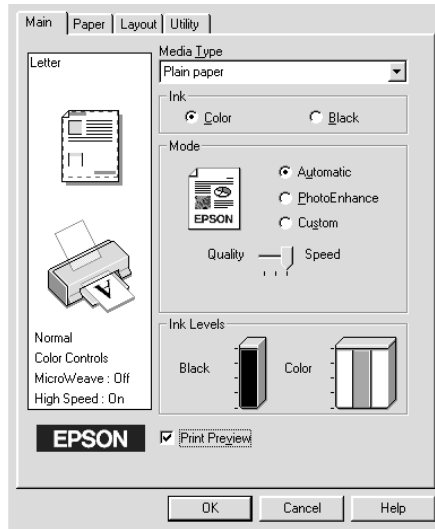
Note:

For Windows 3.1 users, the Custom radio button referred to above appears as the Advanced radio button in the printer driver.

If you change the Media Type or Ink settings while one of your customized settings is selected in the Custom Settings list, the selection shown in the list returns to Custom Settings. The customized setting that was previously selected is not affected by the change. To return to your customized setting, simply reselect it in the list.

Previewing your printout

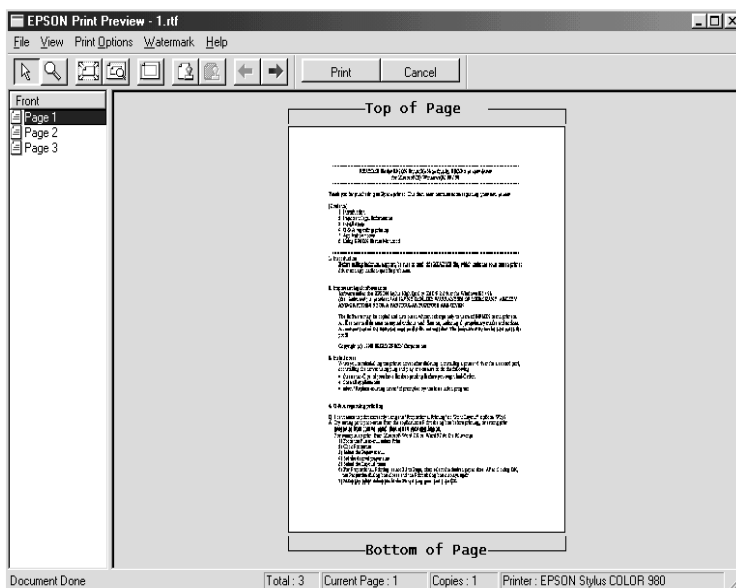
Select the Print Preview check box on the Main menu to see a preview of your document before printing.







Note:






This feature is not available for Windows 3.1.

When you send a print job to the printer, the Print Preview window opens, allowing you to make changes before printing.



The Preview dialog box contains several icon buttons that allow you to perform the following functions.



	Selection	Click this button to select and move watermarks.
	Zoom	Click this button to enlarge or reduce the size of the previewed page.
	Fit-to-screen	Click this button to scale the previewed page so that it fits the size of the window. This is convenient when you want to see the entire page at one time.
	Maximum zoom	Click this button to display the previewed page at the maximum possible zoom ratio.

	Printable area on/off	Click this button to display a rectangle on the page being previewed. This rectangle outlines the printable area for the page. The printer cannot print anything which is outside of this rectangle. Click the button again to turn this feature off.
	Watermark	Click this button to open the Watermark Settings dialog box, where you can change any of the current watermark settings.
	Reset watermark settings	Click this button to return all watermark settings to what they were when the Print Preview window was first opened. If nothing has been changed, this button is unavailable.
	Previous page	Click this button to display the page previous to the one currently being previewed. If there is no previous page, this button is unavailable.
	Next page	Click this button to display the next page in the document. If there is no next page, this button is unavailable.

You can also manipulate the previewed document in the following ways:

- Select and preview individual pages.
- Reduce or enlarge the size of the preview.
- Select and print any or all pages.
- Magnify the previewed document. To do this, click View and then Magnify to open the Magnify window, which magnifies the area of the previewed document which is outlined by a red box. By dragging the red box, you can change which part of the document is magnified.

- ❑ View the individual pages that comprise a poster. The Poster window opens automatically when you send a print job while Poster is selected as the Multi-Page option on the Layout menu. From this window, you can view the individual pages which make up a poster. You can also open this dialog box by clicking View and then Poster.
- ❑ Apply watermarks. The watermark that you select will appear in the previewed image. For detailed information on customizing watermarks, see “Printing a watermark on your document” on page 3-34.
- ❑ Specify which pages in the document you would like printed using the Add and Remove features. To add or remove a page, you must first click the page icon in the list appearing at the left side of the preview window. Then add or remove it using the commands on the Print Options menu.

	Add page	Click this button to add the highlighted pages to the list of pages to be printed.
	Remove page	Click this button to remove the highlighted pages from the list of pages to be printed.

Note:

- ❑ *When using the double-sided printing feature, the Preview window allows you to toggle between pages in the print job by clicking the appropriate page in the list at the left side of the screen. The pages are listed in two columns, Front and Back. The pages in the Front column will print first. The page numbers listed refer to pages of the print job, and may contain more than one document page.*
- ❑ *If it is necessary to reprint part of a double-sided print job, select each page of the print job that does not need to be reprinted in the list at the left side of the screen, then click Remove Page on the Print Options menu. Make sure that the paper is loaded properly so that the print job will start on the correct side of the correct page.*

After you have previewed the document, click Print to print the document, or click CANCEL to cancel printing.

Modifying the printout style

You can modify the style of your printout using a variety of printer driver settings located on the Paper and Layout menus.

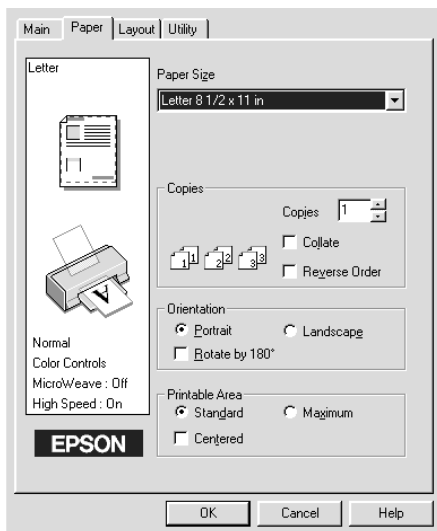
Note:

The Layout menu is not available in the Windows 3.1 printer driver.

On the Paper menu, you can specify the paper size, the number of copies, the orientation of your printout, and the printable area. On the Layout menu, you can automatically match the document size to the paper size, print on both sides of the paper, print two or four pages on a single sheet of paper, print poster-size images by enlarging one page to cover several sheets, or place watermarks on documents. Refer to the appropriate section below for details.

Making the Paper menu settings

Use the settings on the Paper menu to change the paper size, set the number of copies and other copy parameters, specify the paper orientation, and adjust the printable area.



You can make the following settings on the Paper menu:

Paper Size	Select the paper size that you wish to use. You can also add a custom paper size.
Copies	Select the number of copies that you wish to print. You can select Collate to print one set at a time or Reverse Order to print your documents in reverse order, starting with the last page.
Orientation	Select Portrait (tall) or Landscape (wide) to change the orientation of your printout. If you need to print closer to the bottom of the page, select the Rotate by 180° check box.

Printable Area	Select Centered to center the printout. Select Maximum to increase the printable area. Note: When Maximum is selected, print quality may decline at the edges of the printout. Before printing large jobs using this setting, print a single sheet to confirm quality. When Maximum is selected, make sure that the paper loaded in the paper feeder is not curled.
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Making the Layout menu settings

Use the settings on the Layout menu to modify the page layout of your document by matching the document size to the paper size, or by allowing printing on both sides of the paper, printing two or four pages on a single sheet of paper, printing poster-size images by enlarging one page to cover several sheets, or printing watermarks.

Note:

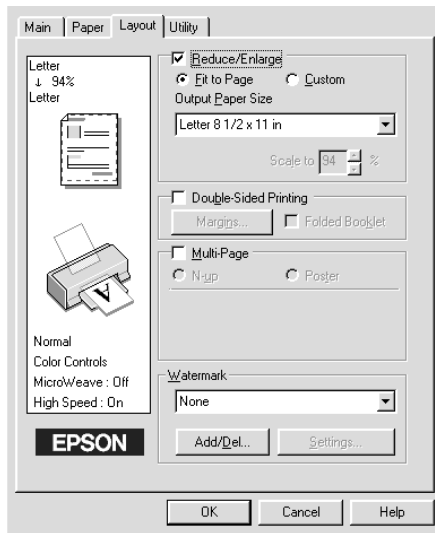
The Layout menu is not available in the Windows 3.1 printer driver.

Fitting your document to the paper size

Use the Reduce/Enlarge options on the Layout menu to fit your document to the paper size that you will print on.

Note:

The Layout menu is not available in the Windows 3.1 printer driver.



You can select from the following settings.

Normal	Prints your document at its normal size.
Fit to Page	Proportionally enlarges or reduces the size of your document to make it fit the paper size that you select in the Paper Size list on the Paper menu.
Custom	Allows you to manually enlarge or reduce the size of your document. Use the arrows next to the Scale to box to select a percentage between 10% and 400%.

Printing on both sides of the paper

The EPSON Stylus COLOR 980 allows double-sided printing. There are two types of double-sided printing available. Standard double-sided printing allows you to print the odd-numbered pages first. Once these are printed, you can reload the printouts in the sheet feeder and print the even-numbered pages on the other side of the paper. Folded Booklet double-sided printing allows you to make single-fold booklets. Refer to the appropriate section below.

Note:

- Double-sided printing via a network is possible when the EPSON high-speed port is set to ON in EpsonNet Direct Print Version 2 or higher, running on the server. For details, please refer to the Readme file on the Printer software CD-ROM.*
- You can load up to 30 sheets of paper at one time when double-sided printing; however, the loading capacity of the sheet feeder varies, depending on the media type.*
- Only use media types which are suitable for double-sided printing. Otherwise, the printout quality may deteriorate.*
- Depending on the type of paper and the amount of ink used to print text and images, ink may bleed through to the other side of the paper.*

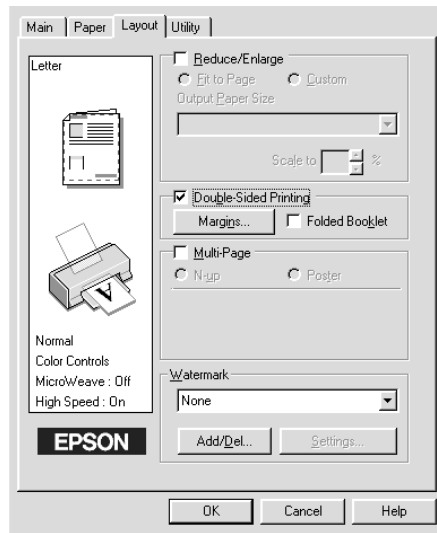
Standard double-sided printing

Follow the steps below to print first the odd-numbered pages, and then the even-numbered pages after you have reloaded the printouts.

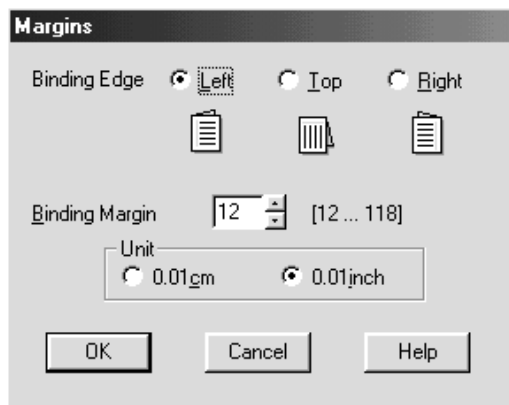
1. Select the Double-Sided Printing check box on the Layout menu of your printer driver. For information on accessing the Layout menu, see “Accessing the printer software” on page 3-2.

Note:

The Layout menu is not available in the Windows 3.1 printer driver.



2. Click the Margins button. The following dialog box opens.



3. Specify which edge of the paper the binding will be on. You can choose between Left, Top, and Right.

4. Specify the width of the binding margin by entering a value in the Binding Margin text box. You can specify a value between 3 mm and 30 mm.

Note:

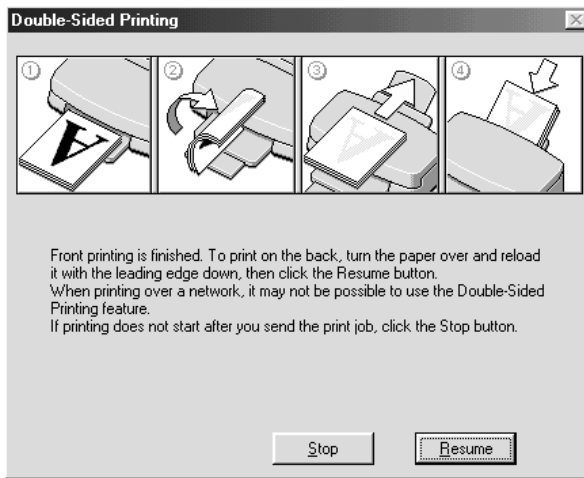
The actual binding margin may vary, depending on your application. Experiment by printing a few sheets using different binding margin values before printing the entire job; otherwise, the results may differ from what you expect.

5. Click OK to return to the Layout menu, then click OK to save your settings.
6. Load paper in the sheet feeder, then send the print job from your application. While the printer is printing the odd-numbered pages, instructions are displayed which explain how to reload the paper correctly.
7. Follow the instructions to reload the paper, or reload the paper as shown in the illustration below.

Note:

- The paper may curl during printing, depending on the amount of ink used to print text and images. Flatten it or curl it slightly toward the opposite side before printing on the other side of the paper.*
- Tap the stack of paper on a flat surface to align the edges before reloading it.*
- Reload the printouts as instructed; otherwise, the paper may jam or the binding margin may differ from what you expect.*

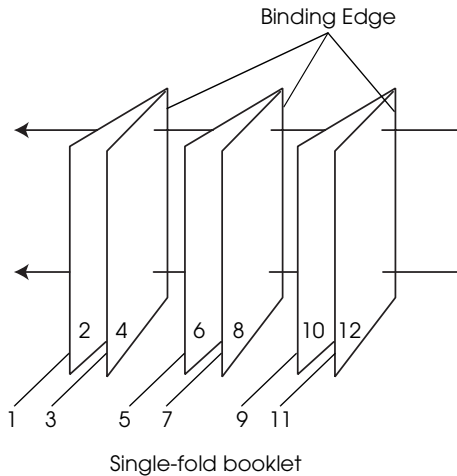
- If the paper jams, see “Paper Does Not Feed Correctly” on page 10-23.



8. Once the paper is reloaded, click Resume to print the even-numbered pages.

Folded Booklet double-sided printing

You can also make single-fold booklets using the double-sided printing feature. When booklet printing, the printer first prints the pages which will be on the outside after you fold the paper, and then prints the inside pages after you reload the paper, as shown in the illustration below.



In this example, the printer would print pages 1 and 4 of your document on the first sheet of paper, pages 5 and 8 on the second sheet of paper, and pages 9 and 12 on the third sheet of paper. After you reload the printouts in the sheet feeder, the printer would then print pages 2 and 3 on the back of the first sheet of paper, pages 6 and 7 on the back of the second sheet of paper, and 10 and 11 on the back of the third sheet of paper. After printing is finished, you can fold each sheet of paper and bind them together.

Follow the steps below to print booklets.

1. Select the Double-Sided Printing check box on the Layout menu, then select the Folded Booklet check box.

Note:

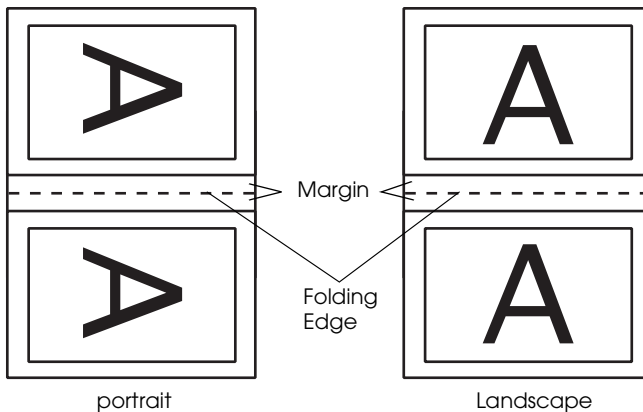
The Layout menu is not available in the Windows 3.1 printer driver.

2. Click the Margins button. The Margins dialog box opens.
3. Specify which edge of the paper the binding will be on. You can choose between Left, Top, and Right.

Note:

While Portrait is selected as the Orientation setting on the Main menu of your printer driver, you can choose between Left and Right. While Landscape is selected as the Orientation setting, you can only select Top.

4. Specify the width of the binding margin by entering a value in the Binding Margin text box. You can specify a value between 3 mm and 30 mm. This margin width will be inserted on both sides of the fold. For example, if you specify a value of 10 mm, a 20-mm margin will be inserted, with 10 mm on each side of the fold.



5. Click OK to return to the Layout menu, then click OK to save your settings.
6. Load paper in the sheet feeder, then send the print job from your application.

7. While the printer is printing the outside pages, instructions are displayed which explain how to reload the paper correctly. Follow the on-screen instructions to reload the paper, or reload the paper as shown in the illustration in the previous section, “Standard double-sided printing” on page 3-25.

Note:

- ❑ *The paper may curl during printing, depending on the amount of ink used to print text and images. Flatten it or curl it slightly toward the opposite side before printing on the other side of the paper.*
- ❑ *Tap the stack of paper on a flat surface to align the edges before reloading it.*
- ❑ *Reload the printouts as instructed; otherwise, the paper may jam or the binding margin may differ from what you expect.*

If the paper jams, see “Paper Does Not Feed Correctly” on page 10-23.

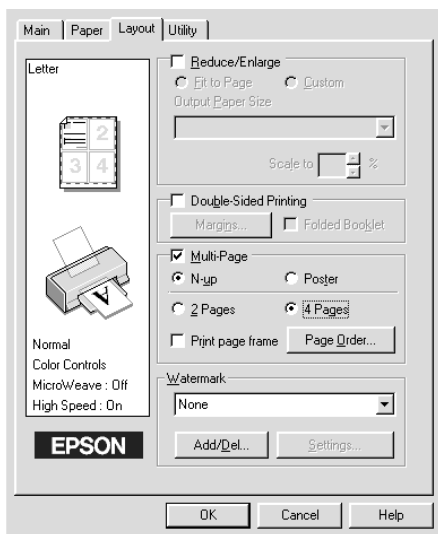
8. Once the paper is reloaded, click Resume to print the inside pages.
9. Once printing is complete, fold the printouts properly and bind them together using a stapler or other binding method.

Printing two or four pages on one sheet

Select N-up as the Multi-Page setting on the Layout menu to print two or four pages of your document on one sheet of paper.

Note:

The Layout menu is not available in the Windows 3.1 printer driver.



You choose from the following settings:

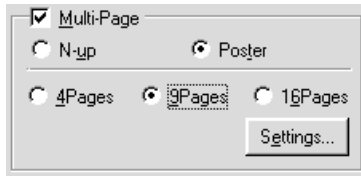
2 Pages 4 Pages	Prints two or four pages of your document on a single piece of paper.
Page Order	Opens the Print Layout dialog box, where you can specify the order in which the pages will be printed on the sheet of paper. Some settings may be unavailable, depending upon your Orientation selection on the Paper menu.
Print page frames	Prints a frame around each page that is printed on the sheet of paper.

Printing posters

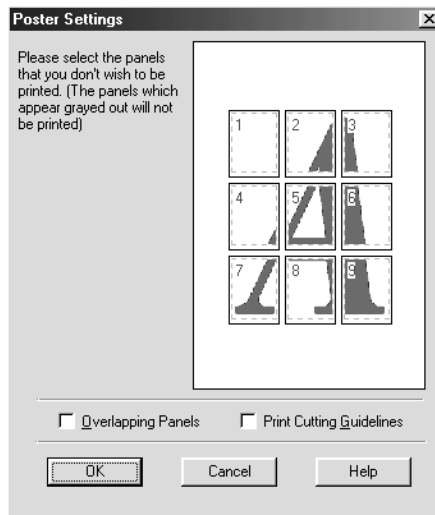
A single document page can be enlarged to cover 4, 9, or 16 printed sheets of paper. Select Poster as the Multi-Page setting on the Layout menu to print a poster-size image.

Note:

The Layout menu is not available in the Windows 3.1 printer driver.



Click the Settings button to adjust the way that your poster will print. The Poster Settings dialog box opens.



You can make the following settings:

Overlapping Panels	Slightly overlaps the images so that they can be aligned more precisely.
Print Cutting Guidelines	Prints border lines on the images to guide you when trimming the pages.

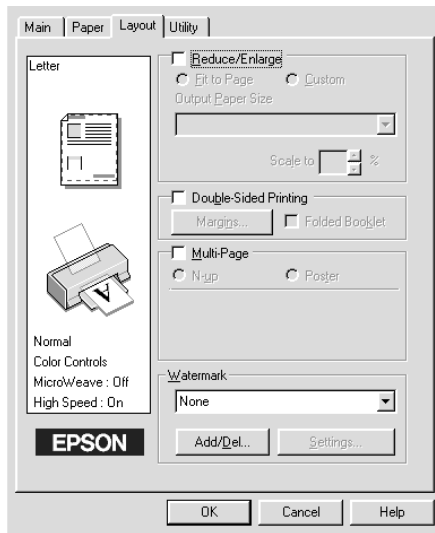
If you only want to print a few of the panels without printing the entire poster, click the panels that you don't wish to print, then click OK to close the Poster Settings dialog box.

Printing a watermark on your document

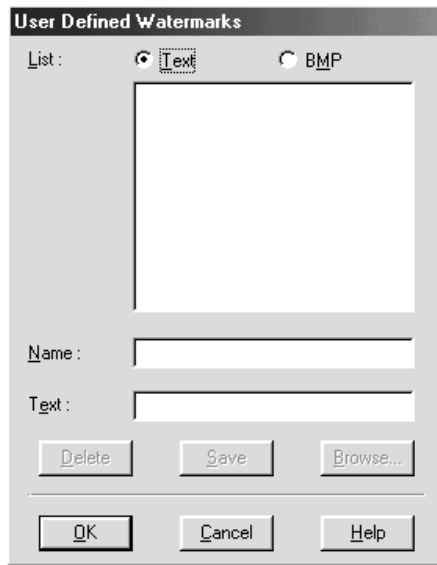
To print a watermark on your document, click anywhere in the Watermark list box on the Layout menu and select from the list of predefined watermarks. To make settings for a predefined watermark, proceed to "Making settings for your watermark" on page 3-36.

Note:

The Layout menu is not available in the Windows 3.1 printer driver.



You can also add your own text-based or image-based watermarks to the Watermark list. To add a watermark to the list, click the Add/Del button. The following dialog box appears.



Refer to the appropriate section below to finish creating and configuring a custom watermark.

Creating an image-based watermark

Follow the steps below to finish creating an image-based watermark.

1. Select BMP.
2. Click the Browse button to specify the bitmap file that you want to use, then click OK.
3. Type a name for your watermark in the Name box, then click Save.
4. Click OK to return to the Layout menu.

Creating a text-based watermark

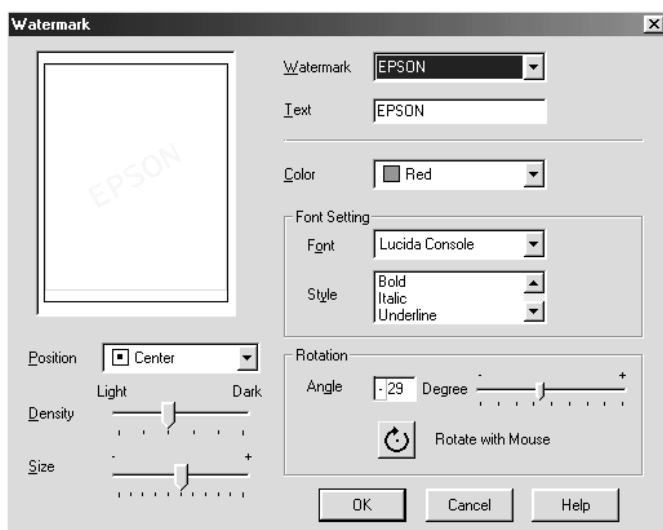
Follow the steps below to finish creating a text-based watermark.

1. Select Text.
2. Type the text for your watermark in the Text box. The text that you enter will also be assigned to the watermark as a watermark name. If you want to change the watermark name, type a new name in the Name box, then click Save.
3. Click OK to return to the Layout menu.

Making settings for your watermark

Follow the steps below to make settings for your watermark.

1. Select the desired Watermark in the Watermark list box on the Layout menu.
2. Click the Settings button. The following dialog box appears.

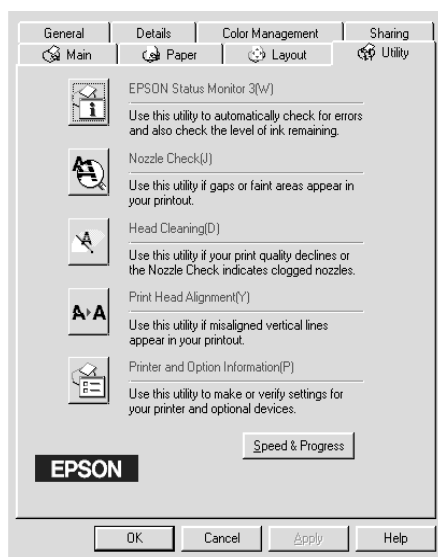


3. Make sure that the appropriate watermark is selected in the Watermark list box, then make Color, Position, Density, Size, Font, Font Style and Angle settings. For details, please see online help. Your settings are reflected in the display at the left side of the dialog box.
4. When you are finished making settings, click OK.

Using the Printer Utilities

The EPSON printer utilities allow you to check the current printer status and to perform some printer maintenance from your computer.

To use the utilities, click the Utility tab in the printer driver, then click the icon button for the utility that you wish to use. For information on how to access the printer software, see “Accessing the printer software” on page 3-2.



Note:

- ❑ *The letter in parentheses after each utility name indicates the shortcut key for that utility. Press Alt and that letter on the keyboard to open the utility.*
- ❑ *Do not use the Nozzle Check, Head Cleaning, and Print Head Alignment utilities if your printer is connected to your computer through a network.*
- ❑ *Do not use the Nozzle Check, Head Cleaning, and Print Head Alignment utilities while printing is in progress; otherwise, your printout may be marred.*

EPSON Status Monitor 3 (not available for Windows 3.1)

EPSON Status Monitor 3 provides you with printer status information such as the amount of ink remaining and checks for printer errors.

This utility is only available when both of the following conditions are met:

- ❑ The printer is connected directly to the host computer via the parallel port or the USB port.
- ❑ Your system is configured to support bidirectional communication.

Nozzle Check

The Nozzle Check utility checks the print head nozzles for clogging. Check the nozzles if you notice that print quality has declined and after cleaning to confirm that the print head nozzles have been cleared. If the nozzle check indicates that the print head needs cleaning, you can access the Head Cleaning utility directly from the Nozzle Check utility. See “Checking the Print Head Nozzles” on page 9-1.

Head Cleaning

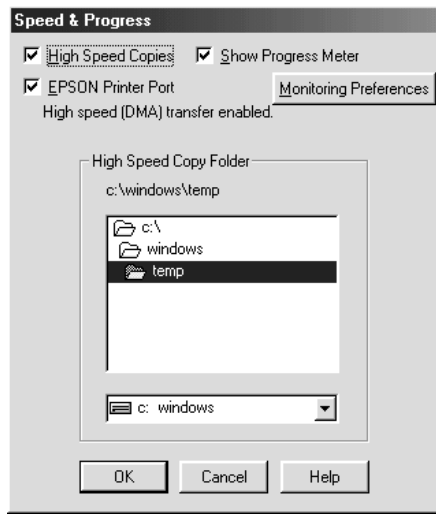
The Head Cleaning utility cleans the print head. You may need to clean the print head when you notice print quality has declined. Use the Nozzle Check utility first to confirm that the print head needs to be cleaned. You can access the Nozzle Check utility directly from the Head Cleaning utility. See “Cleaning the Print Head” on page 9-4 for details.

Print Head Alignment

The Print Head Alignment utility aligns the print head. Use this utility if you notice a misalignment of vertical lines. Follow the on-screen instructions to use this utility.

Speed & Progress (not available for Windows 3.1)

Click the Speed & Progress button to open this dialog box, where you can make settings related to print speed and progress.



The available settings are as follows.

High Speed Copies

To print multiple copies of your document faster, select High Speed Copies.

Show Progress Meter

To monitor the progress of your print job, select Show Progress Meter.

EPSON Printer Port (for Windows 98 and 95 only)

To speed up the data transfer rate to EPSON printers, select EPSON Printer Port.

If your computer supports ECP mode, enable DMA transfer to speed up printing.

For more details, see “Making Speed & Progress settings (not available for Windows 3.1)” on page 3-47.

Note:

You cannot make this setting if your printer is connected via the USB port.

Always Spool RAW Datatype (for Windows 2000 and NT 4.0 only)

To have Windows NT-based clients spool documents using the RAW format instead of the EMF (metafile) format (Windows NT-based applications use the EMF format by default), select the Always Spool RAW Datatype check box.

Try using this feature if documents spooled in EMF format do not print correctly.

Spooling RAW datatype requires less resources than EMF, so some errors, such as “Insufficient Memory /Disk Space to Print” and “Slow print speed”, can be solved by selecting the Always Spool RAW Datatype check box.

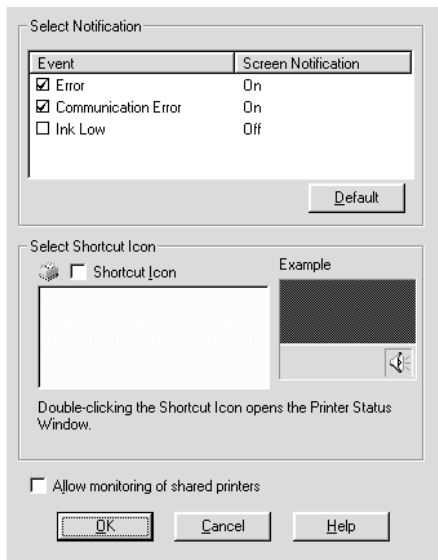
When spooling RAW datatype, print progress as displayed by the Progress Meter may differ from the actual print progress.

Monitoring Preferences

To open the Monitoring Preferences dialog box where you can make settings for EPSON Status Monitor 3, click this button. The settings are described in detail in the next section.

Monitoring Preferences

When you click the Monitoring Preferences button, the following dialog box appears.



The available settings are as follows:

Select Notification	Displays the current error item notification settings. In this area, you can designate whether to have general error messages, communication error messages, or ink status messages displayed during printing, scanning, or copying. Select the check boxes that correspond to the error types for which you wish to receive notification.
Select Shortcut Icon	Select the Shortcut Icon check box to have a shortcut icon placed in your Windows taskbar. Clicking the shortcut icon in the taskbar will open EPSON Status Monitor 3. To select which icon will be displayed, click the icon your prefer from the choices given; your selection will be shown at the right.

Allow monitoring of shared printers	Select this check box to allow a shared printer to be monitored by other computers.
--------------------------------------------	-------------------------------------------------------------------------------------

Note:

Click the Default button to return all Select Notification settings to their default settings.

Getting Information Through Online Help

Your printer software has an extensive online help feature, which provides you with instructions on printing, making printer driver settings, and using the printer utilities. In Windows 98, 95, 2000, and NT 4.0, you can access online help from an application or from the Windows Start menu. In Windows 3.1, you can access online help through the EPSON program group. Refer to the appropriate section below.

Accessing help from an application

To access help from an application, open the application's File menu and choose Print or Print Setup. Then click Printer, Setup, Options, or Properties. (Depending on the application, you may need to click a combination of these buttons.) Click Help at the bottom of the Main, Paper, Layout, and Utility menu for help related to that menu.

For Windows 98, 95, 2000, and NT 4.0, you can get specific help related to any item on a menu by right-clicking the item, then clicking the What's This? command in the shortcut menu that appears. The help contents window opens.

Accessing help from the Windows Start menu

To access help from the Start menu, click the Start button, point to Programs and then to Epson (for Windows 98 and 95) or EPSON Printers (for Windows 2000 and NT 4.0), then click EPSON Stylus COLOR 980 Help. The help contents window opens.

Accessing help from Windows 3.1

To access help in Windows 3.1, open the EPSON program group and click the EPSON Stylus COLOR 980 Help icon. The help contents window opens.

Increasing the Print Speed

Follow the instructions in this section to increase the printing speed of your printer.

General tips

Just as printing at a high resolution requires more processing time than printing at a low resolution, printing in color takes longer than printing in black because the volume of data in a color document is much greater. For this reason, it is important to be selective in your use of color if you also require a fast print speed.

However, even if your document requires the highest resolution and extensive use of color—for example, when you are printing a camera-ready composite that includes color photographs—it may still be possible to optimize the print speed by adjusting other printing conditions. Keep in mind that changing some conditions to increase the print speed may also lower print quality.

The following table shows the factors that inversely affect print speed and print quality (increasing one will decrease the other).

Print quality Print speed		Lower Faster	Higher Slower	Printer driver menu
Printer driver settings	Print Quality	Economy, Normal	Photo	Advanced dialog box
	High Speed	On	Off	
	Finest Detail	Off	On	
Data characteristics	Image size	Small	Large	-
	Resolution	Low	High	

The table below shows the factors related to print speed only.

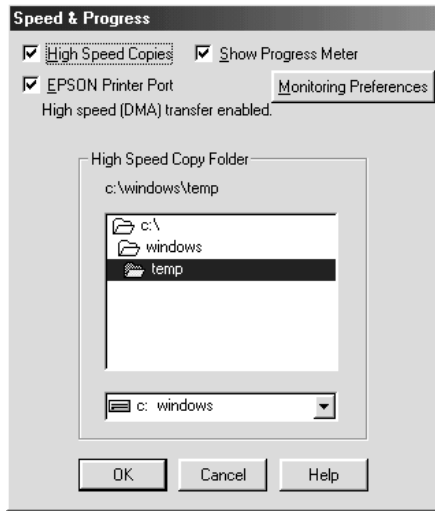
Print speed		Faster	Slower	Printer driver menu
Printer driver settings	Ink	Black	Color	Advanced dialog box, Main menu
	Flip Horizontal*	Off	On	Advanced dialog box
	Collate*	Off	On	Paper menu
	Reverse Order*	Off	On	
Data characteristics	Variety of colors	Grayscale**	Full color	-
Hardware resources	System speed	Faster	Slower	-
	HDD free space	Large	Small	
	Memory free space	Large	Small	
Software status	Applications running	One	Many	-
	Virtual memory	Not in use	In use	

* Varies depending on the printer driver and application that you are using.

** Grayscale means using black ink only to print varying shades of gray, from pure black to pure white.

Making Speed & Progress settings (not available for Windows 3.1)

You can make certain print speed settings in the Speed & Progress dialog box. Click the Speed & Progress button on your printer software's Utility menu. The following dialog box appears.



The following settings are available in the Speed & Progress dialog box.

High Speed Copies

Select this check box to turn on high-speed printing for multiple copies. This speeds up printing by using your hard disk space as a cache when printing multiple copies of your document.

EPSON Printer Port (for Windows 98 and 95 only)

Select this check box to enable the EPSON printer port, which is optimized for EPSON printers, instead of the Windows default printer port. This speeds up the data transfer rate to EPSON printers.

Note:

This setting is unavailable when your printer is connected via the USB port.

Use DMA transfer (for Windows 98 and 95 only)

If your computer has a parallel port which supports ECP mode, you can enable DMA transfer to speed up printing. See your computer manual to determine if it supports ECP mode and DMA transfer.

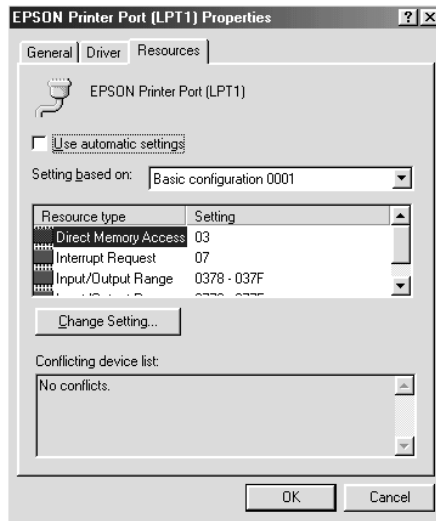
To determine whether you need to enable DMA transfer, compare the message below the EPSON Printer Port check box to this table, and take the recommended action.

Message	Action
High Speed (DMA) Transfer enabled.	DMA transfer is already enabled. Click OK to close the dialog box.
For higher data transfer rates, use DMA Transfer.	Follow the steps below this table to enable DMA transfer.
(No message)	Your system's parallel port setting does not allow DMA transfer. However, if you change the parallel port setting to ECP or Enhanced using your computer's BIOS Setup program, you may be able to use DMA transfer. Consult your computer manual or computer manufacturer for instructions. Once you change the parallel port setting, follow the steps below this table to enable DMA transfer. Note: Before you run the BIOS Setup program, uninstall the printer driver using Add/Remove Programs in the Control Panel. After running the BIOS Setup program, reinstall the printer driver.

To enable DMA transfer, follow the steps below.

1. Double-click the My Computer icon on your desktop, then double-click the Control Panel icon.

2. Double-click the System icon, then click the Device Manager tab.
3. Double-click the Ports (COM & LPT) icon and then LPT1. If you have connected your printer to a port other than LPT1, double-click the appropriate port icon.
4. Click the Resources tab, then clear the Use automatic settings check box. Write down the Input/Output Range settings shown in the resource settings box.



5. Select a basic configuration setting from the Setting based on list that uses the same Input/Output Range settings as those you wrote down in Step 4, and make sure that the Direct Memory Access channel and Interrupt Request numbers are allocated and displayed. Confirm also that the Conflicting device list box shows No conflicts.
6. Click OK to save the settings.
7. Reopen the Speed & Progress dialog box to confirm that DMA transfer has been enabled.

Note:

You may be unable to use DMA transfer on some computers even after you make the settings described above. Consult your computer maker for information on the DMA transfer capabilities of your computer.

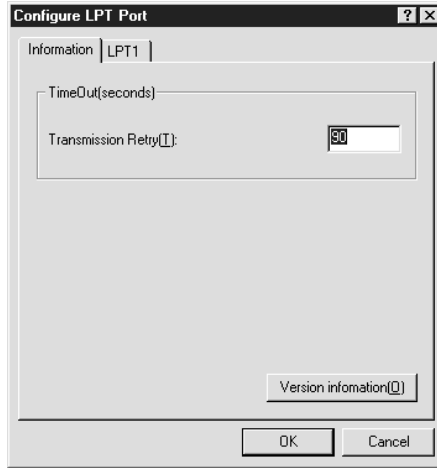
Making Configure LPT Port settings (for Windows NT 4.0 only)

Note:

Port settings for Windows NT 4.0 are complicated and should only be made by an experienced user with administrative privileges.

If your computer has a parallel port that supports ECP mode, you can make certain print speed settings in the Configure LPT Port dialog box. Before making settings, make sure that ECP mode has been selected in your computer settings. For details about ECP mode, see your computer manual.

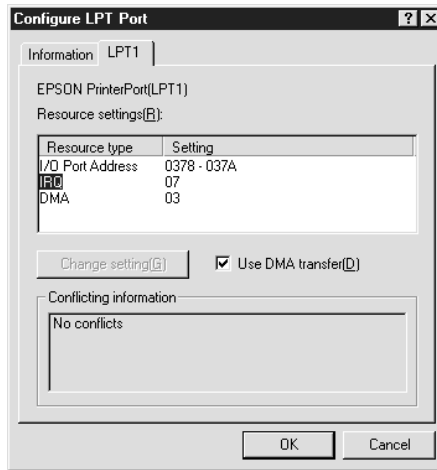
To access the Configure LPT Port dialog box, click the Start button, point to Settings, then click Printers. Select your printer and click Properties on the File menu. The printer driver opens. Click the Ports tab and then Configure Port. The following dialog box appears.



Click the LPT port tab for the port to which your printer is connected, then click the Change setting button.

Note:

If your printer is connected to LPT1, only the LPT1 tab is available.



It is possible to make resource settings and enable DMA transfer in the Configure LPT Port dialog box. Refer to the appropriate section below.

Resource settings (IRQ and DMA)

If you have connected your printer to LPT2 or LPT3, making IRQ and DMA settings here may speed up printing. Input the same configuration numbers for IRQ and DMA which you have made for your expansion board. See your computer documentation to determine the settings for IRQ and DMA.

Use DMA Transfer

Using DMA transfer to send print data to the computer may help you speed up printing. If the Use DMA Transfer check box is not available, you must first enable DMA transfer in your computer settings. For details, see your computer documentation.

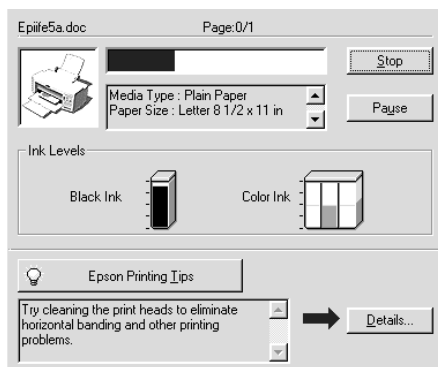
Chapter 4

Checking Printer Status and Managing Print Jobs for Windows

Using the Progress Meter	4-1
Viewing printing tips	4-2
Viewing error messages	4-3
Using EPSON Spool Manager	4-3
Using EPSON Status Monitor 3	4-4
Accessing EPSON Status Monitor 3	4-4
Viewing information in EPSON Status Monitor 3	4-5

Using the Progress Meter

When you send a print job to the printer, the Progress Meter opens, as shown in the illustration below.



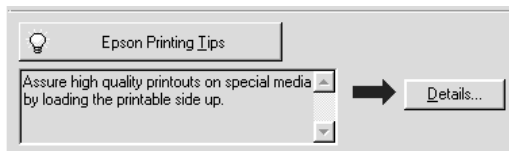
The Progress Meter indicates the progress of the current print job and provides printer status information when bidirectional communication between the printer and computer is established. This meter also displays error messages and helpful tips for better printing, as explained below.

Note:

The Progress Meter does not appear when the Show Progress Meter check box is cleared in the Speed & Progress dialog box. See “Speed & Progress (not available for Windows 3.1)” on page 3-40 for more information.

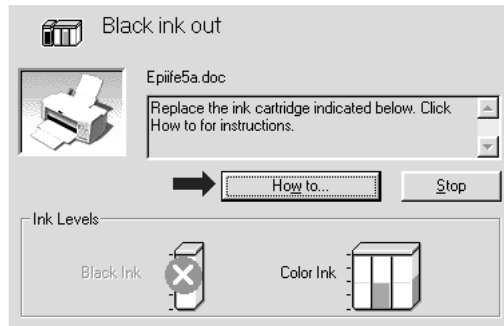
Viewing printing tips

Tips for getting the most out of your EPSON printer driver appear in the text box at the bottom of the Progress Meter window. A new tip appears every 30 seconds. For more details on a tip, click the Details button while that tip is displayed.



Viewing error messages

If a problem occurs during printing, an error message appears in the text box at the top of the Progress Meter window. When the ink runs low or out, a How To button appears below the text box. Click How To and EPSON Status Monitor 3 will lead you step-by-step through the cartridge replacement procedure.



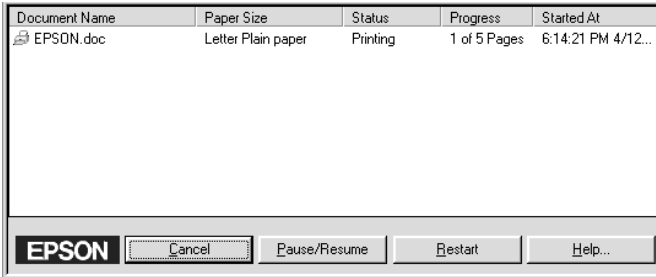
Using EPSON Spool Manager

EPSON Spool Manager is similar to Windows Print Manager. If it receives two or more print jobs at one time, it holds them in the order that they were received (with printers on a network this may be called a print queue). When a print job reaches the top of the line, the EPSON Spool Manager sends the job to the printer.

Note:

EPSON Spool Manager is not available for Windows NT.

After you send a print job, an EPSON Stylus COLOR 980 button appears on the taskbar. Click this button to open the EPSON Spool Manager, where you can view print status information about the print jobs that have been sent to the printer. You can also cancel, pause and resume, or restart a print job by selecting it in the list and clicking the appropriate button.



Using EPSON Status Monitor 3

EPSON Status Monitor 3 displays detailed printer status information.

Note:

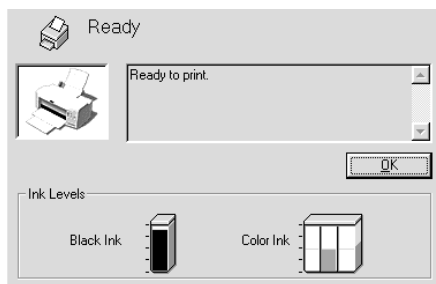
Before using EPSON Status Monitor 3, be sure to read its README file. To open this file, click Start, point to Programs and then to EPSON or EPSON Printers, then click EPSON Stylus COLOR 980 Readme.

Accessing EPSON Status Monitor 3

The two ways to access EPSON Status Monitor 3 are as follows:

- ❑ Double-click the printer-shaped shortcut icon on the Windows taskbar. To add a shortcut icon to the taskbar, see “Monitoring Preferences” on page 3-42.
- ❑ Open the printer driver, click the Utility tab, then click the EPSON Status Monitor 3 button.

When you access EPSON Status Monitor 3, the following window is displayed.



Viewing information in EPSON Status Monitor 3

EPSON Status Monitor 3 provides the following information:

- ❑ **Current Status**

EPSON Status Monitor 3 provides you with detailed printer status information, a graphic display of the printer, and status messages. If the ink runs low or out, a How to button appears in the EPSON Status Monitor 3 window. Click the How to button to display cartridge replacement instructions and to move the print head to the cartridge replacement position.
- ❑ **Ink Levels**

EPSON Status Monitor 3 provides a graphic display of the amount of ink remaining.

Chapter 5

Using the Printer Software for Macintosh

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Printer Software Introduction

The printer software that comes with your printer includes a printer driver and printer utilities. The printer driver lets you choose from a wide variety of settings to get the best results from your printer. The printer utilities help you check the printer and keep it in top operating condition.




For information on using the printer driver, see “Making Changes to Printer Settings” on page 5-2.

For information on using the printer utilities, see “Using the Printer Utilities” on page 5-32.

You can also get more information about the printer software by clicking the help icon in any of the dialog boxes in the printer driver.

Making Changes to Printer Settings

You will find the printer driver settings in the following dialog boxes.

- ❑ Print dialog box (click Print on the File menu of your application or click Options in the Page Setup dialog box)
- ❑ Background Printing dialog box (click the  Background Printing icon button located in the Print dialog box)
- ❑ Page Setup dialog box (click Page Setup on the File menu of your application)
- ❑ Layout dialog box (click the  Layout icon button in the Print dialog box)
- ❑ Preview dialog box (click the  Preview icon button in the Print dialog box and then click Preview)

The Mode settings in the Print dialog box are arranged to give you three levels of control over the printer driver.

The Mode settings are explained below.

Automatic	This mode provides the quickest and easiest way to start printing. See "Using the Automatic mode" on page 5-7 for details.
PhotoEnhance	This mode lets you choose from a variety of image-correction settings specially designed for photos. See "Using the PhotoEnhance mode" on page 5-7.
Custom	This mode lets you choose from a list of ready-made or personalized settings suited to the kind of document that you want to print. When Custom is selected, the Advanced button is enabled, allowing you to access the Advanced dialog box. See "Using the Custom mode" on page 5-9.

In addition to making comprehensive Mode settings that affect overall print quality, you can also modify individual aspects of your printout using the settings contained in the Page Setup and the Layout dialog boxes. For information on making page setup settings, see "Making the Page Setup settings" on page 5-12. For information on making page layout settings, see "Modifying the Page Layout" on page 5-22.

Making the Media Type setting

The Media Type setting determines what other settings are available, so you should always make this setting first.

In the Print dialog box, select the Media Type setting that matches the paper that is loaded in the printer. To find out what Media Type you are using, find your media in the list below “Media types” on page 11-4, and refer to the corresponding media type under which it is grouped (shown in larger type). For some types of media, there are several Media Type settings to choose from.

Plain Paper

Plain paper

Envelopes

EPSON Premium Ink Jet Plain Paper (A4) S041214

360 dpi Ink Jet Paper

EPSON 360 dpi Ink Jet Paper (A4) S041059
S041025

EPSON 360 dpi Ink Jet Paper (Letter) S041060
S041028

EPSON Iron-On Cool Peel Transfer Paper (A4) S041154

EPSON Iron-On Cool Peel Transfer Paper (Letter) S041153
S041155

Photo Quality Ink Jet Paper

EPSON Photo Quality Ink Jet Paper (A4)	S041061 S041026
EPSON Photo Quality Ink Jet Paper (Letter)	S041062 S041029
EPSON Photo Quality Ink Jet Paper (Legal)	S041067 S041048
EPSON Photo Quality Ink Jet Cards (A6)	S041054
EPSON Photo Quality Ink Jet Cards (5 × 8")	S041121
EPSON Photo Quality Ink Jet Cards (8 × 10")	S041122
EPSON Photo Quality Self Adhesive Sheets (A4)	S041106
EPSON Ink Jet Note Cards A6 (with envelopes)	S041147
EPSON Ink Jet Greeting Cards 5 × 8" (with envelopes)	S041148
EPSON Ink Jet Greeting Cards 8 × 10" (with envelopes)	S041149

Matte Paper-Heavyweight

EPSON Matte Paper-Heavyweight (A4)	S041256 S041258 S041259
EPSON Matte Paper-Heavyweight (Letter)	S041257

Photo Paper

EPSON Photo Paper (A4)	S041140
EPSON Photo Paper (Letter)	S041141
EPSON Photo Paper (4 × 6")	S041134
EPSON Photo Paper (100 × 150 mm)	S041255
EPSON Photo Paper (200 × 300 mm)	S041254
EPSON Panoramic Photo Paper (210 × 594 mm)	S041145
EPSON Photo Paper Cards (A4)	S041177

Photo Quality Glossy Film

EPSON Photo Quality Glossy Film (A4)	S041071
EPSON Photo Quality Glossy Film (Letter)	S041072
EPSON Photo Quality Glossy Film (A6)	S041107
EPSON Photo Stickers 16 (A6)	S041144
EPSON Photo Stickers 4 (A6)	S041176

Ink Jet Transparencies

EPSON Ink Jet Transparencies (A4)	S041063
EPSON Ink Jet Transparencies (Letter)	S041064

Premium Glossy Photo Paper

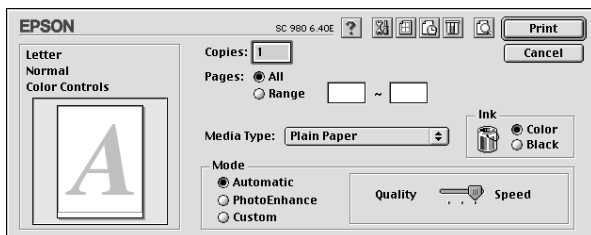
EPSON Premium Glossy Photo Paper (A4)	S041287 S041297
EPSON Premium Glossy Photo Paper (Letter)	S041286

Note:

The availability of special media varies by location.

Using the Automatic mode

When Automatic is selected as the Mode setting in the Print dialog box, the printer driver takes care of all detailed settings based on the current Media Type and Ink settings. To make the Ink setting, click Color to print in color, or Black to print in black-and-white or grayscale. To make the Media Type setting, see “Making the Media Type setting” on page 5-3.

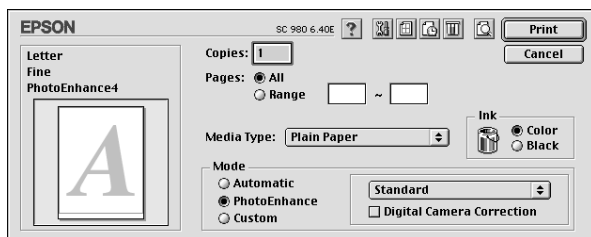


Note:

Depending on the media that you select in the Media Type list (while Automatic is selected), a slider appears to the right of the Mode options that lets you choose Quality or Speed. Select Quality when print quality is more important than speed.

Using the PhotoEnhance mode

The Photo Enhance mode provides a variety of image-correction settings that you can apply to your photos before printing. PhotoEnhance does not affect your original data.



Note:

- ❑ *This mode is only available when printing 16-, 24-, or 32-bit color data.*

- ❑ *Printing with PhotoEnhance selected may increase the time required for printing, depending on your computer system and the amount of data contained in your image.*

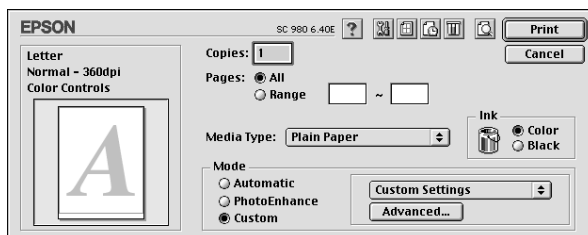
You can select from the following settings.

Standard	This setting provides standard image correction for most photos. Try this first.
People	This setting is best for photos of people.
Nature	This setting is best for outdoor scenery such as mountains, sky, and oceans.
Soft Focus	This setting makes your photos look as if they were taken with a soft-focus lens.
Sepia	This setting applies a sepia tone to your photos.

If you are printing photos taken with a digital camera, you can also select the Digital Camera Correction check box to give your printed images the smooth, natural appearance of photographs taken with a film camera.

Using the Custom mode

The Custom mode offers ready-made settings designed for printing text and graphs and for applying a color-matching method. You can also create and save your own custom settings. Refer to the appropriate section below.



You can select from the following ready-made settings.

Text/Graph	This setting is good for printing presentation documents such as graphs and charts.
Economy	This setting is best for printing drafts of text.
ColorSync	This setting automatically adjusts printout colors to match colors on your screen.

When you select a Custom setting, other settings such as Print Quality, Halftoning, and Color Management are made automatically. Changes to these settings are reflected in the display at the left side of the Print dialog box.

Follow the steps below to select a Custom setting.

1. Confirm that the Media Type and Ink settings in the Print dialog box are correct. For details, see “Making the Media Type setting” on page 5-3.
2. Select Custom as the Mode setting in the Print dialog box. This enables the Custom Settings list, located to the right of the Custom radio button.

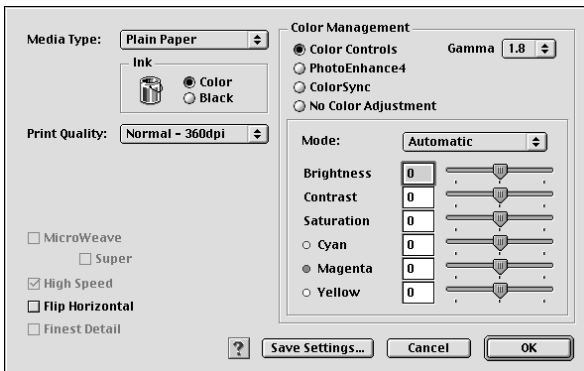
3. From the Custom Settings list, select the most appropriate setting for the type of document or image that you will print.

Making the Advanced settings

The settings in the Advanced dialog box give you complete control over your printing environment. Use these settings to experiment with new printing ideas, or to fine-tune a range of print settings to meet your individual needs. Once you are satisfied with your new settings, you can give them a name and add them to the Custom Settings list.

Follow the instructions below to make Advanced settings.

1. Select Custom as the Mode setting in the Print dialog box, then click the Advanced button. The Advanced dialog box opens.



2. Select the Media Type that is loaded in the printer. For details, see “Making the Media Type setting” on page 5-3.
3. Choose Color or Black as the Ink setting.
4. Select the Print Quality setting.
5. Make other settings as necessary. For details, see online help.

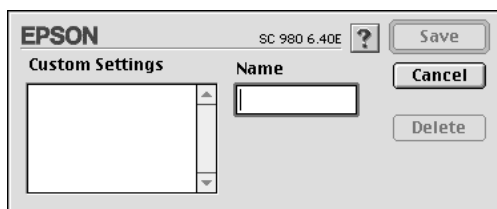
Note:

- ❑ *The PhotoEnhance feature only affects images, not text or graphs. For example, if Monochrome is selected in the Tone list (enabled when PhotoEnhance is selected as the Color Management setting), only the images in a document will be printed in monochrome. Any colored text or graphs in the same document will be printed in color.*

 - ❑ *Some settings may be unavailable depending on the Print Quality, Media Type, and Ink settings that you make.*
6. Click OK to apply your settings and return to the Print dialog box. Click Cancel to return to the Print dialog box without applying your settings. To save your Advanced settings, see the next section.

Saving and deleting your Advanced settings

To save your Advanced settings in the Custom Settings list, click Save Settings in the Advanced dialog box. The Custom Settings dialog box appears.



Type a unique name (up to 16 characters) for your settings in the Name box, then click Save. Your Advanced settings will be added to the Custom Settings list. You can save up to 10 different custom settings.

Note:

- ❑ *You cannot apply the names of EPSON ready-made settings to your custom settings.*

- ❑ *You cannot delete the ready-made settings from the Custom Settings list.*

To delete a setting from the Custom Settings list, select it in the Custom Settings dialog box and click **Delete**.

Using your saved settings

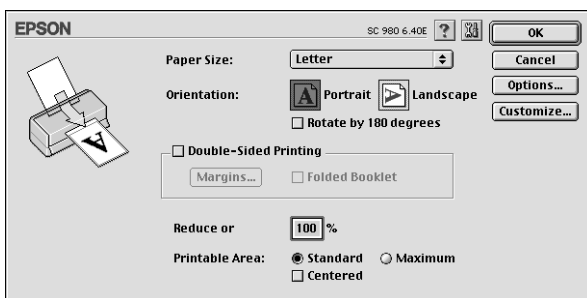
To use your saved settings, select **Custom** as the Mode setting in the Print dialog box, then select your setting in the Custom Settings list, located to the right of the Custom radio button.

If you change the Media Type or Ink settings while one of your customized settings is selected in the Custom Settings list, the selection shown in the list returns to Custom Settings. The customized setting that was previously selected is not affected by the change. To return to your customized setting, simply reselect it in the list.

Making the Page Setup settings

In the Page Setup dialog box, you can change the paper size, specify the paper orientation, choose to print on both sides of the paper, reduce or enlarge your printout, and adjust the printable area.

To open the Page Setup dialog box, select **Page Setup** from the File menu of your application. The following dialog box appears.



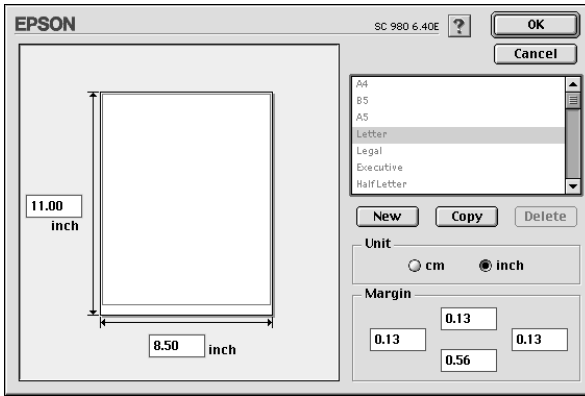
You can make the following settings in the Page Setup dialog box.

Paper Size	Select the paper size that you want to use. If you want to define a custom paper size, see "Defining a custom paper size" on page 5-13.
Orientation	Select Portrait (tall) or Landscape (wide) to change the orientation of your printout. If you need to print close to the bottom of the page, select the Rotate by 180 degrees check box.
Double-Sided Printing	Select the Double-Sided check box to print on both sides of the paper. Select the Folded Booklet check box to make single-fold booklets. For details, see "Printing on both sides of the paper" on page 5-15.
Reduce or Enlarge	Use this setting to reduce or enlarge the size of your image, from 25% to 400%.
Printable Area	Select Centered to center the printout. Select Maximum to increase the printable area. Note: When Maximum is selected, the print quality may decline at the edges of the printout. Before printing large jobs using this setting, print a single sheet to confirm quality. When Maximum is selected, make sure that the paper loaded in the sheet feeder is not curled.

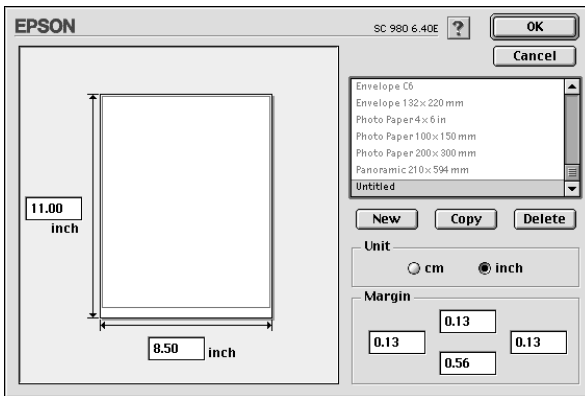
Defining a custom paper size

If the appropriate paper size is not included in the Paper Size list in the Page Setup dialog box, follow the steps below to define a custom paper size.

1. In the Page Setup dialog box, click **Customize**. The following dialog box appears.



2. Click **New**. The dialog box updates to allow you to enter a name for the new size.



3. Type a unique name for the paper size in the paper size list.
4. Specify the measurement unit as either inch or cm.
5. Enter the width and the height of your paper.

6. Specify the margins in the Margin text boxes or by dragging the cursor on the preview image.
7. Click OK to return to the Page Setup dialog box.

You can define up to 100 paper sizes. The paper size names that you create will appear in the Paper Size list in the Page Setup dialog box.

To delete a custom paper size, click Customize in the Page Setup dialog box, select the paper size that you wish to delete from the list in the Custom Paper dialog box, and click Delete.

Copying a paper size

Follow the steps below to copy a paper size and use it as a template for a new paper size.

1. Select an existing paper size that you wish to copy, and click Copy.
2. Specify the measurement unit as either inch or cm.
3. Specify the margins in the Margin text boxes or by dragging the cursor on the preview image.
4. Click OK to return to the Page Setup dialog box.

Printing on both sides of the paper

The EPSON Stylus COLOR 980 allows double-sided printing. There are two types of double-sided printing available. Standard double-sided printing allows you to print the odd-numbered pages first. Once these are printed, you can reload the printouts in the sheet feeder and print the even-numbered pages on the other side of the paper. Folded Booklet double-sided printing allows you to make single-fold booklets. Refer to the appropriate section below.

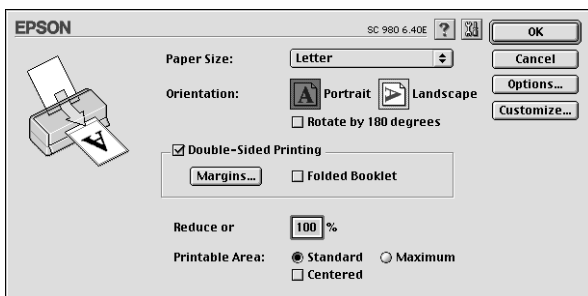
Note:

- ❑ You can load up to 30 sheets of paper at one time when double-sided printing; however, the loading capacity of the sheet feeder varies, depending on the media type.
- ❑ Only use media types which are suitable for double-sided printing. Otherwise, the printout quality may deteriorate.
- ❑ Depending on the type of paper and the amount of ink used to print text and images, ink may bleed through to the other side of the paper.

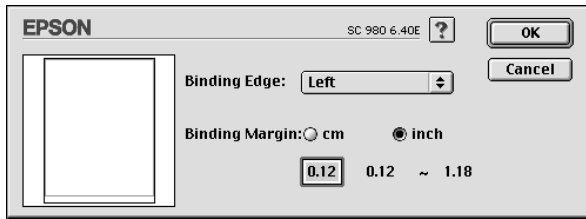
Standard double-sided printing

Follow the steps below to print first the odd-numbered pages, and then the even-numbered pages after you have reloaded the printouts.

1. Select the Double-Sided Printing check box in the Page Setup dialog box. For information on accessing the Page Setup dialog box, see “Making Changes to Printer Settings” on page 5-2.



2. Click the Margins button. The following dialog box opens



3. Specify which edge of the paper the binding will be on. You can choose between Left, Top, and Right.
4. Specify the width of the binding margin by entering a value in the Binding Margin text box. You can specify a value between 3 mm and 30 mm.

Note:

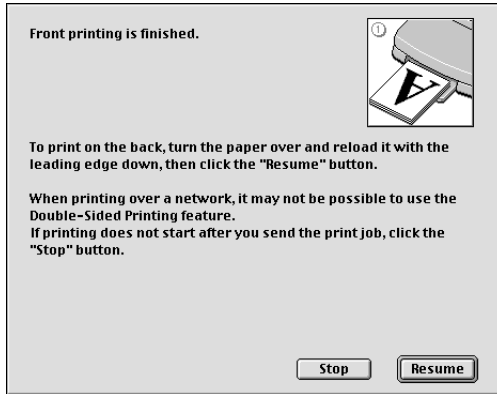
The actual binding margin may vary, depending on your application. Experiment by printing a few sheets using different binding margin values before printing the entire job; otherwise, the results may differ from what you expect.

5. Click OK to return to the Page Setup dialog box, then click OK to save your settings.
6. Load paper in the sheet feeder, then send the print job from your application. While the printer is printing the odd-numbered pages, instructions are displayed which explain how to reload the paper correctly.
7. Follow the instructions to reload the paper, or reload the paper as shown in the illustration below.

Note:

- ❑ *The paper may curl during printing, depending on the amount of ink used to print text and images. Flatten it or curl it slightly toward the opposite side before printing on the other side of the paper.*

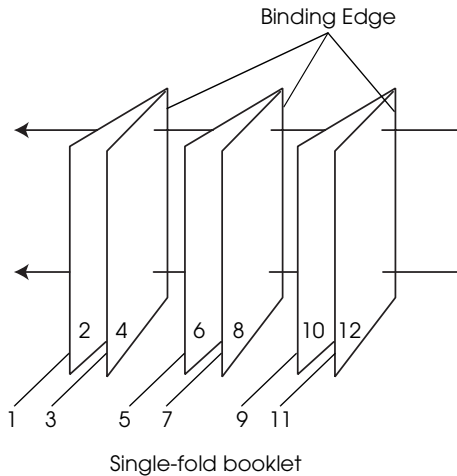
- ❑ *Tap the stack of paper on a flat surface to align the edges before reloading it.*
- ❑ *Reload the printouts as instructed; otherwise, the paper may jam or the binding margin may differ from what you expect.*
- ❑ *If the paper jams, see “Paper Does Not Feed Correctly” on page 10-23.*



8. Once the paper is reloaded, click Resume to print the even-numbered pages.

Folded Booklet double-sided printing

You can also make single-fold booklets using the double-sided printing feature. When booklet printing, the printer first prints the pages which will be on the outside after you fold the paper, and then prints the inside pages after you reload the paper, as shown in the illustration below.



In this example, the printer would print pages 1 and 4 of your document on the first sheet of paper, pages 5 and 8 on the second sheet of paper, and pages 9 and 12 on the third sheet of paper. After you reload the printouts in the sheet feeder, the printer would then print pages 2 and 3 on the back of the first sheet of paper, pages 6 and 7 on the back of the second sheet of paper, and 10 and 11 on the back of the third sheet of paper. After printing is finished, you can fold each sheet of paper and bind them together.

Follow the steps below to print booklets.

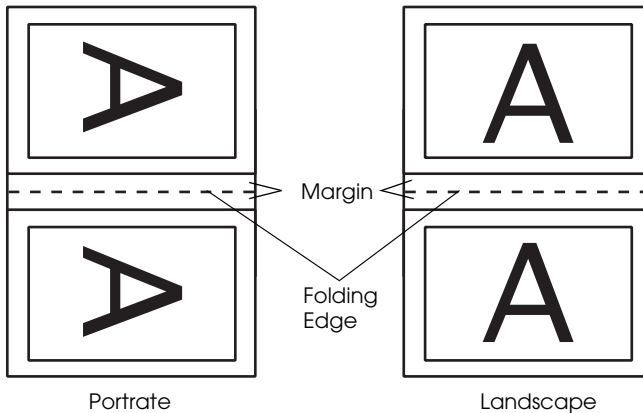
1. Select the Double-Sided Printing check box in the Page Setup dialog box, then select the Folded Booklet check box.
2. Click the Margins button. The Margins dialog box opens.

- Specify which edge of the paper the binding will be on. You can choose between Left, Top, and Right.

Note:

While Portrait is selected as the Orientation setting in the printer driver, you can choose between Left and Right. While Landscape is selected, you can only select Top.

- Specify the width of the binding margin by entering a value in the Binding Margin text box. You can specify a value between 3 mm and 30 mm. This margin width will be inserted on both sides of the fold. For example, if you specify a value of 10 mm, a 20-mm margin will be inserted, with 10 mm on each side of the fold.




- Click OK to return to the Page Setup dialog box, then click OK to save your settings.
- Load paper in the sheet feeder, then send the print job from your application.

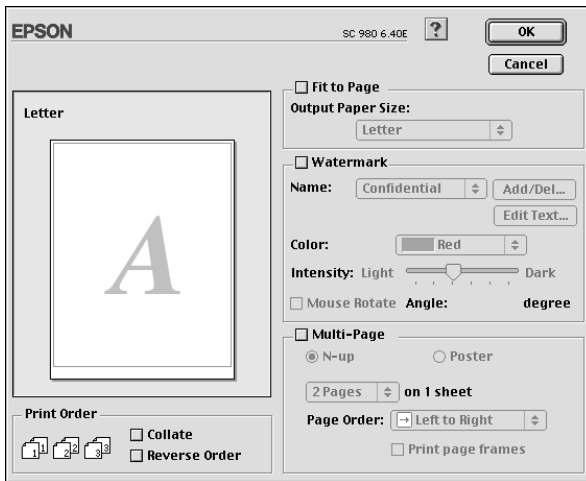
7. While the printer is printing the outside pages, instructions are displayed which explain how to reload the paper correctly. Follow the on-screen instructions to reload the paper, or reload the paper as shown in the illustration in the previous section, "Standard double-sided printing" on page 5-16.

Note:

- ❑ *The paper may curl during printing, depending on the amount of ink used to print text and images. Flatten it or curl it slightly toward the opposite side before printing on the other side of the paper.*
 - ❑ *Tap the stack of paper on a flat surface to align the edges before reloading it.*
 - ❑ *Reload the printouts as instructed; otherwise, the paper may jam or the binding margin may differ from what you expect.*
 - ❑ *If the paper jams, see "Paper Does Not Feed Correctly" on page 10-23.*
8. Once the paper is reloaded, click Resume to print the inside pages.
 9. Once printing is complete, fold the printouts properly and bind them together using a stapler or other binding method.

Modifying the Page Layout

You can modify the page layout of your document using the settings found in the Layout dialog box. To open this dialog box, click Print on the File menu of your application, then click the  Layout icon button in the Print dialog box. The Layout dialog box appears.



The Layout dialog box allows you to automatically match the document size to the paper size, place watermarks on documents, print two or four pages on a single sheet of paper, print poster-size images by enlarging one page to cover several sheets, or set the order in which you would like the pages of your document to print.

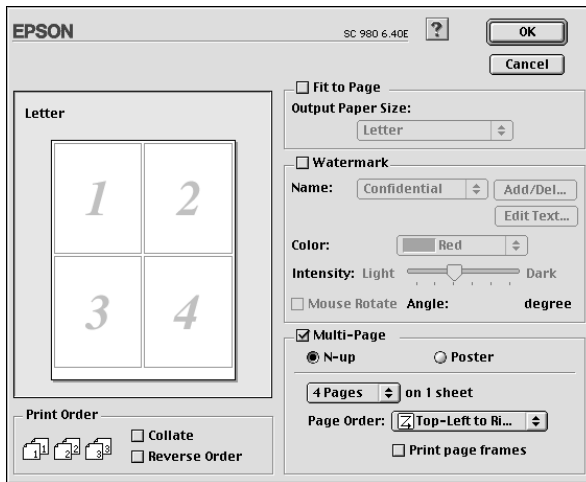
You can also specify the printing order for your print job. When printing multiple copies of your document, select **Collate** to print one complete document set at a time. Select **Reverse Order** to print your document in reverse order, starting with the last page.

Fitting your document to the paper size

You can proportionally enlarge or reduce the size of the image to make it fit a specified paper size. To do this, load paper of the correct size, select the Fit to Page check box, then specify the appropriate paper size in the Paper Size list.

Printing two or four pages on one sheet

To print two or four pages of your document on one sheet of paper, select the Multi-Page check box in the Page Layout dialog box, then click N-up.

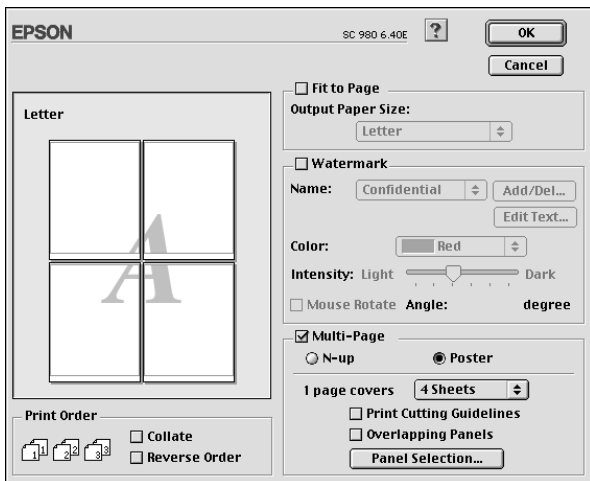


You can choose from the following settings.

2 Pages 4 Pages	Prints two or four pages of your document on a single piece of paper.
Page Order	Allows you to specify the order in which the pages will be printed on the sheet of paper.
Print page frames	Allows you to print a frame around each page on the sheet of paper.

Printing posters

A single document page can be enlarged to cover 4, 9, or 16 printed sheets of paper. To print a poster-size image, select the Multi-Page check box in the Page Layout dialog box, then click Poster.



You can make the following settings.

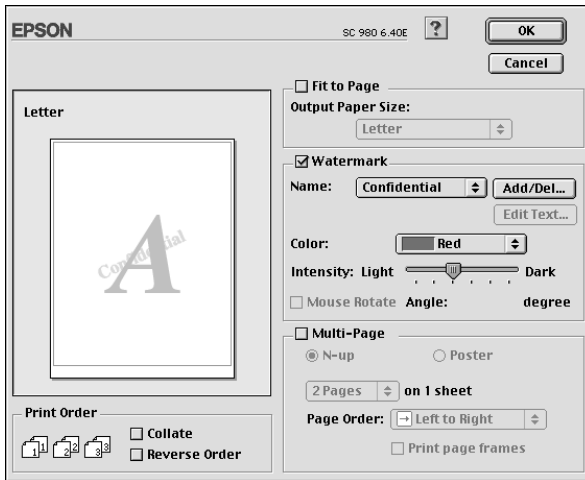
1 page covers xx sheets	Specifies how many printed sheets of paper the enlarged document page is to cover. You can select 4, 9, or 16 pages.
Print Cutting Guidelines	Prints border lines on the images to guide you when trimming the pages.
Overlapping Panels	Slightly overlaps the images so that they can be aligned more precisely.

If you only want to print a few of the panels without printing the entire poster, click **Panel Selection**, then click the panels that you do not wish to print, and then click **OK**. Only the panels that you did not click will be printed.

Printing a watermark on your document

To print a watermark in the background of your document, select the Watermark check box in the Page Layout dialog box.

Select the watermark that you wish to print from the Name list, then specify its position, size, color, and intensity. You can change the position and size of the watermark by dragging it with your mouse in the preview window at the left side of the dialog box.

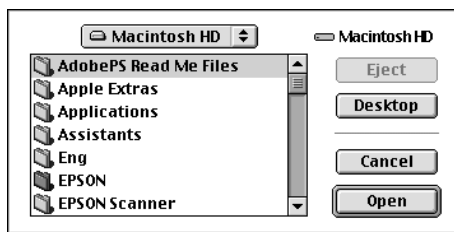


You can also add your own text-based or image-based watermarks to the Name list. Follow the steps below.

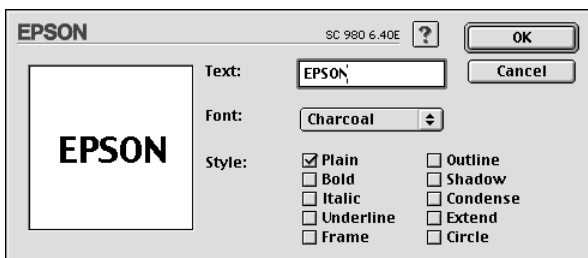
1. Click the Add/Del button beside the Name list. The following dialog box appears.



2. To use an image file as a watermark, click the Add PICT button. Specify the desired image file, then click Open.



To create a text-based watermark, click the Add Text button. Type the text in the Text box, select a font and a text style, then click OK.



3. The image file name or the watermark text appears in the Mark Name list in the Watermark dialog box. To change the name of an image watermark, select it in the list, then type a new name. When a text watermark is selected in the Name list, you can edit the text and change the font and text style by clicking the Edit Text button.

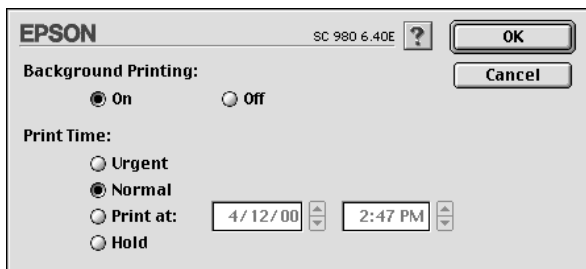


4. Click OK to add your watermark to the Name list in the Page Layout dialog box.

Making the Print Time setting

You can specify the priority of a printout or set the time that you want the printer to begin printing your document. Follow the steps below.

1. Click the  Background Printing icon button in the Print dialog box. The Background Printing dialog box opens.



2. Select On as the Background Printing setting.
3. Select Urgent, Normal, Print at, or Hold as the Print Time setting.

If you select Print at, use the arrows beside the date and time boxes to specify the date and time that you want the document to be printed.

Note:

Make sure that the computer and printer are turned on at the date and time specified.


4. Click OK. The Background Printing dialog box closes.
5. In the Print dialog box, make sure that your print settings are as you want them, then click Print.

Note:

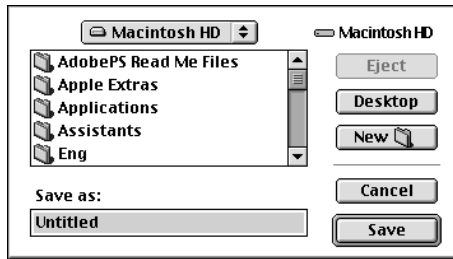
You can check or change the priority of print jobs using the EPSON Monitor3 utility. See "Using EPSON Monitor3" on page 6-4 for details.


Saving spool data as a file

You can save the spool data as a file by using the Save File feature in the Print dialog box. This feature lets you print the file at a later time using the saved spool data, simply by double-clicking the saved file. Follow the steps below to save spool data for files and to print files using saved spool data.

1. Make your printer driver settings.
2. Click the  Preview icon button in the Print dialog box repeatedly until the Print button changes into the Save File button.


3. Click the Save File button. The following dialog box appears.







4. Browse for the location where you want to save the file, then type a file name in the Save As text box and click Save. The print settings are now saved for this file.
5. When you want to print the document, double-click the file to open EPSON Monitor 3, make sure that the correct document is selected, then click the  Resume button to send the data to the printer.

Previewing your printout

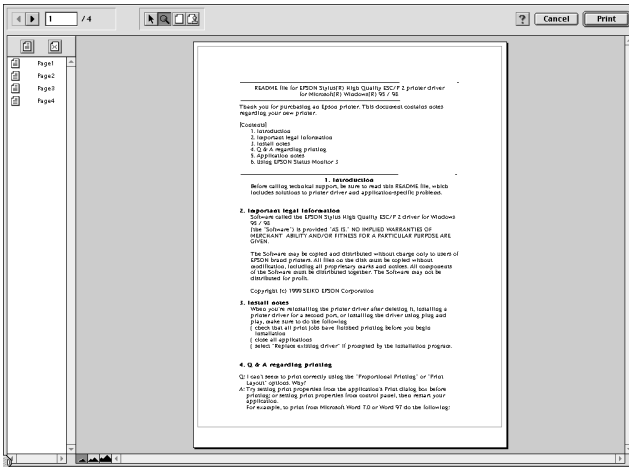
The Preview feature allows you to see how your document will look before actually printing it. Follow the steps below to preview your document.

1. Make your printer driver settings.
2. Click the  Preview icon button in the Print dialog box. The Print button changes into a Preview button.

Note:

Click the  Preview icon button to toggle between the  Print,  Preview, and  Save File modes. For information on the Save File mode, see "Saving spool data as a file" on page 5-28.


3. Click the Preview button. The Preview dialog box appears and displays a preview of your document.



The Preview dialog box contains six icon buttons that you can use to perform the following functions.


	Selection	Click this button to select, move, and resize watermarks.
	Zoom	Click this button to enlarge or reduce the size of the previewed page.
	Show/hide printable area	Click this button to display or hide borderlines which indicate the printable area.
	Watermark editing	Click this button to open the Watermark Edit box, where you can add watermarks to the document and change any of the current watermark settings.
	Add page	Click these buttons to add or remove the highlighted pages from the list of pages to be printed.
	Remove page	

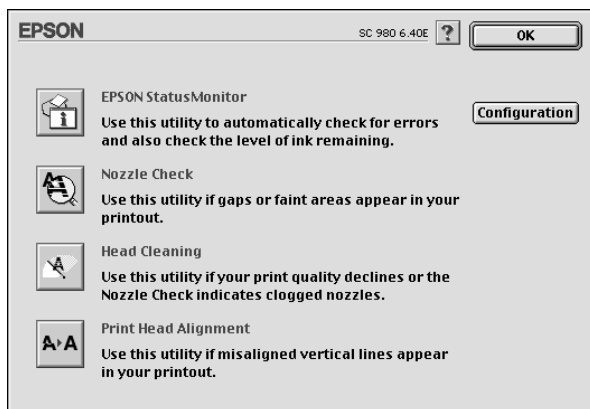
Note:

- ❑ *When using the double-sided printing feature, the Preview window allows you to toggle between pages in the print job by clicking the appropriate page in the list at the left side of the screen. The pages are listed in two columns, Front and Back. The pages in the Front column will print first. The page numbers listed refer to pages of the print job, and may contain more than one document page.*
 - ❑ *If it is necessary to reprint part of a double-sided print job, select each page of the print job that does not need to be reprinted in the list at the left side of the screen, then click the  remove page button. Make sure that the paper is loaded properly so that the print job will start on the correct side of the correct page.*
4. If you are satisfied with the previewed image, click Print.

If you are not satisfied with the appearance of the image, click Cancel. The Preview and Print dialog boxes close with the current print settings preserved. Open the Print dialog box again to make additional changes to the print settings.

Using the Printer Utilities

EPSON printer utilities allow you to check the current printer status and to perform some printer maintenance from your computer screen. To access the utilities, click the  Utility icon button in the Print or Page Setup dialog box, then click the button for the utility that you want to use.



The printer utilities are described below.

EPSON StatusMonitor

The StatusMonitor utility monitors the printer status. If it detects a printer error, it will inform you with an error message.

You can also use this utility to check how much ink is remaining before printing.

To use the StatusMonitor, click the EPSON StatusMonitor button in the Utility dialog box. For details, see "Using EPSON StatusMonitor" on page 6-1.

Note:

Do not use the Nozzle Check, Head Cleaning, or Print Head Alignment utilities while printing is in progress; otherwise, your printout may be marred.

Nozzle Check

The Nozzle Check utility checks the print head nozzles for clogging. Check the nozzles if you notice print quality has declined and after cleaning to confirm that the print head nozzles have been cleaned. If the nozzle check indicates that the print head needs cleaning, you can access the Head Cleaning utility directly from the Nozzle Check utility. For details, see “Checking the Print Head Nozzles” on page 9-1.

Head Cleaning

The Head Cleaning utility cleans the print head. You may need to clean the print head when you notice print quality has declined. Use the Nozzle Check utility first to confirm that the print head needs to be cleaned. For details, see “Cleaning the Print Head” on page 9-4.

Print Head Alignment

The Print Head Alignment utility aligns the print head. Use this utility if you notice a misalignment of vertical or horizontal lines.

Configuration

The Configuration dialog box allows you to change the way that the StatusMonitor utility notifies you when the printer status changes. For details, see “Using the Configuration Settings dialog box” on page 6-2.

Checking Printer Status and Managing Print Jobs for Macintosh

Using EPSON StatusMonitor	6-1
Accessing EPSON StatusMonitor	6-1
Using the Configuration Settings dialog box	6-2
Using EPSON Monitor3	6-4
Accessing EPSON Monitor3	6-4
Managing print jobs using EPSON Monitor3	6-5
Changing the priority of print jobs	6-7

Using EPSON StatusMonitor



EPSON StatusMonitor is a utility that monitors the printer. If it detects a printer error, it will inform you with an error message.

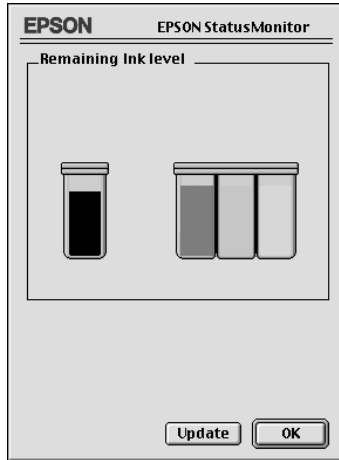
You can also use this utility to check ink levels before printing. When open, EPSON StatusMonitor displays the amount of ink remaining at the time it was opened. To update the ink level information, click the Update button.

Accessing EPSON StatusMonitor

To access EPSON StatusMonitor, follow the steps below.


1. Click Print or Page Setup on the File menu of your application. The Print dialog box appears.

2. Click the  StatusMonitor icon button. Or, click the  Utility icon button, then click the EPSON StatusMonitor button in the Utility dialog box that appears. The StatusMonitor dialog box opens.

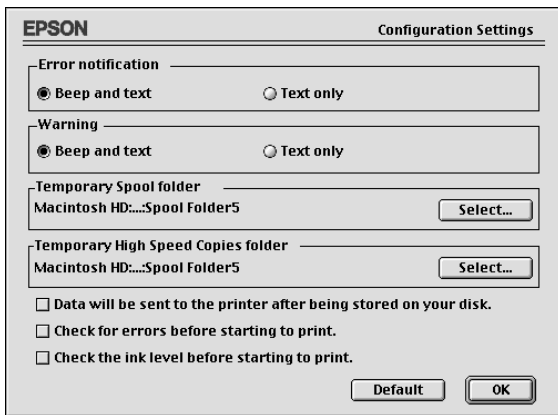


Using the Configuration Settings dialog box

If you want to change the way that the StatusMonitor utility monitors your printer, or change the way that your printer handles print jobs, follow the steps below.

1. Click Print or Page Setup on the File menu of your application.
2. Click the  Utility icon button.

- Click the Configuration button. The Configuration Settings dialog box opens.



In the Configuration Settings dialog box, you can make the following settings:

Error notification	Choose the method by which EPSON StatusMonitor will notify you in case of an error.
Warning	Choose the method by which EPSON StatusMonitor will notify you if a warning message becomes necessary.
Temporary Spool folder	Specify the folder in which print data will be temporarily spooled.
Temporary High Speed Copies folder	Specify the folder in which multiple-copy print data will be temporarily stored.
Data will be sent to the printer after being stored on your disk.	Select this check box to prevent horizontal banding in printouts that contain images by having the computer temporarily store image data on its hard drive. The computer will then send the image data to the printer as a whole rather than as rectangular bands.
Check for errors before starting to print.	Select this check box to have the printer check for errors before starting to print.

Check the ink level before starting to print.	Select this check box to have the printer check the ink levels before starting to print.
------------------------------------------------------	------------------------------------------------------------------------------------------

Using EPSON Monitor3

After you send a print job to the printer, the EPSON Monitor3 utility allows you to check, cancel, or change the priority of print jobs that are queued for printing. This utility also shows the status of the job that is currently being printed.

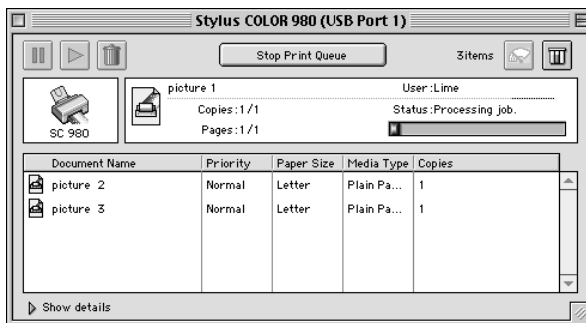
Accessing EPSON Monitor3

To access EPSON Monitor3, follow the steps below.

1. Turn on Background Printing in the Chooser or in the Background Printing dialog box.
2. Send a print job to the printer.
3. Select EPSON Monitor3 from the Application menu at the right end of the menu bar. The EPSON Monitor3 dialog box opens.

Note:




You can also open EPSON Monitor3 by double-clicking the EPSON Monitor3 icon in the Extensions folder.



Managing print jobs using EPSON Monitor3



Using EPSON Monitor3, you can manage print jobs as described below:

- ❑ Use the buttons below to hold, resume, and delete print jobs. Select the print job that you wish to manage, then click the appropriate button.

	Hold	Pauses printing and keeps the current print job at the top of the print queue
	Resume	Resumes printing
	Delete	Stops printing and deletes the print job from the print queue

- ❑ Click Stop Print Queue to stop printing. Click Start Print Queue to resume printing.

- ❑ Use the buttons below to start the printer utilities.

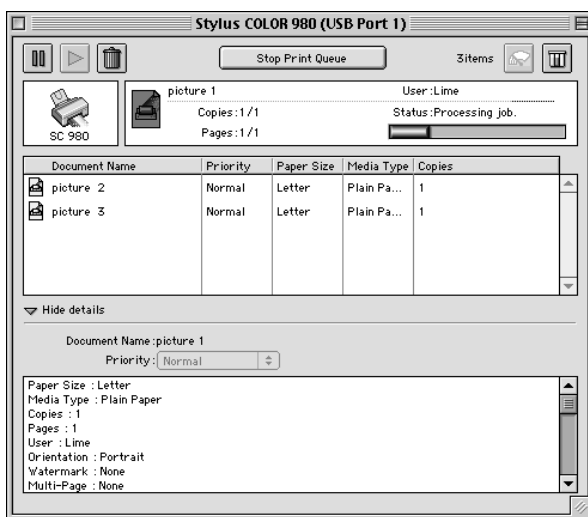
	Print head cleaning	Starts the Print Head Cleaning utility
	StatusMonitor	Starts the EPSON StatusMonitor, which displays the amount of ink remaining

- ❑ Double-click a file in the list to preview it.

Note:

This function is not available when you are printing the ESC/P command file.

- ❑ Double-click Copies to change the number of copies of the selected print job that will be printed.
- ❑ Click the Show details arrow to open an extension at the bottom of the EPSON Monitor3 dialog box, similar to the one below. The extension displays detailed information on the selected document's printer driver settings.



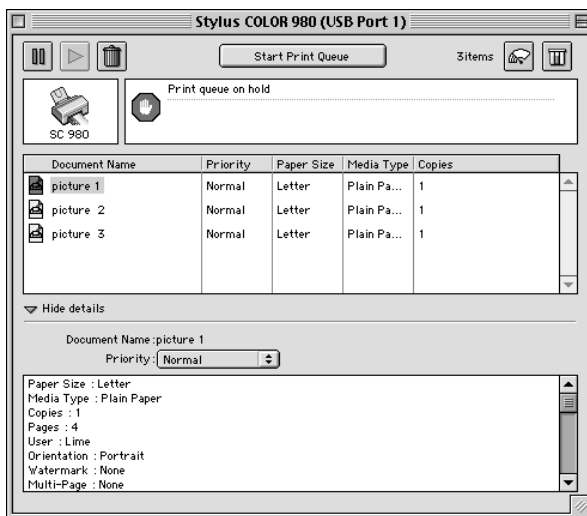
Changing the priority of print jobs

To change the priority of print jobs in a print queue, follow the steps in this section.

Note:

You can also change the priority of print jobs whose print times were previously set in the printer driver's Background Printing dialog box.

1. In the Document Name column, select the print job for which you wish to change the priority.
2. Click the Show details arrow to open an extension at the bottom of the EPSON Monitor3 dialog box, similar to the one below.



3. From the Priority list, select Urgent, Normal, Hold, or Print Time.

Note:

If you select Print Time, a dialog box opens where you can specify the date and time that the document will print. Make sure that your printer and computer are turned on at the specified time.

Setting Up Your Printer on a Network

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Setting up your printer as a shared printer	7-2
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Setting up your printer as shared printer	7-10
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Network Printing for Windows 98 and 95 Users

This section tells you how to set up your printer so that other computers on a network can use it.

First, you need to set up the printer as a shared printer on the computer to which the printer is connected. Then, you must specify the network path to the printer from each computer that will use it and install the printer software on those computers.

Note:

This section describes how to use your printer as a shared printer on a network. To connect your printer directly to a network without setting it up as a shared printer, consult your network administrator.

Setting up your printer as a shared printer

To share a printer with other computers on a network, follow the steps below to configure the computer to which the printer is connected.

1. Click Start, point to Settings, then click Control Panel.
2. Double-click the Network icon.
3. Click the File and Print Sharing button.
4. Select the I want to be able to allow others to print to my printer(s) check box and click OK.

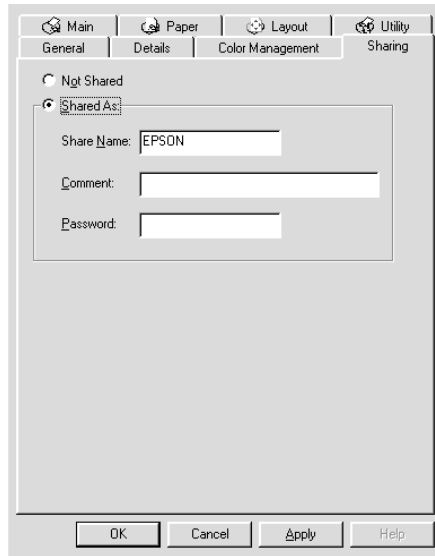


5. In the Network dialog box, click OK. You return to the Control Panel.
6. Double-click the Printers icon.

Note:

- ❑ *If a dialog box requesting the insertion of the Windows 98 or 95 CD-ROM appears, insert the CD in the CD-ROM drive and follow the on-screen instructions.*
- ❑ *If a dialog box requesting that you to restart your computer appears, do so. Then, open the Printers folder and continue from step 7.*

7. Select the icon for your printer and click Sharing on the File menu.
8. Select Shared As, then enter the printer information as required and click OK.



Accessing the printer through a network

To access your printer from other computers on a network, follow the steps below for each computer that will access the printer.

Note:

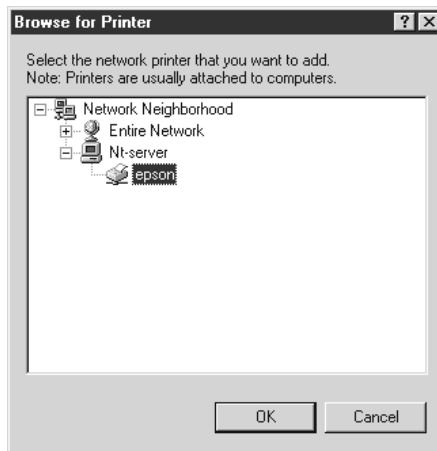
Your printer must be set up as a shared resource on the computer to which it is directly connected before you can access it from another computer. For instructions, see "Setting up your printer as a shared printer" on page 7-2.

1. Click Start, point to Settings, and click Printers.
2. Double-click the Add Printer icon. The Add Printer Wizard opens.

3. Click Next.
4. Select Network printer, then click Next.



5. Click Browse.
6. Double-click the icon of the computer that is directly connected to the printer. Then click the icon of the appropriate printer.



7. Click OK and follow the on-screen instructions.

Network Printing for Windows 2000 and NT 4.0 Users

This section tells you how to set up your printer so that other computers on a network can use it.

Note:

- ❑ *This section is written for small network users only. If you are on a large network and would like to share your printer, consult your network administrator.*

- ❑ *The screens shown in this section are from Windows NT 4.0.*

First, you need to set up the printer as a shared printer on the computer to which the printer is connected. Then, you must specify the network path to the printer from each computer that will use it and install the printer software on those computers.

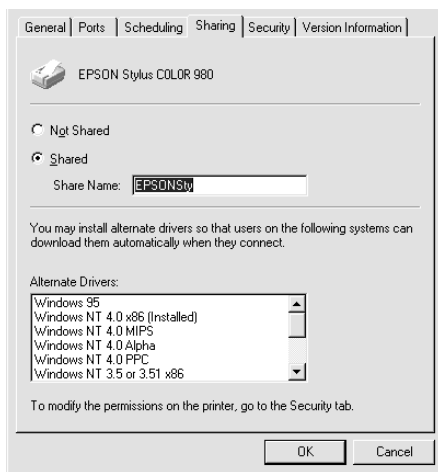
Setting up your printer as a shared printer

To share a printer with other computers on a network, follow the steps below to configure the computer to which the printer is connected.

1. Click Start, point to Settings, and click Printers.

2. Select the icon for your printer, then click Sharing on the File menu.

3. Select Shared (for Windows 2000 users, select Shared as:), then enter the Share Name.



4. Click OK.

Note:

- ❑ Do not select a driver from the Alternate Drivers list.
- ❑ For Windows 2000 users, do not select a driver from Additional Drivers list in the Additional Drivers dialog box.

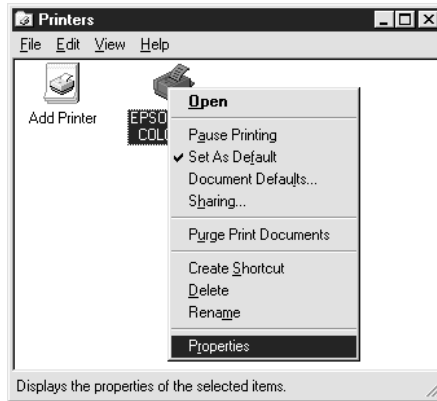
Accessing the printer through a network

To access your printer from other computers on the network, follow the steps in this section for each computer that will access the printer.

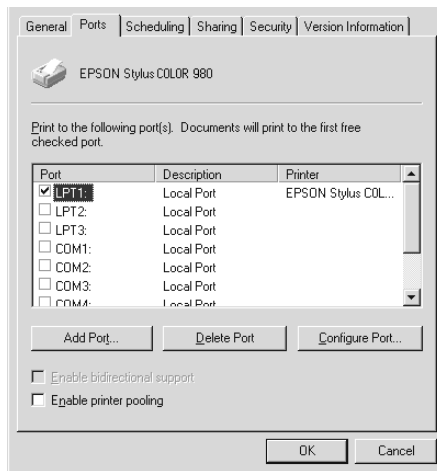
Note:

Your printer must be set up as a shared resource on the computer to which it is directly connected before you can access it from another computer. For instructions, see "Setting up your printer as a shared printer" on page 7-5.

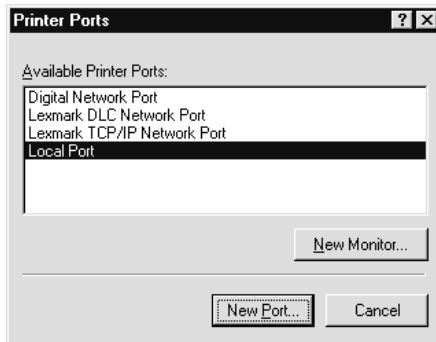
1. Install the printer driver from the software CD-ROM.
2. Click Start, point to Settings, and then click Control Panel.
3. Double-click the Printers icon.
4. Right-click the icon for your printer, then click Properties in the shortcut menu that appears. The printer driver opens.



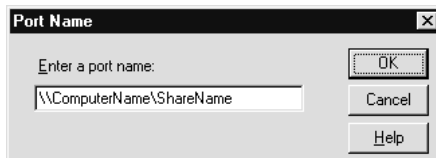
5. Click the Ports tab and then Add Port.



6. In the Printer Ports dialog box, select Local Port and click New Port.

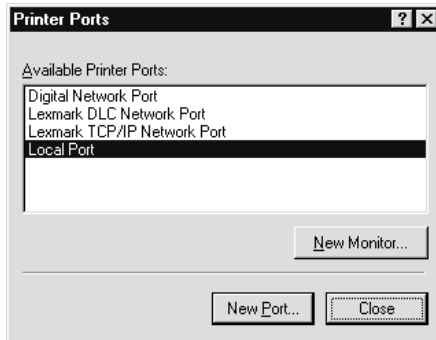


7. In the Port Name dialog box, enter the path information for your printer using the format below:
\\name of computer that is connected to the printer\name of the shared printer

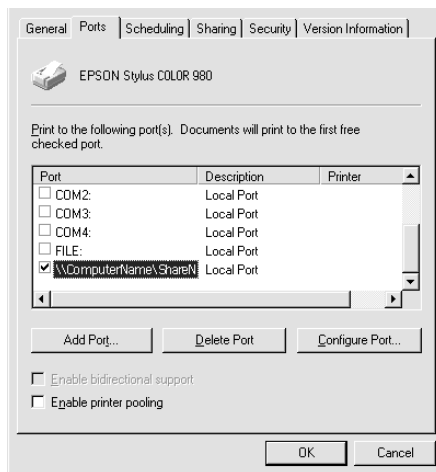


8. Click OK to return to the Printer Ports dialog box.

9. Click **Close** to return to the Ports menu.



10. On the Ports menu, make sure that the new port is included in the list and that the corresponding check box is selected. Click **OK** to close the printer driver.



Network Printing for Macintosh Users

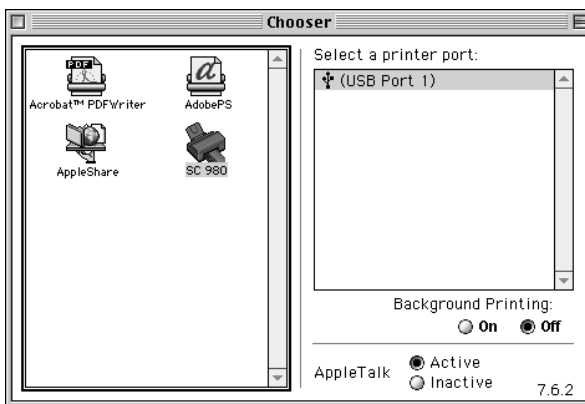
This section tells you how to set up the printer so that you can use it on an AppleTalk network. By setting up your printer as a shared printer, your local printer is connected to the network and can be used by other computers.

First, you need to set up the printer as a shared printer on the computer to which the printer is connected. Then, you must specify the network path to the printer from each computer that will use it, and install the printer software on those computers.

Setting up your printer as shared printer

To share a printer with other computers on an AppleTalk network, follow the steps below to configure the computer to which the printer is connected.

1. Turn on the printer.
2. Choose Chooser from the Apple menu and click the icon for your printer. Then select the port to which the printer is connected from the Select a printer port list.



3. Click the Setup button or double-click a printer port. The Printer Sharing Setup dialog box appears.



4. Select the Share this Printer check box, then type the printer name and password information as required.
5. Click OK. The name of the shared printer appears in the port list in the Chooser.
6. Close the Chooser.

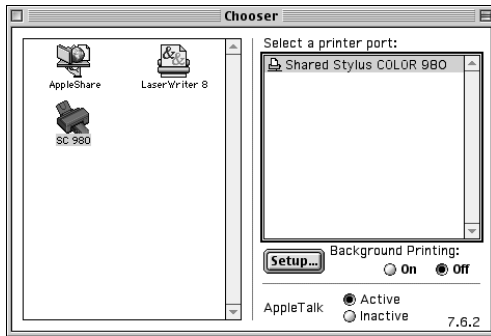
Accessing the printer through a network

To access your printer from other computers on a network, follow the steps in this section for each computer that will access the printer.

1. Turn on your printer.
2. Install the printer driver from your software CD-ROM.
3. Choose Chooser from the Apple menu. Then, click the appropriate printer icon and select the printer port that you want to use from the Select a printer port list.

Note:

Only printers that are connected to your current AppleTalk zone are available.



4. If the following dialog box appears, enter the password for the printer, then click **OK**.



5. Select the appropriate Background Printing radio button to turn background printing on or off.
6. Close the Chooser.

Replacing Ink Cartridges

Replacing an Empty Ink Cartridge	8-1
Using the printer's control panel	8-1
Using the Status Monitor utility	8-7
Replacing an Old or Damaged Ink cartridge	8-8



Replacing an Empty Ink Cartridge

Follow the instructions in this section to replace an ink cartridge using the printer's control panel or the Status Monitor utility.





Using the printer's control panel


The printer's indicator lights will inform you when it is time to obtain a replacement ink cartridge and when it is time to replace an empty cartridge.

Note:

If you need to replace an ink cartridge while the  black and  color ink out lights are off, see "Replacing an Old or Damaged Ink Cartridge" on page 8-8.

The following table describes the status of the lights on your printer and the actions that you need to take.

Light	Action
	Obtain a replacement black ink cartridge (T003).
	Replace the empty black ink cartridge.
	Obtain a replacement color ink cartridge (T005).
	Replace the empty color ink cartridge.

■ = on,  = flashing



Warning:

- Keep ink cartridges out of the reach of children. Do not allow children to drink from or otherwise handle the cartridges.*
- If ink gets on your skin, wash it thoroughly with soap and water. If ink gets in your eyes, flush them immediately with water. If discomfort or vision problems remain after a thorough flushing, see a doctor immediately.*



Caution:

- EPSON recommends the use of genuine EPSON ink cartridges. Other products not manufactured by EPSON may cause damage to your printer not covered by EPSON's warranties.*
- Leave the old cartridge installed in the printer until you have obtained a replacement; otherwise, ink remaining in the print head nozzles may dry out.*

Note:






- You cannot continue printing with one ink cartridge empty, even if the other cartridge still contains ink. Before printing, replace the empty cartridge.*

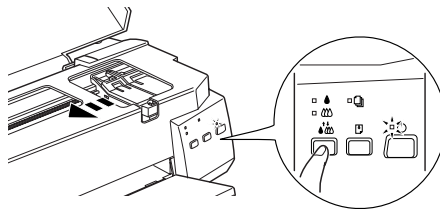
- ❑ *In addition to the ink used during printing, ink is consumed during the print head cleaning operation and during the self-cleaning cycle which is performed when the printer is turned on.*

To replace an ink cartridge using the printer's control panel, follow the steps below.


Note:

You can also replace an ink cartridge from your computer using the Status Monitor. Click the Replace Ink Cartridge button in the Status Monitor's Printer Status window, then follow the on-screen instructions.




1. Make sure that the printer is on. The  power light should be on, but not flashing.
2. Determine which cartridge needs to be replaced as indicated by the  black and  color ink out lights.
3. Lower the output tray at the front of the printer, then open the printer cover.
4. Hold down the  cleaning button for three seconds. The print head moves left to the ink cartridge replacement position, and the  power light begins flashing.



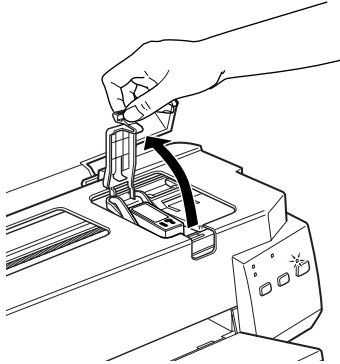
Caution:

Do not move the print head by hand as this may damage the printer. Always press the  cleaning button to move it.

Note:

If you press the  cleaning button for three seconds while the  black and  color ink out lights are off, the printer will clean the print head.

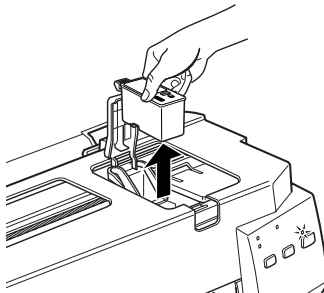
5. Push back the release tabs and lift up the clamp that holds the cartridge. The cartridge rises partly out of the cartridge holder.



Caution:

Do not open the ink cartridge clamp until you are ready to replace the ink cartridge. Opening the clamp will cause the installed ink cartridge to become unusable, even if ink remains.

6. Lift the cartridge out of the printer and dispose of it properly. Do not take the used cartridge apart or try to refill it.

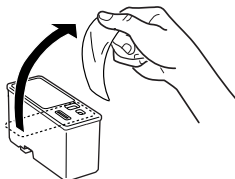




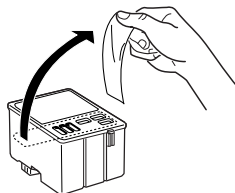
Warning:

If ink gets on your skin, wash it thoroughly with soap and water. If ink gets in your eyes, flush them immediately with water.

7. Remove the new ink cartridge from its protective bag. Next, remove only the yellow tape seal from the cartridge.



black ink cartridge (T003)



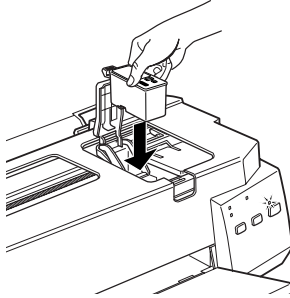
color ink cartridge (T005)



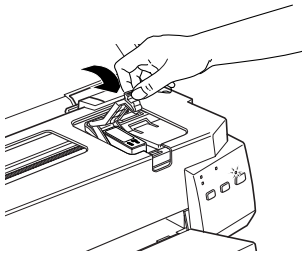
Caution:

- ❑ *You must remove the yellow tape seal from the cartridge before installing it; otherwise, the cartridge will become unusable and you will be unable to print.*
- ❑ *Do not remove the blue portion of the tape seal from the top of the cartridge; otherwise, the print head may become clogged and will be unable to print.*
- ❑ *Do not remove the tape seal from the bottom of the cartridge; otherwise, ink will leak.*

- Place the ink cartridge gently in the cartridge holder with the label on the cartridge facing up. Do not press down on the cartridge. Lower the ink cartridge clamp until it locks into place.







- Lower the ink cartridge clamp until it locks into place.

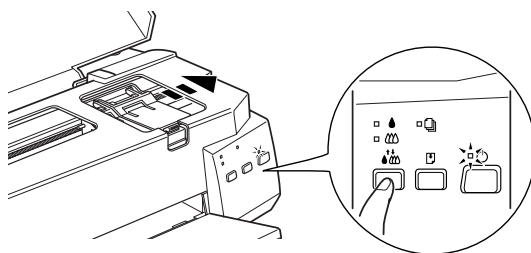


Caution:


Once you install the ink cartridges, do not open their clamps again until you replace the cartridges. Otherwise, the cartridges may become unusable.

- If you need to replace the color ink cartridge as well, press the  cleaning button. Then repeat steps 4 through 8.

11. Make sure that the  black and  color ink out lights are off, then press the  cleaning button. The printer moves the print head and begins charging the ink delivery system. This process takes about one minute to complete. When the ink charging process is finished, the printer returns the print head to its home position and the  power light stops flashing and stays on.



Caution:

The  power light continues to flash while the printer performs the ink charging operation. Never turn off the printer while this light is flashing. Doing so can result in incomplete charging of ink.

12. Close the printer cover.

Using the Status Monitor utility



You can monitor the remaining ink levels from your computer and view on-screen instructions for replacing a low or empty ink cartridge using the Status Monitor utility.



When an ink cartridge is low or empty, click the How to button in the EPSON Status Monitor window. The print head moves to the ink cartridge replacement position. Follow the on-screen instructions to replace the cartridge.

For more information on using EPSON Status Monitor, see “Using EPSON Status Monitor 3” on page 4-4 (Windows) or “Using EPSON StatusMonitor” on page 6-1 (Macintosh).

Replacing an Old or Damaged Ink Cartridge


In some circumstances, you may need to replace an ink cartridge before it is empty. For example, if the quality of your printouts remains poor even after repeatedly cleaning and aligning the print head, one or both of the ink cartridges may be old or damaged and should be replaced.



If the  black or  color ink out light is flashing or is on, replace the empty ink cartridge as described in “Replacing an Empty Ink Cartridge” on page 8-1.

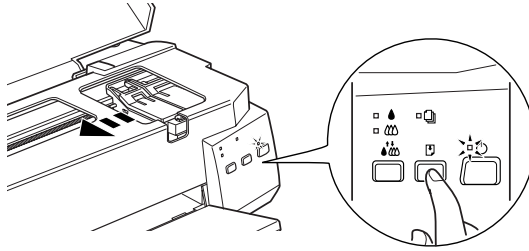
To replace an ink cartridge before the  black or  color ink out light flashes, follow the instructions in this section.




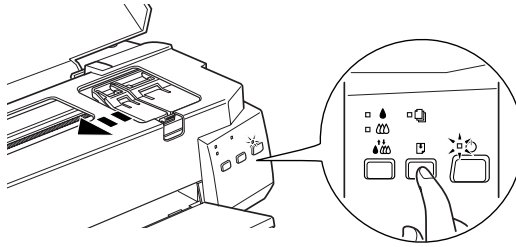
Caution:

- Once you remove an ink cartridge from the printer, it becomes unusable and cannot be reinstalled, even if ink remains.*
 - Leave the old cartridge installed in the printer until you are ready to replace it with a new one.*
1. Make sure that the printer is on. The  power light should be on, but not flashing.
 2. Lower the output tray; then open the printer cover.

3. Hold down the  load/eject button for three seconds. The print head moves to the black cartridge replacement position and the  power light begins flashing.



If you need to replace only the color ink cartridge, press the  load/eject button to move the print head to the color cartridge replacement position.



4. Lift the ink cartridge clamp. Then, lift the ink cartridge out of the printer and dispose of it properly.
5. Remove the yellow tape seal from the new cartridge.





Caution:

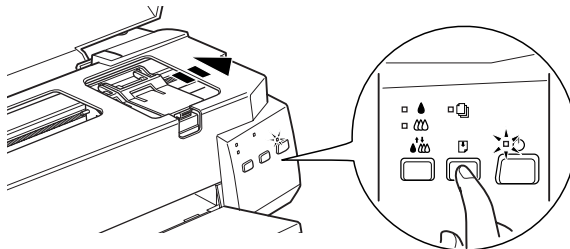
- ❑ You must remove the yellow tape seal from the cartridge before installing it; otherwise, the cartridge will become unusable.
 - ❑ Do not remove the blue portion of the tape seal from the top of the cartridge; otherwise, the print head may become clogged and be unable to print.
 - ❑ Do not remove the tape seal from the bottom of the cartridge; otherwise, ink will leak.
6. Place the cartridge gently in the cartridge holder. Do not press down on the cartridge. Lower the ink cartridge clamp until it locks into place.



Caution:



Once you install the cartridges, do not open their clamps again until you replace the ink cartridges. Otherwise, the cartridges may become unusable.

7. Press the  load/eject button. The print head moves to the color cartridge replacement position. If you need to replace the color ink cartridge as well, repeat steps 5 through 7.
8. Press the  load/eject button again. The printer moves the print head back to its home position and charges ink in the system. This process takes about one minute to complete.





Caution:

The  power light continues to flash while the printer performs the ink charging operation. Never turn off the printer while the  power light is flashing. Doing so can result in incomplete charging of ink.

9. Close the printer cover.

Chapter 9

Maintenance

Checking the Print Head Nozzles.....	9-1
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Checking the Print Head Nozzles

If you find that the printed image is unexpectedly faint or that dots in the printed image are missing, you may be able to identify the problem by checking the print head nozzles.

You can check the print head nozzles from your computer using the Nozzle Check utility in the printer software, or from the printer using the printer's control panel buttons.

Using the Nozzle Check utility

To use the Nozzle Check utility, refer to the appropriate section below.

Note:

Do not use the Nozzle Check utility while printing is in progress; otherwise, your printout may be marred.


For Windows users

Follow the steps below to use the Nozzle Check utility.

1. Make sure that A4 or Letter size paper is loaded in the sheet feeder.
2. Access the printer software. If you need instructions, see “Accessing the printer software” on page 3-2.
3. Click the Utility tab, then click the Nozzle Check button.
4. Follow the on-screen instructions.

For Macintosh users



Follow the steps below to use the Nozzle Check utility.

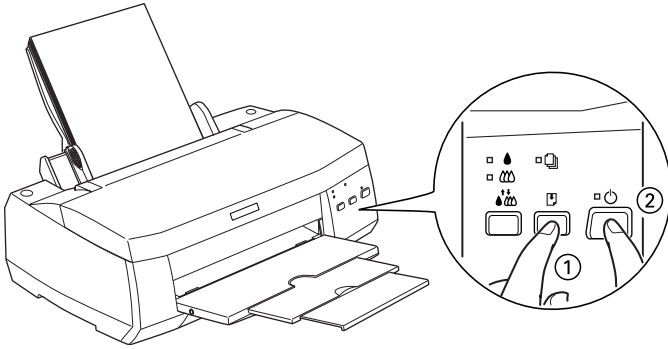
1. Make sure that A4 or Letter size paper is loaded in the sheet feeder.
2. Access the Print or Page Setup dialog box.
3. Click the  Utility icon button, then click the Nozzle Check button.
4. Follow the on-screen instructions.

Using the control panel buttons

Follow the steps below to check the print head nozzles using the control panel buttons.

1. Turn off your printer.

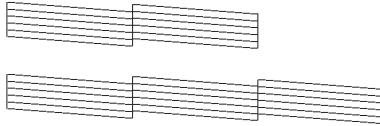
2. Make sure that A4 or Letter size paper is loaded in the sheet feeder.
3. Hold down the  load/eject button (① in the illustration below) and press the  power button (② in the illustration below) to turn on the printer.



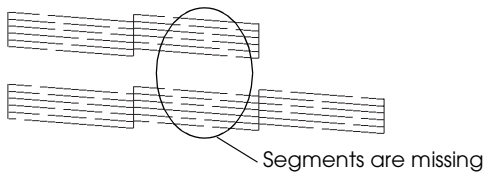
4. Release both buttons.

The printer prints an operation check page that includes your printer's ROM version information, the ink counter code, and a nozzle check pattern. Below are sample printouts.

Good sample



Print head needs to be cleaned



The above sample is in black and white, but the actual test prints in color (CMYK).



If the nozzle check page does not print satisfactorily (for example, if any segment of the printed lines is missing), there is a problem with the printer. This could be a clogged ink nozzle or a misaligned print head. See the next section for details on cleaning the print head. For information on aligning the print head, see "Aligning the Print Head" on page 9-10.

Cleaning the Print Head

If you find that the printed image is unexpectedly faint or that dots in the printed image are missing, you may be able to solve these problems by cleaning the print head, which ensures that the nozzles are delivering ink properly.

You can clean the print head from your computer using the Head Cleaning utility in the printer software, or from the printer itself by using the printer's control panel buttons.

Note:



- ❑ *Print head cleaning uses both color and black ink. To avoid wasting ink, clean the print head only if print quality declines. For example, if the printout is blurry or the color is incorrect or missing.*
- ❑ *Use the Nozzle Check utility first to confirm that the print head needs to be cleaned. This saves ink.*
- ❑ *You cannot clean the print head while the  black or  color ink out light is flashing or on. Replace the appropriate ink cartridge first.*
- ❑ *Do not start the Head Cleaning or Nozzle Check utility while printing is in progress; otherwise, your printout may be marred.*

Using the Head Cleaning utility



Refer to the appropriate section below to clean the print head using the Head Cleaning utility.

For Windows users

Follow the steps below to clean the print head.


1. Make sure that the printer is on and both the  black and  color ink out lights are off.

Note:

If the  black or  color ink out light is flashing, you cannot clean the print head. Replace the appropriate ink cartridge first.


2. Access the printer software. For directions, see "Accessing the printer software" on page 3-2.
3. Click the Utility tab, then click the Head Cleaning button.

4. Follow the on-screen instructions.

The  power light flashes while the printer performs the cleaning cycle. This takes about one minute to complete.



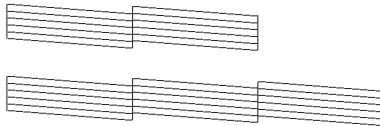
Caution:

Never turn off the printer while the  power light is flashing. Doing so may damage the printer.

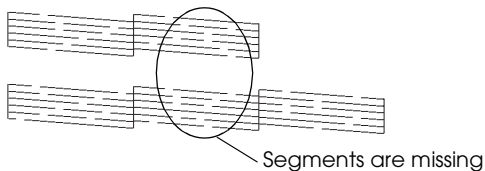
5. When the  power light stops flashing, click Print nozzle check pattern in the Head Cleaning dialog box to confirm that the head is clean and to reset the cleaning cycle.

Below are nozzle check patterns:

Good sample



Print head needs to be cleaned



The above sample is in black and white, but the actual check pattern prints in color.

If you find that any segments are missing from the nozzle check pattern, you may need to repeat the head cleaning and print the pattern again.

If print quality hasn't improved after repeating this procedure four or five times, turn the printer off and leave it alone overnight. Then, perform the head cleaning again.

If the print quality still has not improved, one or both of your ink cartridges may be old or damaged and may need to be replaced. To replace an ink cartridge before it is empty, see "Replacing an Old or Damaged Ink Cartridge" on page 8-8.




If print quality remains a problem after replacing the ink cartridges, contact your dealer.


Note:

To maintain print quality, EPSON recommends turning on the printer for at least one minute every month.

For Macintosh users


Follow the steps below to clean the print head.


1. Make sure that the printer is on, and the  black and  color ink out lights are off.
2. Click the  Utility icon button, then click the Head Cleaning button.
3. Follow the on-screen instructions.

The  power light flashes while the printer performs the cleaning cycle. This operation takes about one minute to complete.



Caution:

Never turn off the printer while the  power light is flashing. Doing so may damage the printer.

4. When the  power light stops flashing, click the Confirmation button in the Head Cleaning dialog box to print a nozzle check pattern and to reset the cleaning cycle. Use the check pattern to confirm that the print head is clean. See page 148 for a sample of the nozzle check pattern.

If print quality hasn't improved after repeating this procedure four or five times, turn the printer off and leave it alone overnight. Then, perform the head cleaning again.

If the print quality still has not improved, one or both of the ink cartridges may be old or damaged and may need to be replaced. To replace an ink cartridge, see "Replacing an Old or Damaged Ink Cartridge" on page 8-8.




If print quality remains a problem after replacing the ink cartridges, contact your dealer.

Note:




To maintain print quality, EPSON recommends turning on the printer for at least one minute every month.


Using the control panel buttons

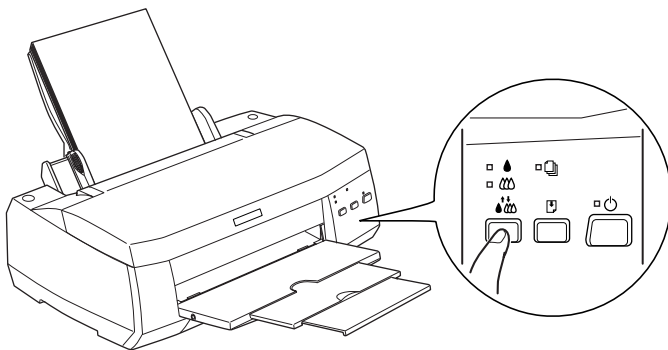
Follow the steps below to clean the print head using the printer's control panel buttons.


1. Make sure that the  power light is on and that both the  black and  color ink out lights are off.

Note:

If the  black or  color ink out light is flashing or on, you cannot clean the head, and the operation described here will start the ink cartridge replacement procedure. If you inadvertently start the ink cartridge replacement procedure, press the  cleaning button to return the print head to its home position.


2. Depress the  cleaning button for three seconds.




The printer starts cleaning the print head and the  power light begins flashing. Print head cleaning takes about one minute to complete.



Caution:

Never turn off the printer while the  power light is flashing. Doing so may damage the printer.

3. When the  power light stops flashing, print a nozzle check pattern to confirm that the head is clean and to reset the cleaning cycle.

If print quality hasn't improved after repeating this procedure four or five times, turn the printer off and leave it alone overnight. Then, perform the head cleaning again.

If the print quality still has not improved, one or both of your ink cartridges may be old or damaged and may need to be replaced. To replace an ink cartridge before it is empty, see "Replacing an Old or Damaged Ink Cartridge" on page 8-8.

If print quality remains a problem after replacing the ink cartridges, contact your dealer.

Note:

To maintain print quality, EPSON recommends turning on the printer for at least one minute every month.

Aligning the Print Head

If you notice a misalignment of vertical lines, you may be able to solve this problem using the Print Head Alignment utility in your printer software. Follow the directions in the appropriate section below.

Note:

Do not start the Print Head Alignment utility while printing is in progress; otherwise, your printout may be marred.

For Windows users

Follow the steps below to align the print head.

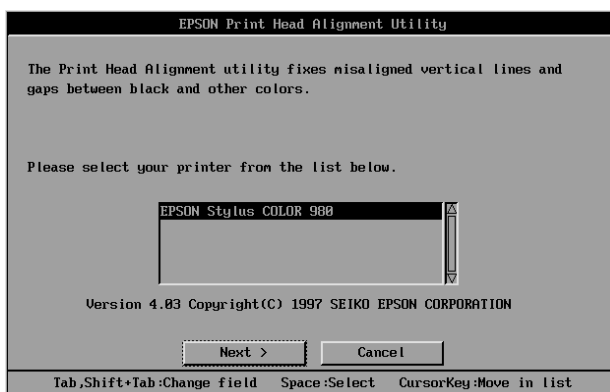
1. Make sure that A4 or Letter size plain paper is loaded in the sheet feeder.
2. Access the printer software. For directions, see “Accessing the printer software” on page 3-2.
3. Click the Utility tab, then click the Print Head Alignment button.
4. Follow the on-screen instructions to align the print head.

For DOS users

Follow the steps below to align the print head.

1. Insert the printer software CD in your CD-ROM drive.


2. Type D:\SETUP at the DOS prompt. (If your CD-ROM drive is assigned a drive letter other than "D", or if you are using the floppy disk version, substitute the appropriate letter.)
3. Press the Enter key, then follow the on-screen instructions.
4. After running the setup program, type C:\EPCALIB2. (If your hard drive is assigned a drive letter other than "C", substitute the appropriate letter.)
5. Press the Enter key. The following window appears.



6. Make sure that your printer is selected. Click Next, then follow the on-screen instructions.

For Macintosh users

Follow the steps below to align the print head.

1. Make sure that A4 or Letter size plain paper is loaded in the sheet feeder.
2. Click the  Utility icon button, then click the Print Head Alignment button.
3. Follow the on-screen instructions to align the print head.

Cleaning the Printer

To keep your printer operating at its best, clean it thoroughly several times a year as described below.

1. Make sure that the printer is turned off and that all of the printer's lights are off. Then, unplug the power cord.
2. Remove any paper from the sheet feeder.
3. Use a soft brush to carefully clean away all dust and dirt from the sheet feeder.
4. If the outer case or the inside of the sheet feeder is dirty, clean it with a soft, clean cloth dampened with mild detergent. Keep the printer cover closed to prevent water from getting inside.
5. If the inside of the printer accidentally gets soiled with ink, wipe it off with a damp cloth.



Warning:

Be careful not to touch the gears inside the printer.



Caution:

- Never use alcohols or thinners to clean the printer; these chemicals can damage the components as well as the case.*
- Be careful not to get water on the printer mechanism or electronic components.*
- Do not use a hard or abrasive brush.*
- Do not spray the inside of the printer with lubricants; unsuitable oils can damage the mechanism. Contact your dealer or a qualified service person if lubrication is needed.*

Transporting the Printer

If you need to transport your printer, carefully prepare and repack it using the original box (or a similar box that the printer fits snugly into) and packing materials. Follow the steps below.

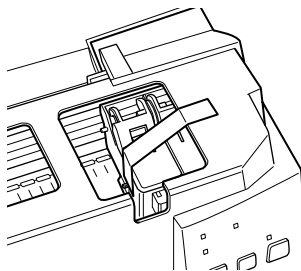
1. Open the printer cover and make sure that the print head is in the home (far right) position. If it is not, turn on the printer and wait until the print head returns to the home position. Then, turn off the printer and close the printer cover.



Caution:

Leave the ink cartridges installed when you transport the printer. Removing the cartridges during transport can damage the printer.

2. Unplug the power cord from the electrical outlet, then disconnect the interface cable from the printer.
3. Remove the paper from the sheet feeder, then remove the paper support.
4. Open the printer cover again. Secure the ink cartridge holder to the printer with tape as shown below, then close the printer cover.



5. Push in the output extension tray, then raise the output tray.
6. Attach the protective materials to both sides of the printer.

7. Repack the printer and power cord in the original box.
8. Keep the printer level during transport.

Updating Software

Follow the directions in this section if you have upgraded your computer from Windows 95 to Windows 98 or if you are a Windows NT 4.0 or Windows 2000 user and wish to update your printer driver from a previous version. Refer to the appropriate section below.

Updating to Windows 98

If you have upgraded your computer's operating system from Windows 95 to Windows 98, you must uninstall your printer software and then install it again.

To uninstall the printer software, double-click the Add/Remove Programs icon in the Windows Control Panel and select EPSON Printer Software in the list. Click the Add/Remove button. The EPSON Printer Software Uninstall dialog box appears. Select the printer model, and then click OK. Then, install the printer software again.

Updating the driver in Windows 2000 or NT 4.0

When you update the printer driver in Windows 2000 or NT 4.0, please be sure to uninstall the previous printer driver before you install the new driver. Installing over the existing printer driver results in a failure to update. To uninstall the printer driver, double-click the Add/Remove Programs icon in the Windows Control Panel. The Add/Remove Programs Properties dialog box appears. Select EPSON Printer Software from the list, click Change/Remove (Windows 2000) or Add/Remove (Windows NT 4.0). The EPSON Printer Software Uninstall dialog box appears. Select the printer model and then click OK.

Chapter 10

Troubleshooting

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Correcting USB Problems

Make sure that your computer is a Windows 98 or Windows 2000 pre-installed model

Your computer must be a Windows 98 or Windows 2000 pre-installed model. You may not be able to install or run the USB Printer Driver on a computer which is not equipped with a USB port or which has been upgraded from Windows 95 to Windows 98 or 2000.

For details about your computer, contact your dealer.

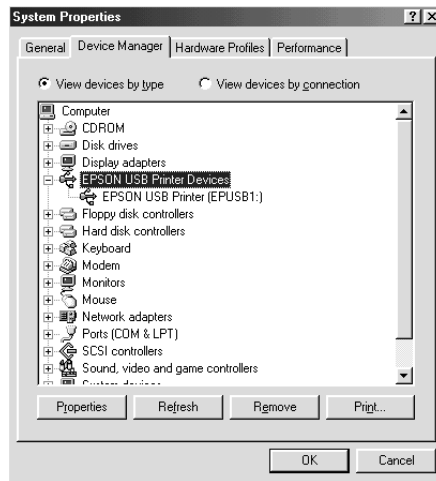
Make sure that EPSON USB Printer Devices appears in the list on the Device Manager menu (for Windows 98 only)

If you canceled the plug-and-play driver installation before the procedure was completed, either the USB printer device driver or the printer driver may be installed incorrectly.

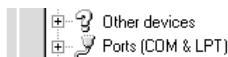
Follow the steps below to check the installation and reinstall the drivers.

1. Turn the printer on. Plug the USB cable into the printer and the computer.
2. Right-click the My Computer icon on your desktop, then click Properties in the shortcut menu that appears.
3. Click the Device Manager tab.

If your drivers are correctly installed, EPSON USB Printer Devices should appear in the list on the Device Manager menu.



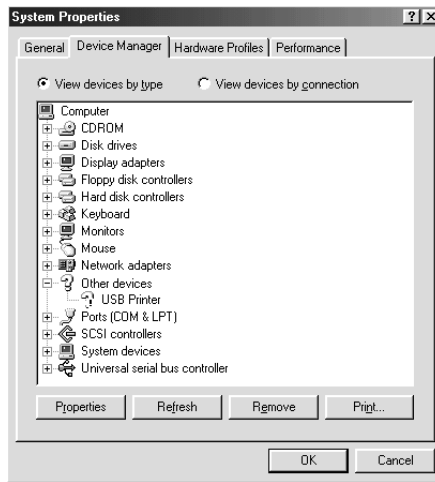
If EPSON USB Printer Devices does not appear in the list, click the plus (+) sign beside Other Devices to view the installed devices.



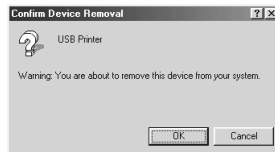
If USB Printer appears under Other Devices, the USB printer device driver is not installed correctly. If EPSON Stylus COLOR 980 appears, the printer driver is not installed correctly.

If neither USB Printer nor EPSON Stylus COLOR 980 appears under Other Devices, click Refresh or unplug the USB cable from the printer, then plug it into the printer again.

4. Under Other Devices, select USB Printer or EPSON Stylus COLOR 980, then click Remove. Then click OK.



5. When the following dialog box appears, click OK. Then click OK again to close the Properties window.



6. Turn off both the printer and the PC. Then, install the drivers again, following the instructions in the *Setup Guide*.

Printer does not work correctly with a USB cable

If your printer does not work correctly with a USB cable, try one or more of these solutions:

- ❑ Use the recommended USB cable as described in “System Requirements” on page A-11.
- ❑ If you use a USB hub, connect the printer to the first tier of the hub, or connect the printer to the computer’s USB port directly.
- ❑ For Windows 98 users, try reinstalling the USB printer device driver and the printer software. First, uninstall EPSON Printer Software using the Add/Remove Programs utility in the Control Panel, then uninstall EPSON USB Printer Devices. Next, reinstall the software as described in *Setup Guide*. If EPSON USB Printer Devices is not registered in the Add/Remove Programs list, browse the CD-ROM and double-click epusbun.exe in the Win 9x folder. Then, follow the on-screen instructions.









Diagnosing the Problem




Troubleshooting printer problems is best handled in two easy steps: first diagnose the problem, then apply likely solutions until the problem is fixed. The information that you need to diagnose the most common problems is provided by the printer’s control panel lights and by the Status Monitor utility (for Macintosh and Windows 98, 95, 2000, and NT 4.0). You can also run a printer operation check to determine whether the problem originates with the printer or the computer. Refer to the appropriate section below.

Use the information presented in this chapter to pinpoint the source of your problem, then apply the recommended solutions until the problem is solved.

Using the error indicators

You can identify many common printer problems using the lights on your printer's control panel. If your printer stops working and the lights are on or flashing, use the following table of panel light patterns to diagnose the problem, then follow the recommended corrective measures.

Lights	Problem and solutions	
	Paper out	
	No paper is loaded in the sheet feeder.	Load paper in the sheet feeder, then press the  load/eject button. The printer resumes printing and the light goes out.
	Paper jam	
	Paper has jammed in the printer.	Press the  load/eject button to eject the jammed paper. If the error does not clear, open the printer cover and remove all of the paper inside, including any tone pieces. Then, reload the paper in the sheet feeder and press  load/eject button to resume printing.
	Ink low (black ink cartridge)	
	The black ink cartridge is nearly empty.	Obtain a replacement black ink cartridge (T003).
	Ink out (black ink cartridge)	
	The black ink cartridge is empty.	Replace the black ink cartridge with a new one (T003). See "Replacing an Empty Ink Cartridge" on page 8-1 for details.
	Ink low (color ink cartridge)	
	The color ink cartridge is nearly empty.	Obtain a replacement color ink cartridge (T005).

	Ink out (color ink cartridge)	
	The color ink cartridge is empty.	Replace the color ink cartridge with a new one (T005). See "Replacing an Empty Ink Cartridge" on page 8-1 for details.
	Carriage error	
	The print head is obstructed by jammed paper or other foreign material and cannot return to the home position.	Turn off the printer. Open the printer cover and remove any paper from the paper path by hand. Then, does turn the printer back on. If the error does not clear, contact your dealer.
	Unknown printer error	
	An unknown printer error has occurred.	Turn off the printer and contact your dealer.

■ = on, □ = off, ◻ = flashing

Using the Status Monitor (not available for Windows 3.1)

The Status Monitor utility provides status messages and a graphic display showing the current status of the printer.

If a problem occurs while printing, an error message is displayed in the Progress Meter window.

When the ink is out, click the HOW TO button in the Status Monitor or Progress Meter window and EPSON Status Monitor will lead you step-by-step through the cartridge replacement procedure.

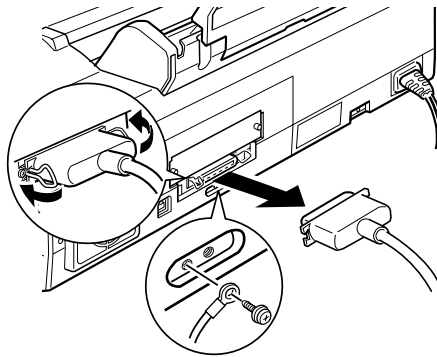
Running a printer operation check

Performing a printer operation check can help you to determine whether the problem comes from the printer or from the computer.



To print a printer operation check page, follow the steps below.

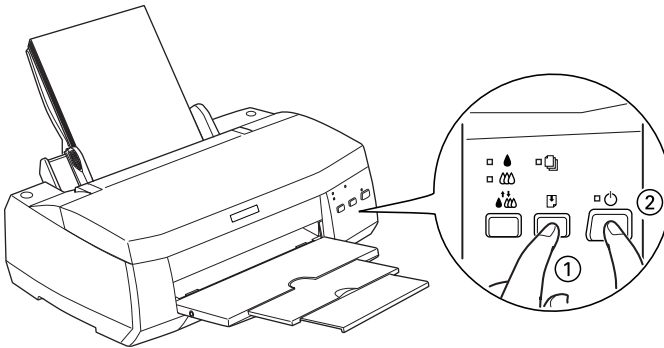
1. Make sure that both the printer and computer are turned off.
2. Disconnect the cable from the printer's interface connector.

If you use the parallel interface, unlock the wire clips on both sides of the interface connector and remove the ground connector, if necessary. Then, disconnect the cable from the printer's interface connector.



3. Make sure that A4 or Letter size paper is loaded in the sheet feeder.

4. Hold down the  load/eject button and press the  power button to turn on the printer. Then, release both buttons.



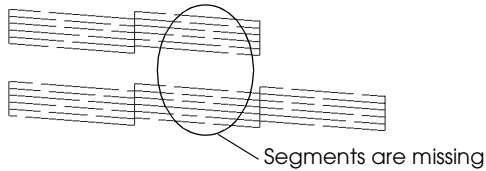
The printer prints an operation check page, which includes the version of your printer's ROM, the ink counter code, and a nozzle check pattern.

Compare the quality of the printed check page with the sample shown below. If there are no print quality problems such as gaps or missing segments in the test lines, the printer itself is all right and the problem probably lies in the printer software settings or the application settings, or with the interface cable or the computer itself. Always use a shielded interface cable.



The above sample is in black and white, but the actual check page prints in color (CMYK).

If the check page does not print satisfactorily as shown below, there is a problem with the printer. For example, if any segment of the printed lines is missing, the problem could be a clogged ink nozzle or a misaligned print head.



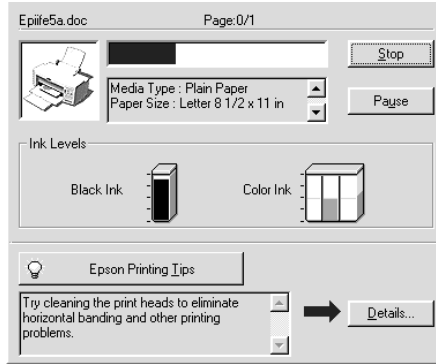
The above sample is in black and white, but the actual check pattern prints in color.

Cancelling Printing

If the printouts are not what you expect and display incorrect or garbled characters or images, you may need to cancel the print job. To cancel the print job, follow the instructions in the appropriate section below.

For Windows 98, 95, 2000, and NT 4.0 users

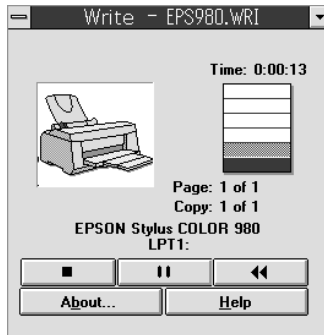
When you send a print job to the printer, the Progress Meter opens.



Click the Stop button to cancel the print job.

For Windows 3.1 users

When you send a print job to the printer, the Despooler opens.



Click the  Stop button to cancel the print job.

For Macintosh users


The procedure for canceling a print job from a Macintosh varies, depending on whether background printing is on or off. Refer to the appropriate section below.

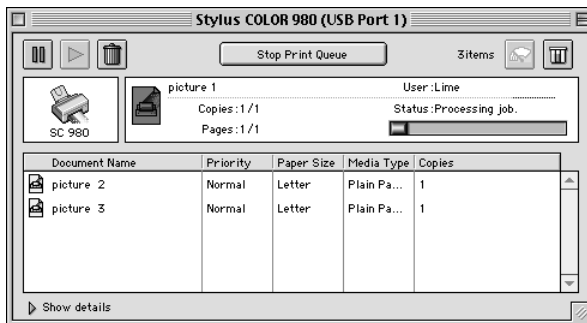
When background printing is on

Follow the steps below to cancel the print job.

1. Press the ⏻ power button to turn off the printer.
2. Select EPSON Monitor3 from the application menu. EPSON Monitor3 opens.





3. Select the print job that you wish to cancel in the Document Name list, then click the  Stop icon button to cancel the print job.



When background printing is off

Follow the steps below to cancel the print job.



1. Press the  power button to turn off the printer.
2. Hold down the  command key on your keyboard and press the period (.) key to cancel the print job.

Print Quality Could Be Better

If you are having print quality problems, try the solutions offered for the problems listed in this section.

Horizontal banding

Try one or more of these solutions:

- Make sure that the printable side of the paper is face up in the sheet feeder.
- Run the Head Cleaning utility to clear any clogged ink nozzles.
- Select Automatic as the Mode setting on your printer driver's Main menu (Windows) or in the Print dialog box (Macintosh).
- Check the  black and  color ink out lights. If a light is flashing, replace the appropriate ink cartridge. See "Replacing an Empty Ink Cartridge" on page 8-1.
- Make sure that Maximum is not selected as the Printable Area setting in your printer driver. When this setting is selected, banding may occur in the expanded area.
- Make sure that the Media Type selected in the printer driver is appropriate for the type of media that is loaded in the printer.



Vertical misalignment or banding

Try one or more of these solutions:

- Make sure that the printable side of the paper is face up in the sheet feeder.
- Run the Print Head Alignment utility.
- Clear the High Speed check box in your printer driver's Advanced dialog box. For Windows users, see "Making Advanced settings" on page 3-13 for instructions. For Macintosh users, see "Making the Advanced settings" on page 5-10".
- Run the Head Cleaning utility to clear any clogged ink nozzles.
- Make sure that the Media Type setting selected in the printer driver is appropriate for the type of media that is loaded in the printer.

Color gaps

Try one or more of these solutions:

- Make sure that your paper is not damaged, dirty, or too old. Also, make sure that the printable side of the paper is face up in the sheet feeder.
- Run the Head Cleaning utility to clear any clogged ink nozzles.
- Check the  black and  color ink out lights. If one of the lights is flashing, replace the appropriate ink cartridge. See "Replacing an Empty Ink Cartridge" on page 8-1.

- ❑ Adjust the color settings in your application or your printer driver. For Windows users, see “Making Advanced settings” on page 3-13 for instructions. For Macintosh users, see “Making the Advanced settings” on page 5-10.
- ❑ Select Automatic as the Mode setting on your printer driver’s Main menu (Windows) or in the Print dialog box (Macintosh).
- ❑ Make sure that the Media Type setting selected in the printer driver is appropriate for the type of media that is loaded in the printer.

Colors are incorrect or missing

Try one or more of these solutions:

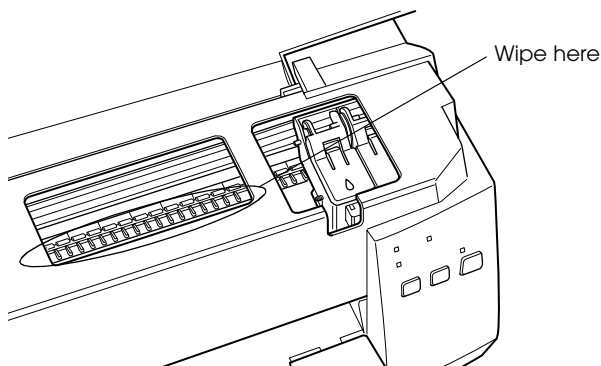
- ❑ Change the Ink setting in your printer driver to Color. For Windows users, see “Using the Automatic mode” on page 3-9 for instructions. For Macintosh users, see “Using the Automatic mode” on page 5-7.
- ❑ Adjust the color settings in your application or your printer driver. For Windows users, see “Making Advanced settings” on page 3-13 for instructions. For Macintosh users, see “Making the Advanced settings” on page 5-10.
- ❑ Run the Head Cleaning utility. If colors are still incorrect or are missing, replace the color ink cartridge. If the problem persists, replace the black ink cartridge. See “Replacing an Empty Ink Cartridge” on page 8-1.

Blurry or smeared printout

Try one or more of these solutions:

- ❑ Make sure that your paper is dry and that the printable side is facing up. Also, make sure that you are using an acceptable paper type. See “Paper” on page A-2 for specifications.

- ❑ Select Automatic as the Mode setting on your printer driver's Main menu (Windows) or in the Print dialog box (Macintosh).
- ❑ If the paper is curled toward the printable side, flatten it or curl it slightly toward the opposite side.
- ❑ Set the adjust lever to the "+" position, and make sure that the Media Type setting in your printer driver is correct.
- ❑ Remove each sheet from the output tray as it is printed, especially if you are using transparencies.
- ❑ If you are printing on glossy media or transparencies, place a support sheet (or a sheet of plain paper) beneath the stack. Or, load one sheet at a time.
- ❑ Run the Head Cleaning utility.
- ❑ Run the Print Head Alignment utility.
- ❑ Ink may have leaked inside the printer. Wipe the inside of the printer with a soft, clean cloth.



Warning:

Do not touch the gears inside the printer.

Printouts Are Not What You Expected

If one of the following problems has occurred, try the solutions listed for that problem.

- Incorrect or garbled characters
- Incorrect margins
- Inverted image
- Blank pages print
- Printout has smears on the bottom edge
- Printing is too slow

Incorrect or garbled characters

Try one or more of these solutions:

- Select your printer as the default printer in Windows.
- Clear any stalled print jobs from the Spool Manager. For instructions, see "Using EPSON Spool Manager" on page 4-3.
- Turn off the printer and computer. Make sure that the printer's interface cable is securely plugged in.
- If you are using NT 4.0, try to uninstall the EPSON Printer Port. Click Start and point to Programs, then point to EPSON Printers and click EPSON Printer Port Uninstall. Follow the on-screen instructions.

Incorrect margins

Try one or more of these solutions:

- ❑ Check the margin settings in your application. Make sure that the margins are within the printable area of the page. See “Paper” on page A-2 for specifications.
- ❑ For Windows users, check the settings on the Paper menu. Make sure that the settings are appropriate for the paper size that you are using.

For Macintosh users, check the settings in the Page Setup dialog box. Make sure that the settings are appropriate for the paper size that you are using.

Inverted image

Clear the Flip Horizontal check box in the printer driver, or turn off the “Mirror” setting in your application. For instructions, see online help for the printer driver or for your application.

For Macintosh, see also “Making the Advanced settings” on page 5-10.

Blank pages print

Try one or more of these solutions:

- ❑ Select your printer as the default printer in Windows.
- ❑ For Windows users, check the settings on the Paper menu. Make sure that they are appropriate for the paper size that you are using.

For Macintosh users, check the settings in the Page Setup dialog box. Make sure that they are appropriate for the paper size that you are using.

- ❑ Run the Head Cleaning utility to clear any clogged nozzles.

After trying one or more of these solutions, run a printer operation check to check your results. See “Running a printer operation check” on page 10-8 for details.

Printout has smears on the bottom edge

Try one or more of these solutions:

- ❑ If the paper is curled toward the printable side, flatten it or curl it slightly toward the opposite side.
- ❑ Set the adjust lever to the “+” position and clear the High Speed check box in your printer driver’s Advanced dialog box. The Advanced dialog box is accessible through the Main menu (Windows) or the Print dialog box (Macintosh) when Custom is selected as the Mode setting. To turn this option off, you may also need to change the Print Quality setting.


Printing is too slow

Try one or more of these solutions:

- ❑ Make sure that the Media Type setting in your printer driver is correct. For Windows users, see “Making the Media Type setting” on page 3-5 for instructions. For Macintosh users, see “Making the Media Type setting” on page 5-3.
- ❑ Select Automatic as the Mode setting on your printer driver’s Main menu (Windows) or in the Print dialog box (Macintosh) and then move the slider to Speed. For Windows users, see “Using the Automatic mode” on page 3-9 for instructions. For Macintosh, see “Using the Automatic mode” on page 5-7.
- ❑ Close any applications you are not using at the moment.


Printer Doesn't Print

If one of the following error indications is displayed, try the solutions listed.

- All lights are off
- Lights came on and then went out
- Only the power light is on
- The  paper out light is flashing or on
- One of the ink out lights is flashing or on
- Ink out lights are on and the other lights are flashing

All lights are off

Try one or more of these solutions:

- Press the  power button and make sure that the printer is on.
- Turn off the printer and make sure that the power cord is securely plugged in.
- Make sure that your outlet works and that it is not controlled by a wall switch or a timer.

Lights came on and then went out

The printer's voltage may not match the outlet rating. Turn off the printer and unplug it immediately. Then, check the printer label.

If the voltage does not match, **DO NOT PLUG YOUR PRINTER BACK IN**. Contact your dealer.

Only the power light is on

Try one or more of these solutions:

- ❑ Turn off the printer and computer. Make sure that the printer's interface cable is securely plugged in.
- ❑ Make sure that there is no packing material remaining inside the printer.
- ❑ Turn off the printer and computer and disconnect the printer's interface cable. Then, print an operation check page. See "Running a printer operation check" on page 10-8.

If the check page prints, make sure that the printer software and your application are installed correctly.

- ❑ If you are trying to print a large image, your computer may not have enough memory to print. Try printing a smaller image.
- ❑ If you are using Windows 2000 or NT 4.0, try to uninstall the EPSON Printer Port. Click Start, point to Programs and EPSON Printers, then click EPSON Printer Port Uninstall. Follow the on-screen instructions.
- ❑ Clear any stalled print jobs from the Spool Manager. For instructions, see "Using EPSON Spool Manager" on page 4-3.
- ❑ If the printer sounds like it is trying to print but is unable to, run the Head Cleaning utility.



If this does not work, replace the ink cartridges. See "Replacing an Empty Ink Cartridge" on page 8-1 for instructions.

Paper out light is flashing or on

If the paper out light is flashing, remove any paper that may be jammed in the printer.

If the paper out light is on, load more paper in the sheet feeder.


One of the ink out lights is flashing or on

If the  black or  color ink out light is flashing, ink is low. Prepare a replacement cartridge.

If the  black or  color light is on, ink is out. Replace the appropriate cartridge. See “Replacing an Empty Ink Cartridge” on page 8-1.

Ink out lights are on and the other lights are flashing

Follow the steps below.

1. Press the  load/eject button, then remove any paper in the printer.
2. Turn the printer off. Check for and remove any foreign objects or pieces of paper from inside the printer. Also, make sure that there is sufficient space around the vent on the back of the printer to allow proper ventilation. Remove any objects that are blocking the vent. Then, turn the printer back on.

Note:

If you cannot remove a foreign object easily by yourself, do not use force and do not disassemble the printer. Call your dealer for assistance.

3. If the error is not cleared, contact your dealer.

Paper Does Not Feed Correctly

If one of the following problems has occurred, try the solution(s) listed for the problem.

- Paper does not feed
- Multiple pages feed
- The paper jams
- Paper does not eject fully or is wrinkled

Paper does not feed

Remove the stack of paper and make sure of the following:

- The paper is not curled or creased.
- The paper is not too old. See the instructions that came with the paper for more information.
- The paper is not loaded above the arrow on the left edge guide.
- Paper is not jammed inside the printer. If it is, remove the jammed paper.
- The black and/or color ink cartridge is empty. Replace the appropriate cartridge. See "Replacing an Empty Ink Cartridge" on page 8-1.



Load the paper again. Make sure that you follow any special loading instructions that came with your paper. See also "Paper Handling" on page 19.

Multiple pages feed

Remove the stack of paper and make sure that the paper is not too thin. See “Paper” on page A-2 for specifications. Fan the edges of the stack to separate the sheets, then reload the paper.

If too many copies of a document are being printed, check the Copies setting in both the printer driver and in your application. For Windows users, see “Modifying the printout style” on page 3-21 for instructions. For Macintosh users, see “Modifying the Page Layout” on page 5-22.

The paper jams

Press the  load/eject button to eject the jammed paper. If the error does not clear, open the printer cover and remove all of the paper inside, including any torn pieces. Then, reload the paper in the sheet feeder and press  load/eject button to resume printing.


Note:

If you cannot remove a foreign object easily by yourself, do not use force and do not disassemble the printer. Call your dealer for assistance.

If your paper jams frequently, make sure of the following:

- The paper is smooth, not curled or wrinkled.
- The paper is of high-quality, loaded with the printable side up.
- The paper stack was fanned before loading.
- The paper is not loaded above the arrow on the left edge guide.
- The left edge guide is adjusted to fit your paper.

Paper does not eject fully or is wrinkled

If the paper does not eject fully, press the  load/eject button. Also check the Paper Size setting in your application or printer driver.

If the paper is wrinkled when it comes out, it may be damp or too thin. Load a new stack.

Note:

Store any unused paper in its original packaging in a dry area. See “Paper” on page A-2 for specifications.

Paper doesn't feed correctly when Using the double-sided printing feature

If multiple pages feed when using the double-sided printing feature, remove the paper as instructed in “Multiple pages feed” on page 10-24. You may be able to reuse the pages that were fed in error. Make sure that the paper is not wrinkled or creased, then reload it properly to ensure that no pages are skipped and that the document is printed correctly.

If paper jams when using the double-sided printing feature, remove the paper as instructed in “The paper jams” on page 10-24. If a number of print jobs have been sent to the printer, check the page settings in your application and confirm that the paper is loaded properly to ensure that no pages are skipped and that the document is printed correctly.

Where to Get Help

If your printer is not operating properly and you cannot solve the problem using the troubleshooting information in your printer documentation, contact customer support services for assistance.

Customer support will be able to help you much more quickly if you provide them with the following information:

- Serial number of your printer
(the serial number label is on the back of the printer)
- Printer model
- Brand and model of your computer
- Printer software version
(click ABOUT in your printer driver)
- Windows version that you are using
- Software application(s) you normally use with your printer and their version number(s)

For United Kingdom and the Republic of Ireland users

If you purchased your product in the UK or the Republic of Ireland, EPSON (UK) LTD provides a range of customer services and technical support.

Support via the World Wide Web

- For information on the latest EPSON products, software drivers, on-line user guides and answers to frequently asked questions:
<http://www.epson.co.uk>
- To email EPSON Technical Support:
<http://www.epson.co.uk/support/email/>
- For a full list of EPSON Customer and Warranty Support services:
<http://www.epson.co.uk/support/>

Support via telephone

Our Customer and Warranty Support teams can be contacted by calling 0870 163 7766 in the UK or 0044 0870 163 7766 from the Republic of Ireland. They can provide the following services:

- ❑ Technical information on installing, configuring and operating your EPSON products
- ❑ Arranging for faulty EPSON products to be repaired within the warranty period

Pre Sales Enquiry Desk

Our Enquiry Desk team can be contacted by calling 0800 220546 in the UK or 1 800 409132 from the Republic of Ireland, by faxing 01442 227271 in the UK or 0044 1442 227271 from the Republic of Ireland, and via Email at info@epson.co.uk. They can provide the following information:

- ❑ Pre sales information and literature on new EPSON products (also available via our world wide web site at <http://www.epson.co.uk>)
- ❑ Where to purchase genuine EPSON consumables, accessories, and options

For Australia users

EPSON Australia wishes to provide you with a high level of customer service. In addition to this user's guide, we provide the following sources for obtaining information:

EPSON FAXBACK

EPSON FAXBACK will fax you the latest specifications and pricing for most EPSON products offered in Australia. There is also technical information including details of the latest software and drivers available. Phone (02) 9903 9075 and the system will guide you through a number of choices before faxing the information to your fax machine.

Internet URL <http://www.epson.com.au>

Access the EPSON Australia World Wide Web pages. Worth taking your modem here for the occasional surf! You can get the same information as offered on the EPSON FAXBACK and the EPSON Bulletin Board, plus more.

Your dealer

Don't forget that your dealer can often help identify and resolve problems. The dealer should always be the first call for advice on problems. They can often solve problems quickly and easily as well as give you advice on the next step to take.

EPSON Helpdesk

EPSON Helpdesk is provided as a final backup to make sure that our clients have access to advice. Operators at the Helpdesk can aid you in diagnosing hardware and software problems. They can also advise you on the latest EPSON products and where the nearest dealer or service agent is located. Many types of queries are answered here.

The Helpdesk numbers are:

Phone: 1300 361 054

Fax: (02) 9903 9189

We encourage you to have all the relevant information on hand when you ring. The more information you prepare, the faster we can help solve the problem. This information includes the *User's Guide* for your EPSON product, type of computer, operating system, application programs, and any other information you feel is required.

For India users

Contacts for information, support and services are:

World Wide Web (www.epson.co.in)

Information on product specifications, drivers for download, Frequently Asked Questions (FAQ) Product Enquiry and Technical Query are available.

Epson India Bangalore Head Office:

Phone: 080 5095465

Fax: 080 5095474

For Malaysia users

Contacts for information, support and services are:

World Wide Web (www.epson.com.my)

Information on product specifications, drivers for download, Frequently Asked Questions (FAQ) and Email Enquiry are available.

Epson Trading Shah Alam Head Office

Phone: 03 5191366

Fax: 03 5191281

For Singapore users

Sources of information, support and services available from Epson Singapore are:

World Wide Web (www.epson.com.sg)

Information on product specifications, drivers for download, Frequently Asked Questions (FAQ), Sales Enquiry, and Technical Email Support are available.

Epson HelpDesk <Phone: (065) 5863111>

Our HelpDesk team can help you with the following over the phone:

Sales enquiry and product information

Product usage questions or problem

Enquiries on repair service and warranty

For Hong Kong users

To obtain technical support as well as other after-sales services, users are welcome to contact EPSON Hong Kong Limited.

Internet home page

EPSON Hong Kong has established a local home page in both Chinese and English on the Internet to provide users with the following information:

- Product information
- Answers to Frequently Asked Questions (FAQs)
- Latest versions of EPSON printer drivers

Users can access our World Wide Web home page at:

<http://www.epson.com.hk>

Electronic bulletin board system

An electronic bulletin board system (BBS) is also available to obtain printer information and the latest versions of printer drivers. You can log on to the following number for the BBS service:

BBS: (852) 2827-4244

Technical Support Hotline

You can also contact our technical staff at the following telephone and fax numbers:

Phone: (852) 2585-4399

Fax: (852) 2827-4383

For Philippines users

To obtain technical support as well as other after sales services, users are welcome to contact the EPSON Philippines Representative Office at the telephone and fax numbers below:

Phone: (632) 813-6552

Fax: (632) 813-6545

BBS: (632) 814-0595

Chapter 11

Options and Consumable Products

Options	11-1
Consumable products	11-4
Using optional interface cards	11-6
Consumable products	11-8

Options

Interface cards

A number of optional interfaces are available to supplement the printer's built-in interfaces. See "Using optional interface cards" on page 11-2 for more information.

If you are not sure whether you need an optional interface or if you want to know more about interfaces, contact your dealer.

Ethernet Interface Card	C82362*
	C82363*
	C82364*
	C82384*
IEEE 1394 Interface Card	C82372*

Note:

The asterisk () is a substitute for the last digit of the product number, which varies by location.*

Using optional interface cards

Note the following when using optional interface cards:

- ❑ To use the Ethernet Interface Card (C82362*/C82363*/C82364*/C82384*) and IEEE1394 Interface Card(C82372*), see the documentation that comes with the card for setup information.

Follow these steps to install an optional interface card.

1. Make sure the printer is turned off and all the printer's lights are off.
2. Unplug the power cord from the electrical outlet (and from the back of the printer, if your printer's power cord is removable).

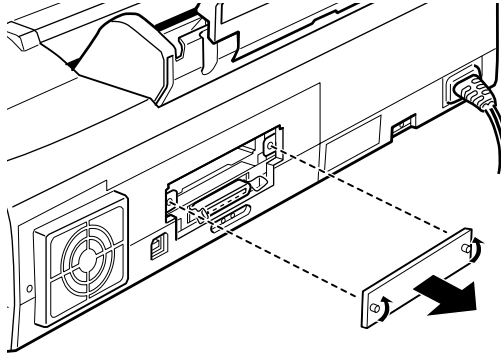


Caution:

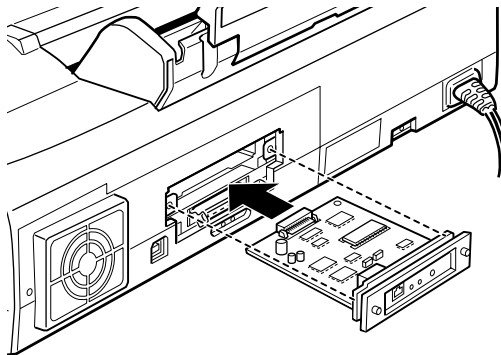
Do not install the interface card when the printer is connected to an electrical outlet. Doing so may damage the printer or your computer.

3. Turn the printer around so that its back faces you, and disconnect any existing interface cables.

4. Use a cross-head screwdriver to remove the two screws securing the shield plate to the optional interface slot; then remove the plate. Be sure to keep both screws; you may need to use them again when you reinstall the shield plate.



5. Be sure to set any switches and jumpers on the card. See the interface card's manual for details. If your interface card has a jumper labeled JG, make sure that you turn it on, or the card will not work properly.
6. Slide the interface card along the slots on both sides of the interface compartment. Push it in firmly to fully insert the connector at the rear of the interface card into the printer's internal socket.



7. Secure the interface card in the slot with the two screws included with the interface card.
8. Connect the proper interface cable to the interface card and to your computer. If the cable has a grounding wire, connect it to one of the screws securing the parallel interface.

Also, if you are using more than one computer, reconnect the other interface cable.

9. Make sure the printer is turned off. Then plug in the power cord.

Before you use the optional interface, you may need to change the setting for the interface option, such as I/F (interface) mode in the default-setting mode. If you need to change any settings, see “Changing the Print Settings” on page 12-2 for details.

To remove the interface card, follow the above steps in reverse order.

Consumable products

Ink cartridges

You can use the following cartridges with your printer.

Black ink cartridge	T003
Color ink cartridge	T005

Note:

The product numbers of ink cartridges may vary by location.

Media types

EPSON offers specially designed media for ink jet printers to meet most high-quality printing needs.

EPSON Premium Ink Jet Plain Paper (A4)	S041214
EPSON 360 dpi Ink Jet Paper (A4)	S041059 S041025
EPSON 360 dpi Ink Jet Paper (Letter)	S041060 S041028
EPSON Iron-On Cool Peel Transfer Paper (A4)	S041154
EPSON Iron-On Cool Peel Transfer Paper (Letter)	S041153 S041155
EPSON Photo Quality Ink Jet Paper (A4)	S041061 S041026
EPSON Photo Quality Ink Jet Paper (Letter)	S041062 S041029
EPSON Photo Quality Ink Jet Paper (Legal)	S041067 S041048
EPSON Photo Quality Ink Jet Cards (A6)	S041054
EPSON Photo Quality Ink Jet Cards (5 × 8")	S041121
EPSON Photo Quality Ink Jet Cards (8 × 10")	S041122
EPSON Photo Quality Self Adhesive Sheets (A4)	S041106
EPSON Ink Jet Note Cards A6 (with envelopes)	S041147
EPSON Ink Jet Greeting Cards 5 × 8" (with envelopes)	S041148
EPSON Ink Jet Greeting Cards 8 × 10" (with envelopes)	S041149

EPSON Matte Paper-Heavyweight (A4)	S041256 S041258 S041259
EPSON Matte Paper-Heavyweight (Letter)	S041257
EPSON Photo Paper (A4)	S041140
EPSON Photo Paper (Letter)	S041141
EPSON Photo Paper (4 × 6")	S041134
EPSON Photo Paper (100 × 150 mm)	S041255
EPSON Photo Paper (200 × 300 mm)	S041254
EPSON Panoramic Photo Paper (210 × 594 mm)	S041145
EPSON Photo Paper Cards (A4)	S041177
EPSON Photo Quality Glossy Film (A4)	S041071
EPSON Photo Quality Glossy Film (Letter)	S041072
EPSON Photo Quality Glossy Film (A6)	S041107
EPSON Photo Stickers 16 (A6)	S041144
EPSON Photo Stickers 4 (A6)	S041176

EPSON Ink Jet Transparencies (A4) S041063

EPSON Ink Jet Transparencies (Letter) S041064

EPSON Premium Glossy Photo Paper (A4) S041287

S041297

EPSON Premium Glossy Photo Paper (Letter) S041286

Note:

The availability of special media varies by location.

Chapter 12

Using the Printer Software for DOS

Installing the Printer Driver for DOS Programs	12-1
Changing the Print Settings	12-2
Changing the default settings	12-3
Using Built-in Fonts and Character Tables	12-3

Installing the Printer Driver for DOS Programs

Most DOS software programs include a driver for EPSON ESC/P 2™ printers and require that you select the printer from a list to install the printer driver. To take advantage of your printer's advanced, built-in, scalable fonts and graphics handling, you must select an appropriate driver.

If your printer is not included in the list, contact your software manufacturer to obtain updated software.

If the manufacturer does not have an updated printer driver for your printer, select an alternative printer from those listed below, choosing the printers listed at the top first.

When printing in black only:

- LQ-870/1170
- LQ-570 (+)/1070(+)
- SQ-870/1070
- LQ-850
- LQ-500

When printing in black and color:

EPSON Stylus PRO
EPSON Stylus COLOR 500
EPSON Stylus COLOR II
LQ-860
LQ-2550

Note:

The drivers for the printers listed above do not allow access to all of the features offered by the EPSON STYLUS COLOR 980, such as 720-dpi printing, 1440-dpi printing, and MicroWeave.

DOS software varies greatly. See the printing section of your software manual for information on accessing the printer driver settings.

Changing the Print Settings

You can change many print settings such as print direction and loading position. Because these settings take effect each time you turn on the printer, they are also called default settings.

The factory default settings are designed to meet the needs of most users, so you may not need to change them. The table below lists the features you can select in the default-setting mode.

Settings	Options
Font	Courier, Roman, Sans Serif, Prestige, Script, Roman T, Sans Serif H, Draft
Pitch	10 cpi, 12 cpi, 15 cpi, 17.1 cpi, 20 cpi, Proportional
Print direction	Auto, Bi-D, Uni-D
Loading position	8.5 mm, 3 mm, Others
I/F mode	Auto, Parallel, USB
Auto I/F wait time	10 seconds, 30 seconds

Network I/F mode	Off, On
Parallel I/F transfer rate	Fast, Normal
Software	ESC/P 2, IBM X24E
Auto CR (IBM mode only)	Off, On
AGM (IBM mode only)	Off, On
Auto line feed	Off, On
0 slash	0, 0 with slash
Character table	<p>Standard model: Italic, PC437, PC850, PC860, PC861, PC863, PC865, BRASCII, Abicomp, Roman 8, ISO Latin 1, PC858, ISO 8859-15</p> <p>All other models: Italic, PC437, PC437 Greek, PC850, PC852, PC853, PC855, PC857, PC866, PC869, MAZOWIA, Code MJK, ISO 8859-7, ISO Latin 1T, Bulgaria, PC774, Estonia, ISO 8859-2, PC866 LAT, PC866 UKR, PCAPTEC, PC708, PC720, PCAR864, PC860, PC861, PC863, PC865, BRASCII, Abicomp, Roman 8, ISO Latin 1, PC858, ISO 8859-15</p>


Note:

Most software controls the character table and auto line feed. If your software controls these features, you may never need to set them with the control panel.


Changing the default settings




To change the printer's default settings, use the control panel buttons. Your selections are indicated by the control panel lights. Follow the steps below.

1. Make sure that the printer is turned off and that A4 or Letter size paper is loaded in the sheet feeder.


- Hold down the  cleaning button and turn on the printer to enter the default-setting mode.

The printer loads a sheet of paper and prints a brief summary and instructions. It instructs you to select the language that you want messages printed in (English, French, German, Italian, Spanish, or Portuguese).

- Press the  cleaning button until the control panel lights indicate the language of your choice, as shown below.

Language			
English	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
French	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
German	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Italian	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spanish	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Portuguese	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

■ = On, □ = Off

- Press the  load/eject button to print the current default settings and the next set of instructions in the language that you selected. The printed instructions include submenu tables that list all of the settings that you can change and describe the appearance of the control panel lights for each selection. Use these instructions to change the settings using the control panel.
- After making your changes, exit the default-settings mode by turning off the printer.

Note:

You may exit the default-settings mode at any time by turning off the printer. Any settings that you have made remain in effect until you change them.

If you want to check the current default settings, enter the default-settings mode again and print the current default settings. The current settings are indicated with arrows.

Appendix A

Printer Specifications

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Printing

Printing method	On-demand ink jet
Nozzle configuration	Monochrome (black) 192 nozzles Color (cyan, magenta, yellow) 288 nozzles (96 [each color] × 3)
Resolution	Maximum 2880 dpi × 720 dpi
Print direction	Bidirectional with logic seeking
Control code	ESC/P2 and Raster graphics code EPSON Remote IBM X24E emulation code
Input buffer	256 KB
Character tables	1 italic and 12 graphics character tables (33 graphics character tables are available in certain countries.)
Character sets	14 international character sets and 1 legal character set

Paper

Note:

Since the quality of any particular brand or type of paper may be changed by the manufacturer at any time, EPSON cannot attest to the quality of any non-EPSON brand or type of paper. Always test samples of paper stock before purchasing large quantities or printing large jobs.

Paper specifications

Single sheets:

Size	A4 (210 mm × 297 mm) A5 (148 mm × 210 mm) B5 (182 mm × 257 mm) Letter (216 mm × 279 mm) Half letter (139.7 mm × 215.9 mm) Legal (216 mm × 356 mm) Executive (184.2 mm × 266.7 mm)
Paper types	Plain paper, bond paper, special papers distributed by EPSON
Thickness (for plain bond paper)	0.08 mm to 0.11 mm (0.003 to 0.004 inch)
Weight (for plain bond paper)	64 g/m ² (17 lb) to 90 g/m ² (24 lb)

Envelopes:

Size	No. 10 (104.8 mm × 241 mm) DL (110 mm × 220 mm) C6 (114 mm × 162 mm) 132 mm × 220 mm
Paper types	Plain paper, bond paper, air mail
Thickness	0.16 mm to 0.52 mm (0.006 to 0.02 inch)
Weight	45 g/m ² (12 lb) to 75 g/m ² (20 lb)

Index Cards:

Size	A6 (105 mm × 148 mm) 5 × 8" (127 mm × 203 mm) 8 × 10" (203 mm × 254 mm)
Paper types	Special papers distributed by EPSON

Transparencies, Glossy Film:

Size	A4 (210 mm × 297 mm) Letter (216 mm × 279 mm) A6 (105 mm × 148 mm) [for glossy film]
Paper types	Special papers distributed by EPSON

Self Adhesive Sheets:

Size	A4 (210 mm × 297 mm)
Paper types	Special papers distributed by EPSON

Matte Paper-Heavyweight:

Size	A4 (210 mm × 297 mm) Letter (216 mm × 279 mm)
Paper types	Special papers distributed by EPSON

Premium Glossy Photo Paper:

Size	A4 (210 mm × 297 mm) Letter (216 mm × 279 mm)
Paper types	Special papers distributed by EPSON

Photo Paper:

Size	A4 (210 mm × 297 mm) Letter (216 mm × 279 mm) 100 mm × 150 mm 4 × 6" (101.6 mm × 152.4 mm) 200 mm × 300 mm 113.6 mm × 175.4 mm Panoramic: 210 mm × 594 mm
Paper types	Special papers distributed by EPSON

Photo Stickers:

Size	A6 (105 mm × 148 mm) with 4 or 16 frames
Paper types	Special paper distributed by EPSON

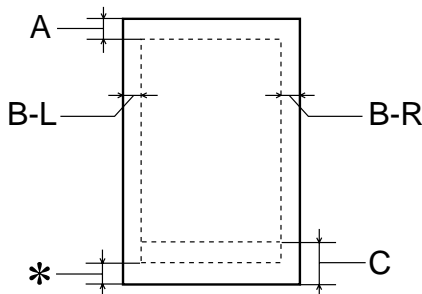
Note:

- ❑ *Poor quality paper may reduce print quality and cause paper jams or other problems. If you encounter such problems, switch to a higher grade of paper.*
- ❑ *Do not load curled or folded paper.*
- ❑ *Use paper under normal conditions:
Temperature 15 to 25°C (59 to 77°F)
Humidity 40 to 60% RH*
- ❑ *EPSON Photo Quality Glossy Film and Self Adhesive Sheets should be stored under the following conditions:
Temperature 15 to 30°C (59 to 86°F)
Humidity 20 to 60% RH*

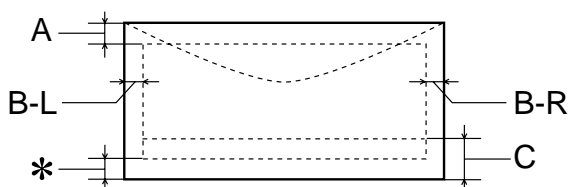
Printable area

Refer to the appropriate section below for the printable area of a particular media type.

Single sheets (including panoramic size) and index cards



Envelopes



A: The minimum top margin is 3.0 mm (0.12").

When loading multiple sheets of EPSON Photo Quality Glossy Film, the minimum top margin is 30.0 mm (1.2").

B-L: The minimum left margin is 3.0 mm (0.12").

B-R: The minimum right margin is 3.0 mm (0.12").
(The minimum right margin may vary, depending on the media type.)

C: The minimum bottom margin is 14.0 mm (0.55").

*: You can decrease the minimum bottom margin to 3 mm by selecting Maximum as the Printable Area setting on the printer driver's Paper menu (Windows) or in the Page Setup dialog box (Macintosh). However, the minimum bottom margin varies, depending on the paper. Also, print quality may decline in the expanded area. Before printing large jobs using this setting, print a single sheet to confirm printout quality.

Ink Cartridges

Black ink cartridges (T003)

Color	Black
Print capacity*	1200 pages (A4, ISO/IEC 10561 Letter pattern 360 dpi)
Cartridge life	2 years from production date (within 6 months after opening package, at 25°C [77°F])
Temperature	Storage: -20 to 40°C (-4 to 104°F) 1 month at 40°C (104°F) Transit: -30 to 60°C (-22 to 140°F) 1 month at 40°C (104°F) 120 hours at 60°C (140°F) Freezing:** -16°C (3.2°F)
Dimensions	28.9 mm (W) × 67.4 mm (D) × 41.8 mm (H)

Color ink cartridge (T005)

Colors	Cyan, magenta, and yellow
Print capacity*	570 pages (A4, 360 dpi, 5% duty each color)
Cartridge life	2 years from production date (within 6 months of opening the package at 25°C [77°F])
Temperature	Storage: -20 to 40°C (-4 to 104°F) 1 month at 40°C (104°F) Transit: -30 to 60°C (-22 to 140°F) 1 month at 40°C (104°F) 120 hours at 60°C (140°F) Freezing:** -18°C (-0.4°F)
Dimensions	54.0 mm (W) × 67.4 mm (D) × 41.8 mm (H)

* The print capacity may vary, depending on how often you use the print head cleaning function and how often you use the printer.

** Ink thaws and is usable after approximately 3 hours at 25°C (77°F).



Caution:

- ❑ *EPSON recommends the use of original EPSON ink cartridges only. Other products not manufactured by EPSON may cause damage to your printer not covered by EPSON's warranties.*
- ❑ *Do not use an ink cartridge if the date on the package has expired.*

Mechanical

Paper feed method	Friction
Paper path	Sheet feeder, rear entry
Sheet feeder capacity	About 100 sheets of 64 g/m ² (17 lb) paper
Dimensions	Storage Width: 467 mm (18.4 inches) Depth: 296 mm (11.7 inches) Height: 199 mm (7.8 inches) Printing Width: 467 mm (18.4 inches) Depth: 594 mm (23.4 inches) Height: 325 mm (12.8 inches)
Weight	8.4 kg (18.5 lb) without the ink cartridges installed

Electrical

	120 V Model	220-240 V Model
Input voltage range	99 to 132 V	198 to 264 V
Rated frequency range	50 to 60 Hz	
Input frequency range	49.5 to 60.5 Hz	
Rated current	0.7 A	0.4 A
Power consumption	Approx. 30 W (ISO/IEC 10561 Letter Pattern) Energy Star compliant	

Note:

Check the label on the back of the printer for the voltage of your printer.

Environmental

Temperature	Operation: 10 to 35°C (50 to 95°F) Storage: -20 to 60°C (-4 to 140°F) 1 month at 40°C (104°F) Transit:* -20 to 60°C (-4 to 140°F) 120 hours at 60°C (140°F)
Humidity	Operation:** 20 to 80% RH Storage:*,** 5 to 85% RH

* Stored in shipping container

** Without condensation

Safety Approvals

Safety standards:

U.S. model	UL 1950 CSA C22.2 No.950
European model	Directive 73/23/EEC EN60950

EMC:

U.S. model	FCC part 15 subpart B class B CSA C108.8 class B
European model	Directive 89/336 /EEC EN 55022 (CISPR Pub. 22) class B EN 50082-1 IEC 60801-2 IEC 60801-3 IEC 60801-4 EN 61000-3-2 EN 61000-3-3
Australian model	AS/NZS 3548 class B

System Requirements

For Windows computers

To use this printer, you need Microsoft® Windows® 98, Windows® 95, Windows® 3.1, Windows® 2000 or Windows NT® 4.0 installed and a shielded, twisted-pair parallel cable connected. If you wish to connect your printer to a USB port, you need a Windows 98 or 2000 pre-installed PC that is equipped with a USB port and is connected to the printer via a shielded USB cable.

Your computer should also meet the following system requirements.

Minimum System Requirements	Recommended System
i386/25 MHz for Windows 3.1 i486/25 MHz for Windows 95 and NT 4.0 i486/66 MHz for Windows 98 and 2000	Pentium or better processor

16 MB RAM	32 MB RAM or more for Windows 98, 95, and 3.1 64 MB RAM or more for Windows 2000 and NT 4.0
20 MB hard disk space for Windows 98, 95, and 3.1 40 MB for Windows 2000 and NT 4.0	50 MB or more hard disk space for Windows 98, 95, and 3.1 100 MB or more for Windows 2000 and NT 4.0
VGA monitor	VGA monitor or better

Your computer dealer can help you update your system if it does not meet these requirements.

For Macintosh computers

To connect this printer to an Apple® Macintosh® computer, you must use a USB cable.

Your Macintosh must also meet the following system requirements.

Minimum System Requirements	Recommended System
Mac OS 8.1 (If using the optional IEEE1394 Interface Card, MacOS 8.6.)	Mac OS 8.5.1 or later (If using the optional IEEE1394 Interface Card, MacOS 8.6 or later.)
9 MB RAM 9 MB RAM when background printing is turned on.	21 MB RAM or more. 36 MB RAM or more when background printing is turned on.

Note:

- ❑ *The amount of available memory varies according to the number and kind of applications that are open. To see how much memory is available, click About This Computer on the Apple menu and refer to the memory size (listed in kilobytes) under "Largest Unused Block" (1,024K=1 MB).*

- ❑ *The memory requirements above are for printing on Letter size paper. These requirements may vary depending on the size of the paper, the type of application that you are using, and the complexity of the document that you want to print.*

In addition to these system and memory requirements, you need 10 MB of free hard disk space to install the printer software. To print, you also need extra hard disk space amounting to about twice the size of the file that you want to print.

Glossary

The following definitions apply specifically to printers.

application

A software program that helps you carry out a particular task such as word processing or financial planning.

ASCII

American Standard Code for Information Interchange. A standardized coding system for assigning numerical codes to letters and symbols.

banding

The horizontal lines that sometimes appear when printing graphics. This occurs when the print head is misaligned. See also *MicroWeave*.

bit

A binary digit (0 or 1), which is the smallest unit of information used by a printer or computer.

brightness

The lightness or darkness of an image.

buffer

The portion of the printer's memory used to store data before printing it.

byte

A unit of information consisting of eight bits.

characters per inch (cpi)

A measure of the size of text characters, sometimes referred to as pitch.

CMYK

Cyan (blue-green), magenta, yellow, and black. These colored inks are used to create the subtractive system array of printed colors.

color matching

A method of processing color data so that colors displayed on a computer screen closely match colors in printouts. A variety of color-matching software is available. See also *ColorSync*.

ColorSync

Macintosh software that is designed to help you get WYSIWIG (what you see is what you get) color output. This software prints colors as you see them on your screen.

cpi

See *characters per inch*.

default

A value or setting that takes effect when the equipment is turned on, reset, or initialized.

DMA

Direct Memory Access. A data transfer feature that bypasses a computer's CPU and allows direct communication between a computer and peripheral devices (like printers), and between one peripheral device and another.

dpi

Dots per inch. The dpi measures the resolution. See also *resolution*.

drive

A memory device, such as a CD-ROM drive, hard drive, or floppy disk drive. In Windows, a letter is assigned to each drive for easy management.

driver

A software program that sends instructions to a computer peripheral to tell it what to do. For example, your printer driver accepts print data from your word processor application and sends instructions to the printer on how to print this data.

economy printing

Printing in which images are printed using fewer dots to save ink.

error diffusion

Error diffusion blends individual colored dots with the colors of the surrounding dots to create the appearance of natural colors. By blending colored dots, the printer can achieve excellent colors and subtle color gradation. This method is best suited for printing documents that contain detailed graphics or photographic images.

ESC/P

Abbreviation for EPSON Standard Code for Printers, the system of commands that your computer uses to control your printer. It is a standard for all EPSON printers and is supported by most applications for personal computers.

ESC/P 2

An enhanced version of the ESC/P printer command language. Commands in this language produce laser-like features, such as scalable fonts and enhanced graphics printing.

Finest detail

This printer driver setting automatically makes your printouts sharper and clearer, especially when the printouts contain text. This may increase the time required for printing.

font

A style of type designated by a family name.

grayscale

A sequence of shades of gray from black to white. Grayscale is used to represent colors when printing with black ink only.

halftones

Patterns of black or colored dots used to reproduce an image.

halftoning

A method of using dot patterns to represent an image. Halftoning makes it possible to produce varying shades of gray using only black dots, or a nearly infinite array of colors using only a few colors of dots. See also *halftones*.

high speed printing

Printing in which images are printed in both directions. This results in faster printing.

initialization

Returns the printer to its defaults (fixed set of conditions). This happens every time you turn on the printer or reset the printer.

ink cartridge

Contains the ink that your printer uses when printing.

ink jet

A method of printing in which each letter or symbol is formed by precisely spraying ink onto the paper.

interface

The connection between the computer and the printer. A parallel interface transmits data one character or code at a time. A serial interface transmits data one bit at a time.

interface cable

The cable that connects the computer and the printer.

local printer

The printer that is directly connected to the computer's port by an interface cable.

media

Materials upon which data is printed, such as envelopes, plain paper, special paper, and transparency film.

memory

The part of the printer's electronic system that is used to store information (data). Some of the information is fixed and is used to control how the printer operates. Information that is sent to the printer from the computer is temporarily stored in memory. See also *RAM* and *ROM*.

MicroWeave

Printing in which images are printed in finer increments to reduce the possibility of banding and to produce laser-like images. See also *banding*.

monochrome

Printing using only one color of ink, which is generally black.

nozzle

Fine tubes in the print head through which ink is sprayed on the page. Print quality may decline if the print head nozzles are clogged.

operation check

A method for checking the operation of the printer. When you perform a printer operation check, the printer prints the ROM version, code page, ink counter code, and a nozzle check pattern.

parallel interface

See *interface*.

port

An interface channel through which data is transmitted between devices.

printable area

The area of a page on which the printer can print. It is smaller than the physical size of the page due to margins.

printer driver

A software program that sends commands for using the features of a particular printer. See also *driver*.

print queue

When your printer is connected to a network, a waiting line in which print jobs that are sent to the printer are held while the printer is busy.

RAM

Random Access Memory. The portion of the printer's memory that is used as a buffer and for storing user-defined characters. All data that is stored in RAM is lost when the printer is turned off.

reset

To return a printer to its defaults by turning the printer off and then back on.

resolution

The number of dots per inch used to represent an image.

ROM

Read Only Memory. A portion of memory that can only be read and cannot be used for data storage. Data that is stored in ROM is retained when you turn off the printer.

RGB

Red, green, and blue. These colors, in phosphors irradiated by a cathode ray tube (CRT) monitor's electron gun, are used to create the additive array of screen colors.

serial interface

See *interface*.

spool

The first step in printing, in which the printer driver converts the print data into codes that your printer understands. This data is then sent directly to the printer or to the print server.

spool manager

The software program that converts print data into codes that your printer understands. See also *spool*.

sRGB

The color management method used to maintain color consistency between devices which adhere to the sRGB standard.

Status Monitor

The software program that allows you to check the printer's status.

subtractive colors

Colors produced by pigments that absorb some colors of light and reflect others. See also *CMYK*.

USB interface

Universal Serial Bus interface. Enables the user to connect up to 127 peripheral devices (such as keyboards, mice, and printers) to the computer through a single, general-purpose port. The use of USB hubs allows you to add additional ports. See also *interface*.

WYSIWYG

What-you-see-is-what-you-get. This term is used to describe printout that looks exactly like it appears on screen.

