

PCL Printer Driver Help



Press F1 to find out about using Help

- Printer Driver Basics
- Working with Paper
- Adjusting Print Quality
- Working with Fonts
- Setting Options
- Common Print Problems





Printer Driver Basics

A printer driver is software that allows your computer to communicate with a printer and to use most of your printer's features. When you print from an application, the application talks to the printer through the printer driver. You can also access the printer driver directly. In the Print dialog box in most Windows applications, choose the Setup button; or click the Printers icon in the Windows Control Panel and then choose the Setup button.

Usually, you will want to access the printer driver to change the way your printer behaves. For instance, you might want to have the printer use paper from a different tray than it usually does, or you might want it to handle graphics differently than it does currently.

The HP PCL Printer Driver has four *tabs* on which you can make changes to various settings. For more information, select any of the topics listed below.

See also

[Working with Paper](#)

[Adjusting Print Quality](#)

[Working with Fonts](#)

[Setting Options](#)



Working with Paper

You can control several aspects of how your printer works with paper and paper trays. You can tell your printer what paper size to expect in a paper tray, and you can tell it which tray to pull paper from. You can also tell it which orientation to use for printing and how many copies to print.

The options that appear on the Paper tab for the HP LaserJet 5P and 5MP printers are listed below. For more information about any of these options, select the appropriate option name in the list.

Paper Tab Options

[Paper Size](#)

[Paper Source](#)

[Copies](#)

[Orientation](#)

[Set Custom Paper Size](#)

[Restore Defaults](#)

[About](#)



Paper Size

Use the Paper Size box to set your printer's default paper size or envelope size. The box shows only those sizes that are supported by your printer model.

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

The HP LaserJet 5P and 5MP printers allow you to define custom paper sizes. For more information, see [Setting Custom Paper Sizes](#).





Setting Custom Paper Sizes

For the HP LaserJet 5P and 5MP printers, you can define custom paper sizes if none of the available size options are what you want to use. You can set custom paper sizes in either your application or in the printer driver. The smallest paper size supported is 3 by 5 inches (76 by 127 mm). The largest size supported is 8-1/2 by 14 inches (216 by 356 mm). All custom-sized paper is fed to the printer through the Tray 1. The following procedure describes how to change paper size in the printer driver. See your application's user's guide for more information about setting custom paper size there.

Note If you set paper size in your application, it will usually override changes you make in the driver. Occasionally, however, you will have problems setting custom paper size from your application. If your page does not print as you expect, try setting the custom paper size in both the application and the driver.



To define a custom paper size

- 1 Measure your paper.
- 2 On the Paper tab, choose the Set Custom Paper Size button.
The Custom Paper Size dialog box appears.
- 3 Select either the English or Metric option button.
- 4 Enter values in the Width and Length boxes.
- 5 Choose the OK button.
The dialog box closes, and the new custom size appears in the Paper Size box.

See also

[Orientation](#)



Paper Source

The Paper Source box allows you to set the default paper tray or the default paper input (paper source) option. The HP LaserJet 5P and 5MP printers give you the following choices:

- First Available Tray
- Tray 1
- Tray 2
- Manual (Tray 1 - Pause)

You can set the paper source in either your application or in the printer driver. See your application's user's guide for more information about setting the paper source there.

Note If you set the paper source in your application, it will usually override changes you make in the driver. Occasionally, however, you will have problems setting paper source from your application. If your page does not print as you expect, try setting the paper source in both the application and the driver.

Note If you select the Manual option, 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.



First Available Tray

For First Available Tray option, the printer will pull from Tray 1, unless Tray 1 is empty, in which case the printer will try to pull from Tray 2. If both Tray 1 and Tray 2 are empty, the printer will pause and prompt you to put paper into Tray 2.



Copies

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

Note that the Copies box on the Paper tab is one of two locations where you can specify number of copies to print; the other place is the Print dialog box in your application (where the setting works a bit differently).

If you specify multiple copies on the Paper tab, the printer generates the copies, and each page is sent to the printer only once. This technique prints faster, but the copies will be uncollated.

If you specify multiple copies in the Print dialog box in your application, the application generates the copies, and each copy of each page is sent to the printer individually, in sequence. For example, if you print 10 copies of a 25-page document using this method, the printer will print one copy of pages 1-25, then a second copy of pages 1-25, and so on until all 10 complete copies have been printed. This technique prints more slowly, but you can specify that the copies be collated as they are printed.

Note If you set the number of copies in the Print dialog box to any value other than 1, this value will override the value set on the Paper tab.





Orientation

Use the Orientation option buttons to specify whether your printer should use portrait orientation or landscape orientation. You can set orientation in either your application or in the printer driver.

Note If you set orientation in your application, it will usually override changes you make in the driver. Occasionally, however, you will have problems setting orientation from your application. If your page does not print as you expect, try setting the orientation in both the application and the driver. Occasionally, for Custom Paper Size lengths and widths, it may be necessary to reverse the settings in the length and width boxes.

- Select Portrait



if you are printing a page that is taller than it is wide when you view the text right side up.

- Select Landscape



if you are printing a page that is wider than it is tall when you view the text right side up.

See also

[Setting Custom Paper Sizes](#)



Restore Defaults

Choose the Restore Defaults button to return all of the settings on the tab to the driver's "factory settings."





Adjusting Print Quality



There are many adjustments that you can make to affect the print quality of your document. You can allow the printer to make decisions about the best way to print text or graphics, or you can have the printer use settings that you specify. Also, you can adjust the resolution that the printer uses.

Listed below are the options that appear on the Print Quality tab for the HP LaserJet 5P and 5MP printers. For more information about any of these options, select the appropriate option name in the list.

Print Quality Tab Options

[Graphics Quality](#)

[Graphics Mode](#)

[Text Mode](#)

[REt](#)

[EconoMode](#)

[Printer Resolution](#)

[Restore Defaults](#)

[About](#)

See also

[Printed Page Looks Different than Screen Page](#)

[Out of Memory Printer Error \(Error 20\)](#)

[Print Overrun Printer Error \(Error 21\)](#)





Graphics Quality



Use the options in the Graphics Quality box to change the resolution of graphic images. Generally, you'll want to keep the quality at the highest setting; however, printing at lower resolutions can be faster and takes less memory. If complex graphics take a long time to print or if you have printer memory problems, lowering the graphics quality can be helpful.

Note The Graphics Quality setting affects the resolution of graphic images only, not text. Use the Printer Resolution box to change the resolution of text as well as graphic images.

You can select one of three options in the Graphics Quality box:



High--prints at the current printer resolution, producing the highest quality graphics that your printer is capable of printing.



Medium--prints at half the resolution of High.



Low--prints at one fourth the resolution of High.

For example, if you have specified 600 dpi as the Printer Resolution setting and High as the Graphics Quality setting, both text and graphics will print at 600 dpi. If you have selected Medium as the Graphics Quality setting, text prints at 600 dpi and graphics print at 300 dpi. If you have selected Low, text prints at 600 dpi and graphics print at 150 dpi.





Graphics Mode



Use the Graphics Mode setting to tell Windows how to send graphic information to the printer. HP LaserJet printers will print graphics either as raster images or as HP-GL/2 (Hewlett Packard Graphics Language) graphic images. Most graphics will print faster as HP-GL/2 than as raster images. With extremely complex images, raster images may print faster.

You can select one of three options in the Graphics Mode box:



Auto--lets the driver select the optimum technique for sending graphics to the printer.



Raster--sends all graphics to the printer as raster images.



HP-GL/2--sends graphics to the printer as a mixture of HP-GL/2 and raster images.

Note Not all graphic images can be printed using the HP-GL/2 setting. If you use the HP-GL/2 or Auto setting and your graphic images do not print the same way they appear on your screen, or if your printer displays a print overrun error (Error 21), select the Raster setting and reprint your graphic.





Text Mode



Use the options in the Text Mode box to specify whether textual elements are to be sent to the printer as graphics or as bitmaps.

You can select one of three options in the Text Mode box:



Auto--At 600 dpi, lets the driver choose the fastest printing method for you.



TrueType as Bitmaps--May print slower than Auto, but output at 600 dpi will match what you see on your monitor. At 300 dpi, you'll get output that looks exactly as if it were printed on an HP LaserJet III or 4L printer.



TrueType as Graphics--(Available only when Graphics Mode is set to Raster and Graphics Quality is set to High.) This option is useful if you want to print graphic images on top of TrueType text. By default, because TrueType text is always sent to the printer last, it appears on top of any graphics being printed. Selecting the TrueType as Bitmaps option sends your TrueType images to the printer as graphics so that the *actual* graphics can appear on top of the TrueType images. Selecting a different Text Mode option can affect the order in which graphics and text are printed on the page. This selection is important if you are trying to achieve a special effect such as overlaying graphics on top of text.





REt



REt (Resolution Enhancement technology) refines the print quality of characters and graphics by smoothing out jagged edges that can occur around angles and curves in a printed image. The effects of different REt settings can be seen by printing a self test. Look for the block labeled REt on the self test printout. In general, set the REt option so that the REt block on the self test page is uniform in appearance, with no vertical lines or with vertical lines that are dark.

The REt box for the HP LaserJet 5P and 5MP printers contains five options: Printer Default, Light, Medium, Dark, and Off. (From the factory, the default is set to Medium).





EconoMode



Use EconoMode to reduce the amount of toner that your printer uses.

EconoMode causes the printer to use less toner on each page, as illustrated in the figure below.

As a result, pages printed with EconoMode turned on will be much lighter than pages printed with EconoMode turned off. This feature can be used as a "draft mode" to extend the life of your toner cartridge.

Note EconoMode will not affect the speed or performance of your printer.

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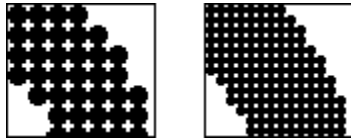




Printer Resolution



Resolution refers to the number of dots per inch (dpi) of ink or toner that the printer places on the page. As resolution is increased, the quality (clarity and visual appeal) of the print on the page is improved.



Note Occasionally, using a 600 dpi Printer Resolution setting may occasionally require additional printer memory, especially if you are using the Page Protection option. For recommendations on adding printer memory, see the user's guide or operator's manual for your printer.

Working with Fonts

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-dpi resolution.

If you are using accessory fonts that were designed for 300-dpi printers such as the HP LaserJet Series II and HP LaserJet III printers, you can print at either 600-dpi or 300-dpi resolution.

Working with Graphics

If you want to change the resolution of graphic images only, change the setting in the Graphics Quality box. The Graphics Quality setting does not affect the resolution of printed text.

See also

[Graphics Quality](#)





Common Print Problems



Generally, you should have few problems printing. There are, however, a few problems that people see more frequently than others. In the following topics, common problems are described and solutions to the problems are presented.

See also

[Printed Page Looks Different than Screen Page](#)

[Out of Memory Printer Error \(Error 20\)](#)

[Print Overrun Printer Error \(Error 21\)](#)



Printed Page Looks Different than Screen Page



Not all graphic images can be printed using the HP-GL/2 or Auto options in the Graphics Mode box on the Print Quality tab. If your printed text looks different than the text on your screen, change your Text Mode setting to Graphics Mode.

See also

[Graphics Mode](#)

[Text Mode](#)





Out of Memory Printer Error (Error 20)



Additional printer memory may be required before you can print full-page graphic images at higher Print Quality settings. If your printer does not print the entire graphic image on one page and displays the Out of Memory error message (Error 20), the printer has run out of memory.



To avoid this error



Change the setting in the Graphics Mode box (if HP-GL/2 or Auto is selected, select Raster instead; or if Raster is selected, select HP-GL/2 instead).



Select a lower setting in the Graphics Quality box.



Install more memory in your printer. (For more information about adding printer memory, contact your authorized Hewlett-Packard dealer.)



Reduce amount of data on the page.





Print Overrun Printer Error (Error 21)



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



To avoid this error



In the Print Quality tab, select Raster in the Graphics Mode box if you are printing complex HP-GL/2 images.



Use the Page Protection option. (This option requires additional memory for 600-dpi printing and for larger paper sizes. See your user's manual for more information).



Make your page less complex by reducing the amount of dense text or the number of rules or graphic images.



Reduce the amount of memory that you have set for the Resource Saving option. Use the "Configure Printer" button located on the Device Options property sheet.





Working with Fonts



Usually, you should use HP FontSmart (if it is installed) to manage fonts for your Hewlett-Packard printer. If the FontSmart button is grayed (or dimmed), HP FontSmart is not installed. You can install HP FontSmart from the original disk(s) packaged with your printer. To install bitmap font cartridges, scalable font cartridges, and older disk-based scalable type collections, however, use the HP Font Installer. Only HP PCL-compatible fonts and typefaces can be installed with the HP Font Installer. For more information, see "Compatible Fonts and Typefaces" (in the "Installing Fonts" topic) in the HP Font Installer Help file. To install TrueType fonts, use HP FontSmart or the Windows Font utility. The Windows Font utility can be found in the Windows Control Panel.

The options that appear on the Fonts tab for the HP LaserJet 5P and 5MP printers are listed below. For more information about any of these options, select the appropriate option name in the list.

Fonts Tab Options

[Run HP FontSmart](#)

[SIMMS](#)

[List Fonts in Application Font Menus](#)

[Install Printer Fonts](#)

[Restore Defaults](#)

[About](#)





Run HP FontSmart



Use HP FontSmart to install fonts in Windows and to uninstall and delete fonts from Windows. You can also create font lists and samples with HP FontSmart. If the FontSmart button is grayed (or dimmed), HP FontSmart is not installed. You can install HP FontSmart from the original disk(s) packaged with your HP LaserJet printer. For more information about HP FontSmart, see the HP FontSmart Help file.





SIMMs



You can install SIMM-based font or scalable typeface products from Hewlett-Packard or other companies as long as they are specifically designed for HP LaserJet printers.



To install SIMM-based fonts

- 1 Install the SIMM in your printer according to the instructions in the user's guide for your printer.
- 2 Choose the Install Printer Fonts button on the Fonts tab.

The HP Font Installer opens.

- 3 If you are installing AutoFont Support files, install them according to the instructions that came with the cartridge; if you are using Printer Cartridge Metrics (.PCM) files, go to step 4. (You must use either AutoFont Support files or Printer Cartridge Metrics (.PCM) files to install support for your cartridge.)

Note If you are installing AutoFont Support files, you must first exit Windows. If you are installing AutoFont Support files, we recommend that you print this Help topic. To print this topic, choose Print from the File menu.

Note You may have to contact the manufacturer of your SIMM for more information about installing AutoFont Support or Printer Cartridge Metrics (.PCM) files.

- 4 In the Font Installer dialog box, choose the Add Fonts button.
- 5 In the Add Fonts dialog box, type the drive and directory where your support files are located. For example, AutoFont Support files may be in C:\AUTOFONT. (.PCM files will probably be on a flexible disk drive, such as A:\.)
- 6 Choose the OK button.
- 7 From the list on the right, select the SIMM name.
- 8 Choose the Add button.
- 9 Type the destination drive and directory for your driver support files (for example, C:\PCLFONTS).
- 10 Choose the OK button.

Once installed, the font SIMM name will appear in the list on the left.

- 11 Choose the Exit button; then select the SIMM name in the SIMMs box in the Fonts tab.

Note If you do not select the SIMM name in the SIMMs box, the fonts or typefaces in the SIMM will not be available in your Windows applications.

To use SIMM-based fonts or typefaces in Windows, you will need to physically install the SIMM (see your user's guide) and then load a .PCM file for Windows using the HP Font Installer (accessed by clicking the Install Printer Fonts button on the Fonts tab).

After you load the .PCM file, use the SIMMs box to tell Windows which one you are using.

For more information, see the HP Font Installer Help file.





List Fonts in Application Font Menus



Clear this option only if you have installed the TrueType Screen Fonts software for your HP LaserJet printer. If you have installed a screen font and you have this option selected, Windows will list your printer's built-in Intellifont typefaces twice in each of your Windows applications--once as a printer font and once as a TrueType screen font. De-selecting this option causes your printer's built-in Intellifont typefaces to be listed only once (as a TrueType screen font) in the Fonts or Typefaces menu of your Windows applications.





Install Printer Fonts



Use the Install Printer Fonts button to open the HP Font Installer. In general, though, you should use HP FontSmart (if it is installed) to manage fonts for your Hewlett-Packard printer. The HP Font Installer does *not* install TrueType fonts. Use HP FontSmart or the Windows Font utility to install TrueType fonts. The Windows Font utility can be found in the Windows Control Panel.

Use the HP Font Installer only to install bitmap font SIMMs, and older disk-based scalable fonts. Only HP PCL-compatible fonts and typefaces can be installed with the HP Font Installer. For more information, see the Installing Fonts topic in the HP Font Installer help file.





Setting Options



Using the PCL Printer Driver, you can adjust many printer settings that are not available elsewhere.

The options that appear on the Device Options tab for the HP LaserJet 5P and 5MP printers are listed below. For more information about any of these options, select the appropriate option name in the list.

Device Options Tab Options

[Page Protection](#)

[Configure Printer](#)

[About](#)

[Restore Defaults](#)





Page Protection



The Page Protection option allows the printer to reserve printer memory for printing complex text or graphic images. Page Protection enables 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 default printer Page Protection setting.

Normally, you should leave the Page Protection option set to Auto (MEt) for best results. If you get an Error 21 message, try printing with Page Protection set to Special. With Special selected, performance will be reduced and the printer might use more memory, but you may be able to print error-free.

Note When you finish printing the job, switch back to the Auto setting.





Configure Printer



Use the Configure Printer button to open the Advanced Printer Configuration dialog box. Use this button to make changes to the printer's default settings.

For more information, see the Advanced Printer Configuration Help file or your user's guide.





About



Use this button to see information about the name and version of the printer driver.



This is the beginning of the pop-up section

Collated

In multiple-page jobs that are collated, the printer will print a complete set of pages, followed by another complete set of pages, and so on until the total number of copies you specified have been printed. For example, for a three-page print job, it will print one copy each of pages 1, 2, and 3, followed by another set of pages 1, 2, and 3, and so on.

Uncollated

In multiple-page jobs that are uncollated, all of the copies (the number of copies you specified) of page 1 are printed, followed by all of the copies of page 2, and so on.

Self Test

For instructions on printing a self-test, see the user's guide or operator's manual for your printer.

SIMM

SIMM stands for "Standard In-line Memory Module." SIMMs can contain printer memory, optional printer languages (such as Adobe's PostScript language), and fonts or typefaces.

Resolution

Resolution refers to the number of dots per inch (dpi) of ink, or toner, that the printer places on the page. As resolution is increased, the quality (clarity) of the print on the page is improved.

Scalable

Fonts have a fixed point size and cannot be reduced or enlarged. Scalable typefaces, on the other hand, are not limited to a particular point size and can thus be reduced and enlarged.

AutoFont Support

AutoFont Support files contain font and typeface width information used by the HP Font Installer.
AutoFont Support files are included with all new HP font and typeface products.

Welcome to Help for the HP PCL Printer Driver



The PCL Printer Driver allows your computer to communicate with your printer and to use all of the printer's features.

