

README -- OEMSETUP

README FILE FOR HEWLETT-PACKARD HPPCL5E PRINTER DRIVER FOR USE WITH
MICROSOFT WINDOWS 3.1 / 3.11 WITH SUPPORT FOR HP LaserJet 4/4M,
4L, 4ML, 4Si/4Si MX, 4P/4MP, 4 Plus/4M Plus and 4V/4MV Printers.

HPPCL5E Printer Driver: 31.V1.50

This README file contains the following information:

- * Introduction
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- * User Hints
- * Features of the HP LaserJet 4 Family Printer Driver
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Intellifont is a registered trademark of AGFA Compugraphic,
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TrueType is a registered trademark of Apple Computers Inc.
PageMaker is a registered trademark of Aldus Corporation.
CorelDRAW is a registered trademark of Corel Corporation.

INTRODUCTION

This release includes printer driver support for the HP LaserJet 4
Printer family.

Additional system components are available through the HP LaserJet
Printing System for Windows 3.1 / 3.11 including:

- HPPCL5E Printer Driver
- TrueType Screen Fonts
- HP Status Window (bi-directional printer support)
- Networked Windows installation
- HP Travel Guide

See the "HOW TO OBTAIN ADDITIONAL INFORMATION ABOUT HP SERVICES"
section below for assistance in obtaining the HP LaserJet Printing
System.

Customers who have Windows for Workgroups 3.11 installation issues should see the "SYSTEM UPDATE INFORMATION" section below.

INSTALLATION INSTRUCTIONS

To install Hewlett-Packard HPPCL5E printer driver version 31.V1.50 for Windows 3.1 / 3.11:

1. Choose the "Control Panel" from the Main Group in Program Manager.
2. Choose the "Printers" icon from the Control Panel window.
3. The Printers dialog box appears. Choose the "Add>>" button.
4. The "List of Printers" dialog box appears. Select "Install Unlisted or Updated Printer" (first line in list).
5. Choose the "Install" button.
6. Insert the driver disk with the HPPCL5E printer driver (or Disk 1 of the HP LaserJet Printer System) into your flexible disk drive and specify the corresponding drive, OR enter the drive and directory where the driver files are stored.
7. At the "Add Unlisted or Updated Printer" dialog box, highlight one of the available printers: "HP LaserJet 4/4M", "HP LaserJet 4L", "HP LaserJet 4ML", "HP LaserJet 4P/4MP", "HP LaserJet 4Si/4Si MX", "HP LaserJet 4 Plus/4M Plus", "HP LaserJet 4V/4MV" and press [Enter]. If you are asked whether or not to install the new HPPCL5E3.DLL file, press the "Yes" button to continue the installation.
8. Choose the "Connect" button.
9. Highlight the correct printer port from the "Ports:" list box and press [Enter].
10. Choose the "Setup" button.
11. Make any necessary changes in the Printer Setup screen to reflect your printer's configuration.
12. Choose OK.
13. Choose the "Set as Default Printer" button.
14. Choose the "Close" button.

SYSTEM UPDATE INFORMATION (Changes to Version 31.V1.50 since 31.V1.30)

Aldus PageMaker

The PageMaker set width feature allows changes to be made to the size and spacing of specified characters. This feature is not supported by the LaserJet 4 family printers when rendering the TrueType fonts which are internal to the printer. The PCL driver now directs Windows to render the font and download it to the printer whenever any application applies changes, such as set width, to fonts internal to a LaserJet 4 family printer.

Aldus PageMaker

If you experience problems when printing rotated, skewed, or

mirrored images with Aldus PageMaker 5.0, contact Aldus to order their software patch "ALDIM3.DLL". The Aldus patch in combination with the 31.V1.50 HP PCL driver correct this problem. The patch can be downloaded from the Aldus bulletin board or from the Aldus forums on America On-line or CompuServe.

Windows for Workgroups 3.11 Support

The HP LaserJet Printing System installation program has been enhanced to allow installation for Windows for Workgroups 3.11. Versions of the HP Printing Systems included with HP LaserJets built previous to the release of Windows for Workgroups 3.11 do not support installation into the WFW 3.11 environment. See the "HOW TO OBTAIN ADDITIONAL INFORMATION ABOUT HP SERVICES" section below for assistance in obtaining the HP LaserJet Printing System, 31.V1.50.

Many customers have experienced printing problems in WFW 3.11. Among these are:

1. The job in the queue goes to 0 bytes and will not delete.
2. The printing process locks up without completing the job.

This problem results from the Print Manager files for WFW 3.11 being overwritten by Print Manager files from some other version of Windows, especially Windows for Workgroups 3.1. Several vendors have included earlier versions of Print Manager in their products, including: PC vendors, printer vendors, etc.

IMPORTANT: PLEASE NOTE

The following workaround is provided to assist customers who are experiencing the problems described above and suspect that their original Print Manager files that have been written over by an installation utility. Hewlett-Packard provides this workaround in good faith and is not responsible for problems associated with it's use. Hewlett-Packard will only assist customers who have incurred this problem as a result of installing products purchased from Hewlett-Packard.

The original Print Manager file set included with Windows for Workgroups 3.11 is as follows:

Compressed Files:
PRINTMAN.EX_ 11-01-93
PRINTMAN.HL_ 11-01-93

These files will likely be found on Disk 3 and Disk 4 of the Windows for Workgroups 3.11 package. Verify that different Print Manager files are found in the "Windows" directory of a WFW 3.11 installation before replacing them with the originals. Use the "EXPAND.EXE" utility to decompress the print manager files into the "Windows" directory.

Example:

```
c:\wfw\expand a:printman.ex_ c:\wfw\printman.exe  
c:\wfw\expand a:printman.hl_ c:\wfw\printman.hlp
```

USER HINTS

On-Line Help

On-line help files are included for the HPPCL5E PRINTER DRIVER and the HP font installer screens. Choose Help from these screens to access the HELP information.

Aldus PageMaker 5.0

See the SYSTEM UPDATE INFORMATION section above for important information regarding PageMaker support with this driver.

Graphics, Error 20s, and Print Performance

If you encounter print difficulties, Error 20s, or slow performance with any application when using in HP-GL/2 Graphics Mode, it is recommended that you change the Graphics Mode to RASTER in the HP PCL printer driver and try your print job again. Access the Printers Icon through the Control Panel. Select the LaserJet 4 family printer driver, the Setup button, the Options dialogue box, and Graphics Mode.

Corel Draw Printing Performance

The options below are made available to assist you in improving print speed. Print performance, however, is largely dependent on information in the graphics document being printed.

1. Print Performance

For best printing performance in CorelDRAW, it is recommended that you change the Graphics Mode to RASTER in the HP PCL printer driver and try your print job again. See the Graphics, Error 20s,... paragraph above for assistance.

2. Corel Draw 3.0: Improve graphics performance.

- a) Open CORELDRW.INI with a text editor. The CORELDRW.INI is in the DRAW subdirectory for Corel Draw 3.0b or later.
e.g. c:\corel30\coreldrw\draw\coreldrw.ini
- b) Go the section labeled: [CDrawConfig].
- c) At the end of this section, enter the following line (exactly as shown): UseClippingForFills=0
- d) Save and close the CORELDRW.INI file.
- e) Restart Corel Draw.

3. Corel Draw 4.0 and 5.0 - Improve graphics and scanned image printing performance.

- a) Open CORELDRW.INI with a text editor. The CORELDRW.INI file is found in the COREL40\CONFIG subdirectory for Corel 40 and 5.0.
e.g. c:\corel40\config\coreldrw.ini
- b) Go the section labeled: [Config]
- c) At the end of this section, enter the following line (exactly as shown): UseClippingForFills=0
- d) Save and close the CORELDRW.INI file.

The setting below impacts raster graphics only.

- a) Open the CORELPRN.INI file with a text editor. The CORELPRN.INI file is also located in the CONFIG sub-directory.
- b) Go to the section labeled: [Config]
- c) Find the following line: DumpEntireBitmap=0.
Changed to read: DumpEntireBitmap=1.
- d) Save and close the CORELPRN.INI file
- e) RESTART Corel Draw.

Changing this entry from 0 to 1 allows Corel Draw to send raster data in blocks rather than line by line. This should improve processing time of graphic intense files and should improve memory performance.

FEATURES of the HP LASERJET 4 FAMILY PRINTER DRIVER

HP-GL/2 Mode

Support for HP-GL/2 is in the HPPCL5E PRINTER DRIVER. Under the Options Dialog in the Printer Setup, an option of "Graphics Mode" is available. Two options are present: HP-GL/2 or Raster. The first choice enables both HP-GL/2 and raster printing which optimizes print performance. The second choice uses raster only. Default settings for "Graphics Mode" optimize print speed for the given printer. The default graphics mode is set to raster for the HP LaserJet 4L. The default mode is set to HP-GL/2 for all other HP LaserJet 4 family printers. Default settings for "Graphics Mode" optimize print speed for the given printer.

300 DPI Compatibility (Supported on 31.V1.26 and later)

Additional compatibility has been added to this driver to insure compatibility between documents printed with this driver and documents printed with the HP LaserJet III Family drivers. This compatibility is automatically enabled when a document is printed with the resolution field set to 300 DPI.

Graphics Quality

Depending upon which dpi (dots per inch) selection you choose, there are different graphic resolution settings available. The actual settings are denoted by the descriptive terms of High, Medium and Low rather than the actual dpi number. When the driver is set to 600 dpi mode, the settings available are 600, 300, and 150 dpi. When the driver is set to 300 dpi mode, the settings available are 300, 150, and 75 dpi.

Internal Intellifont typefaces.

All the internal Intellifont typefaces in the HP LaserJet 4 family printers are supported in the 19U (Windows) symbol set.

EconoMode

(Supported by the LaserJet 4L, 4ML, 4P/4MP, 4 Plus/4M Plus & 4V/4MV Printers)

Support for EconoMode is in printer driver versions 31.V1.20 or later within the Options Dialog. There are two options available, ON or OFF. With EconoMode enabled the output will resemble draft mode, using fewer dots in order to conserve toner.

Print Density

(Supported by the LaserJet 4L, 4ML, 4P/4MP, & 4 Plus/4M Plus)

Print density support is provided in the Options Dialog.

Adjust the density of the printer according to the desired density. The density range is one (lightest) to five (darkest).

REt (Resolution Enhancement technology)

REt refines the print quality of characters and graphics by

smoothing the fine gradations along the angles and curves of the printed image. The driver default is "Printer Default". The printer default is "Medium". Other options override the printer setting.

Resource Saving

(Dialog support is only provided for the LaserJet 4Si/4Si MX)

This feature, added to the main setup dialog box, allows the user to tell the printer driver how much memory is set aside for each printer personality (PCL and PostScript). This memory is used for saving printer resources between printer language switching. The range is 0KB to 99900KB. For all other printers which support Resource Saving, it can be set from the front control panel of the printer.

Version Information Resources

This feature, in printer driver versions 31.V1.20 and later, is added to the printer driver and its dynamic link libraries. This helps to eliminate a possible mismatch of driver and driver resource files when installing previous drivers. If a potential mismatch is detected during driver installation, a dialog box that contains a warning is displayed.

Custom Media Size

Custom Media is also supported by this driver for the HP LaserJet 4ML, 4P/4MP, and 4 Plus/4M Plus. The size of the custom media in most cases must be set in both the application's page setup and the driver setup. For more information about minimum and maximum page size, see your user's manual.

Cartridge Support (Removed 31.V1.26 and later)

This driver does not have built-in support for HP font cartridges. Font cartridge support is still available by:

- 1) Installing the fonts for the font cartridge from the autofont support disk shipped with the font cartridge
- 2) North American customer can contact Hewlett-Packard's Driver Distribution Center.
Call: 303-339-7009
Monday through Saturday, 24 hours a day
Fax: 303-330-7655
- 3) For other customers, please contact your local HP dealer.
- 4) Downloading the PCM (printer cartridge metric) files from the HP Peripherals Forum library on CompuServe. The filename for the PCM files is L4PCM.EXE.

After extracting the files, the PCM files can be installed from the HP Font Installer which is accessed from the "Control Panel", "Printers", "Setup", "Fonts...", "Add Fonts..." option in Windows 3.1. Detailed installation instructions are included with the PCM files.

HOW TO OBTAIN ADDITIONAL INFORMATION TO HP SERVICES

HP ELECTRONIC SERVICES

INTERNET

Anonymous ftp library service for around-the-clock access to drivers and technical support information for Hewlett-Packard peripheral and computer products.

IP address 192.6.71.2
Alias ftp-boi.external.hp.com
Login - anonymous
Password - send user identification (your Internet name)
URL to access HP - <http://www.hp.com/home.html>

COMPUSERVE

HP Peripherals Forum provides low-cost, around-the-clock access to drivers and technical support information. In the US, you can call CompuServe at 800-848-8199 (Users type: GO HPPER). This service is provided by CompuServe, not Hewlett-Packard. In countries other than the US, contact CompuServe for information.

SOFTWARE APPLICATION SUPPORT

Call the phone number listed in your software vendor's manual.

PERIPHERAL TECHNICAL SUPPORT AND ASSISTANCE

To resolve problems you may encounter, we suggest using the following resources:

- 1) Your company may have an internal support professional, department, or help desk.
- 2) Your local authorized reseller is also qualified to provide you with support.

US and CANADA SUPPORT SERVICES

"HP Guide to Electronic Support Services"

HP FIRST DOCUMENT #9020. See HP FIRST section below for assistance.

HP BBS DOWNLOAD SERVICES

Hewlett-Packard download service for around-the-clock access to drivers and technical support information for Hewlett-Packard peripheral and computer products.

(208) 344-1691
Modem Settings - N,8,1
14,400 baud maximum

DRIVER DISTRIBUTION - US and Canada

Hewlett-Packard's Driver Distribution Center provides US and Canadian customers with HP drivers for several popular software packages. To order drivers:

Call: 303-339-7009
Monday through Saturday, 24 hours a day
Fax: 303-330-7655

Driver Distribution is available in many other North American countries, ask your local HP dealer for the numbers.

HP FIRST - US and Canada

HP's automated fax system provides technical information around-the-clock for Hewlett-Packard peripherals and computer products. Indexes are available listing thousands of documents.

U.S. and CANADA, call 800-333-1917

Elsewhere call 208-344-4809 (must call from your fax machine)

AUDIO-TIPS

Audio-Tips offers pre-recorded technical information for Hewlett-Packard peripherals and computer products around-the-clock. Many trouble-shooting tips have faxable documents providing for more detailed information.

US and CANADA, call 800-333-1917

HP CUSTOMER SUPPORT CENTER - US and Canada

The HP Customer Support Center provides live technical assistance for peripherals.

Call: 208-323-2551

Hours of operation:

Monday through Friday, 7:00 a.m. to 6:00 p.m.

Wednesdays, 7:00 a.m. to 4:00 p.m. Mountain Standard Time

Free technical support is offered during the warranty period at 208-323-2551 (have your HP LaserJet printer serial number available).

After the warranty period, call 800-999-1148 (US and Canada) at \$25 per call (US Funds - VISA or MasterCard); or call 900-555-1500 (US) at \$2.50 per minute. Charges begin only when you connect with a support technician. Prices subject to change.

EUROPEAN SUPPORT SERVICES

DRIVER DISTRIBUTION - Europe

Driver Lists and Driver Order Forms are available from HP FIRST (see HP FIRST in this section). Use the product numbers listed on the Driver List to fill in the Driver Order Form. The Driver Order Form includes fax numbers and telephone numbers for ordering drivers.

HP FIRST - Europe

(HP's Fax Information Retrieval Support Technology)

Provides technical information by fax, around the clock. To use HP FIRST, you must call from a touch-tone telephone or fax. Telephone numbers for HP FIRST are listed below.

Country =====	Language =====	Toll Free Numbers =====
Austria	German	0660-8128 (local toll charged)
Belgium	Dutch	0800 1 1906
Belgium	French	0800 1 7043

Denmark	Danish	800-10453	
Finland	Finnish	9800-13134	(local toll charged)
France	French	05-905900	
Germany	German	0130-810061	
Great Britain	English	0800-960271	
Italy	Italian	1678-59020	
Netherlands	Dutch	06-0222420	
Norway	Norwegian	800-11319	(local toll charged)
Spain	Spanish	900-993123	
Sweden	Swedish	020-795743	(local toll charged)
Switzerland	German	155-1527	
Switzerland	French	155-1526	

Access to HP FIRST in English is available from the countries listed above and other countries by calling the Netherlands at (+31) 20 6815792. NOTE: International call charges apply outside of the Netherlands.

EUROPEAN CUSTOMER SUPPORT CENTER

Hours of operation:

Mon/Tue/Thu/Fri from 8:30 to 18:00, Central European Time

Wednesday from 8:30 to 16:00, Central European Time

Free technical support is offered during the product's warranty period. Please have the product's serial number available when you call. Telephone numbers and other information about the European Customer Support Center is included with supported products.

SUPPORT SERVICES - OTHER COUNTRIES

Driver Distribution and HP FIRST is available in many other countries, ask your local HP dealer for the numbers.

Customer Support is also available in several other countries. Check your printer user's manual or contact your authorized HP Dealer for more information.

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