EPSON *StylusRIP*™

User's Guide

Contents

Glossary

Index

Introduction

EPSON® StylusRIP™ is software for use with Windows 95®, 98 or NT 4.0 that turns your EPSON Stylus™ printer into a PostScript® printer. Stylus RIP processes raster images for your PC, reads and interprets Adobe Level 2 PostScript (for Windows 95 / 98) or Adobe PostScript3 (for Windows NT 4.0) and allows your EPSON Stylus printer to print color raster images.

Adobe PostScript is the standard for high quality graphic output. All elements of a document, including text, graphics, and images are processed, stored, and reproduced using the PostScript code. When you print from an application, such as PageMaker®, StylusRIP processes the PostScript code and sends the processed image to the printer.

Features

❏ Enables PostScript printing
StylusRIP enables an EPSON Stylus printer connected to a PC to perform as a PostScript printer.

❏ Compliance with the network
By using the folder sharing function of Windows 95, 98 or NT 4.0, you can print from other PCs on the network.

Chapter 1

Installing StylusRIP in Your PC

Before you install the StylusRIP software in your PC, make sure your PC meets the system requirements listed below.

System Requirements

Your PC needs to meet the following configuration requirements to use StylusRIP, whether in a standalone or network environment:

❏ At least 15 MB of RAM (23 MB recommended). Also, any memory requirements for optional software must be added to this total.

❏ At least 50 MB of available disk space. As the number of files in the jobs folder increases, the amount of required disk space also increases.

❏ Windows 95, 98, or NT 4.0 operating system

❏ CPU: i486 or later, Pentium 133 MHz or faster is recommended.

❏ CD-ROM drive is required.

What to Check Before Setting Up StylusRIP

Before setting up StylusRIP, make sure your system meets the minimum hardware and software requirements listed above, and install any necessary fonts and printer drivers in your PC. See your font installation software and printer user's guides for more details.

Note:
Read the "README" file provided on the StylusRIP CD-ROM before setting up StylusRIP. The README file contains some important notices and the latest information concerning StylusRIP.

Also, be sure to note the following when setting up StylusRIP.

❏ Turn off all virus protection. For instructions on how to do this, see your virus protection or Windows documentation.

❏ Close all other active applications.

❏ Be sure to print a self test for the printer in question to make sure the printer is operating properly. Also, make sure the printer and PC are connected correctly.

❏ Remove all other printer drivers which access the LPT port (or change the port).

Installation

This section explains how to install the Stylus RIP Server for Windows 95, 98 and NT 4.0. Uses Windows 95 as an example to explain how to install the Stylus RIP Server in this section. Follow these steps:

1. Make sure Windows 95, 98 or Windows NT 4.0 is running.

2. Insert the CD-ROM into the appropriate drive.

3. The StylusRIP Installer dialog box appears.

4. Select English and click Next.

5. Select the printer you want to use and click Install.
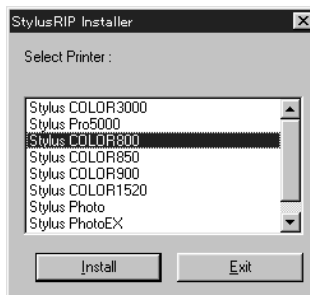
6. **Click** Next.

7. **Click** Next **for the default installation.**
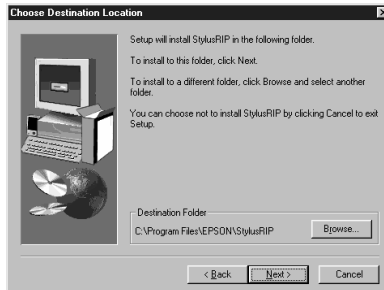
Note:
The installer saves the StylusRIP files to your hard disk. If you want to install the files somewhere other than on your hard disk, choose the destination.

8. Click Finish to complete the setting up.

9. The program installs all files necessary to run StylusRIP. When installation is complete, make the Preference settings, if necessary. See "Using the Preferences Dialog Box" on page 18.

10. AdobePS 4.2 Adobe PostScript Printer dialog box appears. Click Accept.
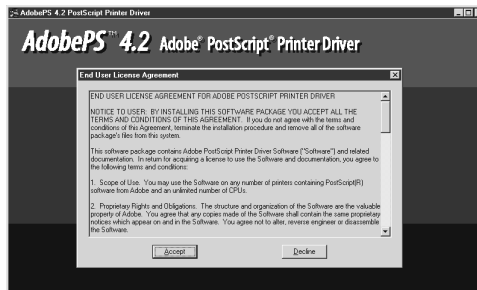
11. **Click** Next.
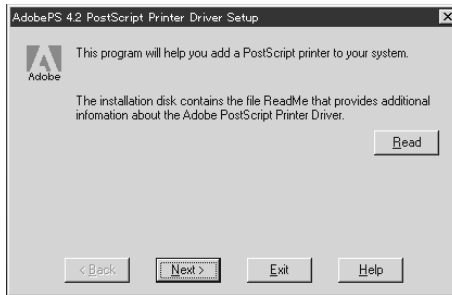
12. **Click** Next.
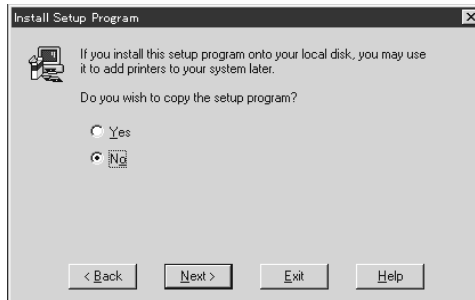
13. **Select the** Local Printer **radio button; then click** Next.
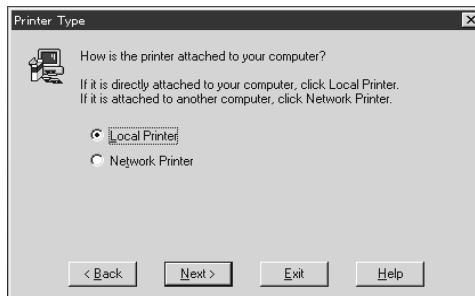
14. Select your printer's PPD file in the right column in the dialog box; then click *Next*.
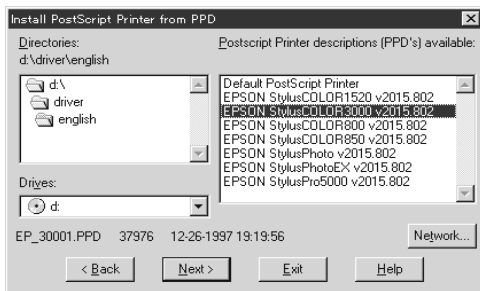
15. Select *StylusRIP* from the available ports list box, then click *Next*.
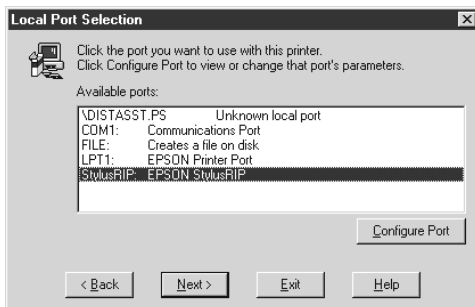
16. Select the No button at the Question: Would you like to print the test page? Then click Next. The printer driver is installed automatically.
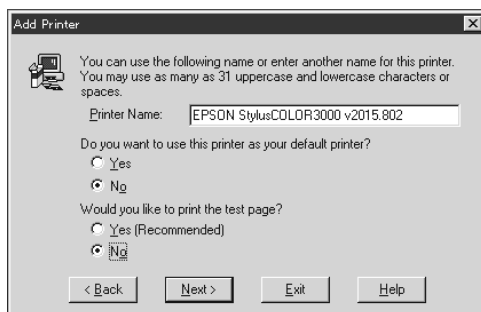
Note:
Some applications display a proprietary dialog box at this point. If one appears, see your application manual for instructions.

17. Click OK for the default setting.
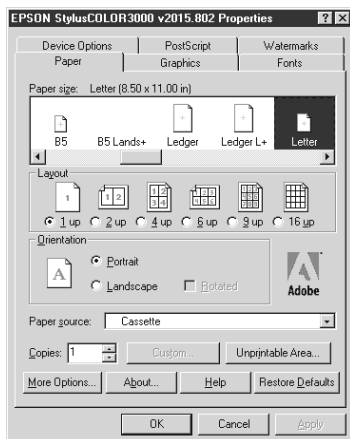
18. When installation is complete, click Exit.
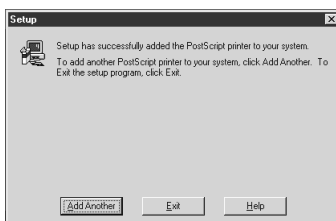
19. Click Yes to restart Windows.
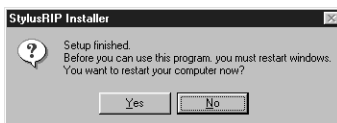
The printer driver is now installed on your PC.

Color Matching

During the StylusRIP installation, PANTONE color profiles for EPSON Stylus printers and the ICC profiles are installed in the StylusRIP Utilities folder.

PANTONE Color Support

PANTONE professional color palette files for the EPSON Stylus series printer are included with StylusRIP. These files can be read directly into all PANTONE-licensed applications so you can have printer calibrated versions of all PANTONE colors. The colors are calibrated to use StylusRIP's stochastic screens and EPSON's coated and high-quality glossy paper.

For installation instructions, refer to the README file, PANTONE documentation, and PANTONE manual in the PANTONE folder.

ICC Support

For applications that support ICC (International Color Consortium), use the ICC profiles that are included in the StylusRIP software.

For installation instructions, refer to the README file in the ICC PROFILE folder.

Chapter 2

Printing With StylusRIP Server

The StylusRIP Server is software that can play the role of print server. When you send a print job (when you save a document as a file, the file extension must be ".ps") from your application program, the StylusRIP Server receives the print job and puts it in a print queue in the order it was received. When your print job reaches the top of the queue, the StylusRIP Server sends it to the printer to be printed. The StylusRIP Server, just like any other application, must be opened before you can use it.

Using the StylusRIP Server

The first time you open the StylusRIP Server after setting up the StylusRIP software package, be sure to select the printer that you just updated.

1. Turn on the printer. Make sure the printer's power light is on before you open the StylusRIP Server.

2. Click Start, point to Programs, then click StylusRIP.

3. The StylusRIP Server searches for the upgraded printer. If the printer's power is on and the printer is ready to print, the StylusRIP Server selects the printer and prepares for printing.

When Licence Key dialog box appears, type your key in the dialog box.

Exiting the StylusRIP Server

Close the StylusRIP Server by clicking the close box on the top right corner of the StylusRIP Server window. Keep in mind that you need to open StylusRIP every time before printing.

Note:
Unless your PC is low on memory, you do not need to exit StylusRIP after every print job. You can leave it active until you turn off your PC.

Checking Print Status

If the StylusRIP Server is activated, the Server Status window automatically appears and shows the print status when you send a print job. This window displays the following information:
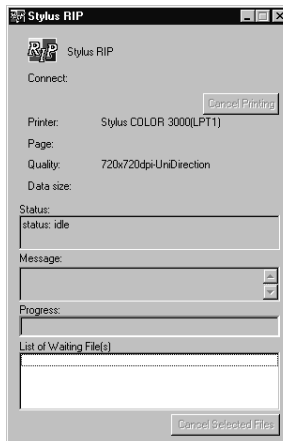
Connect:
Displays the name of the application program used to create the PostScript file.

Printer:
Displays the raster output printer name that is selected in the StylusRIP Server.

Page:
Displays the number of the page that is being processed and the total number of pages.

Quality:
Displays the print resolution and print direction.

Data Size:
Displays the size of the PostScript file that is being processed. The value increases as more of the file is received and processed. Once the entire file has been processed, the raster output is sent to the printer, as shown by the "Progress" bar.

Status:
Displays the current status of StylusRIP.

Message:
Displays specific printer information such as "Paper out" or "Ink end." All recoverable printer errors are displayed here. When an error occurs, StylusRIP holds the print job until the error is fixed and then automatically releases the job for printing. PostScript error messages are also shown here.

Progress:
Displays the progress of the raster output that is sent to the printer using a status bar. The color of this bar changes to gray when data is first sent to the printer. Printing begins soon after this. The bar progresses from left to right and reaches the right edge when the print job has been completely sent.

List of Waiting File(s):
Displays the files waiting for printing.

Cancel Printing:
Click the Cancel Printing button to cancel the print job that is now spooling.

Cancel Selected Files:
You can cancel the files that are displayed in the List of Waiting File(s) dialog box. To cancel a file, select the one that you want to cancel, then click the Cancel Selected Files button.

Using the Preferences Dialog Box

You can make special preference settings by clicking on the top left corner of the StylusRIP Server window and choosing Preferences. The Preferences settings are for changing the folder that stores the PostScript file to be printed.
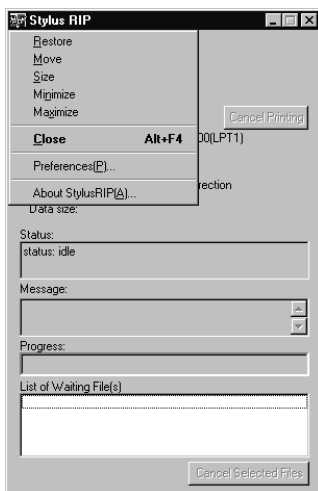
Temp Directory:
The StylusRIP Server searches for and prints the file (when you save a document as a file from driver, the file extension must be .ps) that is stored in the Temp Directory (for default installation, C:\Program Files\StylusRIP\tmp). To change the Temp Directory, type another folder name in the Temp Directory box, and click OK.

By using the folder sharing function of Windows 95, 98 and NT 4.0, you can print the PostScript file from other PCs on the network. Follow the steps below.

1. Open the Control Panel and double-click Network.

2. Click File and Print Sharing.

3. Check I want to be able to give others access to my files if you want to share the folder. Check I want to be able to allow others to print to my printer[s] if you want to share the printer driver.
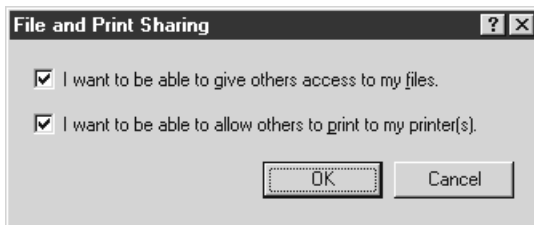
4. Click OK.

5. The network dialog box appears. Click OK.

6. Insert the Windows 95 CD-ROM and click OK.

7. Restart Windows and click Yes.

8. Right-click the Temp Directory (Tmp folder, in the example below) and click Sharing in the menu that appears.
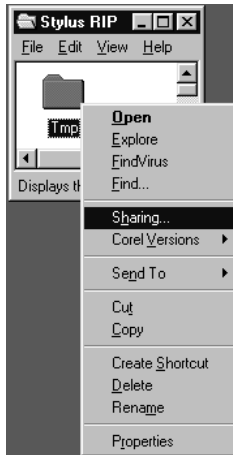
9. Click the Shared As radio button, and select the options you want.
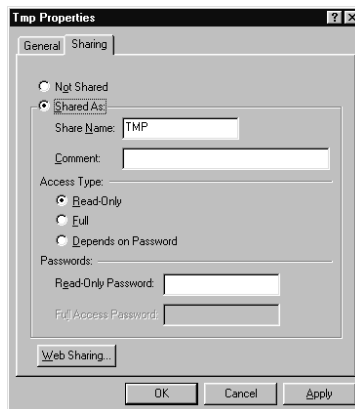
To share the Printer driver, follow the steps below.

1. Repeat steps 1 to 7.

2. Select the printer you want in the Printer dialog box. Then right-click and click Sharing in the menu that appears.
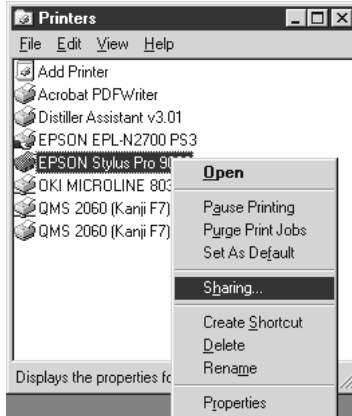
3. Click the Shared As radio button, and select the options you want.
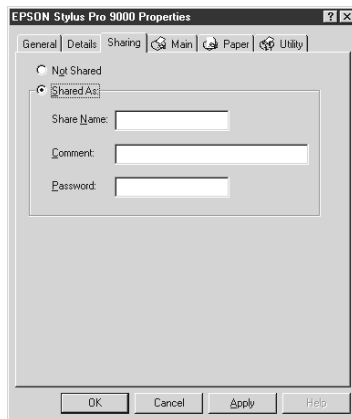
Starting the StylusRIP Server automatically

Follow the steps below if you often use the StylusRIP Server. This procedure causes the StylusRIP Server to start automatically every time you turn on your PC.

1. Right-click the StylusRIP Server **icon (which is in C:\StylusRIP\ for default installation), then choose** Create Shortcut.

2. Move the Shortcut into the C:\Win95\Start Menu\StartUp\Programs folder.

Using the Device Options Menu

You can make the following Print features settings in the Properties window. To open this window, click Start, **point to** Settings, **and click** Printers. **Next right-click the target printer's icon and click** Properties. **Click the** Device Options **tab to access the Printer features options.**
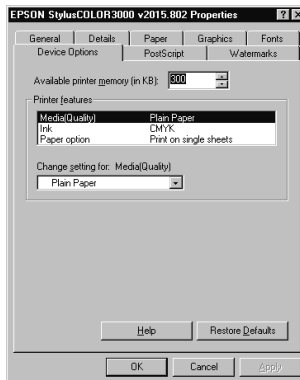
From the Printer features list, select the option you want to change, then select a setting from the Change setting for drop-down list. You can make the following Printer features settings:

Press Simulation

The Press Simulation function is useful when you print CMYK color data. You can easily make colors match CMYK color with the standard 3 offset colors (SWOP, Euro (Eurostandard), and DIC), and print.

Almost all PostScript compliance applications, suchs PageMaker, QuarkXPress, Illustrator, and PhotoShop (CMYK mode), use CMYK color designation. You can easily simulate offset color printing by using the Press Simulation function.

Select the profile of the target offset printing machine that you want to use. Your choices are SWOP, Euro (Eurostandard), DIC, or OFF. SWOP is the profile to simulate SWOP publications. Euro (Eurostandard) is the profile to simulate European publications. DIC is the profile to simulate standard DIC color publication. The default setting is SWOP. When using this settings, make sure of the following:

❏ Use only 360 dpi Ink Jet Paper, Photo Quality Ink Jet Paper, Photo Quality Glossy Paper, or Photo Quality Glossy Film (see your printer manual for which paper is available for your printer). You can not use Press Simulation with other paper types.

❏ Turn the Color settings to Color/Grayscale in the Print window.

❏ Some applications, schas PageMaker 6.5, Illustrator 7.0, or QuarkXPress 3.3 with HELIOS ColorSync2 XTension, can be used for color management functions. When using the application's color management function, make sure to select OFF for Press Simulation.

❏ The color of printouts look different depending on lighting. Press Simulation assumes you are looking at the printouts under correlated color temperature 5,000K°.

❏ Because each offset machine has its unique properties, the simulation results may vary.

Media(Quality)

Select the media type and resolution combinations. If a ⃠ symbol appears beside the media type you select, you need to change the Resolution setting on the Graphics menu, as described on page 25.

Ink

Select CMYK or Gray.

Paper option

Select the paper that you want to use. Your choices are Print on roll paper or Print on single sheets. This menu does not appear unless roll paper is available in your printer.

Things to check for when using roll paper and single sheets

Make sure of the following when you use roll paper or single sheets.

❏ Be sure to select Print on roll paper in the Change settings for Paper option drop-down list; otherwise the printer will eject entire roll of roll paper, because the printer believes the printout is just a long cut sheet.

❏ The available paper sizes depend on your printer. Verify the paper size, because the printer driver may automatically correct or change the paper size.

❏ If your application supports successive page printing, you can override the paper size setting and print over the above paper size as a result. For details, see your application manual.

❏ When you use single sheets, select Print on single sheets in the Change settings for Paper option drop-down list; otherwise, the top and bottom margins of the printout will be deleted.

Changing the Graphics Resolution setting

On the Device Option menu, a ⃠ symbol appears beside the Media (Quality) setting you want to select in the Change settings for drop-down list, follow the steps below.

1. Select the media type in the Change settings for drop-down list.
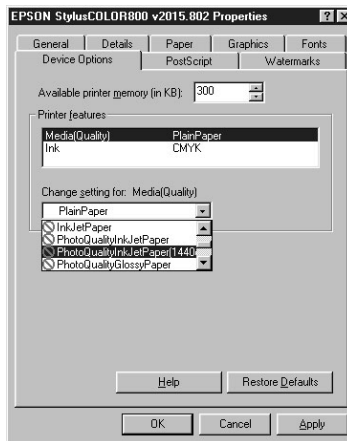
2. **Click the** Graphics **tab.**
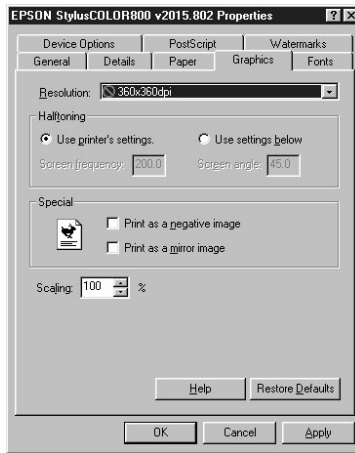
3. Select setting that does not have a ⊘ symbol beside it the resolution in the Resolution drop-down list.
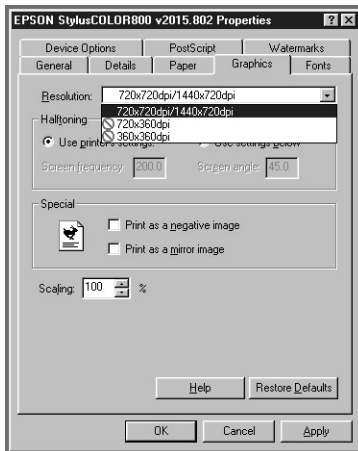
4. Click OK.

Printing the PostScript file from your application

If you want to print the PostScript file (when you save a document as a file, the file exteniton must be ".ps") from your application, save the file to the Temp Directory (for default installation, C:\Program Files\StylusRIP\tmp). If you want to change the Temp Directory, see "Temp Directory:" on page 18.

Chapter 3

Troubleshooting

This chapter lists possible solutions for common problems. Please refer to the troubleshooting hints before calling technical support.

When calling for technical assistance, be ready to identify your system and its configuration, the serial number of your copy of StylusRIP, and a description of the problems you are encountering.

Troubleshooting Hints

This section includes the most common problems StylusRIP users may encounter. These problems may include several possible solutions.

Getting the Best Possible Print Quality

The StylusRIP is a true Adobe Level 2 PostScript and Adobe PostScript3 raster image processor, which means it can utilize color rendering dictionaries when the RIP is driving a color printer. Adobe Photoshop automatically accesses these color rendering dictionaries when directly printing to the printer. Images created in Photoshop can be placed in other applications and still access color rendering dictionaries by saving them as LAB.EPS or calibrated RGB.EPS files. Note that color rendering dictionaries are not accessed by RGB.TIF or CMYK.TIF files when they are placed in other applications and printed.

Color profiles for Windows 95, Windows 98 and Windows NT are included with StylusRIP. These ICC color files provide support for printer color adjustment from the application, but only for applications which support this feature.

CMYK files are usually developed in a device-independent space, which makes it possible to adjust specific printing parameters for specific printers instead of accepting the default options given in the color rendering dictionary.

To obtain high-quality color images, keep the following points in mind.

❏ Use the manufacturer's inks and recommended paper for your ink jet printer.

❏ Try using a higher-quality paper. Paper designed for your ink jet printer has special coatings to evenly distribute the ink, and is different from uncoated bond paper used in laser printers and copiers.

❏ Make sure that you use the correct printer driver (included in the StylusRIP CD-ROM).

❏ For scanned images, check the scanner software settings.

❏ Perform a print head cleaning; then print a few lines to check the output.

Printer prints out illegible type or characters

❏ StylusRIP can only to print to a file. In the printer driver, check that StylusRIP is set to file and not to an LPT port.

Wrong fonts or jagged type

❏ Most fonts are downloaded with the print job. Sometimes a bitmap image of a font is downloaded. If the page is missing a font, StylusRIP will default to the Courier font or print the bitmap image of the font. Make sure you have the printer fonts installed properly.

❏ If you have the correct printer fonts, try cleaning the print head.

StylusRIP takes a long time before printing starts

❏ Change to a faster CPU or add more RAM. Complex jobs that use a large number of fonts will process faster on a faster CPU or with more RAM. We recommends that you change to a faster CPU first, then add more RAM, if necessary.

EPS files do not print

❏ EPS files are designed to be placed into other documents. They cannot be processed directly by StylusRIP. Place EPS files on a page created in another application and then print from that application.

Bitmap images or clip art looks jagged

❏ Bitmap images and clip art are processed for a set resolution and size. When enlarged, they tend to look jagged. EPS files produce higher-quality images.

TIFF images and simple text files do not print

❏ TIFF images and simple text files are designed to be placed into other documents. They cannot be processed directly by StylusRIP. Place these files on a page created in another application and then print from that application.

There are white lines on the output

❏ Screen savers interrupt the CPU during the printing process. Turn off your screen saver.

❏ Run a self test on the printer to verify that you have no clogged nozzles.

StylusRIP does not run from Navigator or other special desktops

❏ StylusRIP runs from Windows and may not run from special desktops like Navigator. If you are using a special desktop, click the Windows icon, then click the StylusRIP icon.

Printout has misplaced images or type

❏ You may not have enough memory to run StylusRIP. If you have other applications open, print to the StylusRIP directory and then launch StylusRIP.

❏ You may need to install more RAM in your system.

PPD in PageMaker 6.0 is missing

❏ To install the StylusRIP PPDs for PageMaker 6.0, follow these steps:

1. Select Start, Find, Files or Folders.

2. In the Named box, type in *.ppd and click Find Now.

3. Click the appropriate PPD name.

4. On the Edit menu, select Copy and copy the file to the appropriate PageMaker directory, for example C:\PM6\RSRC\USENGLISH\PPD4.

When a problem occurs with ECP mode

❏ If a print problem occurs in ECP mode when using the StylusRIP utility, such as incorrect characters or blank pages are ouput, change from ECP mode to Comptible (or Nibble) mode in your computer's BIOS setting. For details how to change the BIOS setting, see your computer's manual.

Glossary

CPSI
Configurable PostScript Interpreter. This Adobe Level 3 PostScript Interpreter runs on a Macintosh server rather than on a hardware peripheral device. StylusRIP uses this interpreter to render a raster image.

EPS
Encapsulated PostScript. This is a file type that may contain complex graphics. It is designed as a universal format to include complex graphics in other applications.

FPU
Floating Point Unit. A chip capable of executing operations with real numbers.

ICC
International Color Consortium. A consortium of operating-sytem vendors that has agreed to a standard color matching sytem for device profiles.

Imaging device
A device capable of printing a raster image on a physical medium, for example, a printer, imagesetter, or digital film recorder.

Interpreter
A set of software functions that convert PostScript language commands into a raster image. StylusRIP uses the CPSI interpreter.

OPI
Open Prepress Interface. A set of PostScript language commands for defining and specifying the placement of images.

PostScript
An interpretive computer language developed by Adobe that describes the text, graphics, and image content of a document to a printer or other output device. PostScript is hardware, software, and network independent so your images always appear the way you want them to.

PSPrinter driver
A printer driver used by an application to create a PostScript file.

Raster image
A digital representation of an image, consisting of values that are assigned to, and represent, each dot in an image.

Render
The process by which PostScript language commands are interpreted and a raster image is produced.

RIP
Raster Image Processor. An application or device that translates PostScript data into dots that can be printed.

StylusRIP server
A PC running the StylusRIP Server application.

TIFF
Tagged Image File Format. A standard image file format consisting of labeled fields.

Index

EPSON OVERSEAS MARKETING LOCATIONS

EPSON AMERICA, INC.

20770 Madrona Ave.

P.O. Box 2842

Torrance, CA 90509-2842

Phone: (800) 922-8911

Fax: (310) 782-5220

EPSON UK LTD.

Campus 100, Maylands Avenue,

Hemel Hempstead, Herts,

HP2 7TJ, U.K.

Phone: (+44) 01442 261144

Fax: (+44) 01442 227227

EPSON DEUTSCHLAND GmbH

Zülpicher Straße 6,

40549 Düsseldorf Germany

Phone: (0211) 56030

Fax: (0211) 5047787

EPSON FRANCE S.A.

68 bis, rue Marjolin

92300, Levallois-Perret, France

Phone: 33.1.40.87.37.37

Telex: 610657

EPSON AUSTRALIA PTY. LTD.

70 GIBBES STREET, CHATSWOOD 2067 NSW.

Phone: 2-9903-9000

Fax: 2-9903-9177

EPSON SINGAPORE PTE. LTD.

No. 1 Temasek Avenue #36-00

Millenia Tower, Singapore 039192

Phone: (065) 33 77 911

Fax: (065) 33 41 185

EPSON HONG KONG LTD.

Rooms 4706-10, 47/F,

China Resources Bldg.,

26 Harbour Road, Wanchai, Hong Kong

Phone: 2585-4300

Fax: 2827-7083

EPSON TAIWAN TECHNOLOGY & TRADING LTD.

10F, No. 287 Nanking E. Road, Sec. 3,

Taipei, Taiwan, R.O.C.

Phone: (02) 717-7360

Fax: (02) 712-9164

EPSON ITALIA S.p.A.

V.le F.lli Casiraghi 427

20099 Sesto S.Giovanni

MI, Italy

Phone: 2-262331

Fax: 2-2440750

EPSON IBERICA S.A.

Av. de Roma, 18-26

08290 Cerdanyola del Valles

Barcelona, Spain

Phone: 582. 15.00

Fax: 582. 15.55

SEIKO EPSON CORPORATION (Hirooka Office)

80 Harashinden, Hirooka

Shiojiri-shi, Nagano-ken

399-0785 Japan

EPSON PORTUGAL, S.A.

R. do Progresso, 471, 1° Perafita

4460 Matosinhos, Portugal

Phone: (02) 996 14 02

Fax: (02) 996 14 11

1998 February