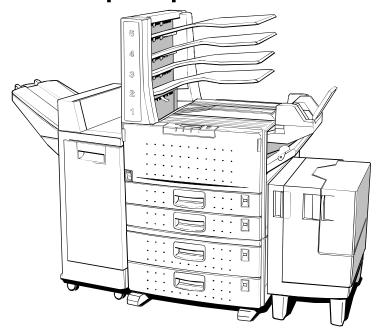
Aficio MP01

RIGOH

Printer Driver / Utility Reference <PostScript® option>



Operating Instructions

Read this manual carefully before you use this product and keep it handy for future reference. For safety, please follow the instructions in this manual.

Important

Parts of this manual are subject to change without prior notice.

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

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INTRODUCTION

We have three manuals that describe the operational procedures separately for the operation and maintenance of the machine, the operation of Printer Driver/Utility <PCL and TIFF> and the operation of Printer Driver/Utility <PostScript®-option>.

This manual contains detailed instructions on the installation and use of PostScript® printer drivers for Windows 3.1, 95 and Macintosh operating systems. To insure safe and efficient operation of the printer, all users should read and follow the instructions contained in this manual.

Printer Reference

Describes the operational procedures and functions of the printer including loading paper, use of the Control Panel and other operational tasks.

Printer Driver/Utility Reference < PCL and TIFF>

Describes the operational procedures and functions to use PCL and TIFF driver.

Printer Driver/Utility Reference < PostScript®-option>(this manual)

Describes the operational procedures and functions to use PostScript® (option) driver.

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1. USING THE POSTSCRIPT® DRIVERS FOR WINDOWS

OVERVIEW

This chapter contains information on installing and using the optional PostScript® printer drivers for Windows 3.1 and Windows 95.

The PostScript® option supports Adobe PostScript® Level II, with 35 built-in Adobe® PostScript® fonts. The PostScript® option allows you to download PostScript® Type 1 fonts, and supports downloaded TrueType fonts.

USING THE POSTSCRIPT® DRIVER FOR WINDOWS 3.1

This section contains information on installing and using the PostScript® printer driver for Windows 3.1. Refer to the "Using the PostScript® Driver for Windows 95" in this chapter for information on using the driver for Windows 95.

Installing the PostScript® Driver on Windows 3.1

The PostScript® option consists of the following components:

- □ PostScript® ROM DIMM module
- PstScript® printer driver software for Windows 3.1.

Follow these steps to install the PostScript® printer driver on your Windows 3.1 system:

- Insert the "PostScript® Printer Driver for Windows 3.1" diskette in the 3.5-inch diskette drive on the host computer.
- Close all the applications that are currently running.
- From the Program Manager, select Run from the File menu. The Run window displays.

- In the Run window, type "a: setup.exe" or click the Browser button and select the drive.
- Click **[OK]** and follow the installation instructions that display on the screen.
- 6 Restart Windows when prompted.
- When the "Install PostScript Printer from PPD" window appears, select drive "a: (or the letter that represents the drive in which you placed the installation diskette)" and click on the line for your printer. Do not select the "Pagemaker" subdirectory.
- 8 Click on the "Install" button.
- The "Printer Successfully Installed" message appears. Click the OK button and close the "Install PostScript Printer from PPD" window.

Note: If you plan to use the printer with the Adobe PageMaker® for Windows 3.1 application, an addition installation procedure is required to install a special PPD file for Adobe PageMaker®. Perform the following steps:

- 1. Insert the "PostScript Printer Driver for Windows 3.1" disk in the 3.5inch diskette drive on the host computer.
- 2. Copy the special PPD file from that drive a:\Pagemake\ Rio1p100.ppd to the PageMaker® directory, c:\Aldus\Usenglsh \Ppd4 using Windows File Manager or DOS. The disk drive letters and/or directory names may be different on your system. The last three characters in the PPD file name represent the version and will change in later versions.

Updating Printer Configuration Information

Before you use the printer with the Windows 3.1 PostScript® driver, you must update the printer configuration information. You must also update this information whenever you install a new optional accessory.

Follow these steps to update the printer configuration information:

- Select **Print** from the File menu in your application. On the Print window, click the **[Printer]** button. In the Print Setup window, select your printer name, highlighting the entire line, and click the **[Options]** button. Or, from your operating system Control Panel, double-click on the **Printers** icon, select your printer name, highlighting the entire line, and click the **[Setup]** button.
- 2 Click on the Features tab. The Features tab displays.
- Use the scroll box to select the accessory you want to specify as installed. Select **Installed** from the drop-down list box next to the accessory name.
- Click [OK] to save your selections.
- Refer to the "Features Tab" in this chapter for more detailed instructions on configuring the printer.

Printer Driver Window

In general, you access the Printer Driver window by selecting **Print** or **Setup** from the File menu in your application, clicking the **[Printer]** button, selecting your printer name line, highlighting the entire line, and then clicking the **[Options]** button.

You can also access the Printer Driver window using your operating system. Follow these steps to access the window available for the PostScript® driver for Windows 3.1:

- Access the Control Panel and double-click on the **Printers** icon. A list of the currently available printers displays.
- Select your printer name, highlighting the entire line.



Click the [Setup] button to access the Printer Setup window.

The Printer Driver window contains the following tabs. You use these tabs to specify the parameters and options you want to use for your print jobs.

Note: The Form Overlay, displays only when the Form Overlay option is installed.)

- Paper
- □ Features
- □ Fonts
- □ PostScript[®]
- Job Control
- □ Watermark
- Form Overlay (displays when the Form Overlay option is installed)

Paper Tab

To access the Paper tab, from the Printer Driver window, click on the Paper tab. You use this tab to specify the paper options you want to use and how you want the output to look.

Paper Tab Parameters

You use the Paper tab to specify the parameters you want to use for the printed output. The parameters you can specify are as follows:

Output Format

Use the drop-down list box to select the output format you want to use. The options are as follows:

- PostScript® use this option for normal printing.
- Encapsulated PostScript® use this option to create a single-page image file that you can use with applications that accept this file format.

The default setting is **PostScript**[®].

Note: When you select **Encapsulated PostScript**®, you do not send your document to the printer. Your document is stored as a file on the disk or media that you select.

Paper Source

Use the drop-down list box to select the input tray you want to use. The options are as follows:

Auto Tray Select
 Tray 4
 Tray 1
 Large Capacity Tray
 Tray 2
 Envelope Feeder
 Bypass Tray

When you choose **Auto Tray Select**, the printer uses the first available tray, starting from the default tray, that contains the paper size required by the print job.

The **Tray 3** and **Tray 4** options display when the optional Paper Bank is installed. The **Large Capacity Tray** option displays when the optional Large Capacity Tray is installed. The **Envelope Feeder** option displays when the optional Envelope Feeder is installed.

The **Bypass Tray** does not display when the Envelope Feeder is installed. The **Tray 1** option does not display when the optional Duplex Tray is installed.

The default value is **Auto Tray Select**.

Note: When you select **Auto Tray Select**, the automatic tray switching feature is enabled. This features switches the input paper tray to another tray containing paper with the same size and orientation, when the active tray runs out of paper. The printer checks the other trays in the following sequence: LCT, Tray 1, Tray 2, Tray 3, Tray 4, Bypass Tray. If you select a specific tray, the automatic tray switching feature is disabled.

Paper

Use the drop-down list box to select a paper size for the current job. When the paper size you select is not available, the printer stops and the "Load <paper size>" message displays on the Control Panel. The options are as follows:

- □ Letter (8.5" x 11")
- □ Legal (8.5" x 14")
- □ 11" x 17"
- □ Executive (7.25" x 10.5")
- □ 5.5" x 8.5"
- □ A3 (297 x 420 mm)
- □ A4 (210 x 297 mm)
- □ A5 (148 x 210 mm)
- □ A6 (105 x 148 mm)
- □ B4 JIS (257 x 364 mm)
- □ B5 JIS (182 x 257 mm)
- □ 8" x 13"

- □ 8.25" x 13"
- □ 8.5" x 13"
- Monarch Env (3.875" x 7.5")
- □ Com 10 Envelope (4.125" x9.5")
- □ C5 Env (162 x 229 mm)
- □ C6 Env (114 x 162 mm)
- □ DL Env (110 x 220 mm)
- Custom Paper

Note: Some of the options appear only when the optional Envelope Feeder or the Bypass Tray is selected as a Paper Source.

The default paper size is A4.

When you select **Custom Paper**, the **[Custom Paper]** button is enabled. You use this button to specify a custom paper size. Refer to the "Custom Paper Window" in this chapter for more information on defining custom paper sizes.

Orientation

Use the radio buttons to specify the page orientation for the printed output. The options are as follows:

- □ **Portrait** prints with the left margin along the long side of the paper.
- Landscape prints with the left margin along the short side of the paper.
- Rotated Landscape prints in the same orientation as Landscape, but rotated 180 degrees.

Scaling

Use the incremental spin box to specify the percentage by which you want to reduce or enlarge the printed image. You can specify scaling from **10** to **400** %. The default value is **100** %.

Copies

Use your keyboard, or the incremental spin box, to specify the number of copies you want to print. You can specify from 1 to 999 copies. The default value is 1.

Watermarks

Use the scroll box to select a watermark. The options are as follows:

- (None) specifies you do not want to print a watermark.
- CONFIDENTIAL
- COPY
- DRAFT

Note: When you create new watermarks using the Add Watermark window, the names of the new watermarks display in the Select a Watermark list box. ► Refer to the "Edit Watermark Window" in this chapter for more information on using and creating watermarks.

First Page Only

Check this check box when you want to print the watermark on the first page of your document only.

Layout

Use the list box to select the option that specifies the number of multiple pages you want to print on a single sheet of paper. The options are as follows:

- 1 page up/sheet
- □ 2 pages up
- □ 4 pages up
- □ 6 pages up
- □ 9 pages up
- □ 16 pages up

The default value is 1 page up/sheet.

Print Page Border

When you print more than one page on a sheet, you can select the Print Page Border option. You use this option to print a border around each page on the sheet.

Note: The multiple page layout may not work with some applications.

Paper Tab Control Buttons

You use the control buttons located on the Paper tab to perform the following functions:

About

Displays information about the copyright date and revision level of the printer driver.

Help

Accesses the Help window, which provides detailed information on the parameters available on the Paper tab.

Cancel

Cancels your parameter settings and closes the Printer Driver window.

OK

Saves your parameter settings and closes the Printer Driver window.

Custom Paper Window

To access the Custom Paper window from the Paper tab, click the **[Custom Paper]** button. The **[Custom Paper]** button is only enabled when you select Custom Paper from the Paper Size drop-down list box. You use the Custom Paper window to define custom paper sizes.

Custom Paper Window Parameters

The parameters you can specify in the Custom Paper window are as follows:

Width

Use your keyboard, or the incremental spin box, to specify the width of the custom paper size. The valid range is **90.42** mm to **297.0** mm (**3.56**" to **11.69**").

Height

Use your keyboard, or the incremental spin box, to specify the length of the custom paper size. The valid range is **148.2** to **431.8** mm **(5.83**" to **17.00**").

Units

Click the radio button that corresponds to the unit of measure you want to use. The options are as follows:

- □ Inches
- ☐ Millimeters

The default value is **Inches**.

Note:

You can use the Bypass Tray of the printer to print special or custom paper sizes. To do so, you use the printer Control Panel to define the custom paper size you want to use. To define a custom size for the Bypass Tray, enter the Menu mode using the printer Control Panel and access the Job Control menu. From the Job Control menu, select Paper Input. From the Paper Input submenu, select Bypass Size and select Width/Length. The display will show Width. You can set the width dimension in millimeters by pressing the [*] key or the [*] key. Press the [#/\] key when the dimension is correct. You enter the Length dimension using the same procedure. You can then load the special paper in the Bypass Tray and use your application or the printer driver to select Bypass Tray as the Paper Source you want to use to print your document.

Custom Paper Window Control Buttons

You use the control buttons located on the Custom Paper window to perform the following functions:

OK

Saves your parameter settings and closes the Custom Paper window.

Cancel

Cancels your parameter settings and closes the Custom Paper window.

Help

Accesses the Help window, which provides detailed information on the parameters available in the Custom Paper window.

Features Tab

To access the Features tab from the Printer Driver window, click on the Setup button. You use this tab to specify the optional accessories and print features that are available on your printer.

Features Tab Parameters

The parameters you can specify on the Features tab are as follows:

Duplex

Use the drop-down list box to specify duplex output. The options are as follows:

- □ Off disables duplex printing.
- Long Edge Binding when printing in Portrait orientation, use this setting when you want to bind your output along the left edge of the paper, like a book. In Landscape orientation, this setting produces output that you can bind along the top edge of the paper, like a calendar.
- Short Edge Binding when printing in Portrait orientation, use this setting when you want to bind your output along the top edge of the paper, like a calendar. In Landscape orientation, this setting produces output that you can bind along the left edge of the paper, like a book.

The default value is Off.

Figure 1-1 illustrates the two binding methods.

Figure 1-1. Binding methods

PORTRAIT LANDSCAPE A May A A B B

- A. Long Edge binding
- B. Short Edge binding

Note: This selection displays only when the Duplex Tray is installed. Duplex printing is not available on certain sizes, including A5 □, A6 □, 5 1/2" x 8 1/2" (Halfletter), and envelopes.

Collate

Use the drop-down list box to specify whether you want to use the diskbased collation feature. The options are as follows:

- True enables disk-based collation. This selection is available only when the optional hard disk is installed.
- False disables disk-based collation.

The default value is False.

Note: The Collate function, located in the Print window of your application, must be turned off if you set this Collate option to **True**. Otherwise, you will get multiple sets of your collated job.

Custom Halftone

When you use a halftone screen, the printer optimizes the appearance of multibit-per-pixel gray images and graphics by dithering the images up to 256 levels of gray. You can also use the Halftoning selection to print color images in shades of gray, rather than in black and white. The PostScript® option on your printer supports the Adobe standard PostScript® halftone features as well as a special calibrated halftone method that provides four screen frequencies, or lines per inch (lpi) and angle, for each resolution setting. You can select the calibrated halftones by selecting **Newsletter**, **Commercial**, **Newspaper**, or **Silkscreen**, or you can use the Adobe PostScript® halftone by selecting **Adobe default setting**.

Refer to table 1-1 for further information.

You can select one of the following halftone screen settings:

- Use Newsletter
- Use Commercial
- Use Newspaper
- Use Silkscreen
- Adobe default setting

Table 1-1 lists the halftone settings, with the lines per inch (lpi) available at different resolution settings.

Table 1-1. Halftone settings

Setting	Lines per inch at	Lines per inch at	Lines per inch at
	600 dpi resolution	400 dpi resolution	300 dpi resolution
Commercial	141 (45°)	94 (45°)	70 (45°)
Newsletter	106 (45°)	80 (45°)	60 (45°)
Newspaper	85 (45°)	70 (45°)	53 (45°)
Silkscreen	45 (45°)	47 (45°)	42 (45°)

Note: The **Adobe default setting** halftone selection uses the Adobe halftone feature in the PostScript® interpreter in the printer. Screen frequency and angle vary with resolution as follows: 120 lpi and 45° at 600 dpi; 85 lpi and 45° at 400 dpi; and 60 lpi and 45° at 300 dpi.

The selection of the best halftone setting depends on several factors including the original quality and format of the image, the format and resolution of the image file being used, the method you will use to print or copy the printed image and the detail in the image itself. In general, a lower quality image or less refined method of printing should be printed with a lower screen density. The appearance of halftone images is a subjective matter. Try printing a given image with different halftone settings to determine which one looks best. The default value is Newsletter.

Note: When you use the Halftone option, make sure Edge Smoothing is disabled. Halftone and Edge Smoothing are not compatible, and wen both features are enabled, the printer may produce poor results. Some application programs override the printer's halftone function, use their own halftone methods for images and print images as bitmaps. Check your application documentation if the printer's halftone selection does not appear to work.

Printer Memory

Use the drop-down list box to specify the amount of available dynamic random access memory (DRAM). The printer has a base memory of 8 megabytes (MB), which is expandable to 68 MB. The default value is **Standard 8 MB RAM**.

Toner Saving

You can use this function when you print draft copies of documents. When you enable Toner Saveing, the printer uses less than the normal amount of toner, which makes black areas print as gray but does not affect readability. The options are as follows:

- On enables Toner Saving, causing the printer to use approximately one half of the normal amount of toner.
- Off disables Toner Saving.

The default value is Off.

Paper Bank

Use the drop-down list box to specify whether the optional Paper Bank is installed. The options are as follows:

- Installed the Paper Bank is installed.
- □ Not Installed the Paper Bank is not installed.

Large Capacity Tray

Use the drop-down list box to specify whether the optional Large Capacity Tray (LCT) is installed. The options are as follows:

- Installed the Large Capacity Tray is installed.
- Not Installed the Large Capacity Tray is not installed.

Envelope Feeder

Use the drop-down list box to specify whether the optional Envelope Feeder is installed. The options are as follows:

- Installed the Envelope Feeder is installed.
- □ **Not Installed** the Envelope Feeder is not installed.

Mailbox

Use the drop-down list box to specify whether the optional Mailbox is installed. The options are as follows:

- Installed the Mailbox is installed.
- Not Installed the Mailbox is not installed.

Finisher

Use the drop-down list box to specify whether the optional Finisher is installed. The options are as follows:

- Installed the Finisher is installed.
- Not Installed the Finisher is not installed.

Duplex Tray

Use the drop-down list box to specify whether the optional Duplex Tray is installed. The options are as follows:

- Installed the Duplex Tray is installed.
- Not Installed the Duplex Tray is not installed.

Hard Disk

Use the drop-down list box to specify whether the optional Hard Disk is installed. The options are as follows:

- Installed the Hard Disk is installed.
- Not Installed the Hard Disk is not installed.

Output Tray

Use the drop-down list box to specify the output tray you want to use when an optional output device is installed. The options are as follows:

□ External Tray
□ Output Tray 4

□ Output Tray 1
□ Output Tray 5

(Standard Tray)

Shift Tray Face-down

□ Output Tray 2 □ Shift Tray Face-up

Output Tray 3

The Output Tray 2, Output Tray 3, Output Tray 4, and Output Tray 5 options display only when the optional Mailbox is installed. The Shift Tray options (Face-down and Face-up) display only when the optional Finisher is installed.

The default value is Output Tray 1 (Standard Tray).

Resolution

Use the drop-down list box to set the printer resolution for PostScript® output. The options are as follows:

- 600 dpi (dots per inch)
- 400 dpi
- □ 300 dpi

The default value is 600 dpi.

Edge Smoothing

Use the drop-down list box to enable Edge Smoothing, which enhances print quality. The options are as follows:

- On enables Edge Smoothing. The printer rasterizes output to enhance print quality. The appearance of the output emulates a resolution of 1200 dpi, reducing ragged edges and providing printed output with smooth curved and diagonal lines.
- Off disables Edge Smoothing.

The default value is On.

Note: When you enable this function, images and halftones may be adversely affected and not print properly.

Staple

Use the drop-down list box to specify whether you want your output stapled. The stapler can staple up to 20 sheets of A4 or Letter size paper, to a maximum of 30 sets. When you select stapling, you must set the Output Tray selection to Shift Tray Face-down. You cannot set the Stapling option to **True** unless the Output Tray option is set to **Shift Tray Face-down**.

When you want to staple sets of a multiple copy collated job, you must set the Collate (disk-based collation) option to **True** from within your printer driver. If you enable collation from the Print window of your application, the entire job is stapled together.

The options are as follows:

- □ True (check box checked) enables stapling.
- □ False (check box not checked) disables stapling.

The default value is False.

Note: The following output combinations should not be stapled, as the staple will be placed in an awkward position:

- 1. Duplex, Short Edge Binding, Landscape Orientation
- 2. Reverse Portrait Orientation, Simplex or Duplex
- 3. Reverse Landscape Orientation, Simplex or Duplex

Form Overlay

To use the Form Overlay, check the Enable Form Overlay check box.

Features Tab Control Buttons

You use the control buttons located on the Features tab to perform the following functions:

About

Displays information about the copyright date and revision level of the printer driver.

Help

Accesses the Help window, which provides detailed information on the parameters available on the Features tab.

Cancel

Cancels your parameter settings and closes the Printer Driver window.

OK

Saves your parameter settings and closes the Printer Driver window.

Fonts Tab

To access the Fonts tab from the Printer Driver window, click on the Fonts tab. You use this tab to perform PostScript® font management tasks.

Refer to Appendix for more information on using the Fonts tab.

PostScript® Tab

To access the PostScript® tab from the Printer Driver window, click on the PostScript® tab. You use this tab to specify PostScript® features that enhance output performance and appearance.

PostScript® Tab Parameters

The parameters you can specify on the PostScript® tab are as follows:

Performance Options

Check the check box that corresponds to the PostScript® modes you want to use. This specifies the manner in which you want your system to send document data to your printer. The options are as follows:

- Use PostScript® Level 2 Features uses the available PostScript® Level II features. The default is On (check box checked). This should be turned off only if you are using the driver with another printer that does not support PostScript® Level 2.
- Send Data in Binary sends data to the printer in binary format. This reduces the size of the print file and may reduce printing time. The default is On (check box checked).

Color Options

These options do not apply to this printer.

PostScript® Timeout Values

Use your keyboard, or the incremental spin box, to specify printer timeout values. The options are as follows:

- Job Timeout Seconds sets the length of job processing time, in seconds, after which the current print job is canceled. A value of 0 indicates that print jobs are never canceled. You can specify a value between 0 and 999 seconds. The default value is 0 seconds.
- □ Wait Timeout Seconds sets the length of time, in seconds, during which the printer waits for data when no end of file code is received before canceling the print job. A value of 0 indicates that print jobs are never canceled. When you are using a networked printer, you should not set this value to 0. You can specify a value between 0 and 999 seconds. The default value is 120 seconds.

Margins

Check the check box that corresponds to the page margins you want to use. The options are as follows:

- Default reports the printable area to the printer based on the margins you selected using your application. Select this option for most applications.
- None reports the size of the physical sheet of paper to the printer, and overrides the margins you selected using your application. Select this option when the images on the printed output are cropped.

The default value is **Default**.

Protocol Options

Check the check box that corresponds to the connection protocol you want to use for PostScript® communication. The options are as follows:

- Default-Serial/Parallel specifies that the printer is connected to the host computer by the parallel cable, or when the printer is connected to a network other than an AppleTalk network.
- None (AppleTalk) specifies that the printer is connected to an AppleTalk network.

PostScript® Performance

Check the check box that corresponds to the method you want to use to optimize the PostScript® performance of your printer. The options are as follows:

- Optimize for Speed prints PostScript® documents as quickly as possible by optimizing the PostScript® print file.
- Optimize for Portability creates PostScript® document descriptions that can print successfully on a variety of PostScript® printers. Use this option when you are creating a PostScript® print file that may be printed on another printer.

The default value is **Optimize for Speed**.

PostScript® Tab Control Buttons

You use the control buttons located on the PostScript® tab to perform the following functions:

About

Displays information about the copyright date and revision level of the printer driver.

Help

Accesses the Help window, which provides detailed information on the parameters available on the PostScript® tab.

Cancel

Cancels your parameter settings and closes the Printer Driver window.

OK

Saves your parameter settings and closes the Printer Driver window.

Job Control Tab

To access the Job Control tab from the Printer Driver window, click on the Job Control tab. You use this tab to specify printing features for the current job.

Job Control Tab Parameters

The parameters you can specify on the Job Control tab are as follows:

Printer Mode

The printer automatically senses the file format and switches the printer mode automatically. Therefore, this selection is "grayed out" and not controlled by the user.

PostScript® Header

When you turn on the printer, or the printer is reset, a PostScript® header must be sent to the printer. The header contains information describing the driver required by the printer. This header only needs to be sent to the printer once. However, when you turn the printer power off and back on, or reset the printer, you must send the PostScript® header again, by clicking the **[Download]** button.

Check the check box that corresponds to the correct status of the PostScript header. The options are as follows:

- Download Each Job sends the PostScript header to the printer with each job. This provides a secure method of knowing that the PostScript header is sent to the printer. This should always be used when the printer is connected to a network and shared with other users.
- Already Downloaded informs the printer driver that the PostScript[®] header has already been downloaded. Check this check box after you download the header by clicking the [Download] button.

Download

Click this button to download the PostScript® header. When you download the header, make sure that you select Already Downloaded under "PostScript® Header"

Error Handler

Check this check box to specify that you want the printer driver to print a PostScript® error page when an error occurs. This feature is useful for diagnosing printing problems. The default value is **Off** (check box not checked).

Font Control

Check this check box to specify that you do not want the printer driver to download soft fonts to the printer. When you enable this option, your print jobs complete more quickly. The printer substitutes resident fonts for any fonts that would have been downloaded. Therefore, the printed output may look different from the document representation displayed on your computer screen. The default value is **Off** (check box not checked).

Job Control Tab Control Buttons

You use the control buttons located on the Job Control tab to perform the following functions:

About

Displays information about the copyright date and revision level of the printer driver.

Help

Accesses the Help window, which provides detailed information on the parameters available on the Job Control tab.

Cancel

Cancels your parameter settings and closes the Printer Driver window.

OK

Saves your parameter settings and closes the Printer Driver window.

Watermark Tab

To access the Watermark tab from the Printer Driver window, click on the Watermark tab. You use this tab to create and manage watermarks, and to specify how you want them to print.

Watermark Tab Parameters

The parameters you can specify on the Watermark tab are as follows:

Select a watermark

Use the list box to select a watermark that you want to edit or delete. The options are as follows:

- CONFIDENTIAL
- □ COPY
- □ DRAFT

Note: When you create new watermarks using the Add Watermark windows, the names of the new watermarks display in the Select a Watermark list box.

Watermark Tab Control Buttons

You use the control buttons located on the Watermark tab to perform the following functions:

Edit

Accesses the Edit Watermark window, allowing you to specify text, font, color, and so forth, for an existing watermark, or to create a new watermark.

bbA

Accesses the Add Watermark window, allowing you to create a new watermark.

Note: The Add Watermark window is the same as the Edit Watermark window.

Delete

Allows you to delete the watermark you selected in the Select a Watermark list box.

Help

Accesses the Help window, which provides detailed information on the parameters available on the Watermark tab.

OK

Saves your parameter settings and closes the Printer Driver window.

Cancel

Cancels your parameter settings and closes the Printer Driver window.

About

Displays version and copyright information about the driver.

Edit Watermark Window

To access the Edit Watermark window from the Watermark tab, click the **[Edit]** button. You use the Edit Watermark window to modify attributes for an existing watermark or to add a new watermark.

Note: The Add Watermark window is the same as the Edit Watermark window.

Edit Watermark Window Parameters

When you modify a watermark using the parameters in this window, the illustration located on the right side of the window displays the changes you make.

The parameters you can specify on the Edit Watermark window are as follows:

Watermark Text

Use the selections in this dialog box to specify text attributes for the watermark. The selections are as follows:

- Text type the wording of the watermark in the text box.
- Font use the drop-down list box to select the font you want to use for the watermark text.
- Size use your keyboard, or the incremental spin box, to select the size, in points, of the watermark text.
- □ **Style** use the drop-down list box to select a style for the watermark text. The options are as follows:
 - Regular
 - Bold
 - Italic
 - Bold Italic
- Print in Foreground check this check box when you want the watermark to print in the foreground of your document. Any text or graphics located in the area of the watermark are covered by the watermark.
- Print Outline Only check this check box when you want the watermark to print as an outline. The watermark prints as white space surrounded by a border on each page of your document.

Angle

Click on and move the pointer to specify the angle at which you want the watermark to print. The angle, relative to the horizontal axis of the paper, displays in the box located to the right of the pointer.

Color

The color attributes do not apply to this printer. However, selecting a lighter color causes the watermark to print in a lighter shade of gray. Selecting a darker color causes the watermark to print in a darker shade of gray.

Position

Click the radio button that corresponds to the position at which you want the watermark to print. The options are as follows:

- Automatically Center Watermark centers the watermark on the page.
- Position Relative to Center allows you to specify the position of the watermark relative to the center of the page. The parameters you can specify are as follows:
 - x use your keyboard, or the incremental spin box, to specify the horizontal position of the watermark, in inches, relative to the center of the page. When you specify a negative value, the watermark moves to the left
 - y use your keyboard, or the incremental spin box, to specify the vertical position of the watermark, in inches, relative to the center of the page. When you specify a negative value, the watermark moves down.

Edit Watermark Window Control Buttons

You use the control buttons located on the Edit Watermark window to perform the following functions:

Help

Accesses the Help window, which provides detailed information on the parameters available in the Edit Watermark window.

Cancel

Cancels your parameter settings and closes the Edit Watermark window.

OK

Saves your parameter settings and closes the Edit Watermark window.

Form Overlay Tab

When you have the Form Overlay option, you are provided with a separate printer driver along with the Form Overlay Utility. This printer driver includes the additional Form Overlay tab in the Printer Driver Window, but in all other respects is identical to the standard PostScript® driver. To access the Form Overlay, from the Printer Driver window, click on the driver Features tab. The Form Overlay feature, available only with the Adobe® PostScript® option, provides the functionality necessary to download and manage forms on your hard disk (refer to the "Using the Form Overlay Utility" chapter for further information) and to retrieve those forms for adding data and printing. You use this tab to enable the Form Overlay feature of your printer and to specify the form you want to use.

Form Overlay Parameters

The parameters you can specify on the Form Overlay section are as follows:

Form Filename on Printer Disk

Use your keyboard or the drop-down list box to specify the form you want to use. The drop-down list contains the names of the four most recently used forms. This field in only available when you check the "Enable Form Overlay" check box.

Enable Form Overlay

Check the check box to specify that you want to use the Form Overlay feature. This box will be grayed out if a hard disk is not configured on the printer.

Note: The following are some hints for the successful use of the optional Form Overlay feature available for your printer:

- 1. Develop a form using any supported forms creation software application. When the form is complete, use your printer driver to print the form to a file. Check the **Print to File** check box in the Print window. Select **Properties** and click on the PostScript tab. Set the PostScript Output Format option to **Encapsulated PostScript (EPS)**. Form files are limited to a single page. Supported forms applications are listed in the Form Overlay utility chapter.
- 2. When the File Selection window displays, enter a name for the form file using an .eps extension. You must use an .eps extension.
- 3. Use the Form Overlay Utility to download the form to the hard disk on the printer.
- 4. Use the same forms creation software application to fill data into the form you want to use.
- 5. When you are ready to print the form, select the print data only mode in the form application and select Print from the File menu in the application. Click the [Properties] button in the Print window. In the Properties window, click on the Features tab (Windows 3.1), check the Enable Form Overlay check box and enter the form name in the "Form" field. Click [OK] in the Properties window. Set the selections in the Print window to specify your preferences and click [OK]. Both the form you specified and the associated data will print.

USING THE POSTSCRIPT® DRIVERFOR WINDOWS 95

This section contains information on installing and using the PostScript® printer driver for Windows 95. • Refer to the "Using the PostScript® Driver for Windows 3.1" in this chapter for information on using the driver for Windows 3.1.

Installing the PostScript® Driver on Windows 95

The PostScript® option consists of the following components:

- PostScript® ROM DIMM module
- PostScript® printer driver software for Windows 95.

Follow these steps to install the PostScript® printer driver on your Windows 95 system:

- Insert the "PostScript® Printer Driver for Windows 95" diskette in the 3.5-inch diskette drive on the host computer.
- Close any applications that are currently running.
- Click [Start] and select Run. The Run window displays.
- In the Run window, type "a:\ (or the letter that represents the drive in which you placed the installation diskette) **Setup.exe**" or click the Browser button and select the drive.
- Click **[OK]** and follow the installation instructions that display on the screen.
- Select the appropriate option "Local Printer" or "Network Printer" when the "Printer Type " window displays. If you select "Network Printer", type in the network path or printer greve in the next window. You can use the Browser to select the paper path.

- When the "Install PostScript® Printer from PPD" window displays, select the drive with the "PostScript® Printer Driver for windows 95" diskette and select the line for your printer.
- Click "Next" and follow the remaining instructions that display on the screen.

Note: If you plan to use the printer with the Adobe PageMaker® for Windows 95 application, an addition installation procedure is required to install a special PPD file for Adobe PageMaker®. Perform the following steps:

- 1. Insert the "PostScript® Printer Driver for Windows 95" disk in the 3.5 inch diskette drive on the host computer.
- 2. Copy the special PPD file from that drive, a:\Pagemake\ Rio1p100.ppd to the PageMaker® directory, c:\Pm6\Rsrc \Usenglsh\Ppd4 using Windows Explorer or DOS. The disk drive letters and/or directory names may be different on your system. The last three characters in the PPD file name represent the version and will change in later versions.

Updating Printer Configuration Information

Before you use the printer with the Windows 95 PostScript® driver, you must update the printer configuration information. You must also update this information whenever you install a new optional accessory.

Follow these steps to update the printer configuration information:

- Click [Start] and select Printers from the Settings submenu. The Printers window displays. Double-click on your printer name, highlighting the entire line. Your printer window displays, providing a list of the currently listed print jobs.
- Select **Properties** from the Printer menu available on your Printer window. The Properties window displays.
- 3 Click on the Device Options tab.

- Use the Installable Options list box to select the accessory for which you want to specify a different status. The name of the feature you select displays next to the "Change setting for" field, the selections **Installed** and **Not Installed** are contained in the drop-down list box. Select **Installed** to add an option or **Not Installed** to remove an option.
- Use the drop-down list box to select the correct status for each accessory.
- 6 Click [OK] to save your selections.
- Refer to the "Device Options Tab" in this chapter for more detailed instructions on configuring the printer.

Properties Window

In general, you access printer settings by selecting **Print** from the File menu, and clicking the **[Properties]** button. You can also access the Properties window using your operating system. Follow these steps to access the Properties window available on the PostScript® driver for Windows 95:

- Click [Start] and select Printers from the Settings submenu. The Printers window displays.
- Double-click on the line for your printer, highlighting the entire line. Your printer window displays, providing a list of the currently listed print jobs.
- Select **Properties** from the Printer menu available on your printer window. The Properties window displays.

If you access the Properties window from the Settings submenu, the Properties window contains the following tabs. You use these tabs to specify the parameters and options you want to use to configure equipment, communications, fonts, and other semi-permanent settings, as well as to set up your print jobs.

- **Note1:** The Sharing tab appears only when the printer is accessed through a network.
- **Note2:** If you access the Properties window from an application, the Properties window contains five tabs: Paper, Graphics, Device Options, PostScript®, and Watermarks.
- Note3: The Form Overlay tab is available when you are using that option.

- □ General
- □ Details
- □ Sharing
- □ Fonts
- Paper
- □ Graphics
- Device Options
- □ PostScript®
- □ Watermarks
- Form Overlay (displays when the Form Overlay option is installed)

General Tab

The General tab displays only when you access the Properties window by selecting Printers from the Settings submenu. This tab contains general description information about the printer, and allows you to print a test page.

Refer to the documentation provided with your operating system for further information on this tab.

Details Tab

The Details tab displays only when you access the Properties window by selecting **Printers** from the Settings submenu. This tab contains setup information about the printer driver and the printer ports. **Refer** to the documentation provided with your operating system for further information on this tab.

Sharing Tab

The Sharing tab displays only when you access the Properties window by selecting **Printers** from the Settings submenu. This tab contains setup information about how the printer will be shared, naming conventions and password control. Refer to the documentation provided with your operating system for further information on this tab.

Note: The Sharing tab appears only when the printer can be accessed through a network.

Fonts Tab

The Fonts tab displays only when you access the Properties window by selecting **Printers** from the Settings submenu. You use this tab to perform PostScript® font management tasks. ***** Refer to Appendix for more information on using the Fonts tab.

Paper Tab

To access the Paper tab from the Properties window, click on the Paper tab. You use this tab to specify the paper you want to use and how you want the output to look.

Paper Tab Parameters

You use the Paper tab to specify the parameters you want to use for the printed output. The parameters you can specify are as follows:

Paper size

Use the scroll bar to select the paper size you want to use for the current job. When the paper size you select is not available, the printer stops and the "Load <paper size>" message displays on the Control Panel. The options are as follows:

- □ Letter (8.5" x 11")
- Legal (8.5" x 14")
- □ 11" x 17"
- □ A4 (210 x 297 mm)
- □ A5 (148 x 210 mm)
- □ A6 (105 x 148 mm)
- □ B4 JIS (257 x 364 mm)
- □ B5 JIS (182 x 257 mm)
- □ 8" x 13"
- □ 8.25" x 13"
- □ 8.5" x 13"

- Monarch Env (3.875" x 7.5")
- □ Executive (7.25" x 10.5")
- □ 5.5" x 8.5"
- □ A3 (297 x 420 mm)
- □ Com 10 Env (4.125" x 9.5")
- □ C5 Env (162 x 229 mm)
- □ C6 Env (114 x 162 mm)
- □ DL Env (110 x 220 mm)
- Custom/Page 1
- □ Custom/Page 2
- Custom/Page 3

The default value is A4.

When you select one of the Custom paper sizes, the **[Custom]** button is enabled. **Refer to the "Custom-Defined Size Window" in this chapter for more information on defining custom paper sizes.**

Note: When a paper size selection displays with a red circle and a slash, it is in conflict with the currently selected input tray. When you select a conflicting paper size, a window displays allowing you to specify that you want to change the paper size or the paper tray, or that you want to ignore the conflict.

Layout

Use the radio buttons to print multiple pages on a single sheet of paper. The options are as follows:

0	1 up	0	6 up
0	2 up	0	9 up
О	4 up		16 up

When you specify that you want to print two or more pages on a sheet, each page on the sheet is surrounded by a page border. The default value is **1 up**.

Note: The multiple page layout may not work with some applications.

Orientation

Use the radio buttons to specify the page orientation for the printed output. The options are as follows:

- □ **Portrait** prints with the left margin along the long side of the paper.
- Landscape prints with the left margin along the short side of the paper.
- Rotated Landscape prints in the same direction as Landscape, but rotated 180 degrees.

Paper source

Use the drop-down list box to select the input tray you want to use. The options are as follows:

- Auto Select TrayTray 4Tray 1Large Capacity Tray
- □ Tray 2 □ Envelope Feeder

□ Tray 3 □ Bypass Tray

When you choose **Auto Select Tray**, the printer uses the first available tray, starting from the default tray, that contains the paper size required by the print job.

Note: When an input tray is not available, it displays with a red circle and a slash.

The default value is Auto Select Tray.

Note: When you select **Auto Select Tray**, the automatic tray switching feature is enabled. This features switches the input paper tray to another tray containing paper with the same size and orientation, when the active tray runs out of paper. The tray checking sequence is LCT, Tray 1, Tray 2, Tray 3, Tray 4, and Bypass Tray. If you select a specific tray, the automatic tray switching feature is disabled.

Copies

Use your keyboard, or the incremental spin box, to specify the number of copies you want to print. You can specify from 1 to 999 copies. The default value is 1.

Paper Tab Control Buttons

You use the control buttons located on the Paper tab to perform the following functions:

Custom

Accesses the Custom-Defined Size window, allowing you to specify the dimensions of custom paper sizes. This button is enabled when you select **Custom Paper** as the Paper Size on the Paper tab.

Unprintable Area

Accesses the Unprintable Area window, allowing you to specify the margins for the print job.

More Options

Accesses the More Paper Options window, allowing you to select Duplex printing and Output Tray options.

About

Displays information about the copyright date and revision level of the printer driver.

Help

Accesses the Help window, which provides detailed information on the parameters available on the Paper tab.

Restore Defaults

Resets this tab to the system default settings.

OK

Saves your parameter settings and closes the Properties window.

Cancel

Cancels your parameter settings and closes the Properties window.

Apply

Saves your parameter settings and leaves the Paper tab open.

Custom-Defined Size Window

To access the Custom-Defined Size window from the Paper tab, click the **[Custom]** button. The **[Custom]** button is only enabled when you select Custom Paper as the Paper Size on the Paper tab. You use the Custom-Defined Size window to define custom paper sizes.

Custom-Defined Size Window Parameters

The parameters you can specify in the Custom-Defined Size window are as follows:

Paper name

Displays the name of the custom paper size you selected on the Paper tab. Use your keyboard to enter a new name. You can enter up to 63 characters in this field.

Width

Use your keyboard, or the incremental spin box, to specify the width of the custom paper size. The valid range is **90.42** to **297.0** mm (**3.56**" to **11.69**").

Length

Use your keyboard, or the incremental spin box, to specify the length of the custom paper size. The valid range is 148.2 to 431.8 mm (5.83" to 17.00").

Transverse

Check the check box to specify that you want the printer to print documents on the custom paper size using a transverse orientation (at a 90 degree angle relative to the appearance of the document on your screen). Transverse orientation is the same as Landscape orientation. The default value is **Off** (check box not checked).

Units

Use the radio buttons to specify the unit of measure you want to use. The options are as follows:

- □ Inches
- ☐ Millimeters

The default value is **Inches**.

Note:

You can use the Bypass Tray of the printer to print special or custom paper sizes. To do so, you use the printer Control Panel to define the custom paper size you want to use. To define a custom size for the Bypass Tray, enter the Menu mode using the Printer Control Panel and access the Job Control menu. From the Job Control menu, select Paper Input. From the Paper Input submenu, select Bypass Size and select Width/Length. The display will show Width. You can set the width dimension in millimeters by pressing the [^] key or the [*] key. Press the [# / \] key when the dimension is correct. You enter the Length dimension using the same procedure. You can then load the special paper in the Bypass Tray and use your application or the printer driver to select Bypass Tray as the Paper Source you want to use to print your document.

Custom-Defined Size Window Control Buttons

You use the control buttons located on the Custom-Defined Size window to perform the following functions:

OK

Saves your parameter settings and closes the Custom-Defined Size window.

Cancel

Cancels your parameter settings and closes the Custom-Defined Size window

Help

Accesses the Help windows, which provides detailed information on the parameters available in the Custom-Defined Size window.

Restore Defaults

Resets this window to the system default settings.

Unprintable Area Window

To access the Unprintable Area window from the Paper tab, click the **[Unprintable Area]** button. You use this window to specify the margins for your print job.

Unprintable Area Window Parameters

The parameters you can specify on the Unprintable Area window are as follows:

Units

Use the radio button to specify the unit of measure you want to use. The options are as follows:

- □ Inches
- ☐ Millimeters

The default value is **Inches**.

Top

Use your keyboard, or the incremental spin box, to specify the top margin for your print job.

Bottom

Use your keyboard, or the incremental spin box, to specify the bottom margin for your print job.

Left

Use your keyboard, or the incremental spin box, to specify the left margin for your print job.

Right

Use your keyboard, or the incremental spin box, to specify the right margin for your print job.

The maximum, minimum, and default values for the unprintable area settings vary depending on the paper size you selected using the Paper Size selection on the Paper tab. Refer to Table 1-2 for detailed information about the physical unprintable area limitations of the printer for each supported paper size.

Figure 1-2 shows how the parameters listed in Table 1-2 correspond to the printable area and physical paper size.

Figure 1-2. Paper dimensions

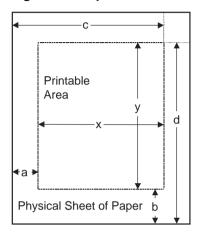


Table 1-2 lists the printable and unprintable area dimensions for various paper sizes, in inches, millimeters, and points.

Table 1-2. Printable and unprintable area dimensions

Paper Size	Unit	а	b	С	d	х	у
Letter	inches	0.17	0.17	8.33	10.83	8.17	10.67
8 ¹ / ₂ " x 11"	mm	4.2	4.2	211.7	275.2	207.4	270.9
	points	12	12	600	780	588	768
Legal	inches	0.17	0.17	8.33	13.83	8.17	13.67
8 ¹ / ₂ " x 14"	mm	4.2	4.2	211.7	351.4	207.4	347.1
	points	12	12	600	996	588	984
Ledger	inches	0.18	0.18	10.82	16.82	10.64	16.64
11" x 17"	mm	4.6	4.6	275.4	427.4	270.8	422.8
	points	13	13	779	1211	766	1198
Executive	inches	0.17	0.17	7.08	10.33	6.92	10.17
7 ¹ / ₄ " x 10 ¹ / ₂ "	mm	4.2	4.2	179.9	262.5	175.7	258.2
	points	12	12	510	744	498	732

Table 1-2. Printable and unprintable area dimensions (continued)

D 0:	1111	_		_			
Paper Size	Unit	а	b	С	d	х	у
Halfletter	inches	0.18	0.18	5.32	8.32	5.14	8.14
5 ¹ / ₂ " x 8 ¹ / ₂ "	mm	4.6	4.6	135.4	211.4	130.8	206.8
	points	13	13	383	599	370	586
A3	inches	0.22	0.22	11.47	16.32	11.25	16.10
297 x 420 mm	mm	5.6	5.6	291.4	414.4	285.8	408.8
	points	16	16	826	1175	810	1159
A4	inches	0.18	0.18	8.08	11.51	7.90	11.33
210 x 297 mm	mm	4.6	4.6	205.3	292.5	200.7	287.9
	points	13	13	582	829	569	816
A5	inches	0.18	0.18	5.65	8.08	5.47	7.90
148 x 210 mm	mm	4.6	4.6	143.6	205.3	139.0	200.7
	points	13	13	407	582	394	569
A6	inches	0.18	0.18	3.94	5.65	3.76	5.47
105 x 148 mm	mm	4.6	4.6	100.2	143.6	95.6	139.0
	points	13	13	284	407	271	394
B4 JIS	inches	0.18	0.18	9.94	14.15	9.76	13.97
257 x 364 mm	mm	4.6	4.6	252.4	359.4	247.8	354.8
	points	13	13	716	1019	703	1006
B5 JIS	inches	0.18	0.18	6.99	9.94	6.81	9.76
182 x 257 mm	mm	4.6	4.6	177.4	252.6	172.9	248.0
	points	13	13	503	716	490	703
F/GL	inches	0.18	0.18	7.82	12.82	7.64	12.64
8" x 13"	mm	4.6	4.6	198.6	325.6	194.0	321.0
203 x 330 mm	points	13	13	563	923	550	910
Foolscap	inches	0.18	0.18	8.32	12.82	8.14	12.64
8 ¹ / ₂ " x 13"	mm	4.6	4.6	211.3	325.6	206.7	321.0
	points	13	13	599	923	586	910
Folio	inches	0.17	0.17	8.10	12.82	7.93	12.65
8 ¹ / ₄ " x 13"	mm	4.2	4.2	205.7	325.6	201.4	321.4
	points	12	12	583	923	571	911
Monarch Env	inches	0.18	0.18	3.70	7.32	3.52	7.14
3 ⁷ /8" x 7 ¹ / ₂ "	mm	4.6	4.6	93.8	185.9	89.2	181.3
	points	13	13	266	527	253	514

Table 1-2. Printable and unprintable area dimensions (continued)

Paper Size	Unit	а	b	С	d	х	у
Com 10 Env	inches	0.18	0.18	3.95	9.32	3.77	9.14
4 ¹ / ₈ " x 9 ¹ / ₂ "	mm	4.6	4.6	100.2	236.7	95.6	232.1
	points	13	13	284	671	271	658
C5 Env	inches	0.17	0.17	6.21	8.85	6.04	8.68
162 x 229 mm	mm	4.2	4.2	157.7	224.7	153.5	220.5
	points	12	12	447	637	435	625
C6 Env	inches	0.17	0.17	4.32	6.21	4.15	6.04
114 x 162 mm	mm	4.2	4.2	109.7	157.7	105.5	153.5
	points	12	12	311	447	299	435
DL Env	inches	0.18	0.18	4.15	8.49	3.97	8.31
110 x 220 mm	mm	4.6	4.6	105.5	215.5	100.9	211.0
	points	13	13	299	611	286	598

Unprintable Area Window Control Buttons

You use the control buttons located on the Unprintable Area window to perform the following functions:

OK

Saves your parameter settings and closes the Unprintable Area window.

Cancel

Cancels your parameter settings and closes the Unprintable Area window.

Help

Accesses the Help window, which provides detailed information on the parameters available in the Unprintable Area window.

Restore Defaults

Resets this window to the system default settings.

More Paper Options Window

To access the More Paper Options window, from the Paper tab, click the **[More Options]** button. You use this window to specify duplex printing and output tray options for your print job.

More Paper Options Window Parameters

The parameters you can specify in the More Paper Options window are as follows:

Printing on both sides (duplex printing)

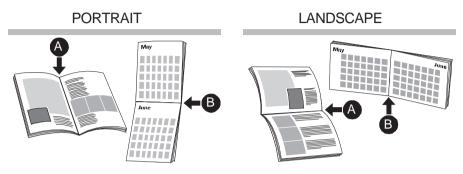
Use the radio button to specify the duplex format you want to use. The options are as follows:

- None disables duplex printing.
- Flip on long edge when printing in Portrait orientation, use this setting when you want to bind your output along the left edge of the paper, like a book. In Landscape orientation, this setting produces output that you can bind along the top edge of the paper, like a calendar.
- Flip on short edge when printing in Portrait orientation, use this setting when you want to bind your output along the top edge of the paper, like a calendar. In Landscape orientation, this setting produces output that you can bind along the left edge of the paper, like a book.

The default value is None.

Figure 1-3 illustrates the two binding methods.

Figure 1-3. Binding methods



- A. Long Edge binding
- B. Short Edge binding

Note: This selection displays only when the optional Duplex Tray is installed. Duplex printing is not available on certain sizes, including $A5\square$, $A6\square$, $5^1/2^{"} \times 8^{"}/2^{"}$ (Halfletter), and envelopes.

Output bin

Use the drop-down list box to specify the output bin you want to use when an optional output device is installed. The options are as follows:

External Tray
 Output Tray 4
 Output Tray 5
 Output Tray 2
 Shift Tray Face-down
 Output Tray 3

The Output Tray 2, Output Tray 3, Output Tray 4, and Output Tray 5 options display with a red circle and a slash except when the optional Mailbox is installed. The **Shift Tray** options (Face-down and Face-up) display with a red circle and a slash except when the optional Finisher is installed. When the Finisher is installed, the **External Tray** option displays with a red circle and a slash, indicating that it is not available.

The default value is **Output Tray 1 (Standard)**.

Note: When you select a Finisher **Shift Tray**, the job separation, function is always activated. When this is the case, the print jobs are always separated (except when the Staple option is set to **On**). Stapled jobs are not separated.

More Paper Options Window Control Buttons

You use the control buttons located on the More Paper Options window to perform the following functions:

OK

Saves your parameter settings and closes the More Paper Options window.

Cancel

Cancels your parameter settings and closes the More Paper Options window.

Help

Accesses the Help window, which provides detailed information on the parameters available in the More Paper Options window.

Restore Defaults

Resets this window to the system default settings.

Graphics Tab

To access the Graphics tab from the Properties window, click on the Graphics tab. You use this tab to specify how you want your printed output to appear.

Graphics Tab Parameters

The parameters you can specify on the Graphics tab are as follows:

Resolution

Use the radio buttons to specify the printer resolution you want to use for PostScript® output. The options are as follows:

- □ 600 dpi (dots per inch)
- □ 400 dpi
- □ 300 dpi

The default value is 600 dpi.

Halftoning

The PostScript® option on you printer supports the Adobe standard PostScript® halftone features as well as a special calibrated halftone method that provides four screen frequencies, or lines per inch (lpi) and angle, for each resolution setting.

You can use the halftone selection, available on the Device Options tab, to specify a special calibrated halftone by selecting **Commercial**, **Newsletter**, **Newspaper**, or **Silkscreen** (refer to table 1-3 for further information), or you can use the Adobe PostScript® halftone by selecting **Use Graphics Tab Setting** on the Device Options tab.

When you select one of the special calibrated halftones, this selection overrides the **Use Graphics Tab Setting** setting. If you select **Use Graphics Tab Setting** on the Device Options tab, you can either select **Use Settings Below** and specify the screen frequency lpi and angle you want to use for the printer, or the **Use Printer's Settings**, which has a default of 120 lpi and 45 degrees at 600 dpi. Refer to the "Device Options Tab" in this chapter for information on the special calibrated halftone screens.

Use the radio button to specify the halftone screen setting you want to use. The options are as follows:

- □ **Use printer's settings** images print using the Adobe PostScript® default halftone screen of 120 lpi and 45° at 600 dpi; 85 lpi and 45° at 400 dpi; and 60 lpi and 45° at 300 dpi.
- Use Settings Below allows you to specify an Adobe PostScript[®] halftone definition. Use your keyboard to set values for the following options:
 - Screen frequency specifies the number of lines per inch (lpi). You can specify a value between 1 and 999.9.
 - Screen angle specifies the angle, in degrees, at which cells are positioned. You can specify a value between 0 and 360.0. The default value is 45.0.

The default value is **Use printer's settings**.

Special

Check the check box that specifies how you want your output to appear. When you do not check either check box, the job prints using the standard settings (positive, nonmirror image). The options are as follows:

- Print as a negative image prints the job as a negative. Areas that display as black on the screen print as white, and areas that display as white on the screen print as black.
- Print as a mirror image prints the job as a mirror image of the screen.

Scaling

Use the incremental spin box to specify the percentage by which you want to enlarge or reduce the printed image. You can specify scaling from 25 to 400 %. The default value is **100** %.

Graphics Tab Control Buttons

You use the control buttons located on the Graphics tab to perform the following functions:

Help

Accesses the Help window, which provides detailed information on the parameters available on the Graphics tab.

Restore Defaults

Resets this tab to the system default settings.

OK

Saves your parameter settings and closes the Properties window.

Cancel

Cancels your parameter settings and closes the Properties window.

Apply

Saves your parameter settings and leaves the Graphics tab open.

Device Options Tab

To access the Device Options tab from the Properties window, click on the Device Options tab. You use this tab to specify the optional accessories that are available on your printer, and to select output and image processing features.

Note: When you access the Device Options tab from the application Print window, only the printer feature fields display. If you want to access and change the installed options, you must access the Device Options tab from the Setting submenu.

Device Options Tab Parameters

The parameters you can specify on the Device Options tab are as follows:

Available printer memory

The Available printer memory is automatically adjusted when you add printer memory and update the installable options section with the installed memory. The default value is **2MB** when installed memory is at the default 8 MB. This field displays only when you access the Device Options tab from Settings submenu.

Printer features

Select the printer feature you want to change from the Printer features list box. The name of the feature you select displays next to the "Change setting for" field, and the options available for the feature are contained in the drop-down list box. When you select a feature, the current setting displays next to the name of the feature in the Printer features list box.

The parameters you can specify using the Printer features list box are as follows:

- Collate use the drop-down list box to specify whether you want to use the disk-based collation feature. The options are as follows:
 - True enables disk-based collation. This option is available only when the Hard Disk is installed.
 - False disables disk-based collation.

The default value is False.

Note: The collation function, located in the Print window of your application, must be turned off if you set this Collate option to **True**. Otherwise, you will get multiple sets of your collated job.

□ Staple - use the drop-down list box to specify whether you want your output stapled. The stapler can staple up to 20 sheets of A4 or Letter size paper, to a maximum of 30 sets. When you select stapling, you must set the Output Tray selection to ShiftTray Face-down. You cannot select Staple unless you selected ShiftTray Face-down as the Output Tray option.

When you want to staple sets of a multiple copy collated job, you must set the Collate (disk-based collation) option to **True** from within your printer driver. If you enable the collate from the Print window of your application, the entire job is stapled together.

The options are as follows:

- True output is stapled. This selection is available only when the optional Finisher is installed.
- False output is not stapled.

The default value is **False**

Note: The following output combinations should not be stapled, as the staple will be placed in an awkward position:

- 1. Duplex, Short Edge Binding, Landscape Orientation
- 2. Reverse Portrait Orientation, Simplex or Duplex
- 3. Reverse Landscape Orientation, Simplex or Duplex
- Toner Saving use this function when you print draft copies of documents. When you enable Toner Saving, the printer uses less than the normal amount of toner, which makes black areas print as gray but does not affect readability. The options are as follows:
 - On enables Toner Saving. The printer uses approximately one half of the normal amount of toner.
 - Off disables Toner Saving.

The default value is Off

- Edge Smoothing use the drop-down list box to enable Edge Smoothing, which enhances print quality. The options are as follows:
 - On enables Edge Smoothing. The printer rasterizes output to enhance print quality. The appearance of the output emulates a resolution of 1200 dpi, reducing ragged edges and providing printed output with smooth curved and diagonal lines.
 - Off disables Edge Smoothing.

The default value is On.

Note: When you enable this function, images and halftones may be adversely affected and not print properly.

Custom Halftone - When you use a halftone screen, the printer optimizes the appearance of multibit-per-pixel gray images and graphics by dithering the images up to 256 levels of gray. You can also use the halftone selection to print color images in shades of gray, rather than in black and white.

The PostScript® option on this machine supports the Adobe standard PostScript® halftone features as well as a special calibrated halftone method that provides four screen frequencies, or lines per inch (lpi) and angles, for each resolution setting.

You can specify a special calibrated halftone by selecting **Commercial**, **Newsletter**, **Newspaper**, or **Silkscreen** (refer to table 1-3 for further information), or you can use the Adobe PostScript® halftone set on the Graphics tab by selecting **Use Graphics Tab Setting**.

When you select one of the special calibrated halftones, the specification for the selection overrides the computer setting. If you select **Use Graphics Tab Setting**, you can use the Graphics tab to specify the screen frequency lpi and angle you want to use for the printer (refer to the "Graphics Tab" in this chapter).

You can select one of the following halftone screen settings:

- Use Commercial
- Use Newsletter
- Use Newspaper
- Use Silkscreen
- Use Graphics Tab Setting

Table 1-3 lists the halftone settings, with the lines per inch (lpi) available at different resolution settings.

Table 1-3. Halftone settings

Setting	Lines per inch at 600 dpi resolution	Lines per inch at 400 dpi resolution	Lines per inch at 300 dpi resolution		
Commercial	141 (45°)	94 (45°)	70 (45°)		
Newsletter	106 (45°)	80 (45°)	60 (45°)		
Newspaper	85 (45°)	70 (45°)	53 (45°)		
Silkscreen	45 (45°)	47 (45°)	42 (45°)		

Note: The **Use Printer's Setting** halftone selection uses the Adobe halftone feature in the PostScript® interpreter in the printer. Screen frequency and angle vary with resolution as follows: 120 lpi and 45° at 600 dpi; 85 lpi and 45° at 400 dpi; and 60 lpi and 45° at 300 dpi.

The halftone function in the printer is calibrated so that the brightness and contrast of the printed image are the same as the image that displays on your computer screen, regardless of the lines per inch and resolution settings.

The selection of the best halftone setting depends on several factors including the original quality and format of the image, the format and resolution of the image file being used, the method you will use to print or copy the printed image and the detail in the image itself. In general, a lower quality image or less refined method of printing should be printed with a lower screen density. The appearance of halftone images is a subjective matter. Try printing a given image with different halftone settings to determine which one looks best.

The default value is Use Newsletter.

Note: When you use the Halftone option, make sure Edge Smoothing is disabled. Halftone and Edge Smoothing are not compatible, and when both features are enabled, the printer produces poor results.

Installable Options

Use the Installable Options list box to specify which optional accessories are available on your printer. When you install or remove an accessory, you must change the status for the accessory. To perform this task, select the accessory from the list box. The name of the accessory displays next to the "Change Setting for" drop-down list box. Use the drop-down list box to select **Installed** when the accessory is installed, or **Not Installed** when it is no longer installed. The setting you select displays next to the name of the accessory in the list box. This list box displays only when you access the Device Options tab from the Settings submenu.

Device Options Tab Control Buttons

You use the control buttons located on the Device Options tab to perform the following functions:

Help

Accesses the Help window, which provides detailed information on the parameters available on the Device Options tab.

Restore Defaults

Resets this tab to the system default settings.

OK

Saves your parameter settings and closes the Properties window.

Cancel

Cancels your parameter settings and closes the Properties window.

Apply

Saves your parameter settings and leaves the Properties tab open.

PostScript® Tab

To access the PostScript® tab from the Properties window, click on the PostScript® tab. You use this tab to specify PostScript® features that enhance output performance and appearance.

Note: The PostScript® tab contains only the PostScript® output format fields when you access this tab from the Print window of your application. The PostScript® error information and timeout values display if you access this tab from the Settings submenu.

PostScript® Tab Parameters

The parameters you can specify on the PostScript® tab are as follows:

PostScript® output format

Use the drop-down list box to specify the PostScript® output format you want to use. The options are as follows:

- PostScript® (optimize for speed) prints the PostScript® document as quickly as possible. This option reduces printing time. However, when you select this option, you may not be able to use all of the features available from some of the network spoolers.
- PostScript® (optimize for portability ADSC) creates a PostScript® file that conforms to the Adobe Document Structuring Conventions (ADSC). This option ensures that each PostScript® page is independent of all other pages in a document.
- Encapsulated PostScript® (EPS) sends the page to a file instead of to the printer. This allows you to include the file as a high-quality image in another document that you can print using a different application.
- □ **Archive format** improves file portability when you want long-term storage, or plan wide distribution of a file that may be printed on unknown destination devices.
- PJL archive format allows you to notify a PJL-based printer that the document is being printed in PostScript[®].

The default value is PostScript® (optimize for speed).

Print PostScript® header

When you turn on the printer, or the printer is reset, a PostScript® header must be sent to the printer. The header contains information describing the driver required by the printer. This header only needs to be sent to the printer once. However, when you turn the printer power off and back on, or reset the printer, you must send the PostScript® header again, by clicking the **[Download]** button.

Check the check box that corresponds to the correct status of the PostScript® header. The options are as follows:

- Download header with each Print job sends the PostScript® header to the printer with each job. This provides a secure method of knowing that the PostScript® header is sent to the printer. This should always be used when the printer is connected to a network and shared with other users.
- Assume header is downloaded and retained informs the printer driver that the PostScript® header has already been or will be downloaded. Check this check box after you download the header by clicking the [Send Header Now] button.

Send Header Now

Check this button to download the Print PostScript® header. When you download the header, make sure that you select **Assume header is downloaded and retained** under "PostScript® Header."

Print PostScript® error information

Check this check box when you want to print PostScript® error information with your print job. The error information is helpful in diagnosing problems in printing a document. The default value is **On** (check box checked).

PostScript® timeout values

Use your keyboard, or the incremental spin boxes, to specify printer timeout values. The options are as follows:

- □ **Job timeout** sets the length of job processing time, in seconds, after which the current print job is canceled. A value of zero indicates that print jobs are never canceled. When you are using a networked printer, you should not set this value to **0**. The maximum value is 999 seconds. The default value is **0 seconds**.
- □ Wait timeout sets the length of time, in seconds, during which the printer waits for data before canceling the print job. A value of zero indicates that print jobs are never canceled. When you are using a networked printer, you should not set this value to 0. The default value is 240 seconds.

PostScript® Tab Control Buttons

You use the control buttons located on the PostScript® tab to perform the following functions:

Advanced

Accesses the Advanced PostScript® Options window, allowing you to specify advanced PostScript® printer settings. This button is available only when you use the Setting submenu to access the PostScript® tab.

Help

Accesses the Help window, which provides detailed information on the parameters available in the PostScript® tab.

Restore Defaults

Resets this tab to the system default settings.

OK

Saves your parameter settings and closes the PostScript® tab.

Cancel

Cancels your parameter settings and closes the PostScript® tab.

Apply

Saves your parameter settings and leaves the PostScript® tab open.

Advanced PostScript® Options Window

To access the Advanced PostScript® Options window from the PostScript® tab, click the **[Advanced]** button. The parameter settings contained in this window were specified for optimal PostScript® performance. You should not change these settings unless you have a specific reason for the change.

Advanced PostScript® Options Window Parameters

The parameters you can specify in the Advanced PostScript® Options window are as follows:

PostScript® language level

Use the radio buttons to specify which PostScript® feature set you want to use. The options are as follows:

- Use PostScript® Level 1 features sends print jobs using PostScript® level I features only. Select this option when you want to create PostScript® or EPS files that you can print on a PostScript® Level I printer.
- Use PostScript® Level 2 features sends print jobs using PostScript® level II features.

The default value is Use PostScript® Level 2 features.

Bitmap Compression

Use the radio buttons to specify the bitmap compression method you want to use. You should adjust this setting only when you are using a PostScript[®] Level I printer connected through a COM port.

The options are as follows:

- Compress bitmap images sends bitmap data to the printer in compressed format.
- No bitmap compression does not compress bitmap data.

The default value is **Compress bitmap images**.

Data format

Use the radio buttons to specify the format in which you want to send data to the printer. The options are as follows:

- ASCII data sends all data in Adobe Communication Protocol, allowing the file to print on any printer.
- Tagged binary communications protocol sends all data except special characters in binary (8-bit) format over parallel or serial ports. When you select this option, the printer can detect when data is being sent in binary or ASCII mode.

Pure binary data - sends all data in pure binary format. This is the fastest format for printing, but can be sent only over AppleTalk or Ethernet.

The default value is **ASCII data**

Send Ctrl+D before job

Check this check box when you want to send the reset memory code, Ctrl+D, to the printer before each print job. The default setting is **Off** (check box not checked).

Send Ctrl+D after job

Check this check box when you want to send the reset memory code, Ctrl+D, to the printer after each print job. The default setting is **On** (check box checked).

Display alert for applications incompatible with driver features

Check this check box when you want an alert message to display when you use applications that can be incompatible with some PostScript® features, such as mirror image printing and watermarks. The default setting is **Off** (check box not checked).

Advanced PostScript® Options Window Control Buttons

You use the control buttons located in the Advanced PostScript® Options Window to perform the following functions:

OK

Saves your parameter settings and closes the Advanced PostScript® Options window.

Cancel

Cancels your parameter settings and closes the Advanced PostScript® Options window.

Help

Accesses the Help window, which provides detailed information on the parameters available in the Advanced PostScript® Options window.

Restore Defaults

Resets this window to the system default settings.

Watermarks Tab

To access the Watermarks tab from the Properties window, click on the Watermarks tab. You use this tab to create and manage watermarks, and to specify how you want them to print.

Watermarks Tab Parameters

The parameters you can specify on the Watermarks tab are as follows:

Select a watermark

Use the list box to select a watermark. The options are as follows:

- □ (None)
- CONFIDENTIAL
- □ COPY
- DRAFT

Note: When you create new watermarks using the New Watermark window, the names of the new watermarks display in the Select a watermark list box.

Print Watermark

Check the check box that corresponds to the manner in which you want to print the watermark. The options are as follows:

- On first page only prints the watermark on the first page of your document only.
- In background prints the watermark as a grayscale background element on each page of your document.
- As outline only prints the watermark as white space surrounded by a border on each page of your document.

The default value is In background.

Watermarks Tab Control Buttons

You use the control buttons located on the Watermarks tab to perform the following functions:

Edit

Accesses the Edit Watermark window, allowing you to specify text, font, color, and so forth, for an existing watermark.

New

Accesses the New Watermark window, allowing you to create a new watermark.

Note: The New Watermark window is the same as the Edit Watermark window.

Delete

Deletes the watermark you selected in the Select a Watermark list box.

Help

Accesses the Help window, which provides detailed information on the parameters available on the Watermarks tab.

OK

Saves your parameter settings and closes the Properties window.

Cancel

Cancels your parameter settings and closes the Properties window.

Apply

Saves your parameter settings and leaves the Watermarks tab open.

Edit Watermark Window

To access the Edit Watermark window from the Watermark tab, click the **[Edit]** button. You use the Edit Watermark window to specify attributes for an existing watermark, or to create a new watermark.

Note: The New Watermark window is the same as the Edit Watermark window.

Edit Watermark Window Parameters

When you modify a watermark using the parameters in this window, the illustration on the right side of the window displays the changes.

The parameters you can specify in the Edit Watermark window are as follows:

Watermark Text

Use these fields to specify text attributes for the watermark. The selections are as follows:

- Text type the wording of the watermark in the text box.
- Font use the drop-down list box to select the font you want to use for the watermark text.
- Size use your keyboard, or the incremental spin box, to select the size, in points, of the watermark text.
- Style use the drop-down list box to select a style for the watermark text. The options are as follows:
 - Regular
 - Bold
 - Italic
 - Bold Italic

Angle

Click on and move the pointer to specify the angle at which you want the watermark to print, relative to the horizontal axis of the paper. You can also use your keyboard, or the incremental spin box, to specify the angle.

Color

The color attributes do not apply to this printer. However, selecting a lighter color causes the watermark to print in a lighter shade of gray. Selecting a darker color causes the watermark to print in a darker shade of gray.

Position

Click the radio button that corresponds to the position at which you want the watermark to print. The options are as follows:

- Automatically center centers the watermark on the page.
- Position relative to center allows you to specify the position of the watermark relative to the center of the page. The parameters you can specify are as follows:
 - x use your keyboard, or the incremental spin box, to specify the horizontal position of the watermark, in inches, relative to the center of the page. When you specify a negative value, the watermark moves to the left.
 - y use your keyboard, or the incremental spin box, to specify the vertical position of the watermark, in inches, relative to the center of the page. When you specify a negative value, the watermark moves down.

Edit Watermark Window Control Buttons

You use the control buttons in the Edit Watermark window to perform the following functions:

OK

Saves your parameter settings and closes the Edit Watermark window.

Cancel

Cancels your parameter settings and closes the Edit Watermark window.

Help

Accesses the Help window, which provides detailed information on the parameters available in the Edit Watermark window.

Form Overlay Tab

When you have the Form Overlay option, you are provided with a separate printer driver that includes the Form Overlay Utility. This printer driver includes the additional Form Overlay tab but in all other respects is identical to the standard PostScript® driver.

To access the Form Overlay tab, from the Properties window, click on the Form Overlay tab. The Form Overlay feature, available only with the Adobe® PostScript® option, provides the functionality necessary to download and manage forms on your hard disk (refer to the "Form Overlay Utility" section in this chapter for further information) and to retrieve forms for printing with form data. You use this tab to enable the Form Overlay feature of your printer and to specify the form you want to use.

Form Overlay Tab Parameters

The parameters you can specify on the Form Overlay tab are as follows:

Form Filename on Printer Disk

Use your keyboard or the drop-down list box to specify the form you want to use. The drop-down list contains the names of the five most recently used forms. This field in only available when you check the Enable Form Overlay check box.

Note: When you specify the form file, do not use the .eps extention.

Enable Form Overlay

Check the check box to specify that you want to use the Form Overlay feature. This box will be grayed out if a hard disk is not configured on the printer.

Form Overlay Tab Control Buttons

You use the control buttons located on the Form Overlay tab to perform the following functions:

OK

Saves your parameter settings and closes the Form Overlay tab.

Cancel

Cancels your parameter settings and closes the Form Overlay tab.

Apply

Saves your parameter settings and leaves the Form Overlay tab open.

Note: The following are some hints for the successful use of the optional Form Overlay feature available for your printer:

- 1. Develop a form using any supported forms creation software application. When the form is complete, use your printer driver to print the form to a file. Check the **Print to File** check box in the Print window. Select **Properties** and click on the PostScript tab. Set the PostScript Output Format option to **Encapsulated PostScript (EPS)**. Form files are limited to a single page. Supported forms applications are shown in the "Form Overlay utility" chapter.
- 2. When the File Selection window displays, enter a name for the form file using an .eps extension. You must use an .eps extension.
- 3. Use the Form Overlay Utility to download the form to the hard disk on the printer.
- 4. Use the same forms creation software application to fill data into the form you want to use.
- 5. When you are ready to print the form, select the **print data only** mode in the form application and select **Print** from the File menu in the application. Click the **[Properties]** button in the Print window. In the Properties window, click on the Form Overlay tab, check the **Enable Form Overlay** check box and enter the form name in the "Form" field. Click **[OK]** in the Properties window. Set the selections in the Print window to specify your preferences and click **[OK]**. Both the form you specified and the associated data will print.

2. USING THE FORM OVERLAY UTILITY

OVERVIEW

This chapter contains information on installing and using the Form Overlay Utility option for Windows 3.1 and Windows 95.

The Form Overlay option, available only with the Adobe® PostScript® option, provides the functionality necessary to download and manage form files on the printer's hard disk. This feature enhances your form printing speed by overlaying forms and form data on the printer. The Form Overlay Utility program is provided to manage the forms on the disk.

Note: The form files must be in Encapsulated PostScript® (EPS) file format.

A special PostScript® driver is required to use the forms printing feature. You use the Form Overlay tab, available from this machine Properties window, to specify whether you want to enable the Form Overlay feature and to specify the form you want to use.

Refer to the "Form Overlay Tab" in this chapter for further information.

You use the Form Overlay Utility to download and store forms as Encapsulated PostScript® files on the hard disk of this machine printer. This utility provides you with the tools you need to manage your form files on this machine hard disk.

To use your forms with the Form Overlay Utility, you must first create the forms using a supported form generation software application and then convert the form files to Encapsulated PostScript® (EPS) format. You can then use the Utility to download the forms to the printer hard disk, rename the forms as necessary, delete forms, and print lists of the forms currently stored on the hard disk. You can also use the Utility to print blank copies of the forms on the disk.

Forms applications supported by the Form Overlay Utility include OmniForm v2.01, FormTool 97 v3.0, Form Designer v4.0, In-Power Forms v2.0 and ExpressForms. Others may be added.

USING THE FORM OVERLAY UTILITY

Installing the Form Overlay Utility on Windows 3.1

Follow these steps to install the Form Overlay Utility on your Windows 3.1 system:

- Insert the "Form Overlay Utility for this machine" diskette in the 3.5-inch diskette drive on the host computer.
- 2 Close all the applications that are currently running.
- From the Program Manager, select **Run** from the **File** menu. The Run window displays.
- In the Run window, type "a:\ (or the letter that represents the drive in which you placed the installation diskette) **setup.exe**" or click the Browser button and select the drive.
- Click [OK] and follow the installation instructions that display on the screen.

Accessing the Form Overlay Utility Window on Windows 3.1

Note: When using the Form Overlay Utility program, this printer must be set as the Default Printer in the Print Window.

Follow these steps to access the Form Overlay Utility window on your Windows 3.1 system:

- From the Program Manager, double-click on the **Form Overlay Utility** icon. Your Form Overlay Utility program group window name displays.
- Double-click on the **Form Overlay Utility** icon. The Form Overlay Utility window displays.

You can access the following tabs from the Form Overlay Utility window:

- Download Tab
- Print Tab
- □ About Tab

Installing the Form Overlay Utility on Windows 95

Follow these steps to install the Form Overlay Utility on your Windows 95 system:

- Insert the "Form Overlay Utility for this machine" diskette in the 3.5-inch diskette drive on the host computer.
- 2 Close all the applications that are currently running.
- Click [Start] and select Run. The Run window displays.
- In the Run window, type "a:\ (or the letter that represents the drive in which you placed the installation diskette) **setup.exe**" or click the Browser button and select the drive.
- Click [OK] and follow the installation instructions that display on the screen.

Accessing the Form Overlay Utility Window on Windows 95

Note: When using the Form Overlay Utility program, this printer must be set as the Default Printer in the Print Window.

Follow these steps to access the Form Overlay Utility window on your Windows 95 system:

- Click [Start] and select Form Overlay Utility from the Programs submenu. The Form Overlay Utility selections display.
- Select Form Overlay Utility. The Form Overlay Utility window displays.

You can access the following tabs from the Form Overlay Utility window:

- Download Tab
- Print Tab
- About Tab

Download Tab

To access the Download tab from the Form Overlay Utility window, click on the Download tab. You use the Download tab to access the windows you use to download, rename, and delete form files.

The tools available on the Download tab are as follows:

- Download accesses the window you use to download a form file to the printer hard disk.
- Rename accesses the window you use to rename a form file on the printer hard disk.
- Delete accesses the window you use to delete a form file from the printer hard disk.

Download Window

You use the Download window, accessed by clicking the **[Download]** button, to select the form file you want to download to the printer hard disk. The form file must be in Encapsulated PostScript® (EPS) file format. The file must have an .eps extension.

Download Window Parameters

The parameters you can specify in the Download window are as follows:

Look in

Use the drop-down list box to select the drive and directory in which the form file you want to download is located. This limits the items contained in the File list box.

File Name

Use your keyboard, or select the names of the form file you want to download. This field is used together with the other fields on this window. The file name length may not exceed 25 characters. A form downloaded using an existing form name on the printer will overwrite the existing form.

Note: You can select only one form file at one time when all of the form files are located in the same drive and directory.

Form files must be scaled in the forms application to fit on the desired paper size. A form to be printed on different paper sizes must be scaled and downloaded with a different form name for each paper size.

Download Window Control Buttons

You use the control buttons located on the Download window to perform the following functions:

Open

Downloads the form file you selected to the printer hard disk.

Cancel

Cancels your selection and closes the Download window.

Rename Window

You use the Rename window, accessed by clicking the **[Rename]** button on the Download tab, to rename a form file on the printer hard disk.

Rename Window ParamMeters

The parameters you can specify in the Rename window are as follows:

From

Enter the current name of the form file you want to rename.

Note: When you specify the form name, do not use the .eps extension.

То

Enter the new name you want to use for the form file on the printer hard disk.

Note: When you specify the form name, do not use the .eps extension.

Rename Window Control Buttons

You use the control buttons located on the Rename window to perform the following functions:

OK

Saves the form file on the printer hard disk using the new name.

Cancel

Cancels your changes and closes the Rename window.

Delete Window

You use the Delete window, accessed by clicking the **[Delete]** button on the Download tab, to delete a form file from the printer hard disk.

Delete Window Parameters

The parameters you can specify in the Delete window are as follows:

Name

Enter the name of the form file you want to delete from the printer hard disk.

Note: When you specify the form name, do not use the .eps extension.

Delete Window Control Buttons

You use the control buttons located on the Delete window to perform the following functions:

OK

Deletes the form file you specified from the printer hard disk.

Cancel

Cancels your selection and closes the Delete window.

Print Tab

To access the Print tab, from the Form Overlay Utility window, click on the Print tab. You use the Print tab to print blank forms and to access the window you use to print form lists. The tools available on the Print tab are as follows:

- List prints a list of all of the form files currently stored in the printer hard disk.
- Print accesses the window you use to print blank copies of the form files stored on the printer hard disk.

Print Window

You use the Print window, accessed by clicking the [Print] button on the Print tab, to print a blank copy of the form file you specify.

Print Window Parameters

The parameters you can specify in the Print window are as follows:

Name

Enter the name of the form file for which you want to print a sample.

Note1: When you specify the form name, do not use the .eps extension.

Note2: Sample forms printed with the Utility are always printed on the paper from the default tray. If the designated default tray in the printer does not have the correct paper size, the user must load the correct paper and set the proper tray as the default tray using the printer's Control Panel. Select Job Control, Tray Priority to set the default tray.

Print Header

Check this checkbox when you want to print a header page in front of the form file sample. The header page contains the file name.

Print Window Control Buttons

You use the control buttons located on the Print window to perform the following functions:

OK

Prints a blank copy of the form file you specified.

Cancel

Cancels your selection and closes the Print window.

Note: When you specify the form name, do not use the .eps extension.

About Tab

The About tab displays information regarding the Form Overlay Utility, including the copyright and version level.

3. USING THE POSTSCRIPT® DRIVER FOR MACINTOSH

OVERVIEW

This chapter contains information on installing and using the PostScript® printer driver for Macintosh.

Note: The PCL5e and TIFF drivers are not available for the Macintosh. Using this printer with a Macintosh system requires the PostScript® option.

USING THE POSTSCRIPT® DRIVER FOR MACINTOSH

The PostScript® printer driver allows the printer to support Adobe® PostScript® Level II. To use the printer with a Macintosh, the Macintosh must be connected to a network using either an Ethernet connection with EtherTalk, or a Token Ring connection with TokenTalk. You connect the printer to the Macintosh using the optional Network Interface Card (NIC).

Installing the PostScript® Printer Driver on Macintosh

You must have the following components to install the PostScript® option:

- PostScript® ROM Dual Inline Memory Module (DIMM)
- PostScript® printer driver software

Follow these steps to install the PostScript® printer driver on your Macintosh system:

- Insert the "PostScript® Printer Driver for Macintosh" diskette in the drive on the host computer. A diskette icon displays on the screen.
- Double-click on the diskette icon, and double-click on the PS Printer Install icon. Follow the instructions that display.
- 3 Double-click on the PS Printer Install icon.
- Click [OK] on "Adobe Printer Driver 8.3.1" and click [Install].

- If you have previously installed the PostScript® driver, select only the PPD file for the printer. If the PostScript® driver was not installed previously, also select PS Printer and click install.
- Follow the instructions that display on the screen to complete the installation.

Note: The software requires a System 7.0 or later Macintosh operating system.

Installable Options Window

Follow these steps to access the Installable Options window:

- Open the Chooser and select your printer name from the list.
- 2 Click the [Setup] button.
- In the Setup window, click [Select PPD]. A list of PostScript® Printer Description (PPD) files displays.
- Select your printer Description (PPD) file (xxxxxxxx.ppd). Make sure that your printer name displays at the bottom of the window.
- Click the [Select] button to select the PPD (PostScript® Printer Description) file.
- 6 Click the [Configure] box.

You use the Installable Options window to specify the availability of printer accessories and printer memory.

Note: If the printer is connected to the host computer through an Ethernet or TokenRing network running EtherTalk or TokenTalk, the driver will be updated automatically with the printer's configuration. In this case, it is not necessary to enter the configuration.

Installable Options Window Parameters

The parameters you can specify in the Installable Options window are as follows:

Paper Bank

Use the drop-down list box to select **Not Installed** when the optional Paper Bank is not installed, or **Installed** when it is installed.

Large Capacity Tray

Use the drop-down list box to select **Not Installed** when the optional Large Capacity Tray (LCT) is not installed, or **Installed** when it is installed.

Envelope Feeder

Use the drop-down list box to select **Not Installed** when the optional Envelope Feeder is not installed, or **Installed** when it is installed.

Mailbox

Use the drop-down list box to select **Not Installed** when the optional fourbin Mailbox is not installed, or **Installed** when it is installed.

Finisher

Use the drop-down list box to select **Not Installed** when the optional Finisher is not installed, or **Installed** when it is installed.

Duplex Tray

Use the drop-down list box to select **Not Installed** when the optional Duplex Tray is not installed, or **Installed** when it is installed.

Hard Disk

Use the drop-down list box to select **Not Installed** when the optional printer hard disk is not installed, or **Installed** when it is installed.

Printer Memory

Use the drop-down list box to specify the available amount of printer memory. When you add memory to the printer, you must update the memory value using this screen so the driver knows the actual memory in the printer. The default value is **Standard 8 MB Total RAM**.

Installable Options Window Control Buttons

You use the control buttons located on the Installable Options window to perform the following functions:

Cancel

Cancels your parameter settings and closes the Installable Options window.

OK

Saves your parameter settings and closes the Installable Options window.

Page Setup Window

To access the Page Setup window, select **Page Setup** from the File menu of your application. You use this window to select a paper size, and to specify other printing features for the current print job.

Page Setup Window Parameters

The parameters you can specify in the Page Setup window are as follows:

Paper

Use the drop-down list box to select a paper size for the current job. When the paper size you select is not available, the printer stops and the "Add <paper size>" message displays on the Control Panel. The options are as follows:

- □ Letter (8.5" x 11")
- □ Legal (8.5" x 14")
- □ 11" x 17"
- □ 5.5" x 8.5"
- Executive (7.25" x 10.5")
- □ A3 (297 x 420 mm)
- □ A4 (210 x 297 mm)
- □ A5 (148 x 210 mm)
- □ B4 JIS (257 x 364 mm)
- □ B5 JIS (182 x 257 mm)
- □ A6 (105 x 148 mm)

- □ 8" x 13"
- □ 8.25" x 13"
- □ 8.5" x 13"
- □ Com 10 Env (4.125" x 9.5")
- Monarch Env (3.875" x 7.5")
- C5 Env (162 x 229 mm)
- □ C6 Env (114 x 162 mm)
- □ DL Env (110 x 220 mm)
- □ Custom

The default value is A4.

Note 1: Information on the dimensions and margins of the current paper size displays in the Layout area located on the left side of the window. Click on the Layout area to view this information. Clicking on this area toggles the display between a visual layout, the dimensions in inches, and the dimensions in millimeters.

Note 2: When you select **Custom**, the Custom Size window displays to the left of the Page Setup window.

Layout

Use the drop-down list box to specify the number of multiple pages you want to print on a single sheet of paper. The options are as follows:

□ 1 up □ 6 up
□ 2 up □ 9 up
□ 4 up □ 16 up

The default value is 1 up.

Note: An illustration of the layout displays in the Layout area located on the left side of the window.

Reduce or Enlarge

Use your keyboard to specify the percentage by which you want to shrink or enlarge the printed image. You can specify scaling from **25** to **400** %. The default value is **100** %.

Orientation

Select the icon that corresponds to the page orientation you want to use. The options are as follows:

- □ Portrait
- Landscape
- □ Rotated Landscape

The default value is **Portrait**.

Page Setup Window Control Buttons

You use the control buttons located on the Page Setup window to perform the following functions:

OK

Saves your parameter settings and closes the Page Setup window.

Cancel

Cancels your parameter settings and closes the Page Setup window.

Options

Accesses the Printer Options window.

Help

Accesses the Help window, which provides detailed information on the parameters available on the Page Setup window.

Custom Paper Size Window

To access the Custom Paper Size window, from the Page Setup window, click the **[Custom]** button. You use this window to specify the dimensions of the custom paper size you want to use.

Using the Custom Paper Size Window

To specify a custom paper size, select **Custom Paper Size** in the Paper window. Use your keyboard to enter the width and height, in inches, of the custom paper size you want to use. These dimensions refer to the short and long dimensions of the paper.

Note: You can use the Bypass Tray or the printer to print special or custom paper sizes. To do so, you use the printer Control Panel to define the custom paper size you want to use. To define a custom size for the Bypass Tray, enter the Menu mode using the printer Control Panel and access the Job Control menu. From the Job Control menu, select Paper Input. From the Paper Input submenu, select Bypass Size and select Width/Length. The display will show Width. You can set the width dimension in millimeters by pressing the [↑] key or the [▼] key. Press the [‡ / ↓] key when the dimension is correct. You enter the Length dimension using the same procedure. You can then load the special paper in the Bypass Tray and use your application or the printer driver to select Bypass Tray as the Paper Source you want to use to print your document.

Printer Options Window

To access the Printer Options window from the Page Setup window, click the **[Options]** button. You use this window to specify the text and graphics attributes for the current print job.

Printer Options Window Parameters

The parameters you can specify in the Printer Options window are as follows:

Visual Effects

Check the checkbox that corresponds to the way you want the printed output to look. You can check more than one checkbox. The options are as follows:

- Flip Horizontal prints the document as a mirror image of the screen. The default value is Off (checkbox not checked).
- Flip Vertical prints the document rotated 180 degrees. The default value is Off (checkbox not checked).
- Invert Image prints the job as a negative. Areas that display as black on the screen print as white, and areas that displays as white on the screen print as black. The default value is Off (checkbox not checked).

Printer Options

Check the checkbox that corresponds to the printer options you want to use. You can check more than one checkbox. The options are as follows:

- Substitute Fonts allows the printer to substitute PostScript® printer fonts for Macintosh screen fonts. When you enable this option, your job prints faster and uses less memory. The default value is On (checkbox checked).
- □ **Smooth Graphics** rasterizes bitmap image output to improve the appearance of graphics. The default value is **On** (checkbox checked).
- Precision Bitmap Alignment prints bitmap graphics more accurately.
 Select this option when you use a system with a low-resolution monitor.
 The default value is Off (checkbox not checked).
- Unlimited Downloadable Fonts in a Document prints without substituting printer fonts for Macintosh screen fonts. When you select this option, your job may print more slowly. However, the appearance of your output matches the screen more closely. The default value is Off (checkbox not checked).

Printer Options Window Control Buttons

You use the control buttons located on the Printer Options window to perform the following functions:

OK

Saves your parameter settings and closes the Printer Options window.

Cancel

Cancels your parameter settings and closes the Printer Options window.

Help

Accesses the Help window, which provides detailed information on the parameters available on the Printer Options window.

Printer Window

To access the Printer window, select **Print** from the File menu of your application. You use this window to specify printing features for the current print job.

Printer Window Parameters

The parameters you can specify in the Printer window are as follows:

Copies

Use your keyboard to specify the number of copies you want to print. You can specify from 1 to 999 copies. The default value is 1.

Pages

Click the radio button that corresponds to the portion of the document you want to print. The options are as follows:

- All prints the entire document.
- From/To use your keyboard to enter the beginning and ending page numbers to specify the portion of the document you want to print.

The default value is All.

Paper Source

Click the radio button that corresponds to the manner in which you want the printer to select input trays for the print job. The options are as follows:

- All use the drop-down list box to specify a single paper source for the entire document.
- First from use the drop-down list box to specify the paper source for the first page of the document. This option is useful when you want to print a document with a cover page, such as a report or a business letter using letterhead for the first page only.
- Remaining from use the drop-down list box to specify the paper source for the remaining pages of the document. This option is enabled only when you select First from.

The default value is All.

The paper tray selections are as follows:

□ Auto Selectp □ Tray 4

□ Tray 1
□ Large Capacity Tray

□ Tray 2
□ Bypass Tray

□ Tray 3
□ Envelope Feeder

When you choose **Auto Select**, the printer uses the first available tray, starting from the default tray, that contains the paper size required by the print job. **Auto Select** is not available when you select **First from**.

The **Tray 3** and **Tray 4** options are available only when the optional Paper Bank is installed. The **Large Capacity Tray** option is available when the optional Large Capacity Tray (LCT) is installed. The **Envelope Feeder** option is available only when the optional Envelope Feeder is installed. The **Bypass Tray** option is not available when the Envelope Feeder is installed. The **Tray 1** option is not available when the optional Duplex Tray is installed.

Note: When you select **Auto Select**, the automatic tray switching feature is enabled. This features switches the input paper tray to another tray containing paper with the same size and orientation, when the active tray runs out of paper. The printer checks the other trays in the following sequence: LCT, Tray 1, Tray 2, Tray 3, Tray 4, Bypass Tray. If you select a specific tray, the automatic tray switching feature is disabled.

The default value when you select **All** is **Auto Select**. The default value when you select **First from** and **Remaining from** is **Tray 1**. However, when the optional Duplex Tray is installed, the default value is **Tray 2**.

Destination

Click the radio button that corresponds to the output destination for the print job. The options are as follows:

- □ Printer
- □ File

The default value is Printer.

Printer Window Control Buttons

You use the control buttons located on the Printer window to perform the following functions:

Print

Prints your document, and closes the Printer window.

Cancel

Cancels your parameter settings and closes the Printer window.

Options

Accesses the Print Options window.

Help

Accesses the Help window, which provides detailed information on the parameters available in the Printer window.

<Application> Options

Accesses a window containing parameters specific to your application.

<Application> Help

Accesses a Help window, which provides detailed, application-specific information on the parameters available on this window.

Note: This section contains information on the Page Setup window parameters for the Microsoft Word application. Your application may provide different parameters.

Print Options Window

To access the Print Options window from the Print window, click the **[Options]** button. You use this window to specify printer attributes.

Print Options Window Parameters

The parameters you can specify in the Print Options window are as follows:

Cover Page

Click the radio button that corresponds to the manner in which you want to print cover pages. Cover pages can be useful for separating individual documents in large print runs.

The options are as follows:

- None the printer does not print a cover page.
- Before document the printer prints a cover page at the beginning of each document.
- After document the printer prints a cover page at the end of each document.

The default value is None.

Print

Use the drop-down list box to specify the manner in which you want to print graphics. The options are as follows:

- Black and White the printer prints in black and white only.
- Color/Grayscale the printer renders color images and text in shades of gray. Use this setting when you want to print documents that contain color or grayscale images, such as photographs.

The default setting is **Black and White**.

Note: The other settings do not apply to this printer.

PostScript® error handling

Use the radio buttons to specify how you want the printer to notify you when a PostScript® error occurs. When an error occurs, the printer completes the current job and performs a soft reset. However, when a fatal error occurs (when the printer stops printing), you must turn the power to the printer off and back on.

The options for error reporting are as follows:

- No special reporting the printer does not notify you when a PostScript[®] error occurs.
- Summarize on screen the printer notifies you of a PostScript® error by displaying an error message on your monitor.
- Print detailed report the printer notifies you of a PostScript® error by printing an error report.

The default value is **No special reporting**.

Duplex

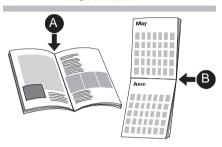
Use the drop-down list box selection to specify duplex output. The options are as follows:

- Printer's Default enables your printer setting.
- Off disables duplex printing.
- Long Edge Binding when printing in Portrait orientation, use this setting when you want to bind your output along the left edge of the paper, like a book. In Landscape orientation, this setting produces output that you can bind along the top edge of the paper, like a calendar.
- Short Edge Binding when printing in Portrait orientation, use this setting when you want to bind your output along the top edge of the paper, like a calendar. In Landscape orientation, this setting produces output that you can bind along the left edge of the paper, like a book.

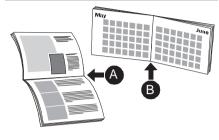
The default value is **Printer's Default**.

Figure 3-1 illustrates the two binding methods.

Figure 3-1.Binding methods
PORTRAIT







A. Long Edge binding

B. Short Edge binding

Note: This selection displays only when the Duplex Tray is installed. Duplex printing is not available on certain sizes, including A5 \square , A6 \square , $5^1/2^n \times 8^1/2^n$ (Halfletter), and envelopes.

Collate

Use the drop-down list box to specify whether you want to use the soft collation feature. The options are as follows:

- Printer's Default enables your printer setting.
- True enables the disk-based collation. This selection is available only when the optional hard disk is installed.
- False disables the disk-based collation.

The default value is Printer's Default.

Note: The collation function, located in the Print window of your application, must be turned off if you set this Collate (disk-based collation) option to **True**. Otherwise, you will get multiple sets of your collated job.

Staple

Use the drop-down list box to specify whether you want your output stapled. The stapler can staple up to 20 sheets of A4 or Letter size paper, to a maximum of 50 sets. When you select stapling, you must set the Output Destination selection to **Shift Tray Face Down**.

When you want to staple sets of a multiple copy collated job, you must set the Collate (disk-based collation) option to **True** from within your printer driver. If you enable collation from the Print window of your application, the entire job is stapled together.

The options are as follows:

- Printer's Default enables your printer setting.
- True output is stapled. This option is available only when the optional Finisher is installed.
- False output is not stapled.

The default value is False.

Note: The following output combinations should not be stapled, as the staple will be placed in an awkward position:

- 1. Duplex, Short Edge Binding, Landscape Orientation
- 2. Reverse Portrait Orientation, Simplex or Duplex
- 3. Reverse Landscape Orientation, Simplex or Duplex

Output Tray

Use the drop-down list box to specify an output tray. The options are as follows:

Printer's Default

External Tray

Output Tray 1

(Standard Tray)

Output Tray 2

Output Tray 3

Output Tray 4

Output Tray 5

Shift Tray Face down

Shift Tray Face up

The default value is **Printer's Default**.

The Output Tray 2, Output Tray 3, Output Tray 4, and Output Tray 5 options are available only when the optional mailbox is installed. The **Shift Tray** options (**Face-down** and **Face-up**) are available only when the optional Finisher is installed

Note: When you select a Finisher Shift Tray option (either Face-down or Face-up), the job separation, or jogging, function is always activated. When this is the case, the print jobs are always separated (except when the Stapler option is set to On). Stapled jobs are not separated.

Toner Saving

You can use this function when you print draft copies of documents. When you enable Toner Saving, the printer uses less than the normal amount of toner, which makes black areas print as gray but does not affect readability. The options are as follows:

- □ **Printer's Default** Enables your printer setting.
- □ **On** (checkbox checked) enables Toner Saving. The printer uses approximately one half of the normal amount of toner.
- Off (checkbox not checked) disables Toner Saving.

The default value is Printer's Default.

Resolution

Use the drop-down list box to set the printer resolution for PostScript® output in dots per inch (dpi). The options are as follows:

- Printer's Default Enable your printer setting.
- □ 600 dpi
- □ 400 dpi
- □ 300 dpi

The default value is Printer's Default.

Edge Smoothing

Use the drop-down list box to enable Edge Smoothing, which enhances print quality. The options are as follows:

- Printer's Default Enable your printer setting.
- On enables Edge Smoothing. The printer rasterizes output to enhance print quality. The appearance of the output emulates a resolution of 1200 dpi, reducing ragged edges and providing printed output with smooth curved and diagonal lines.
- Off disables Edge Smoothing.

The default value is **Printer's Default**.

Note: When you enable this function, images and halftones may be adversely affected and not print properly.

Custom Halftone

The PostScript® option on this machine supports the Adobe standard PostScript® halftone features as well as a special calibrated halftone method that provides four screen frequencies, or lines per inch (lpi) and angle, for each resolution setting (refer to table 3-1 for further information). You can select the calibrated halftones by selecting **Commercial**, **Newsletter**, **Newspaper**, or **Silkscreen**, or you can use the Adobe PostScript® halftone by selecting **Use computer setting**.

Use the drop-down list box to specify the halftone screen setting you want to use. When you use a halftone screen, the printer optimizes the appearance of multibit-per-pixel gray images and graphics by dithering the images up to 256 levels of gray. You can also use the Halftoning selection to print color images in shades of gray, rather than black and white.

You can select one of the following halftone settings:

- Printer's Default
- Use Commercial
- Use Newsletter
- Use Newspaper
- □ Use Silkscreen
- Adobe default setting

Table 3-1 lists the halftone settings, with the lines per inch (lpi) available at different resolution settings.

Table 3-1. Halftone settings

Setting	Lines per inch at 600 dpi resolution	Lines per inch at 400 dpi resolution	Lines per inch at 300 dpi resolution
Commercial	141 (45°)	94 (45°)	70 (45°)
Newsletter	106 (45°)	80 (45°)	60 (45°)
Newspaper	85 (45°)	70 (45°)	53 (45°)
Silkscreen	45 (45°)	47 (45°)	42 (45°)

Note: The Adobe Default setting halftone selection uses the Adobe halftone feature in the PostScript® interpreter in the printer. Screen frequency and angle vary with resolution as follows: 120 lpi and 45° at 600 dpi; 85 lpi and 45° at 400 dpi; and 60 lpi and 45° at 300 dpi.

The halftone screens are calibrated so that the brightness and contrast of the printed image are the same as the image that displays on your computer screen, regardless of the lines per inch and resolution settings.

The selection of the best halftone setting depends on several factors including the original quality and format of the image, the format and resolution of the image file being used, the method you will use to print or copy the printed image and the detail in the image inself. In genaral, a lower quality image or less refined method of printing should be printed with a lower screen density. The appearance of halftone image is a subjective matter. Try printing a given image with different halftone settings to determine which one looks best.

The default value is **Printer's Default**.

Note1: Some application programs override the printer's halftone function, use their own halftone methods for images and print images as bitmaps. Check your application documentation if the printer driver's halftone selection does not appear to work.

Note2: When you use the halftone option, make sure Edge Smoothing is disabled. Halftone and Edge Smoothing are not compatible, and when both features are enabled, the printer produces poor results.

Print Options Window Control Buttons

You use the control buttons located on the Print Options window to perform the following functions:

OK

Saves your parameter settings and closes the Print Options window.

Cancel

Cancels your parameter settings and closes the Print Options window.

Help

Accesses the Help window, which provides detailed information on the parameters available in the Print Options window.

Save

Saves your parameter settings and leaves the Print Options window open.

APPEND

APPENDIX

FONTS

This section contains information on the PostScript Type 1 fonts that are supported by the printer. This section also contains information on how to select supported fonts and how to use additional fonts.

Fonts are the style of characters you can use for your printed documents, for example, Times New Roman (abcdefg ABCDEFG) and Wingdings (SQMAM, N). This section describes the fonts available with your printer.

The two basic types of fonts are scaleable and bitmap. When you send a document to the printer, you can direct the printer to set the scaleable fonts to any size you want. Bitmap fonts are predefined and are not scaled or changed during printing. Each bitmapped font has a fixed point size (height of the font), pitch (number of characters per inch), and orientation (portrait or landscape).

Using Fonts

This section contains information on the fonts that are supported by the printer, as well as information on how you can use these fonts in your print jobs. The built-in PostScript® fonts are all scaleable fonts.

Built-In Fonts

The PostScript® built-in fonts consist of 35 Type 1 scaleable fonts. These include text fonts, Zapf Dingbats, and Symbol fonts. For Type 1 fonts, the character set (called the Symbol Set for PCL5e fonts) determines which characters and special symbols are available with a specific font.

The text fonts use the Adobe ISO Latin 1 character set, which includes the standard alphabet of all uppercase and lowercase letters, standard punctuation characters, the digits 0 through 9, and some special characters. The Zapf Dingbats character set includes characters such as special bullets and checkmarks. The Symbol character set includes math symbols and Greek characters.

In addition, depending on the software you use to create the document you want to print, the PostScript® language provides you with the capability to manipulate the text contained in a PostScript® file. This allows you to perform tasks such as stretching, filling, rotating, bending, defining the shape, scaling, and clipping the text.

You can use the Control Panel to print a PostScript® font list, so you can see what each font looks like. The following PostScript® Type 1 scaleable fonts are provided with the printer when you have the PostScript® option:

- Courier
- Courier Bold
- ◆Courier Bold Oblique
- ◆Courier Oblique
- Helvetica
- Helvetica Bold
- Helvetica Bold Oblique
- Helvetica Oblique
- Helvetica Narrow
- Helvetica Narrow Bold
- ◆ Helvetica Narrow Bold Oblique
- Helvetica Narrow Oblique

- ITC Avant Garde Book
- ◆ITC Avant Garde Book Oblique
- ITC Avant Garde Demi
- ◆ITC Avant Garde Demi Oblique
- ◆ITC Bookman Demi
- ◆ITC Bookman Demi Italic
- ◆ITC Bookman Light
- ◆ITC Bookman Light Italic
- ◆ITCZapfChanceryMedium Italic
- ITC Zapf Dingbats
- NewCenturySchoolbookRoman
- New Century Schoolbook Bold
- New Century Schoolbook Bold Italic

- New Century Schoolbook Italic
- Palatino Roman
- ◆ Palatino Bold
- Palatino Bold Italic
- Palatino Italic
- Symbol
- Times Roman
- Times Bold
- Times Bold Italic
- Times Italic

Additional Fonts

Additional fonts are available as follows:

- □ When you print a document, the software used to create the document may download additional fonts. These downloaded fonts can include TrueType fonts available from Windows and Macintosh software. With the PostScript® option, documents previously formatted with TrueType fonts print using PostScript® Type 1 fonts when the TrueType font is not available. The printer automatically substitutes the closest matching PostScript® Type 1 font for the TrueType font.
- □ You can download additional soft fonts from diskettes to your printer using a software utility designed for this purpose. For example, you can use the Font Downloader of the PostScript® driver for Windows 3.1 to download PostScript® soft fonts. Refer to the "Font Downloader Window" section in this chapter for more information.

Note:

When you are using the printer with a PC running Windows 95 or a Macintosh, you must use the Adobe Type Manager, or other appropriate software, to download soft fonts.

Selecting Fonts

You can select fonts for use in your print job as follows:

- Using your document software.
- Using the PostScript® printer driver.

The printer defaults to the Courier font when no software commands and no PostScript® printer driver commands are received.

Some fonts may be available as built-in fonts and also as soft fonts. For example, Zapf Dingbats is a built-in font. However, it can also be downloaded as a soft font. When you download the soft font, the printer uses the downloaded soft font instead of the built-in font.

Using the Windows 3.1 Fonts Tab

This section describes how you use the Fonts tab available when you use the PostScript® driver for Windows 3.1. To access the Fonts tab, from the Windows 3.1 Printer Driver window, click on the Fonts tab. • Refer to the "Using the PostScript® Drivers for Windows" chapter in this manual for instructions on how to access the Printer Driver window.

Fonts Tab Parameters

You use the parameters in the Fonts tab to specify how you want the printer driver to send TrueType fonts. The parameters you can specify are as follows:

Send TrueType Fonts to This Printer as:

Use the drop-down list box to specify the PostScript® fonts you want the driver to use in place of TrueType fonts. The options are as follows:

- □ **Type 1** sends TrueType fonts to the printer as scaleable outline PostScript® Type 1 fonts. The TrueType fonts are converted to Type 1 format by the printer driver. There may be some loss of accuracy, especially for small font sizes.
- □ **Type 3** sends TrueType fonts to the printer as Type 3 bitmapped PostScript® fonts. This option is very accurate and is recommended for smaller font sizes (14 points or less).
- □ **Type 42** packages TrueType fonts for the printer. Type 42 is a true representation of TrueType fonts and provides the greatest accuracy.
- Don't Send uses TrueType fonts that are stored in the printer memory or provided to the printer by a network spooler. If TrueType fonts are not available, the printer uses the default font (usually Courier). Therefore, the output may not match the appearance of the document on your screen.

The default setting is **Type 1**.

Substitute PostScript® Fonts for TrueType Fonts on This Printer

Check the checkbox when you want the driver to substitute PostScript® fontsfor TrueType fonts. When you enable this option, the printer uses the font substitutions specified in the TrueType Substitutions for All Printers field. This option allows your documents to print faster.

TrueType Substitutions

Allows you to use the list box and drop-down list boxes to select a TrueType font and specify the PostScript® font you want to use as a substitute.

Fonts Tab Control Buttons

You use the control buttons located on the Fonts tab to perform the following functions:

Use Defaults

Resets the parameters in the Fonts window to the default settings.

Font Downloader

Accesses the Font Downloader window.

About

Displays information about the copyright date and revision level of the printer driver.

Help

Accesses the Help window, which provides detailed information on the parameters available in the Fonts tab.

Cancel

Cancels your parameter settings and closes the Properties window.

OK

Saves your parameter settings and closes the Properties window.

Font Downloader Window

When a document with Adobe Type 1 fonts that are not included in the resident font set for the printer is sent to the printer, the fonts are downloaded from your computer to the memory of the printer. However, these fonts are deleted when the job is complete. You can use the Font Downloader to download Type 1 fonts manually when you want the fonts to remain resident on the printer. Downloading fonts manually can speed up printing. When you download fonts manually, the fonts remain resident in the printer memory until you delete the fonts, or until you turn the printer power off or switch between the PCL5e and PostScript® emulations.

Use this feature when you want to print multiple documents that contain the same Type 1 fonts that are not resident in the printer memory.

You can download Type 1 fonts and store them in the DRAM memory of the printer. Since downloaded fonts take up memory on your printer, you may want to limit the number of fonts you use at any one time. Should you require numerous fonts other than those resident on the printer, you should expand the memory available to the printer, or add the optional hard disk for font storage. You can manage fonts downloaded to the hard disk using this same Font Downloader.

You can also use the Font Downloader to perform the following functions:

- Format the optional hard disk for font storage.
- Manually download soft fonts to the optional hard disk.
- Perform printer management tasks, such as adding, listing, and removing downloaded fonts to and from the DRAM memory and the hard disk, and clearing the printer font cache.

Font Downloader Window Parameters

The parameters you can specify in the Font Downloader window are as follows:

Fonts available

Use the list box to select the fonts you want to download.

Destination device

Use the drop-down list box to select a destination device for the fonts you want to download.

Font Downloader Window Control Buttons

You use the control buttons available on the Font Downloader window to perform the following functions:

Download

Downloads the fonts you have selected to the printer or the font storage device.

Create font group

Allows you to create a font group. This feature is useful when you use the same group of Type 1 fonts for your print jobs.

Delete font group

Allows you to delete a font group.

Other

Accesses the Other window, allowing you to perform additional font management and printer management tasks.

Help

Accesses the Help window, which provides detailed information on the parameters available in the Font Downloader window.

Exit

Saves your settings and closes the Font Downloader window.

Device Installer

Accesses the Device Installer window, allowing you to install and configure a hard disk or other font storage device.

Downloading Fonts

Follow these steps to download soft fonts using the Font Downloader:

- Access the Font Downloader window. A list of all available Type 1 fonts displays in the Fonts available list box.
- Select the fonts you want to download.
- Use the Destination device drop-down list box to select the destination for the fonts.
- Click the [Download] button to download the fonts.

Note: You cannot print when fonts are downloading to the printer.

Device Installer Window

To access the Device Installer window, from the Font Downloader window, click the **[Device Installer]** button. You use this window to install and remove printer storage devices.

Device Installer Window Parameters

The parameters you can specify in the Device Installer window are as follows:

Connected

Check the checkbox when the device you select using the Add New window is currently connected. The name of the device displays in the window next to the **[Add New]** and **[Remove]** buttons.

Disk port

Click the radio button that corresponds to the disk port to which the currently selected storage device is connected.

Device Installer Window Control Buttons

You use the control buttons available on the Device Installer window to perform the following functions:

Add new

Accesses the Add Device window, allowing you to choose the type of device you want to add.

Remove

Allows you to remove a printer device.

Help

Accesses the Help window, which provides detailed information on the parameters available in the Device Installer window.

Close

Closes the Device Installer window.

Add Device Window

To access the Add Device window, from the Device Installer window, click the **[Add New]** button. You use this window to specify the type of storage devices you want to add to the printer.

Add Device Window Parameters

The parameter you can specify in the Add Device window is as follows:

Device type

Click the radio button that corresponds to the type of storage device you want to connect to the printer. The choices are as follows:

- Magnetic disk
- □ CD-ROM disk
- □ Font Cartridge
- Magnetic cartridge

Add Device Window Control Buttons

You use the control buttons available on the Add Device window to perform the following functions:

Add

Adds the selected device.

Cancel

Cancels your parameter settings and returns to the Device Installer window.

Help

Accesses the Help window, which provides detailed information on the parameters available in the Add Device window.

Other Window

To access the Other window, from the Font Downloader window, click the **[Other]** button. You use this window to perform font management and printer management tasks.

Other Window Parameters

The parameters you can specify in the Other window are as follows:

List/remove fonts

Click the radio button to access a window allowing you to view a list of available fonts and to remove fonts.

Print font listing

Click the radio button to print a list of available PostScript® fonts.

Download PostScript file

Click the radio button to download a PostScript® file. PostScript® files are those you use to run print jobs, send application headers, and download program files to the printer.

Format device

Click the radio button to access a window allowing you to format a peripheral font device for the printer, such as the hard disk. You must format the device before using it to store fonts and other data.

Clear font cache

Click the radio button to remove all temporarily downloaded soft fonts from the printer memory. Clearing the font cache frees up memory on the printer and storage space on your devices.

Reset printer

Click the radio button to soft-reset the printer and clears all downloaded fonts from memory.

Password

Click the radio button to access a window allowing you to enter a printer password. If your printer is set up to use a password, you must enter it before downloading.

Set communications mode

Click the radio button to access a window allowing you to set the downloader to work with a standalone or networked printer.

Resync printer and Windows

Click the radio button to synchronize a printer to work with Windows. Once you synchronize the printer, you can select the downloaded fonts with Windows applications.

Other Window Control Buttons

You use the control buttons available on the Other window to perform the following functions:

OK

Saves your parameter settings and closes the Other window.

Cancel

Cancels your parameter settings and returns to the Font Downloader window.

Help

Accesses the Help window, which provides detailed information on the parameters available in the Other window.

Using the Windows 95 Fonts Tab

This section describes how you use the Fonts tab available when you use the PostScript® printer driver for Windows 95.

Note: The PostScript® printer driver for Windows 95 does not include a utility for downloading fonts. You use Adobe® Type Manager® to perform font management tasks.

Follow these steps to access the Fonts tab:

- Click **Start** and select **Printers** from the Settings submenu. The Printers window displays.
- Select your printer name. Your printer window displays, providing a list of the currently listed print jobs.
- Select **Properties** from your Printer menu available on this machine Printer window. The Properties window displays.

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From the Properties window, click on the Fonts tab.

Fonts Window Parameters

The parameters you can specify on the Fonts tab are as follows:

Send TrueType fonts to printer according to the font Substitution Table

Click the radio button when you want the printer to use the Font Substitution Table to substitute resident printer fonts for TrueType fonts. When you choose this option, the **[Edit the Table]** button is enabled.

Always use built-in printer fonts instead of TrueType fonts

Click the radio button when you want to print using built-in printer fonts. The printed output may not match the appearance of your document on the screen. This allows your documents to print faster.

Always use TrueType fonts

Click the radio button when you want to print using TrueType fonts. The driver downloads all TrueType fonts to the printer. This assures that all fonts will look the same on your printed document as they do on the screen. However, this may cause your documents to print more slowly.

Fonts Tab Control Buttons

You use the control buttons located on the Fonts tab to perform the following functions:

Edit the Table

Accesses the Font Substitution Table window, allowing you to edit the font substitution table.

Update Soft Fonts

Searches the computer and updates the list of available soft fonts that you can select for downloading.

Send Fonts As

Accesses the Send Fonts As window, allowing you to specify how you want the printer to download TrueType and PostScript® Type 1 fonts.

Help

Accesses the Help window, which provides detailed information on the parameters available in the Fonts tab.

Restore Defaults

Resets this tab to the system default settings.

OK

Saves your parameter settings and closes the Fonts tab.

Cancel

Cancels your parameter settings and closes the Fonts tab.

Apply

Applies your parameter settings and leaves the Fonts tab open.

Font Substitution Table Window

To access the Font Substitution Table window, from the Fonts tab, click the **[Edit the Table]** button. You use the Font Substitution Table window to specify the PostScript® fonts you want the printer to use in place of TrueType fonts.

Using the Font Substitution Table Window

You use the list box located at the top of the window to specify the font substitutions you want to use. To perform this task, click on the name of the font for which you want to specify a new substitute font. The name of the font displays in the dialog box at the bottom of the window.

Use the drop-down list box to select the substitute font you want to use, or to select "Send as outlines" when you do not want to specify a printer font.

Fonts Substitution Table Window Control Buttons

You use the control buttons located on the bottom of the Font Substitution Table window to perform the following functions:

OK

Saves your parameter settings and closes the Font Substitution Table window.

Cancel

Cancels your parameter settings and closes the Font Substitution Table window.

Help

Accesses the Help window, which provides detailed information on the parameters available in the Font Substitution Table window.

Restore Defaults

Resets this window to the system default settings.

Send Fonts As Window

To access the Send Fonts As window, from the Fonts tab, click the [**Send Fonts As**] button. You use the parameters in this window to specify how you want the printer to send TrueType and PostScript® Type 1 fonts.

Send Fonts As Window Parameters

The parameters you can specify in the Send Fonts As window are as follows:

Send TrueType fonts as:

Use the drop-down list box to specify the PostScript® fonts you want the driver to use in place of TrueType fonts. The options are as follows:

Outlines - sends TrueType fonts to the printer as Type 1 scaleable PostScript® fonts. The TrueType fonts are converted to Type 1 format by the printer driver. There may be some loss of accuracy, especially for small font sizes

- Bitmaps- sends TrueType fonts to the printer as Type 3 bitmapped PostScript® fonts. This option is very accurate and is recommended for smaller font sizes (14 points or less).
- □ **Type 42** packages TrueType fonts for the printer. Type 42 is a true representation of TrueType fonts and provides the greatest accuracy.
- Don't Send uses TrueType fonts that are stored in the printer memory or provided to the printer by a network spooler. If TrueType fonts are not available, the printer uses the default font (usually Courier). Therefore, the output may not match the appearance of the document on your screen.

The default setting is **Outlines**.

Threshold

Use your keyboard to enter the bitmapped font size, in pixels, at which you want the printer to stop sending TrueType fonts as bitmap fonts and start sending them as outline fonts. This value varies based on the print resolution setting. A value of $\bf 0$ specifies that you want to send only outline fonts. Specify a value of $\bf 100$ for typical text font usage. Increase the value to $\bf 200$ when you are using ornamental fonts.

The default value is 100.

Note: You can set this option only when you set the Send TrueType Fonts As option to **Outlines**.

Favor system TrueType fonts

Check the checkbox to specify that you want to use a system TrueType font, instead of a PostScript® font, when a font of the same name resides on both your computer and your printer.

PostScript fonts:

Use the drop-down list box to specify the manner in which you want to send PostScript® fonts to the printer. The options are as follows:

□ In Native Format - sends PostScript® fonts to the printer in Type 1 format.

Don't Send - does not send PostScript® fonts to the printer, and does not substitute printer fonts for PostScript® fonts. This option is useful only when you have a spooler that can supply PostScript® fonts. When a PostScript® font is not available, the default printer font, usually Courier, is used.

The default value is In Native Format.

Send Fonts As Window Control Buttons

You use the control buttons located on the bottom of the Send Fonts As window to perform the following functions:

OK

Saves your parameter settings and closes the Send Fonts As window.

Cancel

Cancels your parameter settings and closes the Send Fonts As window.

Help

Accesses the Help window, which provides detailed information on the parameters available in the Send Fonts As window.

Restore Defaults

Resets this window to the system default settings.

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