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LaserWriter 8.3: Read Me (11/95)

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TOPIC -----

The following article is the Read Me document for the LaserWriter 8.3 driver software.

DISCUSSION -----

About Your Apple Macintosh LaserWriter Printer Software

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This document contains some important reminders and some information that is not in the manual that comes with your printer. You may want to print this document and keep it for future reference. The topics are:

- Installing the Printer Driver Software
- Using the Apple Color LaserWriter 12/600 PS Printer
- Obtaining Printer Supplies for the Apple Color LaserWriter 12/600 PS
- Desktop PrintMonitor Version 1.0.1
- Apple Printer Utility Version 2.0
- LaserWriter 8 Printer Driver Version 8.3

Installing the Printer Driver Software

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The manual that came with your printer contains detailed installation instructions. You cannot install the software and fonts by dragging their icons to your hard disk; you must use the Installer program as described in the printer manual. Your Macintosh must have System 7.1 or later. The printer software does not support QuickDraw GX systems.

IMPORTANT: Before installing the printer software, restart your system with all Extensions turned off. To do this, hold down the Shift key while you restart your computer. Hold the Shift key down until you see the message "Extensions off" or until your normal desktop appears.

The Installer does not remove versions of the LaserWriter printer driver earlier than version 8.0. If you no longer need these files, you may remove them from your System Folder.

The Installer does remove earlier versions of the LaserWriter 8 driver (for example, LaserWriter 8.0) and replaces the PPD files for Apple LaserWriter printers with the latest versions.

When you choose Easy Install, the Installer places the following files in the System Folder on your hard disk:

- LaserWriter 8.3 is placed in the Extensions folder.
- The PPD files used by LaserWriter 8 are placed in the Printer Descriptions folder inside the Extensions folder.
- TrueType fonts are installed in the Fonts folder.
- The Apple Printer Utility and this Read Me file are placed in the Apple LaserWriter Software folder.
- For desktop printing, Desktop Print Monitor, Desktop Printer Spooler, and Desktop Printer Extension are placed in the Extensions folder.
- ColorSync 2.0 is placed in the Extensions folder. The ColorSync profiles are placed in a folder called ColorSync Profiles (in the Preferences folder inside the System Folder). The ColorSync System Profile control panel is placed in the Control Panels folder (inside the System Folder).
- If your system has System Software 7.1.1, Finder 7.1.3 is placed in your System Folder, and Finder Help 7.1.3 is placed in the Extensions folder.
- If your system has System 7.1.1 or 7.1.2, these files are placed in the Extensions folder: Thread Manager 2.1, Network Extension 7.1.3, Macintosh Drag and Drop 1.1, and Dragging Enabler.

IMPORTANT: If the Installer is unable to remove old files from your hard disk, it will terminate the installation procedure. If this happens, please remove old copies of the LaserWriter 8 driver and the PPD files. Then move your Fonts folder from the System Folder to the desktop. Run the Installer again. Once installation is complete, move the fonts from the Fonts folder on the desktop back to the new Fonts folder in your System Folder.

Using the Apple Color LaserWriter 12/600 PS Printer

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This section provides additional information on using the Color LaserWriter 12/600 PS Printer.

About the Demonstration Page

When the power is turned on, the Color LaserWriter 12/600 PS automatically prints a startup page and a demonstration page. For legal and B5 paper sizes, only the startup page prints; the demonstration page is not printed. You can use the Apple Printer Utility to turn off the printing of the startup and demonstration pages.

About the Apple Color LaserWriter 12/600 PS Status Panel

As described in the Color LaserWriter 12/600 PS manual, Appendix G, the status panel lights aid in indicating hardware service problems found during printer startup. If the Alert light is flashing and all the door lights are flashing,

check all the printer doors; one of them is open. If the Paper Out and Paper Jam lights are blinking alternately, a hardware problem has been detected. To identify the problem, notice which toner lights (C, M, Y, Bk) and how many of the maintenance lights (in the area on the right-hand side of the status panel) are on, and refer to the table below. Each area listed under "Problem" represents a general circuit area for the service technician to investigate, not necessarily the exact cause of the problem.

If you have an external SCSI hard disk drive attached but don't turn it on before you turn on the printer's power, the printer may indicate a hardware failure. To correct the problem, turn the hard disk drive on and restart the printer.

Obtaining the Best Results for Business Graphics

To obtain the best results for business graphics, colors should be 100% saturated. For example, to print pure yellow, define yellow as 100% red and 100% green without any blue. Then print your document, selecting the Color/Grayscale option in the Print Options dialog.

Printing on Legal-Size Paper

In the standard memory configuration, the Color LaserWriter 12/600 PS uses a higher compression technique for legal-size paper using only the cyan, magenta, and yellow colors. As a result of this compression technique, very complex pages may show missing pixels in fine lines or small text, "jaggies" (edges with low-resolution appearance), and color changes. To improve the image quality of such pages, you can increase the printer's memory to 16 MB or more. With at least 16 MB of printer memory, the Color LaserWriter 12/600 PS can achieve the same quality with legal-size pages as with letter and A4 sizes using all four colors (cyan, magenta, yellow, and black.)

Printing Images on the Color LaserWriter 12/600 PS Printer

The Color LaserWriter 12/600 PS Printer's highest resolution for printing images is 150 x 150 dpi. No gain in image quality is achieved if higher resolution images are used. All other types of documents print at 600 x 600 dpi.

Avoiding Hue Shifts When Printing to File

When you save an image in an Encapsulated PostScript (EPS) file all the PostScript settings relating to the original output device in effect are saved along with the image data. When the image is printed later, the settings that were in effect may cause major hue shifts. To prevent these hue shifts save the image in TIFF format instead of EPS.

The Density Control Panel

The Color LaserWriter 12/600 PS has been adjusted at the factory to produce the best possible image quality. However, small variations exist among different printers. To make subtle changes to image quality, you can use the Density Control Panel on the back of the printer. NOTE: If changing the settings produces inferior image quality, return to the factory settings by following

these steps: Select each color using the Color Select button, then press the - or + button to move the indicator light to the center position. When the indicator is in the center, press Enter to make the setting permanent. Repeat this procedure for all four colors.

Printer's Processor Speed

In the printer manual, Appendix A contains a typographical error: the microprocessor speed is 30 MHz, not 25 MHz as printed.

Setting Your ColorSync System Profile for Best Printing Results

Before using ColorSync color matching to print to the Color LaserWriter 12/600 PS printer, set the ColorSync System Profile for the monitor connected to your system. To do this, open Control Panels in the System Folder and double-click ColorSync System Profile. Make sure the following settings are selected:

- Set the profile for the monitor connected to your system. For the best color match when printing, select the "page-white" or "D50" system profile for your type of monitor if one is available.
- For the best visual match between the colors on your monitor and printed colors, select the Page-White Gamma option in the Monitors control panel. To select a gamma option, open the Monitors control panel, then hold down the Option key while you click the Options button. In the Options window, click the Use Special Gamma checkbox to put an X in it. Then choose Page-White Gamma from the list.
- On a multiscan monitor, make sure that the color temperature, or intensity, is set to 9300K (the default setting). See the monitor manual for instructions. If the Page-White Gamma option is selected with a color temperature other than 9300K, your monitor colors could look too red or too blue compared to printed colors.

Obtaining Printer Supplies for the Apple Color LaserWriter 12/600 PS

To order printer supplies for the Color LaserWriter 12/600 PS direct from Apple, call 1-800-600-7805. For order numbers, see Appendix A of the printer manual:

- toner cartridges
- transparencies
- photoconductor cartridge (includes toner disposal boxes)
- fuser oil
- fuser

Instructions for replacing the fuser are in Appendix F of the printer manual. Instructions for replacing other printer parts come in the new packages.

For the location of the nearest Apple-authorized dealer, call 1-800-538-9696, extension 525.

Desktop PrintMonitor Version 1.0.1

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Creating Desktop Printers

You create desktop printers by selecting a printer in the Chooser. When you close the Chooser, the desktop printer icon is created.

System Software Requirements for Desktop Printing

Desktop printing requires System 7.1.1 (System 7 Pro) or greater. If you have System 7.1 and you want to use desktop printing, you can upgrade your Macintosh to use a later version of System software. Contact your Apple-authorized dealer.

Using Desktop PrintMonitor on a Non-English System

If no desktop printer icon appears after you install the printer software, it may mean the Installer installed PrintMonitor 7.1.2 and did not install the Desktop PrintMonitor. (PrintMonitor 7.1.2 is installed if you have an earlier version of the PrintMonitor. Later versions of the PrintMonitor are not replaced.) You have three choices:

- Use PrintMonitor 7.1.2 (or a later version).
- Obtain a set of installation disks for the printer software in the language of your system software from your Apple-authorized dealer and install it.
- Upgrade your system software to System 7.5 and install the printing software again. An English language version of the Desktop PrintMonitor is installed.

Removing the Desktop Printing Software

The desktop printing software uses both the Desktop PrintMonitor and the PrintMonitor software. The Desktop PrintMonitor requires 200-400K of memory in addition to the memory required by the PrintMonitor. If you don't want to use the desktop printing software, you can remove it. Follow these steps:

1. Drag any print spool files found in the PrintMonitor Documents folder (in the System Folder) to the Trash. Warning: these jobs will not be printed.
2. Restart your computer with the extensions off by holding down the Shift key and choosing Restart from the Special menu. Hold the Shift key down until the message "Extensions off" appears or until your normal desktop appears.
3. Drag the following files from the Extensions folder to the Trash:
 - Desktop PrintMonitor 1.0.1
 - Desktop Printer Spooler 1.0.2
 - Desktop Printer Extension 1.0.1.
4. Restart your computer.

Using Save or Open With Desktop Printers

When you choose Save or Open in your application programs, you will see your desktop printers listed as if they were folders, but you should not save or open any documents in them. If you do, you will not be able to access your documents.

Having More Than Five Desktop Printers

If you want to have more than five or six desktop printers, you must increase the Desktop PrintMonitor memory allocation by 10K for each additional desktop printer you want. To do so, select the Desktop PrintMonitor icon (it's in the Extensions folder inside the System Folder), choose Get Info, type a larger number in the Preferred Size box, then close the Get Info window.

Apple Printer Utility Version 2.0

Installing the printer software creates the Apple LaserWriter Software folder containing this Read Me file and the Apple Printer Utility program version 2.0. The Apple Printer Utility program works with all Apple PostScript Level 2 printers.

Downloading PostScript Fonts on a GX System With the Apple Printer Utility

When GX is installed, any PostScript fonts (often called Type 1 fonts) in the Fonts folder are converted to GX fonts, and the original PostScript fonts are copied to a new folder called Archived Type 1 Fonts in the System Folder. If you want to download these fonts to your printer, use the Apple Printer Utility to send the fonts in the Archived Type 1 Fonts folder, not the GX-converted versions in the Fonts folder.

Removing Fonts From a Hard Disk Attached to the Printer

If a font is downloaded to both the printer's RAM and the printer's hard disk with the same name, and you remove the font on the hard disk, the RAM font will also be removed. If you remove the RAM font, the font on the hard disk will not be removed.

LaserWriter 8 Printer Driver Version 8.3

The software includes version 8.3 of the Apple LaserWriter 8 printer driver, which works with many Apple LaserWriter printers. This section contains information about the software and information on using it with several of the printers.

What's New in Version 8.3

LaserWriter 8 now provides support for color matching and for embedded JPEG-compressed documents. LaserWriter 8 now supports ColorSync 2.0, Apple's latest system software for device-independent color-matching services, and PostScript Level 2 color matching.

Using Color Matching

When ColorSync 2.0 is installed and the ColorSync Profiles folder contains printer profile(s), there are two new options in addition to color/grayscale output:

- ColorSync Color Matching invokes the ColorSync system software to perform color matching for the printed document, matching your monitor and printer's profile and sending the correct CMYK information to the printer. With ColorSync Color Matching, most of the work is done by your Macintosh.
- PostScript Color Matching is an alternative to ColorSync Color Matching. When you are printing to a PostScript Level 2 printer, and it is efficient to let the printer do most of the work, this option is a good choice.

Here are some tips on using color matching:

- Color output will vary depending on the application you are using.
- Documents that use ColorSync 1.0 embedded profiles convert to the profile set up in the ColorSync 2.0 System Profile control panel.
- When you print with PostScript Color Matching selected and ColorSync 2.0 is not installed, the driver uses the Apple 13" RGB Standard profile.
- Application programs that generate their own PostScript may have problems color matching EPS or TIFF images correctly. Converting the image to a PICT corrects the problem.

PPD Files

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The LaserWriter 8 driver uses PostScript Printer Description (PPD) files to determine the characteristics of the printers it uses. PPD files contain information about individual PostScript printers. For example, PPD files describe the paper-handling capabilities of printers: the number of paper trays, their capacity, and the paper sizes they handle.

To take full advantage of your printer's features, you need to go through a simple setup procedure. When selecting your printer for the first time, or after installing an additional option, click the Setup button in the Chooser. This procedure causes the LaserWriter driver to query the printer for its characteristics and associate a particular PPD file with the printer.

Creating EPS Files

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You can create an Encapsulated PostScript (EPS) file in many application programs by clicking File in the Print dialog box, then clicking Save. When you create an EPS file, note the following:

- Creating EPS files with the All option selected in the Font Inclusion pop-up menu in the EPS dialog box can result in very large files. If you include all fonts in an EPS file and save the file with the Unlimited Downloadable Fonts option selected, you may create an extremely large file.
- If you create an EPS file with no fonts included and open the document, fonts in the document appear on your screen, but Courier may be substituted when you print.
- When you create EPS files with preview information included, other programs that create their own PostScript code may not display the EPS file accurately on the screen.

Using the LaserWriter 8 Driver With LaserWriter Printers

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When using the LaserWriter 8 driver, you should be aware of the following situations. Some happen with all LaserWriter printers, and others happen only with specific models.

All LaserWriter Printers

- The LaserWriter 8 driver allows some printers to print using a larger imageable print area on the page. If your printer does so, you may find that text in some documents reflows or is clipped to fit the new imageable area. To maintain your document format when printing to different printer models, deselect the Larger Print Area option in the Page Setup Options dialog box.
- Some older printers with small amounts of memory will not print documents containing large numbers of fonts unless you select the Unlimited Downloadable Fonts option in the Page Setup Options dialog box. If a document using multiple fonts doesn't print using the LaserWriter 8 driver, try selecting Unlimited Downloadable Fonts in the Page Setup Options dialog box and print again.
- Printing multiple documents with the Finder may not work if the documents have been created by different application programs.
- If you encounter a timeout (PostScript error -8993) when printing multiple copies of large and complex documents in the background, print the documents one at a time or select foreground printing to avoid this problem.

LaserWriter 16/600 PS

If Tray Switching is turned on and you have an optional 500-sheet feeder that contains the same size paper as the 250-sheet feeder, use the 500-sheet feeder as the preferred paper source for optimal printing performance. See the manual that came with your printer for instructions on selecting the 500-sheet feeder as the preferred paper source.

LaserWriter Pro 810

- With some graphics programs, bitmapped graphics printed with the Precision Bitmap Alignment option in the Page Setup Options dialog box will be reduced in size by 25%.

LaserWriter Pro 600 and 630

- When you print envelopes from the optional envelope feeder, you cannot use Auto Select as the Paper Source (in the Print dialog box).
- When you print at a resolution of 600 dots per inch (dpi), bitmapped images may appear with lines across the image.

LaserWriter II NT and II NTX

- If you select both the Smooth Graphics and the Invert Image options in the Page Setup Options dialog box, a PostScript error results.
- Do not use the B5 tray to print envelopes on a LaserWriter II NT. Use the letter tray instead.

LaserWriter IIg and IIx

- When you select paper sources from the First From and Remaining From pop-up menus in the Print dialog box, selecting Manual Feed for either source sets the driver to print the first page from the manual feed tray.
- The US Legal paper size has been changed on some LaserWriter IIf/IIg printers to be more compatible with other Apple LaserWriter printers. If your legal-size documents no longer fit on the page, select Larger Print Area in the Page Setup Options dialog box.
- Some form-printing application programs cannot print forms using the Layout settings in the Page Setup dialog box.

Using the LaserWriter 8 Driver With the Kanji System

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To print Japanese characters using KanjiTalk or the Japanese Language Kit, your system must have WorldScript II version 7.5.1 or later.

Using the LaserWriter 8 Driver With Application Programs

Some application programs do not yet take advantage of the new features of the LaserWriter 8 driver or have small incompatibilities that result in printing problems. If you experience problems with a program, contact the publisher of the program. In some cases a newer version of the program may be available.

The following list describes some special cases that you should be aware of when working with some application programs. (There may be other problems with these programs, or with other programs, not mentioned in this document.)

- Color output will vary depending on the application you are using.
- With many application programs, you cannot use the Flip Horizontal, Flip Vertical, landscape page orientation, and Layout option in the Page Setup dialog box in combination.
- Some programs may not be able to print from the Finder or use the Drag and Drop printing feature.
- Some programs may print in color when Black and White mode is selected.
- Programs that generate their own PostScript may have problems color matching EPS or TIFF images correctly. Converting the image to a PICT corrects the problem.

Adobe Illustrator 5.5

- Multiple-page documents may not print correctly when you choose a page layout from the Layout pop-up menu in the Page Setup dialog box.

Aldus Freehand 4.0 & Freehand 5.0

- Documents do not print correctly when you choose a page layout from the Layout pop-up menu in the Page Setup dialog box.
- Some paper sizes in Freehand may not be supported by the printer and may

generate Postscript errors.

Aldus PageMaker 5.0

- Documents that have been set up using a page layout from the Layout pop-up menu may not print correctly with the Print-Option command; use the Print command with PageMaker's Thumbnail option.
- When using a page layout from the Layout pop-up menu with the Print-Option command, the document will be printed in reverse order.
- Rotated graphics may not print correctly when you hold down the Option key and click Print in the Print dialog box.
- You cannot print legal-size documents from the paper cassette of the Personal LaserWriter 320; print such documents by selecting Manual Feed or by holding down the Option key and clicking Print in the Print dialog box.

Aldus Personal Press 2.02

- Using several font style combinations in text can result in spacing problems.

Aldus SuperPaint 3.5

- Rotated or filled polygons print as solid gray objects.
- Gradient fills may not print when copied into other programs.

Canvas 3.5.2

- When you select the Substitute Fonts option in the Page Setup Options dialog box, text may be incorrectly spaced if you use the Geneva, New York, or Monaco fonts.

ClarisDraw 1.0

- Some shapes that contain gradients may not print correctly.

CricketDraw III 2.01

- When you choose a page layout from the Layout pop-up menu in the Page Setup dialog box, underlined TrueType fonts may not print.

CricketPresents 2.1

- You cannot import an EPS file created with the LaserWriter 8 driver when it has been saved without preview information.

DeltaGraph Pro 3.0.4

- Printing with Unlimited Downloadable Fonts may cause some elements to be shifted and fonts to substitute Courier.

FileMaker Pro 2.1

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- When you choose a page layout from the Layout pop-up menu in the Page Setup dialog box, documents that contain EPS graphics may appear clipped when printed.

Informed Designer/Manager 1.4.2

- Do not print documents that contain JPEG images in Black and White mode; your system will restart.
- When you select the Unlimited Downloadable Fonts option, some graphic elements may shift or disappear when printed.

MacDraft 3.01 and earlier versions

- When you print using the Cut Marks option, a PostScript error results.

MacDraw Pro 1.5

- Rotated text within a frame that is placed in another application program may not print correctly.

MacWrite Pro

- Colored text with colored underlines may not print correctly from the Finder.

Microsoft Excel 5.0

- Colored horizontal cell borders will often not appear in the printout. This happens with any color printing option and on most printers.

Microsoft PowerPoint 3.0

- Polygons and ovals filled with gradients and without a border line may shift locations on the page when printed.

Microsoft Works 3.0

- Printing documents that have rotated objects with rounded corners results in a PostScript error.

Microsoft Works 4.0

- There are 24 new shapes available through the tools palette. Colored shadows for any of these shapes will appear correctly on screen. But these colored shadows will only print in gray, regardless of what the print color options might be.

Painter 3.0

- When you print using the Invert option, images do not print inverted correctly.

PixelPaint Pro 3.0

- When you print using the Invert option, images do not print inverted correctly.

Publish It!

- Use a pre-LaserWriter 8 version of the driver, or contact the publisher of the application program.

QuarkXPress 3.3.1

- Be sure to use the PPDs provided with QuarkXPress when you choose a page layout from the Layout pop-up menu in the Page Setup dialog box.
- Some imported JPEG files may not print correctly.

RagTime 3.2

- You cannot print documents that contain PICT or TIFF files.

ReadySetGo! 6.0

- Use ReadySetGo! version 6.0 or later with the LaserWriter 8 printer driver; earlier versions will not work.
- With the Unlimited Downloadable Fonts option selected, you may not be able to print complex documents.
- Documents that use pen patterns will print patterns as solid gray.

Studio/8 & Studio/32

- When creating an EPS file with these programs and the LaserWriter 8 driver, you must select the QuickDraw Printer option.

WordPerfect 3.0

- When you select the Unlimited Downloadable Fonts option and print rotated text in Watermark, the entire document rotates when printed.
- When you select the Unlimited Downloadable Fonts option, Watermark option, and Color/Grayscale option, black text prints as gray.

How to Get Updated Printer Software

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If you need to update your printer software and you have an AppleLink account, you can obtain the latest versions of the LaserWriter 8 software from AppleLink.

Follow this path to locate the LaserWriter 8 software:

Apple Products
Apple Software Updates
Macintosh
Printing Software

The latest LaserWriter 8 software is also available from Apple's ftp site on the Internet. The location is: ftp.apple.com. The path is:

/ftp/dts/mac/sys.soft/laserwriter.8.3/

The latest LaserWriter 8 software is also available on CompuServe and America OnLine.

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