



Update to LaserWriter 12/640 PS User's Manual

This update contains the following late-breaking information that supersedes information in the manual:

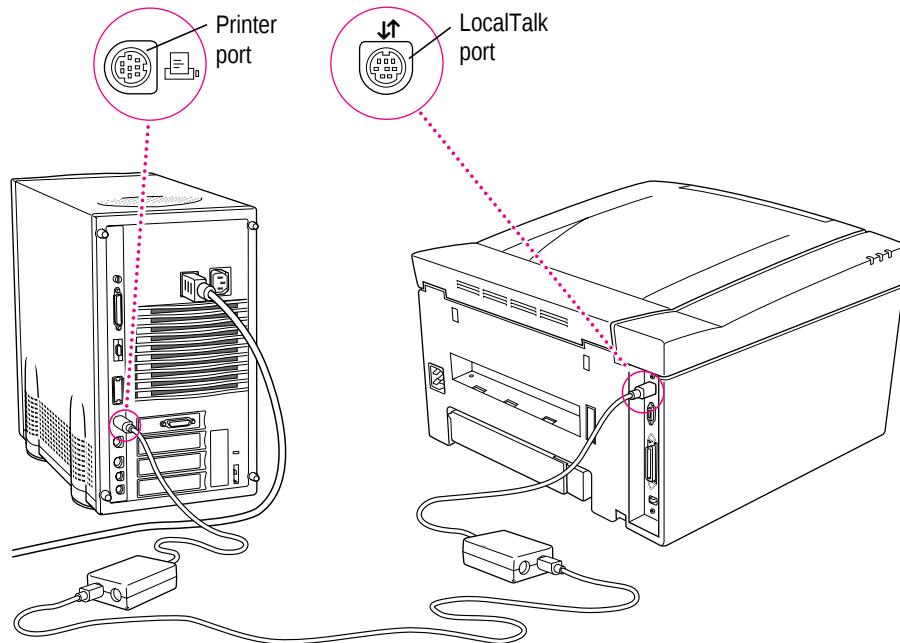
- connecting directly to a single Mac OS–based computer
- installing the software
- initial Novell NetWare setup
- changing the communication settings for UNIX users

Connecting directly to a single Mac OS–based computer

Apple recommends that you use two LocalTalk Kits or Ethernet to connect the LaserWriter 12/640 PS to a single Mac OS–based computer. If you use a System/Peripheral 8 cable, the printer prints correctly, but configuration items set through the printer utility (for example, the printer's AppleTalk name and turning off the startup page) are reset to the factory default when you turn off the printer. The following describes how to connect the printer with LocalTalk. For information on connecting with Ethernet, see Chapter 2 of the *LaserWriter 12/640 PS User's Manual*.

- 1** Obtain two LocalTalk Kits.
- 2** Plug one LocalTalk connector into the computer's printer () port.
- 3** Plug one end of the cable into the LocalTalk connector on the computer.
- 4** Plug the second LocalTalk connector into the printer's LocalTalk () port.

- 5 Plug the other end of the cable into the LocalTalk connector on the printer.



Installing the software

Be sure to install the updated software included on the *Apple LaserWriter* CD-ROM disc.

Mac OS-based computers

- 1 Quit any programs you are running.
- 2 Turn off any automatic virus-detection programs you have on your computer.

If you don't, problems may occur during the installation. After installation is complete, you can turn the virus-detection programs back on. (For instructions on turning off each virus-detection program, see the manual that came with the program.)

- 3** Insert the *Apple LaserWriter* CD-ROM disc into the CD-ROM drive.

The disc's icon appears on the desktop.

Note: Some systems require you to place the disc into a caddy before inserting it into the CD-ROM drive.

- 4** Double-click the disc icon to open the disk, if necessary.
- 5** Double-click the `MAC_OS` folder, if necessary.
- 6** Double-click the `SOFTWARE` folder, if necessary.
- 7** Double-click the `INSTALL` folder, if necessary.
- 8** Read the `Before You Install` file to check for late-breaking news.
- 9** Double-click the Installer icon to start the Installer program.

After a moment, a Welcome dialog box appears.

- 10** Click **Continue**.

After a moment, the Install dialog box appears. At the top of the dialog box is a pop-up menu set to allow you to perform an Easy Install.

Easy Install installs all the software you need. It installs the LaserWriter 8 software, the Desktop PrintMonitor, and the Apple Printer Utility.

Custom Install lets you specify what portions of the software you would like to install.

IMPORTANT The Installer checks to make sure you have what you need to use the printer software. If you're missing anything, a message tells you what you need. You won't be able to install the software until you correct the problem. If a dialog box says you don't have the correct system software, you can purchase a new version from an Apple-authorized dealer.

- 11** Click the **Install** button.

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

- 12** Follow the instructions on the screen until the installation is complete.

After the installation, the Installer tells you to restart your computer.

13 Click the Restart button.

The software is now installed on the hard disk. If you turned off any automatic virus-detection programs on your computer, turn them back on now.

After you restart, you may notice a new icon on your desktop, one that represents a desktop printer.

You will also see the Apple LaserWriter Software folder on your hard disk. This folder contains the Apple Printer Utility and Read Me files.

Creating installation floppy disks

You can create installation floppy disks from the CD-ROM disc if you don't want to give the disc to your users, or if some of your user systems don't have CD-ROM drives. You'll need seven blank floppy disks. To create installation disks, follow these steps:

1 Insert the *Apple LaserWriter* CD-ROM disc into the CD-ROM drive.

The disc's icon appears on the desktop.

Note: Some systems require you to place the disc into a caddy before inserting it into the CD-ROM drive.

2 Double-click the disc icon to open the disc, if necessary.

3 Double-click the MAC_OS folder, if necessary.

4 Double-click the SOFTWARE folder, if necessary.

5 Copy the DISKS folder to your hard disk.

6 Double-click the DISKS folder on your hard disk.

7 Double-click the Floppy Disk Maker application.

8 Click Full Set.

A dialog box appears that gives you some information, such as the approximate time it will take to copy the images to floppy disks.

- 9 Click Start to start the copy process.**
- 10 Follow the instructions on the screen until all disk images have been copied.**
Be sure to label the disks.

Windows 95–based computers

- 1 Start Windows 95.**
Before installing the software, make sure the Control Panel and Printers folder are closed.
- 2 Insert the *Apple LaserWriter* CD-ROM disc into the CD-ROM drive.**
- 3 Open the directory on the CD called WIN_OS\WIN95\DISK1.**
- 4 Double-click the setup.exe file.**
After a few moments, a message appears warning you to close all other applications before continuing with this installation.
- 5 Click Next if you have no other open applications.**
If you have open applications, click Cancel to stop this installation. Close all other applications and start the installation process again.
A message appears that lets you view the ReadMe file for late-breaking news.
- 6 Click Yes to view the ReadMe file.**
- 7 When you have finished reading the ReadMe file, choose Exit from the File menu in the WordPad application.**

A Welcome dialog box is displayed that allows you to select Express Installation, Custom Installation, or Printer Driver Only.

Express Installation installs all the software you need. It creates the Apple LaserWriter Software program group and installs within it the ReadMe file and the Apple LaserWriter Utility for Windows, which you use to name the printer and perform various printer administrative functions.

Custom Installation lets you specify what portions of the software you would like to install.

Printer Driver Only installs only the PostScript™ printer driver and printer description files.

8 Click Express Installation.

A window appears that keeps you informed as file decompression proceeds.

9 Click Next when the Installer prompts you to add a PostScript printer to your system.

A message appears that lets you install the setup program onto your hard disk.

10 Select Yes, if desired, and click Next.

The Setup Program Location dialog box appears.

11 Enter a new directory for the setup program or use the default directory and click Next.

A message appears that lets you specify how your printer is connected (local or network).

12 Select how your printer is connected (local or network) and click Next.

The Install PostScript Printer from PPD dialog box appears.

13 Select the drive that holds your CD from the Drives list box.

14 Select Disk 3 from the Directories list.

15 Select LaserWriter 12/640 PS from the PostScript Printer Descriptions Available list and click Next.

16 Select LPT1 if the printer is connected to your local computer.

17 Click Next.

The Add Printer dialog box appears.

18 Name your computer and select other options as necessary.

19 Click Next.

The printer Properties dialog box appears.

- 20 Click OK to dismiss the Properties dialog box.

A message appears telling you that the driver software was successfully installed.

- 21 Click Add Another to install another Apple LaserWriter printer.

Repeat for each printer you want to install.

- 22 When you're done, click Exit.

Installation is complete.

Creating installation floppy disks

You can create floppy disk copies of the printer software by using the standard features of Microsoft Windows 95.

- 1 Insert the *Apple LaserWriter* CD-ROM disc into the CD-ROM drive.

- 2 Double-click the My Computer icon.

- 3 Double-click the drive that holds your CD.

A window appears that displays the contents of the CD.

- 4 Insert a blank floppy disk into the a: drive (or b: drive).

- 5 Double-click the drive that holds your floppy disk.

A window appears that displays the contents of the floppy disk.

- 6 Open the WIN_OS directory.

- 7 Drag the WIN95\DISK1 from the CD window to the floppy disk window.

- 8 Repeat steps 4 through 6 using the WIN95\DISK2 and WIN95\DISK3 directories.

Windows 31-based computers

1 Start Windows.

Before installing the software, make sure the Windows Control Panel and Printers control panel are closed.

2 Insert the *Apple LaserWriter* CD-ROM disc into the CD-ROM drive.

3 Using the File Manager, open the directory on the CD called WIN_OSIWIN31_NT\DISK1.

4 Double-click the setup.exe file.

After a few moments, a message appears warning you to close all other applications before continuing with this installation.

5 Click Continue if you have no other open applications.

If you have open applications, click Exit to stop this installation. Close all other applications and start the installation process again.

A message appears that lets you view the ReadMe file for late-breaking news.

6 Click Yes to view the ReadMe file.

7 When you have finished reading the ReadMe file, choose Exit from the File menu in the Notepad application.

A Welcome dialog box is displayed that allows you to select Express Installation, Custom Installation, Print Driver Only, or De-Install.

Express Installation installs all the software you need. It creates the Apple LaserWriter Software program group and installs within it the ReadMe file and the Apple LaserWriter Utility for Windows, which you use to name the printer and perform various printer administrative functions.

Print Driver Only installs the minimum software needed for printing only.

Custom Installation lets you specify what portions of the software you would like to install.

De-Install lets you remove previously installed LaserWriter software.

8 Click Express Install.

A window appears that keeps you informed as file decompression proceeds.

9 Click Restart Windows.

After Windows restarts, the Adobe™ PostScript Printers control panel appears.

10 Select the drive that holds your CD from the Drives list box (or select WIN_OSIWIN31_NT\DISK2).

11 Select LaserWriter 12/640 PS from the PostScript Printer Descriptions Available list and click Install.

The PostScript printer driver files are installed on the hard disk. A message appears telling you that the driver software was successfully installed.

12 Click OK to dismiss the message.

13 Select another Apple LaserWriter printer, if you want, and click Install to install.

Repeat for each printer you want to install.

14 When you're done, click Close.

A message appears telling you to use the Printers control panel to connect and set up the printers you've installed. By default, each printer uses LPT1. The Printers control panel Setup dialog box lets you specify a different port, for example, LPT2, or a NetWare queue.

Installation is complete.

Creating installation floppy disks

You can create floppy disk copies of the printer software by using the standard features of Microsoft Windows 3.1.

1 Open the File Manager.

2 Insert the *Apple LaserWriter* CD-ROM disc into the CD-ROM drive.

3 Insert a blank floppy disk into the a: drive (or b: drive).

4 From the File Manager, open the WIN_OSIWIN31_NT\DISK1 directory on the CD.

5 Select Copy from the File menu.

- 6 Type ***.*** in the Source field and **a: (or b:)** in the Destination field.

The files are copied to the floppy disk.

- 7 Repeat steps 3 through 6 using the **WIN31_NT\DISK2** directory.

Windows NT 3.5x-based computers

These instructions install the printer on an Intel architecture Windows NT 3.5x workstation. If you have a Windows NT 3.5x server or other computer architecture, see the section “Windows NT 3.5x–Based Servers or Non-Intel Computers” later.

- 1 Start Windows NT 3.5.
- 2 Insert the *Apple LaserWriter* CD-ROM disc into the CD-ROM drive.
- 3 Using File Manager, open the directory on the CD called **WIN_OS\WIN_31_NT\DISK1**.
- 4 Double-click the **setup.exe** file.

The Welcome screen appears.

- 5 Select **Custom Install** and click **Windows NT Printer Software**. Make sure all other checkboxes are not checked.
- 6 Click **Install**.

Instructions for installing the Windows NT software appear.

- 7 Click **Continue**.

The Print Manager dialog box appears.

- 8 Select **Create Printer** from the Print Manager's Printer menu.

The Create Printer dialog box appears.

- 9 Select **Other** in the Driver Combo box.

- 10 Type **D:\WIN_OS\WIN31_NT\DISK2** when prompted by the Install Driver dialog box.

Replace **D:** with the letter of your CD-ROM drive.

- 11 Make sure the correct drive is listed in the Install Driver dialog box and click **OK**.

A list of printer drivers appears.

- 12 Select the printer driver that corresponds to your printer and click OK.
- 13 Follow the instructions on the screen.
- 14 Click Continue and OK to complete the installation.

Windows NT 4.0–based computers

You can use the Windows NT 4.0 Add Printer Wizard to install the PostScript printer driver.

- 1 Start Windows NT 4.0.
- 2 Insert the *Apple LaserWriter* CD into the CD-ROM drive.
- 3 Using File Manager, open the directory on the CD called WIN_OSI\WIN31_NT\DISK2.
- 4 Copy the APLWNT4.0.INF file and printer PPD file to your hard drive.
- 5 Click the Start Icon on the Task-Bar; select Settings and then Printers.
- 6 Double-click the Add Printer icon.
- 7 Follow the instructions on the screen until the list of known printers appears in the Add Printer Wizard window.
- 8 Click Have Disk.
- 9 In the dialog box that appears, select the driver and directory where the APLWNT4.0.INF file and printer PPD file are located.

You copied these files to your hard drive in step 4.

A list of printer models appears.

- 10 Select the LaserWriter 12/640 PS printer and click Next.
- 11 Follow the instructions on the screen to select the port.

The Add Printer Wizard prompts for the PostScript printer driver source directory.

- 12 Insert the Windows NT 4.0 CD-ROM disc into the the CD-ROM drive.
- 13 Follow the instructions on the screen to complete the installation.

Windows NT 3.5x-based servers or non-Intel computers

Follow these steps to install the software on a Windows NT 3.5x server or non-Intel computer.

- 1** Copy the PRINTER.INF file located in the D:\WIN_OSI\WIN31_NT\DISK2 directory of your CD-ROM disc to a temporary directory on your hard disk drive.

This example uses c:\TEMP as the temporary directory.

- 2** If you are installing onto a Windows NT 3.5x Server:

- Open the PRINTER.INF file with Notepad.
- Search for the [Source Media Description] session.
- Comment out the line for the NT Workstation.
- Uncomment the line for the NT Server.
- Save the file and exit Notepad.

- 3** Place your Windows NT CD-ROM disc into the CD-ROM drive.

This example uses d: as the CD-ROM drive. Be sure to use the letter that corresponds to your CD-ROM drive.

- 4** Double-click the “MS-DOS command prompt” icon in the Main program group.

- 5** Change to the appropriate directory by typing:

D:

CD \i386

The i386 directory is for Intel computers. You will need to change this directory according to your system. For example, \PPC is for a PowerPC™ computer.

- 6** Expand the PostScript driver components to your temporary directory. The following command expands the files to the C:\TEMP directory.

```
EXPAND -R PSCR*. * C:\TEMP
```

Five files are expanded to your temporary directory: PSCRIPT.CNT, PSCRIPT.DLL, PSCRIPT.HLP, PSCRIPT.SEP, and PSCRIPTUI.DLL.

- 7** Double-click the Print Manager icon located in the Main program group.

- 8** Select Create Printer from the Print Manager's Printer menu.

The Create Printer dialog box appears.

- 9** Select Other in the Driver Combo box.

- 10** Type the location of your PRINTER.INF file when prompted by the Install Driver dialog box.

A list of printer drivers appears.

- 11** Select the printer driver that corresponds to your printer and click OK.

- 12** Follow the instructions on the screen.

- 13** Click Continue and OK to complete the installation.

Initial Novell NetWare 4.1 setup

NetWare 4.1 introduces the concept of a hierarchical tree database, called NetWare Directory Services (NDS). NDS is different from the flat file database called the bindery used in earlier versions of NetWare. The printer does not support NDS. A NetWare command, SET BINDERY CONTEXT, allows a single level of the NDS directory tree to be specified as a virtual bindery location. Each time you use the NetWare 4.1 file server, set the file server's bindery context by typing SET BINDERY CONTEXT at the console prompt.

The superuser account name also changes with NetWare 4.xx to Admin from NetWare 3.xx's name of Supervisor. The Supervisor account still exists in NetWare 4.xx for backward compatibility, but it can't actually be seen in the NDS directory tree. The Admin account gives you full access to the entire NetWare Directory Services tree. The Supervisor account only lets you see objects that are in its bindery context location in the tree. When following the steps below for setting up your printer on NetWare 4.1 as PSERVER, always use the NetWare Admin account.

Make sure that the NetWare network is set up and operating according to the instructions in the Novell NetWare documentation.

You should have access to the NetWare Printer Console utility, PCONSOLE, on the computer from which you will be setting up the printer and have the administrative privileges necessary to make changes to the network.

Step 1: Choosing an operating mode

When setting up your printer for a NetWare network, you have a choice of three operating modes:

- PSERVER mode, in which the printer emulates NetWare's PSERVER software and functions as a dedicated print server
- RPRINTER mode, in which the printer functions as a remote printer
- ATPS (AppleTalk Print Spooler) mode, in which the printer functions as a remote AppleTalk printer

In PSERVER mode, the factory default, print jobs are stored in a queue on a specified file server and retrieved by the printer.

In RPRINTER mode, the printer depends on the NetWare print server software—either a NetWare Loadable Module (NLM), an RPRINTER.EXE executable file, or a value-added process (VAP) running on top of the operating system—to manage printing. Print jobs are stored in a queue on a specified file server. When the printer is ready to print the job, the NetWare print server software copies the job to the printer.

In ATPS mode, the printer uses its AppleTalk protocol support to communicate with the Novell ATPS NetWare Loadable Module (NLM). The NLM (included in the *NetWare for Macintosh* package from Novell) extends full queue and spooling services to Mac OS clients from a server-based software process.

There are advantages to each type of operating mode. Your choice will depend on your networking environment and the types of jobs you will be printing. Regardless of your choice, you can locate the printer anywhere on the network.

What to do next

Once you decide how you want to set up the printer, proceed as follows:

- **PSERVER** To set up the printer as a print server, read about how to use PCONSOLE in the next section, then
 - if you want a simple setup, read “Step 2, Option A: Setting Up the Printer as a Print Server (Using PCONSOLE),” later in this update.
 - if you want to assign a password, read “Step 3: Assigning a Password for the Print Server (Optional),” in Chapter 3 of the *LaserWriter 12/640 PS User’s Manual*.
- **RPRINTER** To set up the printer as a remote printer, read about how to use PCONSOLE in the next section, then skip to “Step 2, Option B: Setting Up the Printer as a Remote Printer (RPRINTER Mode),” later in this update.

For both PSERVER and RPRINTER, you must also follow the instructions in “Step 4: Setting Up the PostScript Printer Driver for NetWare,” in Chapter 3 of the *LaserWriter 12/640 PS User’s Manual*.

For more information about using the Apple LaserWriter Utility, read “Setting Additional Parameters With the Apple LaserWriter Utility for Windows” in Chapter 3 of the *LaserWriter 12/640 PS User’s Manual*.

Using PCONSOLE

PCONSOLE is a DOS-based utility for configuring printers on a NetWare network. This chapter provides information on the set of basic PCONSOLE operations required to set up the LaserWriter 12/640 PS. PCONSOLE is not provided with the printer. It comes with your NetWare software. Detailed information about PCONSOLE can be found in your NetWare documentation.

The descriptions of PCONSOLE in this update assume the use of keyboard commands to navigate through the program and perform operations. With the installation of a DOS mouse driver, you can also use a mouse to make selections and choose options.

The table below lists some basic PCONSOLE key commands.

Command key	Description
Esc (Escape)	Returns to the previous level
Del (Delete)	Deletes a selected item
F7	Cancels changes
Alt-F10	Exits the program
Ins (Insert)	Inserts a new item for a list
F1	Displays online help
Arrow keys	Cycle through menu selections or entry fields

Step 2, option A: Setting up the printer as a print server (using PCONSOLE)

There are five parts to setting up the LaserWriter 12/640 PS for PSERVER mode:

- Create a print server.
- Create a printer.
- Create a print queue.
- Set your printer to PSERVER mode.
- Turn the printer off and then back on to have the changes take effect.

Creating a print server

- 1** Restart the printer to print a startup page; then obtain the NetWare Printer Name.

This NetWare Printer Name is the name of the printer on a NetWare network. It is also the default print server name.

- 2** Type **SET BINDERY CONTEXT** at the NetWare file server's console prompt to ensure that the context has been set.

Be sure to write the context down, as it will be needed later.

- 3** Log in to the NetWare file server from a DOS client using the Admin account.
- 4** At the DOS prompt, type **PCONSOLE** and press Enter.

- 5** Use the arrow keys to highlight Change Context in the menu, and press Enter.
- 6** Change the PCONSOLE utility's context to match the context set on the server (what you wrote down earlier), by pressing the Ins key, and selecting the correct context.
- 7** Use the arrow keys to highlight Print Servers in the menu, and press Enter.
- 8** Press the Ins key, then type the NetWare Printer Name (provided on the printer's startup page), and press Enter.

The print server is created.

Creating a printer

- 1** Select the name of the print server you specified in the previous procedure and press Enter.
- 2** Use the arrow keys to highlight Printers in the Print Server Information menu, and press Enter.

This will let you configure the new print server.

- 3** Press the Ins key to display printers in your current context in the NetWare Directory Services tree.

Note: You may have created a printer earlier. This example assumes that the printer has not yet been created.

- 4** Press the Ins key to create a new printer in the NetWare Directory Services tree.

Make sure that the context listed at the top of the screen still lists the server's bindery context that was set earlier. If not, change to the correct context before creating the printer.

- 5** At the prompt, type the new printer name and press Enter.

This name will be used for reference, so use a name that will be meaningful to the NetWare administrator or to other users who may wish to check on the printer's status. This step creates the printer object in the NDS tree.

- 6** Select the name of the printer you specified and press Enter.

This adds the printer to the Serviced Printer list of the print server.

- 7** From the Serviced Printers menu list, select the name of the printer you specified in the previous procedure, and press Enter.

This brings up the Printer Configuration menu.

- 8** From the Printer Configuration menu, use the arrow keys to highlight Printer type, and press Enter.

- 9** From the Printer Type menu, use the arrow keys to highlight Other/Unknown, and press Enter.

This makes your selection active, and brings you back to the Printer Configuration menu.

- 10** From the Printer Configuration menu, use the arrow keys to highlight Banner type, and change the banner type from Text to PostScript.

Creating a print queue

- 1** From the Printer Configuration menu, use the arrow keys to highlight Print queues assigned, and press Enter.

This displays the Print Queue menu list.

- 2** Press the Ins key to display print queues in your current context in the NetWare Directory Services tree.

For this example, you will create a new queue.

- 3** Press the Ins key to create a new print queue in the NetWare Directory Services tree.

The context listed at the top of the screen should still list the server's bindery context that was set earlier. If it doesn't, change to the correct context before creating the print queue.

- 4** At the prompt, type the new queue name and press Enter.

You are then asked for the NetWare volume to store your NetWare print queue jobs on. With NetWare 4 the NetWare queue does not have to exist on the SYS volume. You can place the queue on any volume you choose. Use the Ins key to select the volume from the directory tree (you may need to navigate to a different context to select the volume desired).

- 5 Select the name of the queue you specified above and press Enter.

This adds the queue to the Print Queue list of the printer.

- 6 Press the Esc key until you are prompted to save your changes.

Completing the PSERVER configuration

- 1 Start Windows, if it's not already running.
- 2 In the Program Manager window, open the Apple LaserWriter Software program group and double-click the Apple LaserWriter Utility icon.
- 3 Select your printer.
- 4 Select Print Server Configuration from the Network menu.
- 5 Select the printer you want to configure.

You can identify the printer from the NetWare printer name that is printed on the printer's startup page.

IMPORTANT After the printer is turned on, it advertises itself on the NetWare network for 5 minutes only to reduce network traffic. If you don't see your printer's name in the list of printers, turn the printer off and back on. Make sure the NetWare file server is running, and verify that the NetWare file server and the printer are using the same Ethernet frame type. If the Ethernet frame types do not match, see "Connecting to a Network Printer Manually," in Chapter 3 of the *LaserWriter 12/640 PS User's Manual*. See also "Novell NetWare Troubleshooting" in Chapter 13 of the *LaserWriter 12/640 PS User's Manual*.

- 6 Select the LaserWriter 12/640 PS printer you want, then click Configure.

- 7 Enter the PSERVER name.

Use the same printer name you used in PCONSOLE (if you are not using the default name).

- 8 Enter the same NetWare password that you entered with PCONSOLE.
- 9 Enter the names of file servers that the printer will service.
- 10 Click Add.

11 Click OK.

12 Enter the queue scan time.

The queue scan time is the number of milliseconds that the printer will wait before checking each file server that it can access.

13 Click Send.

Restarting the printer

1 Turn the printer off and then back on again.

2 Submit a print job to the printer to ensure it is working.

What to do next: The next section covers setting up the printer as a remote printer. If you want to assign a password on the server, see “Step 3: Assigning a Password for the Print Server (Optional)” in Chapter 3 of the *LaserWriter 12/640 PS User's Manual*. Otherwise, see “Step 4: Setting Up the PostScript Printer Driver for NetWare” also in Chapter 3 of the *LaserWriter 12/640 PS User's Manual*.

Step 2, option B: Setting up the printer as a remote printer (RPRINTER mode)

There are six parts to setting up the printer for RPRINTER mode:

- Create a print server.
- Create a printer.
- Create a print queue.
- Set your printer to RPRINTER mode.
- Start PSERVER on your NetWare 4.1 file server.
- Turn the printer off and then back on to have the changes take effect.

Creating a print server

1 Turn the printer off and back on; then retrieve the printer's startup page.

2 Type **SET BINDERY CONTEXT** at the server's console prompt to ensure that the context has been set.

Write the context down, as it will be needed later when creating the printer in the NetWare Directory Services tree.

- 3** Log in to a NetWare file server from a DOS client using the Admin account.
- 4** At the DOS prompt, type **PCONSOLE**, and press Enter.
- 5** Use the arrow keys to highlight **Change Context** in the menu, and press Enter.
- 6** Change the PCONSOLE utility's context to match the context set on the server (what you wrote down in step 2) by pressing the Ins key and selecting the correct context.
- 7** Use the arrow keys to highlight **Printer Servers** in the menu, and press Enter.
- 8** Press the Ins key, then type a descriptive name for your printer server.

This can be any name, but in general you should be able to glance at the object and know what its purpose is (for example "12_640_Server").

Creating a printer

- 1** Select the name of the print server you specified in "Step 2, Option A: Setting Up the Printer as a Print Server (Using PCONSOLE)"; then press Enter.
- 2** Use the arrow keys to highlight **Printers** in the **Print Server Information** menu, and press Enter.

This lets you configure the new print server.

- 3** Press the Ins key to display printers in your current context in the **NetWare Directory Services** tree.
- 4** Press the Ins key to create a new printer in the **NetWare Directory Services** tree.

The context listed at the top of the screen should still list the server's bindery context that was set earlier. If this is not the case, change the context to the correct context before creating the printer.

- 5** At the prompt, type the new printer name and press Enter.
- 6** Select the name of the printer you specified in the previous procedure and press Enter.

This adds the printer to the **Serviced Printers** list of the print server.

Creating a print queue

- 1** From the Serviced Printers menu list, select the name of the printer you specified in the previous procedure, and press Enter.

A Printer Configuration menu appears.

- 2** From the Printer Configuration menu, use the arrow keys to highlight Printer type, and press Enter.
- 3** From the Printer Type menu, use the arrow keys to highlight Other/Unknown, and press Enter.

This makes your selection active, and brings you back to the Printer Configuration menu.

- 4** From the Printer Configuration menu, use the arrow keys to highlight Banner type, and change the banner type from Text to PostScript.
- 5** From the Printer Configuration menu, use the arrow keys to highlight Print queues assigned, and press Enter.

The Print Queue list appears.

- 6** Press the Ins key to display print queues in your current context in the NetWare Directory Services tree.

For this example, you will create a new queue.

- 7** Press the Ins key to create a new print queue in the NetWare Directory Services tree.

The context listed at the top of the screen should still list the server's bindery context that was set earlier. If it doesn't, change to the correct context first before creating the print queue.

- 8** At the prompt, type the new queue name and press Enter.

Next you will be asked for the NetWare volume on which to store your NetWare print queue jobs on. With NetWare 4.xx, the NetWare queue does not have to exist on the SYS volume. You can place the queue on any volume you choose. Use the Ins key to select the volume from the directory tree. You may need to navigate to a different context to select the volume desired.

- 9 Select the name of the queue you specified in the previous step and press Enter.

This adds the queue to the Print Queue list of Printers.

- 10 Press the Esc key until you are prompted to save your changes.

Completing the RPRINTER configuration

- 1 Start Windows, if it's not already running.
- 2 Open the Apple LaserWriter Software program group and double-click the Apple LaserWriter Utility icon.

- 3 Select the printer to configure and click OK.

- 4 Choose Print Server Configuration from the Network menu.

- 5 Click the LaserWriter 12/640 PS printer you want, then click Configure.

Use the printer's NetWare printer name to identify the printer to configure.

- 6 Click Remote Printer.

- 7 Enter the name of the print server NLM in the Remote Printer Name field.

- 8 Enter the same printer number used by PCONSOLE for this printer.

- 9 Click Send.

Starting PSERVER on your 4.1 file server

- Start PSERVER on your 4.1 file server by typing **LOAD PSERVER**
<Print_Server_Name>.

Restarting the printer

- 1 Turn the printer off and then back on again.
- 2 Submit a print job to the printer to ensure it is working.

What to do next: If you want to assign a password on the server, see “Step 3: Assigning a Password for the Print Server (Optional)” in Chapter 3 of the *LaserWriter 12/640 PS User's Manual*. Otherwise, see “Step 4: Setting Up the PostScript Printer Driver for NetWare” also in Chapter 3 of the *LaserWriter 12/640 PS User's Manual*.

Changing the communication settings for UNIX users

The LaserWriter 12/640 PS default communication setting for the TCP/IP interface is PostScript. If the printer is to be used for PostScript and PCL5 (text) files, you must change the communication setting to AutoSelect, which turns on automatic language sensing. Automatic language sensing allows the printer to receive information over the network and determine which page-description language is required.

Use the printer utility (Mac OS or Windows) to change the communication setting to AutoSelect. If there are no Mac OS-based computers or Windows-based computers on your network, you can download a file to the printer that changes the communication setting to AutoSelect.

Set up your printer for UNIX® users as described in Chapter 4 of the *LaserWriter 12/640 PS User's Manual* before changing the communication setting.

- 1 Set the communication switch on the printer to the Normal (in) position.**

- 2 Using a text editor, create a file with the following contents:**

```
%!PS
```

```
(%LPR_NV%) <</Interpreter /AutoSelect >> setdevparams
```

- 3 Download the file to the printer.**

For example:

```
lpr filename
```

- 4 Turn the printer off and back on again.**

- 5 Examine the startup page to make sure the TCP/IP port is set to AutoSelect.**

To restore the TCP/IP interface to PostScript:

- 1 Set the communication switch on the printer to the Reset (out) position.**

- 2 Turn the printer off and back on again.**

- 3 Set the communication switch on the printer to the Normal (in) position.**