Xerox MRP Family
4215/MRP, 4219/MRP, 4220/MRP, 4230/MRP

AppleTalk Interface
Operator Guide

Printed in the United States of America

Changes are periodically made to this document. Changes, technical inaccuracies, and typographic errors will be corrected in subsequent editions.

This document was created on the Xerox 6085 Professional Computer System using VP software. The typeface is Optima.

Notices

The information in this document is subject to change without notice.

Xerox Corporation shall not be liable for technical or editorial errors or omissions contained herein; nor for incidental or consequential damages resulting from the furnishings, performance, or use of this material.

Safety

CAUTION: This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the installation requirements, may cause radio interference to radio communications.

U.S.A.

Your Xerox printer has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference. In such cases, the user at his or her own expense is required to correct the interference.

Canada

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian department of communications.

Les present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils de Classe A prescitees dans le reglement sur le brouillage radioelectrique edicte par les ministre des communications du Canada.

Europe: 50 Hz, 220 to 240 V equipment

This equipment has been tested and certified in conformance with European commission directive 82/499/ECC and VDE 0871/0875, Class A, relating to radio frequency interference.

Laser safety

Your Xerox printer complies with appropriate safety standards.

Specifically regarding lasers, the equipment complies with laser product performance standards set by governmental, international and national agencies as a Class 1 laser product. It does not emit hazardous light; the beam is totally enclosed during all phases of customer operation and maintenance.

⚠ **WARNING:** Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Warning labels

There are several user accessible Laser Safety Warning labels located on the printer. These are as shown on the next two pages.

Laser labels on the back of the printer are either:

DANGER-invisible laser radiation when open and interlock defeated for service.

AVOID DIRECT EXPOSURE TO BEAM.

instructions for safe service are in SERVICE MANUAL.
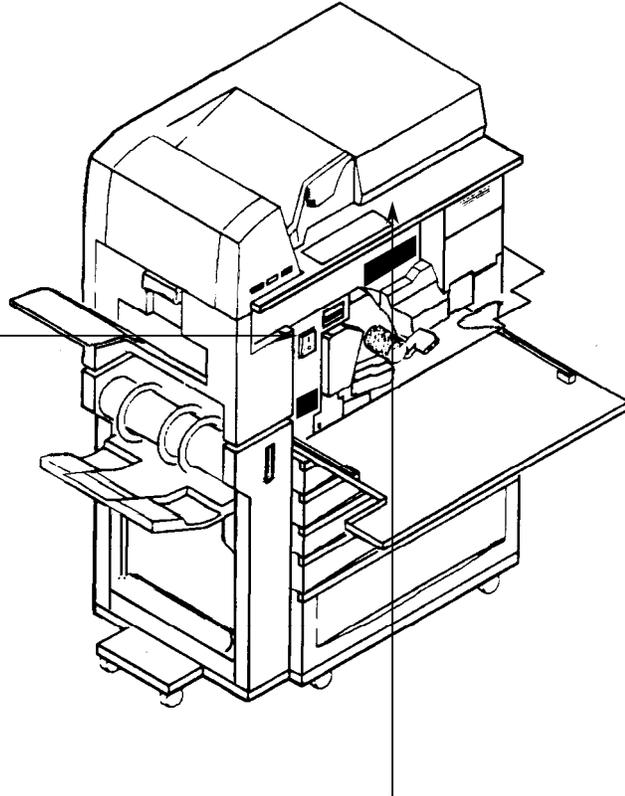
CAUTION	INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.
ATTENTION	RAYONNEMENT LASER INVISIBLE DANGEREUX EN CAS D'OUVERTURE ET LORSQUE LA SÉCURITÉ EST NEUTRALISÉE. EVITER DE S'EXPOSER AU RAYON LASER.
VORSICHT!	UNSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET UND SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT. NICHT DEM STRAHL AUSSETZEN.
VAROI	AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VARNING	OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRRAR ÄR URKOPPLADE. STRÅLEN ÄR FARLIG.
ADVARSEL	USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHETSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.
ADVARSEL	USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.

These laser warning labels are placed on panels that cover areas that are not operator serviceable. These panels are not to be removed.
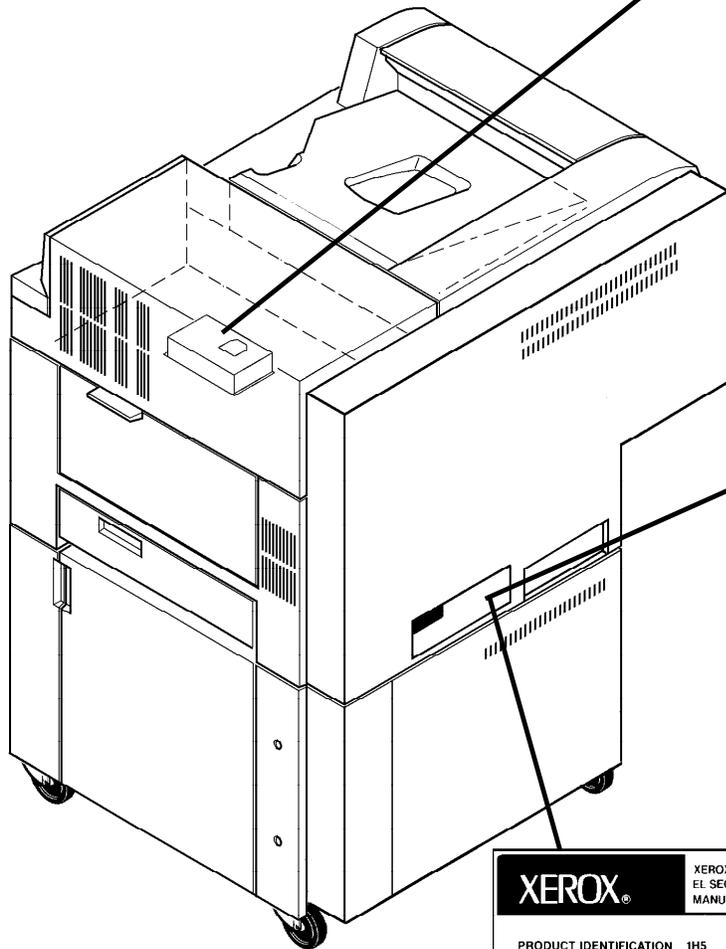
DANGER

INVISIBLE LASER RADIATION WHEN 'ROS COVER2' OPEN, AND WHEN 'ROS COVER1' OR 'ROS COVER3' OPEN.
AVOID DIRECT EXPOSURE TO BEAM.

50hz.
Configuration

XEROX   XEROX CORPORATION

PRODUCT IDENTIFIER   **1H7**
VOLTS   220/240V
AMPERES   6.5A
HERTZ   50Hz

CLASSIFIED BY UNDERWRITERS
LABORATORIES INC. IN ACCORDANCE
WITH I. E. C. PUBLICATION 950.
82 499 : EEC   4B10

CLASS 1 LASER PRODUCT
LASER KLASSE 1

60hz.
Configuration

XEROX®   XEROX CORPORATION
                  EL SEGUNDO,CALIFORNIA 90245
                  MANUFACTURED IN JAPAN

PRODUCT IDENTIFICATION 1H5
VOLTS   115V
AMPERES   12A
HERTZ   60Hz
                        Listed
                        UL 1950   LR43173
                        4B09

CERTIFIED ONLY TO CANADIAN ELECTRICAL CODES.
CERTIFIE EN VERTU DU CODE CANADIEN DE L'ELECTRICITE SEULEMENT   TPI

THIS PRODUCT COMPLIES WITH REGULATIONS. 21 CFR CHAPTER 1
SUB CHAPTER J, SECTION 1010. 1040 AT DATE OF MANUFACTURE.
MONTH OF MANUFACTURE   **FEBRUARY 1994**   4B09

CAUTION
"OPERATION OF ELECTRICAL EQUIPMENT WITHOUT PROPER ELEC-
TRICAL SERVICE MAY BE DANGEROUS TO OPERATING PERSONNEL.
IF THIS EQUIPMENT IS MOVED TO ANOTHER LOCATION. OPERATED
FROM ANOTHER ELECTRICAL SOURCE. OR IF ALTERATIONS ARE
PERFORMED ON THE PREMISES WHICH COULD AFFECT THE ELEC-
TRICAL SERVICE AND/OR GROUND IN THE BUILDING. CONTACT A
LICENSED ELECTRICIAN TO CHECK FOR PROPER ELECTRICAL
SERVICE."

COMPLIES WITH THE LIMITS FOR A CLASS A COMPUTING DEVICE
PURSUANT TO SUBPART J OF PART 15 OF FCC RULES.

This Digital Apparatus does not exceed the Class A Limits for
radio noise emissions from digital apparatus set out in the radio
interference regulations of the Canadian Department of
Communications

Cet appareil numerique est conforme aux limits d'emission de
bruits radioelectriques pour les appareils de Classe A stipulees
dans le Reglement sur le brouillage radioelectrique du ministere
des Communications du Canada

Operational safety

Your Xerox equipment and supplies are designed and tested to meet strict safety requirements. These include safety agency examination, approval, and compliance with established environmental standards.

Attention to the following notes ensures the continued safe operation of your equipment.

Do this

Always connect equipment to a properly grounded power source receptacle. If in doubt, have the receptacle checked by a qualified electrician.

Always place equipment on a floor with adequate strength for the weight of the machine.

Always have your service representative move or relocate the equipment.

Always use materials and supplies specifically designed for your Xerox equipment.

WARNING: Use of unsuitable materials may result in poor performance and can possibly create a hazardous condition.

Always use a Xerox specified cordset with the Equipment Leakage Current Interrupter/Residual Current Device (ELCI/RCD).

Do not do this

Never use an extension cord with the ELCI/RCD.

Never use the ELCI/RCD where water may enter the casing.

Never attempt any maintenance function that is not specifically described in this document.

Never remove any covers or guards that are fastened with screws unless otherwise instructed. There are no operator-serviceable areas within these covers.

Never override or "cheat" electrical or mechanical devices.

Never operate the equipment if you notice unusual noises or odors. Disconnect the power cord from the power source receptacle and call service to correct the problem.

U.S. only: If you need any additional safety information concerning the equipment or Xerox supplied materials, call the following toll-free number: **1-800-828-6571**.

Approvals and certification

60 Hz, 115 V Listed by Underwriters Laboratories, UL1950 (UL). Meets CSA standards, C22.2 NO 950 (CSA).

50 Hz, 220 to 240 V Meets the British Standards Institution, IEC950 (BSI).

Safety feature

Your Xerox printer is equipped with an Equipment Leakage Current Interrupter/Residual Current Device (ELCI/RCD). This safety device protects you if an electric outlet supplying power to the printer is improperly wired.

U.S. configuration of ELCI/RCD
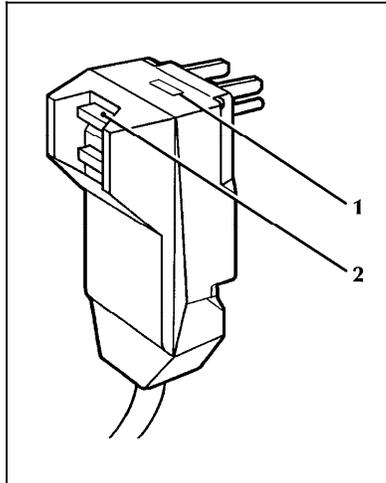
1   **Window**
2   **Reset button**

International configuration of ELCI/RCD
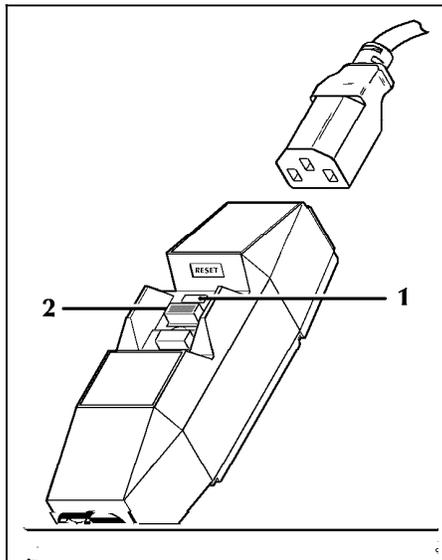
1   **Window**
2   **Reset button**

If power is interrupted to the printer, follow these steps:

1. Locate the safety device, using the U.S. or International Configuration (above).

2. Check to see if a red flag displays in the window of the safety device.

3. If the red flag does not display, press and release the black Reset button.

    The red flag displays and power is restored to the system.

If power is not restored by this procedure or if the device interrupts power to the machine again, call your service representative.

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Introduction

The *Xerox MRP Family AppleTalk Interface Operator Guide* provides information for installing and maintaining the AppleTalk interface.

About this manual

The procedures in this guide are written with the assumption that you are a network administrator familiar with installing printers on networks, and are familiar with AppleTalk software utilities.

Before using this guide, you should become familiar with its contents and conventions.

Conventions

This guide uses the following conventions in text and procedures.

Text conventions

italics	Italics are used for document and library names (for example, the *Xerox MRP Family 4220/MRP, 4230/MRP Operator Guide*).
	CAUTION: Cautions are associated with equipment safety.
	WARNING: Warnings are associated with the safety of people.
N	**Notes** are hints that help you perform a task or understand the text.
MB	Megabyte.
K-byte	Kilobyte.
gsm	Grams per one square meter of paper.

Procedure conventions—printer control panel

This guide uses the following conventions in printer control panel procedures.

Function key   When referred to in the text, the function key is identified by its name followed by the icon representing the key:

- Off-Line/O
- Main Menu/M
- Last Page/L
- Enter/L
- Clear/**C**
- Pause/P
- Reset/R
- Test Mode/T

When specified in a step-by-step control panel procedure example, the function key is identified by the icon in the left margin and the associated key name in the text of the numbered step, for example:

L   1. Press the Enter key.

Messages   References to messages displayed at the control panel appear in text similar to the following:

        READY TO PRINT
        DRY INK IS LOW--REPLACE SOON.

Procedure conventions—Macintosh personal computer

This guide uses the following conventions within computer procedures.

Menu buttons   Menu buttons displayed on the terminal screen are identified by their name in square brackets, for example:

    Click on the [OK] button.

Keyboard keys   Computer keyboard keys are identified by their name in boldface type, for example:

    Press the **Tab** key.

1. Installing the Xerox AppleTalk option

The Xerox AppleTalk option allows you to connect your printer directly to a Macintosh system, or to an AppleTalk-compatible network through LocalTalk. The optional AppleTalk interface board provides support for this interface.

This chapter describes the new features of the Xerox printer AppleTalk software, including the changes incorporated in the Xerox Driver Builder (Xerox driver) version 2.01 (v2.01) or later, the enhanced version with PSPrinter and LaserWriter v8 printer drivers support.

PSPrinter is the new Macintosh driver developed by Adobe Systems, Inc. It can be used instead of the Apple LaserWriter printer driver that comes with the Macintosh computer. To build a Xerox driver with Macintosh PostScript driver v8 support, PSPrinter v8.1.1 or later is required.

N **Note:** Your printer is not supported by PSPrinter v8.0 and v8.1, or LaserWriter v8.0. The Xerox driver v2.01 gives access to the new version 8 features, and provides backward compatibility. If the new Xerox driver is built from LaserWriter driver v7.x or earlier, all selections and options are similar to those provided by Xerox driver v1.0.

Before you begin

You need the following materials to begin using the AppleTalk interface board:

- LocalTalk or PhoneNet cables with DIN-8 or DB-9 connectors
- Xerox Support Software for Macintosh diskette
- Documentation that came with your Macintosh computer

N **Note**: DIN-8 cables are generally used for Macintosh systems, except for models produced before 1986. Most PC AppleTalk cards require DB-9 connectors. Contact your network administrator or authorized Apple dealer for assistance in purchasing the appropriate cables and connections for your Macintosh computer or AppleTalk network.

Xerox AppleTalk software

Both the PSPrinter for Macintosh v8.1.1 or later and Xerox Support Software v2.01 or later for Macintosh are packaged together as three diskettes.

The PSPrinter v8.1.1 or later includes the following three diskettes:

- Disk 1: PSPrinter for Macintosh 1 (Program file)
- Disk 2: PSPrinter for Macintosh 2 (Program file)
- Disk 3: Xerox Support Software and PSPrinter User Guide

Xerox Support Software for Macintosh

The Xerox Support Software for Macintosh diskette is included with the AppleTalk interface option. The software on this diskette provides access to such printer features as selecting input and output trays.

The Xerox Support Software includes the following files:

- Xerox Driver Builder (v2.01 or later)
- Font Downloader folder (v5.0.4 or later)
- README (Release Notes)
- PSPrinter User Guide

Xerox Driver Builder v2.01 or later

The Xerox Driver Builder v2.01 or later (Xerox driver) contains the programs that enable the PSPrinter driver or the LaserWriter driver to customize the paper handling and print options for your printer. It also contains the configuration used by the enhanced driver.

Before building the Xerox driver, make sure you have the PSPrinter driver or LaserWriter driver installed.

Font Downloader folder

The Font Downloader folder contains the following files:

- Downloader v5.0.4 or later
- CLEAR PFM
- CLEAR XXXX DISK

Downloader v5.0.4 Use this utility to download font and PostScript files. You can download fonts to the printer memory, the optional hard disk, or

to reinitialize it when necessary. It is recommended that your system administrator perform this task.

README file

The README file contains information about the software release, as well as descriptions of any software changes and limitations.

PSPrinter User Guide

The PSPrinter User Guide is included as a compressed PostScript file "PSPrinter User Guide.sea" in Disk 3. You should copy this file to the hard disk. Double-click the file icon to uncompress the file and load it to the location you want.

To print the document, download the uncompressed file, called "Mac.Prnt.Drivr.8.1.1.ps," to the printer, and load letter size paper in the default tray.

Installing PSPrinter

If you prefer not to update your printer driver to the latest version, skip this section and continue with the "Installing the Xerox Driver Builder v2.01 or later" section, next.

Ν If you install PSPrinter v8.1.1 on a Macintosh running System 6, the installer automatically overwrites the System 6.0.x versions of the PrintMonitor, Backgrounder, LaserWriter, and LaserPrep utilities with the System 7 versions. You should make copies of the older versions of these utilities if you need to reuse them with the LaserWriter printer driver.

Start the installation by double clicking the installer in Disk 1.

The installer places the following new files in the System Folder (version numbers may vary):

- PSPrinter (v8.1.1)
- Print Monitor (v7.0)
- Backgrounder (v1.3)
- LaserPrep (v7.2)
- Xerox XXXX PPD file (in the Printer Descriptions folder)

If you are running System 7, the installer places the following files in the Extensions folder (version numbers may vary):

- PSPrinter (v8.1.1)
- Xerox XXXX PPD file (in the Printer Descriptions folder)

The installer removes earlier versions of the PSPrinter driver (for example, v8.0) and all PostScript Printer Description (PPD) files. When the installer detects a newer version of the same file, for example TeachText, click the [Newer] button to keep the more recent file. For a description of other PSPrinter driver functions, refer to the PSPrinter User Guide, provided in the disk package.

Ν **Note**: This installation description also applies to the Apple LaserWriter 8 printer driver v8.1.1, with several exceptions. The LaserWriter v8.1.1 installer does not replace LaserWriter driver versions that are older than version 8.0, and it does not install the Xerox PPD file.

Installing the Xerox Driver Builder

The Xerox Driver Builder v2.01 or later (Xerox driver) can be built from the following (version numbers may vary):

- PSPrinter printer driver (v8.1.1)
- LaserWriter 8 printer driver (v8.1.1)
- Fax Printer Driver (v8.1.1)
- LaserWriter printer driver (v5.2 through v7.2)

CAUTION: Make sure that the same version of the printer driver is installed on all Macintosh systems on a network. If printer drivers are not compatible, error messages may occur.

Follow these steps to build the Xerox driver:

1. Turn on your Macintosh computer.

2. Insert the Xerox Support Software for Macintosh diskette into the diskette drive.

3. Double-click on the Driver Builder icon. You see the following message:

   "This application builds the Xerox driver from the printer driver which you select."

4. Click on the [Build] button. You see the following prompt:

   "Next, select the driver that you want to build from."

5. Click [OK] to respond to the message.

   The user menu appears with a list of drivers you can select from the Extension folder. Printer drivers not supported by this builder are not shown.

   If you have Fax Printer driver v8.1.1 installed, you can select Fax Printer instead of PSPrinter to include all of the fax functions in the new Xerox printer driver.

   N   **Note**: Except for fax-related functions, Fax Printer is identical to PSPrinter.

6. Click on [OPEN] to start the building process. You see the following message:

   "Now building the Xerox printer driver."

   When the task is complete, the following message displays:

   "The Xerox printer driver has been successfully built, and may be selected using the Chooser."

7. Click [OK] to clear the message.

   N   **Note**: For System 7 users, the Xerox printer driver is built and stored in the Extension folder. For System 6 users, the driver is stored in the System folder. If you need to keep more than one version of the printer driver in the Chooser, you can rename the Xerox icon or icons in the Extension folder to indicate the different versions.

Installing the Font Downloader

Copy the Font Downloader folder by dragging it to any location on the hard disk.

Setting up the Xerox driver to work with the printer

You should perform the procedures in this section in the following order to set up the Xerox driver to work with your printer:

• Selecting a printer
• Selecting the Xerox PPD file

Selecting a printer

Follow these steps to select a printer:

1. Select Chooser from the Apple Menu.

2. Click on the Xerox printer icon in the Chooser.

3. If you see a list of AppleTalk zones, click the zone where the printer is located.

4. Click the name of the printer you want to use.

5. If Active is not selected, click the [Active] button to activate the AppleTalk network.

6. Close the Chooser.

Selecting the Xerox PPD file

The Xerox PPD file is only required for a printer software v8.x configuration. You do not need to install this file if your printer driver is built from LaserWriter printer driver v7.x or earlier.

If your Xerox printer driver is configured from PSPrinter, the PSPrinter Installer places the Xerox printer PPD file in the Printer Descriptions folder inside the Extensions folder if you are using System 7.x, or in the System folder if you are using System 6.x. The Xerox printer PPD uses PPD format v4.1.

PPD file selection and configuration is part of the PSPrinter v8.x functions. This file contains information about the specific printer features. Click the [Setup] button after you select a printer in the Chooser to display the file selection.

Automatic selection

You can select a PPD file automatically by clicking the [Auto Setup] button in the Setup dialog.

With Auto Setup and proper connection to your printer, the PPD "Xerox printer v2013.112" or later file should be selected. After the driver is installed, you can copy additional PPD files obtained from other sources to the Printer Descriptions folder. If the expected PPD cannot be found, the driver displays a warning message. You should choose the Generic PPD or manually select a PPD file.

Manual selection   Follow these steps to manually select the Xerox PPD:

1. Click [More Choices] in the Setup dialog box.

2. Click [Select PPD].

   The driver displays a dialog box where you can select the PPD "Xerox printer v2013.112" or later version in the Printer Descriptions folder, as shown in the following illustrations. The following shows a setup dialog box with fewer choices:

Current Printer Description File (PPD) Selected:
"Generic"

[More Choices]   [Auto Setup]   [Cancel]   [OK]

The following shows a setup dialog box with more choices:

Current Printer Description File (PPD) Selected:
"Xerox 4220/4230/MRP"

[Select PPD...]   [Configure]   [Printer Info]   [Help]

[Fewer Choices]   [Auto Setup]   [Cancel]   [OK]
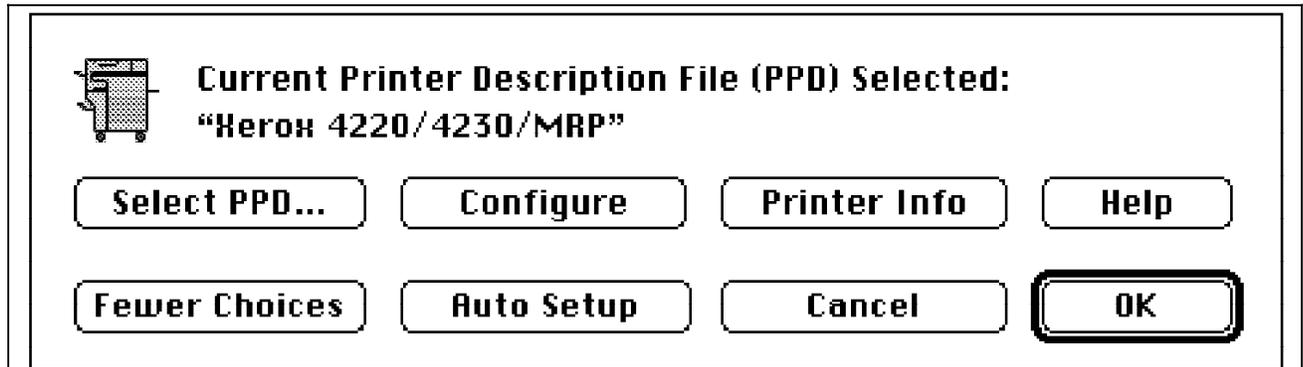
The following shows an example manual PPD file selection dialog box:

Select a PostScript™ Printer Description File:

▱ **Printer Descriptions** ▼

▱ **LaserWriter II NT**	▱ **irc1.0**
▱ **LaserWriter II NTX v47.0**	
▱ **LaserWriter II NTX v50.5**	Eject
▱ **LaserWriter II NTX v51.8**	Desktop
▱ **Xerox 4215/MRP**	
▱ **Xerox 4219/MRP**	Cancel
▱ **Xerox 4220/4230/MRP**	Use Generic
	Select

Printer Model:
Xerox 4220 LPS v2013.112
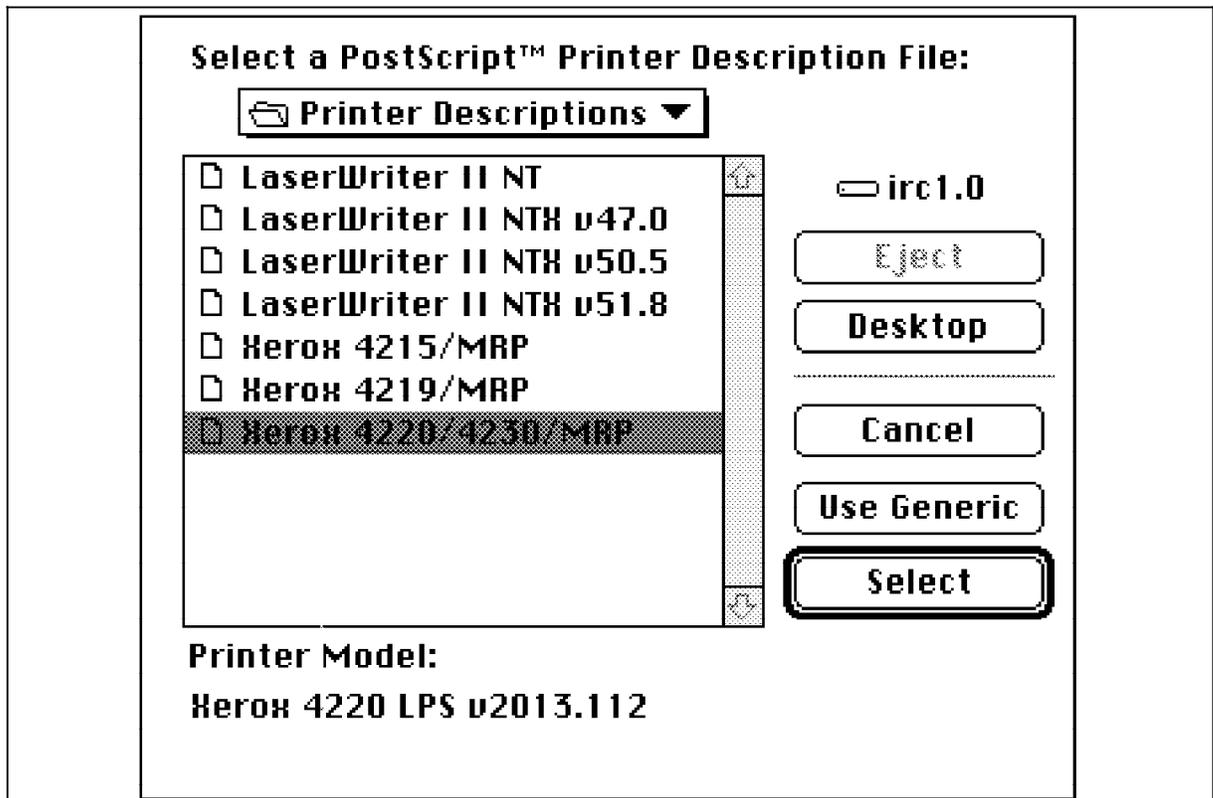
4. Click the [Configuration] button in the expanded Setup dialog box.

   The Installable Options dialog box displays, listing the installable features and options in their default setups.

Current Printer Description File (PPD) Selected:
"Xerox 4220/4230/MRP"

Installable Options:

Memory Configuration: 8 MB Total RAM ▼

High Capacity Feeder: Not Installed ▼

Engine Margin: 2 mm ▼

High Capacity Stacker: Not Installed ▼

Cancel   OK
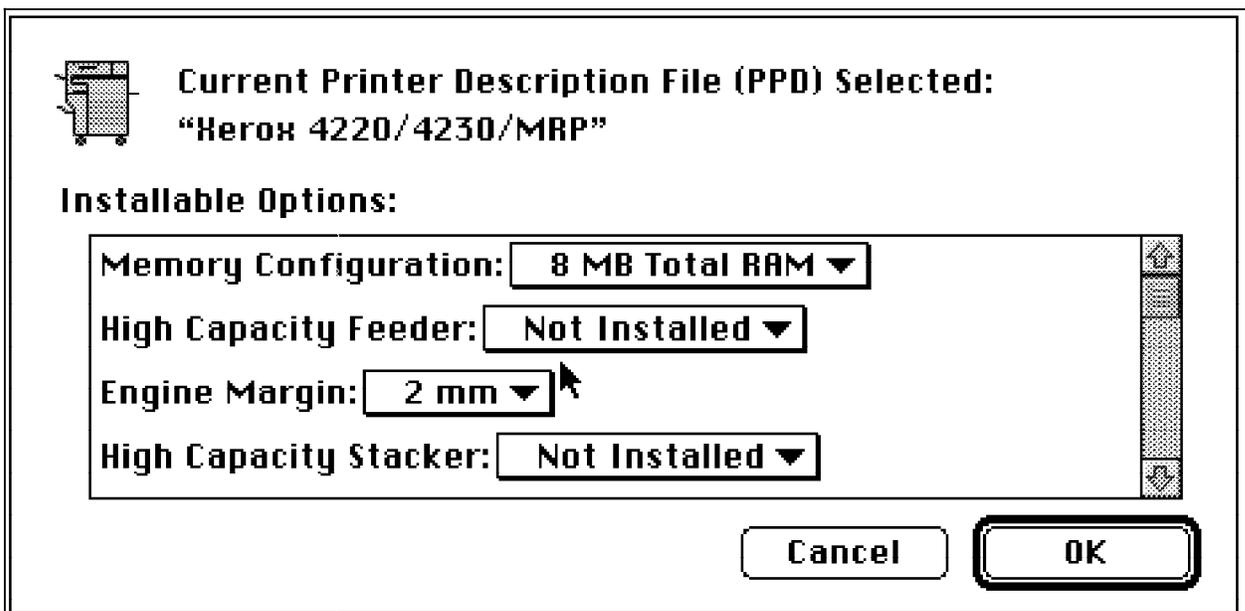
5. Select [OK] to confirm the settings (changed or unchanged) and return to the Setup dialog.

6. Select [Printer Info] to display the Printer Info dialog box.

Printer information is shown as a result of either the Auto Setup query or Printer Info Update.

Current Printer Description File (PPD) Selected: "Xerox 4220/4230/MRP"

Printer Information:

Printer Name: 4230/MRP
Zone: *
Product Name: XEROX 4230 LPS
PostScript™ Level: 2
PostScript™ Version: 2013.115
Resolution: 300 dpi

Update Info   **OK**
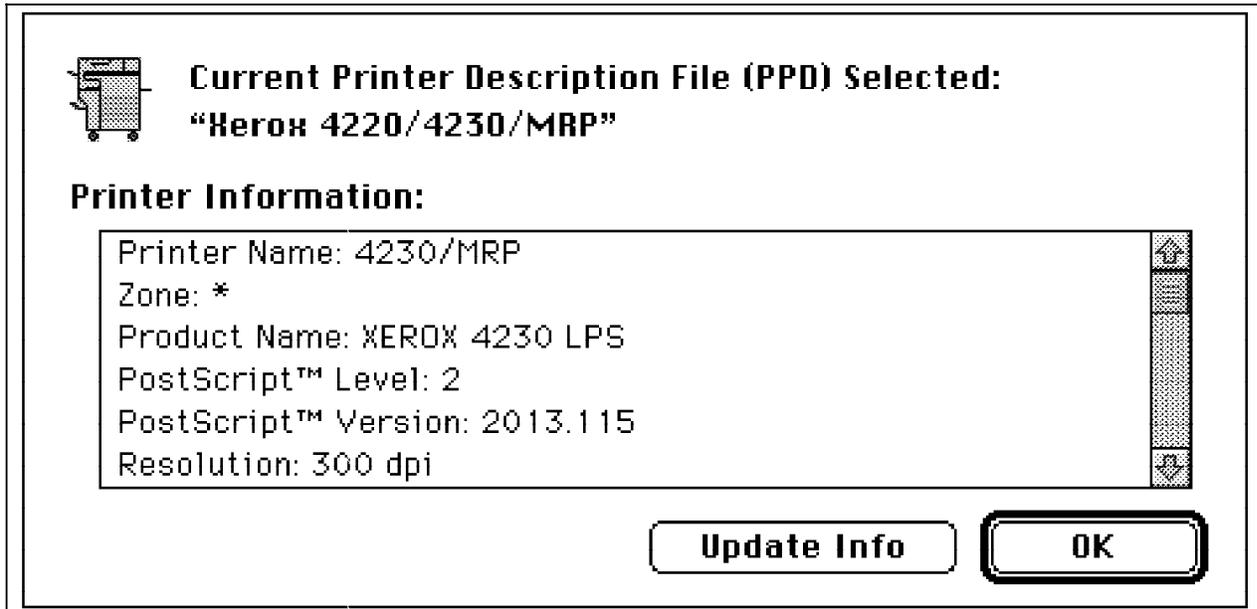
Printing documents

Once the Xerox driver is built, you can open a document in an application and specify the following features:

• Page Setup
• Print options

Page Setup

The Xerox Driver Builder v2.01 supports all of the PSPrinter v8.1.1 and LaserWriter v8.1.1 Page Setup features, including the following:

Print image   The print image shows the current size, arrangement, and appearance of the printed results. The outer solid rectangle represents the edge of the physical paper. The inner dotted rectangle shows the boundaries of the imageable areas. Click within the page image box to display the numerical dimensions of the page. Refer to figure 1-1.

Layout   You can select 1-up, 2-up, and 4-up options, as shown in figures 1-1 through 1-3.

Figure 1-1.   **Page Setup dialog box with page image, layout and orientation example (portrait, 1-up)**
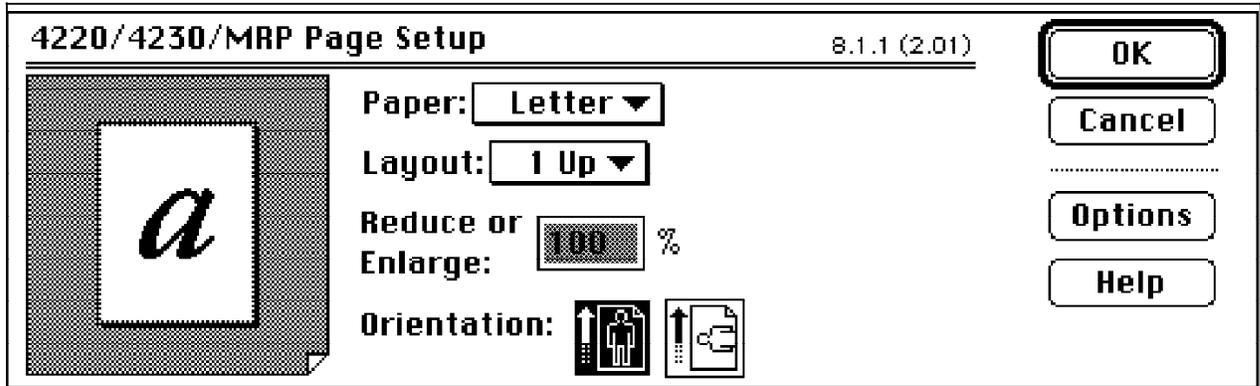
Figure 1-2.   **Page layout and orientation example (portrait, 2-up)**
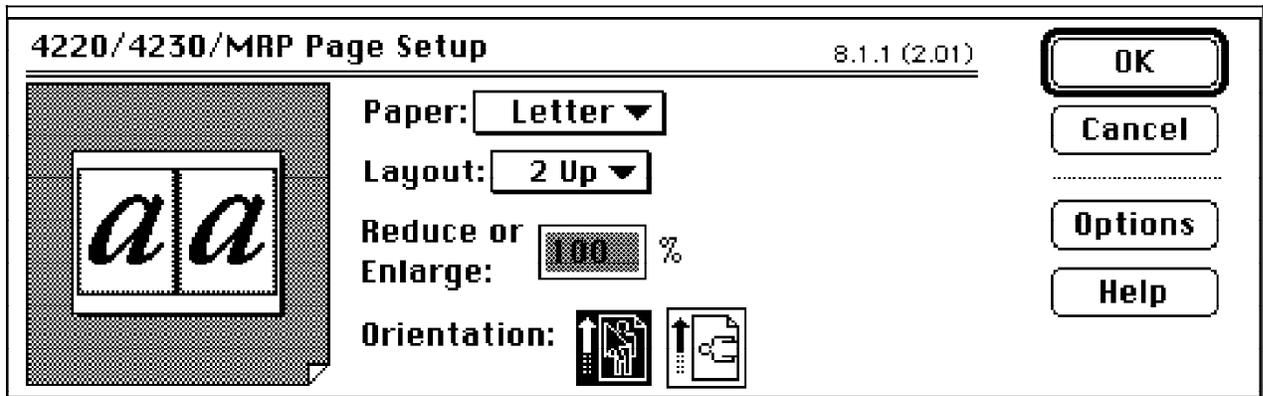
Figure 1-3.   **Page layout and orientation example (portrait, 4-up)**
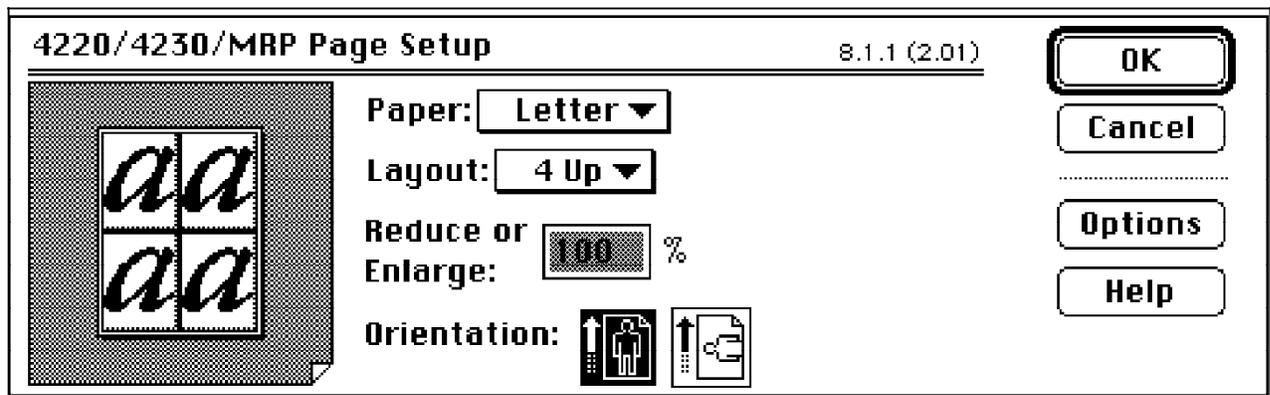
Reduce or enlarge   Scale factors range from 25 percent to 400 percent. Default scaling is 100 percent.

Orientation   Select from portrait and landscape.

Paper   The available paper sizes are the same as defined in the Xerox PPD. These include the 16 standard Xerox sizes in the smaller imageable area set, and the 16 standard Xerox sizes in the larger imageable area set. When the Engine Margin in the PPD configuration is set to two millimetres (the default), the smaller size set is used. When the Engine Margin is set to zero millimetres (mm), the larger size set is used. The larger sizes produce the "Edge to Edge" imageable areas, while the smaller sizes leave nonimageable areas of two mm along the edges.

N   **Note**: The printer's internal configuration for edge deletion (2mm or 0mm) should map the driver selection. Any edge deletion change on the printer should be done only by your service representative.

If the printer driver is built from LaserWriter v7.x or earlier, you can select only 6 LaserWriter sizes and 16 Xerox sizes (marked by an *). The Xerox sizes are equivalent to the larger imageable areas built for version 8.1.1.

Options   Other layout and formatting features include the following:

- Visual effects

  — Flip Horizontal
  — Flip Vertical
  — Invert Image.

- Printer options:

  — Substitute Fonts
  — Smooth Text
  — Smooth Graphics
  — Precision Bitmap Alignment
  — Larger Print Areas
  — Unlimited Downloadable Fonts in a Document.

These features are shown in figure 1-4.

Figure 1-4.   **Page Setup Options dialog box**

Figure 1-4. Page Setup Options dialog box
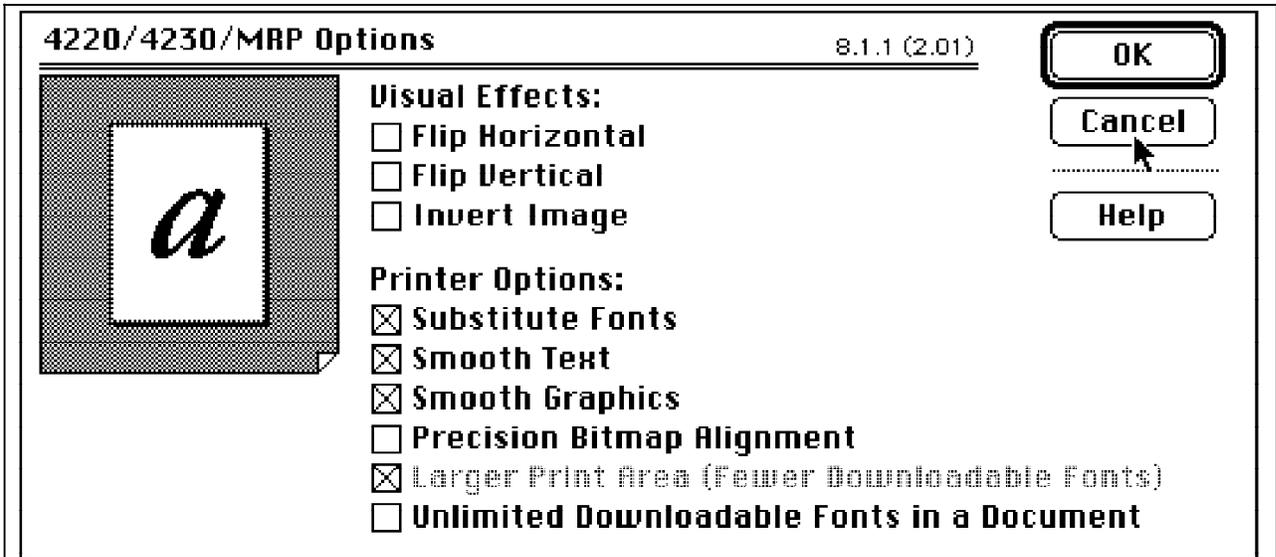
Print options

The selections in the Print dialog box define how the job should print, as shown in figure 1-5. You can select one of the following:

•   Standard options used by PSPrinter or LaserWriter 8
•   Xerox printer custom print options.

Figure 1-5.   **Example Print dialog box**

Figure 1-5. Example Print dialog box
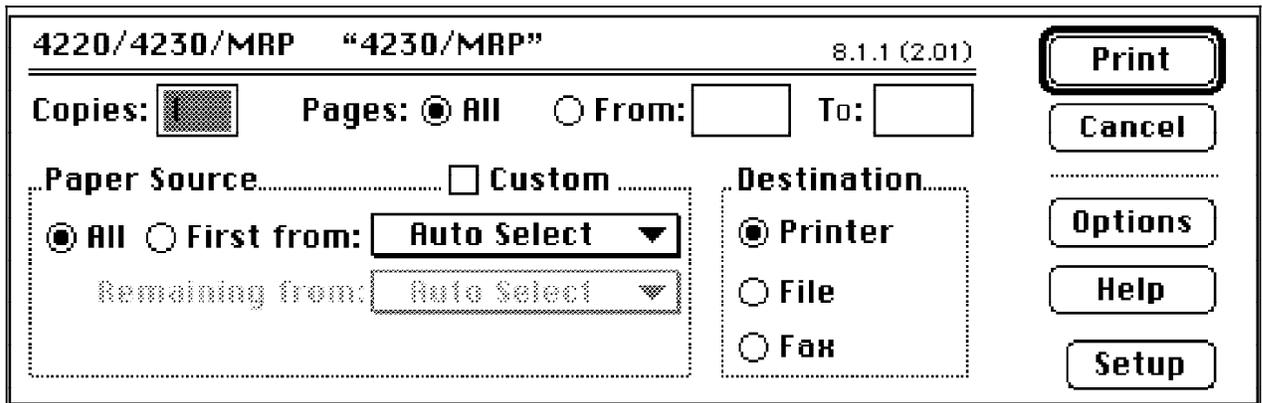
Standard options are used when the Custom checkbox is not selected. Click the [Options] button to display additional standard features. These features include the standard Print dialog box functions, and the options provided by the selected PPD, as shown in figure 1-6. Refer to the online help facility when selecting the standard features.

Figure 1-6.   **Example Print Options dialog box**
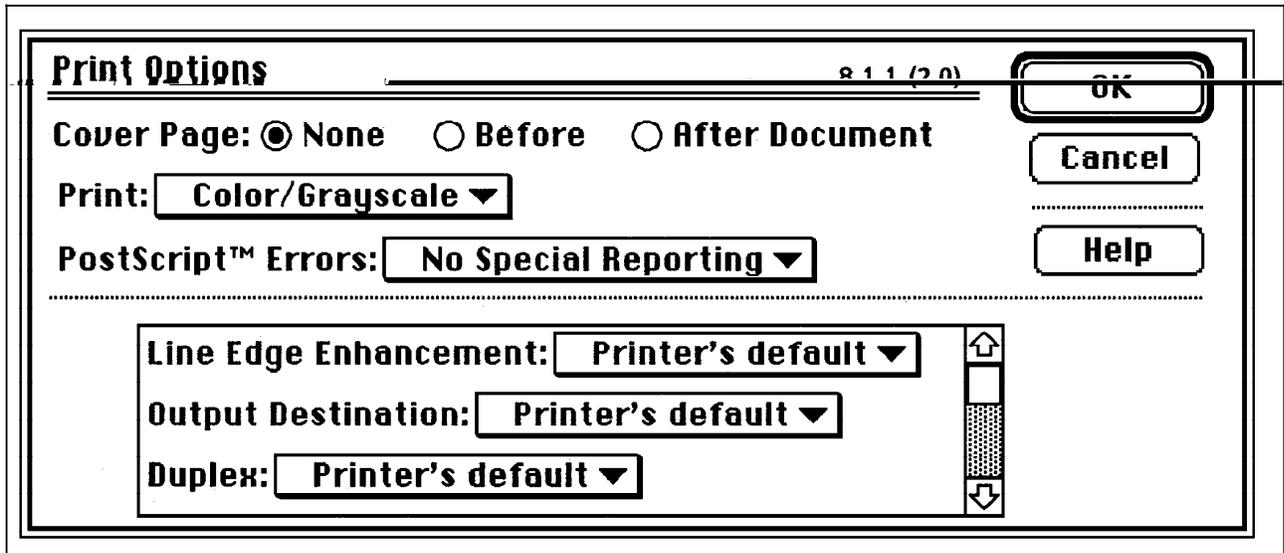
The custom print options provide more flexible input/output manipulation, selection by size, custom size configuration, saving and reuse of setup files, and so on. Click the Custom box to the right of Paper Source in the Print dialog box to disable the standard Paper Source selections and enable the custom print options, as shown in figure 1-7. Then click the [Setup] button to display the Custom Print Options dialog box, as shown in figure 1-8.

You can select the following features:

•   Multiple Input and Single Output
•   Paper Source selectable by Tray or By Size
•   File Settings
•   Duplex Options
•   Line Edge Enhancement
•   Tray 5 Page Size.

Figure 1-7.   **Selecting Custom print options**
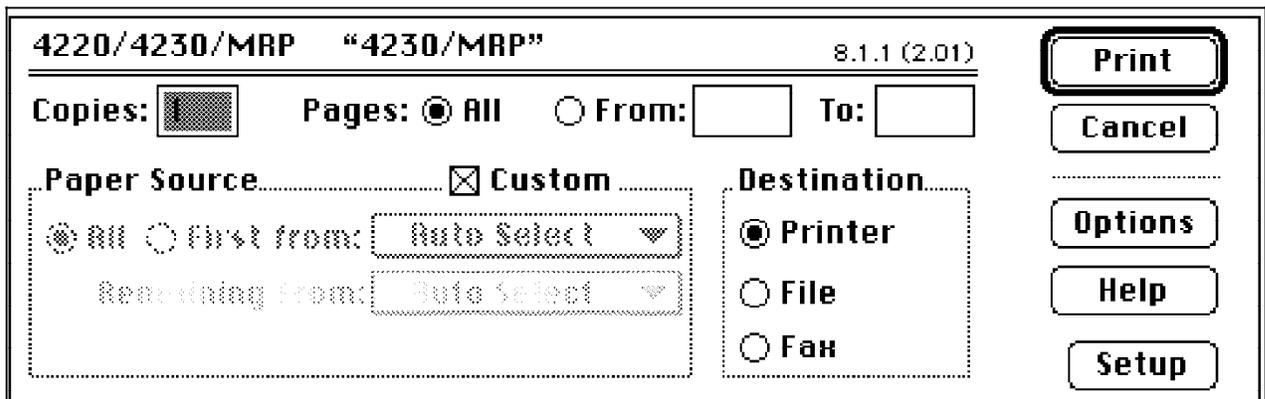
Figure 1-8. **Custom Print Options dialog box**
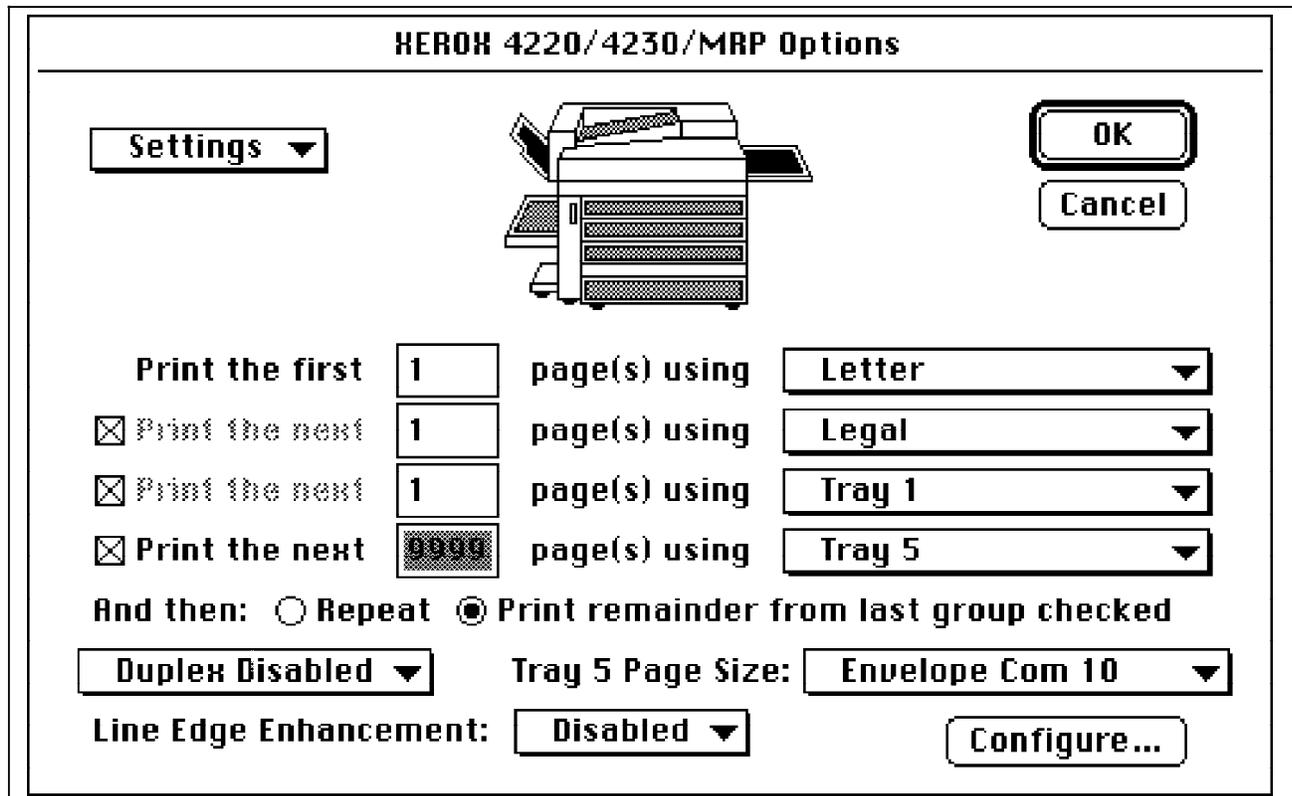
Refer to the "Selecting and using the Xerox driver" chapter for a description of each function.

When switching from standard to custom print options, make sure that the paper source default is Auto Select. The custom checkbox is not selectable when one of Trays 1 through 5 is selected.

N **Note**: You should leave all of the standard PPD features in the Print Options dialog box as "Printer's default" when you are using Xerox custom print options.

Configuration dialog

Refer to the "Selecting and using the Xerox driver" chapter for configuration details.

2. Selecting and using the Xerox driver

This chapter describes selecting a printer, and the required parameters for printing a document.

Selecting a printer

You must select the Xerox printer icon in the Chooser panel before you send a document to the printer for the first time. Follow these steps to select the Xerox printer:

1. Select the Chooser from the Apple menu.

2. Click on the Xerox printer icon in the Chooser panel.

   N   **Note**: You may have to scroll down to see this icon, since printer icons are listed alphabetically in the Chooser.

3. If you see a list of AppleTalk zones, click on the zone where the Xerox printer is located.

4. Select the appropriate printer by clicking on its name.

5. If you see a message stating that AppleTalk is required, click [OK], then click the [Active] button in the Chooser.

   This ensures that AppleTalk is active, so that the driver can identify the printer.

6. Close the Chooser by clicking the small box in the upper left corner of the window.

Renaming a printer

The factory default is the name of the printer, for example, "Xerox MRP." You should rename your printer to avoid having printers with the same name on the AppleTalk network. You can use Macintosh utilities to rename a printer, for example, The Namer or the LaserWriter Utility.

Printing documents

Once the Xerox Driver Builder (Xerox driver) is built, you can open a document in an application and select the Xerox page setup and print options. You can also select these features from the Finder by choosing Print Window, Print Desktop, or Print. Refer to the *Macintosh User's Guide* for detailed instructions on printing.

Page Setup

Before you print a job, you can access the Page Setup dialog box in your application software and set up the paper size formats and page orientation and layout of your document.

To access the Page Setup dialog box, select Page Setup from the File menu. The Page Setup dialog box for your printer appears, as shown in figure 2-1.

Figure 2-1. **Printer dialog box example**
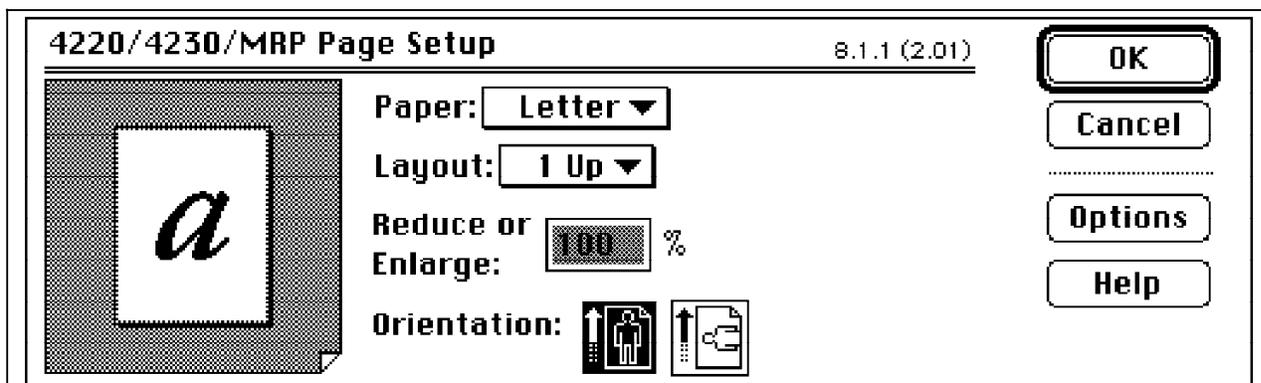
To exit this dialog box without saving your selections, click [Cancel]. To save all selections, click [OK].

Page Size Setup

Your printer Page Setup options are the same as in the LaserWriter Page Setup. However, if you are using a Xerox MRP, the paper size selection in this dialog is unique. Six of the LaserWriter sizes are selectable. This allows documents created by the LaserWriter driver to be ported easily.

All of the standard MRP paper sizes shown in the Paper Size pop-up menu are identified by asterisks to the left of the paper size descriptions. Each MRP paper size provides a larger printable area than the corresponding LaserWriter sizes. Sixteen MRP sizes (including envelopes) are available from the menu. Table 2-1 shows the exact dimensions for each size.

When custom sizes are defined for the print job, select the next larger available size format in Page Setup to maximize the page length (usually defined by page breaks in an application software). For more information, refer to the section "Bringing up the Configuration dialog box," later in this chapter.

When setting up envelopes, use one of the following options:

• When printing envelopes alone—Select landscape and the required envelope size to create the exact printable area and page break suitable for the specified envelope size.

• When printing letters and envelopes in the same job—Select portrait and a paper size larger than the required envelope (such as letter size) to provide the maximum printable area and page length for the letter. At the same time, select Tray 5 Page Size from the print dialog box for the required envelope size, as shown in figure 2-4.

Ν **Note**: In both cases, efficient envelope printing requires the correct printer setup. To guarantee the correct envelope size and tray selection, and avoid any unnecessary jamming that may be caused by using the wrong media in tray 5, use the control panel to enable the Paper Loading Pause option at the Printer Setup menu. This displays an operator message in case of media mismatch, and you are prompted to feed tray 5 with the right size. When the Paper Loading Pause is disabled (the default), enter tray 5 input as the correct envelope size at the control panel.

Refer to the "Envelopes" appendix for helpful hints on setting up and printing envelope sizes.

Table 2-1. **Xerox printer standard and custom page sizes**

Page name	Page size in inches	Page size in millimetres
Postcard	3.5 x 5.5	88.9 x 139.7
Statement	5.5 x 8.5	139.7 x 215.9
Executive/ Monarch	7.25 x 10.5	184.2 x 266.7
Letter	8.5 x 11	215.9 x 279.4
Legal	8.5 x 14	215.9 x 355.6
Ledger	11 x 17	279.4 x 431.8
A6	4.13 x 5.83	105 x 148
A5	5.83 x 8.27	148 x 210
ISO B5	6.93 x 9.84	176 x 250
A4	8.27 x 11.69	210 x 297
Folio	8.5 x 13	215.9 x 330.2
A3	11.69 x 16.54	297 x 420
Custom paper	3.25 x 4.5 to 11.70 x 17	82.6 x 114.3 to 297.2 x 431.8
Envelope Monarch	3.875 x 7.5	98.4 x 190.5
Envelope Commercial 10	4.125 x 9.5	104.8 x 241.3
Envelope DL	4.33 x 8.66	110 x 220
Envelope C5	6.38 x 9.02	162 x 229
Custom envelope	3.85 x 3.85 to 7.00 x 10.20	97.8 x 97.8 to 177.8 x 259.8

Page Setup options

Click on [Options] in the Page Setup dialog box to display the Options menu, as shown in figure 2-2. Check the appropriate number of items and click [OK] to save the selections.

Figure 2-2.   **Page Setup Options dialog box**
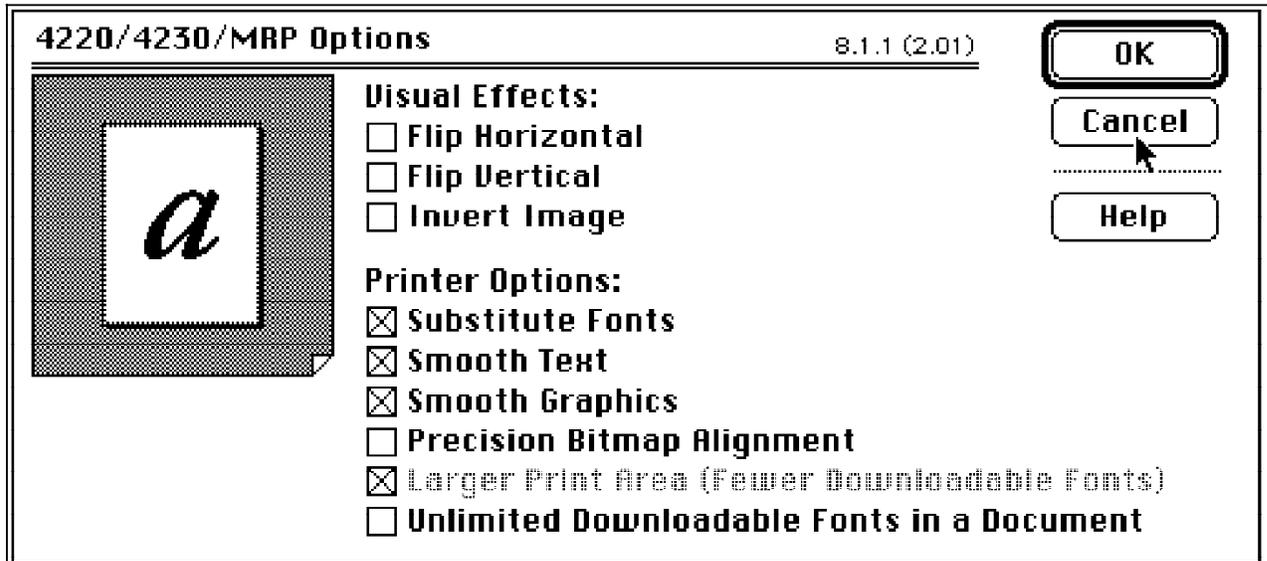
Printing

You can access the Print dialog from within any application software. The selections you make in this dialog define how the job will print. General features are provided in the top level dialog box, as shown in figure 2-3. When you use the MRP print options, always select Custom as the paper source.

N   **Note**: If you are using printer driver v7.2, a Custom checkbox is shown instead of a Custom radio button, as shown in figure 2-4.

To display the Print dialog box, select Print from the File menu. When the Print dialog box appears, make sure that all required options for the document are selected.

Figure 2-3. **Print dialog box example**
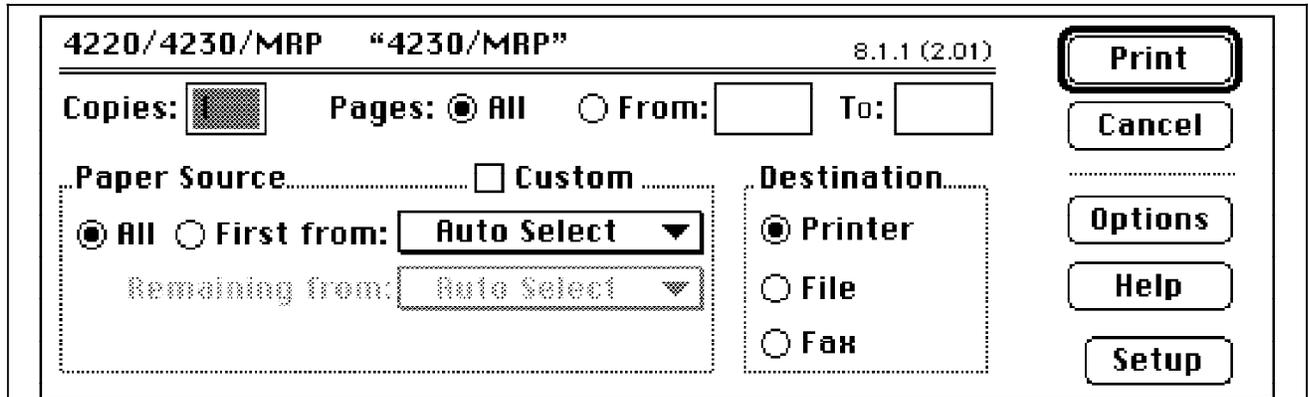
N **Note**: Some software application programs add their own special features to the Print dialog box.

Figure 2-4. **Print dialog box example**
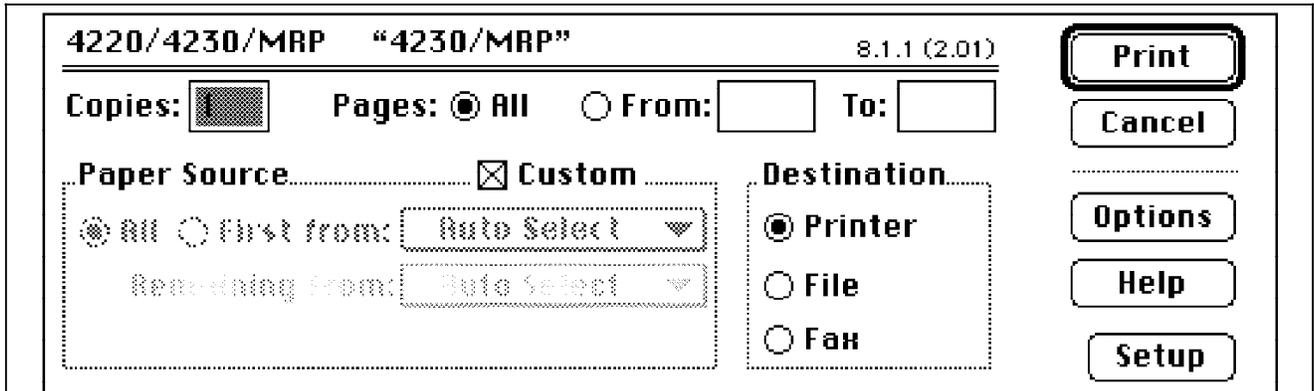
Print options

Click on [Setup] in the Print dialog box to display the Options dialog box, as shown in figure 2-5. You can do the following from the Options dialog box:

• Select multiple input trays and one output tray

— Select input paper trays for different portions of the job

— Select one output tray for the job

— Specify up to four tray changes, which may optionally repeat

— Paper change is determined by tray selection or paper size

• Select the setup options

• Specify the duplex option

• Specify the line edge enhancement

• Set tray 5 size options

• Display the Configuration menu

Figure 2-5. **Options dialog box example**
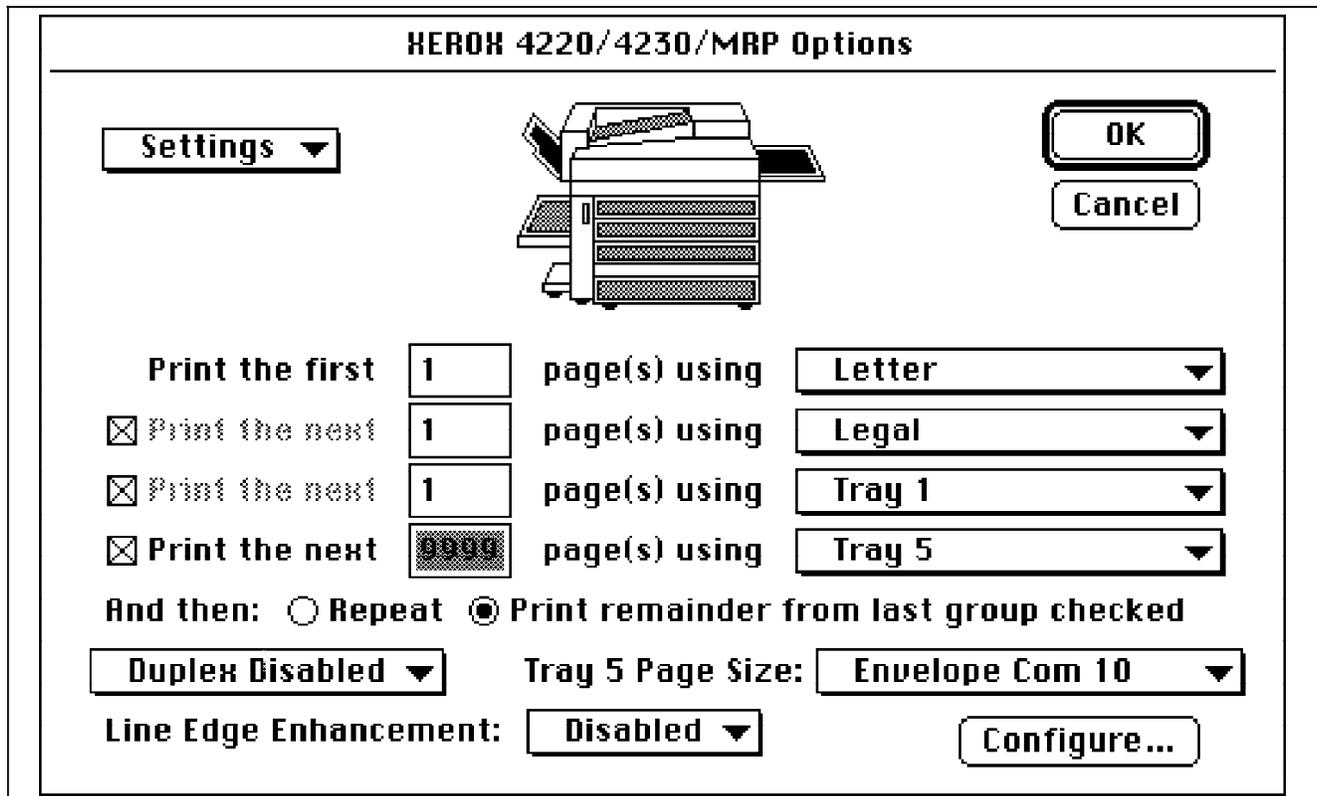
Selecting multiple input trays and one output tray

You use the Options menu to set the number of pages to be printed from each input tray. When the insertion point is in a page count field, the picture of the printer at the top of the menu shows the tray selected for that field.

For example, you can edit the page count fields to print the first four pages from tray 1, the next three pages from tray 2, and the final page (an envelope) from tray 5.

You can select both input trays and output trays by clicking on any of the trays in the picture of the printer. You can select multiple input trays for the same job, but only one output destination is allowed for the job. The text in the box to the right of the page count field reflects your input selection.

Clicking any of the input selection boxes displays a pop-up menu, from which you can select the input source by tray or by size. The selectable trays are tray 1 through tray 5. The selectable sizes include the 16 standard sizes and the four custom sizes, as shown in table 2-1. The four custom sizes, defined in the configuration menu, are listed at the end of the input source pop-up menu. These are equivalent to the "other" paper and envelope sizes entered at the control panel for trays 1, 2, 3, and 5.

Page changes not marked with an "X" are inactive; clicking on their page count field does nothing. Press the **Tab** key to skip them.

You can specify up to four paper changes, which may repeat if you select the Repeat radio button (optional). When you select "Print remainder from last group checked," the final page count changes to 9999.

Some conflicts may arise when selecting paper trays and sizes. However, all conflicting selections are corrected by the driver before a print job is sent.

Consider the following when selecting input trays and an output tray:

• Paper feed capabilities can be restricted by paper size. Refer to tables 2-3 through 2-5 for details.

• Tray 5 can only output to the face-up tray. Any illegal output selection for tray 5 input defaults to the face-up tray.

• Table 2-2 lists the page size restrictions for the high-capacity stacker. When the high-capacity stacker is selected, the job can output to this location only when all sizes selected in the same job belong to size group A. If any paper size in the job belongs to size group B and no group C size is selected, the entire job is redirected to the top tray. If the job contains any size that falls in the group C category, the entire job is redirected to the face-up tray.

Table 2-2.   **High capacity stacker size restrictions**

Group A	**Group B**	**Group C**
Letter	Folio	Postcard
A4	Legal	A6
A5	A3	Envelope Monarch
Executive	Ledger	Envelope Com 10
ISO B5		Envelope DL
Statement		Envelope C5
		*Custom sizes which have to use tray 5

Table 2-3.   **Paper output destinations**

_____

_____

_____

_____

_____

_____

*SEF = Short-edge feed   LEF = Long-edge feed   HCS = High-capacity stacker

Table 2-4.   **Paper input sources**

Paper size in inches	Trays 1 to 3	Tray 4 (HCF)*	Tray 5 (MSB)*
Statement 5.5 x 8.5	X		X
Letter 8.5 x 11	X	X	X
Executive 7.25 x 10.5	X		X
Legal 8.5 x 14	X	X	X
Ledger 11 x 17	X		X
A5 5.83 x 8.27	X		X
A4 8.27 x 11.69	X	X	X
ISO B5 6.93 x 9.84	X		X
Folio 8.5 x 13	X		X
A3 11.69 x 16.54	X		X
Postcard 3.5 x 5.5			X
A6 Postcard 4.13 x 5.83			X
Custom paper size	X		X
Envelope/Custom envelope size			X

*HCF = High capacity feeder   MSB = Multi-sheet bypass tray

N   **Note**: Paper from tray 5 cannot be fed through the duplex path
and can only be output to the face-up tray.

Table 2-5. **Input source capabilities**

Input supply	Capacity	Paper size range in inches	Paper weight range
Tray 1	250 sheets	5.35 min. short edge 5.95 min. long edge 11. 70 max. short edge 17.00 max. long edge	16 pound/60 gsm to 24 pound/90 gsm
Tray 2	250 sheets	5.35 min. short edge 5.95 min. long edge 11. 70 max. short edge 17.00 max. long edge	16 pound/60 gsm to 24 pound/90 gsm
Tray 3	250 sheets	5.35 min. short edge 5.95 min. long edge 11. 70 max. short edge 17.00 max. long edge	16 pound/60 gsm to 24 pound/90 gsm
Tray 5	50 sheets paper	3.25 min. short edge 4.50 min. long edge 11. 70 max. short edge 17.00 max. long edge No duplex from this tray	16 pound/60 gsm to 110 pound Ind/200 gsm and special materials
Tray 5	50 mm envelope stack	3.85 min. short edge 3,85 min. long edge 7. 00 max. short edge 10.20 max. long edge	16 pound/60 gsm to 110 pound Ind/200 gsm and special materials
Tray 4 (option)	1,000 sheets	8.5 x 11 long edge feed 8.27 x 11.69 long edge feed 8.5 x 14 short edge feed	16 pound/60 gsm to 24 pound/90 gsm

N **Note**: Capacity is based on Baseline Papers: 4024 DP 20 pound bond (U.S. and Canada)/A4 80 gsm (international).

Selecting the setup options

The Settings pop-up menu contains the following options:

- Save Setup—Displays the standard file saving dialog, showing only the previously-saved setups, and allows you to save the current setup. If you save the setup to the same name as an existing setup, you are prompted to replace the existing setup.

- Use A Setup—Displays the standard file opening dialog, showing only the previously-saved setups. Selecting a setup causes the current settings to reflect those of the selected setup.

- Delete Setup—Lets you select a previously-saved setup and delete it.

Selecting the duplex option

The duplex selection dialog box provides a pop-up menu for duplex options, which include the following:

- Regular Duplex—Produces output that is suitable for binding on the left or right.

- Tumble Duplex—Produces output that is suitable for binding on the top or bottom.

- Duplex Disabled—Prints on only one side of a physical page.

Tray 5 does not support duplex printing. When selecting duplex and tray 5, the duplex selection changes to Duplex Disabled.

When selecting any size with a slow scan dimension shorter than the duplex slow scan limit (151 mm), duplex selections default to Duplex Disabled.

N **Note**: Slow scan is the paper feed movement from right to left. Slow scan dimension can be long edge or short edge.

Selecting the line edge enhancement

The line edge enhancement improves the document quality through the resizing and repositioning of pixels, which smoothes the jagged edges of text and graphics. The following options are available:

- Dark
- Medium
- Light
- Off

Tray 5 size setup

Tray 5 page size options provide the correct format for the job printed from tray 5. The available sizes in the pop-up menu include all the standard sizes, equivalent to those marked by asterisks in the Page Setup dialog, and four custom sizes defined in the Configuration dialog.

When printing postcard, A6, or any of the envelope sizes, make sure you set up tray 5 to the required size. This is because tray 5 is the only input source available for these paper and envelope sizes.

N **Note**: To efficiently use tray 5 for envelopes, A6, and postcard sizes, use the printer control panel to enable the Paper Loading Pause option at the Printer Setup menu. When Paper Loading Pause is disabled (the default), and tray 5 is not set up to the required size, you are not prompted if a size mismatch occurs. The printer may draw any paper available in tray 5 when tray 5 is selected, or search for the closest size (usually the next larger available size) in some other tray when the requested size is not found. If Paper Loading Pause cannot be enabled for system administration, make sure that the requested size is selected at the control panel as tray 5 input.

Displaying the Configuration dialog box

Click on the [Configure] button to display the Configuration dialog box, as shown in figure 2-6. This dialog box provides options that are not configured with the Setup dialog box. You can define four custom page and envelope sizes. If you make your selection and click on the [OK] button and the selected page size is larger or smaller than that allowed, the closest allowable size is substituted. The following ranges are available:

- For paper: 3.25 x 4.5 inches to 11.7 x 17 inches (82 x 114 mm to 297.2 x 431.8 mm)

- For envelopes: 3.85 x 3.85 inches to 7.0 x 10.2 inches (97.8 x 97.8 mm to 177.8 x 259.8 mm)

- For custom paper sizes that are supported by tray 5, the following restrictions also apply:

  — Paper narrower than 4.5 inches in the short dimension cannot be longer than 8.5 inches.

  — Paper between 4.5 inches and 5.35 inches in the short dimension cannot be longer than 11.7 inches.

N **Note**: When a paper size larger than 11 x 17 inches is entered, for example, 11.7 x 17 inches, the only available input source is tray 5, since sizes larger than 11 x 17 inches do not physically fit into trays 1 through 3. Duplex selection for these sizes is also disabled because tray 5 does not support duplex.

Page size entries in both inches and millimetres are accepted. Select the inches or mm radio button to set your preference.

Selecting tray 4 (high-capacity feeder) and the high-capacity stacker determines the availability of either or both of these features in the Options dialog box. When you turn on tray 4 or the high-capacity stacker, the status remains across jobs and upon system restart until you turn the option off.

When tray 4 is enabled but is not physically installed, the selected pages print from tray 1.

When the high-capacity stacker is enabled but is not installed, the output is redirected to the top tray.

Figure 2-6.   **Configuration dialog box example**

This 4220/4230/MRP printer has the following options:

☒ **Tray 4**   ┌──────────┐
                                                      │   **OK**   │
☒ **High Capacity Stacker**   └──────────┘
                                                      ┌──────────┐
Custom Page Sizes: ◉ **Inches** ○ **mm**   │ **Cancel** │
                                                      └──────────┘

	Width	**Height**	
1	8	3.85	☒ **Envelope**
2	8.5	11	☐ **Envelope**
3	7	10	☐ **Envelope**
4	11	17	☐ **Envelope**

3. Using the Font Downloader

This chapter contains information about using the Font Downloader to download fonts.

Available fonts

The following fonts are internal:

- AvantGarde-Book, AvantGarde-BookOblique, AvantGarde-Demi, AvantGarde-DemiOblique

- Bookman-Demi, Bookman-DemiItalic, Bookman-Light, Bookman-LightItalic

- Courier, Courier-Bold, Courier-Oblique, Courier-BoldOblique

- Helvetica, Helvetica-Bold, Helvetica-Oblique, Helvetica-BoldOblique

- Helvetica-Narrow, Helvetica-Narrow-Bold, Helvetica-Narrow-Oblique, Helvetica-Narrow-BoldOblique

- NewCenturySchlbk-Roman, NewCenturySchlbk-Bold, NewCenturySchlbk-Italic, NewCenturySchlbk-BoldItalic

- Palatino-Roman, Palatino-Bold, Palatino-Italic, Palatino-BoldItalic

- Symbol

- Times-Roman, Times-Bold, Times-Italic, Times-BoldItalic

- ZapfChancery-MediumItalic

- ZapfDingbats

To use outline fonts that are not internal, you must download the fonts to the printer you have selected from the Chooser.

Your system usually automatically transfers fonts to the printer each time you print. If you want to speed up the printing process, you can download fonts manually to one of the following:

- The optional high-capacity hard drive (permanent until deleted)

- RAM (permanent until the printer is switched off)

- The optional programmable font module (permanent until cleared or erased)

You can download as many fonts as the printer memory, programmable font module, or hard drive space allows.

If you need to change your printer password to download fonts manually, refer to the "Changing passwords" section, later in this chapter.

Downloading fonts

Once you have installed the files from the Xerox Support Software for Macintosh diskettes to your system, additional selections are available on the dialog boxes in the Font Downloader program. For example, to display a list of storage devices for your printer, click on Device. Devices that are not installed are not listed in the pop-up menu.

Follow these steps to download fonts to a printer storage device:

1. Open the Font Downloader folder.

2. Double-click on the Font Downloader Application icon to open the application.

3. From the File menu, select Download Font.

   A dialog box appears. If you have font folders in the current folder, one or more font folders display in the left scroll box.

```
Outline Fonts Available:            Outline Fonts Selected:

  🗁 Extensions ▼                Device    Disk 0

  🗋 CouriBol          ⇧      ⊂ Mac#3HD   HelveBolObl       ⇧
  🗋 CouriBolObl                          HelveObl
  🗋 CouriObl                   ┌─────────┐
  🗋 Helve                      │  Eject  │
  🗋 HelveBol                   └─────────┘
  🗋 HelveBolObl                ┌─────────┐
  🗋 HelveObl                   │ Desktop │
  🗋 MTExt                      └─────────┘
  🗀 Printer Descriptions       ┌─────────┐
  🗋 Symbo                      │   Add   │
  🗋 TimesBol                   └─────────┘
  🗋 TimesBolIta                ┌─────────┐
  🗋 TimesIta                   │ Add All │
  🗋 TimesRom                   └─────────┘
  🗀 untitled folder   ⇩        ┌─────────┐
                               │ Remove  │
                               └─────────┘

                               ┌─────────┐
                               │ Cancel  │
                               └─────────┘
                               ┌─────────┐
                               │Download │
                               └─────────┘
```
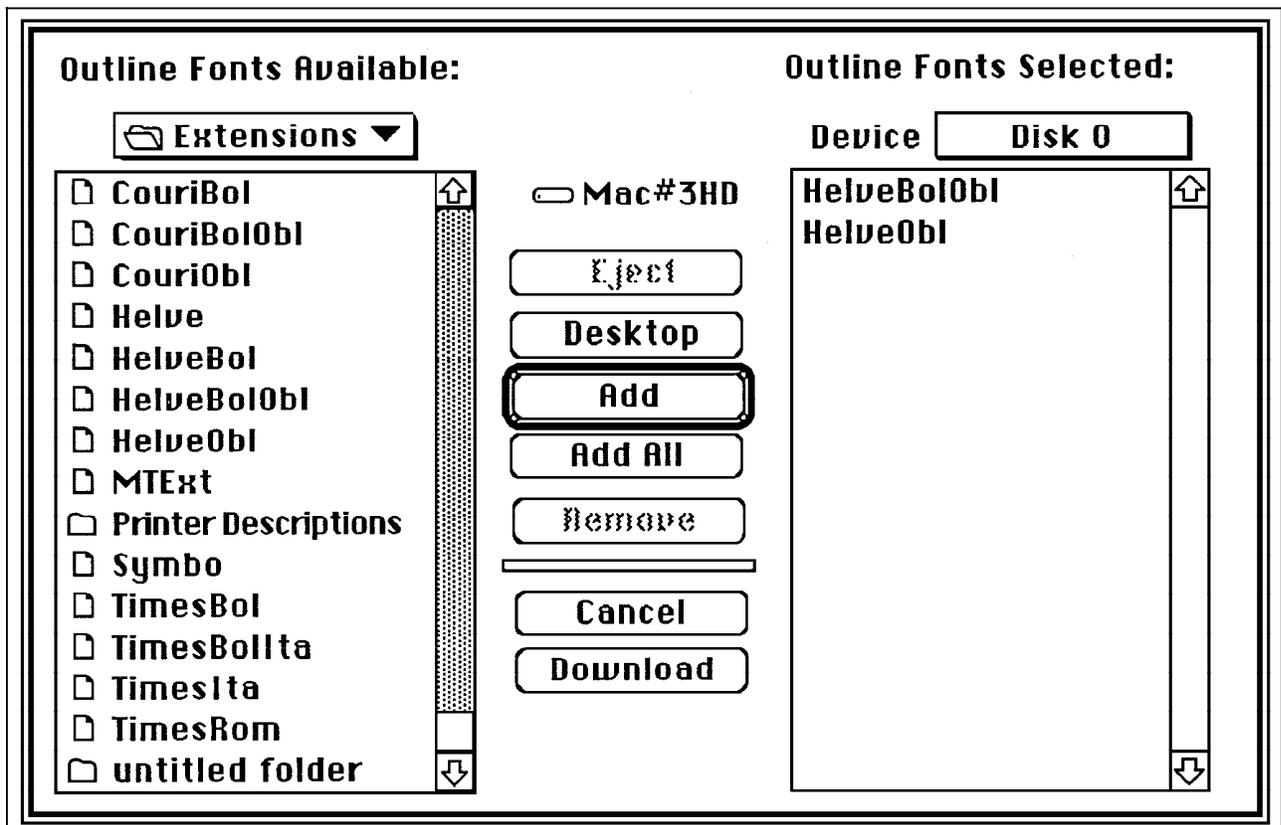
If your font folders are located elsewhere, open the folder where your fonts are stored by clicking on the correct folder in the folder pop-up list box.

4. Open the font folder that contains the fonts.

5. Select a font to download, and click the [Add] button.

   To select more fonts, repeat steps 4 and 5. To select all the font files in the folder, click the [Add All] button. The selected fonts appear in the right scroll box.

N   **Note**: To remove a font from the right scroll box, click the font (or hold down the **Shift** key and click to select several fonts), and click the [Remove] button.

6. Select an available storage device. The Device pop-up menu above the right scroll box lists all available printer storage devices.

7. To download the fonts manually to a storage device, select one of the following:

    •   Memory—Downloads to RAM.

    •   Cartridge 1—Downloads to the programmable font module.

    •   Disk 0—Downloads to the hard drive.

8. Click the [Download] button.

    A message appears indicating that the fonts are being downloaded to the printer.

9. Select Quit from the File menu when the download is complete.

Changing passwords

When your network administrator changes your network printer password, the Font Downloader cannot download fonts or PostScript files to that printer. If this happens, you need to use the Use Different Password command to tell the Font Downloader the new password.

Follow these steps to enter your printer password:

1. Open the Font Downloader.

2. Choose Use Different Password from the Special menu.

    A dialog box displays the function of the printer password and refers you to the *PostScript Language Reference Manual* for details.

3. Click [OK].

    The New Password dialog box appears.

4. Enter the new password in the text box and click [OK].

Managing fonts on your printer

The Font Downloader provides printer management features that allow you to perform the following tasks:

- List downloaded fonts
- Delete downloaded fonts
- Check the printer status
- Download PostScript programs to the printer

Listing downloaded fonts

Follow these steps to view the fonts that were downloaded to your printer before downloading additional fonts:

1. Open the Font Downloader.

2. Select Printer Font Directory from the Special menu.

   The Printer Font Folder dialog box appears with the [Screen Radio] button selected.

3. To view the fonts on-screen, click [OK]. To print the list, click the Printer radio button, then click [OK].

Deleting downloaded fonts

There are three methods of deleting (erasing) downloaded fonts. Follow the procedure that is appropriate for your printer configuration.

Fonts stored in printer memory (RAM)

Do one of the following to delete all of the fonts stored in RAM:

- Restart the printer by turning the printer power switch off, then on again.

- Select Restart Printer from the Special menu in the Font Downloader.

Fonts stored on the printer hard drive

Follow these steps to delete fonts from the printer hard drive:

1. Open the Font Downloader.

2. Select Printer Font Directory from the Special menu.

3. Click [OK] to display the Font Directory dialog box.

   The scroll box displays all the fonts installed in the currently selected printer device.

Font Directory on "VENUS1":

```
AGOldFace-Outline
Barmeno-ExtraBold
Bellevue
BiffoMT
Blackoak
Bodoni-PosterCompressed
CastellarMT
Colossalis-Bold
Copperplate-ThirtyThreeBC
Garamond-Light
Garamond-LightItalic
Lithos-Bold
```

Available memory: 1091 kbytes
Available disk space: 1050416 bytes

[OK]   [Delete]   Device [Disk 0]
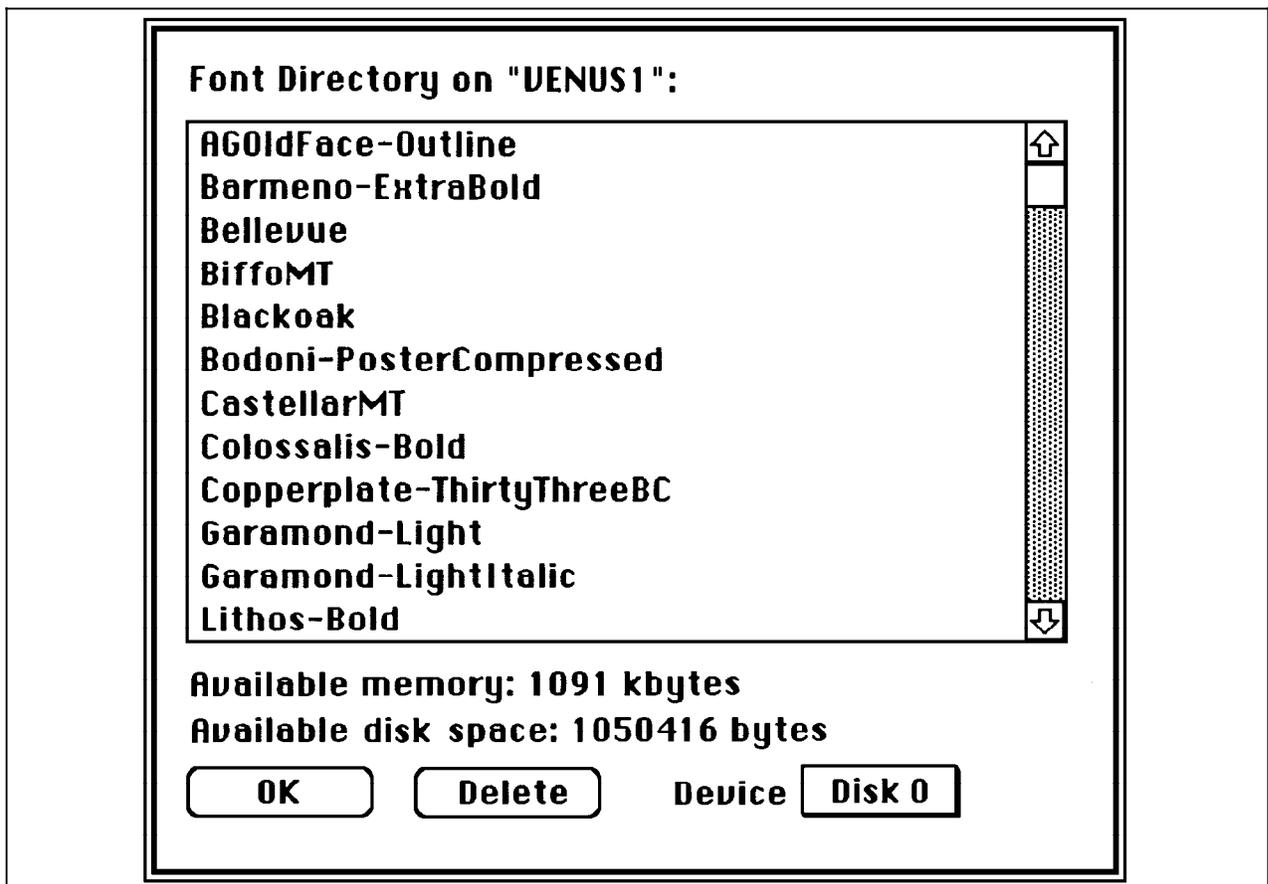
4. Select Disk 0 from the device pop-up menu, if it is not the default selection.

   The amount of available RAM and hard drive space is displayed below the scroll box in K-bytes.

5. Select the fonts you want to delete from the list in the scroll box and click the [Delete] button.

N **Note**: To select multiple contiguous fonts, hold down the Shift key and click. To select multiple non-contiguous fonts, hold down the command key and click.

6. Click [OK] when you are finished.

Fonts stored on the programmable font module

You should not delete fonts from the programmable font module. This removes access to the font file but does not reclaim the memory space from the font module. When clearing fonts in the font module, download the PostScript CLEAR PFM file to reinitialize the font module and create a new file system.

N **Note**: Delete has no effect if fonts are not installed.

Checking the printer status

Follow these steps to check the availability of the printer you are using:

1. Select Printer Status from the Special menu in the Font Downloader.

   The Printer Status dialog box reports the printer status. "Idle" indicates that the printer is available to print or accept a new font. "Busy," "Printing," or "Initializing" indicates that the printer is processing a job.

2. Click [OK] when you are done.

Clearing the font cache

The font cache in the RAM stores the rasterized sizes. This feature enables your document to be printed faster because it does not need to recreate rasterized fonts. If too many fonts are downloaded and the font cache becomes full, the older, least-used rasterized fonts are removed automatically.

Not enough space for the font cache affects your printer performance. Your document may take an unusually long time to print. To improve your printer performance, use the Clear Font Cache command from the Special menu. Clearing the font cache deletes all instances of previously cached fonts. This results in the need to cache the font again, and invokes a printer restart.

Downloading PostScript programs to the printer

The following PostScript programs can be downloaded to the printer:

- A custom application or file
- A file that clears the programmable font module.

Downloading a PostScript file

You can use the Font Downloader application to download the following to the interpreter for processing and printing:

- A custom application

- A file written in the PostScript language that contains PostScript language fonts

You must download the outline fonts manually before you download the PostScript language file. The PostScript language file is saved as a text-only file before it is printed.

Clearing the programmable font module

Follow these steps to clear (erase) the programmable font module in the printer:

1. Open the Font Downloader application.

2. Select Download PostScript File from the File menu.

The Download PostScript File dialog box lists the text files on the current drive.

3. Select the CLEAR PFM file from the Font Downloader folder.

4. Click the [Download] button.

   After a few minutes, a message displays indicating that the file was downloaded successfully.

5. Click [OK].

6. Select Quit from the File menu.

AppleTalk Print Language setup for the Font Downloader

To use the Font Downloader on a Macintosh system, you need to set the AppleTalk Print Language to PostScript mode (AppleTalk) from the printer control panel. The Font Downloader does not function correctly in any other setting, because this utility sends PostScript queries to the printer and feedback is returned only in the AppleTalk PostScript mode.

4.   AppleTalk configuration

This chapter describes configuring the AppleTalk interface option.

Printer Configuration Report

You may want to print the Printer Configuration Report to verify that the AppleTalk interface option is installed correctly.

The report contains the following information:

*   Hardware Status—Displays the AppleTalk interface status.

*   Printer Default Settings System Configuration—Displays AppleTalk interface configuration settings.

Refer to the "Utilities menu" chapter in the *Xerox MRP Family System Administrator Guide* for the procedures to print the Printer Configuration Report.

Reading the Printer Configuration Report

The Printer Configuration Report provides information on the hardware status and the default printer configuration settings for the AppleTalk interface.

Hardware Status report

The Hardware Status section of the Printer Configuration Report contains the following information for AppleTalk:

*   Installed—The AppleTalk interface is installed and working properly.

*   Not Installed—The AppleTalk interface is not installed.

*   Failed—The AppleTalk interface has failed.

System Configuration report

The System Configuration section of the Printer Configuration Report contains the following default AppleTalk interface setup settings:

*   AppleTalk interface settings (if this interface is not installed, "Not Installed" is reported and the following fields are blank):

    —   Interface enablement—Specifies if the AppleTalk interface is enabled or disabled.

    —   Print language selection—Specifies the current print language selection setting.

*   Interface priority—Specifies if the interface priority is sequential or priority, and the interface that is high priority:

serial, parallel, AppleTalk, Token Ring, Ethernet, or MRP interface.

- Interface lock—Specifies if the interface lock setting is enabled or disabled.

- User access—Specifies if the user access is set to level 1 (access to print mode only, without password) or level 2 (access to all Main Menu options).

Troubleshooting

If the AppleTalk Interface appears as "Not Installed" on the Hardware Status section of the Printer Configuration Report, the board is not installed properly. Report the problem to your service representative.

If the AppleTalk configuration settings listed on the Printer Default Settings System Configuration section of the report do not meet your requirements, refer to the "Configuring the AppleTalk network interface at the printer control panel" section of this document for information on how to change the default settings.

Configuring the AppleTalk network interface at the printer control panel

This section contains the following information:

- System configuration menu map and AppleTalk interface configuration item descriptions

- AppleTalk configuration examples.

For instructions on making menu selections, refer to the "Using the control panel" chapter in the *Xerox MRP Family System Administrator Guide*.

AppleTalk interface configuration

You configure the AppleTalk interface at the System Configuration menu. The menu offers lower level menu headings with associated headings and options that you use to define network parameters, enable interfaces and printer languages, and define other network configuration parameters.

The menu map shown in figure 4-1 uses these conventions:

- Headings and options are shown in the order in which they appear when the printer is set to factory defaults.

  Vertical arrows illustrate moves made with the Scroll Previous/1 or Scroll Next/2 keys.

  Horizontal arrows illustrate moves made with the Enter/L key to a lower level heading or option.

An asterisk (*) after the menu option indicates that this setting is the factory default. Factory default settings appear in bold italics in this chapter.

Figure 4-1.   **System Configuration menu**

```
┌──────────────────┐     ┌──────────────────┐         ........................
│ 6. SYSTEM        │────▶│ INTERFACE SETUP  │───────▶  SERIAL/ASYNCHRONOUS SETTINGS
│ CONFIGURATION    │     │                  │
└──────────────────┘     └──────────────────┘
                                 │
                                 │
                                 ▼
                         ┌──────────────────┐
                         │   USER ACCESS    │
                         └──────────────────┘
```
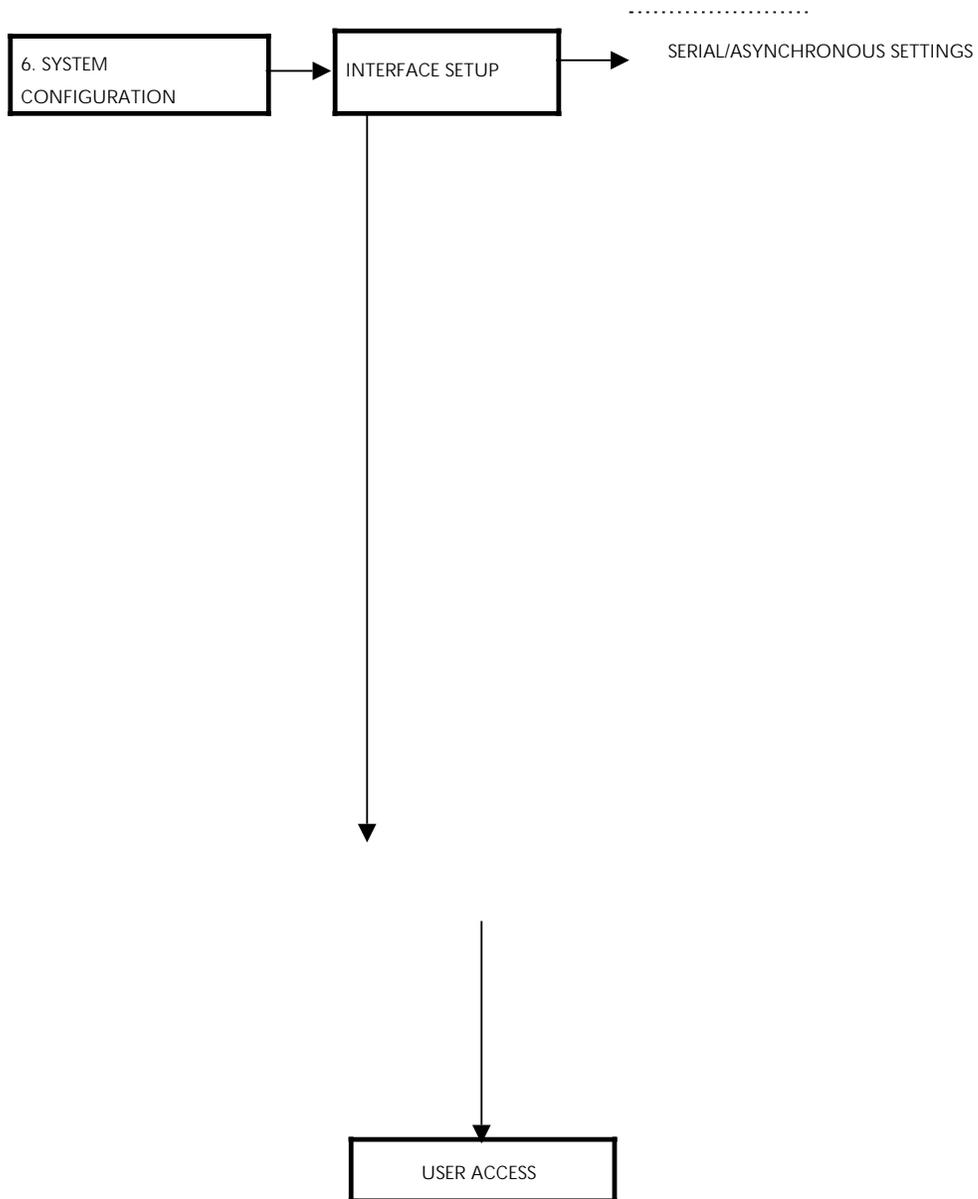
Interface Setup menu item descriptions

You use the Interface Setup menu to configure the AppleTalk interface to meet your needs. The factory default settings are suitable for most office situations.

The following options are available for the AppleTalk interface:

- Interface Enablement
- Print Language Selection

AppleTalk settings

The AppleTalk network interface may be enabled or disabled and set up for a specific print language.

The AppleTalk interface is *Enabled** as the factory default configuration. If you change this setting to disabled, the interface cannot receive data.

Print Language Selection

The AppleTalk interface is initially set up to recognize and interpret the PostScript printer language. You may set up the AppleTalk interface to other options.

The following Print Language Selection options are available for the AppleTalk interface:

- Automatic Print Language Switching

  Specifies that the command interpreter is automatically selected from incoming data as PostScript or PCL 5. This allows the printer to invoke the appropriate interpreter to process the current print job. You do not need to reconfigure the communication interface by using the control panel or remote software commands between print jobs that require different command interpreters.

  This setting is used primarily in a mixed network environment where gateways from typical DOS networks (for example, Novell) are connected to AppleTalk. This setting also enables PC AppleTalk cards to access printing and file services through AppleTalk.

- HP LaserJet Emulation Mode

  With this setting, the printer recognizes only the PCL 5 page description language for defining a page, selecting fonts, and so on. This setting is used in a mixed network environment.

- PostScript Mode (Standard or Tagged Binary)

  In this mode, you send data using the standard (STD) protocol PostScript page description language, or using the tagged binary communications protocol (TBCP). The STD PostScript language sends and receives data in ASCII. Some of the 256 characters used by the PostScript language are interpreted as control functions only and cannot be transmitted as data. The control functions are as follows:

  — End of job   Xon
  — Status (for example, printer idle)   Xoff
  — Abort (for example, cancel)

  The TBCP protocol allows individual applications to enable or disable binary communications on a per-job basis with begin and end protocol functions. All 256 characters can be interpreted as data, and some can also be interpreted as control functions. The TBCP protocol PostScript language uses the control functions listed for the STD protocol PostScript language, as well as the following:

  — Ctrl A (control functions are interpreted as data)
  — Begin protocol
  — End protocol

  When AppleTalk is set up in STD/TBCP protocol PostScript, the printer detects standard protocol PostScript and processes the files accordingly. Data sent in binary can be image data, PostScript language objects and numbers, and strings. This setting is used primarily in a mixed network environment with gateways from DOS networks (for example, Novell) to AppleTalk. This setting is also used where PC AppleTalk cards are used. AppleTalk network architecture alone has no need for TBCP, because it carries control functions out of band (as separate packet types) and arbitrary 8-bit binary data can be sent directly without any additional encoding.

- *PostScript Mode (AppleTalk)**

  This setting is used primarily for AppleTalk if the printing environment is not a mixed network. In this mode, all 256 (8-bit) characters are sent to the printer as data. PostScript control functions are handled by the AppleTalk protocol independently from the data.

- Hexadecimal Dump mode

  This setting is not supported by the current MRP Macintosh software, including the MRP driver and the Font Downloader. Host queries sent by the above software cannot be interpreted by the printer in hexadecimal dump mode and data cannot be dumped accordingly.

Interface Priority menu item descriptions

You can select from one of the following communication priority schemes from the control panel:

- *Sequential**
- Priority

All enabled ports can receive incoming data simultaneously until the communications buffer for that port cannot accept new characters. The execution of a print job is determined by the selected port polling scheme.

Sequential

This scheme does not assign a priority to any port. It executes the first print job received from any enabled port, then advances to the next enabled port in the sequence. The sequential polling sequence is: Serial, Parallel, AppleTalk, Network (Token Ring, Ethernet), or MRP interface, then back to Serial.

Priority

This scheme allows you to assign a high priority to one enabled port: Serial, *Parallel**, AppleTalk, Network, or MRP interface. All other ports have the same lower priority. If new jobs are received on the priority port before the jobs on the other ports are processed, the jobs from the high priority port are printed first.

Interface Lock

Interface Lock determines if a lock is placed on the last active used interface. The following settings are available:

- *Enable**—This scheme is identical to the non-locked polling scheme with the exception that the active port retains priority (continues to process print jobs) until no more data is available on the active port.

- Disable—There is no lock on the active port.

AppleTalk network configuration examples

This section contains examples that show step-by-step procedures for changing the AppleTalk interface configuration using the control panel.

The following examples assume that the printer is set to the factory default configurations.

Only one setting is changed in each example to demonstrate the procedures for changing a specific default setting. When you use the Main Menu to make printer configuration changes, you can make one or more changes to the default settings before you exit the menu.

Specifying standard or tagged binary PostScript mode for the AppleTalk interface

The following example shows designating standard or tagged binary PostScript for the AppleTalk interface.

M   1.   Press the **Main Menu** key to enter the Main Menu.

```
MAIN MENU
1.  PRINT MODE
```

6   2.   Press the **6** key on the numeric keypad to direct scroll.

```
MAIN MENU
6.  SYSTEM CONFIGURATION
```

L   3.   Press the **Enter** key. A warning displays.

```
CHANGING SETTINGS MAY DELETE JOBS:
1.  CONTINUE TO SYSTEM CONFIGURATION
```

L   4.   Press the **Enter** key to enter the System Configuration Menu.

```
SYSTEM CONFIGURATION
1.  INTERFACE SETUP
```

L   5.   Press the **Enter** key to enter Interface Setup.

```
INTERFACE SETUP
1.  SERIAL - ASYNCHRONOUS SETTINGS
```

22   6.   Press the **Scroll Next** key twice.

```
INTERFACE SETUP
3.  APPLETALK SETTINGS
```

L   7.   Press the **Enter** key.

```
APPLETALK SETTINGS
1.  INTERFACE ENABLEMENT
```

2   8.   Press the **Scroll Next** key.

```
APPLETALK SETTINGS
2.  PRINT LANGUAGE SELECTION
```

L   9. Press the **Enter** key.

>   APPLETALK / PRINT LANGUAGE SELECTION:
>   4. POSTSCRIPT MODE (APPLETALK)*

1   10. Press the **Scroll Previous** key.

>   APPLETALK / PRINT LANGUAGE SELECTION:
>   3. POSTSCRIPT MODE (STD OR TAG BINARY)

L   11. Press the **Enter** key to select standard or tagged binary PostScript.

>   APPLETALK SETTINGS
>   2. PRINT LANGUAGE SELECTION

MM   12. Press the **Main Menu** key twice to return to the top of the Main Menu.

>   MAIN MENU
>   1. PRINT MODE

L   13. Press the **Enter** key to reenter print mode to begin printing.

This setting takes effect immediately, and remains in effect until you change it, even if you power off and on.

Assigning a high priority to the AppleTalk interface

The following example shows assigning a high port priority to the AppleTalk interface.

M   1. Press the **Main Menu** key to enter the Main Menu.

>   MAIN MENU
>   1. PRINT MODE

6   2. Press the **6** key on the numeric keypad to direct scroll.

>   MAIN MENU
>   6. SYSTEM CONFIGURATION

L   3. Press the **Enter** key. A warning displays.

>   CHANGING SETTINGS MAY DELETE JOBS:
>   1. CONTINUE TO SYSTEM CONFIGURATION

L   4. Press the **Enter** key to enter the System Configuration Menu.

>   SYSTEM CONFIGURATION
>   1. INTERFACE SETUP

2   5. Press the **Scroll Next** key.

>   SYSTEM CONFIGURATION
>   2. INTERFACE PRIORITY

L   6. Press the **Enter** key.

>   INTERFACE PRIORITY:
>   1. SEQUENTIAL*

2   7. Press the **Scroll Next** key.

> **INTERFACE PRIORITY:**
> **2. PRIORITY**

L   8. Press the **Enter** key.

> **INTERFACE PRIORITY / PRIORITY:**
> **2. PARALLEL***

2   9. Press the **Scroll Next** key.

> **INTERFACE PRIORITY / PRIORITY:**
> **3. APPLETALK**

L   10. Press the **Enter** key to select AppleTalk and advance to the interface lock option.

> **INTERFACE PRIORITY / INTERFACE LOCK:**
> **1. ENABLE***

L   11. Press the **Enter** key to retain enabled interface lock.

> **INTERFACE PRIORITY:**
> **2. PRIORITY**

MM   12. Press the **Main Menu** key twice to return to the top of the Main Menu.

> **MAIN MENU**
> **1. PRINT MODE**

L   13. Press the **Enter** key to reenter print mode to begin printing.

This setting takes effect immediately, and remains in effect until you change it, even if you power off and on.

A.   Envelopes

Many printers support envelope printing in a limited fashion. A typical PostScript printer feeds envelopes from a manual feed or envelope feed tray with the short edge of the envelope positioned at either the center or side edge of the tray.

By contrast, your printer feeds envelopes long edge at the side of the multi-sheet bypass tray (tray 5). This lets you feed the envelope with the sealing edge extended to avoid crinkling and heat treatment of the adhesive, which can sometimes seal the envelope.

You perform envelope feeding by placing the envelope on tray 5 when prompted at the printer control panel (assuming that Paper Loading Pause is enabled).

Software applications supported for envelope printing

Your printer has been tested to work with envelopes generated from the following programs:

- WordPerfect 2.1
- Microsoft Word 5.0

Xerox does not guarantee envelope printing with future releases of these applications. Some applications may require using the Xerox printer page description (PPD) file.

How to set up a file for envelope printing

Because the your printer handles envelopes differently from other printers, use the envelope sample or formats indicated in the following sections. These examples were developed using standard Helvetica 10- or 12-point fonts.

N   **Note:** Avoid applications that include samples for center-fed or edge-fed envelopes, or a letter-envelope combination macro.

WordPerfect 2.1 sample envelope file

With this application package, you can use the sample file "envelope" located in the Stationary folder to obtain optimum print results for Commercial 10, DL, C5, and Monarch envelopes. You can manually adjust any necessary shifting of text (left or right) on the screen.

Table A-1 shows the adjustments that apply to the setup for the different envelopes.

Table A-1.   **Envelope adjustments with WordPerfect 2.1**

Envelope	Set top margin to	Press the Return key*
Commercial 10	0.5 inches	2 times
DL	0.5 inches	2 times
Monarch	0.5 inches	-----
C5	0.75 inches	6 times

*   At the beginning of the addressee line. This may vary with the font characteristics used.

If you want to include a graphic or "place stamp here" box on the envelope, some trial and error may be required to position the text properly. This also applies to a bar coding option.

Microsoft Word 5.0 sample envelope file

With this application package, you can use the sample file "envelope," located in the Envelopes folder, for envelope printing with the modifications shown in table A-2.

Table A-2.   **Envelope adjustments with Microsoft Word 5.0**

Envelope	Select addressee data, move left margin to	Set top margin to	Press the Return key*
Commercial 10	3.0 inches	0.5 inches	-----
DL	3.5 inches	0.5 inches	-----
Monarch	3.0 inches	0.5 inches	-----
C5	3.5 inches	1.0 inches	5 times

*   At the beginning of the addressee line.

If you want to include a graphic or "place stamp here" box on the envelope, some trial and error may be required to position the text properly. This also applies to a bar coding option. Once your envelope form is set up correctly, save your envelope as a template.

Self-styled envelope

You can create a self-styled envelope with any application that supports letter size paper. Follow the guidelines shown in tables A-1 and A-2 for a custom designed envelope. Once you have developed a satisfactory form, you can save it as a template. Table 2-1 shows the dimensions for the four MRP-supported envelopes.

Setting up the envelope form for printing

Once the envelope form is acceptable on screen, select the Print option from File and set up the printer to print the page from tray 5 (or by envelope size), and set Tray 5 Page Size to the same envelope size. If Paper Loading Pause is enabled, the display prompts you to load the specified envelope size. All envelopes are fed long edge.

B. Related publications

Related publications

The following publications, as well as this manual, are available through the Xerox Documentation and Software Services (XDSS) (U.S. only).

N **Note:** Xerox Canada, Ltd. and Rank Xerox Ltd. publications are available through your local sales representative or analyst.

Xerox MRP Family publications

The Xerox 4230/MRP and 4220/MRP library sets include the following manuals.

Publication	U.S. Number	International Language	Number
4220/MRP, 4230/MRP Operator Guide	720P13940	French Spanish German Italian	
4220/MRP, 4230/MRP System Administrator Guide	720P13950	French	
4215/MRP, 4219/MRP, 4220/MRP, 4230/MRP Twinax Command Reference*	720P12751		
4215/MRP, 4219/MRP, 4220/MRP, 4230/MRP Coax Command Reference*	720P12761		
4215/MRP, 4219/MRP, 4220/MRP, 4230/MRP Intelligent Printer Data Stream (IPDS) Configuration and Reference Guide*	720P12771		
4215/MRP, 4219/MRP, 4220/MRP, 4230/MRP PCL 5 and PostScript Printer Language Reference**	721P81071		

* Manuals are shipped with the options.

** In the U.S., the Printer Language Reference for PCL 5 and PostScript is not shipped with the printer. To order this document, fill out and mail the Printer Language Reference Order Card found at the back of the System Administrator Guide. The manual is shipped at no charge to you.

In RX, this manual is shipped with the printer.

Publication	U.S. Number	International	
		Language	Number
4220/MRP, 4230/MRP Network Interface for Novell Operator Guide*	720P12302		
4215/MRP, 4219/MRP, 4220/MRP, 4230/MRP Fax Modem for Macintosh Operator Guide*	720P12321		
4215/MRP, 4219/MRP, 4220/MRP, 4230/MRP Fax Modem for MS-DOS Operator Guide*	720P12331		
4220/MRP, 4230/MRP AppleTalk Interface Operator Guide*	720P12312		
4220/MRP, 4230/MRP TCP/IP Operator Guide*	720P13721		
4220/MRP, 4230/MRP EtherTalk Operator Guide*	720P13731		
4220/MRP, 4230/MRP LAN Manager/LAN Server Operator Guide*	720P13701		
4220/MRP, 4230/MRP Windows NT Operator Guide*	720P13711		

*   Manuals are shipped with the options.

For information about current Xerox training classes and workshops, refer to the *Xerox Customer Education: Printing Systems Catalog*, 610P30238 (U.S. only). In other locations, see your local representative for details.