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## Selecting a Printer Model

To use all of the features of your printer that are supported by Windows, select the model of HP LaserJet printer you are using.

### To select your printer model:

1. Choose OK to exit the Setup dialog box.
2. Select your printer model in the Installed Printers box in the Printer dialog box.

**NOTE:** If your printer model does not appear in the Installed Printers box, install your printer driver. Make sure you select the name of your specific printer model when you install your driver.

# Installing HP Fonts and Scalable Typefaces

You can use any HP PCL compatible font or scalable typeface with your HP LaserJet PCL 5 printer. Fonts and scalable typefaces can be used in both cartridge and flexible disk format.

## Cartridge-based Fonts and Scalable Typefaces:

Support for some cartridge-based fonts and scalable typefaces is included with this printer driver. Check to see if your font cartridge or your scalable typeface cartridge is listed in the Cartridges box in the Setup dialog box.

If your cartridge is listed, select your cartridge name, and you can use your cartridge immediately. Remember to physically install the cartridge in your printer.

If your cartridge name is not listed, install support for your cartridge with the HP Font Installer. To use the HP Font Installer, choose the Fonts button in the Setup dialog box. Choose the Help button in the Font Installer dialog box for detailed instructions about installing cartridge-based fonts and scalable typefaces.

## Disk-based Fonts and Scalable Typefaces:

If you are using disk-based fonts (also called soft fonts) or if you are using disk-based scalable typefaces, install support for your fonts and typefaces using the HP Font Installer. To use the HP Font Installer, choose the Fonts button in the Setup dialog box. Choose the Help button in the HP Font Installer dialog box for detailed instructions about installing disk-based fonts and scalable typefaces.

**NOTE:** To take best advantage of 600 dots per inch (dpi) printing, use fonts that are designed specifically for printers that print at 600 dpi resolution. If you are using accessory fonts which were designed for 300 dots per inch printers, like the HP LaserJet Series II printer or the HP LaserJet III printer, you can print at either 600 or 300 dpi resolution. For best results, set your Printer Resolution setting to 300 dpi and use the RET option in the Options dialog box. This will cause your printer to smooth out the 300 dots per inch data and scale it to 600 dots per inch resolution.

## Installing TrueType Fonts

You can print TrueType fonts with your HP LaserJet printer.

All TrueType fonts must be installed using the Windows Fonts utility.

### **To open the Windows Fonts utility, follow these instructions:**

1. Open the Main menu by double-clicking the Main icon in the Program Manager dialog box.
2. Open the Control Panel by double-clicking the Control Panel icon.
3. Open the Windows Fonts utility by double-clicking the Fonts icon.
4. Choose the Help button in the Windows Fonts utility for detailed instructions about installing TrueType fonts.

# Optimizing HP LaserJet Printer Performance

## Using 300 dpi Fonts and Graphics

If you are printing graphics or fonts that were designed for 300 dots per inch printers, like the HP LaserJet Series II printer or the HP LaserJet III printer, you can use the Printer Resolution setting to improve your print quality. For best results, set your Printer Resolution setting to 300 dpi and use the RET option in the Options dialog box. This will cause your printer to smooth out the 300 dots per inch data and scale it to 600 dots per inch resolution.

## Related Topic:

[Printer Resolution](#)

## Printer Messages -- LaserJet 4/4M and 4Si/4SiMX printers

### Out of Memory Error (Error 20 MEM OVERFLOW)

This message indicates that you have run out of printer memory during your print job.

Printer memory is used in many different ways. Fonts, typefaces, graphic images, rules, forms, and macros all require printer memory. If you print a combination of these items on one page, or if you include many in a document, you may run out of printer memory.

When your printer displays the out of memory error, your print job requires more memory than you have installed in your printer.

### To avoid this error:

- \* install additional memory in your printer. (Contact your authorized Hewlett-Packard dealer for more information about additional printer memory).
- \* simplify your print job by reducing the number of fonts, typefaces, graphic images, rules, forms, or macros in your document.
- \* use the HP Font Installer to make permanent fonts temporary.
- \* turn the PageProtection setting to OFF.
- \* set Printer Resolution to a lower setting.
- \* set Graphics Quality in the Options dialog box to a lower setting.
- \* try changing Graphics Mode in the Options dialog box (if Raster, change to HP-GL/2 or if HP-GL/2, change to Raster).
- \* power the printer off, then on. This will clear any downloaded fonts, typefaces or macros that may be in printer memory.

For the HP LaserJet 4L/4ML printer only:

- \* set Image Adapt to the On or the Auto setting (print quality may degrade).

For the HP LaserJet 4Si/4Si MX printer only:

- \* reduce the amount of memory that you have set for Resource Saving. (This setting must be set on the control panel of your printer.)

## **Related Topics:**

[Fonts Button](#)

[Options Button](#)

[Page Protection](#)

[Printer Resolution](#)

[Resource Saving](#)

## **Print Overrun Error (Error 21 PRINT OVERRUN) -- LaserJet 4/4M and 4Si/4Si MX printers**

This message indicates that the data (rules, dense text, raster graphics, or vector graphics) sent to your printer was too complex.

### **To avoid this error:**

- \* make your page less complex by reducing the amount of dense text or the number of rules or graphic images.
- \* use the Page Protection option (this option requires additional memory for 600 dpi printing and for legal size paper).
- \* set Graphics Mode in the Options dialog box to Raster when printing complex HP-GL/2 images.

For the HP LaserJet 4Si/4Si MX printers only:

- \* reduce the amount of memory that you have set for Resource Saving. (This setting must be set on the control panel of your printer.)

## **Related Topic:**

[Page Protection](#)

[Resource Saving](#)

## Cartridges

The Cartridges box lists several HP font and scalable typeface cartridges. If you are using a cartridge with your HP LaserJet printer, use the Cartridge box to tell Windows which cartridge you are using.

### **Follow these instructions to use font and scalable typeface cartridges:**

1. Install the cartridge into your printer. Refer to your printer's user's manual or operator's guide for information about physically plugging the cartridge into the printer.
2. Scroll through the list of cartridge names in the Cartridges box until you find the name of the cartridge you are using.
3. Select the name of the cartridge you are using.
4. Click the OK button.

**NOTE:** If the name of your cartridge does not appear in the list, use the HP Font Installer to install Windows support files for your cartridge. To use the HP Font Installer, choose the **Fonts** button in the Setup dialog box. Select the **Help** button in the HP Font Installer dialog box for detailed instructions about installing cartridge-based fonts and scalable typefaces.

**NOTE:** To take best advantage of 600 dots per inch (dpi) printing, use fonts that are designed specifically for printers that print at 600 dpi resolution. If you are using accessory fonts which were designed for 300 dots per inch printers, like the HP LaserJet Series II printer or the HP LaserJet III printer, you can print at either 600 or 300 dpi resolution. For best results, set your Printer resolution setting to 300 dpi and use the **RETOption** in the Options dialog box. This will cause your printer to smooth out the 300 dots per inch data and scale it to 600 dots per inch resolution.

## Copies

Use the Copies box to tell Windows how many uncollated copies you want to print from your software applications.

This setting is independent of the "copies" selection that may appear within the print menus of your software applications.

**NOTE: Do not use the two settings simultaneously. Set the number of copies in the Setup dialog box to print uncollated copies. To print collated copies, select the number of copies within your software applications. When you print uncollated copies the printer generates the copies and therefore will print them much faster. When you print collated copies, the software will send the print job to the printer for each copy you want to print. This will take longer to print, however, your pages will be in the correct order.**



## Fonts Button

Select the Fonts button to access the HP Font Installer. The HP Font Installer can be used to install any HP PCL compatible fonts and scalable typefaces.

Choose the Help button in the HP Font Installer dialog box for detailed instructions about installing HP PCL compatible fonts and scalable typefaces.

**NOTE:** Use the Windows Fonts utility to install TrueType fonts. The HP Font Installer can only install HP PCL compatible fonts and scalable typefaces. If you are using TrueType fonts, select Installing TrueType Fonts.

**NOTE:** Support for some font and scalable typeface cartridges is included with this printer driver. If you are using a cartridge, look through the cartridge names listed in the Cartridges box in the Setup dialog box. If your cartridge is listed, select the cartridge name and you can use your cartridge immediately. If your font or scalable typeface cartridge is not listed, use the HP Font Installer to install support files for the cartridge.

### Related Topics:

[Cartridges](#)

[Installing Fonts and Scalable Typefaces](#)

[Installing TrueType Fonts](#)

# Memory

The setting in the Memory box tells Windows how much memory you have installed in your HP LaserJet printer. This setting should exactly match the total amount of memory in your printer.

If you are unsure about how much memory is installed in your printer, print a printer self test. Look for RAM Size. The RAM Size will be listed in Kilobytes. You will need to convert the RAM size from kilobytes to megabytes to type the correct value in the Memory box. To convert this number, divide the RAM size by 1024. For example, if your RAM Size is 2048, enter the number 2 in your Memory box.

Additional printer memory can eliminate out of memory errors (ERROR 20) if you print complex forms, full-page graphics images, or many fonts.

**NOTE: LaserJet 4/4M & 4Si/4Si MX printers: If you are using the Page Protection option, your printer may require additional printer memory. If you are using Page Protection, check your printer user's manual or operator's guide for recommendations for additional printer memory.**

## Related Topics:

[Optimizing Printer Performance](#)  
[Page Protection](#)

## Options Button

Select the Options button to change options which are specific to the model of HP LaserJet printer you are using.

### **The following topics appear in the Options dialog box:**

- Defaults Button
- Density
- Duplex Printing
- EconoMode
- Graphics Mode
- Graphics Quality
- Halftoning
- Image Adapt
- Print TrueType as Graphics
- Output Bin
- RET

For More information about any of these options, select the Help button in the Options dialog box.

## Orientation

HP LaserJet printers can print in portrait or landscape orientation.

**Select portrait orientation if you are printing a page that is taller than it is wide when you view the text upright.**

**Select landscape orientation if you are printing a page that is wider than it is tall when you view the text upright.**

## Page Protection

The Page Protection setting allows the printer to reserve printer memory for printing complex text or graphics images. Page Protection allows your printer to create an entire page image in memory before physically moving the paper through the printer. This process ensures that the entire page will be printed and helps prevent print overrun errors (Error 21 PRINT OVERRUN).

**NOTE:** This setting will override the page protection setting on your printer control panel.

### The following Page Protection settings are available for the HP LaserJet 4/4M and 4Si/4Si MX printers:

- Off (the default setting)
- Letter (for Letter size paper)
- A4 (for A4 size paper)
- Legal (for Legal size paper)

### The following Page Protection settings are available for the HP LaserJet 4ML printers:

- Auto (the default setting)
- Letter (for Letter size paper)
- A4 (for A4 size paper)
- Legal (for Legal size paper)
- Off

**NOTE:** If you are printing in 600 dpi mode, or if you are using legal size paper in 300 dpi mode, you will need additional printer memory to use this option. Refer to your printer user's manual or operator's guide for additional memory recommendations for each of the Page Protection settings. Contact your authorized Hewlett-Packard dealer for information about ordering additional memory for your printer.

### The following Page Protection settings are available for the HP LaserJet 4L printer:

- Auto (the default setting)
- On
- Off

### Related Topic:

[Memory](#)

## Paper Size

The Paper Size box sets your printer's default paper or envelope size.

### Paper Sizes:

Letter 8.5 x 11 inches  
Legal 8.5 x 14 inches  
A4 210 x 297 mm  
A5 148 x 210 mm\*  
Executive 7.25 x 10.5 inches  
Custom Paper Size\*

### Envelope Sizes:

Com-10 Env 4 1/8 x 9 1/2 inches  
Monarch Env 3 7/8 x 7 1/2 inches  
DL Env 110 x 220 mm  
C5 Env 162 x 229 mm\*\*  
B5 Env 176 x 250 mm\*\*

### \*Custom Paper Sizes

HP LaserJet 4ML only: The smallest paper supported is 3.75 in. x 6.70 in. (95 x 170 mm). The largest size supported is 8.5 in. x 14 in. (216 x 356 mm).

1. Measure your paper.
2. Select Custom Paper Size in the Paper Size field.
3. Type in the length and width.
4. Select Manual Feed in the Paper Source field.

### \*\* HP LaserJet 4Si/4Si MX printers

**C5 and B5 envelope sizes are not supported on the HP LaserJet 4Si/4Si MX printers.**

**NOTE:** Your Windows application software may override this setting. Check the paper size you have selected in your software programs. Envelope paper sizes are not saved as permanent default paper size.

## Paper Source

The Paper Source box sets the default paper input tray or option. The choices that appear in the Paper Source box depend on the model of HP LaserJet printer you have installed.

### **A combination of the following sources and options will appear:**

- Auto Select
- Envelope Feeder
- Lower Cassette
- Upper Cassette
- Manual Feed
- MP Tray (multi-purpose tray)
- Paper Cassette

**NOTE:** If you select the **Manual Feed** or **Envelope Feeder** selection, the printer driver will use that selection until you exit Windows. The next time you start Windows, the **Paper Source** selection will revert to your printer's default paper tray.

## Resource Saving

**NOTE:** This option is available only with the HP LaserJet 4Si/4Si MX printers.

Resource Saving tells Windows how much memory you have allocated for Resource Saving on the control panel of your HP LaserJet 4Si/4Si MX printer. Resource Saving is used by the printer to save macros and fonts when switching between printer languages, (HP PCL, PostScript), resolutions (300 or 600) and when changing the Page Protection setting.

The Resource Saving settings should exactly match the amount of memory that you have allocated for Resource Saving on your HP LaserJet 4Si/4Si MX printer control panel.

If you are unsure about how much memory has been set aside for Resource Saving on your printer, print a printer self test. Look for the number following the Resource Saving label that tells the amount of memory allocated for PCL Memory and PostScript Memory. Enter these numbers in the Resource Saving boxes.

### Related Topics:

[Memory](#)

[Optimizing Printer Performance](#)



## Printer Resolution

**NOTE:** This note does not apply to the HP LaserJet 4L printer. The Printer Resolution option is available only if your printer prints at 600 dots per inch (dpi) resolution.

For best results, set the Printer Resolution option to 600 dpi and use graphics and fonts that are designed specifically for printers that print at 600 dots per inch resolution.

If you are using accessory fonts which were designed for 300 dots per inch printers, like the HP LaserJet Series II printer or the HP LaserJet III printer, you can print at either 600 or 300 dpi resolution. For best results, set your Printer resolution setting to 300 dpi and use the RET option in the Options dialog box. This will cause your printer to smooth out the 300 dots per inch data and scale it to 600 dots per inch resolution.

**NOTE:** If you want to change the resolution of graphics images only, choose the Options button, and change the setting in the Graphics Quality box. The Graphics Quality setting does not affect the resolution of text.

**NOTE:** Using a higher Printer Resolution setting may require additional printer memory, especially if you are using the Page Protection option. Refer to your printer user's manual or operator's guide for recommendations for additional printer memory.

## Compatible Fonts and Typefaces

**NOTE:** Use the Windows Font utility to install TrueType fonts. The HP Font Installer can only install HP PCL compatible fonts and scalable typefaces. The Windows Font utility can be found in Windows Control Panel. For information about installing TrueType fonts, select [Installing TrueType Fonts](#).

**The following fonts and typefaces are compatible with PCL5 printers:**

### **Cartridges:**

You can install any Hewlett-Packard font cartridge or scalable typeface cartridge. You can also install font and typeface cartridge products that are made specifically for HP LaserJet printers by companies other than HP.

You may need to contact the manufacturer of the cartridge product to obtain AutoFont Support files or PCM files so that you can install the cartridge with the HP Font Installer.

**NOTE:** Not all printers support the use of cartridge-based fonts and cartridge-based typefaces. Check your printer user's manual or operator's guide to see if you can use cartridges with your printer model.

### **Flexible disks:**

You can install any Hewlett-Packard disk-based font (soft font) or scalable typeface product. You can also install disk-based fonts (soft fonts) or scalable typeface products that are made specifically for HP LaserJet printers by companies other than HP.

- \* Disk-based fonts must be in HP PCL format. The font files have various file extensions. For example, soft fonts created by the HP Type Director program use .SFP and .SFL for file extensions. HP's older soft font products such as the AC, AE, AG, DA, and DC products have file extensions like .USP, .USF, .R8P, and .R8L.
- \* Scalable typefaces must be in AGFA Compugraphic's FAIS format.

If you are using a scalable typeface product, you may need to contact the manufacturer of the product to obtain AutoFont Support files so that you can install the cartridge with the HP Font Installer.

## **TrueType Screen Fonts Software Installed**

Select this option only if you have installed the TrueType Screen Fonts software for your HP LaserJet printer. If you have installed the TrueType Screen Fonts software and if you do not have this selection chosen, Windows will list your printer's built-in Intellifont typefaces twice in each of your Windows software applications, once as a printer font, and once as a TrueType screen font. Selecting this option causes your printer's built-in Intellifont typefaces to be listed only once in the Fonts or Typefaces menu of your Windows software applications.

**NOTE:** The TrueType Screen Fonts software is provided free of charge by Hewlett-Packard Company to customers who return the screen font business reply card which is included with each HP LaserJet 4 family printer.

**NOTE:** Hewlett-Packard company has two methods for viewing screen fonts for the Intellifont typefaces that are built into HP LaserJet printers. Customers who would like to use TrueType screen fonts for their Intellifont typefaces can use the method described above. Customers who would like to use Intellifont screen fonts for their built-in Intellifont typefaces can use Intellifont-for-Windows. Intellifont-for-Windows is a screen font program that creates screen fonts that match the printer's built-in Intellifont typefaces and any accessory Intellifont typefaces. (Accessory typefaces include all HP scalable typefaces in Intellifont format which are disk-based or cartridge-based.) Intellifont-for-Windows is provided free of charge to any HP LaserJet printer user who would like Intellifont screen fonts for their printer fonts. To order a free copy of the HP Intellifont-for-Windows software, contact your authorized HP dealer or in the United States call Hewlett-Packard's driver distribution center at 1-303-353-7650.

**Use the TrueType Screen Fonts software if you are using your printer's internal Intellifont typefaces. If you are using any accessory HP Intellifont disk-based or cartridge-based accessory scalable typefaces, use the Intellifont-for-Windows screen font program for the accessory typefaces. Intellifont-for-Windows and the TrueType Screen Fonts software can be used at the same time.**

You can use the Auto Select setting if your printer has more than one paper tray.

You can also use the Auto Select setting if you print on more than one size of paper. For example, you can use a letter size paper tray for one tray and legal size paper tray for the other. When you choose letter paper from your software program, the printer will automatically select the letter paper tray.

In multiple page jobs that are collated, a complete set of pages in a job are printed followed by another complete set of pages. For example, one copy of page 1, then page 2, then page 3, followed by another copy of page 1, then page 2, then page 3.

In multiple page jobs that are uncollated, several copies of page 1 are printed followed by several copies of page 2, followed by several copies of page 3, etc.

Refer to your printer user's manual or operator's guide for instructions about how to print a printer self test.

