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Copies and Collate Copies

The **Copies** selection tells Windows how many 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.

The **Collate Copies** check box will be enabled if your printer supports collated copies. Collation can also be performed by most software applications. Jobs collated by software applications generally take longer to print since the application must send the print job for each copy desired. However, when the job is collated by the printer, the application only has to send one copy. The printer will keep each page of the job stored in memory until the last copy of each page has been printed. Therefore, more printer memory is required when jobs are collated by the printer. If there is insufficient memory installed to collate the entire print job, the printer will display a message on its operator panel and the print job will be collated in sections.

Do not use the software application and printer driver selections simultaneously.

If your printer supports collated copies: As a general rule, use the number of copies and collate selections in the printer driver window when you want to print uncollated copies, or when you want collated copies of small-to-medium print jobs. For collated copies of large print jobs which would exceed the printer memory, select the number of copies and collate selections from within your software application.

If your printer does not support collated copies, the **Collate Copies** check box will be disabled. As a general rule: Set the number of copies in the 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.

Duplex Printing

Duplex (two-sided) printing is available as an option for the printer.

The default selection is "None" for single-sided printing. If you want to print in duplex mode, you should determine how your finished document will be bound:

"Long-edge" binding setup in portrait orientation is used for conventional layouts in book binding. Long-edge in landscape orientation is often used in accounting and spreadsheet applications because pages can be flipped through as on a clipboard.

"Short-edge" binding setup in portrait orientation is often used for calendar-like books. Short-edge in landscape orientation is another variation of conventional book layouts.

Binding refers to the process of joining a stack of printed sheets with stitches (staples), three-hole, glue or some other means.

Fonts Button

By clicking on the **Fonts** button you can access the **Font Installer** where you can install new printer fonts or, if you have *Intellifont-for-Windows* scalable typefaces. Step-by-step procedures for installing fonts can be found in the Font Installer help screens.

You can install any PCL® compatible printer fonts with the Font Installer.

Ordering Scalable Typefaces and Fonts

Compatible Fonts

Graphics Resolution

The Graphics Resolution setting in the printer setup dialog box affects the resolution of both graphic images and text. Graphics resolution is measured in **dots per inch** (dpi). Choosing the highest dpi will produce finer, higher-quality output. The output quality decreases as the resolution decreases. However, higher resolution output will take longer to print.

If the printer does not print the entire graphic image on one page and displays a **Memory Full** message, then most likely you either need to install more memory in your printer or choose a lower graphics resolution setting.

Ordering Memory

Memory

Graphics Mode

Orientation

Print orientation can 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.

NOTE: When printing in duplex (double-sided) mode, orientation is an important consideration that affects the binding setup of your documents.

Paper Source

Use the Paper Source setting in the printer setup dialog box to select the desired tray or feeder for printing your job.

If you are unsure about which paper source is used in your printer, you can run a Print Menus printout on your printer.

If you choose Manual Feed, Envelope or Man. Envelope for the paper source, the printer driver will use this selection only until you exit Windows. The next time you start Windows, the paper source selection will revert to the default paper tray.

Auto Select

Update

Ordering Paper Trays

Paper Size

Use the Paper Size setting in the printer setup dialog box to select the desired paper or envelope size.

If you are unsure about which paper size is used in your printer, you can run a [Print Menu](#) printout on your printer.

Ordering Accessories

To order additional printer memory, paper trays, and font or typeface products, check with your authorized Lexmark or IBM dealer.

To locate your nearest Lexmark dealer call:

USA 1-800-438-2468

Canada 1-800-663-7662

Other countries Contact a Lexmark or IBM sales office

In the USA, to order a Lexmark Business Product Catalog, or to place an order, call Lexmark directly at: 1-800-438-2468

Graphics Mode

GL/2 uses the printer's GL/2 emulator to process the data describing the page to be printed. When **GL/2** is selected the printer driver sends the text content of the page as character strings and sends the graphic content as GL drawing commands. GL/2 is usually the best option since it allows the use of printer resident fonts and, in most cases, is the fastest.

Raster uses the printer's PCL® 5 emulator to process the data describing the page to be printed. When **Raster** is selected the printer driver sends the text content of the page as character strings and sends the graphic content as image data. **Raster** mode allows the use of printer resident fonts. For this reason, text intensive documents will often print faster when **Raster** is selected than when Print Accelerator is selected.

Print Accelerator uses a special operating mode of the printer to provide high resolution, high speed graphics. For a given Graphics Resolution setting, **Print Accelerator** is generally faster than Raster when printing graphics intensive pages that contain a moderate amount of text. When **Print Accelerator** is selected, the printer driver sends only graphic images to the printer. Text is rendered into graphic images by the printer driver before being sent to the printer. For this reason, printer resident and downloadable fonts are not available when **Print Accelerator** is selected. **Print Accelerator** is not available on all printer models.

Auto Select causes the printer driver to automatically select the **Graphics Mode** based on the active application.

Graphics Resolution

Overlay

By clicking on the **Overlay** button you can access Overlay Management, where you can store information in the printer, in the form of an overlay, and then use the overlay you stored.

Overlay Management

Finishing

By clicking on the **Finishing** button you can access the Finishing Options, where you can choose the output destination for your print job. If your printer has the optional finisher unit installed, you can also specify a stapling option for your job. This button will be disabled if your printer model does not support a finisher unit.

[Finishing Options](#)

To print the printer's menu settings, using the front panel (starting from the **READY** screen):

- 1) select **MENUS**,
- 2) select **TESTS MENU**,
- 3) select **MORE** until **Print Menus** is displayed,
- 4) select **Print Menus**.

AutoFont Support files are provided with some font and typeface products. These files contain font metric (width) information used by the Font Installer. AutoFont Support files are usually shipped with special installation utilities that must be run prior to using the Font Installer.

WYSIWYG is an acronym for "What You See Is What Your Get." The screen fonts that appear on your display match the fonts used in your printer.

The term **scalable** describes products that can be reduced or enlarged (scaled) to virtually any point size that your Windows application will support.

Conversely, **bitmapped** fonts are limited to an exact point size. A bitmapped font can not be reduced or enlarged (non-scalable).

A **driver** is a portion of software code that controls commands sent to a device such as a printer or screen. Drivers work automatically so that you don't have to enter programming codes. Drivers allow you to select fonts, set margins, number of copies, etc.

In multiple page jobs that are **uncollated**, several copies of page One are printed followed by several copies of page Two, followed by several copies of page Three, etc.

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.

Intellifont-for-Windows is a software program 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.

Manual feed is often used for printing non-standard sizes of paper, envelopes, labels and transparencies. Also, when an occasional page of special paper, such as letter-head or color paper, is wanted without having to open and load a paper tray.

If **Auto Select** is used when both input paper trays have the same size of paper, the printer will automatically print from the upper tray until it is empty, then continue printing from the lower tray.

Auto Select can also be used if you store different size paper (for example, letter-size paper in one tray and legal-size paper in the other).

Symbol sets are unique groupings of characters in a font. Each symbol set is defined with a specific set of applications in mind. WN: Windows is the default symbol set. Other symbol sets are used for math and multi-language purposes. Refer to your printer user's manual for charts showing all the characters in symbol sets.

To receive font files for your printer Font Cards, contact your Lexmark dealer, point of purchase or your country Lexmark representative.

Contents for Options Help

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Print TrueType As Graphics

If your document contains a lot of graphics but not a lot of repeated TrueType text, it is recommended that you use this feature. If your document does not contain a lot of different TrueType fonts, printing them as graphics requires less printer memory and may speed up printing time.

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

Dithering

The Dithering setting affects the amount of detail in the graphics images. The overall appearance of graphics is affected by the combination of the Graphics Resolution, Dithering, Contrast Control and Print Darkness settings.

Contrast Control

Print Darkness

Contrast Control

The Contrast Control setting determines the degree of difference between levels of gray. The overall appearance of graphics is affected by the combination of the Graphic Resolution, Dithering, Contrast Control and Print Darkness settings.

Dithering

Print Darkness

Print Darkness

The Print Darkness setting is used to lighten or darken output in print jobs or to preserve toner supply.

Selecting Normal should satisfy most printing requirements.

To get the most from your toner supply, select Toner Saver or Draft. Selecting Draft when printing graphics is not recommended. With Toner Saver or Draft selected, print quality may be reduced. The overall appearance of graphics is affected by the combination of the Graphics Resolution, Dithering, Contrast Control, and Darkness settings.

Dithering

Contrast Control

Compatible Fonts and Typefaces

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

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

Disk-based (soft) bitmapped printer fonts must be in PCL® format. These fonts have various file extensions. For example, .SFP and .SFL.

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

AutoFont Support uses a file typically called GLUE.TXT

- * **Cartridge fonts** -- Printer Cartridge Metric (.PCM) files

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

- * **Scalable typeface products** --

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

Ordering Additional Fonts and Typefaces

Cartridges

Under Cartridges is a list of the font cartridges that are available for use with the printer driver. Be sure to select a cartridge **before** you format your documents. The cartridge you select includes a list of fonts and point sizes that you will be able to use in your Windows applications.

You will not need to use the **Fonts** button or the Font Installer if your cartridge is already listed (unless you need to install matching screen fonts for the *Intellifont-for-Windows* program).

Unlisted Cartridges

If you have a font cartridge that is unlisted, you must install AutoFont Support files (.TFM) or a Printer Cartridge Metric (.PCM) file which supports the fonts through the Font Installer.

If you do not have AutoFont Support diskettes for font products, you can order them from Lexmark.

If you purchased a font cartridge from another company, call that company to see if a Windows .PCM file or AutoFont Support file is available.

For specific instructions on the procedures to install new (unlisted) cartridges, see the Font Installer help screens.

Ordering Typefaces Font Installer

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Page Protection

"Page Protection" refers to a setting that reserves additional memory for the creation of page images. The page protection feature allows the 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 eliminate the **Complex Page** error that can sometimes appear on the printer's display.

Ordering Additional Memory

To set the printer's Page Protect, using the front panel (from the **READY** screen):

- 1) select **MENUS**,
- 2) select **SETUP MENU**,
- 3) select **MORE** until **Page Protect** is displayed,
- 4) select **Page Protect**,
- 5) select either **Off** or **On**,
- 6) press **READY**.

PQET / IET

PQET

Print Quality Enhancement Technology (PQET) is a technology that produces smoother edges for better looking text. PQET provides edge smoothing for a less jagged appearance. No degradation of graphics should occur with PQET selected.

IET

Image Enhancement Technology (IET) is a technology that improves the appearance of gray scale images and color images that are printed as shades of gray. PQET and IET are mutually exclusive. Typically, you will want to select PQET for printing text, and select IET for printing images such as photographs. IET is not available on all printer models, nor at all print resolutions.

Defining 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.

If you are unsure how much memory is installed in your printer, you can run Print Menus using your printer's front panel to obtain a printout with this information.

Additional printer memory can eliminate **Memory Full** and **Complex Page** errors if you print complex forms, full-page graphics and/or download many fonts.

Update

Ordering Additional Printer Memory

Direct to Port

Direct to Port uses enhanced parallel interface protocols to transfer data to the printer. These protocols allow for faster data transfer. To get the maximum benefit, the printer's Parallel Protocol should be set to Fastbytes and NPA Mode should be set to Auto.

Note: This option is available only for local printers and with Windows in Enhanced (386) Mode.

To set the printer's Parallel Protocol, using the front panel (from the **READY** screen):

- 1) select **MENUS**,
- 2) select **SETUP MENU**,
- 3) select **MORE** until **Parallel Setup** is displayed,
- 4) select **Parallel Setup**,
- 5) select **MORE** until **Parallel Protocol** is displayed,
- 6) select **Parallel Protocol**,
- 7) select **Fastbytes**,
- 8) press **READY**.

To set the printer's NPA Mode, using the front panel (from the **READY** screen):

- 1) select **MENUS**,
- 2) select **SETUP MENU**,
- 3) select **MORE** until **Parallel Setup** is displayed,
- 4) select **Parallel Setup**,
- 5) select **NPA Mode**,
- 6) select Auto.

NPA BiDi

NPA BiDi uses enhanced parallel interface protocols to transfer data to the printer. These protocols allow for bi-directional communication. To get the maximum benefit, the printer's Parallel Protocol should be set to Fastbytes and NPA Mode should be set to Auto.

Note: This option is available only for local printers and with Windows in Enhanced (386) Mode.

Use Printer Patterns

When "Use Printer Patterns" is selected the printer driver can use the printer's built in gray scale patterns. This is usually faster than having the printer driver send the patterns to the printer as graphic images. Using the printer's built in patterns does reduce the selection of gray scale patterns available to the printer driver. Also, with some applications, white text on black or gray backgrounds may be missing when Use Printer Patterns is selected.

Optimize for Performance

Selecting Optimize for Performance configures the printer driver to minimize the application/printer driver overhead. In most cases, printing performance is increased. However, with some applications, selecting Optimize for Performance can result in missing or incorrect overlay of text and/or graphics.

Update

Update uses the bi-directional communication capability of the printer to update the information that the printer driver maintains about the printer's configuration. Some of the items set in this fashion are: installed memory, duplex option installed and optional paper sources installed.

This option is only available when the printer is able to respond to the printer driver's request. For example, the printer must be turned on. If the printer is attached through a network, bi-directional communication between the printer driver and the printer must be supported over that network.

Screen Font Substitution

The Screen Font Substitution check box controls the way the printer driver lists printer resident fonts that have corresponding TrueType screen fonts. Normally this box should be checked.

When Screen Font Substitution is on, the printer driver does not list the printer resident fonts which have corresponding TrueType screen fonts installed. Instead, only the screen font is listed. For example, Arial will only appear in an application's font selection dialog box once. When the document is printed, the printer driver uses the printer resident font in place of the matching screen font. A document that uses Arial will be printed with the printer resident Arial font.

When Screen Font Substitution is off, the printer driver lists both the TrueType screen fonts and the printer resident fonts. For example, Arial will appear in an application's font selection dialog box twice, once as a screen font and a second time as a printer font. When the document is printed, the printer driver uses the font that was selected. If a TrueType screen font is used in the document, that screen font will be downloaded to the printer and used to print the document. If the printer resident font is used in the document, it will be used to print the document.

There might be unique situations where it is desirable to create a document that specifies the the printer resident font rather than the screen font. Or, it may be desirable to force the screen font to be downloaded for printing. In either of these cases, Screen Font Substitution should be turned off.

Defaults

Defaults returns the items set from the current dialog window to the settings they had immediately after installing the printer driver.

Overlay Management

This dialog box contains options that let you store information in the printer and then use the information you stored.

Overlays

An overlay is a template that can be defined and then printed as a background on a form before the data from the current job is printed. The overlay can be an image, such as the background of a preprinted form or a company letterhead. This is sometimes referred to as "watermarking."

See Also

[Overlay Order and Overlay Selections](#)

[Download Overlay](#)

[Update List](#)

[Overlay Creation](#)

Overlay Order and Overlay Selections

The Overlay Selections list boxes let you select overlays that have been stored in the printer. Up to two overlays can be used in each job. If None is selected, no overlay will be used. Use the Overlay Order area to determine how the overlays will be used.

Selecting First Page/Other Pages:

Use the First Page list box to select the overlay to be used on the first printed page. If the duplex option is available and is selected, the specified overlay will only be used on the first side of the first printed sheet of paper.

Use the Other Pages list box to select the overlay to be used on all pages of the job after the first page.

Selecting Odd Pages/Even Pages:

Use the Odd Pages list box to select the overlay to be used on all odd pages of the job.

Use the Even Pages list box to select the overlay to be used on all even pages of the job.

Note: The odd/even page numbers refer to the order in which the pages are actually printed, and not to any page numbers which your application may generate and print on the page.

Download Overlay

Choose the Download Overlay button to bring up a dialog which will allow you to store an overlay file in the printer. You must specify the file name of the overlay file you want to store and a descriptive name for the overlay. You can download the overlay to flash, disk (if available), or memory in the printer.

Update List

Choose the Update List button to bring up a dialog which will allow you to edit the list of available overlays in the Overlay Selections list boxes. This will not in any way change what is actually in the printer; it will only change the list maintained by the driver. You may want to use this option to delete overlay names from the list if you have deleted the overlays from the printer by reformatting the flash or disk (if available).

Overlay Creation

Choose the Create an Overlay checkbox when you want to create an overlay from your document instead of printing it..

If the duplex option is available and is turned on, choosing Create an Overlay will cause it to be ignored, and the overlay will be created without duplex.

Contents for Finishing Help

Help Topics

[Paper Destination](#)

[Staples](#)

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Paper Destination

This setting selects whether your printed job is output to the top exit or to the side exit of your printer. If your printer has the optional finisher unit installed, selecting the side exit will route your job to the finisher.

Staples

This option allows your multipage job to be stapled, if your printer has the optional finisher unit installed. Stapling is only allowed for certain paper sizes. The Staples option will be disabled if you have selected a paper size that cannot be stapled, or if your Paper Destination is the Top exit bin.

