

Common Topic Section



Paper Size

Use the Paper Size box to set your printer's default paper size or envelope size. The box shows those sizes that are supported by your printer, including the following paper and envelope sizes:

- Executive (7-1/4 by 10-1/2 inches) paper
- Letter (8-1/2 by 11 inches) paper
- A4 (210 by 297 mm) paper
- A5 (148 x 210 mm) paper
- Legal-sized (8-1/2 by 14 inches) paper
- COM-10 (4-1/8 by 9-1/2 inches) envelopes
- Monarch (3-7/8 by 7-1/2 inches) envelopes
- B5 (176 by 250 mm) envelopes
- C5 (162 by 229 mm) envelopes
- DL (110 by 220 mm) envelopes
- Custom (from 3 by 5 inches to 8-1/2 by 14 inches) paper, envelopes, and other media

Note The smallest paper size supported is 3 by 5 inches (76 by 127 mm) minimum. The largest size supported is 8-1/2 by 14 inches (216 by 356 mm) maximum.

Note Your Windows application software may override the Paper Size setting. Check the paper size you have selected in your applications.

Your printer also allows you to define custom paper sizes. For more information, see [Set Custom Paper Size](#).





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 the number of copies to print; the other location is the Print dialog box in your application (where the setting works a bit differently).

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

If you specify multiple collated 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 specify 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.

Note If you set the number of copies in the Print dialog box in your application to a 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 either in 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 may have problems setting orientation in your application when using custom paper sizes. If your page does not print as you expect, try setting the orientation in both the application and the driver. When using custom paper sizes, it may be necessary to reverse the settings in the Short Edge and Long Edge boxes.

- Select Portrait



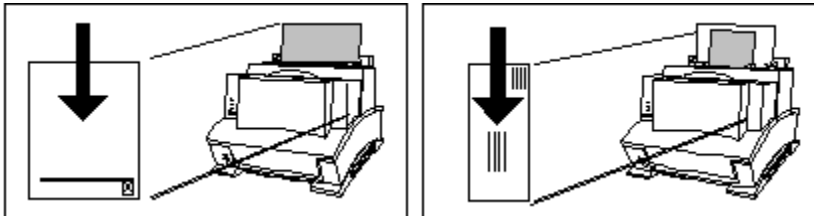
if you are printing an envelope or a page that is taller than it is wide when you view the text right side up.

- Select Landscape



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

Note Regardless of the Orientation setting, paper and other media are always loaded into the printer so that the shortest edge enters the printer first, as shown in the following illustration:



See also

[Set Custom Paper Size](#)

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. Printing uncollated copies is faster than printing collated copies.

Self Test Page

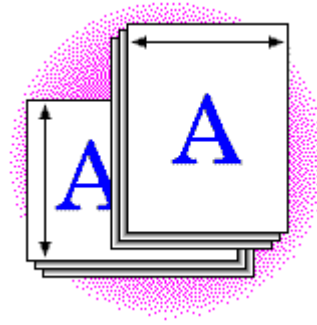
A self test page is an information sheet produced by your printer about your printer. Information on the page includes the name and model of your printer, a list and samples of scalable typeface fonts that are loaded on your printer, and a list of the current printer driver settings. To print a self test page, briefly press the Front Panel Button on your printer.

Resolution

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

Welcome to Help for the HP Printer Driver

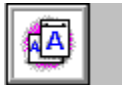
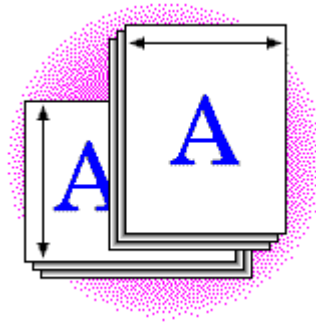
The Printer Driver allows your computer to communicate with your printer and to use all of the printer's features.



PCL Driver Section

Press F1 for information 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 your printer's features. When you print from an application, the application talks to the printer through the printer driver. You can access the printer driver two ways: through the Windows Control Panel or from your software application.

◆ **To access the printer driver through the Windows Control Panel**

- 1 In the Control Panel window, double-click the Printers icon.
The Printers dialog box is displayed.
- 2 Select the HP LaserJet 5L (PCL) printer from the Installed Printers list.
- 3 Choose the Setup button.
The HP LaserJet 5L (PCL) Printing System on... is displayed.

◆ **To access the printer driver from your application**

Note Access to the printer driver from your software applications may vary; however, the printer driver is usually accessed using the File menu.

- 1 In your application, choose Print Setup from the File menu.
The Print Setup dialog box is displayed.
- 2 Select the HP LaserJet 5L printer from the list.
- 3 Choose the Setup button.
The HP LaserJet 5L (PCL) Printing System on ... is displayed.

Usually, you will want to access the printer driver to change the way your printer behaves. For instance, you might want the printer to use a different size of paper than it usually does, or you might want it to handle graphics differently than it does currently. Your application may also provide similar functionality.

The HP Printer Driver has four tabs (Paper, Print Quality, Fonts, and Device Options) on which you can make changes to various settings. For more information, click any of the topics listed below.

See also

[Working with Paper](#)

[Adjusting Print Quality](#)

[Working with Fonts](#)

[Setting Options](#)



Working with Paper

Using the Paper Tab options, you can control several aspects of how your printer works with paper. You can tell the printer

- what paper size to use
- whether to pause the printer for manual feed
- which orientation to use for printing
- how many copies to print

The options that appear on the Paper tab are listed below. For more information about any of these options, click the appropriate option name in the following list.

Paper Tab Options

[Paper Size](#)

[Orientation](#)

[Paper Source](#)

[Copies](#)

[Set Custom Paper Size](#)

[Restore Defaults](#)



Paper Source



The Paper Source box allows you to choose from the following options:



Paper Input Bin--draws paper from the Paper Input Bin. However, if there is paper in the Single Sheet Input Slot, the printer will automatically draw from that location first. When the paper has been removed from the Single Sheet Input Slot, the printer will continue to draw paper from the Paper Input Bin. The Paper Input Bin can hold 100 sheets of paper or 10 envelopes.



Manual Feed--pauses the printer. When the printer is paused, insert paper in the Single Sheet Input Slot. To unpause the printer and print, briefly press the printer Front Panel Button. The Single Sheet Input Slot can hold one sheet of paper or one envelope.

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 override the setting in the driver.

Note If you select Single Sheet Input Slot, the printer driver will use that selection until you change it or until you exit Windows. The next time you start Windows, the Paper Source selection will revert to Paper Input Bin.





Set Custom Paper Size



You can define custom paper sizes if none of the available size options is what you want to use. You can set custom paper sizes in either your application or in the printer driver. 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 sizes 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 sizes in 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.

Note The smallest paper size supported is 3 by 5 inches (76 by 127 mm) minimum. The largest size supported is 8-1/2 by 14 inches (216 by 356 mm) maximum.

- 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 Short Edge and Long Edge boxes.

Note The longest edge of your paper is the "length"; the shortest edge is the "width."

- 5 Choose the OK button.

The dialog box closes, and the new custom size is set.

See also

[Orientation](#)





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



Using Print Quality options, you can control how the printer produces text and graphics. You can either adjust the details of the way the printer handles text and graphics yourself, or you can let the driver select the best settings for you.



To let the driver select the best settings for you



Select a setting in the Print Optimization Settings box.

The Print Optimization Settings box contains print quality options previously defined by the driver.



To manually adjust the print quality settings

- 1 On the Print Quality tab, choose the Manual Settings option.
- 2 Choose the Settings button.
The Settings dialog box is displayed.
- 3 Select the options you want.
- 4 Choose the OK button.

For more information about any print quality option, click the appropriate name in the following list.

Print Quality Options

[Print Optimization Settings](#)

[EconoMode](#)

[Graphics Quality](#)

[Graphics Mode](#)

[Printer Resolution](#)

[Image Adapt](#)

[Text Mode](#)

[Restore Defaults](#)





Print Optimization Settings



The options in the Print Optimization Settings box allow you to choose the optimal settings for your document, depending on the number and complexity of graphics in the document and the desired output quality. The Print Optimization Settings box contains the following options:



Auto - Recommended--lets the driver select the best print quality settings for the document you are printing.



Mixed Text and Graphics--prints high quality text and graphics quickly. Some pages may not print without additional memory. [Show Settings](#)

Note This option may require additional printer memory. Using this option may cause memory errors.



Primarily Text Printing--prints high quality text quickly. If you have installed additional memory in your printer, choose this option. [Show Settings](#)



General Purpose Printing--optimal setting for printing most documents. Prints all pages in a document without memory errors; however, for complex pages, print quality may be reduced. [Show Settings](#)



300 dpi Printing--prints pages quickly and requires less memory, although text and graphics quality are reduced. Output closely resembles output from the LaserJet 4L and LaserJet III. [Show Settings](#)

The above options are pre-defined combinations of Graphics Quality, Graphics Mode, Printer Resolution, Image Adapt, and Text Mode settings. Use the following option to customize print quality settings:



Manual Settings--allows you to customize various print quality settings. When this option is selected, choose the Settings button to change print quality options.

See Also

[Graphics Quality](#)

[Graphics Mode](#)

[Printer Resolution](#)

[Image Adapt](#)

[Text Mode](#)

[Memory Out/Print Overrun Printer Error](#)



Mix Text & Graphics

Image Adapt	Off
Graphics Quality	High
Graphics Mode	Raster
Text Mode	TrueType as Graphics
Resolution	600 dpi

Primarily Text Printing

Image Adapt	Auto
Graphics Quality	High
Graphics Mode	Raster
Text Mode	TrueType as Bitmaps
Resolution	600 dpi

General Purpose Printing

Image Adapt	Auto
Graphics Quality	High
Graphics Mode	Raster
Text Mode	TrueType as Graphics
Resolution	600 dpi

300 dpi Printing

Image Adapt	Off
Graphics Quality	High
Graphics Mode	Raster
Text Mode	TrueType as Bitmaps
Resolution	300 dpi



EconoMode



EconoMode causes the printer to use less toner on each page, as illustrated in the figure below. As a result, pages printed with the Saves Toner setting will be much lighter than pages printed with the Normal Quality setting. Using the Saves Toner setting can extend the life of your toner cartridge.

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Normal Quality



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Saves Toner



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 take 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. The Printer Resolution setting affects the resolution of text as well as graphic images.

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



High--prints using the current printer resolution setting, 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 settings to optimize graphics printing, increasing speed and quality. The Graphics Mode settings tell Windows how to send graphic information to the printer. Some graphics will print faster as HP-GL/2 than as raster images; however, 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 setting and your graphic images do not print the same way they appear on your screen, select the Raster setting and reprint your graphic.

See Also

[Common Print Problems](#)



Raster

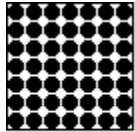
A raster image is an image composed of individual dots. Pictures in newspapers or on television screens are examples of raster images.



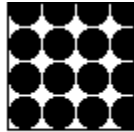
Printer Resolution



Resolution refers to the number of dots per inch (dpi) of toner that the printer places on the page. As resolution is increased, the quality (clarity and visual appeal) of print on the page is improved. Using the 600 dpi Printer Resolution setting uses more printer memory than the 300 dpi setting. For recommendations on adding printer memory, see the user's guide or operator's manual for your printer.



600 dpi



300 dpi

Warning Changing this setting will remove permanently downloaded fonts and macros.

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, 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](#)

[Resolution Enhancement technology](#)





Image Adapt



The Image Adapt option allows you to print documents that contain complex, memory-intensive graphic images, even if your printer does not have enough memory. If the printer does not have enough printer memory to print a page, it will reduce apparent resolution until the page can be printed without error.

Note Using the Image Adapt option will reduce the number of printer memory errors you receive, but graphics and text quality may be reduced.

The Image Adapt option has the following settings:



Auto--lets the printer use Image Adapt when it senses that there is not enough memory available to print a page.



Off--disables the Image Adapt feature.





Text Mode



Use the options in the Text Mode box to specify whether text is to be sent to the printer as graphics or as bitmaps. Both modes can affect the order in which graphics and text are printed on the page.

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



TrueType as Bitmaps--prints faster than TrueType as Graphics, but requires more printer memory to print.



TrueType as Graphics--output will look closer to what you see on your screen than TrueType as Bitmaps, but printing speed is slower. Uses less printer memory.





Restore Defaults



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





Working with Fonts



The Fonts tab provides access to the HP Font Installer, which allows you to install HP PCL-compatible fonts and typefaces. For more information, see the HP Font Installer Help file. To install TrueType fonts, use the Windows Font utility. (The Windows Font utility is in the Windows Control Panel.) The Fonts tab also allows you to remove duplicate font names from your application font menus.

The options that appear on the Fonts tab are listed below. For more information about any of these options, click the appropriate option name in the list.

Fonts Tab Options

List Printer Fonts in Application Font Menus

Install Printer Fonts

Restore Defaults





List Printer Fonts in Application Font Menus



Select 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. Deselecting 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. The HP Font Installer does *not* install TrueType fonts. Use the Windows Font utility to install TrueType fonts. The Windows Font utility is in the Windows Control Panel.

Use the HP Font Installer only to install 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.





Restore Defaults



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





Setting Options



Using the Printer Driver, you can adjust printer settings that are not available in your Windows applications.

The options that appear on the Device Options tab are listed below. For more information about any of these options, click the appropriate option name in the list.

Device Options Tab Options

[Density](#)

[Page Protection](#)

[Enhanced I/O](#)

[Installed Memory](#)

[Resolution Enhancement technology](#)

[About](#)

[Restore Defaults](#)





Density



This option changes the printer's default settings for print density. Print density is a measure of the darkness of print on the page. The settings are numbered from 1 (Lightest) to 5 (Darkest).





Page Protection



The Page Protection option allows the printer to reserve memory for processing 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 errors. The Page Protection option has the following settings:



Auto--Uses the optimal setting for your document. Choose this option for best results.



On--Uses printer memory to create an entire page before printing it. Choose this option if you have a memory error. However, printing with this setting may reduce printing speed.



Off--Does not use Page Protection. Increases printing speed and reduces printer memory use. Printing with this setting may increase print overrun errors.





Enhanced I/O



The Enhanced I/O feature allows printer memory to be used for storing data received from your computer. When Enhanced I/O is enabled, you can send more data to the printer in a shorter amount of time, which allows you to return to your application sooner. Enhanced I/O has the following options:



Auto--allows the printer to use Enhanced I/O memory allocation to increase the speed of data transfer from the computer to the printer, if necessary.



Off--uses the minimum amount of printer memory for storing data sent from the computer.





Installed Memory



Warning You must change the Installed Memory setting if you change the amount of memory in your printer, or you may experience memory errors.

The setting in the Installed Memory box tells Windows how much memory you have installed in your HP LaserJet 5L printer. This setting should match exactly the total amount of memory in your printer.

If you are unsure about how much memory is installed in your printer, print a [self test page](#). Look for Total Memory. The total memory will be listed in MBytes. If your total memory size is 1 MByte, enter the number 1 in the Installed Memory box.

Adding more printer memory can reduce memory errors. See [Common Print Problems](#) for more information about memory errors.





Resolution Enhancement technology



Resolution Enhancement technology (REt) refines the print quality of characters by smoothing out jagged edges that can occur on angles and curves in a printed image. REt effects are especially noticeable in larger images. To use REt, select the Resolution Enhancement technology box.

Note If your graphic images are not printing clearly, turn off REt by clearing the Resolution Enhancement technology box. The REt setting may be affecting the quality of your printed graphics.





About



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





Restore Defaults



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





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 Page on Screen](#)

[Memory Out/Print Overrun Printer Error](#)





Printed Page Looks Different than Page on Screen



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

See also

[Graphics Mode](#)

[Text Mode](#)





Memory Out/Print Overrun Printer Error



Additional printer memory may be required before you can print full-page graphic images at higher Graphics Print Quality settings. If your printer did not print the entire graphic image on one page and displayed the Memory Out/Print Overrun error message, the printer ran 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.)



Change Enhanced I/O to Off.



Change Page Protection to On.



Select a lower setting in the Graphics Quality box.



Change Resolution to 300 dpi.



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



