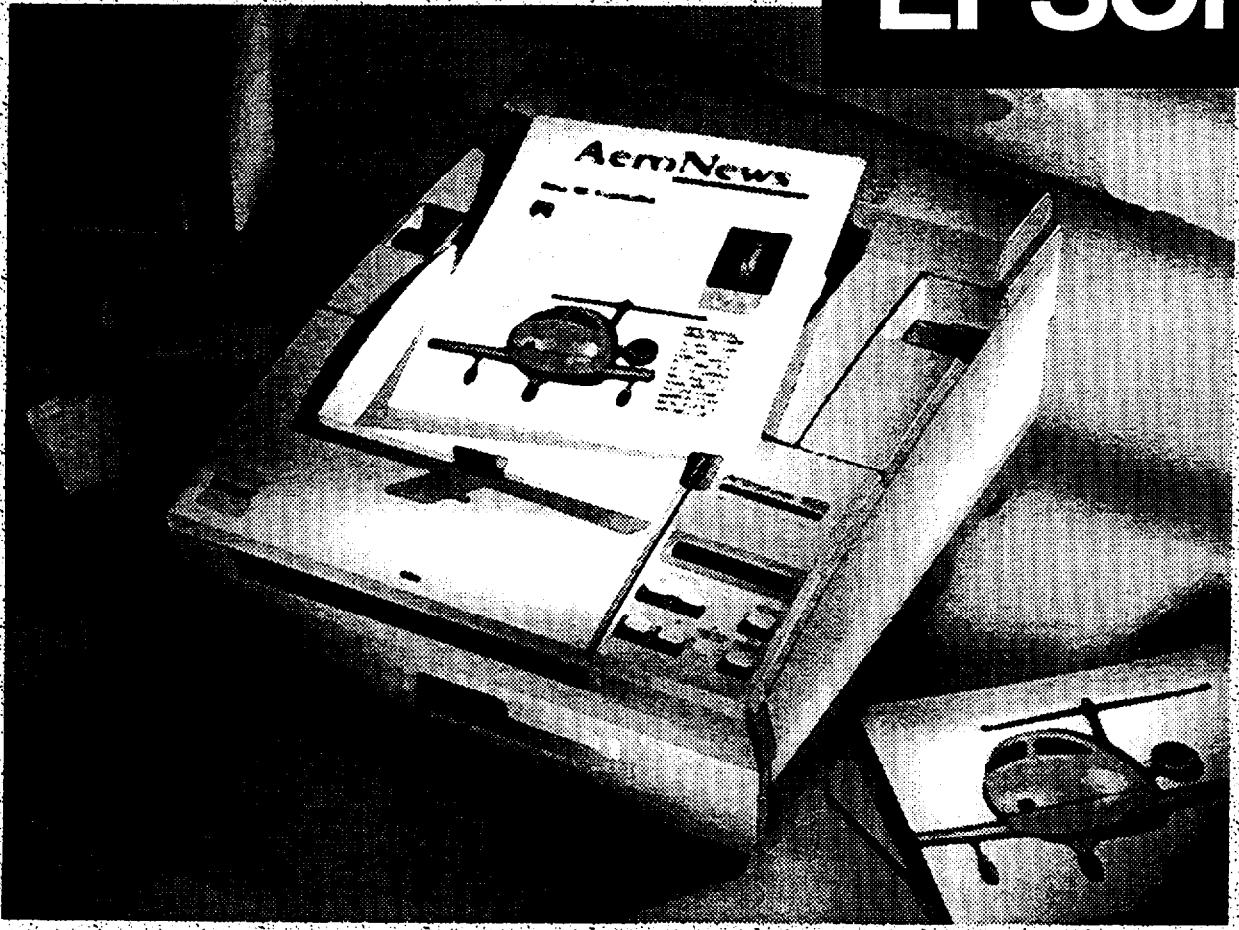


EPSON®



EpsonScript

U s e r ' s G u i d e

ActionLaser™ 1600
600 DPI

EpsonScript

U s e r ' s G u i d e

ActionLaser[™] 1600
600 DPI

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Introduction

EpsonScript Level 2 for the ActionLaser™ 1600 adds PostScript® compatibility to your ActionLaser 1400 so you can print files formatted for PostScript. The printed output is equivalent to the output of an Apple® LaserWriter® II NTX.

EpsonScript includes a set of 35 PostScript-compatible fonts that include the following: Fixed Pitch 810 Courier, Dutch® 801 Roman, Swiss® 721, Geometric ITC Avant Garde® Revival 711 ITC Bookman,® Swiss 721 Narrow, Century 702 Century Schoolbook,® Zapf Calligraphic 801, ITC Zapf Chancery® Medium Italic, ITC Zapf Dingbats,® and Symbol. Matching screen fonts are also included to ensure that what you see on the screen matches the final printed output.

The quality of grayscale images is enhanced when you use the MicroGray feature, which allows EpsonScript to achieve the quality of a 1200-dpi typesetter to produce smoother graphic output than is available with standard PostScript.

The EpsonScript kit consists of an EpsonScript interface board and two sets of disks, one for the PC and one for the Apple Macintosh.® Your kit might also include the Local Talk® interface board, which allows you to connect the printer to your Macintosh or to an AppleTalk® network.

About This Manual

This manual is intended both for Macintosh and PC users. It is divided up into the following chapters:

Chapter 1, "Setup," describes how to install the EpsonScript and the LocalTalk interface boards. If these boards are already installed on your printer, skip this chapter. Note that the LocalTalk board needs to be installed only if you have a Macintosh.

Chapter 2, "Installing the Drivers and Utilities," describes how to install the EpsonScript software.

Chapter 3, "Using EpsonScript in a Macintosh Environment," provides detailed information about using EpsonScript if your printer is connected to an Apple Macintosh computer.

Chapter 4, "Using EpsonScript in a Windows" Environment," provides detailed information about using EpsonScript if you are running Microsoft® Windows on your PC.

Appendix A, "Changes to SelecType," describes how the printer's SelecType menus are expanded to include settings specific to EpsonScript. Because the default settings are designed for most computer environments, you should not normally have to consult this appendix.

Where to Get Help for U.S. and Canadian Users

Epson America provides local customer support and service through a nationwide network of authorized EPSON dealers and Service Centers.

EPSON also provides the support services listed below through EPSON Connections" U.S. users can call (800) 922-8911; Canadian users can call (800) GO-EPSON.

- ❑ Assistance in locating your nearest Authorized EPSON Reseller or Service Center
- ❑ Technical assistance with the installation, configuration, and operation of EPSON products
- ❑ EPSON technical information library fax service
- ❑ Product literature with technical specifications on EPSON's current and new products
- ❑ Customer Relations.

You can purchase supplies, parts, documentation, and accessories by calling EPSON Accessories at (800) 873-7766 (U.S. sales only). In Canada, call (800) GO-EPSON for sales locations.

When you call for technical assistance, be ready to identify your system and its configuration, and describe any error conditions to the support staff.

If you need help with any software program you are using, see the documentation that came with that program for technical support information

System and Memory Requirements

To install and use EpsonScript in a Macintosh environment, your Macintosh must be running System 7.0 or later and have at least 2MB of RAM.



Caution:

Installing EpsonScript on a Macintosh that is running System 6.x or earlier can corrupt the system file on your Macintosh.

If you are installing EpsonScript in a Windows environment, your PC must be running Windows 3.0 or later.

The 2MB of memory that comes with the printer is sufficient for using EpsonScript for most print jobs. However, if you regularly print pages that contain complex layouts or a lot of large or complicated graphics, you may need to install more memory on your printer. See your printer manual for more information.

Note:

LaserTalk™ and SmartArt™ are not compatible with EpsonScript.

Chapter 1

Setup

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Installing Your Hardware

EpsonScript for the ActionLaser 1600 comes with two interface boards: the EpsonScript board and the LocalTalk interface board.

In a PC environment, you need to install the EpsonScript board only. In a Macintosh environment, you need to install both the EpsonScript and LocalTalk interface boards.

If your ActionLaser 1600 is already equipped with EpsonScript and LocalTalk (if needed), you can skip this chapter.

Removing the controller board

The EpsonScript and LocalTalk interface boards attach to connectors on the printer's controller board. Therefore, you first need to remove the controller board.

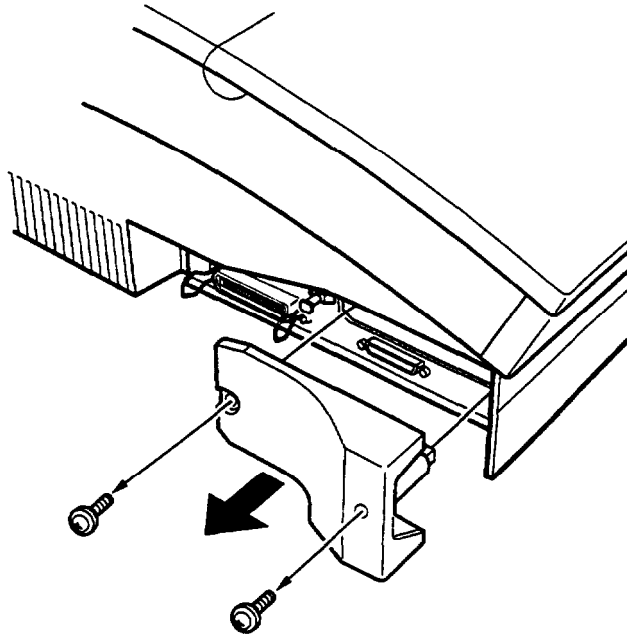


Warning:

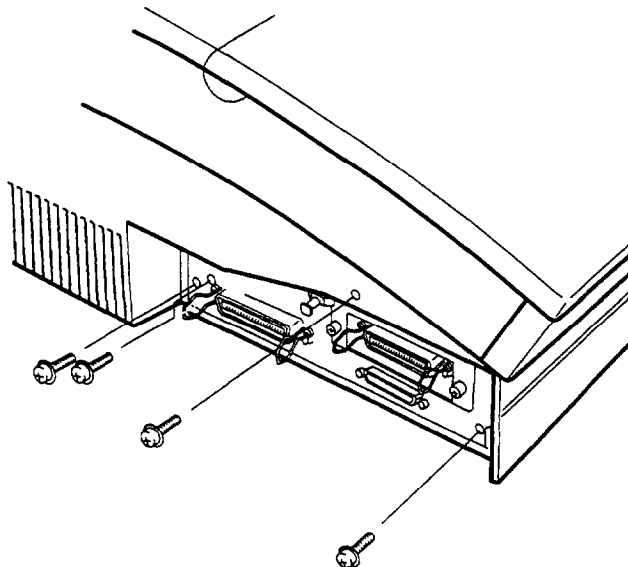
High voltages are present inside the printer when the power is on. Do not attempt to remove the controller board unless the printer is turned off and the power cord is unplugged. Also, do not touch the contacts on the board because many of the components can be damaged by static electricity.

1. Turn off the printer and unplug the power cable from the electrical outlet.
2. Remove any optional font cartridges and the lower paper cassette, if installed.
3. Disconnect all interface cables from the interface connectors.
4. Turn the printer so that its left side is facing you.

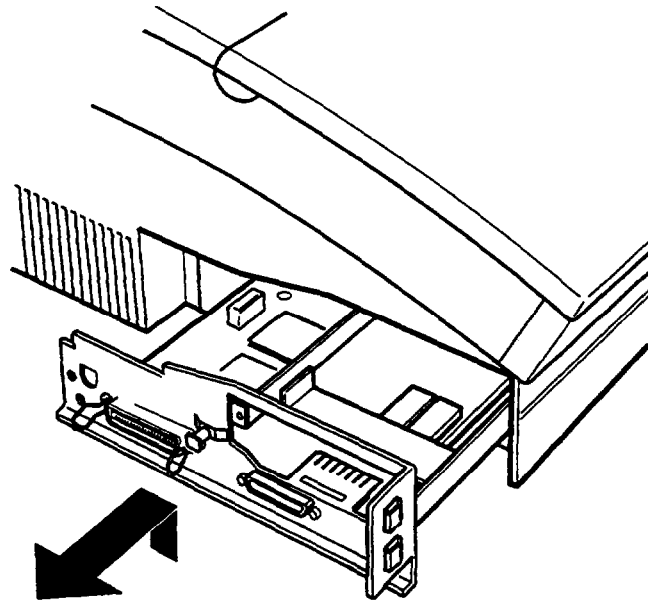
5. Remove the two screws securing the interface card cover; then pull off the cover. Keep the screws handy so that you can use them later. If you have already installed an optional interface card, skip this step.



6. Remove the four silver screws that secure the metal bracket on the left side of the printer. Keep the screws handy so that you can use them later.



7. Pull the tab on the bottom of the bracket to remove the controller board, as shown below.



Warning:

Avoid touching the electrical components that are exposed after you remove the controller board. They may be very hot if the printer has been used recently.

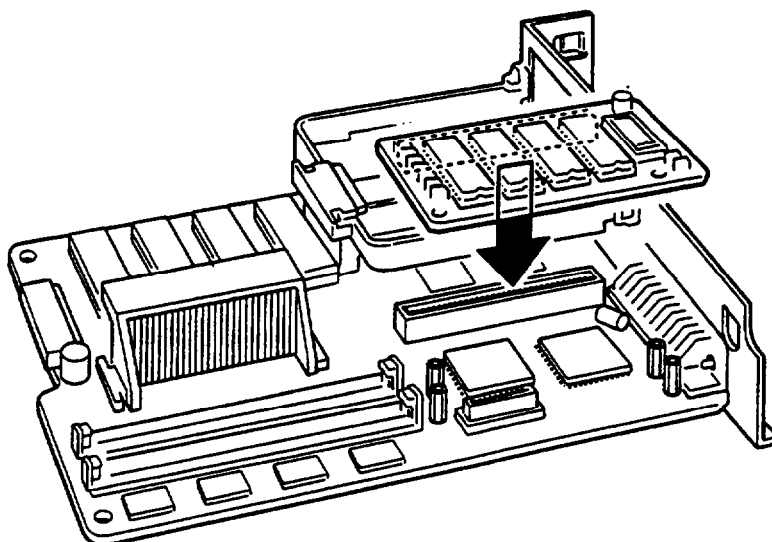
8. Grasp the board with both hands and pull it straight out of its slot.
9. Place the controller board on a clean, stable surface.

Installing the EpsonScript and LocalTalk boards

1. Unpack the EpsonScript and LocalTalk boards.

Follow these guidelines when handling the EpsonScript and LocalTalk boards:

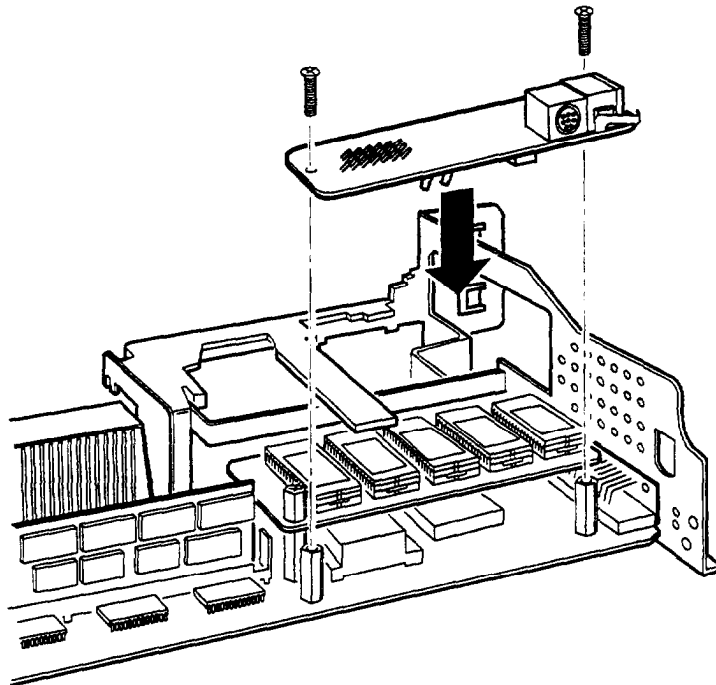
- ❑ Do not drop or bend.
 - ❑ Do not store in direct sunlight or near a heat source.
 - ❑ Make sure the printer is turned off when you insert or remove the boards; otherwise, you can damage the boards or the printer.
 - ❑ Do not touch the connectors. If the connectors become dirty, clean them by wiping the edge with a clean tissue. Do not use water, alcohol, or other solvents.
2. Hold the EpsonScript board so its CN1 connector is face down and position it over the CN3 connector on the controller board.
 3. Insert the connector on the EpsonScript board into the **CN3** connector as shown below.



4. Press the EpsonScript board in firmly and secure it using the supplied screws.

If you do not need to install the LocalTalk interface, go to “Reinserting the controller board.”

5. Position the LocalTalk interface board so its connector is over the **CN4** connector on the controller board. The LocalTalk port should show through the opening in the interface cover.



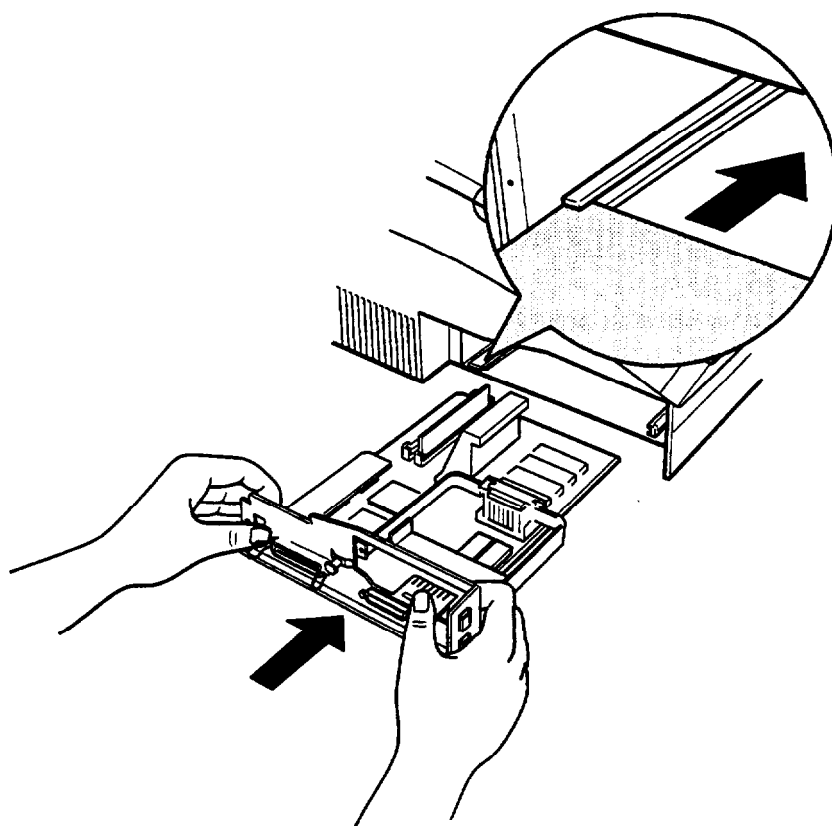
6. Press the LocalTalk board in firmly and secure it with the two screws provided.
7. On the printer's interface panel, remove the white plastic cap that covers the opening for the LocalTalk connector.

Reinserting the controller board

Note:

If you are installing additional memory, install it on the controller board before you reinsert the board. See your printer manual for instructions.

1. Hold the controller board level and fit its right edge into the right groove inside the board slot. Then gently fit its left edge into the left groove.



2. Slide the controller board into the printer until it locks in place. If the controller board does not fit smoothly into the printer, do not force it. Remove it and make sure the edges fit properly into the grooves inside the slot.
3. Secure the board with the four silver screws you removed earlier.

4. Attach the interface board cover with the two screws you removed in step 5.

Note:

Do not attach the interface cover if an optional interface is installed.

5. Reconnect any interface cables you removed.
6. Reinsert the optional font cartridge and lower paper cassette if you have these options.
7. Be sure the power is turned off; then plug the power cord into an electrical outlet.

Printing a status sheet

To print a status sheet to verify that EpsonScript is properly installed:

1. Turn on the printer.
2. Press the Menu button to enter SelectType.
3. Press the Menu button several times until TEST MENU appears on the display.
4. Press the Item button; you should see PS STATUS SHEET on the display.
5. Press the Enter button. The printer prints the status sheet, showing the current EpsonScript printer settings.
6. Press the On Line button to put the printer back on line.

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Software Installation

This chapter describes how to install the EpsonScript driver and utilities for both the Macintosh and PC environments. See the procedure that applies to you.

Installing the Macintosh Driver

To install the EpsonScript drivers and screen fonts on your Macintosh, you first need to run the EpsonScript Installer program. Then select the EpsonScript driver in the Chooser.

Running the EpsonScript Installer program

The Installer utility for the Macintosh driver has both an easy and a custom installation.

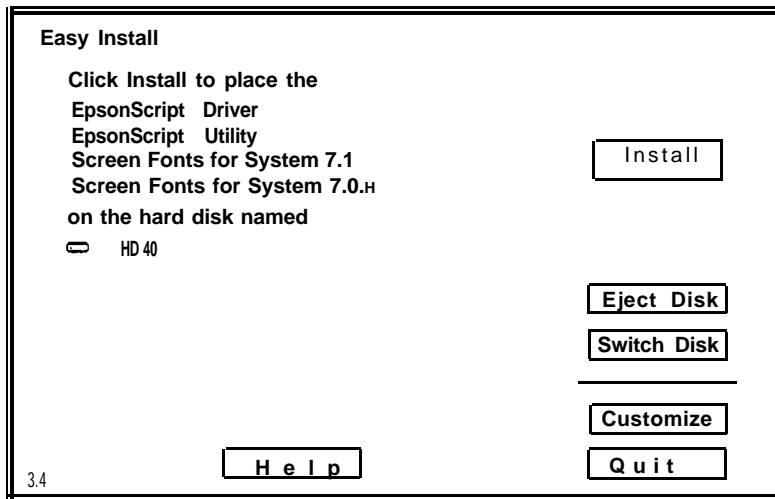
The easy installation installs all EpsonScript files and screen fonts that are not already installed on your Macintosh. Normally, you should use the easy installation since this ensures that all necessary files are copied and that the Macintosh environment is modified to give you the full benefit of the EpsonScript option.

The custom installation installs only the files you specify. You might want to use the custom installation if you are low on disk space and want to install only those files that are absolutely required. However, if you have enough disk space, it is recommended that you use the easy installation.

To install EpsonScript on your Macintosh:

1. Turn on your Macintosh if it is not already on. Exit any Macintosh programs you are currently running.

2. Insert Disk 1 (Installation) of the Macintosh diskettes into a diskette drive.
3. Double-click the Installer icon. When the initial dialog box appears, click OK to continue and open the following menu:



Note:

Your screen may differ slightly depending on your system.

4. Make sure the hard disk to which you want to install EpsonScript is shown.

To select a different disk, click Switch Disk until the appropriate disk is shown.

5. Choose the easy or custom installation.

To do the easy installation, click Install and skip to step 7.

To do a custom installation, click Customize and go to step 6.

6. The Installer prompts you to install one or more of the following:

EpsonScript Driver This driver allows you to use EpsonScript and control printer settings that are specific to EpsonScript. You must install this driver if you want to use your printer to print files formatted for PostScript.

EpsonScript Utility This utility allows you to manage and download fonts, get printer information, and send files directly to the printer. Installation of the EpsonScript Utility is optional. If you do not install the utility to your hard disk, you can run it later when needed from the diskette.

Screen fonts for System 7.1, System 7.0 The screen fonts match the EpsonScript printer fonts and ensure that what you see on screen closely resembles the final printed output. If you do not install screen fonts, the system substitutes other fonts to represent the printer fonts, with the result that your printed output might differ from what you see on screen.

Select one or more items. To select multiple items, hold down the Shift key when you click the item. If you select a single item only, a description for the item appears at the bottom of the dialog box.

7. Click Install and remove or insert diskettes as prompted.

If the screen fonts needed by EpsonScript are not installed on your system, the Installer prompts you to insert Disk 2 (Screen Fonts). If the screen fonts are already on your hard disk, you are not prompted to insert Disk 2.

8. When installation is complete, choose Restart or Quit.

If the Installer installed screen fonts, it prompts you to restart your Macintosh; otherwise, it prompts you to quit.

9. Eject the diskette.

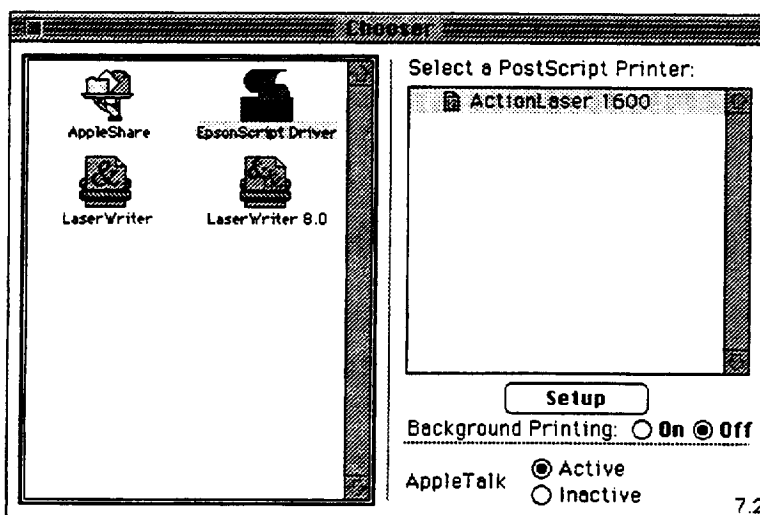
If you did the custom installation and are not able to use EpsonScript, perform the easy installation to ensure all necessary files are copied.

If you are connecting two or more ActionLaser 1600 printers using AppleTalk, you should rename one or more printers so each printer has a unique name on the network. See “Renaming the Printer” in Chapter 4.

Selecting the EpsonScript driver

Before you use EpsonScript, you need to select the appropriate printer driver using the Chooser.

1. Make sure your printer is on and is connected.
2. Under the Apple menu, select Chooser. This opens the Chooser dialog box.



3. Click the EpsonScript Driver icon. The name of your printer appears in the Select a PostScript Printer box. Click the name of your printer to select it.

Note:

You can select the background printing feature which allows you to proceed with other work while printing. See your Macintosh manual for more information.

4. If appropriate, select the AppleTalk zone to which your printer is connected.

If your Macintosh is connected to only one AppleTalk zone, ignore this step.

5. Click the Setup button
6. In the dialog box that appears, scroll through the Selected PPD scroll menu and select EPSON AL-1600 EpsonScript. Choose OK.

You should select the PPD for the ActionLaser 1600 because it contains a description of the printer's features. If you choose another PPD, you will not be able to access all of the functionality of the ActionLaser 1600.

7. Close the Chooser.

Installing the Windows Driver

To install EpsonScript in a Windows environment, you first need to select a PostScript printer. You then run the EpsonScript Installer to create a driver for EpsonScript based on the selected PostScript printer. Once you complete installation, select EpsonScript as the default printer.

Selecting a PostScript printer

If you are familiar with Windows printer installation, add the Apple LaserWriter II NTX printer to your Windows printer list and skip to "Running the EpsonScript Installer." Here are the steps for adding the Apple LaserWriter II NTX printer:

1. In the Windows Main group, double-click the Control Panel icon. Then double-click the Printers icon.
2. Choose the Add button
3. In the list of printers select Apple LaserWriter II NTX and choose Install.
4. If prompted, insert the appropriate Windows diskette and choose OK.
5. After the printer is displayed in the Installed Printers list, choose the Set As Default Printer button.
6. Choose Close. Then close the Control Panel.

Running the EpsonScript Installer

The EpsonScript Installer sets up the EpsonScript driver and installs the screen fonts for EpsonScript.

1. Save all current work and quit all Windows software programs.
2. Insert Disk 1 of the EpsonScript PC diskettes into a diskette drive.
3. In the Program Manager, choose Run from the File menu. This brings up the Run dialog box.

4. In the Command Line box, type A:INSTALL or B:INSTALL as appropriate. Choose OK.
5. After a few moments, you are asked if you want to edit the backup filename of WIN.INI. Choose OK.
6. Select AL-1600 EpsonScript as the printer name you want to install.
7. Follow the onscreen instructions that tell you to change diskettes.
8. Once all the files and screen fonts have been copied, a message appears telling you to reboot Windows. Choose OK. This closes your current Windows session and opens a new one.
9. Remove the EpsonScript diskette.

Selecting the default printer

1. In the Windows Main group, double-click the Control Panel icon. Then double-click the Printers icon.
2. In the Printers dialog box, select the EPSON AL-1600 EpsonScript option.
3. Choose the Set As Default Printer button.
4. Choose Close. Then close the Control Panel.

Chapter 3

Using EpsonScript in a Macintosh Environment

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Changing the Emulation

Before you can use the EpsonScript option, you need to change the emulation by using the SelecType menus.

If you're using the LocalTalk interface, the emulation may automatically be set for PostScript compatibility. However, it is a good idea to check this setting before you begin printing.

To manually change your printer's emulation:

1. Press the Menu button. This takes the printer off line and displays the PRINTING MENU, which is the first menu of the series.
2. Press the Menu button until EMULATION MENU appears in the display.
3. Press the Item button until the interface you want to use is displayed.

You can choose the parallel, serial, LocalTalk (L/T), or any auxiliary interface.

4. Press the up arrow to select one of the following modes: PS, PS&LJ4, PS&FX, PS&ESCP2, PS&GL2.
5. Press the Enter button to add the value to printer memory.
6. Press the On Line button to put the printer back on line.

If you see the message RESET TO SAVE, press Reset while you hold down the Alt button.

PostScript emulation is now assigned to the interface or interfaces you selected in step 3. It stays selected until you change the emulation for the interface.

Selecting Fonts

You select fonts from the Font menu of your software program. Most of the font names listed by your program are very similar to the printer font names; however, in a few cases, the font name you select is different from the name of the font that prints, although the appearance of the fonts is almost the same. For example, when you choose Palatino® the printer font Zapf Calligraphic 801, which resembles Palatino very closely, is automatically substituted.

The following table lists the cases in which the font listed by your program has a different name than the corresponding printer font:

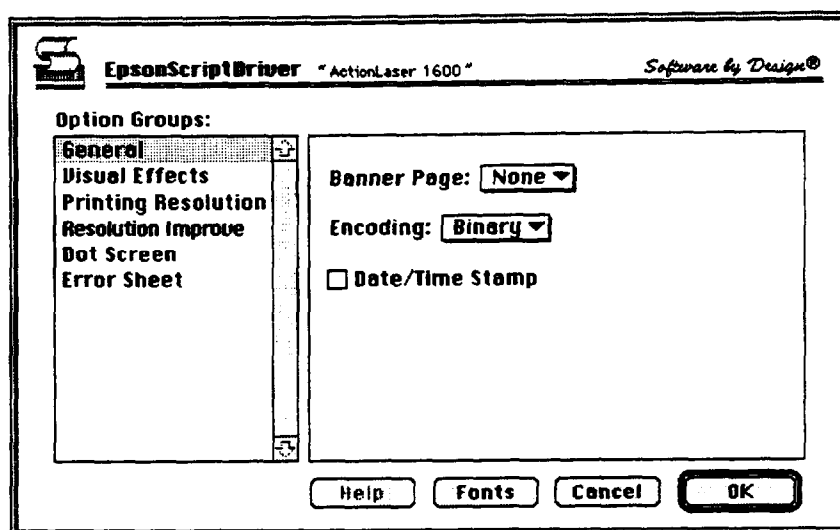
Font name you select	Corresponding printer font
Helvetica Narrow®	Swiss 721 Narrow
Helvetica Narrow Bold	Swiss 721 Bold
Helvetica Narrow Oblique	Swiss 721 Oblique
Helvetica Narrow Bold Oblique	Swiss 721 Bold Oblique
Palatino Roman	Zapf Calligraphic 801
Palatino Bold	Zapf Calligraphic 801 Bold
Palatino Italic	Zapf Calligraphic 801 Italic
Palatino Bold Italic	Zapf Calligraphic 801 Bold Italic

Using the EpsonScript Macintosh Driver

The EpsonScript Macintosh driver allows you to control general printer settings as well as settings specific to PostScript emulation. This chapter describes only those settings specific to PostScript emulation.

You do not normally need to change the EpsonScript settings. The default values are appropriate for most Macintosh environments.

However, if you need to, you can access the EpsonScript driver settings by first selecting Page Setup or Print from the File menu of your software program and then choosing the Options button. This brings up the following dialog box:



The menus that allow you to access additional printer settings are listed to the left.

Note:

This chapter assumes you are using EpsonScript with an ActionLaser 1600 printer. If you have another printer, the Options dialog box may differ and not all settings described in this chapter will be accessible.

Saving PostScript-compatible files as binary and ASCII

When saving a document as a PostScript-compatible file, you have the option of encoding the file as binary (default) or ASCII data. Save the file as a binary file to reduce the quantity of data. Use ASCII if you plan to later edit the document.

To encode a PostScript-compatible file, first select Print to File in the Print dialog box. Then choose the General menu of the Options dialog box and select the Encoding option.

Using precision bitmaps

To improve the quality of bitmap images, turn on the Precision Bitmap option. This option is accessible from the Visual Effects menu in the Options dialog box and slightly modifies bitmaps for printing to a PostScript or PostScript-compatible printer.

Images are displayed on a Macintosh at 72 dpi; however, most PostScript and PostScript-compatible printers print images in multiples of 75 dpi. When 72-dpi screen data is converted to print data, some image quality can be lost. If you select Precision Bitmaps, the screen data is first converted to a multiple of 75 and then printed, preserving the quality of the image, though reducing the image size by approximately 4%.

Using the MicroGray feature

The Dot Screen option of the Options dialog box allows you to change the grayscale technology used by the printer to create images. The options are Printer's Default, Standard, and Multigray/Microgray.

Normally you should use MicroGray for the best looking grayscale images. Standard sets the printer's grayscale handling to be the same as the standard PostScript.

Printing an error sheet

If you encounter errors when using PostScript emulation, you can print an error sheet to determine the cause. To print an error sheet, choose Error Sheet in the Options dialog box.

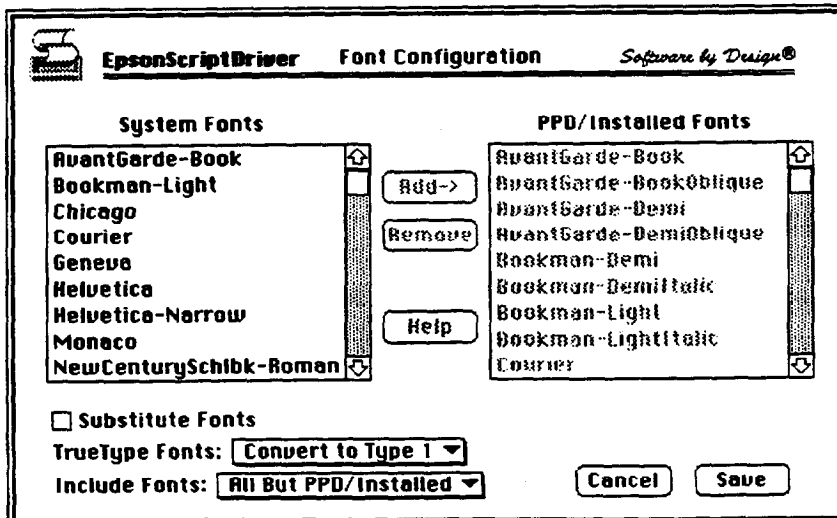
Font Management

The font management capabilities of EpsonScript allow you to do the following:

- Specify that system fonts be added to the PPD.
- Determine how TrueType® fonts are handled.
- Choose which set of fonts is to be downloaded.

Normally you do not need to use the font management capabilities. EpsonScript provides a wide variety of printer fonts, and most other fonts are downloaded as needed. Other font settings are assigned default values appropriate for most environments. You should never change font settings unless you are familiar with font management on a Macintosh..

However if you need to manage fonts, choose the Fonts button in the Options dialog box. This brings up the following dialog box:



Adding fonts to a PPD file

The Font Configuration dialog box lists both system fonts and PPD/Installed fonts for your software program. The system fonts are the fonts currently installed on your system. The PPD fonts are those included in the PPD file of your software program. These fonts are automatically downloaded as needed when you send a print job.

You can add any font on your system to a PPD file simply by selecting the system font and then choosing the Add button. The system font is then displayed in the PPD list.

If you install any new fonts on your system and you want those fonts accessible from your software program, you should add them to the PPD list.

To remove any fonts from the PPD list, simply select the PPD font and choose the Remove button

Substituting fonts

When you turn on Substitute Fonts and then print common Macintosh screen fonts (Geneva, NewYork, and Monaco), EpsonScript automatically substitutes one of its fonts. This results in faster print speed and higher resolution. Be aware that if the substituted font is significantly different from the screen fonts, the printed output might look very different from the way it looks on screen. For this reason, you normally should not turn on Substitute Fonts.

Handling TrueType fonts

By default, EpsonScript converts TrueType fonts to be compatible with Adobe® Type 1 fonts before printing them. If you wish, you can specify that EpsonScript print TrueType fonts as TrueType.

Because EpsonScript is designed to print PostScript-compatible fonts such as Type 1, you should normally not change the default setting.

Specifying which fonts to download

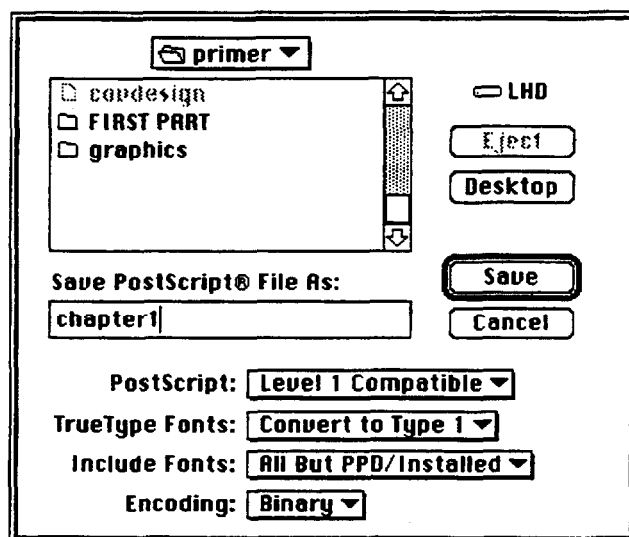
The Include Fonts option specifies which types of fonts need to be downloaded when printing. The options are All But PPD/Installed (default), None, All, All But Standard 13, All But Standard 35, and AU But Resident.

Normally when using EpsonScript with an ActionLaser 1600, you should not change the default setting of All But PPD/Installed. This ensures that all fonts required by your document are downloaded except those already in the PPD list.

If you are using EpsonScript to print to a printer that is able to communicate with the Macintosh, you might choose All But Resident. In this case, the Macintosh interrogates the printer to determine which fonts are already downloaded. Only fonts not already in printer memory are downloaded.

Saving PostScript-Compatible Files

If you want to save print data to a file so you can print it later or transport it to another system for output, open the Print dialog box and choose Print to File. Then when you choose Save, you see the following dialog box:



To save a file, enter a name for the file in the Save PostScript® File As text box. Be sure you select the directory to which you want to save the file.

When saving a PostScript-compatible file, you have the following options:

- Save the file as Level 1 Compatible (default) or Level 2.
- Convert TrueType fonts to Level 1 (default) or keep as TrueType fonts.
- Determine which fonts should be downloaded (by default, all but PPD fonts are downloaded).
- Save the file as binary (default) or ASCII data.

Using the EpsonScript Utility

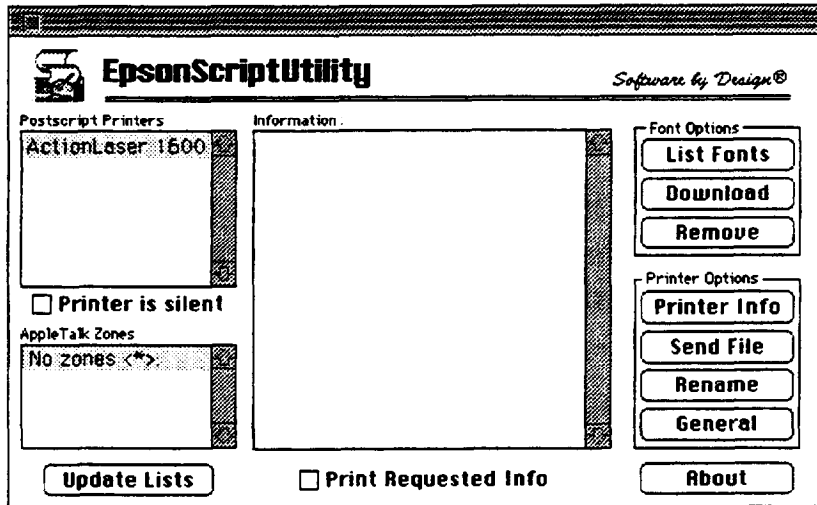
The EpsonScript Utility allows you to manage your printer from a Macintosh computer. The EpsonScript Utility will also work with PostScript or PostScript-compatible printers. With it, you can do the following:

- ❑ Display a list of fonts stored in the printer, download additional fonts, and remove any downloaded fonts.
- ❑ Find out information about the printer, such as the driver version, the total number of pages printed, and how much memory is installed.
- ❑ Send print files formatted for PostScript directly to the printer.
- ❑ Rename the printer.
- ❑ Send control commands to the printer, reset the printer, enable or disable the startup page, and edit control commands.

To use the EpsonScript utility, first be sure the EpsonScript Driver and the appropriate printer are selected in the Chooser. Then double-click the EpsonScript Utility icon.

The EpsonScript Utility is installed on your hard disk during the easy installation. If you did a custom installation and did not install the utility, you can run it from the diskette.

When you double-click the EpsonScript Utility icon, the following dialog box appears:



The EpsonScript Utility dialog box allows you to view all PostScript and PostScript-compatible printers that are connected to the selected AppleTalk zone. Click the printer whose settings you want to change. If you cannot find your printer, it might be connected to another AppleTalk zone.

If you still cannot find a printer, it might be because the printer you are looking for was off or disconnected when you started the utility. Make sure the printer is on and connected, then update the PostScript Printers list and AppleTalk Zones information by clicking the Update Lists button.



Caution:

Some features enable you to remove data from your printer, such as fonts in your printers RAM or hard disk. Make sure you have backup copies of this data before you delete it.

The Printer is Silent radio button disables bidirectional communication between your computer and printer; any messages from your printer are ignored. If Printer is Silent is selected, you cannot get printer information or font lists.

Managing fonts

The EpsonScript Utility allows you to list the fonts currently stored at the printer, download fonts from your computer to the printer, and remove downloaded fonts.

Displaying a list of printer fonts

To display a list of resident and downloaded fonts available on your printer, bring up the EpsonScript Utility and select your printer using PostScript Printers and AppleTalk Zones. Then click the List Fonts button.

Downloading fonts

The Download button downloads fonts from your computer to the selected printer. Fonts downloaded in this way remain in printer memory until you turn off the printer or reset it.

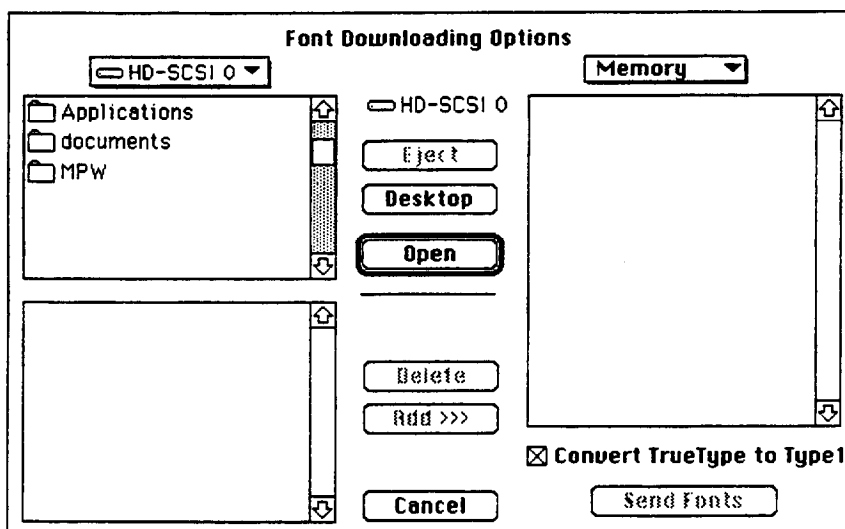
If your document requires non-resident fonts, they are downloaded automatically. Using EpsonScript to download fonts can reduce the time it takes to print, because fonts you explicitly download are handled in the same way as resident fonts. They remain in printer memory until you turn off or reset the printer, or remove them (see “Removing downloaded fonts”).

Note:

Downloading an excessive number of fonts can take away from the amount of printer RAM available to describe a printed page.

To download fonts:

1. Bring up the EpsonScript Utility and select the printer using PostScript Printers and AppleTalk Zones.
2. Click the Download button. The following dialog box appears:



3. In the top left box, locate the folder or folders that contain the fonts you want to download.
4. Open the folder by double-clicking on it or by clicking the Open button. The fonts in the folder are displayed in the lower left box.
5. Select the fonts you want to download.
6. Click the Add button. The fonts to be downloaded are displayed at the right of the dialog box.

Most printers can download fonts to memory only, so Memory is normally displayed at the top of the list of fonts to be downloaded. However, if your printer has another device (such as a hard disk), click Memory and scroll to the appropriate device.

If you want to remove fonts from the list of fonts to be downloaded, select the font at the right of the dialog box and click Delete.

Note:

By default, TrueType fonts are converted to Type 1 format before being downloaded. If you do not want them converted, disable the Convert TrueType To Type 1 box.

7. Once you have selected and added the fonts you want to download, click Send Fonts. This transfers the fonts from your computer to the printer.
8. Click Cancel to exit.

Removing downloaded fonts

To remove downloaded fonts from printer memory:

1. Bring up the EpsonScript Utility and select the printer using PostScript Printers and AppleTalk Zones.
2. Click the Remove button. This brings up a dialog box that allows you to remove downloaded fonts. The fonts currently downloaded to the printer are shown to the left of the screen.
3. 'Select the font(s) you want to remove (or type in the name of the font in the text box at the bottom of the dialog box) and click Add. The fonts to be removed are then listed at the right of the dialog box.

If you decide not to remove a font, select the font and click Delete. The font is deleted from the list of fonts to be removed.

4. When all the fonts you want to remove have been added to the list, click Remove Fonts.
5. Close the dialog box by clicking Cancel.

Getting information about the printer

The Printer Info option of the EpsonScript Utility allows you to view and print information about any of the PostScript or PostScript-compatible printers attached to the AppleTalk network. The information displayed includes the following:

- ❑ The printer name and firmware version
- ❑ PostScript level and version
- ❑ Amount of printer memory
- ❑ Number of pages printed.

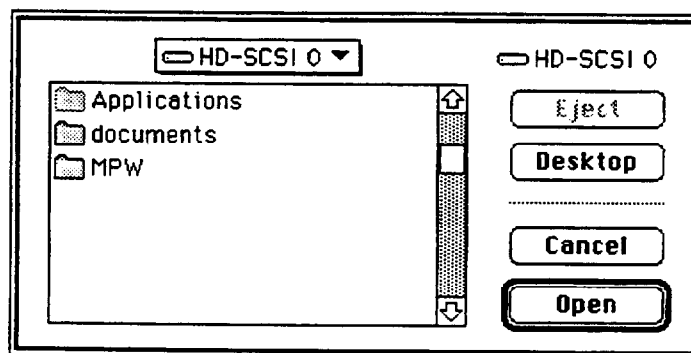
Additional information might also be shown, depending on your printer.

Sending files formatted for PostScript

The Send File option allows you to print a file formatted for PostScript without having to open a software program. It does not, however, allow you to print other types of files.

To print a PostScript-formatted file:

1. In the EpsonScript Utility dialog box, click Send File. This brings up the following dialog box.

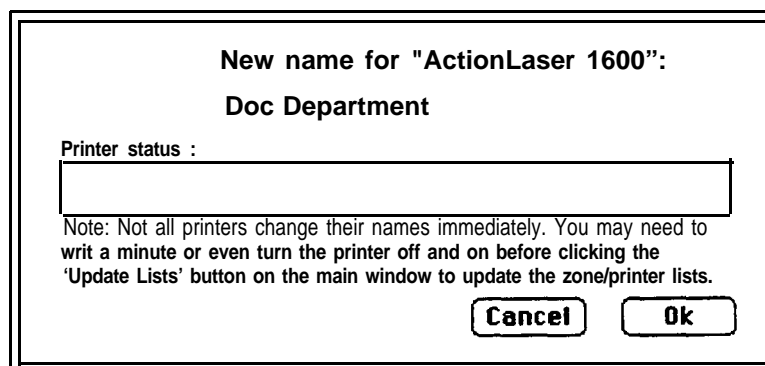


2. Select a PostScript-formatted file.
3. Click Open. This sends the file to the printer.
4. Click Cancel to close the dialog box.

Renaming the printer

By default, the printer is assigned a name when you install it. However, if you are installing the printer on a network that includes other printers, it is highly recommended that you assign it a unique name.

1. Bring up the EpsonScript Utility and select your printer using PostScript Printers and AppleTalk Zones.
2. Click the Rename button. This brings up the following dialog box:



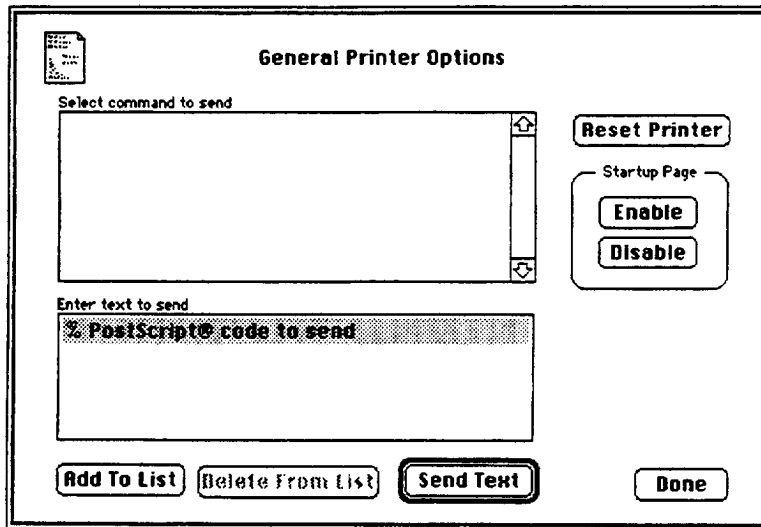
3. Enter a unique name for your printer. The name can be up to 31 characters in length.
4. Click OK.

After you rename the printer, you need to reselect it in the Chooser.

Additional EpsonScript Utility features

The General option allows you to send control commands to the printer, reset the printer, and enable or disable the startup page.

When you click the General option, the following dialog box appears:



Sending commands to the printer

To send any ASCII command to the printer:

1. Bring up the EpsonScript Utility and select your printer using PostScript Printers and AppleTalk Zones.
2. Click the General button.
3. In the General Printer Options dialog box, type a command string in the Enter text to send list box.

You can send any command in ASCII format.

4. Click the Add to List button. The command you type now appears in the Select command to send list box.

If you want to delete a command that appears in the Select command to send list box, select the command and click Delete From List.

5. In the Select command to send list box, select the command line you want to send to the printer.
6. Click Send Text. This sends the selected command line to the printer.
7. Click Done to close the General Printer Options dialog box.

Resetting the printer

The Reset option allows you to reset the printer to return all EpsonScript settings to the factory defaults. This software reset feature is not the same as the hardware reset feature available on the printer.

Note:

Any downloaded fonts and all print jobs are flushed from memory during a reset.

Enabling or disabling the startup page

The startup sheet is a page that prints automatically each time you power on the printer. It contains information about the printer status. Click Enable if you want the startup page printed; otherwise, click Disable.

The startup page is not available on all printers.

Chapter 4

Using EpsonScript in a Windows Environment

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Changing the Emulation

Before you can use the EpsonScript option, you need to change the emulation mode by using the SelecType menus.

To manually change your printer's emulation:

1. Press the Menu button. This takes the printer off line and displays the PRINTING MENU, which is the first menu of the series.
2. Press the Menu button until EMULATION MENU appears in the display.
3. Press the Item button until the interface you want to use is displayed.

You can use EpsonScript over the parallel, serial, LocalTalk (L/T), or any auxiliary interface.

4. Press the up arrow to select one of the following modes: PS, PS&LJ4, PS&FX, PS&ESCP2, PS&GL2.
5. Press the Enter button to add the value to printer memory.
6. Press the On Line button to put the printer back on line.

If you see the message RESET TO SAVE, press Reset while you hold down the Alt button.

EpsonScript is now assigned to the interface or interfaces you selected in step 3. It stays selected until you change the emulation for the interface.

Selecting Fonts

You select fonts from the Font menu of your software program. Most of the font names listed by your program are very similar to the printer font names; however, in a few cases, the font name you select is different from the name of the font that prints, although the appearance of the fonts is almost the same. For example, when you choose Palatino, the printer font Zapf Calligraphic 801, which resembles Palatino very closely, is automatically substituted.

The following table lists the cases in which the font listed by your program has a different name than the corresponding printer font:

Font name you select	Corresponding printer font
Helvetica Narrow	Swiss 721 Narrow
Helvetica Narrow Bold	Swiss 721 Bold
Helvetica Narrow Oblique	Swiss 721 Oblique
Helvetica Narrow Bold Oblique	Swiss 721 Bold Oblique
Palatino Roman	Zapf Calligraphic 801
Palatino Bold	Zapf Calligraphic 801 Bold
Palatino Italic	Zapf Calligraphic 801 Italic
Palatino Bold Italic	Zapf Calligraphic 801 Bold Italic

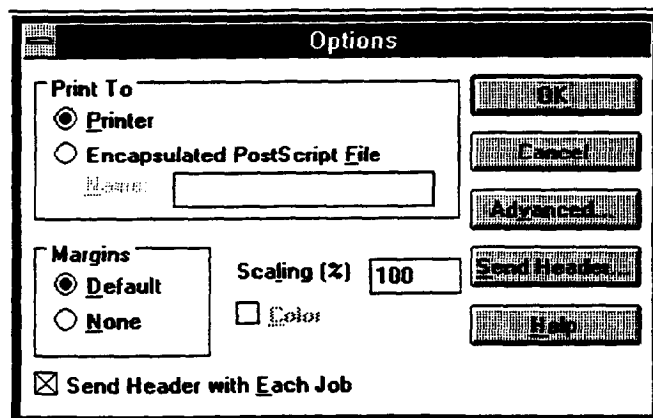
Using the EpsonScript Windows Driver

The EpsonScript Windows driver modifies the Microsoft Windows PostScript driver to allow you to control EpsonScript settings. You do not normally need to change EpsonScript driver settings because the default values are appropriate for most Windows environments.

However, if you need to, you can access the EpsonScript Windows driver settings through the Print or Page Setup menu items in the File menu of your software program. Although the driver allows you to access general printer settings, this chapter describes only those settings specific to EpsonScript. For help about any one of the driver settings, choose the Help button

Accessing EpsonScript driver settings

To access EpsonScript driver settings, choose Print or Page Setup in your File menu. This brings up a dialog box. You now need to select another option. Depending on your software program, you need to choose the Setup, Options, or Printer button. Some programs then prompt you to select the ActionLaser 1600 EpsonScript driver. Then choose Options (or Setup) to bring up the following dialog box.



This dialog box contains two settings that affect EpsonScript: Print To and Send Header with Each Job.

PM to Encapsulated PostScript File

This setting saves a document as a PostScript-compatible file. When you choose OK from the Print dialog box and select Encapsulated PostScript File, EpsonScript prompts you for a filename and saves the print data to a file. Normally you should use the Print to File option in the Print dialog box to specify that the print data be stored to a file.

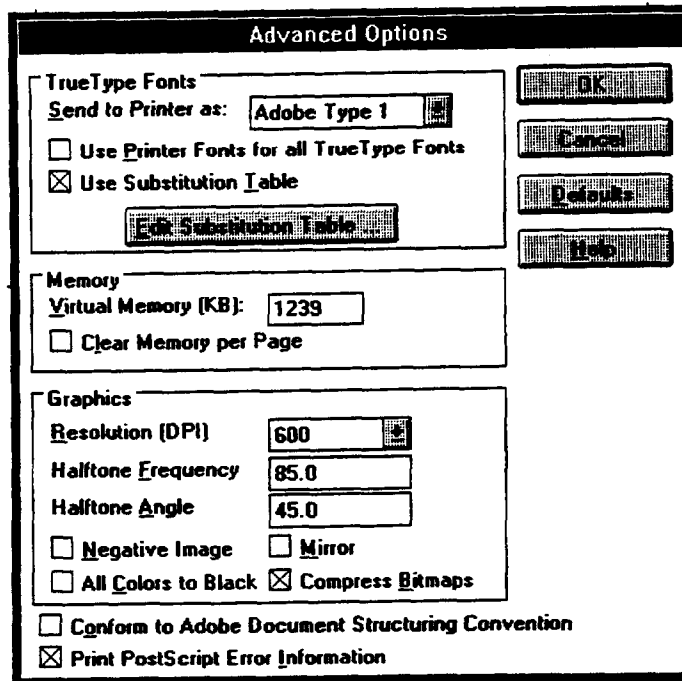
Send Header with Each Job

This setting specifies that EpsonScript attach header information with each file. By default, Send Header with Each Job is enabled to ensure that all header information is included with the file. Including header information is especially important when saving to a diskette or when printing to a shared network printer.

If your computer is connected directly to the printer, you can save printing time by turning off Send Header with Each Job. However, if you move the file to another location and then print, you will lose the header information

Advanced EpsonScript Settings

To access advanced EpsonScript settings, choose the Advanced button in the Options dialog box (see previous section for accessing the Options dialog box). This brings up the following dialog box:



Handling *TrueType fonts*

By default, EpsonScript converts TrueType fonts to be compatible with Adobe Type 1 fonts. This saves print time and uses less printer memory because it makes it unnecessary to download fonts to the printer.

The driver automatically substitutes Type 1 compatible fonts for the TrueType fonts in your document based on what most closely resembles the TrueType font. If you want more control over font substitution, choose the Edit Substitution Table button to explicitly specify what Type 1 font to use in place of a TrueType font.

You can also specify that EpsonScript convert TrueType fonts to bitmaps before printing them. Converting TrueType fonts to bitmaps saves some printing time when you are printing documents that contain a lot of bitmap graphics and only a few TrueType fonts.

Specifying memory usage

You may encounter printer memory problems when printing large documents that contain many downloaded fonts. To resolve memory problems, EpsonScript provides two options so you can specify memory usage:

- ❑ **Virtual Memory.** This option increases the amount of virtual memory your printer has available for storing fonts.
- ❑ **Clear Memory per Page.** This option clears all downloaded fonts from printer memory after each job is printed. This frees up memory for the next print job.

Graphics settings

EpsonScript allows you to specify the following graphics settings:

- ❑ **Resolution.** Can be 300 or 600 dpi. The higher resolution of 600 dpi produces the sharpest images. However, if you are encountering printer memory problems, reduce the resolution to 300 dpi.
- ❑ **Halftone Frequency.** Specifies the line screen. The value you select here depends on the resolution of your image and the resolution capability of the output device. If you are using 600 dpi, increase the halftone frequency (line screen) to at least 110. For 300-dpi output, an 85-line screen is usually sufficient.

- ❑ **Halftone Angle.** Specifies the angle at which the halftone is applied. Normally you should not change the default unless you are correcting for a problem or attempting to achieve a special effect.
- ❑ **Negative Image.** Inverts black and white areas of an image, so that black areas become white and white areas become black.
- ❑ **Mirror Image.** Creates a mirror image of a page.
- ❑ **All Colors to Black.** Prints any areas of color in black or grayscale.
- ❑ **Compress Bitmaps.** Automatically compresses bitmaps so they require less printer memory.

Creating files that conform to Adobe DSC

The Conform to Adobe Document Structuring Conventions (DSC) option specifies that files conform to Adobe DSC. You should enable this option in the following cases:

- ❑ You are creating a file you want to use with a software program that supports Adobe DSC.
- ❑ You want an outside service bureau to print the file.
- ❑ You will be sharing the file with others.

When you create files that conform to Adobe DSC, the Halftone Frequency, Halftone Angle, and Clear Memory Per Page options are no longer selectable.

You do not need to enable this option when creating EPS files.

Printing EpsonScript error information

By default, whenever EpsonScript encounters an error, it prints a file that describes the cause of the error and provides some help on how to correct the problem. The information provided by EpsonScript is more detailed than that provided by the Print Manager.

Appendix A

Changes to SelectType

How EpsonScript Affects Your Printer	A-2
EMULATION MENU	A-2
PS MENU	A-3
TEST MENU	A-4



How EpsonScript Affects Your Printer

When you install EpsonScript, the SelecType menus on the printer's front panel are expanded to allow you to select PostScript emulation and change settings in EpsonScript. The changes to SelecType are these:

- ❑ The EMULATION MENU allows you to select a PostScript emulation mode.
- ❑ The PS MENU has been added so you can print a PostScript-compatible error sheet, change the MicroGray setting, and specify how much memory is reserved for page protection.
- ❑ The TEST MENU includes three new items for testing PostScript compatibility.

EMULATION MENU

When you install EpsonScript, the EMULATION MENU is expanded to allow you to select one of the following PostScript compatibility options:

PS
PS&LJ4
PS&FX
PS&ESCP2
PS&GL2

PS specifies that the selected interface handles only PostScript-compatible data. The other four settings are combined emulations that allow the printer to switch automatically between PostScript compatibility and another emulation as print data is received.

PS MENU

The new PS MENU contains the following three items that allow you to change EpsonScript parameters:

ERR SHEET	ON, OFF (default)
------------------	--------------------------

Specifies whether the printer prints an EpsonScript error message if an error occurs. If ERR SHEET is OFF, the error message is displayed on the printer's control panel but is not printed. If ERR SHEET is ON, an error sheet is printed when the error occurs.

MicroGray	ON (default), OFF
------------------	--------------------------

Enables your printer to produce the grayscale quality of a 1,200-dpi typesetter. If your software program supports halftones, its graphic output becomes smoother than is possible with standard PostScript. If you want to print your documents using standard PostScript grayscale, turn MicroGray off.

PROTECT LEVEL	1 (default) - 5
----------------------	------------------------

Allows you to specify the amount of memory allocated for page protection. If the SelecType item PAGE PROTECT is off, an overrun error might occur if there is not enough memory to print a page. If this error occurs, raise the protect level. If the error occurs after raising the level to 5, set PAGE PROTECT to PAGE, or LT, LGL, or A4.

TEST MENU

The TEST MENU contains three new items that allow you to print test pages specific to the EpsonScript mode. To print a test page, select the item in the TEST MENU and then press the Enter button. If you need more information, see your printer manual.

PS STATUS SHEET

Prints a status sheet describing the current EpsonScript settings.

PS FONT SHEET

Prints a sample of the fonts available when using EpsonScript.

PS FACT SHEET

Prints a fact sheet that illustrates the features available for EpsonScript.

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