



Color StyleWriter 2400

User's Guide

 Apple Computer, Inc.

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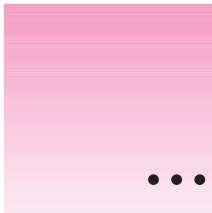
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Communications regulation information

FCC statement

This equipment has been tested and found to comply with the limits for a Class B digital device in accordance with the specifications in Part 15 of FCC rules. See instructions if interference to radio or television reception is suspected.

Radio and television interference

The equipment described in this manual generates, uses, and can radiate radio-frequency energy. If it is not installed and used properly—that is, in strict accordance with Apple’s instructions—it may cause interference with radio and television reception.

This equipment has been tested and found to comply with the limits for a Class B digital device in accordance with the specifications in Part 15 of FCC rules. These specifications are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

You can determine whether your computer system is causing interference by turning it off. If the interference stops, it was probably caused by the computer or one of the peripheral devices.

If your computer system does cause interference to radio or television reception, try to correct the interference by using one or more of the following measures:

- Turn the television or radio antenna until the interference stops.
- Move the computer to one side or the other of the television or radio.
- Move the computer farther away from the television or radio.
- Plug the computer into an outlet that is on a different circuit from the television or radio. (That is, make certain the computer and the television or radio are on circuits controlled by different circuit breakers or fuses.)

If necessary, consult an Apple-authorized service provider or Apple. See the service and support information that came with your Apple product. Or, consult an experienced radio/television technician for additional suggestions. You may find the following booklet helpful: *Interference Handbook* (stock number 004-000-00493-1). This booklet, prepared by the Federal Communications Commission, is available from the U.S. Government Printing Office, Washington, DC 20402.

IMPORTANT Changes or modifications to this product not authorized by Apple Computer, Inc., could void the FCC Certification and negate your authority to operate the product.

This product was tested for FCC compliance under conditions that included the use of Apple peripheral devices and Apple shielded cables and connectors between system components. It is important that you use Apple peripheral devices and shielded cables and connectors between system components to reduce the possibility of causing interference to radios, television sets, and other electronic devices. You can obtain Apple peripheral devices and the proper shielded cables and connectors through an Apple-authorized dealer. For non-Apple peripheral devices, contact the manufacturer or dealer for assistance.

DOC statement

DOC Class B Compliance This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled “Digital Apparatus,” ICES-003 of the Department of Communications.

Observation des normes—Classe B Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: “Appareils Numériques,” NMB-003 édictée par le ministre des Communications.

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1

Setting Up Your Printer



This chapter introduces the Apple Color StyleWriter 2400 printer and explains how to set it up. After you follow the instructions in this chapter, you'll be ready to print.

Before you begin Make sure that your computer is already set up and that you know the basics of its operation.

Main features of the Color StyleWriter 2400

- High-quality color graphics and text are printed quietly on a variety of materials, including plain paper.
- An energy conservation feature turns off the printer when you aren't using it and turns it on when needed.
- The automatic sheet feeder holds up to 100 sheets of paper or up to 15 envelopes.
- The ink cartridges are easy to replace.
- ColorShare (installed with the printer software) allows you to share the printer with anyone on your AppleTalk network (including people using LocalTalk, EtherTalk, or TokenTalk).
- ColorSync (installed with the printer software) ensures that the colors on your monitor and on your printer are the best they can be.
- 64 available TrueType (outline) fonts print smoothly in a variety of sizes.

Important safety instructions

Always take the following precautions:

- Keep the printer cover closed when printing.
- Always turn off the printer before unplugging it.
- Keep the ink tanks and ink cartridges away from children.
- Keep the printer away from sources of liquids, such as wash basins, bathtubs, and shower stalls.
- Protect the printer from dampness or wet weather, such as rain and snow.
- Read all the installation instructions carefully before you plug the printer into a wall socket.
- Keep these instructions handy for reference by you and others.
- Follow all instructions and warnings dealing with your computer system.
- Don't use devices that produce open flames, such as Bunsen burners, near the printer.
- Don't use alcohol-based or ammonia-based cleaners on or around the printer.
- Clean the outside of the printer with only a damp cloth and, if necessary, a mild soap or detergent. Be careful not to get liquid into the printer or the power cord receptacle.

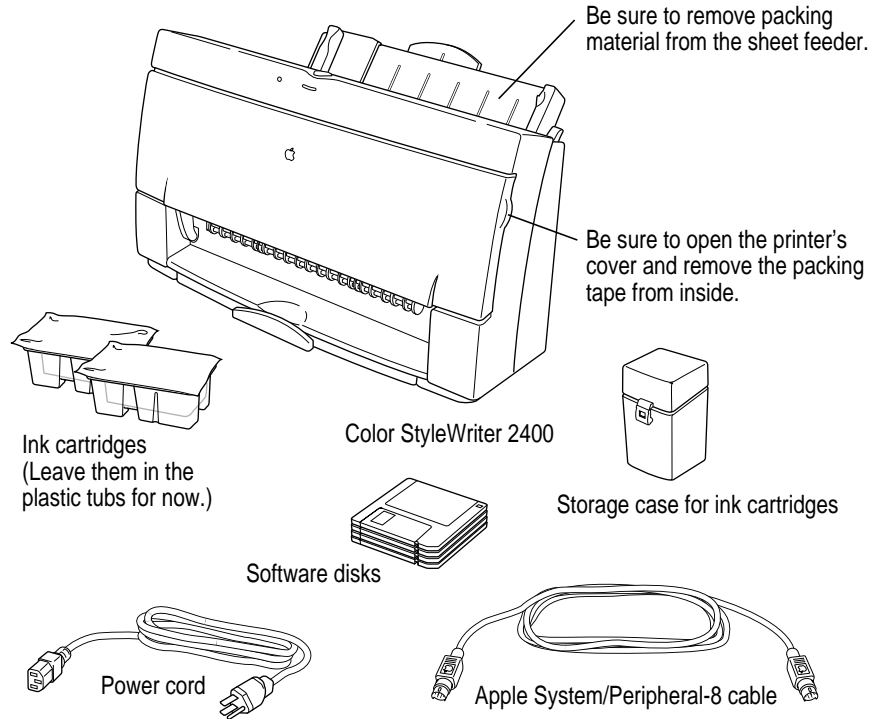
Watch for these situations, and if one occurs pull the plug!

- the power cord or plug becomes frayed or otherwise damaged
- you spill something into the printer
- the printer is exposed to rain or any other excess moisture
- the printer has been dropped or otherwise damaged
- you suspect that your printer needs service or repair
- you want to clean the printer (use only the procedure recommended in Chapter 4)

WARNING Electrical equipment may be hazardous if misused. Operation of this product, or similar products, must always be supervised by an adult. Do not allow children access to the interior of any electrical product and do not permit them to handle any cables.

Unpacking the printer

- 1 Remove everything from the shipping box, but leave the ink cartridges in their packages.**



- 2 Remove the tape and packing material from the inside and outside of the printer.**

Save the carton and the packing material in case you ever need to ship the printer. (See Appendix C, "Packing and Moving the Printer.")

- 3 Close the printer's cover.**

4 Place the printer in your work area.

Choose a location near your computer that has a grounded electrical outlet and good ventilation, is out of direct sunlight, never gets damp or very hot or very cold, and is away from devices that could cause electromagnetic interference, such as stereo speakers or cordless telephone transmitters. Do not place the printer on a slanted surface. See Appendix A, “Technical Information,” for specific information about the physical requirements of your printer.

Note: Don't accidentally discard the ink cartridge storage case. You need it to store an opened cartridge that you're not using in the printer. The case keeps the print head from drying out and prevents accidents with ink stains.

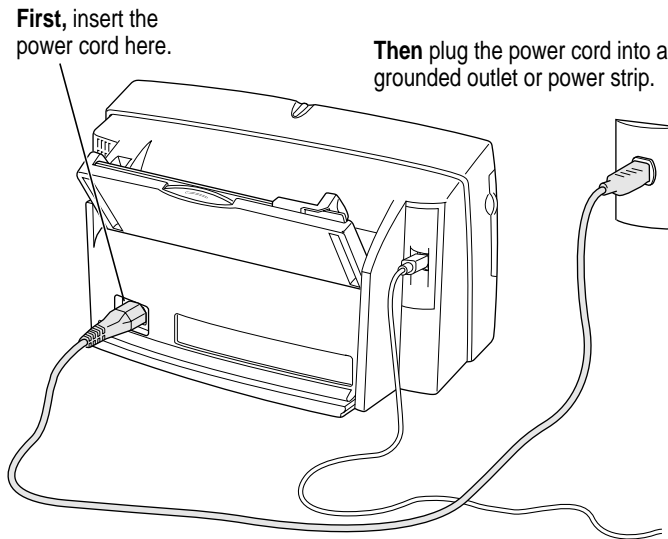
System requirements

To install the printer software and use the Color StyleWriter 2400 printer with your Macintosh computer, you need

- a Macintosh with a 68020 or higher central processing unit (any Macintosh except a Macintosh Plus, SE, Classic®, Portable, or PowerBook 100)
- system software version 7.0 or a later version
- at least 4 megabytes of random-access memory (RAM)
- some space available on your hard disk (during installation the program tells you if you need more disk space)

Plugging in the printer

WARNING This equipment is intended to be electrically grounded. Your Color StyleWriter 2400 printer is equipped with a three-wire grounding plug—a plug that has a third (grounding) pin. This plug fits only a grounded AC outlet. This is a safety feature. If you are unable to insert the plug into the outlet because the outlet is not grounded, contact a licensed electrician to replace the outlet with a properly grounded outlet. Do not defeat the purpose of the grounding plug!



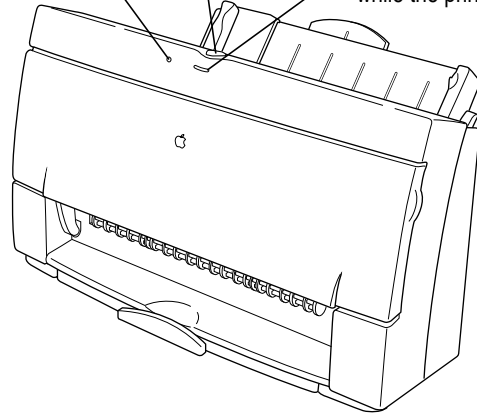
IMPORTANT The only way to disconnect power completely is to unplug the power cord. Make sure that at least one end of the power cord is within easy reach so that you can unplug the printer in an emergency.

Turning the printer on and off

To turn the printer on (and off), press this button.

This light blinks.

This light glows while the printer is on.



The first time you turn on the printer, the green power light glows and the yellow error light blinks because you haven't installed an ink cartridge yet. (The next section tells you how to install the cartridge.)

To save power, the printer turns itself off after sitting unused for about 5 minutes. As long as you leave it plugged into an active power outlet, the printer turns itself on automatically when you print something.

WARNING Except in an emergency, never turn the printer off by unplugging it unless the power light indicates that the power is off. If the printer is plugged into a power strip, never turn off the power strip unless you've already turned the printer off.

Each time you turn off the printer, or the printer turns itself off, it automatically moves the ink cartridge to the right, where it caps the nozzles to keep the ink cartridges from drying out. If you unplug the printer or discontinue power before turning it off, the printer can't position the cartridge in the capped position, the print head may dry out, and you'll have to replace the cartridge.

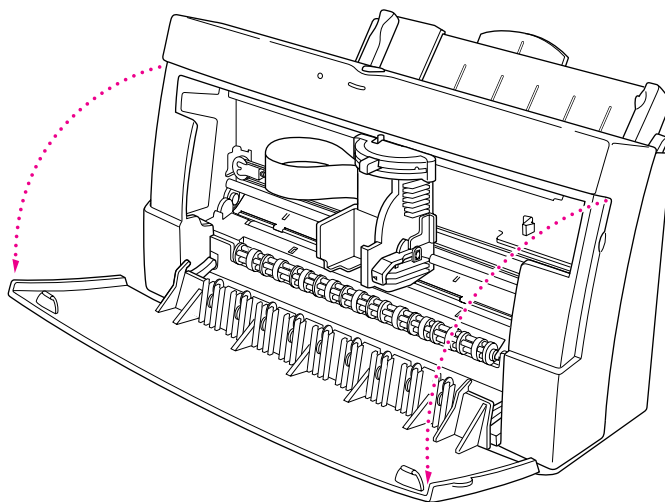
Installing the ink cartridge

The ink cartridge contains the print head, which sprays the ink onto the paper. Treat it gently so you don't damage its tiny nozzles.

WARNING The carrier holds the ink cartridge and moves it back and forth when you are printing a document. When the printer is plugged in, don't slide the carrier by hand or you may damage the printer.

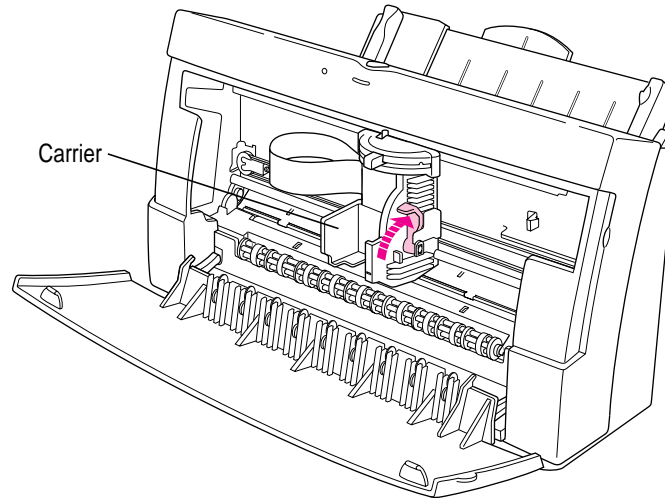
Before you start, make sure the printer is turned on. (The green light glows, and the yellow light flashes.)

- 1 Open the printer by pulling down its front cover.



- 2 Wait a few seconds until the carrier moves to the center of the printer.

- 3** Raise the bright blue lever on the carrier.



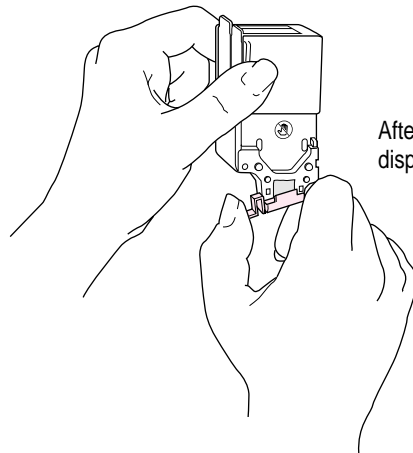
- 4** Remove the cover from the plastic tub that contains the ink cartridge.

You can install either the black-only cartridge or the four-color cartridge. (These instructions show the four-color cartridge being installed, but the process is the same for either cartridge.)

- 5** Remove the ink cartridge from the plastic tub, grasping it by its sides.

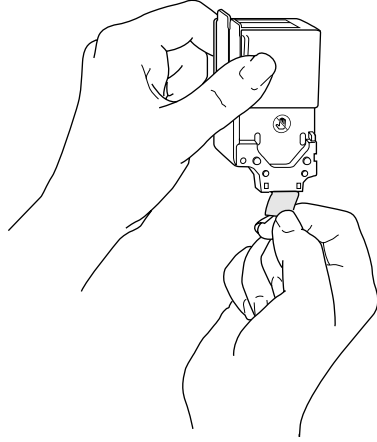
You may touch the black plastic, but be careful not to touch any other part.

- 6** Remove the bright orange cap from the cartridge's print head.

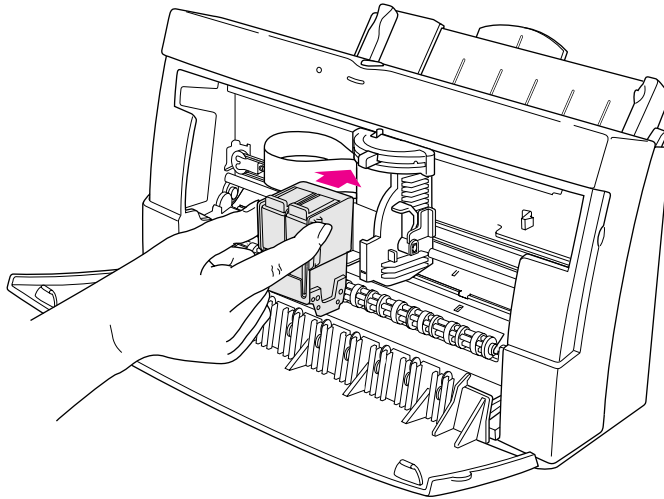


After you snap it off, dispose of the cap.

- 7** Peel the orange tape off the print head.

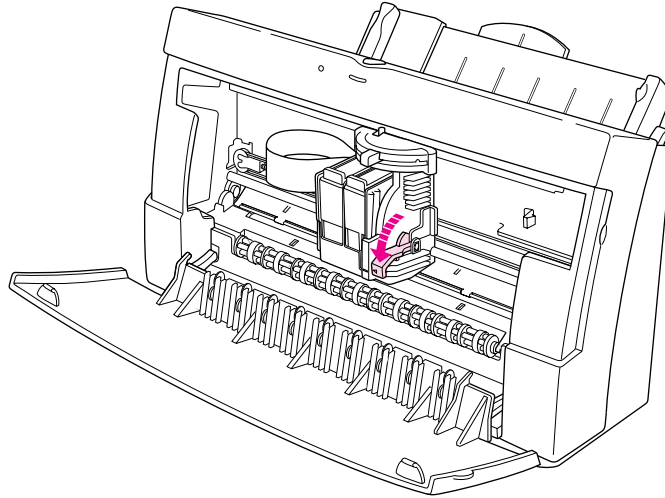


- 8** Slide the ink cartridge straight into its place in the printer.



Note: There are instructions inscribed inside the printer cover to remind you how to install either ink cartridge.

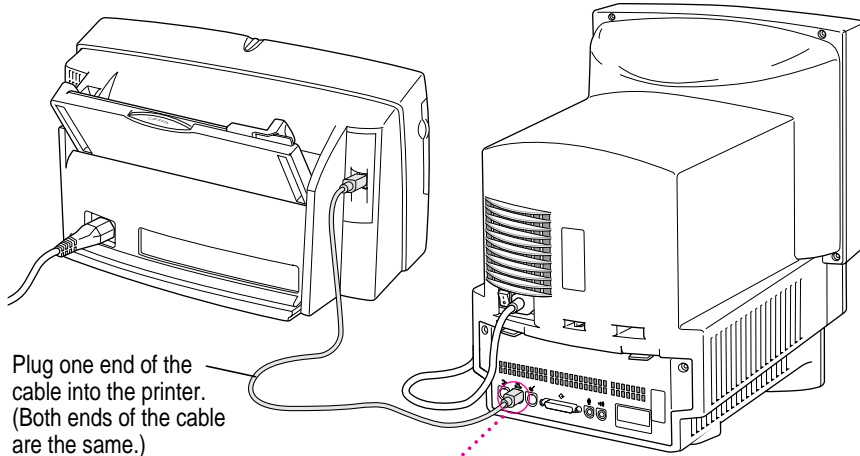
- 9** Lower the lever to secure the ink cartridge in place.



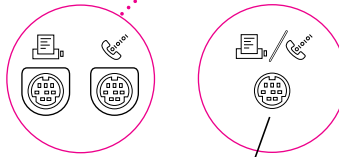
- 10** Close the printer's front cover.

Connecting the printer to your Macintosh

IMPORTANT The serial cable must connect the printer directly to the computer. Use only the cable that comes with the printer. Replace the cable only with another Apple System/Peripheral-8 cable that contains special shielding to prevent interference with radio and television signals.



Connect the other end of the cable to either the printer port or the modem port, which are labeled with these icons.



Some Macintosh computers have a combined serial port with two icons.

If your computer is connected to a network, a network cable may already be connected to the printer port (🖨️). In that case, use the modem port (📠).

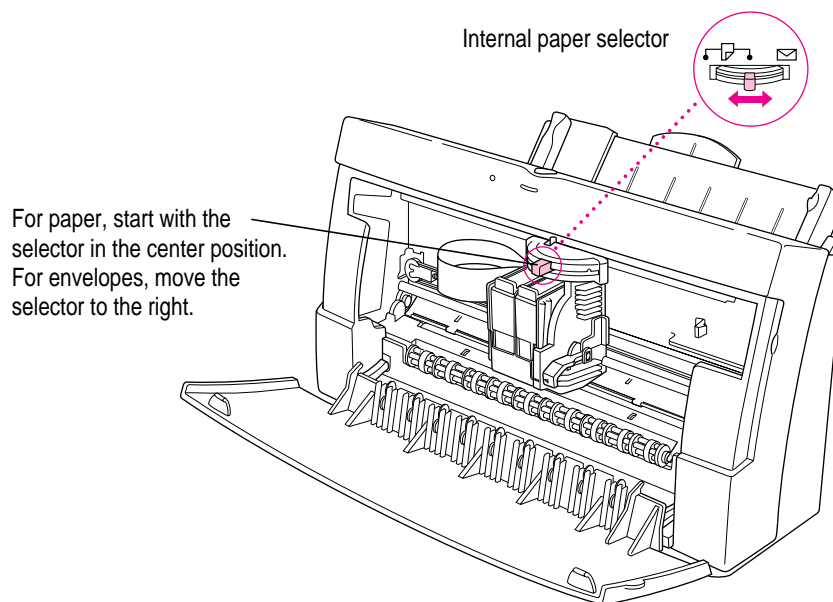
Remember which port you use. Later, you must tell the printer software where to look for the printer.

Some PowerBook computers that have an internal modem installed cannot tell that the printer is plugged in. You must change a setting in the PowerBook Setup or Express Modem control panel. For details, see “Telling Your Computer to Use the Color StyleWriter 2400” later in this chapter.

Loading paper into the sheet feeder

The sheet feeder holds up to 100 sheets of 20-pound paper and feeds the paper automatically into the printer. You can load many sizes of paper and other media into the sheet feeder as described in Chapter 2, but to do a nozzle check, as described in the next section, you must use U.S. letter-size or A4 paper. To load paper into the sheet feeder, follow these steps:

- 1** Open the printer cover.
- 2** Adjust the internal paper selector.



What does the paper selector lever do? The lever has three positions (two for paper, one for envelopes). In the paper (☐) positions, the lever lowers the ink cartridge, bringing it closer for thin materials; in the envelope (✉) position, the lever raises the cartridge to leave room for thick materials. The far-left position is best for black-and-white text on 20-pound paper; the center position is best for color printing, for heavy black ink coverage, or for heavier paper. There's also a paper-selector lever on the outside of the printer, shown in step 4. Be sure to adjust both levers to match the material you're printing on and the amount of ink you're using.

3 Close the printer cover.

4 Load a stack of U.S. letter-size or A4 paper into the sheet feeder.

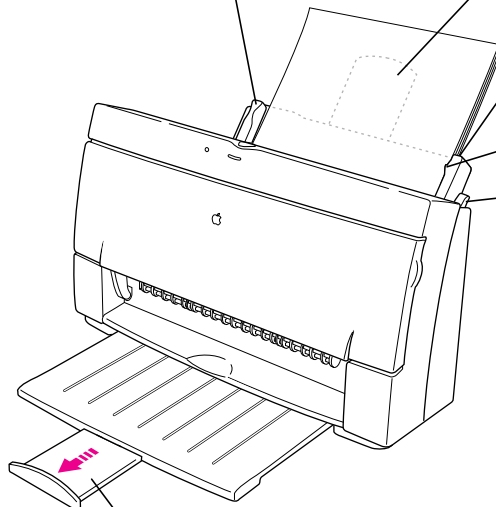
Slide this guide so it just touches the edge of the paper. If the stack of paper bows out even slightly, the guide is too tight.

Extend this paper support. Make sure the paper extends above the support (and doesn't slide down inside the printer).

Make sure the paper lines up evenly at this side of the feeder.

Do not stack paper above this line (☒).

Make sure the external paper selector is next to the ☐ icon.



To open the output tray, pull here. Be sure to pull it out all the way. If you're printing on legal-size paper, don't open the tray.

Checking the print nozzles

The Color StyleWriter 2400 prints by spraying colored ink onto the paper through tiny nozzles. Sometimes these small nozzles can get clogged after sitting unused for a long time. To make sure all the nozzles are working, follow these steps.

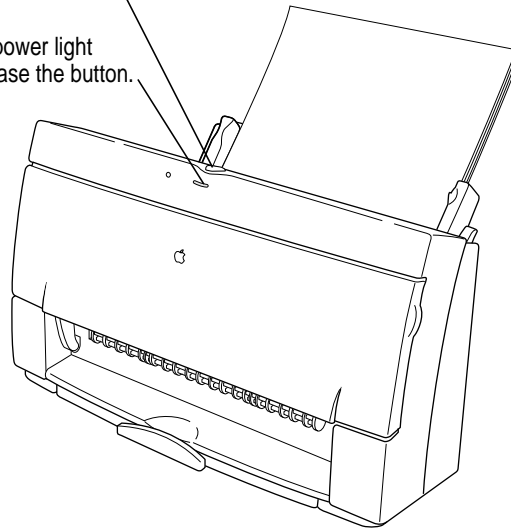
- 1 If necessary, turn off the printer.**

The green power light should be off.

- 2 Press and hold down the power button until the power light starts to blink.**

Press the power button.

When the power light blinks, release the button.



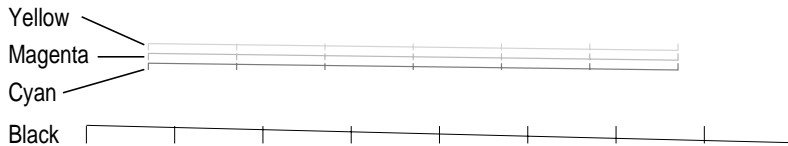
- 3 Release the button and wait for the test page to print.**

4 Examine the nozzle test pattern for broken or missing horizontal lines.

The nozzle test pattern appears near the bottom of the test page. The test pattern for the four-color ink cartridge looks like this:

A broken line means a nozzle on the print head needs to be cleaned.

A missing color means you need to replace an ink tank (or the black-only cartridge).



The test pattern for the black-only ink cartridge looks like this:



5 If you see broken or missing lines, one or more nozzles may be clogged. To clear the nozzle, repeat this nozzle check, starting with step 1.

Installing your printer software

The Color StyleWriter 2400 printer comes with a number of disks that contain the printer software and an Installer program that copies the software onto your hard disk. Before you can print your documents, you need to install the printer software on your Macintosh.

Before you begin If you have virus-protection software, turn it off. Lock all the disks by turning each one over and sliding the small, square plastic tab so you can see through the hole. (The disks may already be locked.)

1 Insert the Color StyleWriter 2400 *Installation* disk into a floppy disk drive.

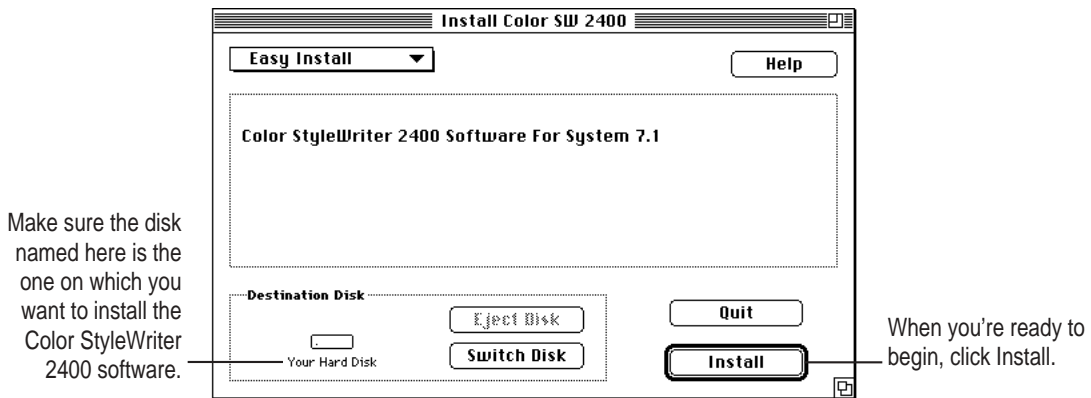
If necessary, open the disk icon.

2 To start the Installer program, double-click its icon.

3 In the Welcome dialog box that appears, click Continue.

IMPORTANT The Installer determines whether you have the correct system software and enough memory to use this printer. If you do not, the Installer displays a message telling you what you need. You won't be able to install the printer software until you correct the system software or memory problem. If the message reports a problem, you can purchase new system software or memory from an Apple-authorized dealer.

- 4 In the Installer dialog box, click Install.**



After a few minutes, the Installer begins to install the printer software. A status box keeps you informed of progress during installation.

- 5 When you see a message on your screen, follow directions and insert the next disk.**

The Installer ejects disks and asks you to insert others. Keep following the instructions on the screen until the installation is complete.

- 6 When you see a message reporting that installation was successful, click Restart.**

The Installer restarts your Macintosh.

More information about the Installer program

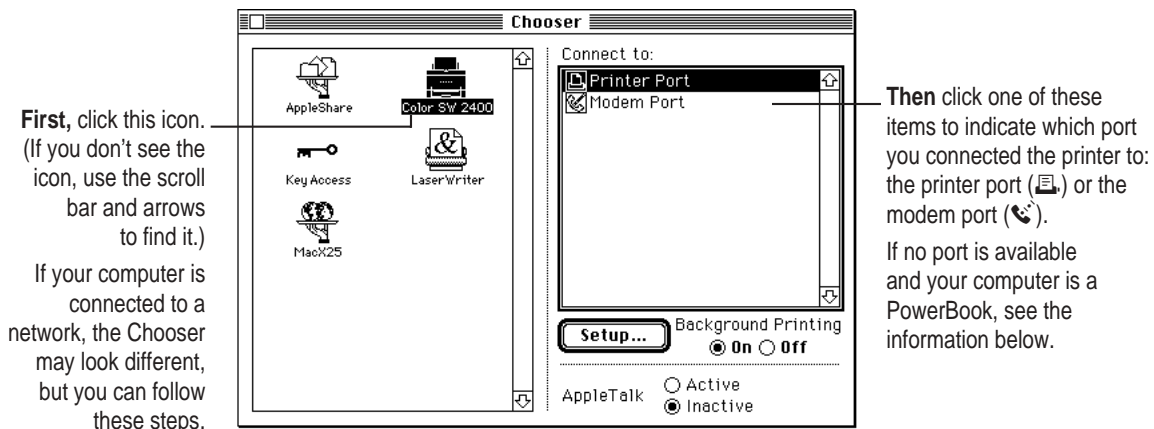
In the procedure just described, the Installer copies all the software you need to your hard disk. In rare circumstances, you may want to copy only a subset of the software. In that case, choose Custom Install from the pop-up menu in the Installer. A list of choices appears. To install something from the list, click to select it, then click the Install button.

Telling your computer to use the Color StyleWriter 2400

Before using your printer, you must select it in the Chooser.

- 1 Select Chooser from the Apple () menu.
- 2 In the Chooser dialog box, click items to select them.

On most Macintosh computers, the Chooser looks like this:



- 3 Close the Chooser by clicking its close box (in the top-left corner).

Special information for PowerBook owners

Some PowerBook computers have a single serial port identified by a combination printer/modem icon (🖨️/📠). If an internal modem is installed on one of these PowerBook computers, the serial port may be in use even though it looks available. When you plug in the Color StyleWriter 2400, the PowerBook may not be able to communicate with the printer.

To make the port available for printing, make sure the serial port setting is Normal or External. To check the setting, open the PowerBook, PowerBook Setup, or Express Modem control panel. (The control panel and the setting you use depend on which PowerBook you have and which internal modem you have.) If you have a PowerBook Express Modem, it is best to leave the serial port setting as Normal or External unless the modem programs you use require another setting for compatibility reasons.

Even when a PowerBook has two serial ports, if it also has an internal modem, the modem port (📠) may look available but actually be in use. If the printer port (🖨️) is available, connect the Color StyleWriter 2400 to it. If the printer port is unavailable and you must use the modem port, make sure the modem serial port setting is Normal or External. To check the setting, open the PowerBook, PowerBook Setup, or Express Modem control panel. (The control panel and the setting you use depend on which modem and system software version you have.) If you have an Express Modem, it is best to leave the serial port setting as Normal or External.

For more information, see the manual or on-screen help that came with your PowerBook.

What's next?

To start printing and verify that the connection between your Color StyleWriter 2400 and the Macintosh is working, go on to Chapter 2.

2

Using Your Printer



When your printer is set up (plugged in, loaded with paper, and selected in the Chooser), you are ready to print. Printing can be as simple as choosing Print from the File menu. You can also make optional changes to parts of the printing process. You can

- load the printer with different kinds of paper, envelopes, or other materials
- change your page setup (page size, orientation, and scale)
- choose the results you prefer when printing in color

If your computer is connected to other Macintosh computers over a network, you can also

- share your Color StyleWriter 2400 printer with others on the network
- use another Color StyleWriter 2400 on the network

This chapter tells you how to carry out these tasks with your Color StyleWriter 2400.

Loading the sheet feeder

The sheet feeder holds paper, envelopes, or other materials and feeds them automatically into the printer. To load the sheet feeder, follow these steps:

1 Adjust the external paper selector and load the paper.

IMPORTANT Don't mix envelopes with paper in the feeder.

Insert letterhead paper face up with the top of the page pointing downward.

Slide this guide so it just touches the edge of the paper. If the stack of paper bows out even slightly, the guide is too tight.

Extend this paper support. Make sure the paper extends above the support (and doesn't slide down inside the printer).

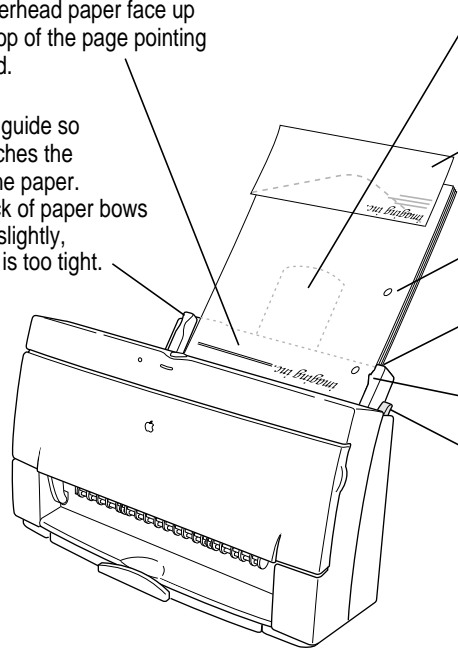
Insert envelopes this way. (Make sure the flap is smoothed flat.)

Insert three-hole punched paper so that the holes line up along this side.

Make sure the paper lines up evenly at this side of the feeder.

Don't stack paper above this line (△).

Move the paper selector lever to the envelope icon (✉) for envelopes and to the paper icon (📄) for everything else.



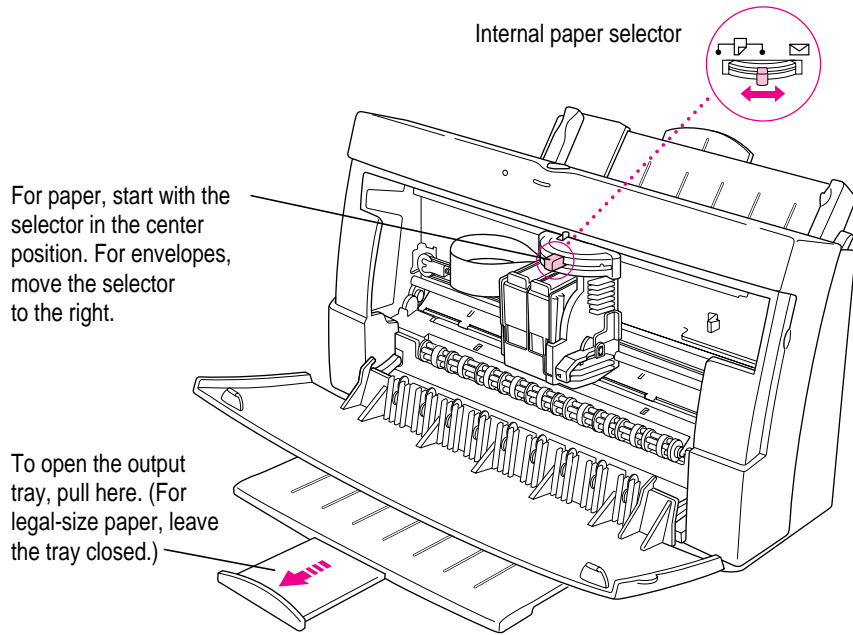
If you're changing print materials (from paper to envelopes, for example), continue with steps 2 through 4.

2 Open the printer's front cover.

Wait while the carrier moves to the center position.

3 Adjust the internal paper selector and extend the output tray.

The lever has three positions (two for paper, one for envelopes). In the paper (⌄) positions, the lever lowers the ink cartridge, bringing it closer for thin materials; in the envelope (⊞) position, the lever raises the cartridge to leave room for thick materials. The far-left position is best for black-and-white text on 20-pound paper; the center position is best for color printing, for heavy black ink coverage, or for heavier paper.



4 Close the printer cover.

Here are details about the kinds of material you can use in your Color StyleWriter 2400 printer.

Print material	Maximum	Special instructions
Plain paper	100 sheets	<ul style="list-style-type: none"> ■ Use 16- to 24-pound paper.
Premium coated paper	20 sheets	<ul style="list-style-type: none"> ■ Use only paper designed for this printer. ■ The whiter side should face you.
Glossy paper	20 sheets	<ul style="list-style-type: none"> ■ Use only paper designed for this printer. ■ To prevent misfeeds, put one sheet of plain paper at the back of the stack. ■ The shinier side should face you.
Envelopes	15	<ul style="list-style-type: none"> ■ Make sure the envelope flap is smoothed flat.
Transparencies	20	<ul style="list-style-type: none"> ■ Use only transparencies designed for this printer. ■ The shiny side should face you. ■ The edge where the paper and transparency are joined should point downward.
Back-print film	20 sheets	<ul style="list-style-type: none"> ■ Use only film designed for this printer. ■ To prevent misfeeds, put one sheet of plain paper at the back of the stack. ■ The chalky side should face you.
Labels	20 sheets	<ul style="list-style-type: none"> ■ To prevent misfeeds, put one sheet of plain paper at the back of the stack. ■ The labels should face you. ■ In the Print dialog box, specify Plain as the paper type.

For more information on the kinds of material you can use with your Color StyleWriter 2400, see Chapter 3, “Tips on Paper, Quality, Speed, and Cost.”

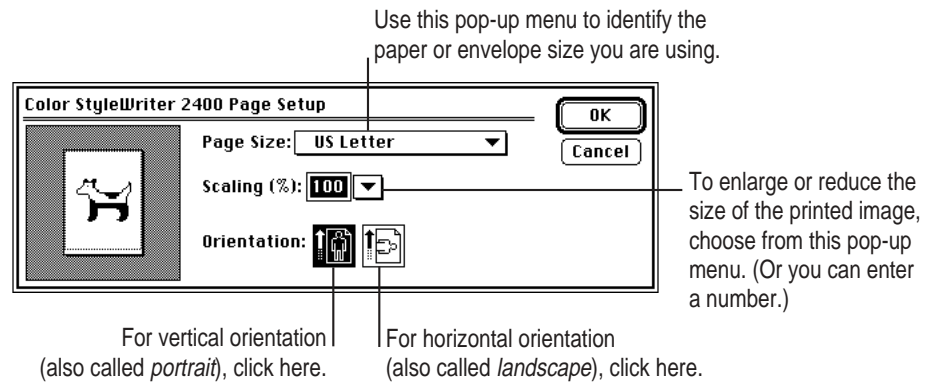
Defining the page setup

Almost every Macintosh program has a Page Setup command in the File menu. You can use this command to set a variety of options, from changing the page size to applying visual effects. The most common options are already selected for you, so choose Page Setup only if you want to change them.

1 Choose Page Setup from the File menu.

The Page Setup dialog box appears, as shown in the next step. The dialog box you see may not exactly match the illustration, but it works basically the same way.

2 In the dialog box, make the selections you want.



3 When you've made your choices, click OK.

Your document is now set up for printing.

Printing a document

To print a document, follow these steps:

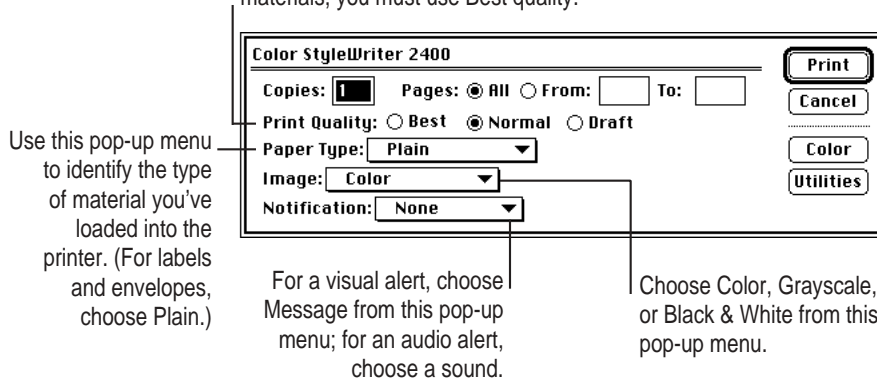
- 1 **Open the document you want to print, or select its icon in the Macintosh Finder.**
- 2 **Choose Print from the File menu.**

A dialog box appears, displaying a number of printing options.

- 3 **Set any options you like.**

The most common choices are already set for you.

Click Best for highest quality, Normal for typical use, or Draft for lower ink consumption. For plain and coated paper, you can use any of these three choices; for other materials, you must use Best quality.



You can use the Color button to adjust the color options for the document you're printing. See the next section, "Adjusting Color Options."

- 4 **When you are satisfied with the settings, click Print.**

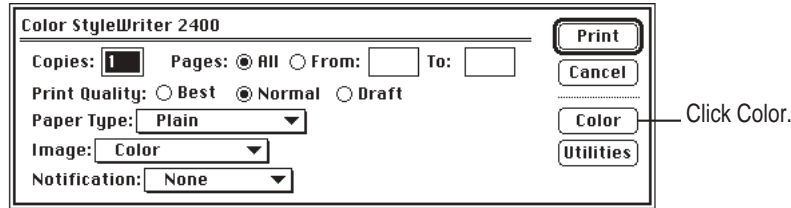
If necessary, the printer turns itself on; after a few moments, the printer begins printing your document.

IMPORTANT Don't open the printer cover while the document is printing. (This can waste ink and cause a paper jam.)

Adjusting color options

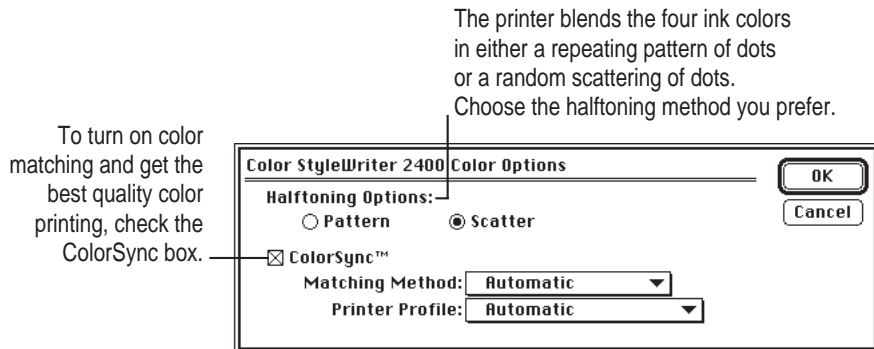
To adjust the way colors are printed, follow these steps:

- 1 Choose Print from the File menu.
- 2 In the dialog box that appears, click Color.



Some programs provide a second box you must click before the color options dialog box opens. See the Read Me file for information about printing in color with specific programs.

- 3 Select your color options.



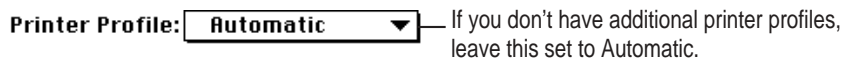
The ColorSync color-matching system makes sure that colors look consistent no matter what device you use to view them—monitor or printer. In addition, ColorSync helps give you the best possible colors when you export the image to another Macintosh with ColorSync installed or print it on another color printer.

Note: If you have a color PowerBook, open the ColorSync control panel and make sure the system profile is correct for your PowerBook. If it's not, choose Set System Profile from the pop-up menu and select the correct profile.

With ColorSync turned on and the Automatic matching method selected, the Macintosh chooses the best matching method for the contents of the document you are printing. If you need to override the automatically selected color-matching method, you can choose the option you want from the Matching Method pop-up menu. Most of the time, however, the Automatic setting is best.



If you have obtained additional printer profiles from other software companies, you can use the Printer Profile pop-up menu to choose the one you want. (The additional profiles should come with instructions telling you how to choose the appropriate one.)



- 4 Once you've made your choices, click OK to return to the Print dialog box.
- 5 Click Print.
- 6 To save the ColorSync settings with this document, choose Save from the File menu.

For more information on ColorSync, see Appendix D.

Color printing quirks

Here is some additional information about color printing.

- Different programs may define colors in different ways. When you choose a red in one program, you may not be able to find an exact match in another program. You can adjust the color in the second program until you're satisfied with the printed results. To see how different programs define color, consult the manuals that came with your programs.
- Color printing takes longer than black-and-white printing. The printer must sort through more data and use more ink to complete the job, and this takes time.

Printing while you use your computer

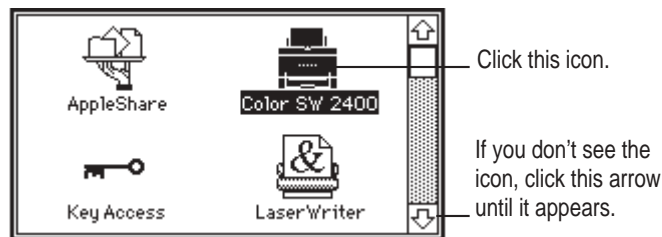
You can continue to work on your computer while printing on the Color StyleWriter 2400. The feature that gives you this ability is called *background printing*, and is automatically turned on when you install your Color StyleWriter 2400 software.

To turn background printing on or off, follow these steps:

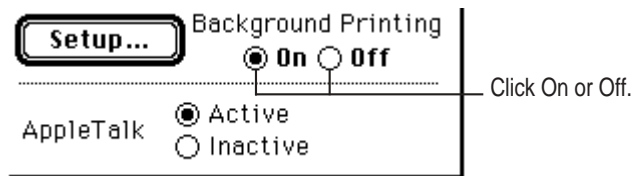
- 1 **Select Chooser from the Apple () menu.**

The Chooser opens.

- 2 **Click the Color SW 2400 icon in the Chooser.**



- 3 **Click to turn background printing on or off.**



- 4 **Click the close box in the upper-left corner of the Chooser.**

Once background printing is turned on, it is in effect whenever you print, until you turn it off. When you click Print in the Print dialog box, a message appears on your screen and then disappears. You can then continue other work. Your computer may pause occasionally while it processes the document for printing.

Checking your printer's progress

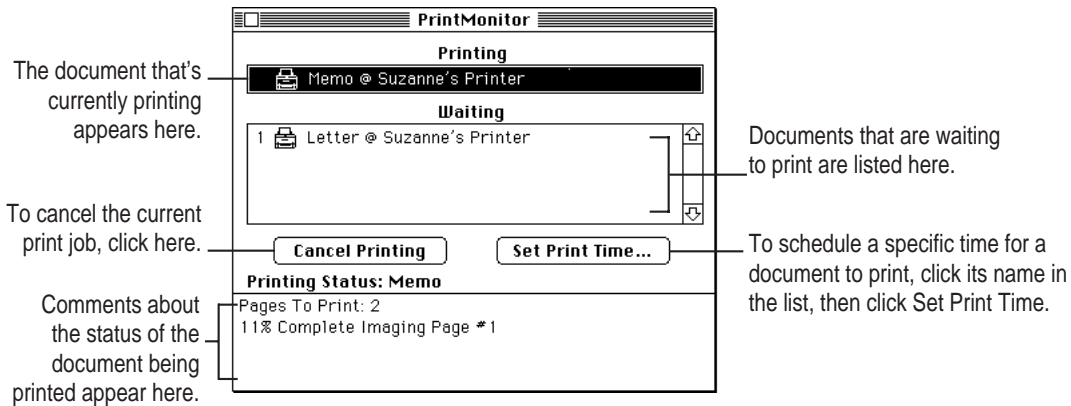
While a document is being printed in the background, you can use PrintMonitor to check its progress. In addition, PrintMonitor lets you know when there's a problem. (PrintMonitor is a program that's part of the Macintosh system software.)

- 1 While the document is printing, choose PrintMonitor from the Application menu at the far right of the menu bar.



PrintMonitor is available only when background printing is on. If you turn off background printing, messages on your screen keep you informed of printing status.

- 2 In the PrintMonitor dialog box, review the status of documents that are printing (and make any changes you want).



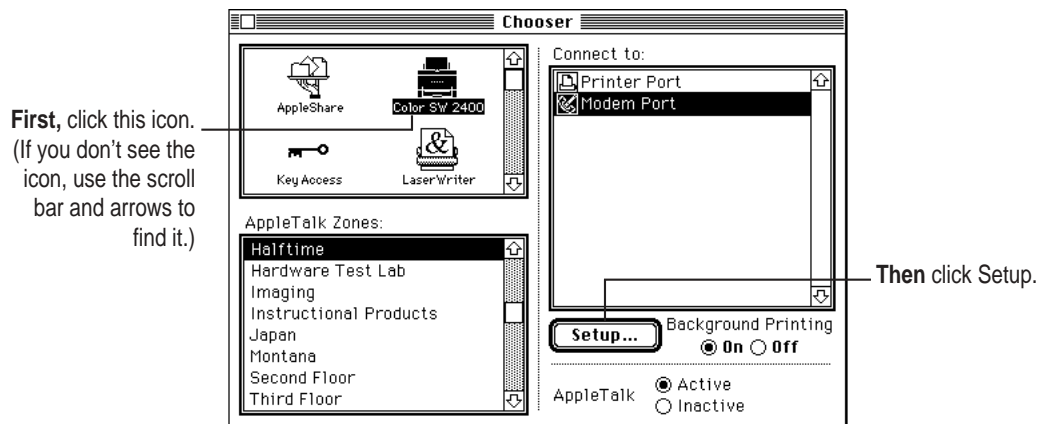
- 3 When you finish, click the close box.

Sharing your printer with other users

If your computer is connected to other computers over an AppleTalk network, you can allow other users on the network to print on your Color StyleWriter 2400. The technology that lets you do this is called ColorShare.

To share the printer with other users, follow these steps:

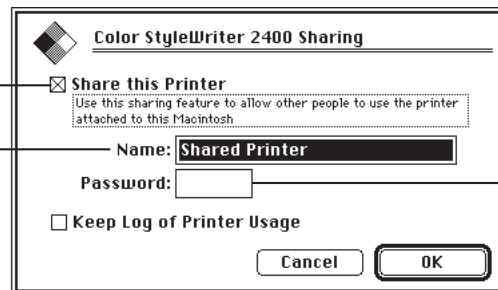
- 1 Select Chooser from the Apple () menu.
- 2 In the Chooser dialog box, make the changes you want.



- 3 In the sharing setup dialog box, make the changes you want.

To share your printer, click to place an X in this box.

Type a name for your printer here. (To avoid confusion, give it a unique name.)



- 4 **To keep a record of what's printed on your printer, click the "Keep Log of Printer Usage" checkbox to put an X in it.**

You can open and print the log with SimpleText, TeachText, or another word-processing program. To find the log file, open your System Folder; then open the Preferences folder, and open the Printing Prefs folder.

Note: You can keep a log even if your printer is not shared.

- 5 **Click OK to close the sharing setup dialog box.**

Sharing works only if background printing is turned on. If it is not turned on, ColorShare turns it on.

- 6 **Close the Chooser (click the close box in the upper-left corner).**

If Color StyleWriter 2400 software has been installed on their Macintosh computers, other users connected to the network can now use your Color StyleWriter 2400. (For information about installing the Color StyleWriter 2400 software, see Chapter 1.)

IMPORTANT For others to be able to use the shared Color StyleWriter 2400 printer, your Macintosh must be turned on.

Printing on a shared Color StyleWriter 2400

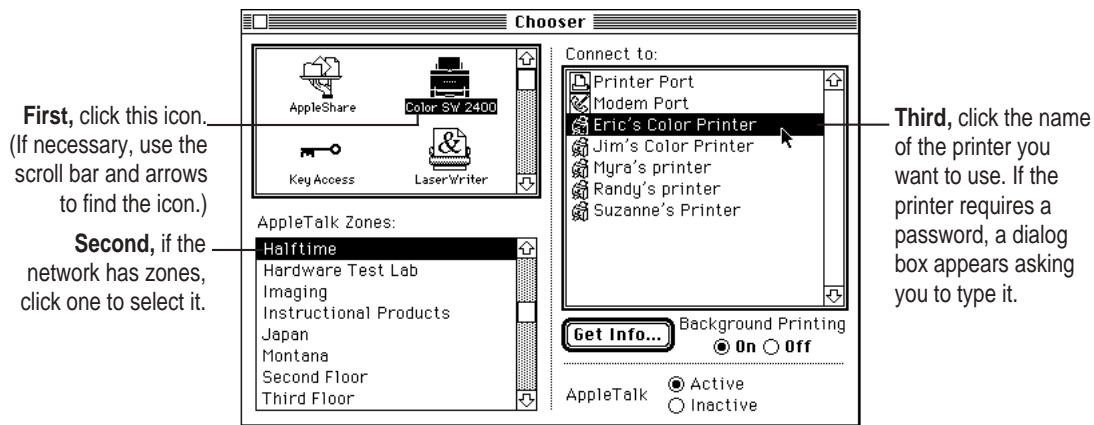
After you turn on sharing (as described in the previous section), others on your network can share your printer.

People on the network who want to print on your shared printer must install the Color StyleWriter 2400 software on their computers, as described in Chapter 1. Then they must follow these steps:

1 Select Chooser from the Apple (🍏) menu.

The Chooser opens.

2 Make selections in the Chooser.



3 Close the Chooser (click the close box in the upper-left corner).

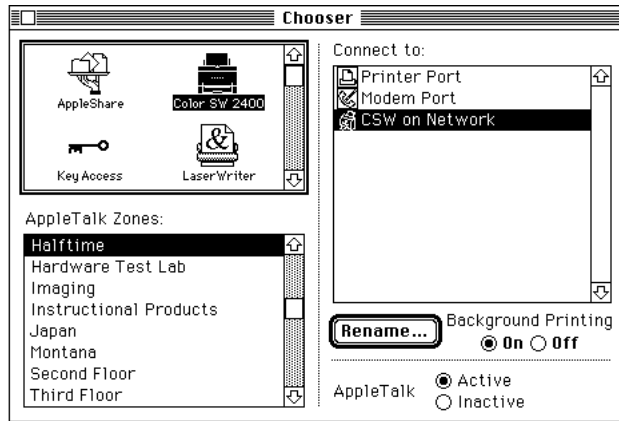
Anyone who completes these steps can print on the shared Color StyleWriter 2400.

Note: When other users print on a printer connected to your Macintosh while you are using your computer, you may notice that your computer pauses occasionally. Because the printer is attached to your Macintosh, you can use PrintMonitor to see what's being printed (and by whom).

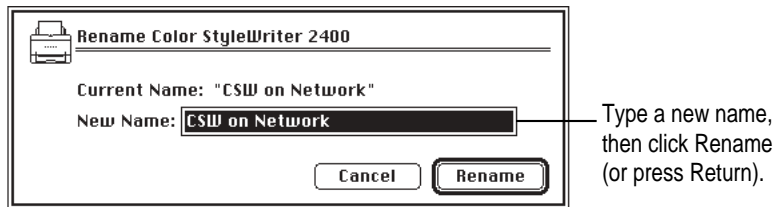
Connecting a Color StyleWriter 2400 to a LocalTalk network

If you have the optional Color StyleWriter 2400 LocalTalk Module, you can connect a Color StyleWriter 2400 printer to a LocalTalk network.

To attach the LocalTalk Module and connect your Color StyleWriter 2400 to the network, follow the instructions that come with the module. Once the printer is on the network, its name appears in the Chooser just like other network printers.



If you want to change the name, click Rename. In the dialog box that appears, type a new name for the Color StyleWriter 2400 printer. (*Note:* Anyone on the network can change the name.)



3

Tips on Paper, Quality, Speed, and Cost



This chapter explains how to use different materials and printing options to meet your needs.

Choosing print materials

Here are some tips on when and how to use different print materials.

Plain paper

Use plain paper for everyday printing.

- Print quality may vary depending on the manufacturer of the paper. If you're not happy with one kind of paper, try a different brand. For consistent results, use one of the special papers designed for the Color StyleWriter 2400 printer.
- You can use any plain paper, including plain copier paper. Paper weight can range from 16 to 24 pounds, though 20-pound paper is recommended.
- Don't use erasable typing paper, damaged or wrinkled paper, stapled paper, or multipart forms ("carbonless carbons").
- Plain paper almost always has one side that is better for printing than the other. See the package label to determine which side is better, and load that side so that it faces you.

Premium coated paper

Use premium coated paper for exceptional print quality—for example, for a final draft, a colorful notice, or the master copy of a presentation. Colors appear richer and more vibrant on such paper.

- Use only coated paper designed for use with the Color StyleWriter 2400.
- One side of the paper is a little whiter than the other and is better for printing. See the package label on the coated paper to determine which side is better, and load that side so that it faces you.

Glossy paper

Use glossy paper for the highest print quality you can get on opaque paper—for example, for color proofs.

- Use only glossy paper designed for use with the Color StyleWriter 2400.
- When loading a stack of glossy paper into the sheet feeder, put a single sheet of plain paper at the back of the stack to prevent misfeeding.

Back-print film

Use back-print film for the highest print quality of all—for example, for digitized photographs or important client presentations. Back-print film has a shiny surface and works exceptionally well when displayed by backlighting.

- Use only back-print film designed for use with the Color StyleWriter 2400.
- Load back-print film so that the chalky side faces you.
- When loading a stack of back-print film into the sheet feeder, put a single sheet of plain paper at the back of the stack to prevent misfeeding.
- In the Print dialog box, be sure to select Back Print as the paper type.
- The printer automatically reverses the image and prints it on the film's chalky side so that the image looks correct when viewed from the shiny side.

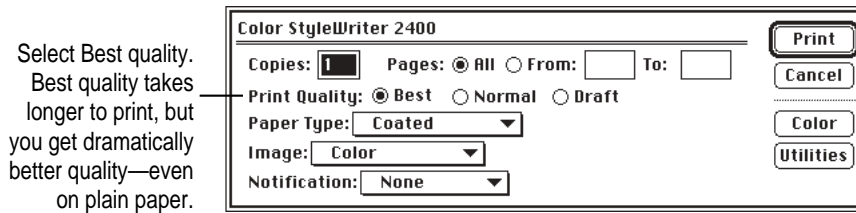
Transparencies

Use transparencies when you want to present your document on an overhead projector.

- Use only transparencies designed for use with the Color StyleWriter 2400. These special transparencies have a sheet of paper attached to them; leave the paper attached until after printing.
- Load the transparencies so that the shiny side faces you and the edge where the paper and the transparencies are attached points downward.

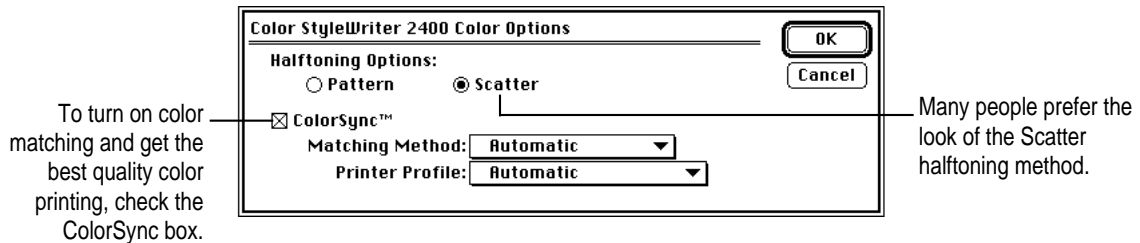
Quality

For highest-quality printing, use the following selections in the Print dialog box. (To display the dialog box, choose Print from the File menu.)



Print on coated or glossy paper, back-print film, or transparencies.

Also consider the following selections in the Color Options dialog box. (To display the dialog box, click the Color button in the Print dialog box.)



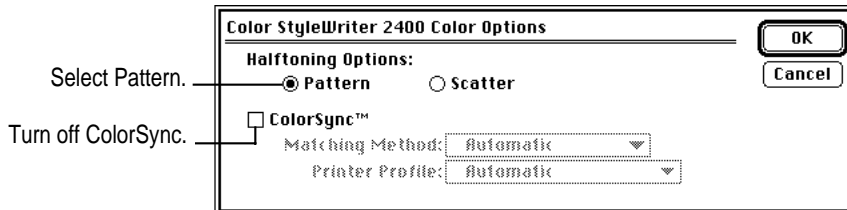
For more information on color matching, see “Adjusting Color Options” in Chapter 2.

Speed

For faster printing, change the Print Quality setting in the Print dialog box. (To display the dialog box, choose Print from the File menu.)



Also use the following selections in the Color Options dialog box. (To open the Color Options dialog box, click the Color button in the Print dialog box.)



Color printing takes longer than black-only printing.

The black-only ink cartridge is designed for efficient, high-speed black and grayscale printing. If you're printing 20 or more pages in black or grayscale, use the black-only cartridge.

Cost

To reduce the amount of ink you use, select Draft quality in the Print dialog box whenever possible.

Leave the printer's cover shut. (Every time you open and shut the cover, the printer uses ink to clean the print head.)

Don't unplug the printer unnecessarily or connect it to a power strip that you turn off occasionally. When you plug the printer in again, it uses ink as it cleans the print head.

Switching cartridges uses extra ink. Don't switch cartridges unnecessarily.

4

Maintaining Your Printer



It doesn't take much effort to keep your Color StyleWriter 2400 printer in good working condition. You simply have to replace the ink cartridges (or their ink tanks) when they run out of ink and clean the printer or print head if you notice a problem.

For other service, see the information about service and support that comes with your Color StyleWriter 2400.

IMPORTANT Follow all the safety instructions given at the beginning of Chapter 1.

Replacing ink tanks in the four-color ink cartridge

The four-color ink cartridge contains two separate ink tanks, one for black ink and one for cyan, magenta, and yellow inks. This means that when you run out of black ink, you don't have to replace both tanks. (Most people use more black ink than any other color.)

WARNING Use only ink specially designed for the Color StyleWriter 2400. The wrong ink can damage the print head and the printer, and such damage is not covered under the warranty.

When to change ink tanks

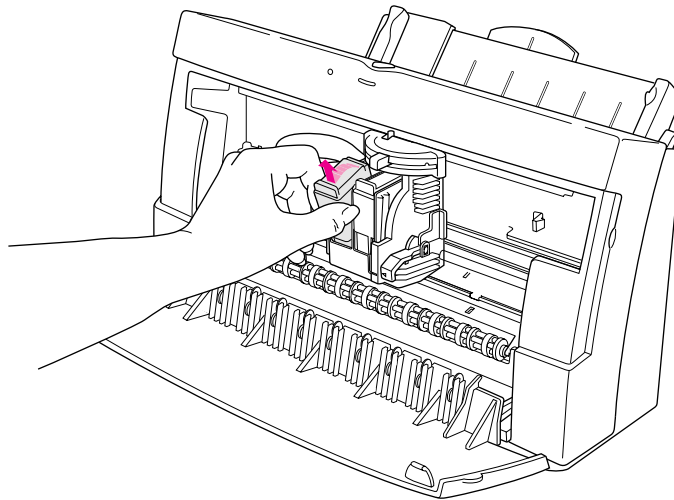
Look carefully at your printed documents to see if a color is missing or faded. Sometimes it's obvious—such as when you run out of black ink. At other times you may notice that the colors seem wrong—such as when you're printing a nature scene and you run out of yellow.

The best way to verify that ink is running low is to print the test page. (For details, see “Checking the Print Nozzles” in Chapter 1.)

Note: Depending on how much printing you have done with your current four-color ink cartridge, this may be a good time to replace the entire cartridge. (A new four-color cartridge comes with fresh ink tanks installed.)

How to change ink tanks

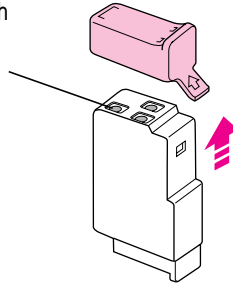
- 1 Turn on the printer.**
- 2 Open the printer's front cover.**
Wait while the carrier moves to the center position.
- 3 Remove and discard the old ink tank.**



4 Remove the new ink tank from its packaging.

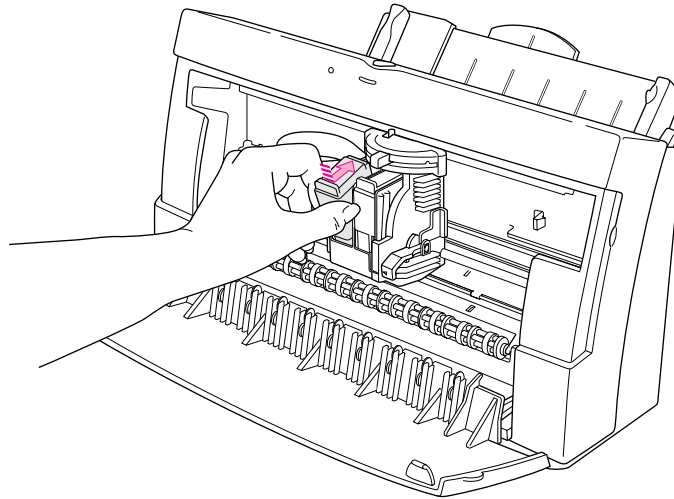
5 Remove the plastic cap from the ink tank.

Don't let anything touch the openings. The ink may cause stains, and any contaminants may harm the print quality.



6 Slide the tank into the cartridge, and push it down so it snaps into place.

IMPORTANT Make sure you put the color ink tank on the left and the black ink tank on the right.



7 Close the printer cover.

Replacing the ink cartridge

The ink cartridge contains the print head, the device that takes the ink and sprays it on the paper. The Color StyleWriter 2400 printer comes with two ink cartridges: a four-color cartridge with replaceable ink tanks and a high-performance, black-only cartridge. The black-only cartridge lasts for about 900 typed pages—until it runs out of ink. The four-color cartridge lasts about twice as long, because you can replace its ink tanks.

When to replace the black-only ink cartridge

Knowing when to replace the black-only cartridge is fairly simple. When it runs out of ink, it stops printing.

Note: If you see other problems with black-only print quality, such as unwanted white lines in a document, try printing the test page. (See “Printing the Test Page” in the section “Images Print Poorly” in Chapter 5.)

When to replace the four-color cartridge

Age is the primary factor in determining when a four-color cartridge wears out. If you’ve done a lot of printing with your cartridge and notice a gradual deterioration in print quality, it may be time to install a new four-color ink cartridge. Before you do, try printing the test page in case a clogged nozzle is the problem. (See “Printing the Test Page” in the section “Images Print Poorly” in Chapter 5.)

Note: A new four-color ink cartridge comes with fresh ink tanks already installed.

How to find ink cartridges

You should be able to find cartridges, ink tanks, and other supplies for your Color StyleWriter 2400 printer at any Apple-authorized reseller.

How to replace the ink cartridge

IMPORTANT Before replacing the cartridge, try printing the test page. (See “Printing the Test Page” in the section “Images Print Poorly” in Chapter 5.)

1 Turn on the printer.

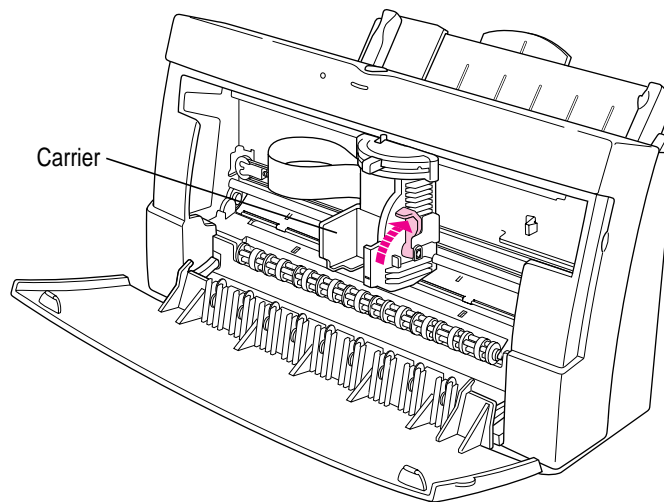
2 Open the printer’s cover.

Wait while the carrier moves to the center position.

3 Raise the bright blue lever on the carrier and remove the cartridge.

Dispose of the cartridge.

IMPORTANT Be careful not to touch the print head, or you may temporarily stain your fingers with ink.

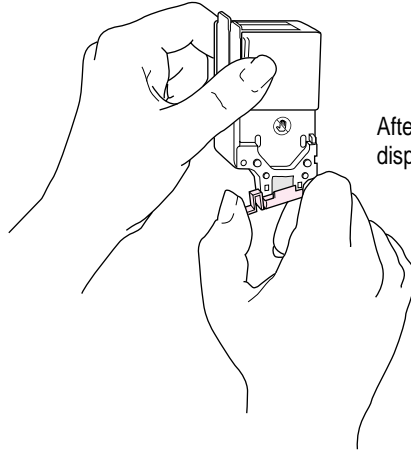


4 Remove the cover from the plastic tub that contains the new cartridge.

5 Remove the ink cartridge from the plastic tub.

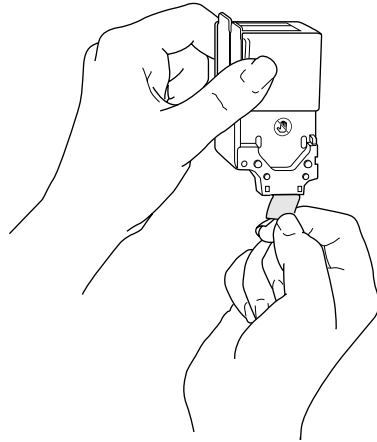
You may safely touch the black plastic, but be careful not to touch any other part.

- 6** Remove the bright orange cap from the cartridge's print head.

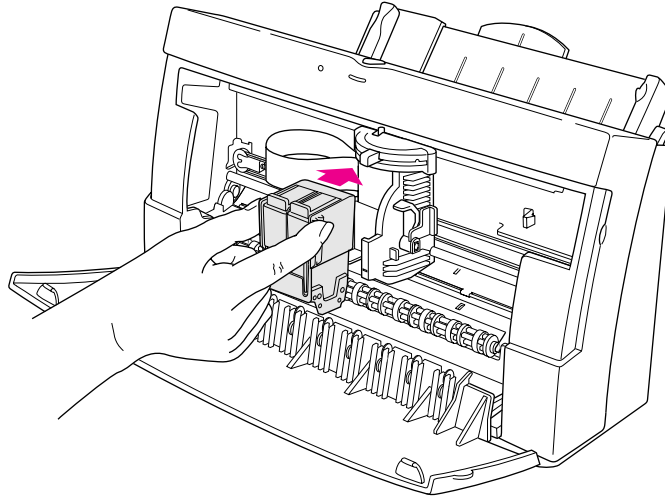


After you snap it off, dispose of the cap.

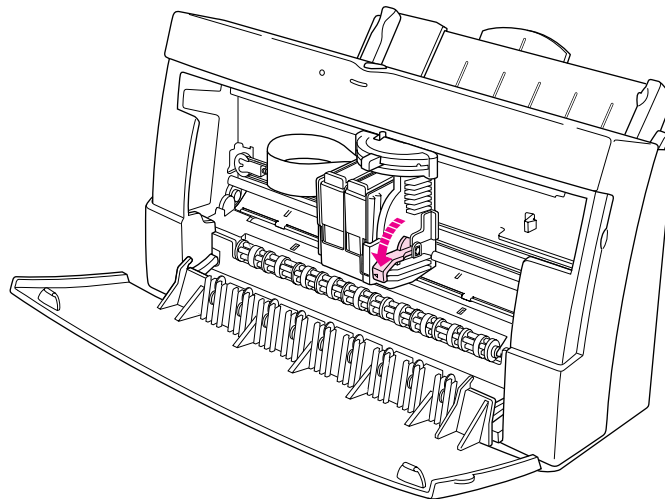
- 7** Peel the orange tape off the print head.



- 8** Slide the cartridge into its place in the printer.



- 9** Lower the bright blue lever on the carrier to secure the cartridge in place.

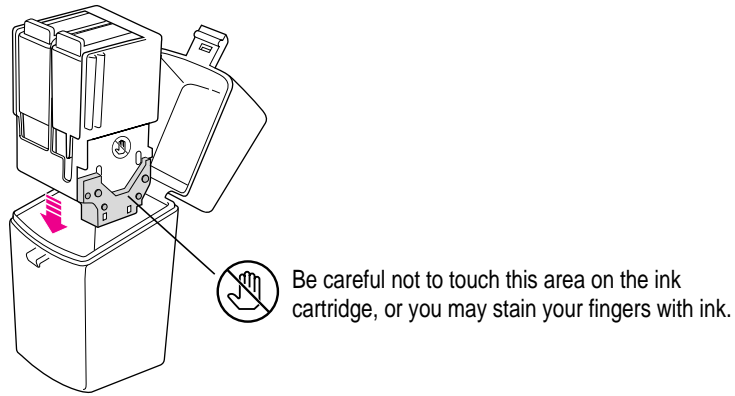


- 10** Close the printer cover.

Now you can open any document you want and print it as usual.

Storing the ink cartridge you aren't using

The Color StyleWriter 2400 comes with two ink cartridges, a black-only and a four-color cartridge. While they are sealed in their original packaging, the ink cartridges are protected. If you open both packages and switch ink cartridges for printing different documents, be sure to store the one you're not using in the storage case supplied with your Color StyleWriter 2400. The storage case keeps the print head from drying out and prevents accidents with ink stains.



Once you've removed both cartridges from their original packages, always keep one inside the printer and the other in the storage case.

Cleaning the outside of the printer

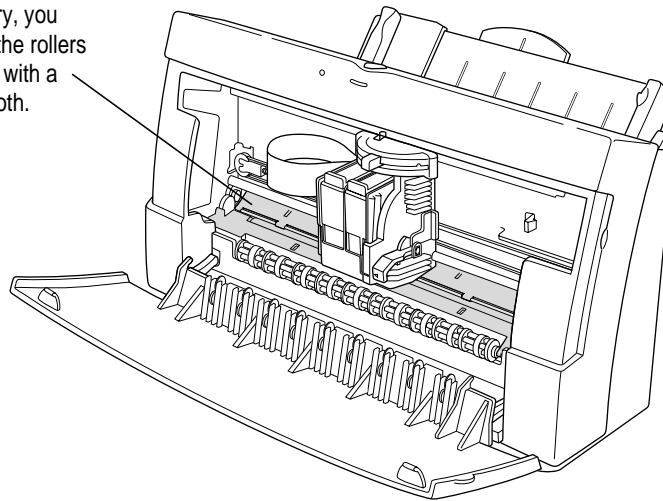
Before you clean the printer, turn it off and unplug the power cord. Then wipe the outside of the printer with a clean, soft cloth dampened with water. If necessary, you can use a mild soap or detergent. Be careful not to get any liquid in the power cord receptacle.

WARNING Don't use ammonia-based or alcohol-based cleaners on or around the printer—they may react with the plastic.

Cleaning the inside of the printer

Occasionally you may need to wipe off paper dust or drops of ink inside the printer. Turn the printer off and unplug it. Then open the printer and carefully clean the rollers and platen with a soft, dry cloth.

If necessary, you can clean the rollers and platen with a soft, dry cloth.



WARNING Don't use any liquid cleaners inside the printer.

5

Troubleshooting



This chapter provides solutions to some problems that you may encounter while using your Color StyleWriter 2400 printer.

As long as you follow the maintenance instructions in Chapter 4, you're not likely to have any problems with your Color StyleWriter 2400. The most common source of trouble is faulty software installation. To avoid these problems, follow the software installation instructions in Chapter 1.

WARNING If you have a problem with your Color StyleWriter 2400 printer and nothing presented in this chapter solves it, consult the service and support information that came with your Apple product for instructions on how to contact an Apple-authorized service provider or Apple for assistance. If you attempt to repair the Color StyleWriter 2400 yourself, any damage you may cause to the printer will not be covered by the limited warranty on your printer. Contact an Apple-authorized dealer or service provider for additional information about this or any other warranty question.

Safety precautions

To prevent damage to the Color StyleWriter 2400 printer and harm to yourself and other users, follow these safety tips.

- Don't touch anything inside the printer except as described in the instructions in this manual. Otherwise, you may damage delicate mechanical parts.
- Don't shake ink tanks or hold them with the ink opening pointing down. Ink can leak out and cause stains.
- Don't touch the ink opening on an ink tank.
- Don't oil the inside of the printer.
- Don't attempt to disassemble the printer.
- Before you unplug the printer, make sure it is turned off. (The green power light should be off.) Turning the power off ensures that the carrier has returned securely to its home position and the cartridge has been capped.

The Chooser doesn't show the Color SW 2400 icon

You use the Chooser desk accessory to identify the printer you intend to use. If the Color SW 2400 icon is missing from the Chooser dialog box, you probably need to install the appropriate printer software. For instructions, see "Installing Your Printer Software" in Chapter 1.

Installation is unsuccessful

If a message tells you that installation was not successful, try turning off your extensions before you install the software. Press and hold down the Shift key as you choose Restart from the Special menu. The Macintosh restarts with all extensions turned off, and you can repeat the installation procedure. For instructions, see "Installing Your Printer Software" in Chapter 1.

If you still cannot install the printer software, the problem may be caused by fonts in your Fonts folder. To solve this problem, you can remove items from your Fonts folder or do a custom installation, as described in the next two sections.

Removing items from your Fonts folder

Items in your current Fonts folder can interfere with successful installation of the printer software. To correct the problem, follow these steps:

- 1 Open the Fonts folder (inside the System Folder) on your Macintosh.**
- 2 Remove from the Fonts folder any file that has the same name as one of the fonts that comes with your Color StyleWriter 2400.**

These are the fonts that come with your printer software:

- ITC Avant Garde®
- ITC Bookman®
- Delphian
- ITC Garamond®
- Helvetica® Black, Helvetica Compressed, and Helvetica Narrow
- ITC Lubalin Graph®
- Lucida Bright
- ITC Machine®
- Nadianne
- Old English Text
- Onyx
- Oxford
- Palatino®
- Swing
- ITC Zapf Chancery® and ITC Zapf Dingbats®
- Zeal

You can put the fonts temporarily into a new folder and drag the folder to your desktop. Then, after you install the Color StyleWriter 2400 software (including these fonts), you can drag the temporary folder to the Trash.

- 3 Repeat the installation procedure.**

For instructions, see “Installing Your Printer Software” in Chapter 1.

For more details about fonts, see Appendix B.

Using the Custom Installer

You can install the printer software without installing the fonts that come with the printer. (The disadvantage is that you won't be able to use these fonts if you don't already have them.)

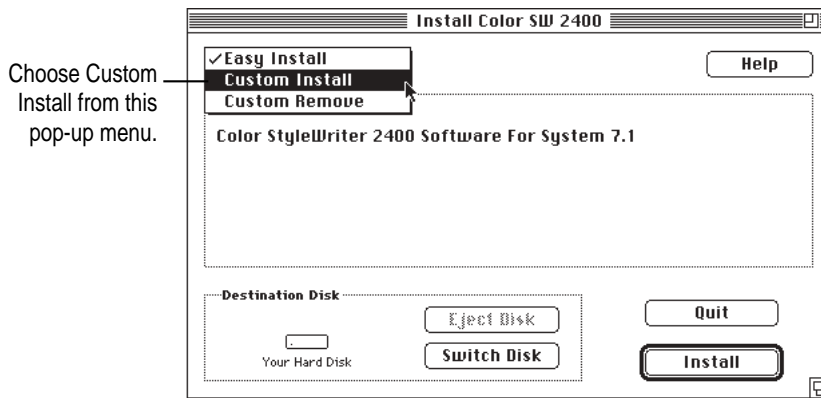
- 1 Insert the *Color StyleWriter 2400 Installation* disk into a floppy disk drive.

If necessary, open the disk icon.

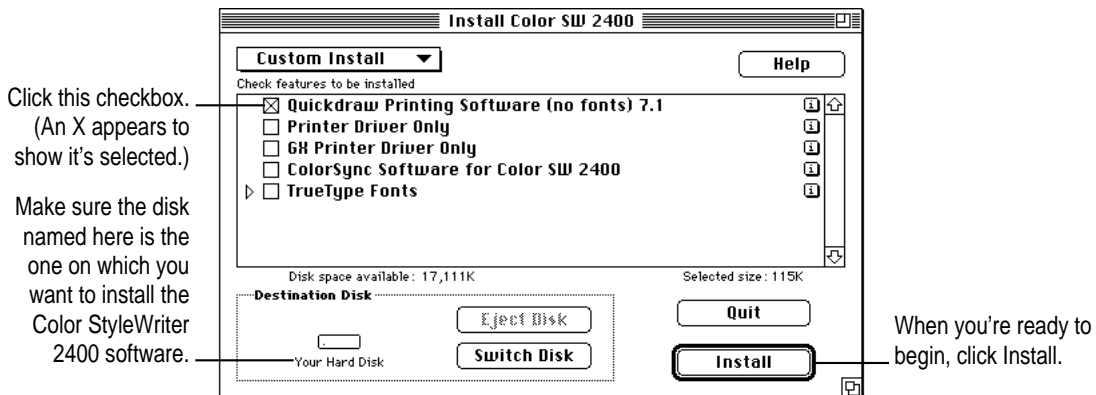
- 2 To start the Installer program, double-click its icon.

- 3 In the Welcome dialog box that appears, click Continue.

- 4 In the Installer dialog box, choose Custom Install.



- 5 In the Custom Install dialog box, click the first checkbox.



When you're ready to begin, click Install.

- 6** When you see a message on your screen, follow the directions and insert the next disk.

The Installer ejects disks and asks you to insert others. Keep following the instructions on the screen until the installation is complete.

- 7** When you see a message reporting that installation was successful, click Restart.

The Installer restarts your Macintosh.

The Macintosh doesn't recognize the Color StyleWriter 2400

If you have selected the Color StyleWriter 2400 printer in the Chooser but nothing prints, or you get a message that no Color StyleWriter 2400 is connected, one of the following conditions may be the cause:

- A plug is loose. Make sure that all cables are properly connected. See the instructions in Chapter 1 for setting up your Color StyleWriter 2400.
- You may have indicated the wrong port in the Chooser. Open the Chooser and change the port selection. (If possible, check to see whether you plugged the printer into the computer's printer port [🖨️] or modem port [📠], then make sure that you indicate the same port in the Chooser.)
- If you are trying to use a shared printer connected to another Macintosh and the printer name isn't listed in the Chooser, make sure that the other Macintosh is turned on and connected to the network. Also make sure that the printer is set up to be shared. Then try again to select the printer in the Chooser. See the instructions in "Sharing Your Printer With Other Users" in Chapter 2.
- If you're using a PowerBook computer with an internal modem, change the serial port setting to Normal or External. For details, see "Special Information for PowerBook Owners" in the section "Telling Your Computer to Use the Color StyleWriter 2400" in Chapter 1.

If you still can't resolve the problem, the printer may not be working properly. See the information about service and support that comes with your printer.

Text appears in the Geneva font or prints jagged

When your Macintosh computer is low on memory, it may display and print certain fonts in the Geneva font. (Geneva looks like this.) Some text may also have jagged edges.

One easy way to make more memory available is to quit open programs you aren't using. For other suggestions on how to free up memory, see the documentation that came with your computer or with your latest system software upgrade. You can also consult an Apple-authorized service provider about installing more memory in your Macintosh.

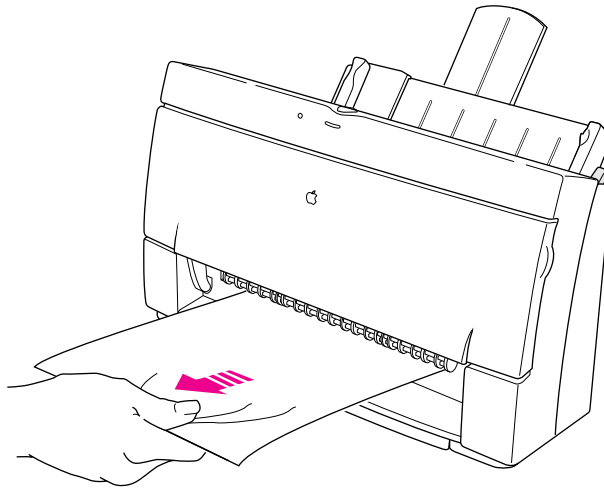
For more information about fonts, see Appendix B, "Using Fonts With the Color StyleWriter 2400 Printer."

Some rotated text may print jagged if you apply a style that has not been defined for the font. Try applying plain style to the text.

Paper is jammed

Occasionally a piece of paper may get jammed (stuck) inside the printer during the printing process. To clear a paper jam, follow these steps:

- 1 If necessary, open the printer to see where the jam is.
- 2 Gently pull the paper free.



Paper or envelopes feed improperly

If paper tears, gets skewed, or comes through the printer crumpled, it may not be entering the printer properly. Try the following:

- **Make sure you have loaded the paper correctly, paying special attention to both paper selectors.**

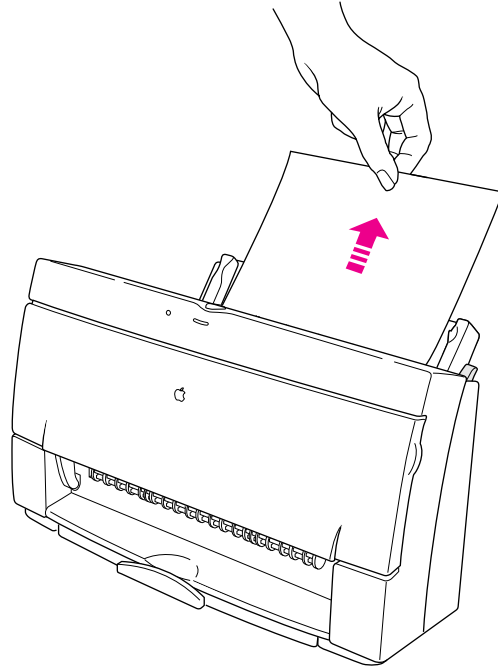
For instructions on loading paper, see “Loading the Sheet Feeder” in Chapter 2.

- **Do not overload the sheet feeder.**

The feeder holds up to 15 envelopes or up to 100 sheets of 20-pound paper. If you use heavier paper, fewer sheets will fit in the feeder.

- **Do not force paper into the sheet feeder.**

- Try to remove any torn or damaged pieces of paper from the printer.



See the previous section, “Paper Is Jammed.”

- **Take the paper out of the sheet feeder and check it.**

Make sure none of the sheets is curled, bent, or dog-eared.

Make sure the edges of the stack line up evenly.

Make sure the left paper guide isn't too snug or too loose. The stack should lie flat (not bowed).

Make sure the paper doesn't slide down into the printer.

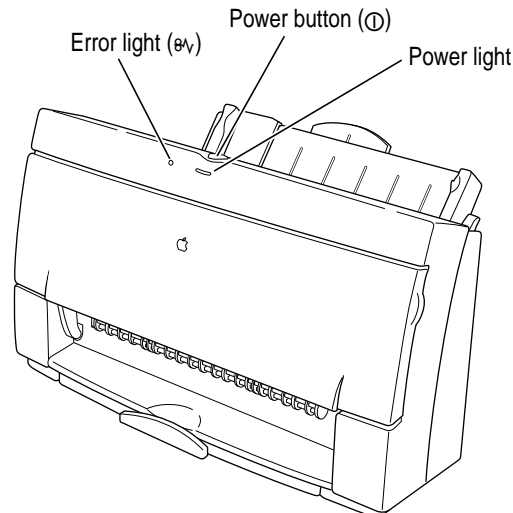
Load either envelopes or paper (not both) into the sheet feeder.

Make sure you have inserted envelopes correctly. The flaps should lie flat against the envelope, the edges should be smoothed flat, and no air should be trapped in the envelopes.

When loading back-print film, put a sheet of plain paper at the back of the stack.

When loading transparencies, the shiny side should face you. The edge where the paper and the transparency are joined should point downward.

The lights indicate a problem



Sometimes the lights on the printer signal a problem.

- **Both lights are off.** To conserve energy, the printer turns itself off if it's left idle for some time (usually about 5 minutes). If you suspect a problem, press the power button. If the lights remain off, check to make sure the power cord is plugged in properly and the outlet has power. If you can't turn the printer lights on, see the information about service and support that comes with the printer.
- **The error light glows steadily.** Either the printer is out of paper or the paper has misfed. Check your computer screen for messages. See Chapter 2 for instructions on loading the sheet feeder, or “Paper Is Jammed” and “Paper or Envelopes Feed Improperly” earlier in this chapter.
- **The error light blinks.** The ink cartridge may not be seated properly. Open the printer's cover. Make sure the cartridge is inserted properly, and that the bright blue lever is firmly lowered to secure the cartridge in place. For instructions, see “Installing the Ink Cartridge” in Chapter 1.

The Color StyleWriter 2400 won't print a particular document

If you attempt to print a document and no page is printed, try the following:

- Check for messages on your Macintosh screen. (If necessary, open PrintMonitor, which is available in the Application menu at the top right corner of the screen.)
- Turn the printer off, then on again. (This resets the printer.)
- Repeat the printing process.
Sometimes problems disappear when you try to print your document again.
- Try printing from another program.
- Restart your Macintosh.

The printer acts as if it's working, but nothing is printed on the page

If your printer takes the paper, but doesn't actually print anything, try the following:

- Make sure the ink cartridge and the ink tanks in the four-color cartridge are correctly installed. (For instructions, see “Replacing Ink Tanks in the Four-Color Ink Cartridge” and “Replacing the Ink Cartridge” in Chapter 4).
- To make sure the printer is not out of ink, print the test page. For instructions, see “Checking the Print Nozzles” in Chapter 1.
- If the ink cartridge is new, make sure that you removed the tape from its print head.
- Try cleaning the print head or printing the test page. For instructions, see “Unwanted Horizontal White Lines or Stripes Appear” in the section “Images Print Poorly,” later in this chapter.

The printer seems slow

See the suggestions in “Speed” in Chapter 3.

If you have a Macintosh IIfx or Macintosh Quadra 950 computer, check the Serial Switch control panel. Make sure the setting is “Compatible.”

Note: The printer automatically takes a few moments to clean the print head when it is plugged back in or after more than three days of inactivity.

Messages appear on your computer screen

Most messages that appear on your screen are self-explanatory. For example, they may tell you that the printer is out of paper or that the paper is jammed. Once you correct the problem, the message goes away.

Here are some other problems that on-screen messages might report:

The waste ink container in the printer is full.

From time to time, the printer deposits some ink into a waste container. In the rare event that the container becomes full, Apple recommends that you take the printer to an Apple-authorized service provider.

There is an error in the printer.

Check to make sure the cable is still connected to the printer and the computer. Also, the ink cartridge may not be seated properly. Turn on the printer and open the printer's cover. Make sure the cartridge is inserted properly, and that the blue lever on the side of the carrier is firmly lowered to secure the cartridge in place.

Images print poorly

Most image problems are caused by problems with an ink cartridge or with your choice of paper. Don't use the following types of paper:

- erasable typing paper
- damaged, wrinkled, or stapled paper
- multipart forms ("carbonless carbons")

For best print quality, use coated or glossy paper or back-print film. If you use plain paper, use 16- to 24-pound copier paper; 20-pound paper is recommended. Plain papers can vary widely. If you're not happy with one kind of paper, try a different brand.

Colors skip or streak at the bottom of the page

If you're not happy with the quality of printing near the bottom of a page, change the setting for the bottom margin to 0.8 inch.

The image is too light or too dark

If printing looks fuzzy because it's too light or too dark, try the following:

- Check the nozzles in the print head. See “Checking the Print Nozzles” in Chapter 1 for instructions. If this doesn't help, replace one or more ink tanks in the four-color ink cartridge, or replace the black-only cartridge. See “Replacing Ink Tanks in the Four-Color Ink Cartridge” and “Replacing the Ink Cartridge” in Chapter 4 for instructions.
- Make sure you've chosen the correct paper type in the Print dialog box.
- Try flipping the stack of paper in the paper tray. Most paper has one side that's better for printing.
- Try printing on a different kind of paper.
- Try choosing Best quality in the Print dialog box.
- Make sure that both paper selectors (one inside the printer, the other on the sheet feeder) are set to the correct position. See “Loading the Sheet Feeder” in Chapter 2.

Ink smears when rubbed

Don't handle pages before the printer ejects them from the printer and delivers them into the output tray. This allows all the time needed for the ink to dry.

Pages leave the printer smeared, blurred, or smudged

The print head may be too close to the paper it's printing on. Move the internal paper selector to the envelope (✉) position. See “Loading the Sheet Feeder” in Chapter 2.

Printing appears on only part of the paper

Check the selections in the Page Setup dialog box.

Check the nozzles in the print head. See “Checking the Print Nozzles” in Chapter 1 for instructions. If this doesn’t help, replace one or more ink tanks in the four-color ink cartridge, or replace the black-only cartridge. See “Replacing Ink Tanks in the Four-Color Ink Cartridge” and “Replacing the Ink Cartridge” in Chapter 4 for instructions.

A page prints off center

This problem may result from one of the following conditions:

- You have selected the wrong page size in the Page Setup dialog box.
- The margins are set incorrectly in the document you are printing.
- Paper is not placed properly in the sheet feeder. See “Paper or Envelopes Feed Improperly” earlier in this chapter.
- You are not using recommended printing materials.

Text lines up in columns on the screen but not when it prints

You may have used spaces (rather than tabs) to line up the text. Because printers interpret spaces differently than the screen does, the text may fail to line up when you print it. Try replacing the spaces with tabs.

Colors don’t look right on the printed page

Try the following:

- Print a test page to see if you’ve run out of ink. For instructions, see “Checking the Print Nozzles” in Chapter 1.
- Try printing the image with ColorSync turned on. For instructions, see “Adjusting Color Options” in Chapter 2.
- Use a different type of paper.

Unwanted horizontal white lines or stripes appear

Problems with print quality, especially horizontal white lines in your document, may mean a nozzle on the print head is clogged or your ink cartridge is running out of ink. There are two ways you can clear up the problem.

- Cleaning the print head is the faster method. It forces a nozzle cleaning as part of a print job. In other words, you can tell the printer to clean the print head before it starts printing the next document.
- Printing a test page also cleans the print head. It gives you a test pattern you can evaluate, but it takes a bit longer.

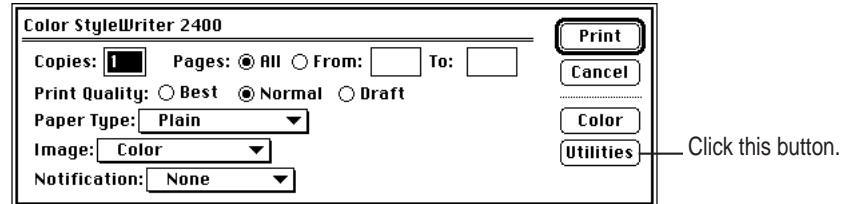
IMPORTANT Cleaning the print head consumes a small amount of ink. If you repeat the procedure unnecessarily, you reduce the life of your cartridge.

Explanations of both procedures follow.

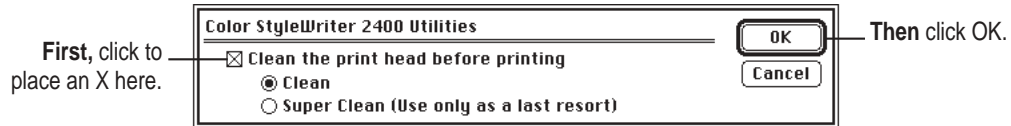
Cleaning the print head

To clean the print head, follow these steps:

- 1 When you are about to print a document, click **Utilities** in the **Print** dialog box.



The Utilities dialog box opens.



The Utilities dialog box closes, and the Print dialog box reappears.

- 2 In the **Print** dialog box, click **Print**.

The printer cleans the print head before printing your document.

Note: After the printer cleans the print head and prints your document, the cleaning option is automatically turned off. You don't have to turn it off before printing again.

Printing the test page

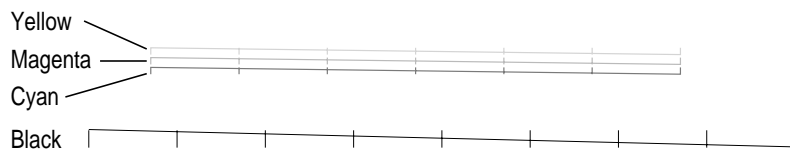
To print the test page and clean the print head, follow these steps:

- 1 Turn off the printer.
- 2 Make sure you've loaded U.S. letter-size or A4 paper into the printer.
- 3 Press and hold down the power button until the power light starts to blink.
- 4 Release the power button and wait for the test page to print.
- 5 Examine the nozzle test pattern for broken or missing horizontal lines.

The nozzle test pattern appears near the bottom of the test page. The test pattern for the four-color ink cartridge looks like this:

A broken line means a nozzle on the print head needs to be cleaned.

A missing color means you need to replace an ink tank (or the black-only cartridge).



The test pattern for the black-only ink cartridge looks like this:



- 6 If you see broken or missing lines, try the following:
 - Print the test page again until the problem clears up or the ink runs out completely.
 - Replace the ink tank containing the missing color, or replace the black-only ink cartridge if that's what you used to print the test page.

The image prints wavy or distorted

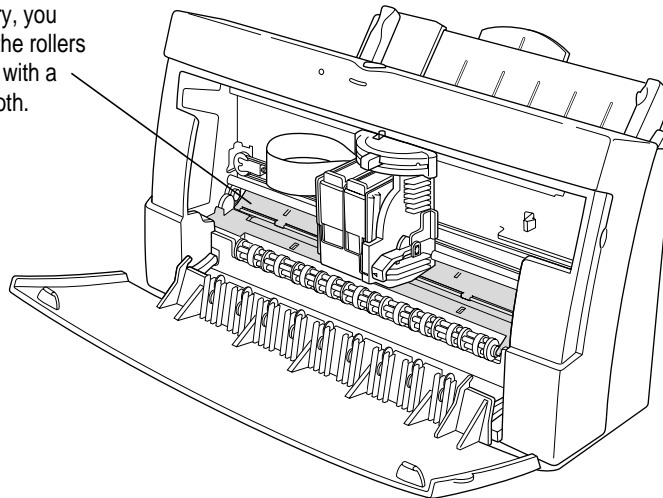
Make sure that you are using recommended types of paper. Check the setting of the internal paper selector above the ink cartridge. If the problem persists, see the information about service and support that comes with the printer.

Stains appear on printed pages

Stains on the backs or tops of printed pages may mean that ink has spilled inside the printer. If so, the ink can transfer to the rollers and from there to the paper.

Turn the printer off and unplug it. Then open the printer and carefully clean the rollers and platen with a soft, dry cloth.

If necessary, you can clean the rollers and platen with a soft, dry cloth.



Ink tanks and cartridges run out of ink too quickly

To extend the life of your ink cartridges, try the following:

- Select Draft print quality in the Print dialog box whenever you can.
- Don't clean the print head unless necessary.
- Don't print solid background colors unless necessary.
- Don't open the printer's cover unnecessarily. (After you shut the cover, the printer cleans the print head, which uses up ink.)
- Don't unplug the printer or otherwise discontinue power frequently.
- Don't print the test page unless necessary.



Appendix A Technical Information

• • • • •

General specifications

Marking engine

- Thermal ink jet engine

Resolution

- 360 dots per inch (dpi) for text and graphics (180 dpi for draft quality)

Engine speed

- Printing speed depends on the images printed and on the Macintosh computer used.

Connector cable

- Apple System/Peripheral-8 cable

Interface

- High-speed serial (RS-422)
- Optional LocalTalk

Paper feed in pounds (lb.) and grams/meter² (g/m²)

- Sheet feeder holds up to 100 sheets of 20-lb. (75-g/m²) paper or 15 envelopes.

Printing materials

- Plain paper: Use 16-lb. (60-g/m²) to 24-lb. (90-g/m²) paper.
- Accepts most letterhead and colored stock.
- Accepts medium-weight sheets of labels.
- Use #10 or Monarch envelopes.
- Apple recommends back-print film, transparency film, coated paper, and glossy paper especially designed for the Color StyleWriter 2400 printer. See your Apple-authorized dealer or reseller.

Paper sizes in millimeters (mm) and inches (")

- U.S. letter: 215.9 mm x 279.4 mm (8.5" x 11")
- U.S. legal: 215.9 mm x 355.6 mm (8.5" x 14")
- A4: 210 mm x 297 mm (8.3" x 11.7")
- #10 envelopes: 241.3 mm x 104.7 mm (9.5" x 4.125")
- Monarch envelopes: 188.9 mm x 98.4 mm (7.4" x 3.9")

Dimensions

- Height: 212 millimeters (8.3 inches)
- Width: 365 millimeters (14.4 inches)
- Depth: 215 millimeters (8.4 inches)

Weight

- Approximately 3.6 kilograms (7.9 pounds)

Ink cartridges

- Black-only ink cartridge: M3240G/A
- Four-color ink cartridge: M3328G/A

Replacement ink tanks for four-color ink cartridge

- Black ink tank: M3330G/A
- Color ink tank: M3329G/A



Operating environment

Temperature

- 15° to 30° C (59° to 86° F)

Relative humidity

- 10 percent to 80 percent, noncondensing

Storage environment

Temperature

- 0° to 35° C (32° to 95° F)

Humidity

- 5 percent to 95 percent, noncondensing

Input electrical requirements

U.S./Japan

- 120 volts AC, 60 hertz, 1.0 ampere (amp)

Europe/Australia

- 220 to 240 volts AC, 50 hertz, 0.5 amp

Power consumption

Operating

- 45 watts maximum

Printable surface

- Maximum printable line: 206 millimeters (8.1 inches)
- Minimum margins: 5 millimeters (0.2 inches) left and right;
3 millimeters (0.1 inches) top; 8 millimeters (0.3 inches) bottom



Appendix B Using Fonts With the Color StyleWriter 2400 Printer



A font is a collection of letters, numbers, and symbols in a distinctive typographic design. Your Macintosh computer and Color StyleWriter 2400 printer come with a variety of fonts that look great both on your monitor and on paper.

Fonts come in such a variety of formats that problems can sometimes arise. This appendix provides the information you need to avoid such problems and to solve them if they come up.

Kinds of fonts

The Macintosh works with three main kinds of fonts: bitmapped, PostScript™, and TrueType fonts.

Apple provides two kinds of fonts with your Macintosh and the Color StyleWriter 2400 printer: bitmapped and TrueType. However, your system can use PostScript fonts as well when it has the proper software installed.

Bitmapped fonts

Bitmapped fonts consist of “pictures” of a typeface at specific sizes. For example, you might have bitmapped fonts at 10-, 12-, and 18-point sizes installed in your Macintosh computer. For best results you need a separate font file for each size of character you want to use.

The icon of a bitmapped font (also called a *fixed-size font* or *screen font*) has the single letter A on it. The font’s point size appears at the end of its name.



When you request a bitmapped character, your Macintosh looks for an installed bitmapped font in the size you specified. (See “How the Macintosh Looks for Fonts” later in this appendix.) If it can’t find that font, your Macintosh tries to construct one by scaling a size that it does find.

In most cases, scaled bitmapped fonts don’t look nearly as good as preinstalled ones. Such scaling is one reason for the jagged edges (sometimes called “jaggies”) you’ll see on your screen or in a printed document when you request an uninstalled size (for example, 17-point Geneva).

Bitmapped fonts are designed on grids of 72 dots per inch (dpi)—the standard Macintosh screen resolution. Because of their correspondence to the standard screen resolution, bitmapped fonts in preinstalled sizes always look great on your display.

When you print a bitmapped font, it prints at a resolution of 72 dpi. Because most modern printers can print at resolutions far better than this (your Color StyleWriter 2400 prints at 360 dpi), printed bitmapped fonts almost always have jagged edges or stairstep sides.

Fortunately, the Macintosh can use bitmapped fonts in combination with other font formats, reserving bitmaps for the screen and other kinds of fonts for the printer.

PostScript fonts

PostScript is a page-description language that defines the characters, symbols, and images that appear on each page of a document. A PostScript font comes as a pair of fonts: an outline font for the printer and a corresponding bitmapped font for displaying type on your screen.

No bitmapped font, no menu entry: If your system doesn't have the bitmapped font, the PostScript font name won't appear in your font menu.



Certain printers are designed specifically to work with PostScript fonts. While your Color StyleWriter 2400 is not a PostScript printer, it can use PostScript fonts if you have Adobe™ Type Manager software installed. Adobe Type Manager uses printer fonts to generate clean-looking screen text at any size. (This software is included with system software version 7.5. It is available from your local Apple-authorized reseller for versions 7.0 or 7.1.)

IMPORTANT Adobe Type Manager is not an Apple product. It is made and supported by Adobe Systems, Inc. Only the version that comes with Apple Macintosh system software version 7.5 is supported by Apple.

PostScript printer fonts have no numbers associated with their names, because a single font can be scaled to any size. Many companies make PostScript fonts; the following illustration shows icons for Adobe, Bitstream, and Fontek PostScript fonts, plus a generic PostScript font icon.



TrueType fonts

A TrueType font is scalable, describing a typeface without rigidly specifying a size. So it looks good whatever size you choose. TrueType fonts provide sharp text at any size on screen or on paper. You can mix and match TrueType fonts from various font vendors.



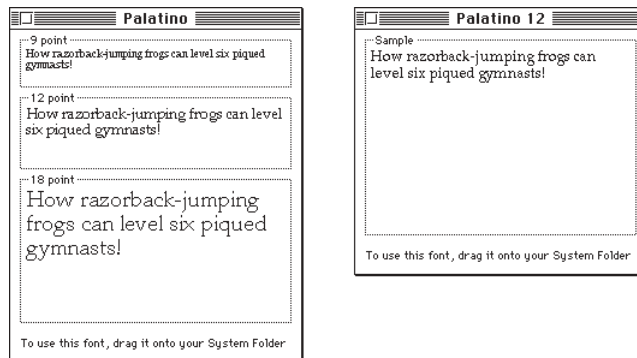
Courier

TrueType fonts store individual text characters as mathematical descriptions of lines and curves, rather than as groups of pixels (a bitmap). When a program asks for a character in a particular size, such as 33 points, the Macintosh uses mathematical calculations to enlarge the character's outline to 33 points and fill in the dots for the monitor or printer output.

Sometimes you'll still get jagged edges when you print a document, even when you use a TrueType font. In nearly all cases, this is because there isn't enough memory available to scale the font properly for printing. This may happen, for example, when you're running several programs at the same time.

Because you don't need a separate font for each character size in order for your printing to look good (as you do with bitmapped fonts), TrueType font names don't have numbers in them.

How does a font look? To see what a TrueType or bitmapped font looks like on your screen, double-click the font's icon to open it. A sample of that font appears (in three sizes for TrueType fonts and in the size you opened for bitmapped fonts).



You can also use the Key Caps desk accessory to examine fonts. See the documentation that came with your computer for instructions.

QuickDraw GX imaging technology

A QuickDraw GX font is a TrueType or PostScript font with an additional set of sophisticated features. These features include extremely accurate typographic elements such as ligatures and kerning, plus the ability to skew, rotate, and add perspective to text in extremely flexible ways.

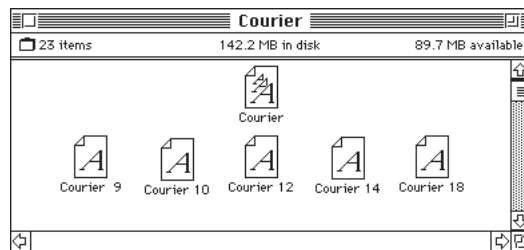
QuickDraw GX is more than a font format; it's a sophisticated printing and display technology that supports complex graphics and advanced typography.

How TrueType fonts work with other kinds of fonts

Although TrueType fonts offer distinct advantages, your Color StyleWriter 2400 printer can also use other kinds of fonts.

TrueType and bitmapped fonts

Macintosh computers running System 7 come with both bitmapped (screen) fonts and TrueType fonts installed. This maintains consistency with documents created on Macintosh systems that don't have TrueType fonts.



If both a TrueType and bitmapped version of the same font are available, the Macintosh uses the bitmapped font (providing that the stipulated point size is present). If you want the Macintosh to use the TrueType font, you need to remove the bitmapped font from your system.

For example, if a document uses 12-point Times®, available in that size as a bitmapped font and as a TrueType font, the system uses the bitmapped font. If a document uses 4-point Times, the system scales the TrueType font to that size, because a bitmapped version isn't available.

Using only TrueType fonts produces a closer match between the appearance of type on the screen and on paper. However, a document you've already created with bitmapped fonts will be reformatted with the corresponding TrueType fonts, and line breaks in the document may change. Similarly, if a document is created on a system that has TrueType fonts or Adobe Type Manager software installed, it may have different spacing, kerning, and so on, when opened on a system that doesn't have TrueType fonts or Adobe Type Manager software.

Keeping two font versions available

If you have a TrueType version of a font, you don't need a bitmapped version. However, although keeping both versions of a font takes up more disk space, there are several advantages to doing so.

Bitmapped fonts are hand-designed: a graphic artist planned each character in each font to look good on a screen. TrueType fonts are scaled by the computer to match what you request. At smaller point sizes, the bitmaps may appear sharper.

Additionally, scaling fonts takes time—sometimes up to several seconds in slower Macintosh computers; but all Macintosh computers can display a bitmapped font instantly.



TrueType and PostScript fonts

PostScript fonts were designed as fonts for PostScript printers. However, if you have Adobe Type Manager software installed, your computer can both display and print PostScript fonts.

Use different names: To avoid confusing the printer software, be sure that you don't install both TrueType and PostScript versions of the same font. For example, do not have a PostScript font file called *Times* and a TrueType font file called *Times* installed in your system at the same time.



How the Macintosh looks for fonts

Here's the search order your Macintosh uses to determine which font to display on your screen when you choose a specific size:

1. an installed bitmapped font in that size, if one exists
2. a scaled TrueType font, if no bitmapped font exists
3. an Adobe Type Manager (ATM) version of a PostScript font, if ATM is installed and if no TrueType version exists
4. a scaled bitmap if no ATM font exists

Here's the search order it uses to determine which font to print on your Color StyleWriter 2400 printer:

1. a scaled TrueType font, if one exists
2. an ATM version of a PostScript font, if ATM is installed and if no TrueType version exists
3. a scaled 72-dpi bitmap if no ATM font exists

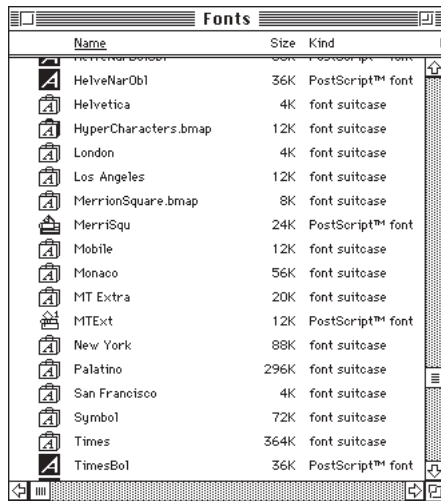
Where fonts are stored

All fonts for your Color StyleWriter 2400 printer reside in special places within the System Folder. To install fonts in System 7, you drag them to the System Folder. Your Macintosh will automatically put them where they belong.

In system software version 7.0, bitmapped and TrueType fonts are installed in the System file, and PostScript fonts are installed in the Extensions folder.

In system software versions 7.1 and 7.5, all the fonts are installed in the Fonts folder within the System Folder.

The Fonts folder can contain a total of 128 font suitcases (described in the next section), plus any number of PostScript fonts, up to the available storage capacity of your hard disk.



IMPORTANT Fonts installed in other folders or in the top level of the System Folder may not work correctly. Additionally, bitmapped and TrueType fonts stored outside of suitcases may not work correctly.

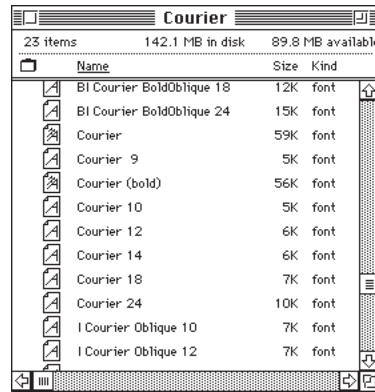
Suitcases

A font suitcase is a special folder for collections of fonts.



Courier

Suitcases provide a convenient way to organize fonts in the same font family. For example, it's a good idea to use a single suitcase (called *Courier*) for all fonts in the Courier font family—all Courier roman fonts as well as fonts with names like Courier Bold and Courier Oblique.



Combining suitcases: To merge all the fonts from one suitcase with another, drag one suitcase on top of the other. All the fonts from the dragged suitcase will go into the other, and the dragged suitcase will disappear.

A suitcase can also contain fonts from different font families, although you should keep all fonts of the same family in the same suitcase. All the fonts will still appear in menus with their proper names.

You treat a suitcase as you would a folder. To open a suitcase, you double-click it. To add a font, you drag the font's icon to the suitcase and drop it in. To remove a font, you drag its icon out of the suitcase.

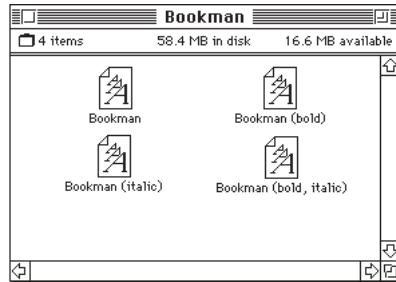
To create a font suitcase, duplicate an existing one and throw away its contents. Then rename the suitcase as appropriate and drag whatever fonts you want into it.

Size limits for suitcases: No matter how many fonts you have in a single suitcase, the Fonts folder counts the suitcase as a single unit. There's no limit to the number of fonts in a single suitcase, but the suitcase cannot be larger than 16 megabytes.



Styled fonts

Most fonts that come with your Color StyleWriter 2400 printer have defined styles. For example, if you open the Bookman font suitcase, you see files for bold and italic versions of the font.



But fonts such as Chicago, Geneva, Monaco, and New York do not come with defined styles. If you open the Chicago font (contained in a suitcase in the Fonts folder, which is inside your System Folder), you see only one file.



You can apply a style to a font like this by making a choice from the appropriate menu (Fonts, Style, Format, or some similar menu, depending on the application program). A font predesigned with a given style nearly always looks better than a font with a computer-generated “derived” style.

About style names: Predesigned styled fonts sometimes have names you may not be familiar with. For example, *roman* refers to a font without styling, or plain. *Oblique* is similar to italic. *Light*, *demi*, and *extra* are different states of bold.

Common questions about fonts

Here are some questions that often come up about fonts.

What kind of fonts should I buy?

Bitmapped fonts are best for screen display but don't look as good when you print them. PostScript fonts look great on paper if you have a PostScript printer or Adobe Type Manager.

TrueType fonts are the best all-purpose fonts to use for your Macintosh monitor and Color StyleWriter 2400 printer. If you need to display fonts with extremely accurate typographic features such as ligatures and kerning, install QuickDraw GX on your system and buy QuickDraw GX TrueType fonts.

Why don't all of my fonts appear in the Fonts menu?

You may not have all of your fonts placed correctly. In system software version 7.0, bitmapped and TrueType fonts should be in the System file in the System Folder. In system software versions 7.1 and 7.5, all the fonts should be installed in the Fonts folder in the System Folder.

Additionally, some application programs let the user decide which fonts should appear in the Fonts menu. Check the manuals that came with your programs.

Why can't I see my Monaco 9, Geneva 9 and 12, and Chicago 12 bitmapped fonts?

These fonts are used by your Macintosh to display information correctly. Because the Macintosh needs these fonts, the Finder makes them invisible to prevent users from removing them.



What does the term *Apple classic fonts* mean?

The Apple classic fonts are the original ten bitmapped fonts that came with the first Macintosh in 1984. These fonts, which all have city names, include Athens, Cairo (a picture font), Chicago, Geneva, London, Los Angeles, Monaco, New York, San Francisco, and Venice. Several of the fonts (Athens, Cairo, London, and San Francisco) came in only one size—18 points.

This is a sample of Athens.



This is a sample of Chicago.

This is a sample of Geneva.

This is a sample of London.

This is a sample of Los Angeles.

This is a sample of Monaco.

This is a sample of New York.

This is a sample of San Francisco.

This is a sample of Venice.

Chicago, Geneva, Monaco, and New York are currently available in TrueType versions. The other classic fonts are still only available in bitmapped versions.

Why do I sometimes get Geneva or Courier in my printed documents when I have specified other fonts?

Geneva often appears when you're trying to use a TrueType font but don't have enough memory for scaling to operate properly.

Substitute fonts can also appear in a document composed on one Macintosh that has a particular set of fonts but printed on another Macintosh that doesn't have those fonts.

Why does a document written entirely in Times look different on different Macintosh computers?

Times, an extremely popular font, is manufactured and sold by more than one company. Such fonts usually have small differences, even though they have the same name. For example, the Times font manufactured by Adobe Systems, Inc., has different letterspacing than does the Times font from Apple Computer, Inc.

What is font substitution?

Font Substitution, which isn't available for your Color StyleWriter 2400 printer, is an option in the Page Setup dialog box for certain PostScript printers. When font substitution is turned on, these printers will use their built-in equivalents for three bitmapped fonts (Times for New York, Helvetica for Geneva, and Courier for Monaco).

What's a downloadable font?

A downloadable font is a TrueType or PostScript font sent to an "intelligent" printer by your system software. (An intelligent printer is one that has a microprocessor built into it.) The printer then uses the font to print your document.

If a printer has sufficient memory, it can hold more than one downloaded font; otherwise, it must request the fonts it needs as necessary. This can be a time-consuming process.

Some printers have hard disks attached to them for holding downloaded fonts. A printer can get the fonts from its hard disk more quickly than it can download them from the computer's hard disk.

Your Color StyleWriter 2400 printer cannot receive downloaded fonts. Instead, your Macintosh composes the entire image and then sends it to your Color StyleWriter 2400 for printing.





Appendix C Packing and Moving the Printer

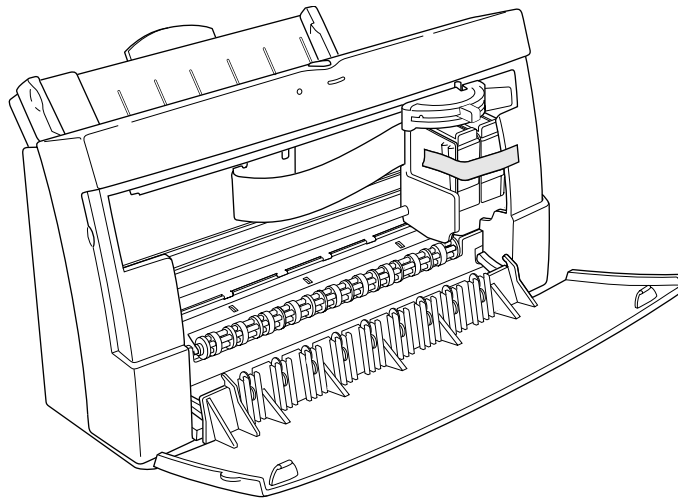


If you need to move your printer a long distance, follow these steps.

- 1** Turn off the printer and unplug it.
- 2** Remove any paper from the sheet feeder.
- 3** Remove the power cord and serial cable.

- 4** Open the cover and tape the carrier (with an ink cartridge installed) to the right side of the printer.

Because you've unplugged the printer, the carrier stays in its "parked" position on the right. Use masking tape to tape the carrier to the side of the printer.



- 5** Close the cover.
- 6** Push the paper support and output tray back inside the printer.
- 7** Repack the printer in its original packing material.

When the printer arrives at its new location, unpack it and set it up as described in Chapter 1.



Appendix D Working With ColorSync

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Providing consistent, pleasing color with desktop computers is a technical challenge. Achieving “What You See Is What You Get” (WYSIWYG) in color is more difficult than in black and white, because colored light on your monitor is very different from printed ink. Even the terms for colors depend on the device:

- On monitors (and most scanners), color is identified as RGB, for red, green, and blue light.
- On most printers, color is identified as CMYK, for cyan (a shade of blue), magenta (a bright pink), yellow, and black ink.

In addition, no two monitors or printers produce exactly the same colors. (You can see an example of the differences among monitors at a consumer electronics store, in the section that sells television sets.)

About ColorSync

To solve these problems, Apple designed ColorSync, a system extension that provides color-matching capabilities. Here's what ColorSync does:

- It defines colors independent of the device creating the colors.
- It makes sure that colors on different devices match as closely as possible.

ColorSync color matching is a central part of Macintosh computing, ensuring that applications, monitors, printers, scanners, and digital cameras use the same scheme for color matching. This means you can scan an image, display it on your monitor, use a graphics program to modify the image, and print it—with matched colors every step of the way.

ColorSync profiles and color-matching methods

Each monitor, scanner, printer, or camera can have ColorSync profiles associated with it. Each profile describes the device's color capabilities compared with a color standard. (Called *CIE XYZ*, the standard was founded in 1931 by the Commission International de l'Eclairage, the International Commission on Illumination.)

These profiles provide the information ColorSync needs to convert colors displayed or printed on one device to the closest possible colors on another device. ColorSync uses a system extension called a color-matching method (CMM) to do actual color conversions. For example, your monitor may display a vivid red, but your printer inks may not be able to produce that color. ColorSync and your printer's CMM (Color SW 2000 Series CMM) determine the “next best” color for your printer to use.

The ColorSync color profile and CMM for the Color StyleWriter 2400 printer are automatically installed as part of the printer software.

You activate ColorSync by selecting it in the Color Options dialog box. If you use ColorSync for your documents, you must activate it for each document every time you print the document. (ColorSync turns itself off after the document is printed.) For more information, see “Adjusting Color Options” in Chapter 2.





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The Apple Publishing System

This Apple manual was written, edited, and produced on a desktop publishing system using Apple Macintosh computers and QuarkXPress. Technical illustrations were drawn in Adobe Illustrator; screen shots were created and modified with system software, ExposurePro, Aldus SuperPaint, and Adobe Photoshop. Proof pages were created on Apple LaserWriter printers and on QMS and Tektronix color printers. Final pages were output directly to separated film on a PostScript-driven imagesetter.

Text type is Times, display type is Helvetica Narrow, and cover type is Apple Garamond, Apple's corporate font. Ornaments are custom symbols designed for Apple Computer.

PostScript, the LaserWriter page-description language, was developed by Adobe Systems Incorporated.