

## PREFACE

### ABOUT YOUR LASERWRITER

The LaserWriter Select 360 produces high-quality text and graphics and delivers the performance of higher-priced laser printers.

#### The LaserWriter Select 360

- Prints at 600 dots per inch (dpi) for sharply defined text and graphics.
- Produces up to 10 pages per minute.
- Has an AMD 29200 RISC processor for high-performance printing.
- Features standard parallel, LocalTalk, and serial ports.
- Can use all interface ports simultaneously.
- Offers PostScript and HP LaserJet III (PCL5) printing capabilities.
- Uses Adobe IntelliSelect (AIS) emulation switching to switch automatically between PostScript and PCL5 documents.
- Provides flexible paper handling from a 250-sheet paper cassette, 50-sheet multipurpose tray, and manual feed tray. A 250- or 500-sheet paper feeder that provides access to a third tray is available. A high-capacity envelope cassette for automatic envelope printing is also available.
- Includes 64 fonts for business, desktop publishing, and graphics needs.
- Meets EPA Energy Star standards for low power consumption.

With its compact design, the LaserWriter Select 360 is easy to maintain and requires little workspace.

## CHAPTER 1

### SETTING UP YOUR PRINTER

#### Choosing a location for the printer

Choose a flat, stable surface with adequate room around the printer. The area should be well ventilated and away from direct sunlight or sources of heat, cold, or humidity.

#### Important safety instructions

Always take the following precautions:

- Protect the printer from dampness and sources of liquids.
- Don't use devices that produce open flames, such as Bunsen burners, near the printer.
- Don't use alcohol-based or ammonia-based cleaners on or around the printer.
- Clean the printer with only a damp cloth and, if necessary, a mild soap or detergent. Be careful to avoid getting liquid in the printer or the power cord receptacle.

Disconnect the power plug immediately if any of the following situations occurs:

- The power cord or plug is frayed or damaged.
- Liquid gets spilled on or into the printer.
- The printer needs cleaning, servicing, or repair.

**Warning** Electrical equipment may be hazardous if misused. Operation of the printer must always be supervised by an adult. Do not allow children access to the interior of the printer and do not permit them to handle any cables.

#### Plugging in the printer

A power cord is supplied with your printer.

Insert the power cord into the receptacle on the back of the LaserWriter. Then plug the

cord into a grounded outlet.

**Warning** The LaserWriter is equipped with a three-wire grounding plug—a plug that has a third (grounding) pin. This plug fits only a grounding-type AC outlet. If you are unable to insert the plug into an outlet, contact a licensed electrician to replace the outlet with a properly grounded one. This equipment is meant to be electrically grounded. Do not defeat the purpose of the grounding plug!

### Installing the toner cartridge

Toner is the powdered ink your printer uses. Follow these steps to install the toner cartridge into the printer.

1. Open the printer access door.
2. Unpack the cartridge and gently rock it to distribute the toner inside.
3. Pull the tape tab to remove the tape.
4. Insert the cartridge into the printer.

Line up the markings on the sides of the cartridge with the arrows in the printer.

5. Close the access door.

### Installing the multipurpose tray

You can use the multipurpose tray to automatically feed envelopes and various sizes of paper into the printer. You don't have to install the tray if you don't want to use it. If you don't want to install it, you can feed individual sheets of paper with the manual feed tray.

The tray fits into the manual feed opening and feeds up to 50 sheets or 5 envelopes. To get ready to install the multipurpose tray, open the printer as shown below.

1. Holding the tray folded, insert the left side first as shown.
2. Push the black latch and snap the tray into position.

You can remove the multipurpose tray by pushing the latch to the left and gently pulling it out.

### Loading the paper cassette

The cassette supplied with your printer holds up to 250 sheets of copier-weight bond paper. The cassette can accept U.S. Letter, A4, or B5 (JIS) paper.

To load the paper cassette:

1. Remove the cassette from the printer by grasping it and firmly pulling straight out.
2. Insert a stack of paper as shown. Load letterhead and three-hole punched paper as shown.

**IMPORTANT** Make sure the sliding backstop clicks into the appropriate notch. Setting the backstop between notches or to an unmarked notch may result in a printing error.

3. Slide the cassette into the printer.

### Loading the multipurpose tray

The multipurpose tray can accept U.S. Legal, A4, U.S. Letter, B5 (JIS), and Executive paper.

1. Open the flap, then pull out the extension as shown.
2. Stack the paper on the tray and adjust the paper guides so they just touch the paper, but still allow it to lie flat.

### Opening the output tray

The printer has an output tray that holds sheets in place as they are ejected from the printer. This tray can hold up to 150 sheets or 15 envelopes.

### Connecting the printer to a Macintosh

There are two ways to connect your printer. You can connect your printer directly to your Macintosh using an Apple System/Peripheral-8 cable or LocalTalk cables and connectors. You can also use LocalTalk to connect your printer to a network.

### Connecting directly to your Macintosh

1. Plug the Peripheral-8 cable into the printer's LocalTalk port.
2. Plug the other end of the cable into your computer's printer port.

### Using LocalTalk cables

LocalTalk network cables and LocalTalk connector boxes are available where you bought your printer. You can obtain a LocalTalk locking connector kit with cables in a variety of lengths, from 2 meters to 100 meters. LocalTalk links the devices on a LocalTalk network together so information can be exchanged between them. If you have an existing LocalTalk network, you can add your LaserWriter Select 360 at any point in that network. You can use LocalTalk to connect your printer directly to your Macintosh even if you don't have an existing network.

### Connecting your printer using LocalTalk cables

1. Plug a LocalTalk connector box into the printer's LocalTalk port.
2. Plug another LocalTalk connector box into the printer port on your computer.
3. Connect the two LocalTalk connector boxes together with a LocalTalk cable.

**Note:** The printer only needs to be connected to one Macintosh on the network to be accessible to all Macintosh computers on the network, as shown in the illustration below.

**Warning** Do not leave an unconnected cable plugged into a computer box. This will cause transmission problems for all network users.

**Note:** You can use two or even three ports on your LaserWriter Select 360 at the same time. For example, as shown in the following figure, you can use the parallel port to connect the printer directly to an IBM PC or compatible computer, and at the same time use the LocalTalk port to connect the printer to a Macintosh.

There are more ways to connect the LaserWriter Select 360 to a computer (using the serial port, for example). For some of these connections, you may need to change the printer's communication settings. See Appendix C, "Automatic Language Sensing and Interface Configuration" for information on how to do this.

## Installing the Macintosh software

Before you can print, you need to install the printer software from the disks that came with your printer.

## System requirements

To use the printer software, your Macintosh must have system software version 7 or later and at least 2 megabytes (MB) of memory (4 MB recommended) or, system software version 6.0.7 or later and at least 2 MB of memory.

If your system software is an earlier version, you need to obtain a system software upgrade from your computer or software dealer.

## Install the Macintosh software

Before you install the printer software, turn off any automatic virus-detection programs you have on your Macintosh computer. If you don't, problems may occur during installation. After installation is complete, you can turn the virus-detection programs back on.

1. Insert the LaserWriter Select 360 Macintosh Installation disk in a disk drive.

The disk's icon appears on the desktop.

2. Double-click the disk icon to open the disk.
3. Double-click the Installer icon to open it.

When you open the Installer, a Welcome screen displays information about the files that will be installed.

4. Click OK to continue.

The Easy Install dialog box appears.

5. Click the Install button.

The Installer takes a few moments to calculate what needs to be done and then begins to copy files.

6. Follow the instructions on the screen.

You see a message when the installation has been successfully completed. If you

turned off any automatic virus-detection programs on your Macintosh, turn them back on now.

You've installed all the software necessary to print.

### Turning on the printer

The power switch is located on the side of the printer, near the rear. When you turn on the power, the status lights flash briefly on and then off. After a minute or so, the green light should stay on and the other status lights should stay off. (See Chapter 5, "Troubleshooting," for more about status lights.)

When the printer is warming up, you'll hear the motor running for about a minute. This is normal.

### What's next?

Your printer is now ready to use. Go to Chapter 2, "Printing From a Macintosh," to begin using your printer.

### Connecting the printer to an IBM PC or compatible computer

To connect the LaserWriter Select 360 to your IBM PC or compatible computer, you need a parallel interface cable, available from most computer dealers.

One end of the parallel cable must have a 36-pin Centronics-type connector to match the parallel port on the printer.

The other end of the cable should have a connector that fits the parallel port on your computer. On most IBM PC and compatible computers, a 25-pin male connector fits the parallel port. Check your computer, or the documentation that came with it, to make sure you get the correct cable.

**Note:** You can use two or even three ports on your LaserWriter Select 360 at the same time. You can use the parallel port to connect the printer directly to an IBM PC or compatible computer, and at the same time use the LocalTalk port to connect the printer to a Macintosh.

### Installing the Windows printer driver software

Before you print from Windows 3.1 or 3.0, you need to install the printer software.

If you have Windows 3.1, follow the steps in the next section to install the 3.1 printer driver.

If you have Windows 3.0, skip to "Installing the Windows 3.0 PostScript Printer Driver" later in this chapter.

If you are using MS-DOS and MS-DOS application programs, refer to the manual that came with your program and follow the instructions for using a PostScript or PCL5 printer.

**Important** Be sure to read the README.TXT file on your LaserWriter Select 360 Windows Software disk for additional instructions about using your printer.

### Installing the Windows 3.1 PostScript printer driver

To install the printer driver for Windows 3.1, follow these steps. (These instructions assume that you have a mouse or similar pointing device. If you do not, see the documentation that came with Windows to find out how to perform these steps from the keyboard.)

1. Open the Main icon from the Program Manager window.
2. Open the Control Panel icon from the Main window.
3. In the Control Panel window, open the Printers icon.

The Printers dialog box appears.

4. Click Add.

A list of the printer drivers on the disks you received with your Windows software appears at the bottom of the dialog box. Your LaserWriter Select 360 driver is not yet listed.

5. Select Install Unlisted or Updated Printer and click the Install button.

The Install Driver dialog box appears, instructing you to insert the disk that has the printer driver file on it.

6. Insert the LaserWriter Select 360 Windows Software disk into the disk drive.
7. Enter the path for the drive holding the LaserWriter Select 360 disk by typing b:\win31drv. (Substitute "a:" or "b:" to specify the drive holding the disk.)

8. Click OK.

The Add Unlisted or Updated Printer dialog box appears.

9. Click OK.

The Install Driver dialog box appears.

10. Insert the Microsoft Windows 3.1 disk #6 in a disk drive.

11. Enter a:\ or b:\ to specify the path for the disk drive holding the Microsoft Windows 3.1 disk #6.

12. Click OK.

The Printers dialog box appears, now listing the newly installed printer driver in the Installed Printers box.

If you want to change the selected port connection, click the Connect button. See the documentation that came with Windows for information about changing ports.

The LaserWriter Select 360 printer driver is preset to use the most commonly selected print settings, and no further setup is generally required. If you wish to change the setup options, see the section "Setting Printing Options in Windows 3.1" in Chapter 3.

13. Click the Set As Default Printer button to set your LaserWriter Select 360 as the default printer.

14. Click the Close button.

#### Installing the Windows 3.0 PostScript printer driver

To install the correct printer driver for Windows 3.0, follow these steps. (These instructions assume that you have a mouse or similar pointing device. If you do not, see the documentation that came with Windows to find out how to perform these steps from the keyboard.)

1. Open the Main icon from the Program Manager window.

2. Open the Control Panel icon from the Main window.

3. In the Control Panel window, open the Printers icon.

The Printers dialog box appears.

4. Click Add Printer.

A list of the printer drivers appears.

5. Select Apple LaserWriter and click Install.

The Control Panel-Printers dialog box appears, instructing you to insert Microsoft Windows 3.0 disk #5.

6. Insert Microsoft Windows 3.0 disk #5 into a disk drive.

7. Enter the path for the disk drive holding Microsoft Win 3.0 disk #5.

(Substitute "a:" or "b:" to specify the drive holding the disk.)

8. Click OK.

The Printers dialog box appears with PostScript Printer on LPT1: listed in the Installed Printers list box. The Apple LaserWriter printer driver and the PostScript printer driver that were shipped with Microsoft Windows 3.0 have been loaded.

9. Click Configure.

The Printers-Configure dialog box appears. Select the printer port and timeout settings you want.

10. Click Setup.

The PostScript Printer on LPT1: dialog box appears.

11. Click Add Printer.

The Add Printer dialog box appears.

12. Insert the LaserWriter Select 360 Windows Software disk into the disk drive.

13. Enter the path for the disk drive holding LaserWriter Select 360 Windows Software by typing B:\win30drv. (Substitute "A:" or "B:" to specify the drive holding the disk.)

14. Click OK.

A different Add Printer dialog box appears.

15. Click Add.

16. Click Done.

The Add Printer dialog box closes.

17. Select the appropriate LaserWriter Select 360 driver from the Printer list box.

18. Click OK.

The PostScript Printer on LPT1: dialog box closes.

19. Click OK.

The Printers-Configure dialog box closes.

20. Double-click the PostScript printer driver that you want in the Installed Printer list box to set the LaserWriter Select 360 as the default printer.

PostScript Printer is now listed in the Default Printer box. Documents printed from Windows applications will be sent automatically to the LaserWriter.

21. Click OK.

The Printers dialog box closes.

22. Close the Control Panel window.

**Important** If you change the port on your computer to which the LaserWriter is connected, you must set up the printer driver again. See the documentation that came with your computer and software for more information.

#### Additional printer settings

There are additional printer settings in Windows. These settings specify the active printer, the default printer, and timeout options. To find out whether you need to change these settings, and how to do so, see the documentation that came with your computer and software.

#### Using HP LaserJet emulation

Some application programs for IBM PC and compatible computers don't support the PostScript printer language. You can still print on the LaserWriter Select 360 by using its capability to emulate a Hewlett Packard LaserJet IIID printer. The HP LaserJet IIID uses a printer language called PCL5. PCL5 includes all the capabilities of PCL4.

## About HP LaserJet emulation

Most MS-DOS application programs allow you to specify a particular HP LaserJet model, or require you to install a specific LaserJet driver (supplied with the program). The LaserJet IIID is the model most similar to the LaserWriter Select 360; they both support two paper cassettes plus a manual feed tray. If the program doesn't support this model, select the LaserJet III model. Like the LaserJet III and IIID, the LaserWriter Select will print PCL5 documents at 300 dpi.

## Installing the HP LaserJet driver software

If you are using Windows 3.0 or 3.1 and want to use the PCL5 language instead of PostScript, you can install the LaserJet IIID driver by executing the following steps. (These instructions assume that you have a mouse or similar pointing device. If you do not, see the documentation that came with Windows to find out how to perform these steps from the keyboard.)

1. Open the Main icon from the Program Manager window.
2. Open the Control Panel icon from the Main window.
3. In the Control Panel window, open the Printers icon.

The Printers dialog box appears.

4. Click Add.

A list of the printer drivers on the disks you received with your Windows software appears at the bottom of the dialog box. Scroll down the list of printers to find the HP LaserJet IIID driver on this list.

5. Select the HP LaserJet IIID driver and click the Install button.

A window appears with a message requesting a specific disk that came with your Windows software.

6. Insert the disk requested into a disk drive.
7. Enter a:\ or b:\ to specify the path for the disk drive holding the disk.
8. Click OK.

The driver is now installed. The Printers dialog box appears, now listing the newly installed printer driver in the Installed Printers box.

If you want to change the selected port connection, click the Connect button. See the documentation that came with Windows for information about changing ports.

9. Click the Set As Default Printer button to set your LaserWriter Select 360 as the default printer.

10. Click the Close button.

It is not necessary to configure the printer to accept PCL5 print jobs. The LaserWriter Select 360 uses Adobe IntelliSelect (AIS) to detect automatically what type of data is being sent and to process it appropriately. For more information about Adobe IntelliSelect, see Appendix C, "Automatic Language Sensing and Interface Configuration."

Note: If you have changed the interface configuration switch on the back of the printer from its original setting of 0, AIS may be turned off.

#### Emulation differences

The printed output of the LaserWriter Select 360 when using the LaserJet emulation is almost identical to that of the HP LaserJet IIID. You may observe slight differences in the shapes of some characters or the darkness of some bitmapped fonts. Unlike the LaserJet IIID, the LaserWriter Select 360 does not have duplex printing capability. If you choose duplex printing, the printer ignores the request when it prints your document.

#### Turning on the printer

The power switch is located on the side of the printer, near the rear. When you turn on the power, the status lights flash briefly on and then off. After a minute or so, the green light should stay on and the other status lights should stay off. (See Chapter 5, "Troubleshooting," for more about status lights.)

When the printer is warming up you'll hear the motor running for about a minute. This is normal.

#### What's next?

Your printer is now ready to use. Go to Chapter 3, "Printing From an IBM PC," to begin using your printer.

## CHAPTER 2

### PRINTING FROM A MACINTOSH

Before you use your printer for the first time, you must use the Chooser to tell the Macintosh where to send print jobs.

Once you indicate the printer in the Chooser, you won't need to repeat this step unless you change printers or change the way your printer is connected.

#### Selecting the Printer

1. Choose the Chooser from the Apple (K) menu.

The Chooser window appears. (Your Chooser may not look exactly like the illustration.)

2. Click the LaserWriter 8.0 icon (in the left half of the Chooser).

If you don't see the LaserWriter Select 8.0 icon, scroll through the window.

The name of your LaserWriter printer appears in the right half of the Chooser (along with the names of any other available LaserWriter printers).

3. Click the name of your LaserWriter Select 360.

You've now selected the LaserWriter printer for printing. The Setup button appears in the Chooser.

If this is the first time you're using the printer, or if you have just installed new options, continue with step 4.

When the printer has been set up, a small printer icon appears beside the printer name.

4. Click Setup.

The Setup dialog box appears.

5. In the Setup dialog box, click Auto Setup.

A message appears saying that setup is completed.

6. Click OK.

7. Close the Chooser.

## Selecting Page Setup options

The Macintosh Page Setup dialog box allows you to specify certain aspects of your document, such as its page size, format, and orientation, as well as the settings for several print effects. You can change these settings for every document you create.

1. Choose Page Setup from the File menu.

The Page Setup dialog box appears.

2. Select the Page Setup options you want.

- In the Paper pop-up menu, choose a paper size.
  - In the Layout pop-up menu, choose a page layout. You can set up the printer to print one, two, or four pages per sheet. (The printer then prints your pages at a reduced or enlarged size to fit them in the chosen layout on a sheet.)
  - In the Reduce or Enlarge box, type the percentage of enlargement or reduction that you want the printed document to have.
  - In the Orientation option, click portrait (tall) or landscape (wide) page orientation.
  - When you choose a paper, layout, or orientation option, a representation of your selection appears in the page image on the left of the dialog box.
  - To see a list of the currently selected page dimensions, click the page image. Click the page image again to close the dimensions list and return to the page image.
3. To print using special effects, click Options. (If you don't want to choose print options, skip to step 5.)

The Options dialog box appears.

- Select Flip Horizontal to flip the page image horizontally.
- Select Flip Vertical to flip the page image vertically.
- Select Invert Image to print a black-and-white reversed image.
- Select Substitute Fonts to allow the printer to use a different font if the Macintosh screen font Geneva, Monaco, or New York is not available on your computer. When this option is selected, the printer substitutes Helvetica for Geneva, Courier for Monaco, and Times for New York.
- Select Smooth Text to smooth edges of letters when your printer does not contain the

font used in the document.

- Select Smooth Graphics to smooth ragged edges of lines in bitmapped graphics.

- Select Precision Bitmap Alignment to make printed bitmapped graphics more precisely match the screen image.

- Select Larger Print Area to print on more of your total page area, if your application program allows.

- Select Unlimited Downloadable Fonts in a Document to print the document using as many downloadable fonts as you need. The fonts will be sent to the printer, used, and then removed from the printer's memory. The document will be printed more slowly.

4. Click OK to close the Options dialog box.

5. Click OK to close the Page Setup dialog box.

## Printing documents

When you are printing from a Macintosh computer, most application programs display a Print dialog box, in which you specify print options such as the number of copies you want printed, whether to print all or part of a document, and which paper tray or cassette will be the paper source.

Some application programs also add more choices to the Print dialog box. For information about such options, refer to the documentation that came with the program.

1. Choose Print from the File menu.

The Print dialog box appears.

2. Select the options you want.

- In the Copies box, type the number of copies you want.

- In the Pages options, click All to print the entire document, or click in the From and To boxes and type a range of pages.

- In the Paper Source options, click All and then choose the paper cassette, multipurpose tray, or other paper source from the pop-up menu.

**Important** The names that appear in the paper source menus vary according to the paper sources of your printer.

To manually print an envelope or a single sheet of paper, transparency film, or labels, select manual feed as the paper source. For paper-loading instructions, see Chapter 1, "Setting Up Your Printer."

Note: When you choose manual feed, you may see a message on the screen telling you it's time to insert the sheet of paper.

- To have the printer automatically select the paper tray that holds the size of paper chosen for the document, choose Auto Select as the paper source.

- To print the first page of a document from one paper source and the rest of the document from a different source, click First From and then choose the paper sources from the pop-up menus.

- In the Destination option, click Printer to print the document on paper, or click File to save the document as a file of PostScript code. To send a PostScript file to the printer, see "Sending PostScript Files to the Printer," later in this chapter.

3. Click Print.

#### Printing a cover page automatically

The LaserWriter can automatically print a cover page that provides information about the printed document, such as the document's name and the date and time of printing. You can set the printer to print the cover page at the beginning or the end of the document.

1. Choose Print from the File menu.

The Print dialog box appears.

2. Click Options.

The Print Options dialog box appears.

3. Click the Before or After Document button to indicate the cover page position you want, or click None to print the document without a cover page.

4. Click OK.

5. Click Print.

The cover page will print each time you print your document.

## Printing gray-scale documents

When you print a document containing shades of gray, you can choose to maximize either image quality or speed. The Print Options dialog box provides three choices: printing in black and white, printing in grays that closely approximate the colors or grays on the screen, or printing in grays calibrated to match those on the computer screen.

1. Choose Print from the File menu.

The Print dialog box appears.

2. Select the options you want.
3. Click Options.

The Print Options dialog box appears.

4. Choose Black & White, Color/Grayscale, or Calibrated Color/Grayscale from the Print pop-up menu.

Note: When printing grays, you will see the best results if you choose Color/Grayscale.

5. Click OK.
6. Click Print.

## Changing print resolution

You can change the printing resolution when printing a particular document. The LaserWriter Select 360's default is 600 dpi.

1. Choose Print from the File menu.

The Print dialog box appears.

2. Select the options you want.
3. Click Options.

The Print Options dialog box appears.

4. Choose 300dpi or 600dpi from the Choose Resolution pop-up menu.

5. Click OK.
6. Click Print.

#### Turning FinePrint on or off

FinePrint smooths out lines and curves and enhances text and line graphics that would normally appear jagged when printing at 300 dpi.

If you print at 300 dpi, you can turn FinePrint on or off.

1. Choose Print from the File menu.

The Print dialog box appears.

2. Select the options you want.
3. Click Options.

The Print Options dialog box appears.

4. Choose On or Off from the FinePrint pop-up menu.
5. Click OK.
6. Click Print.

#### Turning tray switching on or off

Tray switching allows you to switch automatically between the paper cassette and the multipurpose tray, so you can print up to 300 pages without reloading paper.

1. Choose Print from the File menu.

The Print dialog box appears.

2. Select the options you want.
3. Click Options.

The Print Options dialog box appears.

4. Choose On or Off from the TraySwitch pop-up menu.

5. Click OK.

6. Click Print.

#### Using the LaserWriter Utility program for Macintosh computers

The LaserWriter Utility program supplied with your printer allows you to control various aspects of how the LaserWriter Select 360 works. You can use the LaserWriter Utility with other LaserWriter models as well, but depending on the capabilities of the printer, it may not perform all the same functions.

#### Use the LaserWriter Utility to

- name the printer
- turn the startup page on and off
- set the power-saving delay
- set paper-handling options
- see or print a list of printer fonts
- download fonts
- view or change the communication settings
- send PostScript files to the printer
- restart the printer
- set the default printing resolution
- turn FinePrint on and off
- set the print density to lighten or darken printing
- see the total number of pages the printer has printed

The settings you choose with the Laserwriter Utility Program will remain in effect until you change them.

Before you begin, make sure the LaserWriter Select 360 is selected in the Chooser. (See "Selecting the Printer" earlier in this chapter.)

Reverting to factory settings: In some of the LaserWriter Utility's dialog boxes, you can click a button labeled Use Default to restore the options to their original factory settings.

When you are finished using the LaserWriter Utility, quit the program by choosing Quit from the File menu.

### Installing the LaserWriter Utility

To install the LaserWriter Utility:

1. Insert the LaserWriter Select 360 Macintosh Installation disk into a disk drive.
2. Double-click the disk icon to open it.
3. Double-click the Installer icon to open the installer.

When you open the Installer, a Welcome screen displays information about the files that will be installed.

4. Click OK to continue.

The Easy Install screen appears.

5. Click Customize.

The custom installation screen appears.

6. Click LaserWriter Utility in the box on the left.
7. Click Install.

Follow the instructions on your screen to complete the installation.

### Naming the printer

Each LaserWriter Select 360 can be given an individual name. If the printer is connected to a network, this name allows users to identify the printer and select it from their computers. Use the following procedure to name or rename any LaserWriter Select 360 on the network. Be sure to tell everyone who uses the network what the new name is, so they can find the printer they want to use.

**Note:** If you use a character that is not a letter or number, such as an asterisk, in your printer's name, it may appear differently when printed on the startup sheet.

1. In the LaserWriter Utility program, choose Name Printer from the Utilities menu.

The Rename dialog box appears with the selected printer's current name.

2. Type in the new name.
3. Click Rename.

A message alerts you to select the printer's new name in the Chooser. You will not be able to print or to use other LaserWriter Utility functions until you do so. See "Selecting the Printer" earlier in this chapter.

4. Click OK.

#### Turning the startup page on or off

The LaserWriter Select 360 normally prints a sample page when you turn the printer on. This page shows the printer's name, the total number of pages printed, and the amount of memory, number of internal fonts, and communication settings. You can turn this feature off if you wish.

1. In the LaserWriter Utility program, choose Set Startup Page from the Utilities menu.

A dialog box appears that allows you to turn the startup page on or off.

2. Click On or Off.
3. Click OK.

#### Setting the power-saving delay

You can change the amount of time after the last print job at which the printer "powers down" to save energy.

Note: If you send a job to the printer when it is in the power-saving mode, it automatically returns to full power.

1. In the LaserWriter Utility program, choose Power Saving from the Utilities menu.

The Power Saving dialog box is displayed.

2. Click the arrow in the Delay box and select a new delay.

3. Click OK.

#### Setting paper-handling options

When the LaserWriter Select 360 runs out of paper in one tray, it can automatically switch between the paper cassette and the multipurpose tray. Using automatic tray switching between the 250-sheet paper cassette and the 50-sheet multipurpose tray, you can print 300 sheets without reloading paper.

You can use automatic tray switching with the optional cassettes, as well.

You can also set the printer to use a particular size paper in the multipurpose tray.

1. In the LaserWriter Utility program, choose Paper Handling from the Utilities menu.

The Paper Handling dialog box appears.

2. Click On or Off next to Automatic Tray Switching.
3. Choose a paper size from the Paper Type pop-up menu.
4. Click OK.

#### Displaying a list of printer fonts

You can view a list of the fonts currently stored in the printer's memory, to see whether the fonts you need are available.

1. In the LaserWriter Utility program, choose Display Available Fonts from the File menu.
2. Click the close box when you are finished viewing the list.

#### Printing samples of printer fonts

You can print samples of the fonts currently stored in the printer's memory.

1. In the LaserWriter Utility Program, choose Print Font Samples from the File menu.

The Print dialog box is displayed.

2. Click Print.

### Printing a list of printer fonts

You can print a list of the fonts currently stored in the printer's memory.

1. In the LaserWriter Utility program, choose Print Font Catalog from the File menu.

The Print dialog box is displayed.

2. Click Print.

### Downloading fonts to the printer

You can download additional fonts to the printer. You do not have to download fonts to use them in printed documents, but doing so can make printing faster than storing fonts only on your computer. All fonts you download to the printer's memory will be deleted when you turn off your printer.

1. In the LaserWriter Utility program, choose Download Fonts from the File menu.

A dialog box appears listing any fonts already downloaded to the printer. (This list does not include the standard set of Apple fonts installed in the printer; you can view a list of those fonts as described in "Displaying a List of Printer Fonts," earlier in this section.)

2. Click the printer radio button to download fonts to the printer.
3. Click Add.

A dialog box appears.

4. Select the fonts you want to download.

Double-click the font name in the list, or select the name and click Add. If you change your mind about any font you've added to the list, select the font and click Remove.

5. Click Done when you have finished selecting fonts.
6. Click Download.

A dialog box informs you of progress and tells you when downloading is completed.

7. Click OK.

## Changing communication settings

The LaserWriter Select 360's interfaces (LocalTalk, serial, and parallel) have configuration parameters associated with them that you can change by pushing a switch on the back of the printer (for information on how to use the switch, see "Appendix C, Automatic Language Sensing and Interface Configuration.")

You can use the LaserWriter Utility to configure switch position 8 to your own specifications.

**Note:** Switch position 8 is set to select the correct printer language for printing documents automatically. You probably won't need to change the communication settings.

1. In the LaserWriter Utility program, choose Configure Communications from the Utilities menu.
2. Under View Switch Settings, click 8.
3. Choose the port from the pop-up menu.
4. Make the desired changes.
5. Click OK.

## Sending PostScript files to the printer

You can download PostScript files to the printer to print a PostScript program or an Encapsulated PostScript (EPS) file, or to run a PostScript program to change the internal settings of the LaserWriter Select 360. The PostScript file can be created in a variety of text-editing programs.

1. In the LaserWriter Utility program, choose Download PostScript File from the Utilities menu.

A dialog box appears in which you can select the file.

2. Click the file you wish to download.
3. Click Open.

A second dialog box appears, in which you indicate where on your disk to save any PostScript response from the printer.

4. Select a folder in which to save the PostScript log file.

You can type a new name for the file if you wish.

5. Click OK.

The file is downloaded to the LaserWriter Select 360, and any PostScript response from the printer is saved on your disk.

#### Restarting the printer

You may need to restart the printer to clear its memory if you have problems printing. Chapter 5, "Troubleshooting," describes when this may be necessary.

1. In the LaserWriter Utility program, choose Restart Printer from the Utilities menu.

A dialog box appears asking you to confirm that you want to restart the selected printer.

2. Click Restart.

It takes a few minutes for the printer to restart and be ready to print.

The same effect can be achieved by physically turning the printer off and then on again.

**Important** If the LaserWriter Select 360 is on a network shared by other users, make sure that no one is attempting to use the printer before you restart it.

#### Setting the printer's resolution to 300 or 600 dots per inch

You can set the default printer resolution to either 300 or 600 dots per inch (dpi). The LaserWriter Select 360 is normally set to print at 600 dpi, but you may wish to print at 300 dpi to print faster.

1. In the LaserWriter Utility program, choose Imaging Options from the Utilities menu.

The Imaging Options dialog box appears.

2. Click the 300 or 600 dots per inch button in the Printer Resolution options.

3. Click OK.

### Turning FinePrint on or off

You can turn the LaserWriter Select 360's FinePrint feature on and off. FinePrint is normally turned on when printing at 300 dpi, but you may wish to turn it off to maintain the standard 300-dpi look for a special purpose. You cannot use FinePrint when the printer is set to print at 600 dpi.

1. In the LaserWriter Utility program, choose Imaging Options from the Utilities menu.

The Imaging Options dialog box appears.

2. Click the 300 dots per inch button in the Printer Resolution options.
3. Click On or Off in the FinePrint option.
4. Click OK.

### Setting the print density

You use the print density control to adjust the darkness of the printer's output in extreme environmental conditions. Its effect at normal room temperature is small.

1. In the LaserWriter Utility program, choose Print Density from the Utilities menu.

The Print Density dialog box appears.

2. Drag the slider right or left to increase or decrease the print density.
3. Click OK.

### Viewing the page count

The LaserWriter Select 360 stores a running total of the number of pages it has printed. This total is printed on the startup page when you start the printer (if the startup page is turned on). You can also display the current page count from the LaserWriter Utility.

1. In the LaserWriter Utility program, choose Get Page Count from the Utilities menu.

A dialog box appears with the current page count of the selected printer.

2. Click OK when you are finished viewing.

## CHAPTER 3

### PRINTING FROM AN IBM PC OR COMPATIBLE COMPUTER

The way you print and choose printing options can differ from one Windows application program to another. To find out more about printing from your application programs, read the documentation that came with the programs.

#### Printing from a Windows program

To print a document from a Windows program, the program must be open and the document window must be active.

Follow these steps to print.

1. Choose Print from the File menu.

In most programs a Print dialog box appears, in which you select printing options such as the number of copies and the pages to print. Depending on your program, the Print dialog box may offer additional options.

2. Select the options you want and click Print.

A message appears while the document is being sent to the Print Manager. After the message disappears, you can go on with your work while your document is being printed.

#### Setting printing options in Windows 3.1

You can use the Printers icon in the Windows Control Panel to change the printer's default options. For example, you can choose the paper cassette or manual feed, specify a default paper size, or change the paper orientation to Landscape.

1. Open the Main icon from the Program Manager window.
2. Open the Control Panel icon from the Main window.
3. In the Control Panel window, open the Printers icon.

The Printers dialog box appears.

4. From the Installed Printers list, select the appropriate Apple LW Select 360 printer driver.

5. Click Setup.

A dialog box appears. Select the default paper source, page size, page orientation, and number of copies that you want.

Important Choose Upper Tray to print from the paper cassette. Choose Manual Feed to print from the multipurpose tray or the manual feed tray.

6. Click the Options button if you wish to see additional settings. If you don't click Options, skip to step 10.

In the Options dialog box, you can control how the computer sends information to the printer. You can change additional advanced options by clicking the Advanced button.

7. Click the Advanced button if you wish. If you don't click Advanced, skip to step 9.

In the Advanced Options dialog box, you can control how the computer sends fonts and graphics to the printer and how the printer manages memory.

8. Click OK to close the Advanced Options dialog box.

9. Click OK to close the Options dialog box.

10. Click OK to close the Setup dialog box.

11. Click Close to close the Printers dialog box.

12. Close the Control Panel window.

Using the LaserWriter Utility program for IBM PC and compatible computers

The LaserWriter Utility program supplied with the printer allows you to control various aspects of how the LaserWriter Select 360 works. Use the LaserWriter Utility to:

- name the printer
- turn the startup page on and off
- select power-saving delay
- set paper-handling options
- print a list or samples of printer fonts

- view or change the communication settings
- send PostScript files to the printer
- restart the printer
- set the default printing resolution
- turn FinePrint on and off
- set the print density to lighten or darken printing
- see the total number of pages the printer has printed

The settings you choose with the Laserwriter Utility Program will remain in effect until you change them.

#### Installing the LaserWriter Utility

1. Insert the LaserWriter Select 360 Windows Software disk into your disk drive.
2. Open the Main icon from the Program Manager window.
3. Choose Run... from the Program Manager File Menu.

The Run dialog box appears.

4. In the Run dialog box, type a:\ or b:\ to specify the path for the disk drive holding the LaserWriter Select 360 Windows Software disk, and then type setup.
5. Click OK.

Follow the instructions on your screen to complete the installation.

#### Opening and quitting the LaserWriter Utility

Before you begin, make sure the LaserWriter Select 360 is selected in the control panel.

To open the LaserWriter Utility, double-click the LaserWriter Utility icon. The utility presents the menu options listed in the following sections. You can use these menus to perform the functions detailed in this section.

When you are finished using the LaserWriter Utility, quit the program by choosing Exit

from the File menu.

### Naming the printer

Each LaserWriter Select 360 can be given an individual name. Use the following procedure to rename the LaserWriter Select 360.

1. In the LaserWriter Utility program, choose Name Printer from the Utilities menu.

The Rename dialog box appears.

2. Type in the new name.
3. Click Rename.
4. Click OK.

A page prints confirming the printer's new name.

### Turning the startup page on or off

The LaserWriter Select 360 normally prints a sample page when you turn the printer on. This page shows the printer's name; the total number of pages printed; and the amount of memory, number of internal fonts, and communication settings. You can turn this feature off if you wish.

1. In the LaserWriter Utility program, choose Set Startup Page from the Utilities menu.

A dialog box appears that allows you to turn the startup page on or off.

2. Click On or Off.
3. Click OK.

A page prints confirming the choice.

### Setting the power-saving delay

You can change the amount of time after the last print job at which the printer "powers down" to save energy.

Note: If you send a job to the printer when it is in the power-saving mode, it

automatically returns to full power.

1. In the LaserWriter Utility program, choose Power Saving from the Utilities menu.

The Power Saving dialog box appears.

2. Click the arrow in the Delay box and select a new delay.
3. Click OK.

A page prints confirming the choice.

### Setting paper-handling options

When the LaserWriter Select 360 runs out of paper in one tray, it can automatically switch between paper in the paper cassette and the multipurpose tray. Using automatic tray switching between the 250-sheet paper cassette and the 50-sheet multipurpose tray, you can print 300 sheets without reloading paper.

You can also set the printer to use a particular size paper in the multipurpose tray.

1. In the LaserWriter Utility program, choose Paper Handling from the Utilities menu.

The Paper Handling dialog box appears.

2. Click On or Off below Automatic Tray Switching.
3. Choose a paper size from the Paper Type pop-up menu.
4. Click OK.

A page prints confirming the choice.

### Printing a list of printer fonts

You can print a list of the fonts currently stored in the printer's memory.

In the LaserWriter Utility program, choose Print Font Catalog from the File menu.

The list of fonts is printed.

## Printing samples of printer fonts

You can print samples of the fonts currently stored in the printer's memory.

In the LaserWriter Utility program, choose Print Font Samples from the File menu.

Font samples are printed.

## Changing communication settings

The LaserWriter Select 360's interfaces (LocalTalk, serial, and parallel) have configuration parameters associated with them that you can configure by pushing a switch on the back of your printer (for information on how to use the switch, see "Appendix C, Automatic Language Sensing and Interface Configuration").

You can use the LaserWriter Utility to configure switch position 8 to your own specifications.

**Note:** Switch position 8 is set to select the correct printer language for printing documents automatically. You probably won't need to change the communication settings.

1. In the LaserWriter Utility program, choose Configure Communications from the Utilities menu.
2. Choose switch 8-Variable from the View/Set Switch Setting pull-down menu.
3. Choose the port from the Port pull-down menu.
4. Make the desired changes.
5. Click OK.

## Sending PostScript files to the printer

You can download PostScript files to the printer to print a PostScript program or Encapsulated PostScript (EPS) file, or to run a PostScript program to change the internal settings of the LaserWriter Select 360. A PostScript file can be created in a variety of text-editing programs.

1. In the LaserWriter Utility program, choose Download PostScript File from the Utilities menu.

A dialog box appears.

2. Select the file you want to download.
3. Click OK.

The file is downloaded to the LaserWriter Select 360.

### Restarting the printer

You may need to restart the printer to clear its memory if you have problems printing. Chapter 5, "Troubleshooting," describes when this may be necessary.

1. Choose Restart Printer from the Utilities menu.

A dialog box appears asking you to confirm that you want to restart the selected printer.

2. Click Restart.

It takes a few minutes for the printer to restart and be ready to print. The same effect can be achieved by turning the printer off and then on again.

**Important** If the LaserWriter Select 360 is on a network shared by other users, make sure that no one is attempting to use the printer before you restart it.

### Setting the printer's resolution to 300 or 600 dots per inch

You can set the default printer resolution to either 300 or 600 dots per inch (dpi). The LaserWriter Select 360 is normally set to print at 600 dpi, but you may wish to print at the standard 300-dpi look to print faster.

1. In the LaserWriter Utility program, choose Imaging Options from the Utilities menu.

The Imaging Options dialog box appears.

2. Click the 300 or 600 dots per inch button in the Printer Resolution options.
3. Click OK.

## Turning FinePrint on or off

You can turn the LaserWriter Select 360's FinePrint feature on or off. FinePrint is normally turned on when printing at 300 dpi, but you may wish to turn it off to maintain the standard 300-dpi look for a special purpose. You cannot use FinePrint when the printer is set to 600 dpi.

1. In the LaserWriter Utility Program, choose Imaging Options from the Utilities menu.

The Imaging Options Dialog box appears.

2. Click the 300 dots per inch button in the Printer Resolution options.
3. Click On or Off next to FinePrint.
4. Click OK.

A page prints confirming the choice.

## Printing the configuration page

In the LaserWriter Utility program, choose Print Configuration Page from the Utilities menu.

The configuration page prints.

## Setting the print density

You use the print density control to adjust the darkness of the printer's output in extreme environmental conditions. Its effect at normal room temperature is small.

1. In the LaserWriter Utility program, choose Print Density from the Utilities menu.

The Print Density dialog box appears.

2. Drag the slider right or left to increase or decrease the print density.
3. Click Set.

A page prints confirming the choice.

## Printing the page count

The LaserWriter Select 360 stores a running total of the number of pages it has printed. This total is printed on the startup page when you start the printer (if the startup page option is turned on). You can also print it using the LaserWriter Utility.

In the LaserWriter Utility program, choose Print Page Count from the Utilities menu.

A page prints listing the number of pages printed to date.

## CHAPTER 4

### MAINTENANCE

#### Cleaning your printer

- Clean the printer with only a damp cloth, and, if necessary, a mild soap or detergent. Don't use ammonia-based cleaners on or around the printer. They may react with the toner.

- Don't use alcohol-based cleaners on or around the printer. They may react with the plastic case.

#### Changing a toner cartridge

Toner is the powdered ink that produces the image on the paper. Follow these steps to install a toner cartridge in the printer.

1. Remove the multipurpose tray, if attached, and close the manual feed door.
2. Open the printer access door.
3. If you are replacing a used cartridge, remove the old cartridge and set it aside.
4. Unpack the new toner cartridge and gently rock it to distribute the toner inside.
5. Pull the tape tab to remove the tape.
6. Insert the cartridge into the printer.

Line up the markings on the sides of the cartridge with the arrows in the printer.

7. Close the access door.

8. Print the Cleaning Page, as described in the next section.

### Using the Cleaning Page

The Cleaning Page is a file, included with the printer software, that you print each time you install a new toner cartridge. This process removes any buildup of toner on the rollers inside the printer. You can also use the Cleaning Page at any other time as a remedy if your printed pages are not coming out perfectly clean.

### Printing the Cleaning Page from a Macintosh

On a Macintosh computer, the Cleaning Page document is a file created by the TeachText program.

1. Insert the LaserWriter Select 360 Macintosh Installation disk in a disk drive.
2. Open the disk icon.
3. Open the Printing Tools folder.
4. Select the Cleaning Page icon.
5. Choose Print from the File menu.

The Print dialog box appears.

6. Click Print.

The Cleaning Page prints. It contains only a wide, black stripe.

7. Open the multipurpose tray or manual feed tray.

If you need help, see Chapter 1 for instructions.

8. Take out the printed page, turn it over, and feed it through again, printed side up.
9. Once again, select the Cleaning Page icon and choose Print from the File menu.
10. In the Print dialog box, choose Manual Feed from the Paper Source pop-up menu.
11. Click Print.

When the page is printed, the cleaning process is finished. You can discard the printed Cleaning Page.

## Printing the Cleaning Page from an IBM PC or compatible computer

The Cleaning Page for IBM PCs and compatible computers is on the LaserWriter Select 360 Windows Software disk that came with your printer. You can print the Cleaning Page from this disk, or copy it first to your hard disk.

The Cleaning Page is a PostScript file called CLEANPG.PS that you download to your printer.

1. Move to the UTILITY directory on the LaserWriter Select 360 Windows Software disk.

2. Open the multipurpose or manual feed tray.

If you need help, see Chapter 1 for instructions.

3. Set the paper source option in the Printer Setup dialog box to manual feed.

If you need help, see your Windows documentation for instructions.

4. Put a sheet of paper in the multipurpose or manual feed tray.

If you need help, see Chapter 3 for instructions.

5. At the DOS command line, type:

```
copy cleanpg.ps lpt1: <Enter>
```

The Cleaning Page prints. It contains only a wide, black stripe.

6. Take out the printed page, turn it over, and feed it through again, printed side up.

7. Once again, at the DOS command line, type:

```
copy cleanpg.ps lpt1: <Enter>
```

When the page is printed, the cleaning process is finished. You can discard the printed Cleaning Page.

## CHAPTER 5

### TROUBLESHOOTING

This chapter provides solutions to printing problems you may encounter. There is a section for general problems, for problems specific to Macintosh computers, and for problems specific to IBM PCs and compatible computers.

#### Safety precautions

Consider these rules of safety before you open the printer or attempt to troubleshoot problems:

- Don't attempt to disassemble the printer.
- Don't use oil inside the printer.
- Don't use ammonia-based cleaners on or around the printer. They may react with the toner.
- Don't use alcohol-based cleaners on or around the printer. They may react with the plastic case.
- Don't leave the access door open. Exposing the toner cartridge to light may damage the cartridge.
- Don't open the drum-protection shutter on the toner cartridge.

**Important** The fixing assembly in the printer operates at very high temperatures. When you need to open the printer, be careful not to touch the fixing assembly.

#### Checking the printer's status lights

Always check the status lights first when a printing problem occurs. These often tell you the cause of the problem.

If the Paper Jam light is on, see "Paper Is Jammed" in this chapter for assistance. If the Paper Out light is on, add paper.

If all lights are on, or all are off while the printer is on, or if both the Paper Jam and Paper Out lights are flashing, contact your LaserWriter service provider for repairs.

## General printing problems

The solutions in this section can be applied whether you use a Macintosh computer or an IBM PC or compatible computer.

### Paper is jammed

If the Paper Jam status light is on, remove the jammed sheet from one of the locations shown below.

### Paper feeds improperly

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

Remove any jammed sheets from inside the printer. Open the paper cassette, turn the stack of paper over, and replace the cassette (most paper has one side that prints better). It may also help to fan the edge of the stack with your thumb, in case some of the sheets are stuck together.

### The printer won't print

If you are using the paper cassette, make sure the sliding backstop inside the cassette (the paper bracket at the rear) is set in one of the notches with a labeled paper size. If the bracket is set between notches or in an unmarked notch, the document may not print.

### Printing takes a long time

Printing may be slow on documents containing complex graphics or many fonts that have to be downloaded to the printer.

### A page prints off center or images are out of place

This problem may result from one of the following:

- You are not using the recommended paper (20-lb. typewriter or photocopy bond).
- The margins are set wrong in the document you are printing.
- The paper cassette may be too full, causing paper to feed incorrectly.

- The sliding backstop or the paper bracket in the cassette is not set snugly against the edge of the paper.
- If you are using manual feed, the sheet of paper may not have been centered.

#### Unwanted lines or stripes appear

If white or dark lines appear on the page, try the following:

Remove the toner cartridge and rock it to redistribute the toner. Be sure to hold the cartridge horizontally.

#### Toner stains appear on printed pages

If the printed pages are not clean, there may be a buildup of toner on the printing rollers. Follow the instructions for using the Cleaning Page in Chapter 4, "Maintenance."

If stains appear on the backs of printed pages, you may have printed an image that is larger than the paper, causing toner to be deposited in the paper path. To clean the toner from the rollers, print several blank pages until the stains disappear.

#### Smearing, curling, and other paper problems

Many problems such as toner smearing, or paper curling or feeding improperly, can be caused by the paper you are using.

Here is a list of papers to avoid:

- extremely slick or shiny paper
- paper that is highly textured
- coated paper
- paper made with talc
- stapled paper
- multipart forms
- letterhead paper that was printed using low-temperature dyes or thermography, because such materials can peel away from the paper or melt inside the LaserWriter

and cause damage

To assure good results, test a few sheets of any paper before you order large quantities.

### Macintosh troubleshooting

Use the solutions in this section if you print from a Macintosh computer.

#### The Chooser doesn't show the LaserWriter 8.0 icon

If the LaserWriter 8.0 icon is missing from the box that identifies different printer types, you probably need to install the printer software in your System Folder.

#### The Macintosh can't find the printer

If you have selected the printer icon in the Chooser but nothing prints or you get a message that no printer has been found, one of the following may be the cause:

- The printer has been turned off. Make sure it is plugged in and turned on (the green status light should be on).
- There's a loose plug somewhere. Check to make sure that all the cables are properly connected. See Chapter 1, "Setting Up Your Printer."
- The correct printer hasn't been selected. Check the Chooser to make sure you have selected the LaserWriter Select 360.
- The printer is connected to the Macintosh printer port and AppleTalk is inactive. Open the Chooser and make sure AppleTalk is active.
- The printer may be unable to respond. Turn the printer off and back on.
- The printer is connected to the modem port but trying to use LocalTalk. Turn the printer off, then plug the printer into the printer port.

If you still can't resolve the problem, the printer may not be functioning properly. Contact your dealer or service provider about repairs.

#### The image is too light or too dark

If printing is too light or too dark, try the following:

- Take out the toner cartridge and rock it gently to distribute toner. If this doesn't help, you may need to replace the cartridge. See "Changing a Toner Cartridge" in Chapter 4 for instructions.

- If you are in extreme environmental conditions, use the LaserWriter Utility to adjust the print density.

- If the problem occurs on paper other than the recommended 20-lb. photocopy or typewriter bond, the toner may not adhere well to the paper you are using. Try using a fresh package of 20-lb. paper.

An "out of memory" message is displayed on your screen when you try to print

The printer may have insufficient memory to print if:

- the document contains too many fonts that need to be downloaded from your computer to the printer

- the document contains complex images

- you have selected Larger Print Area or have not selected Unlimited Downloadable Fonts in the Page Setup Options dialog box

If a page contains very complex graphic images, try to remove some of the complex detail from that page (or spread the information over two pages) and try again to print it.

If you encounter the "out of memory" message frequently, you can remedy this by increasing the amount of memory in the printer. (See "Upgrading Printer Memory" in Appendix A.)

The printer prints on only part of the paper

Make sure you have selected the appropriate paper size in the Page Setup dialog box.

Check the adjustment of the backstop in the paper cassette to make sure it is correct for your paper size.

Optional paper sources don't appear in the Print dialog box

Make sure the optional cassette is installed properly.

Open the Chooser and click the LaserWriter 8.0 icon. Click the Setup button, then click Auto Setup in the dialog box that appears.

### IBM PC and compatible computer troubleshooting

Use the solutions in this section if you print from an IBM PC or compatible computer with Microsoft Windows.

#### Nothing is printed; no paper comes out of the printer

If you don't get any response from the printer when you try to print a document, try the following steps.

- Check the Print Setup box to see that your printer is selected.
- See Chapter 1 for details about installing and selecting the printer driver.
- Open the Print Manager and check the list of print jobs. If it says your print job is stalled, click the Resume button.
- Check the Paper Out light. If it is on, add paper and replace the paper cassette.
- Check for a paper jam as described earlier in this chapter.
- Check to make sure that all the cables are properly connected. See Chapter 1, "Setting Up Your Printer."
- Turn the printer off and back on.
- Reinstall the printer driver. See Chapter 1 for details about installing and selecting the printer driver.

#### A message on the screen says the printer can't print

If you get such a message, try the following steps.

- Make sure that the printer is turned on.
- Check to make sure that all the cables are properly connected. See Chapter 1, "Setting Up Your Printer."
- Make sure that your LaserWriter printer driver has been installed and is selected. See Chapter 1 for details about installing and selecting the printer driver.

The image is too light or too dark

If printing is too light or too dark, try the following:

- Take out the toner cartridge and rock it gently to distribute toner. If this doesn't help, you may need to replace the cartridge. See "Changing a Toner Cartridge" in Chapter 4 for instructions.
- If the problem occurs on paper other than the recommended 20-lb. photocopy or typewriter bond, the toner may not adhere well to the paper you are using. Try using a fresh package of 20-lb. paper.
- If you are in extreme environmental conditions, use the LaserWriter Utility to adjust the print density.

## APPENDIX A

### ADDING POSTSCRIPT FAX, MEMORY, AND PAPER-HANDLING OPTIONS

You can add fax capability and additional memory to your printer, as well as optional equipment to increase the paper or envelope capacity of the printer. This appendix contains instructions for installing and using the paper-handling accessories.

#### Fax option

The optional PostScript Fax for the LaserWriter Select 360 consists of a fax modem card that is installed in the printer and associated software for the Macintosh and IBM-PC compatible computers. The PostScript Fax option allows any user of the printer to both send and receive faxes, potentially eliminating the need for a conventional fax machine.

The printer can receive faxes from most fax machines (CCITT Group III-compatible), printing them immediately on plain paper at normal fax resolution (100 or 200 dpi). It can also receive faxes sent by other PostScript Fax-capable printers and print them at full 600 dpi resolution.

The supplied software allows any user attached to the printer to send faxes through the printer's fax modem in the same way that print jobs are sent to the printer; no intermediate scanning is required. Faxes can be sent to any Group III-compatible fax machine at either 100 or 200 dpi. If the receiving machine is a PostScript Fax printer, the fax is transmitted in the PostScript page-description language, allowing the fax to be printed at the full resolution of the receiving printer.

The PostScript Fax option must be installed by an Apple-authorized service provider. See your dealer for more information.

## Upgrading printer memory

The LaserWriter Select 360 can be upgraded with more memory, which allows you to print more complex documents and improves performance on documents that contain many fonts.

The printer's standard memory size is 7 MB (megabytes), 4 MB of which are contained on a removable SIMM (Single Inline Memory Module). The printer may be upgraded to 16 MB total (the largest size supported by the printer) by removing the 4 MB SIMM and replacing it with a 16 MB SIMM.

This 16 MB SIMM may be purchased from your Apple-authorized dealer. The SIMM must meet the following specifications.

- Size: 16 MB (4 Mbit x 32 bit)
- Access Time: 80 ns or less
- SIMM Type: 72-pin
- Refresh: 2K Row (11 bit x 11 bit)

**WARNING** Have an Apple-authorized service provider perform this memory upgrade. Attempting to install memory yourself may void the warranty on your printer.

## Adding paper-handling options

In addition to the paper cassette that comes with the printer, the LaserWriter Select 360 can use a second paper cassette if you add an optional feeder. The feeder fits as a base below the printer

## Installing and using the optional sheet feeder and cassette

The optional sheet feeder looks and works exactly like the built-in feeder that forms the lower portion of your printer.

1. Turn off the printer and unplug the power cord.
2. Remove and set aside the paper cassettes from both the printer and the sheet feeder.

3. Set the sheet feeder on a flat, stable surface and lower the printer over it so the sides are exactly aligned.
4. Snap each of the four plastic retainer clips into its slots to lock the upper and lower feeders together.
5. Replace the paper cassettes into the feeders, plug in the power cord, and turn on the printer.

#### Printing from the paper cassette

You need to select the paper cassette as the paper source before you print.

#### Selecting the paper source for a Macintosh

1. Open the Chooser.
2. Click LaserWriter 8.0 in the box on the upper left corner.

Make sure that the LaserWriter Select 360 is highlighted in the printer list.

3. Click Setup.

The printer description dialog box appears.

4. Click Configure.

The installable options dialog box appears.

If Configure isn't a choice in the box, click More Choices until it appears.

5. Choose Installed from the Cassette 250/500 sheets menu.
6. Click OK to close the installable options box.
7. Click OK to close the printer description box.

#### Printing from the paper cassette from a Macintosh

1. Choose Print from the File menu.
2. Select Cassette (250/500 sheets) from the Paper Source pop-up menu.
3. Click Print.

### Printing from the paper cassette in Windows 3.1

1. Open the Printers icon from the Control Panels window.
2. Click Setup.
3. Select Lower Tray from the Paper Source menu.
4. Click OK.
5. Choose Print from the File menu.
6. Click OK.

### Loading and using the envelope cassette

The optional envelope cassette automatically feeds up to 30 standard-weight envelopes. The cassette takes Com-10, Monarch, DL, and C5 envelopes.

To load the envelope cassette:

1. Stack the envelopes face up (with the flap down), with the top edge against the side of the cassette that's on the left when you face the printer.
2. If the side brackets need adjustment, slide them to fit against the stack of envelopes.
3. If the rear bracket needs adjustment, squeeze both sides and slide it until the top lip fits over the stack of envelopes. Be sure the bracket stops at one of the preset sizes marked inside the cassette.

### Printing envelopes from a Macintosh

Follow these steps if you use a Macintosh computer.

1. Open the program in which you'll be printing.
2. Choose Page Setup from the File menu.
3. Choose the type of envelope you are printing from the Paper pop-up menu.
4. Click the icon for landscape page orientation.
5. Click OK.

6. Type the mailing address in the position you want and print.

Depending on the capabilities of the application program you're working in, you may need to experiment to print the address in the correct position.

## APPENDIX B

### SPECIFICATIONS

Marking engine

Fuji Xerox laser-xerographic

Print quality

PostScript: 300 or 600 dots per inch, selectable

LaserJet III emulation: 300 dots per inch

Printer memory

7 MB of RAM standard, upgradable to 16 MB

Printer fonts

Sixty-four fonts are provided with the LaserWriter Select 360, including such fonts as

ITC Avant Garde

ITC Bookman

Chicago

Courier

Delphian

Garamond Condensed

Geneva

Helvetica

Helvetica Black

Helvetica Narrow

Lubalin Graph

Lucida Bright

Machine

Monaco

Nadianne  
New Century Schoolbook  
New York  
Old English Text  
Onyx  
Oxford  
Palatino  
Swing  
Symbol  
Times  
ITC Zapf Chancery  
ITC Zapf Dingbats  
Zeal

Laser

Type: Semiconductor laser

Wavelength: 780 nanometers

Output power: 5 milliwatts maximum

Speed

Ten pages per minute maximum. Actual speed depends on the images printed and the computer used.

Interfaces

LocalTalk, parallel (Centronics-type), and RS-232 serial

RS-232 Serial Interface Connections

Pin	Signal	I/O	Description
1	FG		Frame/protective ground
2	TxD	Output	Transmitted data from printer to computer
3	RxD	Input	Received data from computer to printer
4	RTS	Output	Request to send. Always high when printer is on

5*	CTS	Input	Clear to send. Sends data when signal is high
7	SG		-Signal ground
20*	DTR	Output	Data terminal ready. Sets signal high when ready to accept data

\* These signals are not used when XON/XOFF handshaking is enabled.

#### Recommended duty cycle

- Minimum life expectancy is 300,000 pages, with no monthly page limit

#### Paper feed

- Automatic feed from paper cassettes and multipurpose tray; manual feed for single sheets

#### Energy Star

- The LaserWriter Select 360 is EPA Energy Star-compliant.

#### Printing materials

Apple recommends 20-lb. photocopy or typewriter bond (75 g/m<sup>2</sup>). You can use 16-lb. (60 g/m<sup>2</sup>) to 28-lb. (105 g/m<sup>2</sup>) paper. The printer accepts most letterhead and colored stock, and medium-weight photocopier transparencies. Print labels or transparencies using manual feed or the multipurpose tray. Use envelopes recommended for laser printers. Print envelopes using manual feed or automatically if you have the optional envelope cassette installed. Paper made with talc is not recommended for use with this printer.

#### Paper sizes and capacity

The standard paper cassette can hold up to 250 sheets of U.S. letter, A4, or B5 (JIS) paper sizes. Optional cassettes are available for 250 sheets of U.S. legal paper and 500 sheets of U.S. letter or A4 paper. The multipurpose tray can hold up to 50 sheets of U.S. Legal, A4, U.S. Letter, B5 (JIS), or Executive paper, or 5 envelopes. The optional envelope cassette holds up to 30 Com-10, Monarch, DL, or C5 envelopes.

### Imageable area

- Maximum printable line: 207.7 mm (8.18 in.)
- Minimum top and bottom margins: 4.5 mm (0.18 in.)
- Minimum left and right margins: 4.5 mm (0.18 in.)

Actual imageable area may vary depending on the application program. The printer senses cassette size and adjusts to maintain these margins.

### Dimensions

Height: 25.8 cm (8.0 in.)

Width: 38 cm (15 in.)

Depth: 45.8 cm (18.3 in.)

### Weight

13.2 kg (29 lb.)

### Acoustic noise levels (bystander position)

Standby: 36dBA

Printing: 47dBA

### Operating environment

#### Humidity

20 to 80 percent, noncondensing

#### Toner cartridge transit environment

-4 to +104 F (-20 to +40 C)

### Input electrical requirements

U.S./Japan

100-115 V (10%), 50-60 Hz (2 Hz)

Europe/Australia

220-240 V (10%), 50 Hz (2 Hz)

Power consumption

Operating

450 W maximum at 115 V or 220 V

Ozone emission

0.05 parts per million maximum, measured in accordance with ECMA 129 or UL114 standards for ozone measurement

## APPENDIX C

### AUTOMATIC LANGUAGE SENSING AND INTERFACE CONFIGURATION

The LaserWriter Select 360 can use two page-description languages: PostScript and PCL5. If you use a Macintosh computer, your documents are printed using the PostScript language. If you use an IBM PC or compatible computer, your documents may be printed using either PostScript or PCL5. When you send a document to the LaserWriter, a feature called Adobe IntelliSelect (AIS) automatically determines which language is used for the document.

Your printer has three interface ports (LocalTalk, parallel, and serial). Each port can be set up to use AIS or not, as you choose. For example, if you use the printer's LocalTalk port to connect a Macintosh computer, and the parallel port to connect an IBM PC or compatible computer, you can turn AIS off for the LocalTalk port and turn it on for the parallel port. This is because all Macintosh programs print using PostScript, and programs on PCs may use PostScript or PCL5.

Each port has three possible AIS settings: AutoSelect (AIS is turned on), PostScript (AIS is turned off and the port is set to PostScript only), and PCL5 (AIS is turned off and the port is set to PCL5 only). When a port is set to PostScript only, you cannot use it to print PCL5 documents. When a port is set to PCL5 only, you cannot use it to print PostScript documents.

You use the rotary switch on the back of the printer to change the settings of the interface ports. AIS is one of the the settings you can change. The switch is set at the

factory to position 0, which is what most users will need. To find out what the settings are and how to change them, see the following section, "Interface Configuration."

### Interface configuration

Each of the LaserWriter Select 360's interface ports (LocalTalk, serial, and parallel) has some associated configuration parameters that you can set. The rotary switch on the back of the printer allows you to easily select one of nine commonly-used interface configurations. If one of these switch positions doesn't meet your needs, you can customize the configuration of switch position 8 using the LaserWriter Utility program for Macintosh or IBM PC and compatible computers, as described in Chapters 2 and 3.

You can change the switch position when the printer is on. The new configuration takes effect within a few seconds. Changing the switch position while a job is being printed may produce unpredictable results.

The table that follows summarizes the fixed interface configurations for switch positions 0 through 7, and the factory-default configuration for customizable switch position 8. Switch position 9 is reserved. When the printer is turned on with the switch in position 4, an interface configuration page is printed instead of the usual startup page.

Note: In the AIS column in the table that follows:

- PostScript means that the port is configured to accept only PostScript jobs.
- PCL5 means that the port is configured to accept only PCL5 jobs.
- AutoSelect means that the port can accept either PostScript or PCL5 jobs, and can automatically switch back and forth between them.

Position	Interface	Serial Parameters	Protocol	AIS
0	Serial	9600,N,8,1,DTR	Raw	AutoSelect
	LocalTalk		PostScript	
	Parallel		Raw	Autoselect
1	Serial	9600,N,8,1,DTR	Normal	PostScript
	LocalTalk			PostScript
	Parallel		Normal	PostScript
2	Serial	9600,N,8,1,DTR	Raw	PCL5
	LocalTalk			PostScript
	Parallel		Raw	PCL5

3	Serial	9600,N,8,1,XON/XOFF	Normal	PostScript
	LocalTalk			PostScript
	Parallel		Raw	Autoselect
4	Serial	19200,N,8,1,DTR	Normal	PCL5
	LocalTalk			PostScript
	Parallel		Raw	PCL5
5	Serial	19200,N,8,1,DTR	Raw	Autoselect
	LocalTalk			PostScript
	Parallel		Raw	Autoselect
6	Serial	19200,N,8,1,DTR	Normal	PostScript
	LocalTalk			PostScript
	Parallel		Normal	PostScript
7	Serial	19200,N,8,1,XON/XOFF	Normal	PostScript
	LocalTalk			PostScript
	Parallel		Raw	Autoselect
8	Serial	38400,N,8,1,DTR	Raw	Autoselect
	LocalTalk			PostScript
	Parallel		Raw	Autoselect