



Brother HL-660 Series Printer Driver Help Contents

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Compatible Fonts and Typefaces

Fonts installed through the Brother Font Installer must be in one of the following forms:

- * **Bitmapped-printer (soft) fonts** -- disk-based

Disk-based (soft) *bitmapped* or *scalable* printer fonts must be in PCL format. These fonts have various file extensions. For example, soft fonts from HP's Type Director use .SFP and .SFL. HP's older soft font products such as the AC, AE, AG, DA, DC products have file extensions like .USP, .USL, .R8P, .R8L, etc.

- * **Fonts installed through the AutoFont Support Utility**

AutoFont Support uses a file called GLUE.TXT

Additionally, if you have *Intellifont-for-Windows*, you can also use the Brother Font Installer to install these.

- * **Scalable typeface products** -- disk-based

Scalable typeface products must be in AGFA Compugraphic's FAIS format. All other font products require AutoFont Support files or PCM files.

AutoFont Support files contain font metric information used by the Brother Font Installer.

Bitmapped fonts are limited to an exact point size. A bitmapped font cannot be reduced or enlarged (non-scalable).

Scalable fonts can be reduced or enlarged to any size.

Intellifont-for-Windows is a software program from Hewlett-Packard that includes a special screen font driver. With *Intellifont-for-Windows* loaded, scalable typeface products can be directly installed to produce both printer fonts and screen fonts.

Copies

The **Copies** selection tells Windows how many uncollated copies you want to print from a software application. This setting is independent of the "copies selection" that may be available within the print menus of your software application.

Do not use the two selections simultaneously.

As a general rule: Set the number of copies in the Brother HL-660 Series Printer Driver window when you want to print uncollated copies. When you want sets of collated copies, select the number of copies from within your software application.

You should experiment to determine which selection works best for the jobs you print.

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. For example, for 2 copies of a 3 page document, the printer prints Page1, Page1, Page 2, Page 2, Page 3, and Page 3 in order.

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, printing 2 copies of a 3 page document, the printer prints Page 1, Page 2, Page 3, then Page 1, Page 2, and Page 3 in order.

Printer Memory

The **Memory** selection, which defines the amount of memory installed in a printer, should be configured to match your printer. Windows uses this information to determine the amount of memory you have available for printing.

The Brother HL-660 printer comes with **2** megabytes of memory as standard and a slot for optional expansion memory. The memory can be expanded up to **10** megabytes by installing a commercially available **single in-line memory module (SIMM)**. This value will be automatically set for you and this control enabled if the Brother HL-660 printer driver can talk directly to your printer.

Additional printer memory can eliminate a MEMORY FULL error if you print complex forms, full-page graphics and/or download many fonts.

NOTE: Standard memory size may vary subject to model and country.

The following SIMM can be installed in each slot of your printer:

Capacity : 1, 2, 4 or 8 Mbyte
Type: 72 pin and 32 or 26 bit output
Access Time: 60 - 80 nsec.
Height: 45.72 mm (1.8 inches) or less

Fonts Button

By clicking on the **Fonts** button you can access the **Brother Font Installer** where you can install new printer fonts. Step-by-step procedures for installing fonts can be found in the Brother Font Installer help screens.

You can install any PCL compatible printer font with the Brother Font Installer.

Compatible Fonts and Typefaces

Orientation

Print orientation may be **Portrait** or **Landscape**. Portrait orientation means the page is taller than it is wide when you view the printed text upright. Landscape orientation means the page is wider than it is tall when you view the printed text upright.

Page Protection

"Page Protection" refers to a setting that reserves additional memory for the creation of page images.

The selections are **AUTO**, **OFF**, **LTR** (letter-size paper), **A4**, or **LGL** (legal-size paper).

The page protection feature allows the printer to create the image to be printed in memory before physically moving the paper through the printer. Therefore, page protection may eliminate the "PRINT OVERRUN" error.

The AUTO page protection does not require additional memory and it automatically uses page protection only when it is necessary. Occasionally, when AUTO page protection is on, processing complex print data may be slightly delayed. We recommend to expand the printer memory for fast printing of complex print data.

NOTE:

At 300dpi LGL is only available if the memory in the printer has been expanded to more than 3 MBytes.

At 600dpi page protection is not available unless the printer memory has been expanded to more than 6 MBytes.

There might a case that the resolution of your document is automatically reduced to 300 dpi because of insufficient memory.

When you set the PAGE PROTECT to AUTO and you get the error PRINT OVERRUN or MEMORY FULL, we recommend that you expand the printer memory by installing SIMM and set PAGE PROTECTION to A4, Letter or Legal in accordance with your document.

Memory expansion will eliminate these errors.

If you do not want to expand printer memory, reduce the resolution or complexity of your document.

The following procedure might be a temporary solutions for insufficient memory error.

MEMORY FULL

Try printing again after changing the following settings on this driver. The best combination of settings varies depending on your document.

PAGE PROTECT	AUTO or OFF
Graphics Mode	Raster or HP-GL/2
TrueType Mode	Download as TrueType font or Print as graphics
Use Printer TrueType Font	On or Off

PRINT OVERRUN

Try printing again after changing the following settings on this driver. The best combination of settings varies depending on your document.

PAGE PROTECT	AUTO, A4, LTR, LGL
Graphics Mode	Raster or HP-GL/2
TrueType Mode	Download as TrueType font or Print as graphics
Use Printer TrueType Font	On or Off

Printer Memory

Printer Resolution

Paper Source

For the **Brother HL-660** series printer, you can choose

- * **Multi-purpose sheet feeder**
- * **Manual paper feed**

The **Multi-purpose sheet feeder** is usually used for printing on standard size paper and envelopes. If your paper has difficulty feeding from the multi-purpose sheet feeder we recommend using the **manual paper feed** method.

Also, when an occasional page of special paper is required, such as letterhead, the manual feed method allows easy paper loading without having to open the tray.

Manual paper feed is often used for printing non-standard sizes of paper, envelopes, labels and transparencies. It can also be used when an occasional page of special paper such as letter-head is wanted without having to open the tray and load the paper.

Multi-purpose sheet feeder is usually used for printing standard sizes of paper and envelopes. When the paper is not fed properly, we recommend using manual paper feed.

Paper Size

The **Brother HL-660 Series Printer Driver** lets you select ten sizes of paper and four sizes of envelopes and also allows user defined sizes of paper.

A4 (International)	210 x 297 mm
Letter (US)	8.5 x 11 inches
Legal (US)	8.5 x 14 inches
Executive (US)	7.25 x 10.5 inches
B5	176 x 250 mm
A5 (International)	148.5 x 105 mm
Organizer J	2.75 x 5 inches
Organizer K	3.75 x 6.75 inches
Organizer L	5.5 x 8.5 inches
Organizer M	8.5 x 11 inches
3 x 5	3 x 5 inches

User Defined...

Envelopes

C5 (International envelope)	162 x 229 mm
DL (International envelope)	110 x 220 mm
COM-10 (US envelope)	4 1/8 x 9 1/2 inches
Monarch (US envelope)	3 7/8 x 7 1/2 inches

User Defined Paper Size

The Brother HL-660 Series printer can handle any paper size within the following range.

Minimum 2.75 x 5 inches (70 x 127 mm)

Maximum 8.5 x 14 inches (216 x 356 mm)

In this option, you can specify a custom-sized paper and save it by following this procedure.

- 1 Measure the paper size you want to use.
- 2 Select [User Defined...] in the paper size option.
- 3 Enter a unique name for your paper in the Custom Paper Size Name box.
- 4 Select either mm or inch for the unit of measure.
- 5 Type in the length and width.
- 6 Use the Save button to store the size. If necessary, you can delete a pre-set size by choosing the Delete button.

NOTE: Your Windows application software may override this setting. Make sure you have set the proper paper size in your application software. In addition, check the margin settings when you select the smallest paper size. If they are too large, it may result in nothing being printed.

Economy Mode (Toner Save Mode)

Use the economy mode to reduce toner consumption.

You can choose from three toner save mode selections, **Off**, **by 25%** or **by 50%**.

In Economy off mode, you can get normal density print quality.

When the printer prints in **25% toner saving** mode, approximately 25% of the toner consumption will be saved. Printouts in 25% toner saving mode will be a little lighter than those in normal mode.

When the printer prints in **50% toner saving** mode, approximately 50% of the toner consumption will be saved. Printouts in 50% toner mode will be a little lighter than those in 25% toner saving mode.

NOTE: Changing the Print Quality does not affect the print speed or memory consumption.

Defaults Button

Selecting this button sets the driver to the default settings. This will reset the paper source, size, copy, orientation, printer resolution, and page protection.

Printer Resolution

You can select a resolution of **300** or **600** dots per inch. You can set the resolution mode according to your printing requirement.

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

If the ' MEMORY FULL' error occurs, install additional memory to achieve 600dpi printing, or choose the 300dpi 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.

Page Protection

Printer Memory



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Advanced PhotoScale Technology (APT)

Choosing the **APT** feature in the printer driver is a way of using the HL-660 printer's ability to produce fine gray scales to improve the appearance of print jobs containing photographic images.

It uses the gray scale information contained in the image data to control the printed image gray level, resulting in a more accurate reproduction of the image.

Aldus Pagemaker®, Adobe™ Photostyler®, Microsoft Word® , Microsoft Windows Write®, Adobe™ Illustrator®, Corel Draw® and Microsoft Windows Paintbrush® are examples of applications that are suitable for printing using the APT function of the HL-660 printer. They need not generate the gray scales themselves and the image data can be passed via the driver to the printer so that APT can produce the gray scales.

Not all applications work this way or have this as an option. They produce the gray scales themselves before passing the data to the printer driver. In this case, APT does not work and may result in slow printing performance.

The performance of APT depends on the data in the photographic image file. Try all the different ways available in the driver for printing graphics to obtain the best print results.

NOTE:

This function is available only when the "RESOLUTION" is set to 600 dpi.

Compression Mode

The compression mode setting selects how the printer driver will send data to the printer. There are four settings to choose from:

Compression Off

Advanced Data Transfer

Mode 5 Compression

Mode 9 Compression

Note : Changing compression mode does not alter the print output from the printer, just the amount of data being sent.

Advanced Data transfer is available only for Raster graphics mode.

Defaults Button

Selecting this button resets the Options dialogue box back to the default driver settings. The default driver settings are recommended to produce the highest quality output from your Brother HL-660 Printer.

Economy

Use the economy mode to reduce toner consumption.

You can choose from three toner save mode selections, **OFF**, **25% Toner saving** or **50% Toner saving**.

In Economy off mode, you can get normal density print quality.

When the printer prints in **25% toner saving** mode, approximately 25% of the toner consumption will be saved. Printouts in 25% toner saving mode will be a little lighter than those in normal mode.

When the printer prints in **50% toner saving** mode, approximately 50% of the toner consumption will be saved. Printouts in 50% toner mode will be a little lighter than those in 25% toner saving mode.

NOTE: Changing the Print Quality does not affect the print speed or memory consumption.

Graphics Quality

Use the Graphics Quality box to change the resolution of graphic images.

The Graphics Quality setting in the Options dialogue box affects the resolution of graphic images only, not text.

Graphics Quality can be set to **high**, **medium** or **low**. Choosing high will produce finer, higher-quality output. The output quality decreases with the medium or low settings. However, higher resolution output will take longer to print. The resolution for graphics depends on the combination of the Printer Resolution and Graphics Quality.

	<u>Printer Resolution</u>	<u>Printer Resolution</u>
Graphics Quality High	<u>300dpi</u> 300dpi	600dpi 600dpi
Graphics Quality Medium	150 dpi	300dpi
Graphics Quality Low	75 dpi	150 dpi

If the printer resolution is set to 600 dpi, the Brother HL-660 printer has enough resident memory to print high quality graphics for a half page, or to print low or medium quality graphics for a full page. However, if the page is not too complicated the Brother HL-660 can print the full page at 600 dpi.

If the printer does not print the entire graphic image on one page and indicates a MEMORY FULL error message with the ALARM lamp blinking, then most likely the printer has run out of memory. You either need to install more memory in your printer or choose a lower graphics resolution setting.

Page Protection

Printer Memory

Graphics Mode

The graphics mode for the Brother HL-660 printer can be set to **Raster** or **HP-GL/2**.

In **HP-GL/2** mode, the Brother HL-660 printer driver uses graphic drawing functions on the printer to produce graphics.

In **Raster** mode, the Brother HL-660 printer driver draws lines, circles, etc. in the printer driver and then sends the finished image to the printer.

NOTE: Changing modes only effects how graphics are printed, not text. The printed results may be different.

In case the processing speed of a PC is not so fast, HP-GL/2 mode may improve the print time.

Gray Scale

Gray Scale refers to a type of pattern that is applied to printed images. Though the Brother HL-660 printer prints only black, these patterns produce a "gray" appearance on the printed page.

The best way to choose a setting for your graphic image is to **experiment**. Print a graphic image at each setting and choose the one you like best.

To help you decide which selection to choose, the three settings are described below:

Photographic Images

Choose this setting for printed images that you want to have smooth, realistic and photographic appearance. The **Photographic Images** setting provides soft contrasts between various shades of gray. This setting also works well for images originally designed in color (colour). The Brother HL-660 Printer Driver uses an 8 bit-by-8 bit "clustered dot" method to emulate 60 different levels of gray at this setting.

Line Art Images

Choose this setting for graphic images with intricate lines and fine detail, like "clip art" graphics. The **Line Art Images** setting provides solid lines and sharp contrasts between shaded areas. The Brother HL-660 series Printer Driver uses 32 different 8 bit-by-8 bit "dispersed dot" patterns to produce gray tones.

Scanned Images

Choose this setting if your graphic images were originally scanned. The **Scanned Images** setting is specially tuned to provide exceptional quality and clarity to printed images originally scanned in. The Brother HL-660 Printer Driver uses a variation of the 8 bit-by-8 bit "clustered dot" method used in the Photographic Images setting. This method also produces 60 different levels of gray.

Insert Commands

This option allows data to be inserted into a print job.

Using this function allows you to do the following.

*Insert a print file or a tiff format file into a print job.

*Insert a text string into a print job.

*Insert a macro which is saved in the printer memory into a print job.

To do the above, you should create your own data definition on the file "ESCSEQ.DEF". You can open the file "ESCSEQ.DEF" by using a standard text editor such as NOTEPAD. (This file must be saved in text format).

Key words;

DEFSTART	Start of data definition
DEFEND	End of definition
TITLE	Specify the title name which appears on the "Insert Command/Files" pull-down menu.

Commands;

PAGE n	Insert data at the beginning of page n. (n can 1, 2, 3, etc. or ALL for all pages)
PAGEALL	Insert data at the beginning of every page
DATAEND n	Insert data at the end of page n.
DATAENDALL	Insert data at the end of every page.

Syntax;

```
DEFSTART  
TITLE " title name "  
COMMAND " text or printer command" [ @##### #file name# ]  
DEFEND
```

Define the title name with double quotes,
enter the text or printer command with double quotes,
specify the macro ID with @ mark and file name surrounded by #.
Double quotes following the COMMAND will be needed if there is no text or printer command.

The strings surrounded with [] are optional.

A sample file called **ESCSEQ.DEF** is contained in the supplied disk. You can try to use the followings by copying this file into your WINDOWS/SYSTEM directory of your system.

Sample data definition.

```
DEFSTART ; Start of definition  
TITLE "Every Page" ; This string appears in the Insert Command Combo Box  
PAGEALL "Oct.1" ; The string "Oct. 1" is inserted at the beginning of every page.  
; The string to be inserted should be surrounded with double quotes.  
DEFEND ; End of definition  
DEFSTART ; Start of definition  
TITLE "Insert File 1" ; This string appears in the Insert Command Combo Box.  
PAGEEND1 "ESC *p100x100Y" #c:\windows\aaaaa.prn#  
; 'ESC *p100x100Y' ( These commands specify the vertical and horizontal position ) and the print file c:\aaaaa.prn is inserted at the end of the first page. The command string should be
```

surrounded with double quotes and the file to be inserted should be surrounded with # marks.

DEFEND ; End of definition
DEFSTART ; Start of definition
TITLE "Insert File 2" ; This string appears in the Insert Command Combo Box.
PAGEEND1 "ESC*b1024m100W"#c:\bbbb.tif#
; To insert the tiff format file, put the definition "ESC*b1024m100W" before the file name as shown above.
DEFEND ; End of definition

NOTE: The data is surrounded by "" and must be entered correctly. The data entered is not validated until it reaches the printer. If the command sequence is too long and you store that command sequence into a file, you can insert that file by surrounding the name of the file by ##.

Please consult your Brother dealer for valid commands.

TrueType Mode

TrueType fonts may be sent to your printer in one of three ways:-

- Download as TrueType**
- Download as bit image**
- Print as Graphics**

The Brother HL-660 series printer has a TrueType rasterizer built in. This allows TrueType fonts to be sent directly to your printer. If your document contains a lot of text at various sizes, it is recommended that you use this feature. Select "**Download as TrueType Font**" to use this feature.

If **Download as Bit image** is selected, the printer driver rasterizes the TrueType™ font and downloads it as a bitmapped font.

Your printer supports printing **TrueType fonts as graphics**. If your document contains a lot of graphics but not a lot of text, it is recommended that you use this feature. Printing as graphics requires less printer memory and may speed up printing time. This setting is available only when the Graphics mode is set to "Raster."

This option is also useful if you want to print graphics over text so that only the exposed portion of a character is displayed.

To print TrueType fonts as graphics

- 1 In the printer setup dialogue box, choose the Options button.
- 2 In the Options dialogue box, select the TrueType Mode and choose Print as graphics.
- 3 Specify any other options you want.
- 4 Choose the OK button.

Use Printer TrueType Fonts

Use Printer TrueType Fonts

Selecting the **Use Printer TrueType Fonts** check box enables you to choose whether to use printer TrueType compatible fonts for faster printing or not. If it is not selected, all the TrueType fonts will be downloaded in the way specified in the TrueType mode.

TrueType Mode

Sleep Mode Setting

The Brother HL-660 Series printer goes into sleep mode automatically when the printer has not received any data or there has not been any key operation for a specified time. In sleep mode, the printer is set into a power saving mode.

In the Sleep mode setting box, you can set the time-out value from **1** to **99** minutes. If the printer has not received any data or there has not been any key operation for the specified time, it goes into sleep mode.

Show Status Window

This reports the job title, page number and printer status (ONLINE and any errors that occur on the printer) during printing.

If you do not need the Status Window and would like to speed up your print job, set the Show Status Window to OFF.

Manual Duplex

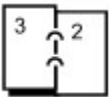
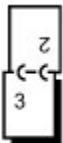
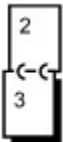
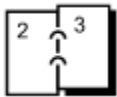
When you want to print on both sides of the paper, use this function.

Duplex Type;

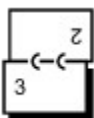
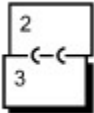
6 types of duplex binding direction are available for each orientation - Portrait or Landscape.

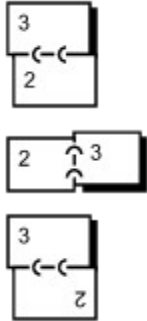
Refer to the figures below.

[Portrait]



[Landscape]





Binding Offset;

If you check the **Binding Offset** option, you can also specify the offset value of the binding side in inches or millimetres.

If you select Manual duplex, the printer prints all the even numbered pages of your document first and then the driver instructs you to reinsert the pages into the printer with the correct paper direction. If you set Long edge binding, put the paper in the tray face-up, with the top edge of the paper downwards. The printer feeds the re-inserted pages and prints all the odd numbered pages.

NOTE: If printing to FILE, the manual duplex setting should be off. The file will not be printed in the correct order.

NOTE: When printing a duplex print job, your computer hard disk must have enough unused space available to store the entire print file.

