IBM

Infoprint 1120 and 1125

User's Reference

Argecy Computer Corporation 248-324-1800

IBM

Infoprint 1120 and 1125

User's Reference



Chapter 1: Printer overview	7
Chapter 2: Using the operator panel	8
Understanding the operator panel	8
Using the operator panel buttons	9
Using the operator panel to change printer settings	10
Printing the menu settings page	11
Chapter 3: Using the Print and Hold function	12
Printing and deleting held jobs	12
Accessing held jobs from the operator panel	13
Recognizing when format errors occur	13
Repeat Print	14
Reserve Print	14
Verify Print	
Confidential jobs	14
Chapter 4: Canceling a print job	16
Chapter 5: Printing folio and statement size paper	17
Chapter 6: Choosing print material	18
Paper characteristics	18
Weight	
Curl	
Smoothness Moisture content	
Grain direction	
Fiber content	19
Recommended paper	19
Unacceptable paper	19
Choosing preprinted forms and letterhead	20

Choosing prepunched paper	20
Choosing paper	21
Choosing envelopes	21
Choosing labels	22
Choosing card stock	23
Choosing transparencies	23
Chapter 7: Print material specifications	24
Chapter 8: Loading print material	28
Chapter 9: Loading a paper tray	29
Loading letterhead	30
Chapter 10: Loading the multipurpose feeder	31
Capacity	
Paper dimensions	
Trouble-free printing	
Loading paper and transparencies	35
Loading envelopes	
Loading letterhead	
Closing the multipurpose feeder	30
Chapter 11: Loading the envelope feeder	39
Chapter 12: Loading the 2000-sheet drawer	43
Chapter 13: Storing paper	44
Chapter 14: Tray linking	45
Chapter 15: Tips for avoiding paper jams	46
Chapter 16: Replacing the print cartridge	47
Chapter 17: Replacing the charge roll	48
Chapter 18: Replacing the transfer roll	49
Chapter 19: Replacing the fuser assembly	50

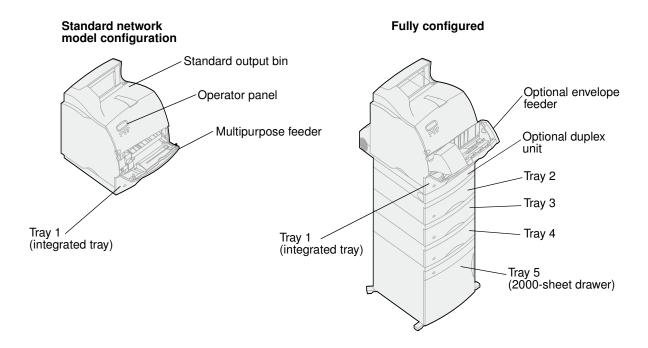
Chapter 20: Resetting the maintenance counter	51
Chapter 21: Ordering supplies	52
Maintenance kit	52
Print cartridges	
Label fuser cleaner	
Charge roll	
Transfer roll	
Fuser assembly	
Chapter 22: Storing supplies	53
Chapter 23: Checking an unresponsive printer	54
Chapter 24: Clearing paper jams	55
Identifying paper jam areas	
Accessing paper jam areas	
200 and 201 Paper Jam	
Remove Cartridge	56
202 Paper Jam	
Open Rear Door	58
Before reaching the output bin	58
While exiting to the output bin	59
230 Paper Jam	
Check Duplex	60
24x Paper Jam	
Check Tray x	63
On the incline surface of a tray or between two trays	63
Between three trays	
Between a tray, the duplex unit, and the integrated tray	65
In the 2000-sheet drawer	67
250 Paper Jam	
Check MP Feeder	68
260 Paper Jam	
Check Env Feeder	68
At entry into the envelope feeder	
Between the envelope feeder and the printer	69
Chapter 25: Solving display problems	71
Chapter 26: Solving printing problems	72
Chapter 27: Solving print quality problems	74

Chapter 28:	Solving option problems77
Chapter 29:	Solving network printing problems79
Chapter 30:	Resolving other problems and questions
Chapter 31:	Understanding printer messages81
Chapter 32:	Using printer menus113
Chapter 33:	Finishing Menu116
Chapter 34:	Infrared Menu122
Chapter 35:	Job Menu127
Chapter 36:	LocalTalk Menu130
Chapter 37:	Network Menu134
Chapter 38:	Paper Menu138
Chapter 39:	PCL Emul Menu146
Chapter 40:	Parallel Menu151
Chapter 41:	PostScript Menu155
Chapter 42:	Quality Menu156
Chapter 43:	Serial Menu158
Chapter 44:	Setup Menu164
Chapter 45:	Utilities Menu170
Chapter 46:	USB Menu
Chapter 47:	Disabling operator panel menus177

Chapter 48:	Removing options178
Chapter 49:	Removing the envelope feeder179
Chapter 50:	Removing a paper tray or duplex unit
Chapter 51:	Removing printer or flash memory183
Chapter 52:	Removing an option card184
Chapter 53:	Understanding fonts185
Typefaces a	and fonts
Weight	and style
	nd point size
	and scalable fonts 187
	onts
-	s
Symbol	I sets for PCL 6 emulation 193
Downloada	ble fonte 19/
	ble fonts
	ble fonts
Printing a fo	
Printing a for Chapter 54:	ont sample list 194
Printing a for Chapter 54: Dimensions	ont sample list
Printing a for Chapter 54: Dimensions Duty cycle	ont sample list
Printing a for Chapter 54: Dimensions Duty cycle	ont sample list
Printing a for Chapter 54: Dimensions Duty cycle Notices Edition noti	ont sample list
Printing a for Chapter 54: Dimensions Duty cycle Notices Edition noti Trademarks	ont sample list
Printing a for Chapter 54: Dimensions Duty cycle Notices Edition noti Trademarks Licensing n	ont sample list 194 Printer specifications 195 s 195 195 195 195 195 196 196 ce 197 s 197 notice 198
Printing a for Chapter 54: Dimensions Duty cycle Notices Edition noti Trademarks Licensing n Safety infor	ont sample list 194 Printer specifications 195 s 195 s 195 195 195 196 196 ice 197 s 197 notice 198 rmation 198
Printing a for Chapter 54: Dimensions Duty cycle Notices Edition noti Trademarks Licensing n Safety infor Cautions ar	ont sample list 194 Printer specifications 195 s 195 195 195 ce 197 s 197 notice 197 notice 198 rmation 198 nd warnings 199
Printing a for Chapter 54: Dimensions Duty cycle Notices Edition notion Trademarks Licensing n Safety infor Cautions ar Electronic e	ont sample list 194 Printer specifications 195 s 195 s 195 195 195 196 196 ice 197 s 197 notice 198 rmation 198
Printing a for Chapter 54: Dimensions Duty cycle Notices Edition noti Trademarks Licensing n Safety infor Cautions ar Electronic e With a Without	ont sample list 194 Printer specifications 195 s 195 s 195 195 195 196 197 s 197 s 197 s 197 s 197 notice 198 rmation 198 nd warnings 199 emission notices 199 network cable attached 199 t a network cable attached 200
Printing a for Chapter 54: Dimensions Duty cycle Notices Edition notion Trademarks Licensing n Safety infor Cautions ar Electronic e With a Without	ont sample list 194 Printer specifications 195 s 195 s 195 195 195 196 196 197 197 s 197 notice 198 rmation 198 nd warnings 199 emission notices 199 network cable attached 199 t a network cable attached 200 nited Kingdom Telecommunications Act 1984 201
Printing a for Chapter 54: Dimensions Duty cycle Notices Edition noti Trademarks Licensing n Safety infor Cautions ar Electronic e With a Without The Un	ont sample list194Printer specifications195s195s195195196ce197s197s197notice198rmation198nd warnings199emission notices199network cable attached199t a network cable attached200nited Kingdom Telecommunications Act 1984201es201
Printing a for Chapter 54: Dimensions Duty cycle Notices Edition notion Trademarks Licensing n Safety infor Cautions ar Electronic e With a for Unit and Laser notice Laser a	ont sample list 194 Printer specifications 195 s 195 s 195 195 195 196 196 197 197 s 197 notice 198 rmation 198 nd warnings 199 emission notices 199 network cable attached 199 t a network cable attached 200 nited Kingdom Telecommunications Act 1984 201
Printing a for Chapter 54: Dimensions Duty cycle Notices Edition notion Trademarks Licensing n Safety infor Cautions ar Electronic e With a for Unit and Laser notice Laser a	ont sample list194Printer specifications195s195s195195196ce197s197s197notice198rmation198mation199emission notices199emission notices199t a network cable attached1994t a network cable attached200nited Kingdom Telecommunications Act 1984201advisory label201



The following illustrations show a standard network model configuration and a fully configured printer. If you have attached paper handling options to your printer, it may look more like the fully configured model. For information on other possible configurations, refer to the *Setup Guide*.





This section contains information about understanding the operator panel, changing printer settings, and understanding operator panel menus.

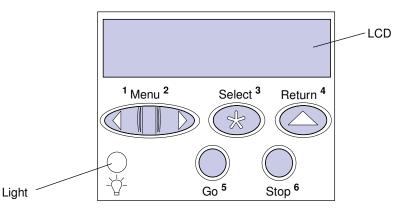
You can change most printer settings from your software application or printer driver. Settings you change from the application or printer driver apply only to the job you are preparing to send to the printer.

Changes made to printer settings from a software application override changes made from the printer operator panel.

If you cannot change a setting from your application, use the printer operator panel or the remote operator panel available from MarkVision[™]. Changing a printer setting from the printer operator panel or from MarkVision makes that setting the user default.

Understanding the operator panel

The printer operator panel has a 2-line by 16-character liquid crystal display (LCD), five buttons, and one indicator light.



Indicator light

The indicator light gives information about the status of your printer. If the light is:

- Off, the printer is off
- On, the printer is on, but idle
- · Blinking, the printer is on and is busy

Using the operator panel buttons

Use the five operator panel buttons to open a menu, scroll through a list of values, change printer settings, and respond to printer messages.

The numbers 1 through 6 appear beside the operator panel buttons; these numbers are used to enter personal identification numbers (PIN) for *Print and Hold* jobs. For more information, see **Using the Print and Hold function**.

The following information describes the functions of each button.

Note: Buttons act upon the information displayed on the second line of the operator panel.

Go	 Press the Go button to: Return to the Ready state if the printer is in an offline situation (the Ready message does not appear on the display). Exit printer menus and return to the Ready state. Clear operator panel error messages. If you've changed printer settings from the operator panel menus, press Go before sending a job to print. The printer must display Ready for jobs to print.
Menu	 Each end of the button has a function. Press Menu: When Ready is displayed, to take the printer offline (out of the Ready state) and scroll through the menus. When Busy is displa yed, to take the printer to the Job Menu. When the printer is offline, press Menu> to scroll through the menus. Press <menu go="" in="" item="" li="" menus.<="" previous="" the="" to=""> For menu items with numeric values, such as Copies, press and hold Menu to scroll through the values. Release the button when the number you want is displayed. </menu>
Select	 Press Select to: Select the menu displayed on the second line of the display. Depending on the type of menu, this action: Opens the menu and shows the first item in the menu. Opens the menu item and shows the default setting. Save the displayed menu item as the default setting. The printer shows the Saved message and returns to the menu item. Clear certain messages from the operator panel.
Return	Press Return to return to the previous menu level or menu item.
Stop	Press Stop at the Ready, Busy, or Waiting message to temporarily stop all activity and take the printer offline. The operator panel status message changes to Not Ready. Press Go to return the printer to the Ready, Busy, Or Waiting State.

Using the operator panel to change printer settings

From the operator panel, you can select menu items and associated values to print your jobs successfully. You can also use the operator panel to alter the setup and operating environment of the printer. See **Using printer menus** for an explanation of all the menu items.

You can modify printer settings by:

- Selecting a setting from a list of values
- Changing an On/Off setting
- · Changing a numerical setting

To select a new value as a setting:

- 1 From a **Ready** status message, press **Menu**. The menu names appear.
- 2 Continue to press and release **Menu** until you see the menu you need.
- **3** Press **Select** to select the menu or menu item displayed on the second line of the display.
 - If the selection is a menu, the menu is opened and the first printer setting in the menu appears.
 - If the selection is a menu item, the default setting for the menu item appears.
 (The current user default setting has an asterisk [*] beside it.)

Each menu item has a list of values for the menu item. A value can be:

- A phrase or word to describe a setting
- A numerical value that can be changed
- An On or Off setting
- 4 Press Menu to move to the value you need.
- 5 Press Select to select the value on the second line of the display. An asterisk appears beside the value to indicate that it is now the user default setting. The new setting appears for one second, clears, displays the word Saved, and then shows the previous list of menu items.
- 6 Press Return to go back to previous menus. Make additional menu selections to set new default settings. Press Go if this is the last printer setting to change.

User default settings remain in effect until you save new settings or restore the factory defaults. Settings you choose from your software application can also change or override the user default settings you select from the operator panel.

Printing the menu settings page

Complete the following steps to print a list of the current user default settings and installed printer options:

- 1 Make sure the printer power is on and the **Ready** message appears.
- 2 Press Menu until you see Utilities Menu and then press Select.
- 3 Press Menu until you see Print Menus and then press Select.

The message **Printing Menu Settings** appears and remains until the page prints. The printer returns to **Ready** when the page or pages finish printing.

If a message displays, see Understanding printer messages for more information.

The diagram in Using printer menus shows the menu items in each menu.

An asterisk (*) next to a value indicates the factory default setting. Factory defaults may differ for different countries.

Factory defaults are the function settings in effect the first time you turn your printer on. These remain in effect until you change them. Factory defaults are restored if you select the Restore value for the Factory Defaults menu item in the Utilities Menu. See **Utilities Menu** for more information.

When you select a new setting from the operator panel, the asterisk moves next to the selected setting to identify it as the current user default.

User defaults are the settings you select for different printer functions and store in printer memory. Once stored, these settings remain active until new ones are stored or the factory defaults are restored.

Note: Settings you choose from your software application may override the settings you select from the operator panel.

Menus Disabled

If your printer is configured as a network printer available to a number of users, **Menus Disabled** may appear when you press **Menu** from the **Ready** state. Disabling the menus prevents users from using the operator panel to inadvertently change a printer default that has been set by the person managing the printer. You can still use Print and Hold features, clear messages, and select items from the Job Menu when printing a job, but you cannot change other printer settings. You can, however, use your printer driver to override printer defaults and select settings for individual print jobs.



When sending a job to the printer, you can specify in the driver that you want the printer to hold the job in memory. When you are ready to print the job, you must go to the printer and use the operator panel menus to identify which held job you want to print.

> Note: Print and Hold functions require a minimum of 16MB available printer memory. We recommend a minimum of 32MB available printer memory and a hard disk.

To learn more about this function, click a topic:

- Printing and deleting held Accessing held jobs from • iobs
- Recognizing when format Repeat Print • errors occur
- the operator panel

 - **Confidential jobs**

- **Verify Print**
- **Reserve Print**

Printing and deleting held jobs

Once held jobs are stored in printer memory, you can use the printer operator panel to specify what you want to do with one or more of the jobs. You can select either Confidential Job or Held Jobs (Repeat Print, Reserve Print, and Verify Print jobs) from the Job Menu. If you select Confidential Job, you must enter the personal identification number (PIN) you specified in the driver when you sent the job. See Confidential jobs for more information.

From either the Confidential Job or the Held Jobs menu items, you have five choices:

- Print All Jobs
- Print A Job •
- **Delete All Jobs** •
- Delete A Job •
- **Print Copies**

Accessing held jobs from the operator panel

- **1** To access held jobs from the operator panel:
 - If the printer is Busy, press Menu and the Job Menu appears.
 - If the printer is Ready, continue to step 2.
- 2 Press Menu until you see Held Jobs or Confidential Job on the operator panel display, depending on the type of job you want to access.
- 3 Press Select.

User Name appears on the first line of the operator panel. The second line displays the names of users currently associated with Print and Hold jobs.

4 Press Menu until you see your user name.

Note: If you are looking for a Confidential Job, you are prompted to enter your PIN. See **Confidential jobs** for more information.

- 5 Press Select.
- 6 Press **Menu** until the action you want to take is on the second line of the operator panel (Print A Job, Delete A Job, and so on).
- 7 Press Select.
 - If you are looking for a particular job, press Menu to scroll through the list of available jobs, and press Select when the correct job is displayed. An asterisk (*) appears next to the job name indicating you have chosen to print or delete that job.
 - If you are prompted to enter the number of copies you want to print, use the Menu button to increase or decrease the number on the display, and then press Select.
- 8 Press Go to print or delete specific jobs you have marked.

The printer briefly shows messages indicating what Print and Hold functions it is performing.

Recognizing when format errors occur

If the $\frac{4}{3}$ symbol appears on the display, it indicates that the printer had trouble formatting one or more of the held jobs. These formatting problems are most commonly the result of insufficient printer memory or invalid data that might cause the printer to flush the job.

When a 7 symbol appears next to a held job, you can:

- Print the job. Be aware, however, that only part of the job may print.
- Delete the job. You may want to free up additional printer memory by scrolling through the list of held jobs and deleting others you have sent to the printer.

If formatting errors are a recurring problem with held jobs, your printer may require more memory.

Repeat Print

If you send a Repeat Print job, the printer prints all requested copies of the job *and* stores the job in memory so you can print additional copies later. You can print additional copies as long as the job remains stored in memory.

Note: Repeat Print jobs are automatically deleted from printer memory when the printer requires extra memory to process additional held jobs.

Reserve Print

If you send a Reserve Print job, the printer does not print the job immediately, but stores the job in memory so you can print the job later. The job is held in memory until you delete it from the Held Jobs menu. Reserve Print jobs may be deleted if the printer requires extra memory to process additional held jobs.

See Printing and deleting held jobs for information.

Verify Print

If you send a Verify Print job, the printer prints one copy and holds the remaining copies you requested from the driver in printer memory. Use Verify Print to examine the first copy to see if it is satisfactory before printing the remaining copies.

See Printing and deleting held jobs if you need help printing the additional copies stored in memory.

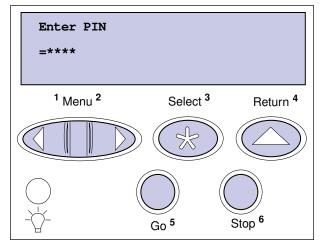
Note: Once all copies are printed, the Verify Print job is deleted from printer memory.

Confidential jobs

When you send a job to the printer, you can enter a personal identification number (PIN) from the driver. The PIN must be four digits using the numbers 1–6. The job is then held in printer memory until you enter the same four-digit PIN from the printer operator panel and choose to print or delete the job. This ensures that the job does not print until you are there to retrieve it, and no one else using the printer can print the job.

When you select Confidential Job from the Job Menu and then select your user name, the following prompt is displayed:

Enter PIN: = Use the buttons on the operator panel to enter the four-digit PIN associated with your confidential job. The numbers next to the button names identify which button to press for each digit (1–6). As you enter the PIN, asterisks are displayed on the operator panel to ensure confidentiality.



If you enter an invalid PIN, the message **No Jobs Found.** Retry? appears. Press **Go** to reenter the PIN, or press **Stop** to exit the Confidential Job menu.

When you enter a valid PIN, you have access to all print jobs matching the user name and PIN you entered. The print jobs matching the PIN you entered appear on the display when you enter the Print A Job, Delete A Job, and Print Copies menu items. You can then choose to print or delete jobs matching the PIN you entered. (See **Printing and deleting held jobs** for more information.) After printing the job, the printer deletes the confidential job from memory.



To cancel a print job:

1 Press **Menu**. Job Menu appears on the first line of the display and Cancel Job appears on the second line.

Note: Job Menu is the only available menu item when the printer is in the Busy state.

2 Press Select.

Canceling Job briefly appears in the display. The printer finishes printing any page already being printed, and then stops. The printer returns to the Ready state.

5 Printing folio and statement size paper

Folio and statement sizes are not available in the Paper Size menu until Size Sensing is turned off. To turn off Size Sensing:

- 1 Press and hold the Select and Return buttons while you turn the printer on.
- 2 Release the buttons when **Performing Self Test** appears.

The printer performs its power-on sequence, and then Config Menu appears on the first line of the display.

3 Press Menu until you see Size Sensing, and then press Select.

Tray 1 Sensing appears on the second line of the display.

4 Press Menu to select the input option that will hold the folio or statement size paper, and then press Select.

The first line of the display shows the selected input option and the second line shows the current setting.

5 Press Menu to change the setting to Off, and then press Select.

SAVED appears briefly on the display, and then is replaced by Config Menu on the first line and Size Sensing on the second line.

- 6 Press Menu until you see Exit Config Menu, and then press Select.
- 7 Activating Menu Changes appears briefly, followed by Performing Self Test. The printer returns to the Ready state.
- 8 Once Size Sensing is turned off, go into the Paper Size menu for that tray and change the size to folio or statement.



The print quality and feed reliability of your printer and options can vary with the type and size of print material you use. This section provides guidelines for each type of print material.

Always print samples on the print material you are considering before buying large quantities.

Click a topic for more information:

- Paper characteristics
- Recommended paper
- Unacceptable paper
- Choosing preprinted forms and letterhead
- Choosing prepunched paper

- Choosing paper
- Choosing envelopes
- Choosing labels
- Choosing card stock
- Choosing transparencies

Paper characteristics

The following paper characteristics affect print quality and reliability. We recommend that you keep these guidelines in mind when evaluating new paper stock.

Weight

The printer can automatically feed paper weights from 60 to 176 g/m^2 (16 to 47 lb bond) grain long. Paper lighter than 60 g/m² (16 lb) might not be stiff enough to feed properly, causing paper jams. For best performance, use 75 g/m² (20 lb bond) grain long paper. To use paper narrower than 182 x 257 mm (7.2 x 10.1 in.), we recommend that the basis weight be greater than or equal to 90 g/m² (24 lb bond).

Curl

Curl is the tendency of paper to curve at its edges. Excessive curl can cause paper feeding problems. Curl usually occurs after the paper passes through the printer, where it is exposed to high temperatures. Storing paper unwrapped in humid conditions, even in the paper tray, can contribute to paper curling.

Smoothness

The degree of smoothness of paper directly affects print quality. If the paper is too rough, the toner does not fuse to the paper properly, resulting in poor print quality. If the paper is too smooth, it can cause paper feeding problems. Smoothness needs to be between 100 and 300 Sheffield points; however, smoothness between 100 and 250 Sheffield points produces the best print quality.

Moisture content

The amount of moisture in the paper affects both print quality and the ability of the printer to feed the paper properly. Leave the paper in its original wrapper until you are ready to use it. This limits the exposure of the paper to moisture changes that can degrade its performance.

Grain direction

Grain refers to the alignment of the paper fibers in a sheet of paper. Grain is either *grain long*, running the length of the paper, or *grain short*, running the width of the paper.

For 60 to 176 g/m² (16 to 47 lb bond) paper, grain long fibers are recommended. For papers heavier than 176 g/m² (47 lb bond), grain short is preferred. For the multipurpose feeder, 60 to 135 g/m² (16 to 36 lb bond) paper, grain long fibers are recommended. For the multipurpose feeder, papers heavier than 135 g/m² (36 lb bond), grain short is preferred.

Fiber content

Most high-quality xerographic paper is made from 100% chemically pulped wood. This content provides the paper with a high degree of stability resulting in fewer paper feeding problems and better print quality. Paper containing fibers such as cotton possess characteristics that can result in degraded paper handling.

Recommended paper

To ensure the best print quality and feed reliability, use 75 g/m² (20 lb) xerographic paper. Business papers designed for general business use may also provide acceptable print quality.

Always print several samples before buying large quantities of any type of paper. When choosing any papers, consider the weight, fiber content, and color of the paper.

The laser printing process heats paper to high temperatures of 225 °C (437 °F) for MICR (Magnetic Ink Character Recognition) applications, and 205 °C (401 °F) for non-MICR applications. Use only papers that are able to withstand these temperatures without discoloring, bleeding, or releasing hazardous emissions. Check with the manufacturer or vendor to determine whether the paper you've chosen is acceptable for laser printers.

Unacceptable paper

The following papers are not recommended for use with the printer:

• Chemically treated papers used to make copies without carbon paper, also known as carbonless papers, carbonless copy paper (CCP), or no carbon required (NCR) paper.

- Coated papers (erasable bond)
- Multiple-part forms or documents
- Preprinted papers that require a *registration* (the precise print location on the page) greater than ±0.09 in., such as optical character recognition (OCR) forms

In some cases, you can adjust registration with your software application to successfully print on these forms.

- Preprinted papers with chemicals that may contaminate the printer
- Preprinted papers that can be affected by the temperature in the printer fuser
- Rough-edged or curled papers
- Synthetic papers
- Thermal papers
- Less than 60 g/m² (16 lb) recycled paper
- Recycled papers containing more than 25% post-consumer waste that do not meet DIN 19 309

Choosing preprinted forms and letterhead

Use the following guidelines when selecting preprinted forms and letterhead paper for the printer:

- Use grain long papers for best results.
- Use only forms and letterhead printed using an offset lithographic or engraved printing process.
- Choose papers that absorb ink, but do not bleed.
- Avoid papers with rough or heavily textured surfaces.

Use papers printed with heat-resistant inks designed for use in xerographic copiers. The ink must withstand temperatures of 205 °C (401 °F) for non-MICR applications, and 225 °C (437 °F) for MICR applications, without melting or releasing hazardous emissions. Use inks that are not affected by the resin in the toner. Inks that are oxidation-set or oil-based should meet these requirements. Latex inks might not meet these requirements. If you are in doubt, contact your paper supplier.

Choosing prepunched paper

Prepunched paper brands can differ in the number and placement of holes and in manufacturing techniques.

Use the following guidelines when selecting and using prepunched paper:

- Test paper from several manufacturers before ordering and using large quantities of prepunched paper.
- Paper should be punched at the paper manufacturer and not drilled into paper already packaged in a ream. Drilled paper can cause paper jams when multiple sheets feed through the printer.

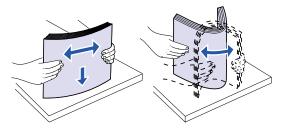
- Prepunched paper can include more paper dust than standard paper. Your printer may require more frequent cleaning and feed reliability may not be as good as that of standard paper.
- Weight guidelines for prepunched paper are the same as for non punched paper.

Choosing paper

Proper paper loading helps prevent paper jams and ensures trouble-free printing.

To help avoid paper jams or poor print quality:

- *Always* use new, undamaged paper.
- Before loading paper, you need to know the recommended print side of the paper you're using. This information is usually indicated on the paper package.
- Do not use paper that you have cut or trimmed yourself.
- *Do not* mix paper sizes, weights, or types in the same paper source; mixing results in paper jams.
- Do not use coated papers.
- *Do not* forget to change the Paper Size setting when you use a source that does not support auto size sensing.
- Do not remove paper trays while a job is printing or **Busy** is displayed.
- Make sure the Paper Type, Paper Texture, and Paper Weight settings are correct. (See Paper Menu for detailed information about these settings.)
- Make sure the paper is properly loaded in the paper source.
- Flex paper back and forth. Do not fold or crease the paper. Straighten the edges on a level surface.



Choosing envelopes

When printing on envelopes:

- To achieve the best possible print quality, use only high-quality envelopes that are designed for use in laser printers.
- Use only new, undamaged envelopes.
- Load only one size of envelope at a time in the envelope feeder.
- Make sure the glue is not exposed.

- A combination of high humidity (over 60%) and the high printing temperatures may seal the envelopes.
- Be sure to select Env Feeder or MP Feeder as the paper source in the **Paper Menu** and set the correct envelope size.

The laser printing process heats envelopes to a temperature of $205 \,^{\circ}$ C (401 $^{\circ}$ F). Use only envelopes that are able to withstand these temperatures without sealing, excessive curling, wrinkling, or releasing hazardous emissions. If you have any doubts about the envelopes you are considering using, check with the envelope supplier.

For best performance, use envelopes made from 75 g/m² (20 lb bond) paper. You can use up to 105 g/m² (28 lb bond) weight for the multipurpose feeder or 105 g/m² (28 lb bond) weight for the envelope feeder as long as the cotton content is 25% or less. Envelopes with 100% cotton content must not exceed 90 g/m² (24 lb bond) weight.

To minimize jams, do not use envelopes that:

- Have excessive curl or twist
- Are stuck together or damaged in any way
- Contain windows, holes, perforations, cutouts, or embossing
- Use metal clasps, string ties, or metal folding bars
- Have an interlocking design
- Have postage stamps attached
- Have any exposed adhesive when the flap is in the sealed or closed position
- Have nicked edges or bent corners
- Have rough, cockle, or laid finishes

Choosing labels

The printer can print on many labels designed for use with laser printers. These labels are supplied in letter size and A4 size sheets.

When printing on labels:

- Be sure to select Labels in the Paper Type menu item in the Paper Menu. (See **Paper Type** for detailed information about these settings.)
- *Do not* load labels together with paper or transparencies in the same paper tray; mixing print materials can cause feeding problems.
- *Do not* load partial sheets with areas exposed by missing labels; this can cause labels to peel off during printing, jam, and contaminate your printer and your print cartridge with adhesive. It can also void your printer and cartridge warranties.
- Avoid using labels that may release hazardous emissions when heated.
 - **Note:** Labels are one of the most difficult print materials for laser printers. Your printer requires a special fuser cleaner for label applications in order to optimize feed reliability. See **Ordering supplies** for information on obtaining a label fuser cleaner.

After continuously printing approximately 10,000 page sides of labels (or each time you replace the print cartridge), complete the following steps to maintain printer feeding reliability:

- **1** Print five sheets of paper.
- **2** Wait approximately five seconds.
- **3** Print five more sheets of paper.

Choosing card stock

Card stock is single-ply and has many properties. The orientation of paper fibers, moisture content, thickness, and texture can all affect printing on card stock. See **Print material specifications** for information on the preferred weight for the grain direction of print materials.

When printing on card stock:

- Be sure to select Card Stock in the Paper Type menu item in the Paper Menu. (See **Paper Type** for detailed information about these settings.)
- Be aware that preprinting, perforation, and creasing can significantly affect the print quality and cause paper handling or jamming problems.
- Avoid using card stock that may release hazardous emissions when heated.

After printing approximately 10,000 page sides of card stock (or each time you replace the print cartridge), complete the following steps to maintain printer feeding reliability:

- **1** Print five sheets of paper.
- 2 Wait approximately five seconds.
- **3** Print five more sheets of paper.

Choosing transparencies

The printer can print directly on transparencies designed for use in laser printers. Print quality and durability depend on the transparency used. Always print samples on the transparencies you are considering before buying large quantities.

The Paper Type setting should be set to Transparency to help prevent jams. (See **Paper Type** for detailed information about this setting.) Check with the manufacturer or vendor to determine whether your transparencies are compatible with laser printers that heat transparencies to $212 \,^{\circ}$ C ($414 \,^{\circ}$ F). Use only transparencies that are able to withstand these temperatures without melting, discoloring, offsetting, or releasing hazardous emissions.

Transparencies can be fed automatically from the multipurpose feeder and all standard and optional trays, except the 2000-sheet drawer, for all printer models. See **Print material specifications** for information about transparency compatibility with output options.

Be careful when you handle transparencies. Fingerprints on the surface of the transparency cause poor print quality.



The following tables provide information on standard and optional paper sources for your printer model, including the paper sizes you can select from the Paper Size menu and supported weights.

Note: If you use a paper size not listed, select the next larger size.

Paper size	Dimensions	250-sheet drawer	250 UAT	Optional 500-sheet drawer	Optional 500 UAT	Multipurpose tray	Optional 2000-sheet drawer	Optional envelope feeder	Optional duplex unit
A4	210 x 297 mm (8.27 x 11.7 in.)	1		1		1	1		1
A5	148 x 210 mm (5.83 x 8.27 in.)	1		<		1	1		1
JIS B5	182 x 257 mm (7.17 x 10.1 in.)	1		√		1	1		1
Letter	215.9 x 279.3 mm (8.5 x 11 in.)	1		√		1	1		1
Legal	215.9 x 355.6 mm (8.5 x 14 in.)	1		√		1	1		1
Executive	184.2 x 266.7 mm (7.25 x 10.5 in.)	1		√		1	1		1
Folio ²	216 x 330 mm (8.5 x 13 in.)	1		√		1			1
Statement ²	139.7 x 215.9 mm (5.5 x 8.5 in.)	1		1		1			

¹ This default setting is 215.9 x 355.6 mm (8.5 x 14 in.). You can set the actual page size from your application software or through the **Universal Setup** menu item.

² This size does not appear in the Paper Size menu until Tray Size Sensing is turned off. See **Printing folio and statement size paper** for more information.

Paper size	Dimensions	250-sheet drawer	250 UAT	Optional 500-sheet drawer	Optional 500 UAT	Multipurpose tray	Optional 2000-sheet drawer	Optional envelope feeder	Optional duplex unit
Universal ¹	139.7 x 210 mm to 215.9 x 355.6 mm (5.5 x 8.27 in. to 8.5 x 14 in.)	1	1	1	1	1			
	69.85 x 127 mm to 229 x 355.6 mm (2.75 x 5 in. to 9.01 x 14 in.)		1		1	1			
	148 x 182 mm to 215.9 x 355.6 mm (5.83 x 7.17 in. to 8.5 x 14 in.)	1	1	1	1	1			1
7 ¾ Envelope	98.4 x 190.5 mm (3.875 x 7.5 in.)					1		1	
9 Envelope	98.4 x 225.4 mm (3.875 x 8.9 in.)					1		1	
10 Envelope	104.8 x 241.3 mm (4.12 x 9.5 in.)					1		1	
DL Envelope	110 x 220 mm (4.33 x 8.66 in.)					1		1	
C5 Envelope	162 x 229 mm (6.38 x 9.01 in.)					1		1	
B5 Envelope	176 x 250 mm (6.93 x 9.84 in.)					1		1	
Other Envelope ¹	98.4 x 162 mm to 176 x 250 mm (3.87 x 6.38 in. to 6.93 x 9.84 in.)					1		1	

This default setting is 215.9 x 355.6 mm (8.5 x 14 in.). You can set the actual page size from your application software or through the Universal Setup menu item.

² This size does not appear in the Paper Size menu until Tray Size Sensing is turned off. See **Printing folio and statement size paper** for more information.

Print material	250-sheet drawer	Optional 500-sheet drawer	Multipurpose tray	Optional 2000-sheet drawer	Optional envelope feeder	Optional duplex unit	Standard output bin
Paper	1	1	1	1		1	1
Card stock	1	1	1			1	1
Transparencies	1	1	1				1
Vinyl labels [*]	1	1	1				1
Paper labels [*]	1	1	1				1
Polyester labels [*]	1	1	1				1
Dual-web labels [*]	1	1	1				1

Printing label applications on your printer requires a special label fuser cleaner which prevents duplexing. The label fuser cleaner is included with a special label cartridge for label applications. See **Ordering supplies** for more information on obtaining a label fuser cleaner.

		Print material weight					
Print material	Туре	Integrated tray and optional 500-sheet drawer	Multipurpose feeder and optional 250-sheet drawer	Envelope feeder			
Paper	Xerographic or business paper	60 to 176 g/m ² grain long (16 to 47 lb bond)	60 to 135 g/m ² grain long (16 to 36 lb bond)	N/A			
Card stock— maximum (grain long) ¹	Index Bristol	163 g/m ² (90 lb)	120 g/m² (67 lb)	N/A			
	Tag	163 g/m ² (100 lb)	120 g/m² (74 lb)	N/A			
	Cover	176 g/m ² (65 lb)	135 g/m² (50 lb)	N/A			
Card stock—	Index Bristol	199 g/m² (110 lb)	163 g/m² (90 lb)	N/A			
maximum (grain short) ¹	Tag	203 g/m ² (125 lb)	163 g/m² (100 lb)	N/A			
-	Cover	216 g/m ² (80 lb)	176 g/m² (65 lb)	N/A			
Transparencies	Laser printer	138 to 146 g/m ² (37 to 39 lb bond)	138 to 146 g/m ² (37 to 39 lb bond)	N/A			

¹ Grain short is preferred for papers over 176 g/m².

² Printing label applications on your printer requires a special label fuser cleaner which prevents duplexing.

³ 28 lb bond envelopes are limited to 25% cotton content.

⁴ Includes envelopes fed from the multipurpose tray only.

		Print material weight					
Print material	Туре	Integrated tray and optional 500-sheet drawer	Multipurpose feeder and optional 250-sheet drawer	Envelope feeder			
Labels—upper limit ²	Paper	180 g/m ² (48 lb bond)	163 g/m ² (43 lb bond)	N/A			
	Dual-web paper	180 g/m ² (48 lb bond)	163 g/m ² (43 lb bond)	N/A			
	Polyester	220 g/m ² (59 lb bond)	220 g/m ² (59 lb bond)	N/A			
	Vinyl	300 g/m ² (92 lb liner)	260 g/m ² (78 lb liner)	N/A			
Integrated forms	Pressure- sensitive area (must enter the printer first)	140 to 175 g/m ²	140 to 175 g/m ²	N/A			
	Paper base (grain long)	75 to 135 g/m ² (20 to 36 lb bond)	75 to 135 g/m ² (20 to 36 lb bond)	N/A			
Envelopes 100% cotton content maximum weight–24 lb	Sulfite, wood- free or up to 100% cotton bonds	N/A	60 to 105 g/m ² (16 to 28 b bond) 3, 4	75 to 90 g/m ² (20 to 24 lb bond)			

² Printing label applications on your printer requires a special label fuser cleaner which prevents duplexing.
 ³ 28 lb bond envelopes are limited to 25% cotton content.

⁴ Includes envelopes fed from the multipurpose tray only.



This section provides information about loading the various input options. Proper paper loading helps prevent paper jams and ensure trouble-free printing.

Before loading paper, you need to know the recommended print side of the paper you're using. This information is usually indicated on the paper package.

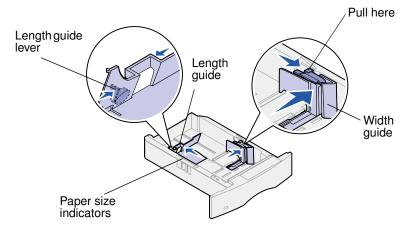
Click below for information on loading a particular option:

- Loading a paper tray
- Loading the multipurpose feeder
- Loading the envelope feeder
- Loading the 2000-sheet drawer

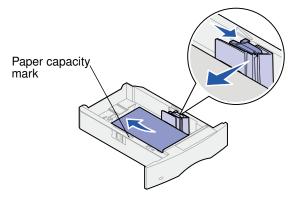


Complete these instructions to load print materials into any of the standard or optional trays.

- 1 Remove the paper tray.
- 2 Pull the width guide tab and slide the width guide to the far right side of the tray.
- **3** Squeeze the length guide lever and slide the length guide to the correct position for the size paper you are loading.



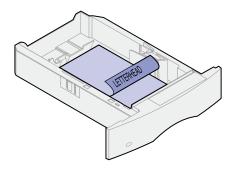
- 4 Place the paper into the paper tray with the recommended print side face down for singlesided printing and face up for double-sided printing. Do not fill paper above the stack height mark.
- **5** Pull the width guide tab and slide the width guide to the left until it lightly rests against the edge of the paper stack.



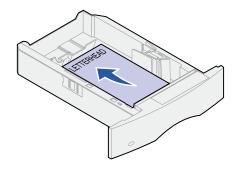
6 Reinstall the tray.

Loading letterhead

For *simplex* (single-sided) printing on letterhead, place the printed side *face down* as shown.



For *duplex* printing on letterhead, place the printed side *face up* as shown.



Note: The Paper Loading menu item lets you print simplex (single-sided) jobs on letterhead (or other preprinted media) that has been *loaded specifically for duplex printing*. See **Paper Loading** for more information.



The multipurpose feeder can hold several sizes and types of paper, such as transparencies, postcards, note cards, and envelopes. It is useful for single page printing on letterhead, colored paper, or other special paper.

Keep in mind the following capacities, paper dimensions, and operating tips when loading the multipurpose feeder.

Capacity

The maximum stack height is 10 mm (0.4 in.). The multipurpose feeder can hold approximately:

- 100 sheets of 75 g/m² (20 lb) paper
- 10 envelopes
- 75 transparencies

Paper dimensions

The multipurpose feeder accepts paper within the following dimensions:

- Width—69.85 mm (2.75 in.) to 229 mm (9.01 in.)
- Length—127 mm (5 in.) to 355.6 mm (14 in.)

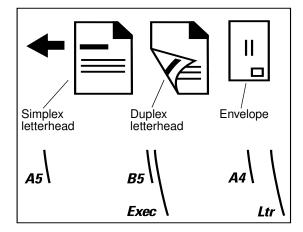
Trouble-free printing

- Load only one size of paper or envelopes at a time in the multipurpose feeder.
- To achieve the best possible print quality, use only high-quality print media that is designed for use in laser printers. For more guidelines on paper, see **Choosing print material**.
- To prevent paper jams, do not add or remove paper when there is still paper in the multipurpose feeder. This applies to other types of print materials, too.
- Never add print materials to the multipurpose feeder while the printer is printing from the multipurpose feeder. Doing so may cause a paper jam.
- Print material should be loaded with the recommended print side up and the top of the print material going into the multipurpose feeder first.

- *Do not* place objects on the multipurpose feeder. Also, avoid pressing down or applying excessive force on it.
- Do not remove any paper tray while a job is printing from the multipurpose feeder or **Busy** is displayed on the operator panel. Doing so may cause a paper jam.

Note: The multipurpose feeder may be used with the optional envelope feeder installed.

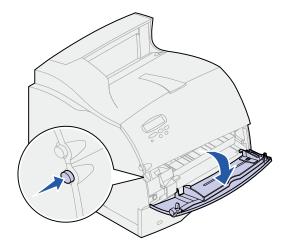
The icons on the multipurpose feeder show you how to load the multipurpose feeder with paper, how to turn an envelope for printing, and how to load letterhead paper for simplex and duplex printing. See **Loading letterhead** for detailed instructions on loading documents loaded on letterhead.



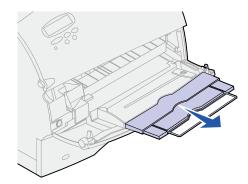
Note: The Paper Loading menu item in the Paper Menu lets you print simplex (singlesided) jobs on letterhead (or other preprinted media) that has been *loaded specifically for duplex printing*. For more information, see **Paper Loading**.

To load the multipurpose feeder:

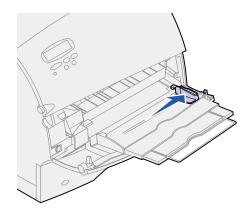
1 Push the lower release latch. The multipurpose feeder door drops open.



2 Pull out the metal bar in the recessed area on the multipurpose feeder far enough to accommodate the paper you will be using.



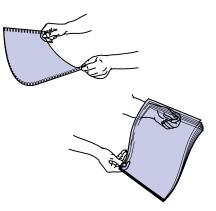
3 Slide the paper width guide to the far right.



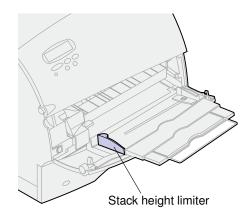
- 4 Prepare the print material for loading.
 - Flex paper or fan envelopes back and forth. Do not fold or crease the paper. Straighten the edges on a level surface.



 Hold transparencies by the edges and avoid touching the print side. Fan the stack of transparencies to prevent jams. Be careful not to scratch or leave fingerprints on the transparencies.



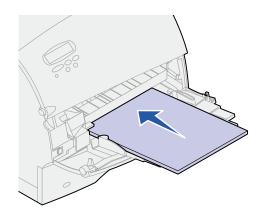
5 Use the stack height limiter as a guide for stack height when loading print materials.



- 6 Load one type of print material in the multipurpose feeder. *Do not* mix types. Click a topic for loading instructions:
 - Loading paper and transparencies
 - Loading envelopes
 - Loading letterhead

Loading paper and transparencies

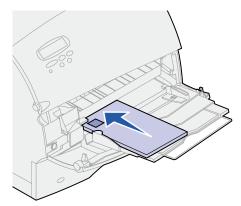
a Load paper with the left edge of the stack against the stack height limiter and with the recommended print side face up.



b Continue with **step 7**.

Loading envelopes

- **a** Load envelopes flap side down with the stamp area and flap on the left side. The end of the envelope with the stamp area enters the multipurpose feeder first.
- **WARNING:** Never use envelopes with stamps, clasps, snaps, windows, coated linings, or selfstick adhesives. These envelopes may severely damage the printer.



- **b** Continue with **step 7**.
 - **Note:** If envelopes jam while printing, try reducing the number of envelopes in the multipurpose feeder.

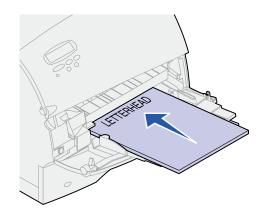
Loading letterhead

Load letterhead according to the options installed on the printer. Click the topic that describes your printer configuration.

- Without a duplex unit
- With a duplex unit

Without a duplex unit

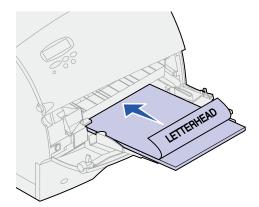
a Load letterhead paper for *single-sided* printing with the logo face up. The end of the sheet with the logo should enter the printer first.



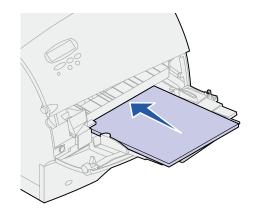
b Continue with **step 7**.

With a duplex unit

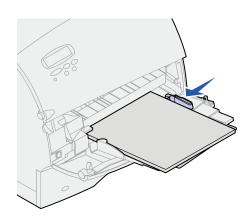
a Load letterhead paper for *duplex* printing with the logo face down. The end of the sheet with the logo should enter the printer last.



- **b** Continue with **step 7**.
 - **Note:** The Paper Loading menu item in the Paper Menu lets you print simplex (singlesided) jobs on letterhead (or other preprinted media) that has been *loaded specifically for duplex printing*. For more information, see **Paper Loading**.
- 7 Gently slide the print material into the multipurpose feeder as far as it will go. Forcing the print material may cause it to buckle.



8 Slide the paper width guide to the left until it lightly touches the stack of print material. *Do not* bend the print material.

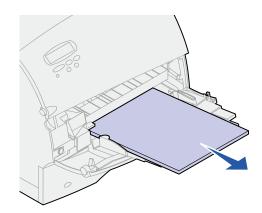


- **9** Select the paper source, size, and type from your software application and select paper size and type from the printer operator panel.
 - a Make sure the Paper Size and Paper Type for the multipurpose feeder (MP Feeder Size and MP Feeder Type) are set to the correct value for the print material you are loading.
 (See Paper Size and Paper Type for detailed information about these settings.)
 - b Press Go to return to Ready.

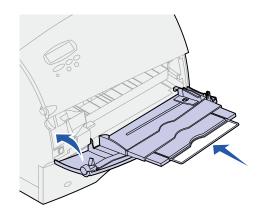
Note: Software settings may override operator panel settings.

Closing the multipurpose feeder

1 Remove print material from the multipurpose feeder.



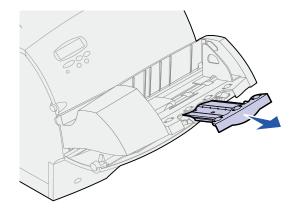
2 Push the metal bar straight back to collapse the multipurpose feeder to its short-length position.



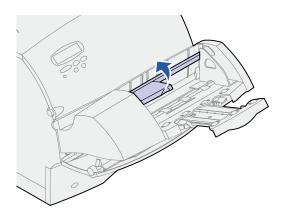
3 Close the multipurpose feeder door.



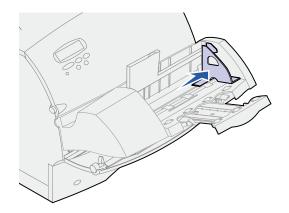
- **1** Gently adjust the envelope support for the size you are loading:
 - Fully closed (pushed in toward the printer) for short envelopes
 - Extended to the middle position for medium-length envelopes
 - Fully open (extended to its full length) for long envelopes
 - **WARNING:** *Do not* place objects on the envelope feeder. Avoid pressing down on it or applying excessive force.



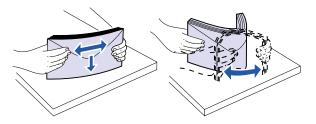
2 Lift the envelope weight back toward the printer. It stays in place.



3 Slide the envelope edge guide to the far right.



4 Flex a stack of envelopes back and forth and then straighten the edges on a level surface. Press down the corners to flatten them.

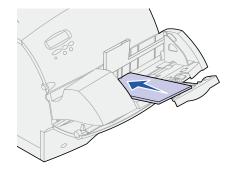


Fan the envelopes. This prevents the edges of the envelopes from sticking together and helps them feed properly.



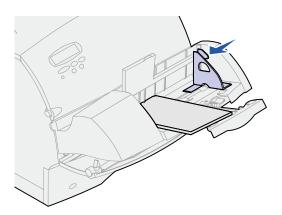
Note: When you load envelopes, do not exceed the maximum stack height of 64.7 mm (2.55 in.). The envelope feeder holds a maximum of 85 envelopes (75 g/m², 20 lb bond).

- **5** Load the stack of envelopes flap side down with the stamp area and the flap on the left. The end of the envelopes with the stamp area enters the envelope feeder first. Let the envelopes at the bottom of the stack slide into the envelope feeder slightly more than the ones at the top of the stack.
 - **WARNING:** Never use envelopes with stamps, clasps, snaps, windows, coated linings, or selfstick adhesives. These envelopes may severely damage the printer. See **Choosing envelopes** for more information.

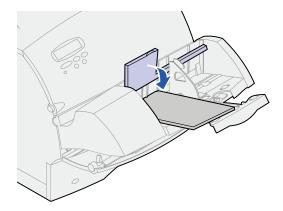


Note: Do not load more envelopes by forcing them under the envelope feeder weight. This causes jams.

6 Slide the envelope edge guide to the left until it lightly touches the stack. Make sure the envelopes do not buckle.



7 Lower the envelope weight to the stack.



- 8 Select the paper source, size, and type from your software application.
- 9 Select the paper size and type from printer operator panel:
 - **a** Make sure the Paper Size for the envelope feeder (Env Feeder Size) is set to the correct envelope size you are loading. (See **Paper Size** for detailed information about this setting.)
 - **b** Press **Go** to return to Ready.

Note: Software settings may override operator panel settings.

If envelopes jam, see Clearing paper jams.



For information on loading the 2000-sheet drawer, refer to the *2000-Sheet Drawer User's Guide* on the *Publications CD* that came with your printer.



Properly storing paper helps ensure trouble-free printing. Use the following guidelines:

- For best results, store paper in an environment where the temperature is approximately 21°C (70°F) and the relative humidity is 40%.
- Store cartons of paper on a pallet or shelf, rather than directly on the floor.
- If you store individual packages of paper out of the original carton, make sure they rest on a flat surface so the edges do not buckle or curl.
- Do not place anything on top of the paper packages.



Tray linking enables the automatic linking feature for trays when you use the same size and type of print material in multiple paper sources (trays).

For example, let's say you have loaded two optional trays with the same size print material and both are set to the same paper type. When one tray becomes empty, the printer automatically selects print material from the other tray since the printer sees the trays as linked.

If you use different print material in the trays, each source with a different print material must have the Paper Type set to a unique value to disable the automatic linking feature. If all the trays do not have the same paper type when they are linked, you could mistakenly print a job on the wrong paper type.



By carefully selecting print materials and loading them properly, you can avoid most paper jams. If jams do occur, follow the steps outlined in **Clearing paper jams**. If jams occur frequently, make sure you follow these tips to avoid jams:

- See Loading print material to load paper properly. Make sure the adjustable guides are positioned correctly.
- *Do not* overload the paper trays. Make sure the paper is under the paper capacity mark on the inside of the paper tray.
- Do not remove paper trays while print jobs are in process.
- Flex, fan, and straighten the paper before loading it.
- Fan stacks of labels or transparencies before loading them into trays or the multipurpose feeder. If jams do occur using the multipurpose feeder, try feeding one sheet at a time.
- Do not load wrinkled, creased, damp, or curled paper.
- Do not mix paper types or paper sizes in one tray.
- Do not add paper to existing paper in tray. Allow tray to go empty before adding more paper.
- Use only recommended print materials. See Recommended paper.
- Make sure the recommended print side is face down for simplex printing when loading all trays.
- Keep print materials stored in an acceptable environment. See Moisture content.



Order a new print cartridge when the **Toner** Low message first appears so you will have it when the current one no longer prints satisfactorily. See **Ordering supplies** for information on ordering print cartridges.

Note: We do not recommend that you use print cartridges from a third party. Print quality and printer reliability cannot be guaranteed if you do.

To utilize the remaining toner, remove the cartridge by gripping the handles with both hands. With the cartridge arrows pointing downward, shake the print cartridge back and forth. Reinstall the cartridge and then press **Go**.

Complete the following steps to replace the print cartridge. Refer to the documentation that comes with the print cartridge for detailed installation information.

- **1** Turn the printer off and unplug the printer power cord.
- **2** Open the front doors and remove the used print cartridge.

WARNING: Never touch the photoconductor drum on the underside of the print cartridge. Use the handhold on the cartridge to avoid touching this area.

- 3 Clean the printer.
- 4 Install the new print cartridge and close the front door.
- **5** Replace the fuser cleaner if you are printing special label applications.
- 6 Plug the printer power cord into a properly grounded electrical outlet and turn the printer on.



Order a new charge roll kit when toner fog or background shading appears. See **Ordering supplies** for information on ordering a charge roll.

Complete the following steps to replace the charge roll. Refer to the documentation that comes with the charge roll for detailed installation information.

- 1 Turn the printer off and unplug the printer power cord.
- **2** Open the front doors and remove the print cartridge.
- **3** Remove the old charge roll.
- 4 Install the new charge roll.
- **5** Reinstall the print cartridge and close the front doors.
- 6 Plug the printer power cord into a properly grounded electrical outlet.
- 7 Reset the maintenance counter.



Order a new transfer roll when light print, toner fog, or background shading appears. See **Ordering supplies** for information on ordering a transfer roll.

Complete the following steps to replace the transfer roll. Refer to the documentation that comes with the transfer roll for detailed installation information.

- 1 Turn the printer off and unplug the printer power cord.
- **2** Open the front doors and remove the print cartridge.
- 3 Remove the old transfer roll.
- 4 Install the new transfer roll.
- **5** Reinstall the print cartridge and close the front doors.
- 6 Plug the printer power cord into a properly grounded electrical outlet.
- 7 Reset the maintenance counter.



Order a new fuser assembly when toner fog or background shading appears. See **Ordering supplies** for information on ordering a fuser assembly.

CAUTION: The fuser assembly should only be replaced by a service technician.



After replacing all the items in the **maintenance kit**, reset the maintenance counter:

- 1 Press and hold the Select and Return buttons while you turn the printer on.
- 2 Release the buttons when **Performing Self Test** appears on the display.

The printer performs its power-on sequence, and then Config Menu appears on the first line of the display.

3 Press Menu until you see Reset Maint Cnt and then press Select.

Reset appears on the second line of the display.

4 Press Select.

Resetting Maint Cnt Value appears briefly on the display, and then is replaced by Config Menu on the top line and Reset Maint Cnt on the second line.

5 Press Menu until you see Exit Config Menu, and then press Select.

Activating Menu Changes appears briefly, followed by Performing Self Test. The printer returns to the Ready state.



Maintenance kit

80 Scheduled Maintenance appears on the display after 250,000 pages have printed to let you know it is time to replace printer maintenance items. Order a maintenance kit when **80** Scheduled Maintenance first appears on the display. The maintenance kit contains all the items necessary to replace the fuser assembly, the charge roll, and the transfer roll. For information about purchasing the correct maintenance kit, contact your point of purchase.

Print cartridges

Order a new print cartridge when **Toner** Low first appears on the display so you will have it when the current one no longer prints satisfactorily. For more information about the print cartridges available for your printer, contact your point of purchase.

Label fuser cleaner

A special label fuser cleaner should be used for label applications to optimize feeding reliability. For more information about ordering a label fuser cleaner, contact your point of purchase.

Label fuser cleaners are not recommended for duplex printing.

Charge roll

For more information about ordering a charge roll, contact your point of purchase.

Transfer roll

For more information about ordering a transfer roll, contact your point of purchase.

Fuser assembly

Order a fuser assembly when **80** Scheduled Maintenance first appears on the display. For more information about ordering a fuser assembly, contact your point of purchase.



Store supplies in their original packaging until you are ready to install them.

Do not store supplies in:

- Temperatures greater than 43 ℃ (110 °F)
- An environment with extreme changes in humidity or temperature
- Direct sunlight
- Dusty places
- A car for a long period of time
- An environment where corrosive gases are present
- An environment with salty air



When you have a problem, first make sure that:

- The printer power cord is plugged into the printer and a properly grounded electrical outlet.
- The printer power switch is on.
- The electrical outlet is not turned off by any switch or breaker.
- Other electrical equipment plugged into the outlet is working.
- You try turning the printer off, then wait for about 10 seconds, and turn the printer on. This often fixes the problem.
- Your printer driver settings are correct.

Note: If an error message appears, see Understanding printer messages.

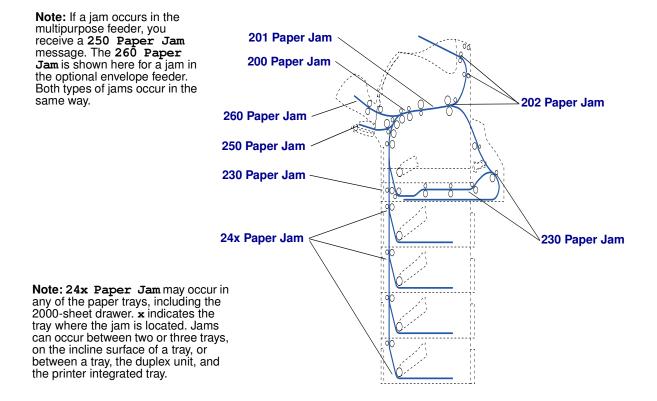


By carefully selecting print materials and loading them properly, you can avoid most paper jams. (See the suggestions in **Tips for avoiding paper jams**.) If paper jams do occur, follow the steps in this section.

To resolve the paper jam messages, *you must clear all paper from the paper path*. Press **Go** to resume printing. The printer prints a new copy of the page that jammed if Jam Recovery is set to On or Auto; however, the Auto setting does not guarantee the page will print.

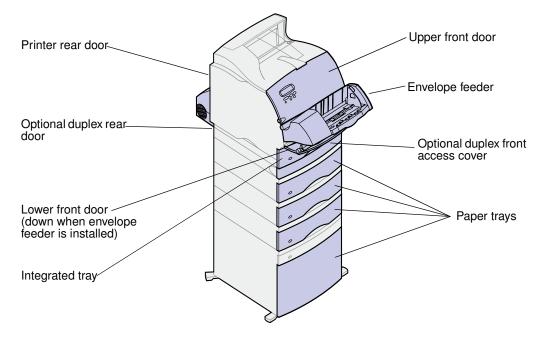
Identifying paper jam areas

See the diagram on **page 55** for the path the paper travels through the printer and options, and areas where jams may occur. The path varies depending on the paper source.



Accessing paper jam areas

You open doors and covers and remove paper trays to access paper jam areas. If your printer has a multipurpose feeder, it is visible when the lower front door is opened. The illustration shows the location of paper sources and possible paper jam areas.

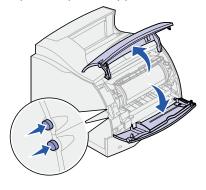


Note: All illustrations in this section show the printer in its standard configuration unless it is necessary to show input or output options.

200 and 201 Paper Jam Remove Cartridge

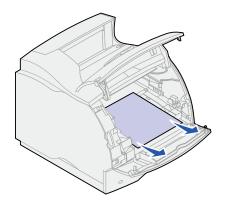
A 200 Paper Jam message indicates the paper is jammed in the area under the print cartridge. This requires removing the print cartridge from the printer. A 201 Paper Jam message indicates the jam is farther inside the printer.

1 Push the release latch and open the printer upper and lower front doors.



CAUTION: The rear portion of the inside of the printer is hot.

- 2 While grasping the print cartridge by the hand grip, pull the print cartridge up toward the upper front door, and then pull it straight out toward you. Lay it aside on a sheet of paper.
- **3** Pull the paper up and toward you and to the right.
 - **Note:** If the paper does not move when you pull, stop pulling. You may need to access the paper from the rear door. See **Between the envelope feeder and the printer** for more information.



- 4 Reinstall the print cartridge.
- **5** Close the upper and lower front doors.

202 Paper Jam Open Rear Door

Jams that cause a 202 Paper Jam message require opening the printer rear door.

Note: To resolve the message, you must clear all paper from the paper path.

For instructions on clearing the jam, click the area where the jam occurred:

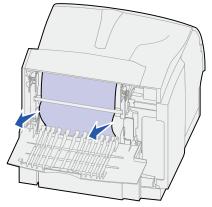
- Before reaching the output bin
- While exiting to the output bin

Before reaching the output bin

1 Open the rear door.

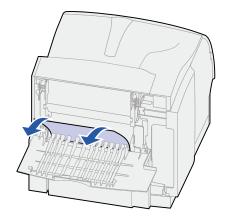


- 2 Remove the paper based on what part is visible.
 - If the middle section of paper is visible, grasp it on both sides and gently pull it straight out.



- If paper is still in the fuser area, open the upper front door and remove the paper.

- If the end of the paper is visible, pull the paper straight out.



If the paper does not move immediately when you pull, stop pulling. Remove the print cartridge, and then pull the paper out. See **Replacing the print cartridge** for more information.

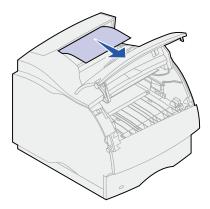
3 Close the rear door.

While exiting to the output bin

Pull the paper straight out.



If the paper does not move immediately when you pull, stop pulling. Open the upper front door and pull the paper out.

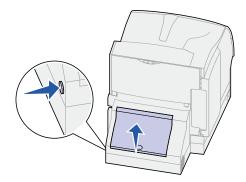


230 Paper Jam Check Duplex

Jams that cause a 230 Paper Jam message require opening the duplex front access cover.

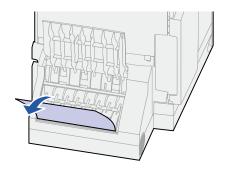
Note: To resolve the message, you must clear all paper from the paper path.

1 Open the duplex rear door.

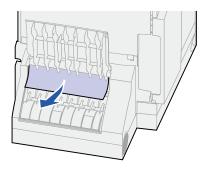


- 2 Look under the duplex rear door for the edge of the paper to determine how the paper is jammed:
 - If a short piece is visible inside the duplex unit next to the inner wall, grasp it and pull it out.
 If you cannot grasp it, see step 6.
 - If only a short piece of paper is visible toward the rear of the printer, do not pull it out; it
 may be easier to access from inside the printer. See 200 and 201 Paper Jam Remove
 Cartridge for instructions.
 - If most of the paper is visible, continue with the following.

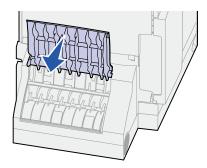
3 Pull the paper up and out toward you:



4 Pull down and out if the paper is in this position.

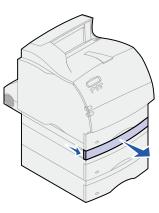


5 Close the duplex rear door. Make sure it *snaps* into place.



6 Locate the recessed areas on each side of the duplex front access cover.

7 Slowly pull the duplex front access cover straight out.

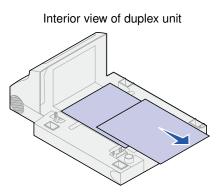


8 If the edge of the paper is visible, pull the paper straight up and out.



If the paper is not visible, continue with step 9. Otherwise, close the duplex front access cover.

- 9 Slide out the integrated tray.
- **10** Remove any sheets of paper lying in the duplex front access cover.



- 11 Slide the duplex front access cover back into the duplex unit. Make sure it *snaps* into place.
- **12** Slide the integrated tray back into the printer.

24x Paper Jam Check Tray x

Jams in four areas result in a 24x Paper Jam message, where x represents the tray number where the jam has occurred.

Note: To resolve the message, you must clear all paper from the paper path.

For instructions on clearing the jam, click the area where the jam occurred:

- On the incline surface of a tray or between two trays
- Between three trays
 (This may happen if you are using legal-size paper in the trays or if you have an optional 250sheet drawer installed with other optional drawers.)
- Between a tray, the duplex unit, and the integrated tray
- Between the envelope feeder and the printer
- In the 2000-sheet drawer

On the incline surface of a tray or between two trays

- 1 Pull the paper tray halfway out of the support unit.
- 2 Remove the paper based on how it is jammed:
 - If the paper is lying on the incline or wall surface at the front of the tray, pull the paper straight out.



 If the paper is in the pass-through area between two trays, pull the paper straight up and out.



- If you do not see either end of the print material, see Between three trays to remove the jam.
- **3** Slide the paper tray back into the support unit.

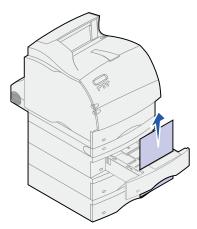
Between three trays

This type of jam may occur if you are using legal-size paper in the trays or if you have a 250-sheet drawer installed with other optional drawers.

1 Pull the paper tray out of the support unit. If only a short piece of the paper is visible, do not pull down to remove the paper.



- 2 Gently slide the paper tray back into the support unit.
- **3** Pull the paper tray out of the support unit that is above the tray you just closed.
- 4 Pull the paper either up or down. If it does not pull easily one way, try the other way.

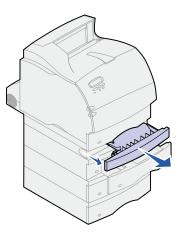


- **5** Slide the paper tray back into the support unit.
 - **Note:** With this type of jam, there may be another jam under the print cartridge. Remove the print cartridge and any jammed paper, and then reinstall the print cartridge. See **Replacing the print cartridge** for more information.

Between a tray, the duplex unit, and the integrated tray



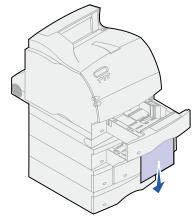
- 1 Pull the paper tray out of the support unit. If only a short piece of the paper is visible, do not pull down to remove the paper.
- 2 Slowly pull the duplex front access cover straight out from the duplex unit.



3 Pull the integrated tray out of the printer.

If you see the edge of the paper in the integrated tray:

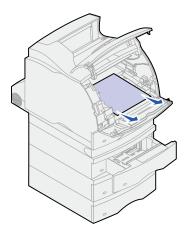
a Pull the paper down and out.



- **b** Slide the tray all the way into the printer.
- **c** Slide the duplex front access cover back into the duplex unit. Make sure it *snaps* into place.

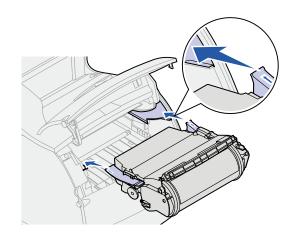
If you do *not* see the edge of the paper in the integrated tray:

- a Push the tray back into the printer.
- **b** Open the printer upper and lower front doors.
- **c** Remove the print cartridge. See **Replacing the print cartridge** for more information. You should see the leading edge of the paper now.
- d Pull the paper out.



e Reinstall the print cartridge.

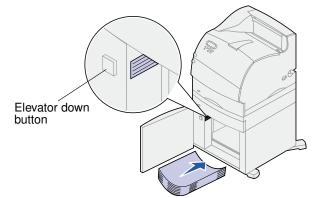
Align the slides on the print cartridge with the slots on the print cartridge cradle. Use the colored arrows inside the printer for placement. Guide the print cartridge down as it *snaps* into place.



- f Close the printer upper and lower front doors.
- g Slide the paper tray all the way into the printer.

In the 2000-sheet drawer

- **1** Open the loading door.
- 2 Press the elevator down button.
- 3 Remove the paper jam. Clear all paper from the paper path of the drawer and printer.

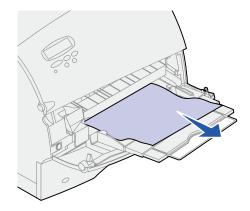


- **4** Make sure the stack of paper is neat and aligned; otherwise, another paper jam may occur.
- 5 Close the door.
- 6 Allow a few seconds for the elevator to reach the top.
- 7 Press Go to resume printing.

250 Paper Jam Check MP Feeder

Slowly pull the jammed print material straight out of the multipurpose feeder.

Note: To resolve the message, you must clear all paper from the paper path.



260 Paper Jam Check Env Feeder

Envelope jams may occur in two areas.

Note: To resolve the message, you must clear all paper from the paper path.

For instructions on clearing the jam, click the area where the jam occurred:

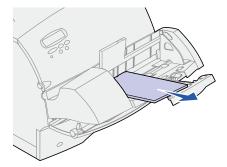
- · At entry into the envelope feeder
- Between the envelope feeder and the printer

At entry into the envelope feeder

Since the envelope feeder feeds envelopes from the bottom of the stack, the envelope on the bottom is jammed.

- 1 Lift the envelope weight.
- 2 Flip the envelope weight back toward the printer.
- **3** Remove the stack of envelopes from the envelope feeder.

4 Slowly pull the jammed envelope straight out toward you.

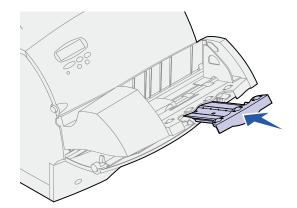


- **5** Replace the stack of envelopes in the envelope feeder.
- 6 Adjust the envelope edge guide.
- 7 Lower the envelope weight to the stack.

Note: If envelope jams continue to occur, repeat these steps and feed a single envelope between steps 4 and 5. This may correct the problem.

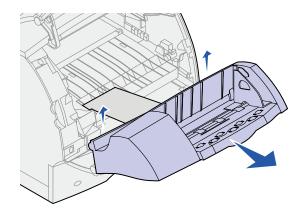
Between the envelope feeder and the printer

- 1 Lift the envelope weight.
- 2 Flip the envelope weight back toward the printer.
- **3** Remove the stack of envelopes from the envelope feeder.
- **4** Push the envelope support to the closed position.

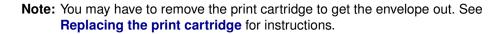


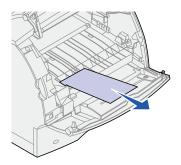
5 Open the printer upper front door.

6 Pull the envelope feeder up slightly and straight out of the printer. Set it aside.



7 Pull the envelope straight out of the printer.





- 8 Reinstall the envelope feeder. Make sure it *snaps* into place.
- **9** Close the printer upper front door.
- **10** Replace the stack of envelopes in the envelope feeder.
- **11** Adjust the envelope edge guide.
- **12** Lower the envelope weight to the stack.



If the suggested corrective action does not fix the problem, call your service representative.

Problem	Action
Operator panel displays only diamonds or is blank.	 Turn the printer off, wait about 10 seconds, and turn the printer on. Performing Self Test appears on the display. When the test is completed, Ready is displayed.
	If the messages do not appear, turn the printer off and call a service technician.
Menu settings changed from the operator panel have no effect.	Settings in the software application, the printer driver, or the printer utilities are overriding the settings made from the operator panel.
	 Change the menu settings from the printer driver, the printer utilities, or the software application instead of the operator panel. Disable the settings in the printer driver, the printer utilities, or the software
	application so you can change settings from the operator panel.



If the suggested corrective action does not fix the problem, call your service representative.

Problem	Action
Job did not print or incorrect characters printed.	Make sure Ready appears on the operator panel before you send a job to print. Press Go to return to Ready .
	Make sure there is print material loaded in the printer. Press Go to return to Ready .
	Verify that the printer is using the correct printer language.
	Verify that you are using the correct printer driver.
	Make sure the parallel, serial, ethernet, USB cable is firmly plugged in at the back of the printer. Make sure you are using the correct cable. Use an IEEE 1284-compliant parallel cable. If you use RS-232 Serial, verify that a null modem cable is used.
	If the printer is connected through a switch box, try a direct connection.
	Verify that the correct paper size is selected through the operator panel, in the printer driver, or in the software application.
	Make sure PCL SmartSwitch and PS SmartSwitch are set to On.
Job did not print or incorrect	If you are using a print spooler, verify that the spooler is not stalled.
characters printed (continued).	If you print across a network or on a Macintosh computer, see Network printing problems.
	Check the printer interface from the Setup Menu.
	Determine which host interface you are using. Print a menu settings page to verify that the current interface settings are correct. See Printing the menu settings page .
	If you are using a serial interface:
	 Make sure Honor DSR is set to Off. Check the protocol, baud, parity, and data bit settings. The settings on the printer and on the host computer should match.
Printer is connected to the USB port, but will not print.	Make sure you are using Windows 98, Windows 2000, Windows Me, or another USB-capable operating system supported by your printer.
Print material misfeeds or multiple feeds occur.	Make sure the print material you are using meets the specifications for your printer. See Print material specifications for more details.
	Flex print material before loading it in any of the paper sources.
	Make sure the print material is loaded correctly.

Problem	Action
Print material misfeeds or multiple feeds occur (continued).	Make sure the paper width and length guides on the paper sources are adjusted correctly.
	Do not overfill the paper sources.
	Do not force print material into the multipurpose feeder when you load it; otherwise, it may skew or buckle.
	Remove any curled print material from paper sources.
	Load the recommended print side correctly for the type of print material you are using. See Loading print material for more information.
	Load less print material in the paper sources.
	Turn the print material over or around and try printing again to see if feeding improves.
	Do not mix print material types.
	Do not mix reams of print material.
	Remove the top and bottom sheets of a ream before loading the print material.
	Load a paper source only when it is empty.
Envelope misfeeds or multiple feeds occur.	Remove the stack of envelopes from the envelope feeder. Load one envelope, feed it through the printer, and then reload the stack of envelopes in the envelope feeder.
Page breaks in unexpected places.	Check the Print Timeout setting in the Setup Menu. Increase the setting.
Job prints from the wrong paper source or on the wrong print material.	Check the Paper Type setting in the Paper Menu from the printer operator panel and in the printer driver.
Paper does not stack neatly in the output bin.	Make sure the paper bail is installed.Turn the paper stack over in the tray or multipurpose feeder.
Printer does not duplex pages.	 Make sure Duplex is selected in both the Finishing Menu and in the printer driver. Make sure you have enough printer memory installed.



If the suggested corrective action does not fix the problem, call your service representative.

Problem	Action
Print is too light. ABCDE ABCDE ABCDE	 The toner may be low. To utilize the remaining toner, remove the cartridge by gripping the handles with both hands. With the cartridge arrows pointing downward, shake the print cartridge back and forth. Reinstall the cartridge and then press Go. Change the Toner Darkness setting in the Quality Menu. If you are printing on an uneven print surface, change the Paper Weight and Paper Texture settings in the Paper Menu. See Paper Type. Verify that the correct print material is being used.
Toner smears or print comes off the page. ABCDE ABCDE ABCDE ABCDE	 If you are printing on an uneven print surface, change the Paper Weight and Paper Texture settings in the Paper Menu. See Paper Type. Verify that the print material is within the printer specifications. See Print material specifications for more details. If the problem continues, call a service technician.
Toner appears on the back of the printed page. ABCDE ABCDE ABCDE	Toner is on the transfer roll. To help prevent this, do not load print material that is smaller than the page size of the job to be printed. Open and close the printer upper front door to run the printer setup cycle and clean the transfer roll.

Problem	Action
Toner fog or background shading appears on the page. ABCDE ABCDE ABCDE ABCDE	 Check the print cartridge to make sure it is installed correctly. Change the print cartridge. See Replacing the print cartridge for more details. If the problem continues, change the charge roll. See Replacing the charge roll for more details.
Entire page is white.	 Make sure the packaging material is removed from the print cartridge. Check the print cartridge to be sure it is installed correctly. The toner may be low. To utilize the remaining toner, remove the cartridge by gripping the handles with both hands. With the cartridge arrows pointing downward, shake the print cartridge back and forth. Reinstall the cartridge and then press Go.
Streaks appear on the page.	 The toner may be low. To utilize the remaining toner, remove the cartridge by gripping the handles with both hands, and then shake the print cartridge gently back and forth. Reinstall the same print cartridge. If you are using preprinted forms, make sure the ink can withstand temperatures of 212°C (414°F).
Printing is too dark. ABCDE ABCDE ABCDE ABCDE	Change the Toner Darkness setting in the Quality Menu. Note: Macintosh computer users should make sure the lines per inch (Ipi) setting is not set too high in the software application.

Problem	Action
Characters have jagged or uneven edges. ABCDE ABCDE ABCDE	 Change the Print Resolution setting in the Quality Menu to 600 dpi or 1200 dpi. Turn PQET in the Quality Menu to On. If you are using downloaded fonts, verify that the fonts are supported by the printer, the host computer, and the software application.
Image quality is poor. ABCDE ABCΓ モ APプL こ	Resolution was automatically reduced. Reduce the complexity of the print job or add additional printer memory. See Res Reduced .
Part or all of the page is printed in black.	 Check the print cartridge to see if it is installed correctly. If the charge roll has been replaced, verify that it is installed correctly.
The job prints, but the top and side margins are incorrect.	 Make sure the Paper Size setting in the Paper Menu is correct. Make sure the margins are set correctly in your software application.



If an option does not operate correctly after it is installed or if it quits working:

- Make sure paper options are marked with a colored triangle, indicating they are compatible with your printer.
- Turn the printer off, wait for about 10 seconds, and turn the printer on. If this does not fix the problem, unplug the printer, and check the connection between the option and printer.
- Print the menu settings page and check to see if the option is listed in the Installed Options list. If the option is not listed, reinstall it.
- Make sure the option is selected in the software application you are using.

For Macintosh computer users: Make sure the printer is set up in Chooser.

Printer options are listed below with suggested corrective actions for related problems. If the suggested corrective action does not fix the problem, call your service representative.

Options	Action
Drawers	 Make sure the connection between drawers (250-sheet drawer, optional 500-sheet drawer, or optional 2000-sheet drawer), or the connection between a drawer and a duplex unit or the printer, is secure. Make sure the print material is loaded correctly. See Loading print material for more details.
Duplex unit	 Make sure the connection between the duplex unit and the printer is secure. If the duplex unit is listed on the menu settings page, but print material jams when it enters or exits the duplex unit, the printer and duplex unit may not be properly aligned. Make sure the duplex front access cover is securely installed.
Envelope feeder	 Make sure the connection between the envelope feeder and the printer is secure. Make sure the Paper Size setting is correct in both the Paper Menu and in the software application. Make sure the envelopes are loaded correctly. See Loading the envelope feeder for more details.
Flash memory	Make sure flash memory is securely connected to the printer system board.
Hard disk with adapter	Make sure the hard disk is securely connected to the hard disk adapter card. Also make sure the hard disk adapter card is securely connected to the printer system board.

Options	Action
Infrared adapter	If infrared communication stops or does not occur, make sure:
	 The distance between the two infrared ports is 1 m (39 in.) or less. If communication does not occur between ports, move the ports closer together. Both ports are stable.
	 The computer and the printer are on a level surface. The angle of communication between the two infrared ports is within 15 degrees of either side of an imaginary line drawn between the two infrared ports. No bright light, such as direct sunshine, is interfering with communication. No objects are placed between the two infrared ports.
Internal print server	 Make sure the internal print server (also called an internal network adapter or INA) is securely connected to the printer system board. Make sure you are using the correct cable, that it is securely connected, and that the network software is correctly set up.
	Refer to the drivers CD for more details.
Printer memory	Check to make sure printer memory is securely connected to the printer system board.
Tri-Port Adapter	 Make sure the Tri-Port Adapter is securely connected to the printer system board. For Macintosh computer users, make sure the host computer is set to LocalTalk. If you are using a phone wire connection, use a terminator plug.
USB/Parallel interface	 Make sure the USB/parallel interface card is securely connected to the printer system board. Make sure you are using the correct cable and that it is securely connected.



If a job did not print or incorrect characters printed, verify that the internal print server or external print server is set up properly and the network cable is connected.

Note: Refer to the drivers CD for more details.

For Novell users:

- Make sure the netware.drv file is dated October 24, 1994, or later.
- Make sure the NT (no tabs) flag is included in the capture statement.

For Macintosh users:

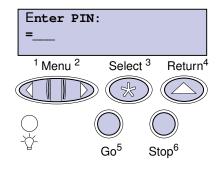
- The printer may need an optional internal print server to allow Macintosh connection.
- Verify that the printer is set up correctly in Chooser.



Problem	Action
I need to get updated printer drivers or utilities.	Refer to the drivers CD that came with your printer which contains printer drivers and utilities.
I need to attach a serial cable to the printer.	If you have installed an optional interface card in your printer, refer to the <i>Setup Guide</i> .



The printer operator panel displays messages describing the current state of the printer and indicates possible printer problems you must resolve. This topic provides a list of all printer messages, explains what they mean, and tells you how to clear the messages.



Click a letter or number at the bottom of the page to locate information about a message beginning with that character.

Α Activating Menu Changes В Busy С Canceling Job Check <device> Connection **Clearing Job** Accounting Stat Close Door or Insert Cartridge D Defragmenting Delete All Jobs Go/Stop? **Deleting Jobs Disabling Menus** Disk Corrupted. Reformat? Disk Recovery E Enabling Menus Enter PIN: = F Flushing Buffer Formatting Disk Formatting Flash G н Held Jobs may be lost.

Infrared <x>

L

Insert Tray <x>

Install <device> or Cancel Job

Invalid Network <x> Code

Invalid Standard Network Code

J

Κ

L Load Manual Load Tray <x> LocalTalk <x>

M Menus Disabled

N Network Card Busy Network <x> Network <x><y> No Jobs Found. Retry? Not Ready

0

P
Parallel <x>
Performing Self Test
Power Saver
Print Jobs on Disk. Go/ Stop?
Printing Directory List
Printing Font List
Printing Job Accounting Stat Printing Menu Settings Prog Engine Code Prog System Code Program Flash Programming Disk

Q

Queuing and Deleting Jobs Queuing Jobs

R

Ready Ready Hex Reattach <device> Res Reduced Resetting the Printer Resetting Maint Cnt Value Restoring Factory Defaults

S

Serial <x>

Т

Toner Low Tray <x> Empty Tray <x> Low Tray <x> Missing

U

USB <x>

w

V

Waiting

X	54 Parallel Error
Υ	54 Parallel Option <x> Error</x>
Z	54 Std Network Software Error
0	54 Std Par ENA Connection Lost
1 2	56 Parallel Port <x> Disabled</x>
2 <xx> Paper Jam</xx>	56 Std Parallel Port Disabled
3	56 Serial Port <x> Disabled</x>
31 Defective Print Cartridge	58 Too Many Disks Installed
32 Unsupported	58 Too Many Flash Options
Print Cartridge	58 Too Many Trays Attached
34 Short Paper	59 Incompatible <device></device>
35 Res Save Off Deficient Memory	6
37 Insufficient	61 Defective Disk
Collation Area	62 Disk Full
37 Insufficient Defrag Memory	63 Unformatted Disk
37 Insufficient Memory	7
38 Memory Full	70–79 <message></message>
39 Complex Page	8
4	80 Scheduled Maintenance
5	81 Engine Code CRC Failure
51 Defective Flash	88 Toner Low
52 Flash Full	9
53 Unformatted Flash	900–999 Service
54 Serial Option <x> Error</x>	<message></message>
54 Network <x> Software Error</x>	
54 Par <x> ENA Connection Lost</x>	

83

Activating Menu Changes

What this message means:

The printer is activating changes made to the printer settings.

What you can do:

Wait for the message to clear.

Busy

What this message means:

The printer is busy receiving, processing, or printing data.

What you can do:

- Wait for the message to clear.
- Press Menu to open the Job Menu and cancel the current job.

See also:

Cancel Job

Canceling Job

What this message means:

The printer is processing a request to cancel the current print job.

What you can do:

Wait for the message to clear.

Check <device> Connection

What this message means:

The specified device is either not fully connected to the printer or is experiencing a hardware failure.

What you can do:

- Reestablish communication by removing the specified device and reattaching it to the printer.
- Press Go to clear the message and continue printing.
- If a hardware failure occurs, turn the printer off and back on. If the error recurs, turn the printer off, remove the specified device, and call for service.

Clearing Job Accounting Stat

What this message means:

The printer is deleting all job statistics stored on the hard disk.

What you can do:

Wait for the message to clear.

Close Door or Insert Cartridge

What this message means:

The upper front door is open or the toner cartridge is not installed.

- Close the upper front door.
- Install the toner cartridge.

Defragmenting

What this message means:

The printer is defragmenting the flash memory to reclaim storage space occupied by deleted resources.

What you can do:

Wait for the message to clear. No button actions are possible while this message is displayed.

WARNING: Do not turn the printer off while this message is displayed.

Delete All Jobs Go/Stop?

What this message means:

The printer is requesting confirmation to delete all held jobs.

What you can do:

- Press Go to continue. The printer deletes all held jobs.
- Press Stop to cancel the operation.

Deleting Jobs

What this message means:

The printer is deleting one or more held jobs.

What you can do:

Wait for the message to clear.

Disabling Menus

What this message means:

The printer is responding to a request to disable the menus.

What you can do:

Wait for the message to clear.

Note: While the menus are disabled, you cannot change the printer settings from the operator panel.

See also:

Disabling operator panel menus

Disk Corrupted. Reformat?

What this message means:

The printer has attempted a disk recovery process and cannot repair the disk. The disk cannot be used unless it is reformatted.

What you can do:

- Press Go. All disk data will be lost when the disk is reformatted.
- Press **Stop** to clear the message without reformatting the disk. **Disk Recovery** may be displayed again and the printer will attempt to recover the disk.

See also:

Disk Recovery

Disk Recovery

What this message means:

The printer is attempting to recover the hard disk after finding errors on it. The disk recovery takes place in five phases. The second line on the display shows the percent complete of the current phase.

Note: Errors can occur if the printer is powered off while writing to the disk.

What you can do:

- Wait for the message to clear. No button actions are possible while this message is displayed.
- To avoid this error in the future, do not turn off the printer unless Ready is displayed.

Enabling Menus

What this message means:

The printer is responding to a request to make the menus available to all users.

What you can do:

Wait for the message to clear, and then press **Menu** to view the menus from the operator panel.

See also:

Disabling operator panel menus

Enter PIN:

=____

What this message means:

The printer is waiting for you to enter your four-digit personal identification number (PIN).

What you can do:

Use the operator panel buttons to enter the PIN you identified in the driver when you sent the confidential job to the printer.

See also:

Confidential jobs

Flushing Buffer

What this message means:

The printer is flushing corrupted print data and discarding the current print job.

What you can do:

Wait for the message to clear.

Formatting Disk

What this message means:

The printer is formatting the hard disk. Since formatting the disk may take longer in some cases, the second line shows the percent complete.

What you can do:

Wait for the message to clear.

WARNING: Do not turn the printer off while this message is displayed.

Formatting Flash

What this message means:

The printer is formatting the flash memory.

What you can do:

Wait for the message to clear.

WARNING: Do not turn the printer off while this message is displayed.

Held Jobs may be lost.

What this message means:

The printer memory is too full to continue processing print jobs.

What you can do:

- Press **Go** to clear the message and continue printing. The printer frees memory by deleting the oldest held job and continues deleting held jobs until there is enough printer memory to process the job.
- To avoid this error in the future:
 - Delete fonts, macros, and other data stored in printer memory.
 - Install more printer memory.
 - Note: The messages 37 Insufficient Memory and Held Jobs may be lost alternate on the display.

Infrared <x>

What this message means:

An infrared interface is the active communication link.

Insert Tray <x>

What this message means:

The specified tray is either missing or not fully inserted.

What you can do:

Insert the specified tray completely.

Install <*device*> or Cancel Job

What this message means:

The printer is requesting that a specified device be installed so it can print a job.

What you can do:

- Turn the printer off, install the specified device, and restart the printer.
- Press Menu to open the Job Menu and cancel the current job.

See also:

Setup Guide

Invalid Network <x> Code

Invalid Standard Network Code

What this message means:

The code in an internal print server is not valid. The printer cannot receive and process jobs until valid code is programmed into the internal print server.

What you can do:

Download valid code to the printer internal print server. No button actions are possible while this message is displayed.

Note: You can download network code while this message is displayed.

Load Manual

What this message means:

A request for a manual feed job has been sent to the printer. The printer is ready for insertion of a single sheet into the manual feed slot.

What you can do:

- Load a sheet of the paper specified on the second line of the display in the multipurpose feeder.
- Press Select or Go to ignore the manual feed request and print on paper already installed in one of the input sources. If the printer finds a tray that has paper of the correct type and size, it feeds paper from that tray. If the printer cannot find a tray with the correct paper type and size, it prints on whatever paper is installed in the default input source.
- Press Menu to open the Job Menu and cancel the current job.

See also:

Loading the multipurpose feeder

Load Tray <x>

What this message means:

The printer is trying to feed paper from a source it detects is empty.

What you can do:

- Load paper of the size and type requested on the second line of the display in the specified tray. The printer automatically clears the message and continues printing the job.
- Press Menu to open the Job Menu and cancel the current job.

LocalTalk <x>

What this message means:

A LocalTalk interface is the active communication link.

Menus Disabled

What this message means:

The printer menus are disabled. You cannot change the printer settings from the operator panel.

What you can do:

You can still open the Job Menu to cancel a job that is printing or to select a confidential job or a held job that you want to print. If you need access to the printer menus, contact your network administrator.

Network Card Busy

What this message means:

An internal print server (also called an internal network adapter or INA) is being reset.

What you can do:

Wait for the message to clear.

Network <x>

What this message means:

A network interface is the active communication link.

Network <x><y>

What this message means:

A network interface is the active communication link, where <x> represents the active communication link and <y> represents the channel.

No Jobs Found. Retry?

What this message means:

The four-digit personal identification number (PIN) you entered is not associated with any confidential print job.

What you can do:

- Press **Go** to enter another PIN.
- Press Stop to clear the PIN entry prompt.

Not Ready

What this message means:

The printer is not ready to receive or process data. Someone pressed **Stop** to take the printer offline.

What you can do:

Press Go to make the printer ready to receive jobs.

Parallel <x>

What this message means:

A parallel interface is the active communication link.

Performing Self Test

What this message means:

The printer is running the series of start-up tests it performs after it is turned on.

What you can do:

Wait for the message to clear.

Power Saver

What this message means:

The printer is ready to receive and process data. It is reducing its electricity consumption while idle. If the printer remains inactive for the period of time specified in the Power Saver menu item, the **Power Saver** message replaces the **Ready** message.

What you can do:

- Send a job to print.
- Press **Go** to quickly warm the printer to normal operating temperature and display the **Ready** message.

Print Jobs on Disk. Go/Stop?

What this message means:

Jobs that were spooled to the hard disk before the printer was last turned off have not yet printed.

What you can do:

- Press Go to print the jobs.
- Press Return or Stop to delete the jobs from the hard disk without printing them.

Printing Directory List

What this message means:

The printer is processing or printing a directory of all files stored in flash memory or on a hard disk.

What you can do:

Wait for the message to clear.

Printing Font List

What this message means:

The printer is processing or printing a list of all available fonts for the specified printer language.

What you can do:

Wait for the message to clear.

Printing Job Accounting Stat

What this message means:

The printer is processing or printing all job accounting statistics stored on the hard disk.

What you can do:

Wait for the message to clear.

Printing Menu Settings

What this message means:

The printer is processing or printing the menu settings page.

What you can do:

Wait for the message to clear.

Prog Engine Code

What this message means:

The printer is programming new code into the flash memory.

What you can do:

Wait for the message to clear.

WARNING: Do not turn the printer off while this message is displayed.

96

Prog System Code

What this message means:

The printer is programming new system code.

What you can do:

Wait for the message to clear and the printer to reset.

WARNING: Do not turn the printer off while this message is displayed.

Program Flash

What this message means:

The printer is storing resources, such as fonts or macros, in flash memory.

What you can do:

Wait for the message to clear.

WARNING: Do not turn the printer off while this message is displayed.

Programming Disk

What this message means:

The printer is storing resources, such as fonts or macros, on the hard disk.

What you can do:

Wait for the message to clear.

WARNING: Do not turn the printer off while this message is displayed.

Queuing and Deleting Jobs

What this message means:

The printer is deleting one or more held jobs and sending one or more jobs to print.

What you can do:

Wait for the message to clear.

97

Queuing Jobs

What this message means:

The printer is sending one or more held jobs to print.

What you can do:

Wait for the message to clear.

Ready

What this message means:

The printer is ready to receive and process print jobs.

What you can do:

Send a job to print.

Ready Hex

What this message means:

The printer is in Hex Trace mode and is ready to receive and process print jobs.

- Send a job to print. All data sent to the printer is printed in hexadecimal and character representation. Control strings are printed, not executed.
- Turn the printer off and then on to exit Hex Trace mode and return to Ready status.
- Reset the printer.

Reattach <device>

What this message means:

The specified device is either not fully connected to the printer or is experiencing a hardware failure.

What you can do:

- Reestablish communication by removing the specified device and reattaching it to the printer.
- Press Go to clear the message and continue printing without using the device.
- If a hardware failure occurs, turn the printer off and back on. If the error recurs, turn the printer off, remove the specified device, and call for service.

Res Reduced

What this message means:

The printer is reducing the resolution of a page in the current job from 600 dots per inch (dpi) to 300 dpi to prevent a **38 Memory Full** error. **Res Reduced** remains on the display while the job prints.

What you can do:

Press Menu to open the Job Menu and cancel the current job.

Resetting the Printer

What this message means:

The printer is resetting to the current default settings. Any active print jobs are canceled.

What you can do:

Wait for the message to clear.

Resetting Maint Cnt Value

What this message means:

The printer is resetting the counter that tracks wear on the fuser.

What you can do:

Wait for the message to clear.

Restoring Factory Defaults

What this message means:

The printer is restoring the factory default printer settings. When factory default settings are restored:

- All downloaded resources (fonts, macros, symbol sets) in the printer memory are deleted.
- All menu settings return to the factory default setting except:
 - The Display Language setting in the Setup Menu.
 - All settings in the Parallel Menu, Serial Menu, Network Menu, Infrared Menu, LocalTalk Menu, and USB Menu.

What you can do:

Wait for the message to clear.

Serial <x>

What this message means:

A serial interface is the active communication link.

Std Bin Full

What this message means:

The standard output bin is full.

What you can do:

Remove the stack of paper in the bin to clear the message.

100

Toner Low

What this message means:

The print cartridge is low on toner.

What you can do:

- To utilize the remaining toner, remove the cartridge by gripping the handles with both hands. With the cartridge arrows pointing downward, shake the print cartridge back and forth. Reinstall the cartridge and then press **Go**.
- Press Go to clear the message and continue printing. You may notice reduced print quality.
- Replace the print cartridge.

Tray <x> Empty

What this message means:

The specified tray is out of paper.

What you can do:

Load paper in the tray to clear the message.

Tray <x> Low

What this message means:

The specified tray is low on paper.

What you can do:

Add paper to the tray to clear the message.

Tray <x> Missing

What this message means:

The specified tray is either missing or not fully inserted into the printer.

What you can do:

Insert the tray completely into the printer.

USB <x>

What this message means:

The printer is processing data through the specified USB port.

Waiting

What this message means:

The printer has received a page of data to print but is waiting for an End of Job command, a Form Feed command, or additional data.

What you can do:

- Press **Go** to print the contents of the buffer.
- Press Menu to open the Job Menu and cancel the current job.

2<xx> Paper Jam

What this message means:

The printer detects a paper jam. Although the location of the paper jam appears on the second line of the display, you must clear paper from the entire paper path.

What you can do:

Clear the paper path.

31 Defective Print Cartridge

What this message means:

A defective print cartridge is installed.

What you can do:

Remove the print cartridge and install a new one.

32 Unsupported Print Cartridge

What this message means:

An unsupported print cartridge is installed.

What you can do:

Remove the print cartridge and install a supported one.

See also:

Replacing the print cartridge

34 Short Paper

What this message means:

The printer has determined that the length of the paper in the source specified on the second line of the display is too short to print the formatted data. For auto-size sensing trays, this error occurs if the paper guides are not in the correct position.

- Press **Go** to clear the message and continue printing. The printer does not automatically reprint the page that prompted the message.
- Make sure the Paper Size setting in the Paper Menu is correct for the size paper you are using. If MP Feeder Size is set to Universal, make sure your paper is large enough for the formatted data.
- Press Menu to open the Job Menu and cancel the current job.

35 Res Save Off Deficient Memory

What this message means:

The printer lacks the memory needed to enable Resource Save. This message usually indicates too much memory is allocated for one or more of the printer link buffers.

What you can do:

- Press Go to disable Resource Save and continue printing.
- To enable Resource Save after you get this message:
 - Make sure the link buffers are set to Auto, and exit the menus to activate the link buffer changes.
 - When **Ready** is displayed, enable Resource Save from the Setup Menu.
- Install additional memory.

37 Insufficient Collation Area

What this message means:

The printer memory (or hard disk, if installed) does not have the free space necessary to collate the print job.

What you can do:

- Press Go to print the portion of the job already stored and begin collating the rest of the job.
- Press Menu to open the Job Menu and cancel the current job.

37 Insufficient Defrag Memory

What this message means:

The printer cannot defragment flash memory, because the printer memory used to store undeleted flash resources is full.

- Delete fonts, macros, and other data in printer memory.
- Install additional printer memory.

37 Insufficient Memory

What this message means:

The printer memory is full and cannot continue processing current print jobs.

What you can do:

- Press **Go** to clear the message and continue the current print job. The printer frees memory by deleting the oldest held job and continues deleting held jobs until there is enough printer memory to process the job.
- To avoid this error in the future:
 - Delete fonts, macros, and other data in printer memory.
 - Install additional printer memory.

Note: The messages 37 Insufficient Memory and Held Jobs may be lost alternate on the display.

38 Memory Full

What this message means:

The printer is processing data, but the memory used to store pages is full.

- Press Go to clear the message and continue printing the job. The job may not print correctly.
- Press Menu to open the Job Menu and cancel the current job.
- To avoid this error in the future:
 - Simplify the print job by reducing the amount of text or graphics on a page and deleting unnecessary downloaded fonts or macros.
 - Install additional printer memory.

39 Complex Page

What this message means:

The page may not print correctly because the print information on the page is too complex.

What you can do:

- Press Go to clear the message and continue printing the job. The job may not print correctly.
- Press Menu to open the Job Menu and cancel the current job.
- To avoid this error in the future:
 - Reduce the complexity of the page by reducing the amount of text or graphics on the page and deleting unnecessary downloaded fonts or macros.
 - Set Page Protect to On in the Setup Menu.
 - Install additional printer memory.

51 Defective Flash

What this message means:

The printer detects defective flash memory.

What you can do:

Press **Go** to clear the message and continue printing. You must install different flash memory before you can download any resources to flash.

52 Flash Full

What this message means:

There is not enough free space in the flash memory to store the data you are trying to download.

- Press **Go** to clear the message and continue printing. Downloaded fonts and macros not previously stored in flash memory are deleted.
- Delete fonts, macros, and other data stored on the flash memory.
- Install flash memory with more storage capacity.

53 Unformatted Flash

What this message means:

The printer detects unformatted flash memory.

What you can do:

- Press **Go** to clear the message and continue printing. You must format the flash memory before you can store any resources on it.
- If the error message remains, the flash memory may be defective and require replacing.

54 Serial Option <x> Error

What this message means:

The printer has detected a serial interface error on a serial port.

What you can do:

- Make sure the serial link is set up correctly and you are using the appropriate cable.
- Press Go to clear the message and continue printing. The job may not print correctly.
- Press Menu to open the Job Menu and reset the printer.

54 Network <x> Software Error

54 Std Network Software Error

What these messages mean:

The printer cannot establish communications with an installed network port.

- Press Go to clear the message and continue printing. The job may not print correctly.
- Program new firmware for the network interface by way of the USB or parallel port.
- Press Menu to open the Job Menu and reset the printer.

54 Par <x> ENA Connection Lost

What this message means:

The printer has lost the connection to an external print server (also called an external network adapter or ENA).

What you can do:

- Make sure the cable connecting the ENA and the printer is securely attached. Turn the printer off and then on to reset the printer.
- Press Go to clear the message. The printer erases any reference to the ENA and then resets.

54 Parallel Error

54 Parallel Option <x> Error

What this message means:

The printer has detected a protocol error on a parallel interface.

What you can do:

- Press Go to clear the message and continue printing. The job may not print correctly.
- Make sure the cable connecting the printer and the computer is securely attached and that the cable is not defective.
- Reset the printer.

56 Parallel Port <x> Disabled

56 Std Parallel Port Disabled

What this message means:

Data has been sent to the printer through a parallel port, but the parallel port is disabled.

- Press **Go** to clear the message. The printer discards any data received through the parallel port.
- Make sure the Parallel Buffer menu item in the Parallel Menu is not set to Disabled.

What this message means:

Data has been sent to the printer through a serial port, but the serial port is disabled.

What you can do:

- Press Go to clear the message. The printer discards any data received through the serial port.
- Make sure the Serial Buffer menu item in the Serial Menu is not set to Disabled.

58 Too Many Disks Installed

What this message means:

Too many hard disks are installed on the printer. The printer only supports one hard disk at a time.

What you can do:

Turn off and unplug the printer. Remove the excess hard disks from the printer. Plug in the printer and turn it on.

58 Too Many Flash Options

What this message means:

Too many flash memory options are installed on the printer.

What you can do:

Turn off and unplug the printer. Remove the excess flash memory. Plug in the printer and turn it on.

58 Too Many Trays Attached

What this message means:

Too many drawers with matching trays are installed on the printer.

What you can do:

Turn off and unplug the printer. Remove the additional drawers. Plug in the printer and turn it on.

59 Incompatible <device>

What this message means:

The printer detects that an incompatible device is installed.

What you can do:

Remove the specified device.

61 Defective

Disk

What this message means:

The printer detects a defective hard disk.

What you can do:

- Press Go to clear the message and continue printing.
- Install a different hard disk before you perform any operations that require one.

62 Disk Full

What this message means:

There is not enough memory on the hard disk to store the data sent to the printer.

- Press **Go** to clear the message and continue processing. Any information not previously stored on the hard disk is deleted.
- Delete fonts, macros, and other data stored on the hard disk.

63 Unformatted Disk

What this message means:

The printer detects an unformatted hard disk.

What you can do:

- Press Go to clear the message and continue printing.
- Format the disk before performing any disk operations. To format the disk, select Format Disk from the Utilities Menu.
- If the error message remains, the hard disk may be defective and require replacing. Install a new hard disk and format it.

70-79 <message>

What these messages mean:

Messages labeled 70–79 identify problems related to the internal print server.

What you can do:

Refer to the drivers CD for more information. Click **View Documentation**, and then click **MarkNet™ Print Servers**.

80 Scheduled Maintenance

What this message means:

The printer requires replacement of routine maintenance items to maintain top performance and avoid print quality and paper feed problems.

What you can do:

Replace the maintenance items and reset the printer maintenance counter, if necessary.

81 Engine Code CRC Failure

What this message means:

Microcode in the engine flash code module has failed a system check.

What you can do:

Press **Go** to clear the message and discard the code. Retransmit the microcode data from the host computer.

88 Toner Low

What this message means:

The print cartridge is low on toner.

What you can do:

- To utilize the remaining toner, remove the cartridge by gripping the handles with both hands. With the cartridge arrows pointing downward, shake the print cartridge back and forth. Reinstall the cartridge and then press **Go**.
- Press Go to clear the message and continue printing. You may notice reduced print quality.
- Replace the print cartridge.

900-999 Service <message>

What these messages mean:

Messages labeled 900-999 relate to printer problems that may require printer service.

What you can do:

Turn the printer off and check all cable connections. Turn the printer back on. If the service message recurs, call for service and report the message number and description of the problem.



Select a menu from the following list for more information. Or, click a letter in the index at the bottom of the page to find a specific menu item that starts with that letter.

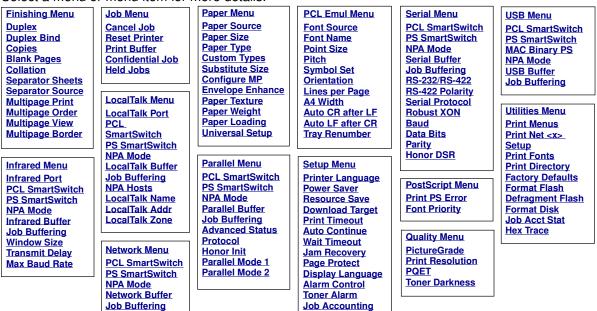
Click here for a one-page overview of all the menus and their menu items.

- Finishing Menu
- Infrared Menu
- Job Menu
- LocalTalk Menu
- Network Menu
- Paper Menu
- Parallel Menu

- PCL Emul Menu
- PostScript Menu
- Quality Menu
- Serial Menu
- Setup Menu
- USB Menu
- Utilities Menu

Select a menu or menu item for more details.

<u>Network <x></u> Setup MAC Binary PS



Α A4 Width **Advanced Status** Alarm Control **Auto Continue** Auto CR after LF Auto LF after CR В Baud **Blank Pages** С Cancel Job Collation **Confidential Job Configure MP** Copies **Custom Types** D Data Bits **Defragment Flash Display Language Download Target** Duplex **Duplex Bind** Ε **Envelope Enhance** F **Factory Defaults Finishing Menu** Font Name

Font Priority Font Source Format Disk Format Flash G н Held Jobs Hex Trace Honor DSR Honor Init Infrared Buffer **Infrared Port** Infrared Menu J Jam Recovery Job Accounting Job Acct Stat Job Buffering Parallel Menu Serial Menu Network Menu Infrared Menu LocalTalk Menu **USB Menu** Job Menu Κ L Lines per Page LocalTalk Addr LocalTalk Buffer

Т

LocalTalk Menu LocalTalk Name LocalTalk Port LocalTalk Zone

Μ

MAC Binary PS **Network Menu USB Menu** Max Baud Rate Multipage Border Multipage Order Multipage Print **Multipage View** Ν **Network Buffer** Network Menu Network <x> Setup **NPA Hosts** NPA Mode Parallel Menu Serial Menu **Network Menu** Infrared Menu LocalTalk Menu **USB Menu** 0 Orientation Ρ Page Protect

Paper Loading Paper Menu Paper Size Paper Source

Paper Texture	PS SmartSwitch
Paper Type	Parallel Menu Serial Menu
Paper Weight	Network Menu
Parallel Buffer	Infrared Menu LocalTalk Menu
Parallel Menu	USB Menu
Parallel Mode 1	Q
Parallel Mode 2	Quality Menu
Parity	R
PCL SmartSwitch	Reset Printer
Parallel Menu Serial Menu	Resource Save
Network Menu	Robust XON
Infrared Menu LocalTalk Menu	
USB Menu	RS-422 Polarity
PCL Emul Menu	RS-232/RS-422
PictureGrade	S
Pitch	Separator Sheets
Point Size	Separator Source
PostScript Menu	Serial Buffer
Power Saver	Serial Menu
PQET	Serial Protocol
Print Buffer	Setup Menu
Print Directory	Substitute Size
Print Fonts	Symbol Set
Print Menus	т
Print Net <x> Setup</x>	Toner Darkness
Print PS Error	Toner Alarm
Print Resolution	Transmit Delay
Print Timeout	Tray Renumber
Printer Language	U
Protocol	Universal Setup
	USB Buffer

USB Menu Utilities Menu V W Wait Timeout Window Size X Y



Use the Finishing Menu to define how the printer delivers the printed output. Select a menu item for more details:

- Blank Pages
- Collation
- Copies
- Duplex
- Duplex Bind
- Multipage Border

- Multipage Order
- Multipage Print
- Multipage View
- Separator Sheets
- Separator Source

Note: Values marked by an asterisk are the factory default settings.

Blank Pages

Purpose:

To specify whether to include application-generated blank pages as part of your printed output.

Values:

Do Not Print*	Does not print application-generated blank pages as part of your job.
Print	Prints application-generated blank pages as part of your job.

Collation

Purpose:

To keep the pages of a print job stacked in sequence, particularly when printing multiple copies of the job.

Values:

- Off* Prints each page of a job the number of times specified by the Copies menu item. For example, if you set Copies to 2 and send three pages to print, the printer prints page 1, page 1, page 2, page 2, page 3, page 3.
- **On** Prints entire job the number of times specified by the Copies menu item. For example, if you set Copies to 2 and send three pages to print, the printer prints page 1, page 2, page 3, page 1, page 2, page 3.

Copies

Purpose:

To set the number of copies you want for the printer default value. (Set the number of copies required for a specific job from the printer driver. Values selected from the printer driver always override values selected from the operator panel.)

Values:

1...999 (1*)

See also:

Collation

Duplex

Purpose:

To set duplexing as the default for all print jobs. (Select Duplex from the printer driver to duplex only specific jobs.)

Values:

- Off* Prints on one side of the paper.
- On Prints on both sides of the paper.

See also:

Duplex Bind

Duplex Bind

Purpose:

To define the way duplexed pages would be bound, and how the printing on the back of the sheet (even-numbered pages) is oriented in relation to the printing on the front (odd-numbered pages).

Values:

Long Edge*	Assumes binding along the long end of the page (left edge for portrait orientation and top edge for landscape orientation).
Short Edge	Assumes binding along the short edge of the page (top edge for portrait orientation and left edge for landscape orientation).

See also:

Duplex

Multipage Border

Purpose:

To print a border around each page image when using Multipage Print.

Values:

None*	Does not print a border around each page image.
Solid	Prints a solid line border around each page image.

See also:

Multipage Print

Multipage Order

Purpose:

To determine the positioning of multiple page images when using Multipage Print. The positioning depends on the number of images and whether the images are portrait or landscape in orientation.

Values:

Horizontal* Vertical Rev Horizontal Rev Vertical

See also:

Multipage Print

Multipage Print

Purpose:

To print multiple page images on one side of a sheet of paper. Also called *N-Up* or *Paper Saver*.

Values:

Off*	Prints 1 page image per side.	6 Up	Prints 6 page images per side.
2 Up	Prints 2 page images per side.	9 Up	Prints 9 page images per side.
3 Up	Prints 3 page images per side.	12 Up	Prints 12 page images per side.
4 Up	Prints 4 page images per side.	16 Up	Prints 16 page images per side.

See also:

Multipage Border; Multipage Order; Multipage View

Multipage View

Purpose:

To determine the orientation of a multipage sheet.

Values:

Auto*	Lets the printer choose between portrait and landscape orientation.
Long Edge	Sets the long edge of the paper as the top of the page (landscape).
Short Edge	Sets the short edge of the paper as the top of the page (portrait).

See also:

Multipage Print

Separator Sheets

Purpose:

To insert blank separator sheets between jobs, between multiple copies of a job, or between each page of a job.

Values:

None*	Does not insert separator sheets.
Between Copies	Inserts a blank sheet between each copy of a job. If Collation is Off, a blank page is inserted between each set of printed pages (all page 1's, all page 2's, and so on). If Collation is On, a blank page is inserted between each collated copy of the job.
Between Jobs	Inserts a blank sheet between jobs.
Between Pages	Inserts a blank sheet between each page of a job. This is useful if you are printing transparencies or want to insert blank pages in a document for notes.

See also:

Separator Source; Collation

Separator Source

Purpose:

To specify the paper source that holds separator sheets.

Values:

Tray <x> (Tray 1*)</x>	Selects separator sheets from the specified tray.
MP Feeder	Selects separator sheets from the multipurpose feeder. (You must also set Configure MP to Cassette.)
Env Feeder	Inserts envelopes as separator sheets.

See also:

Separator Sheets; Configure MP



Use the Infrared Menu to change printer settings affecting jobs sent to the printer through an infrared port.

Select a menu item for more details:

- Infrared Buffer
- Infrared Port
- Job Buffering
- Max Baud Rate
- NPA Mode

- PCL SmartSwitch
- PS SmartSwitch
- Transmit Delay
- Window Size

Note: Values marked by an asterisk are the factory default settings.

Infrared Buffer

Purpose:

To configure the size of the infrared input buffer.

Values:

Disabled	Disables the infrared buffer.
Auto*	Printer automatically calculates the Infrared Buffer size (recommended setting).
5K to maximum size allowed	User specifies the Infrared Buffer size. The maximum size setting depends on the amount of memory in your printer, the size of the other link buffers, and whether Resource Save is set to On or Off. To maximize the range for the Infrared Buffer size, disable or reduce the size of the parallel, serial, network, LocalTalk, and USB buffers.

Note: Changing the Infrared Buffer menu item automatically resets the printer.

See also:

Resource Save

122

Infrared Port

Purpose:

To activate the infrared port.

Values:

Disabled*	Disables the infrared port and all other menu items in the Infrared Menu.
IR Option <x></x>	Activates the specified infrared port.

Job Buffering

Purpose:

To temporarily store jobs on the printer hard disk before printing.

Values:

Off*	Does not buffer print jobs to the hard disk.
On	Buffers print jobs to the hard disk.
Auto	Buffers print jobs only if the printer is busy processing data from another input port.

Note: Changing the Job Buffering menu item automatically resets the printer.

Max Baud Rate

Purpose:

To specify the rate at which data can be received through the infrared port.

Values:

2400	115200
9600	576000
19200	1152000*
38400	4000000
57600	

The maximum baud possible for both the printer and the infrared adapter is automatically set during a power on reset. However, if your printer is situated in a bright or highly reflective environment, you may experience intermittent communication problems. If you do, select a lower baud for the infrared connection.

NPA Mode

Purpose:

To specify whether the printer performs the special processing required for bidirectional communication, following the conventions defined in the Network Printing Alliance (NPA) Protocol.

Values:

On	Printer performs NPA processing. If data is not in NPA format, it is rejected as bad data.
Off	Printer does not perform NPA processing.
Auto*	Printer examines the data to determine the format and then processes it appropriately.

Note: Changing this menu item automatically resets the printer.

PCL SmartSwitch

Purpose:

To configure the printer so it automatically switches to PCL emulation when a print job received through the infrared port requires it, regardless of the default printer language.

Values:

- **On*** Printer examines the data on the infrared interface and selects PCL emulation if the data indicates that is the required printer language.
- Off Printer does not examine the incoming data. The printer uses PostScript emulation to process the job if PS SmartSwitch is On, or uses the default printer language specified in the Setup Menu if PS SmartSwitch is Off.

See also:

PS SmartSwitch; Printer Language

PS SmartSwitch

Purpose:

To configure the printer so it automatically switches to PostScript emulation when a print job received through the infrared port requires it, regardless of the default printer language.

Values:

- **On*** Printer examines data on the infrared interface and selects PostScript emulation if the data indicates that is the required printer language.
- Off Printer does not examine the incoming data. The printer uses PCL emulation to process the job if PCL SmartSwitch is On, or uses the default printer language specified in the Setup Menu if PCL SmartSwitch is Off.

See also:

PCL SmartSwitch; Printer Language

Transmit Delay

Purpose:

To define the amount of time, in seconds, the printer must wait before transmitting meaningful infrared data to the host computer, as well as the amount of time the printer requests that the host computer wait before transmitting infrared data.

Values:

Auto*	Printer sets the Transmit Delay value during a power-on reset to maximize link performance (recommended).
None	No delay is imposed by the printer. However, not all host computers can communicate without some transmission delays.
115	User selects a Transmit Delay value between 1 and 15 seconds. If you have trouble printing using the infrared port, selecting a high Transmit Delay value, such as 15, may resolve the problem.

Window Size

Purpose:

To specify the maximum number of infrared frames the printer can receive before sending an acknowledgment to the host computer.

Values:

- **Auto*** Printer sets the Window Size value during a power-on reset to maximize link performance (recommended).
- 1 User sets the Window Size to one frame (1). If you have trouble printing using the infrared port, changing the Window Size menu item to 1 may resolve the problem.



The Job Menu is only available when the printer is busy processing or printing a job, when a printer message is displayed, or when the printer is in Hex Trace mode. Press **Menu** to open the Job Menu.

Select a menu item for more details:

- Cancel Job
- Confidential Job
- Held Jobs
- Print Buffer
- Reset Printer

Cancel Job

Purpose:

To cancel the current print job.

Note: Cancel Job is only displayed if the printer is processing a job or has a job in printer memory.

Confidential Job

Purpose:

To print confidential jobs stored in printer memory. (When the confidential job prints, it is automatically deleted from printer memory.)

- **1** Select the user name associated with your confidential job.
- 2 Enter the Personal Identification Number (PIN) associated with your Confidential Job:

	Enter PIN	Use the operator panel buttons to enter the PIN associated with your confidential job.
3	Select a value:	
	Print All Jobs	Prints all jobs associated with your user name and PIN.
	Print A Job	Prints the specified confidential job. Press Menu to scroll through the list of confidential jobs associated with your user name and PIN. Press Select to print a specific job.
	Delete All Jobs	Deletes all jobs associated with your user name and PIN.
	Delete A Job	Deletes the specified confidential job. Press Menu to scroll through the list of confidential jobs associated with your user name and PIN. Press Select to delete a specific job.
	Copies	Determines the number of copies printed for each confidential job. Press Menu to scroll through the list of confidential jobs associated with your user name and PIN. Press Select to specify the job you want to print. Press Menu to increase or decrease the number of copies, and then press Select .

See also: Confidential jobs

Held Jobs

Purpose:

To print Reserve Print, Repeat Print, or Verify Print jobs stored in printer memory.

Select the user name associated with your confidential job.

Values:

Print All Jobs Prints all held jobs associated with your user name.	
Print A Job	Prints the specified held job. Press Menu to scroll through the list of held jobs. Press Select to print the specific job.
Delete All Jobs	Deletes all held jobs associated with your user name.
Delete A Job	Deletes the designated held job. Press Menu to scroll through the list of held jobs. Press Select to delete the job.
Copies	Determines the number of copies for each held job. Press Menu to scroll through the list of held jobs. Press Select to specify the job you want to print. Press Menu to increase or decrease the number of copies, and then press Select .

Print Buffer

Purpose:

To print any data stored in the print buffer.

Note: Print Buffer is only available when you enter the Job Menu while **Waiting** is displayed. The Waiting state occurs if an incomplete job is sent to the printer or an ASCII job, such as a print screen command, is printing.

Reset Printer

Purpose:

To reset the printer to the user default value for each menu item, delete all downloaded resources (fonts, macros, and symbol sets) stored in printer memory (RAM), and delete all data in the interface link buffer.

Note: Before selecting Reset Printer, exit the software application you are using.



Use the LocalTalk Menu to change printer settings affecting jobs sent to the printer through a LocalTalk port.

Select a menu item for more details:

- Job Buffering
- LocalTalk Addr
- LocalTalk Buffer
- LocalTalk Name
- LocalTalk Port

- LocalTalk Zone
- NPA Hosts
- NPA Mode
- PCL SmartSwitch
- PS SmartSwitch

Note: Values marked by an asterisk are the factory default settings.

Job Buffering

Purpose:

To temporarily store jobs on the printer hard disk before printing.

Values:

Off* Does not buffer the print job to the hard disk.
On Buffers print jobs to the hard disk.
Auto Buffers print jobs only if the printer is busy processing data from another input port.

Note: Changing the Job Buffering menu item automatically resets the printer.

LocalTalk Addr

Purpose:

To identify the LocalTalk Node number assigned to the printer. This menu item cannot be modified through the operator panel.

LocalTalk Buffer

Purpose:

To configure the size of the LocalTalk input buffer.

Values:

Disabled	Disables the LocalTalk port.
Auto* Printer automatically calculates LocalTalk Buffer size (recommended).	
6K to maximum size allowed	User specifies the LocalTalk Buffer size. The maximum size depends on the amount of memory in your printer, the size of the other link buffers, and whether Resource Save is set to On or Off. To maximize the range for the LocalTalk Buffer size, disable or reduce the size of the parallel, serial, network, infrared, and USB buffers.

Note: Changing the LocalTalk Buffer menu item automatically resets the printer.

See also:

Resource Save

LocalTalk Name

Purpose:

To identify the printer model name stored in printer memory. This menu item cannot be modified through the operator panel.

LocalTalk Port

Purpose:

To activate the LocalTalk port.

Values:

Disabled*	Disables the LocalTalk port and all other menu items in the LocalTalk Menu.
LTalk Option <x></x>	Activates the specified LocalTalk port.

LocalTalk Zone

Purpose:

To identify the LocalTalk Zone provided by the LocalTalk network. This menu item cannot be modified through the operator panel.

NPA Hosts

Purpose:

To specify the maximum number of NPA hosts that can register for NPA alerts.

Values:

1...10 (2*)

Note: Changing this menu item automatically resets the printer.

NPA Mode

Purpose:

To specify whether the printer performs the special processing required for bidirectional communication, following the conventions defined in the Network Printing Alliance (NPA) Protocol.

Values:

On	Printer performs NPA processing. If data is not in NPA format, it is rejected as bad data.	
Off	Printer does not perform NPA processing.	
Auto*	Printer examines the data to determine the format and then processes it appropriately.	

Note: Changing this menu item automatically resets the printer.

PCL SmartSwitch

Purpose:

To configure the printer so it automatically switches to PCL emulation when a print job received through the LocalTalk port requires it, regardless of the default printer language.

Values:

- **On*** Printer examines data on the LocalTalk interface and selects PCL emulation if the data indicates that is the required printer language.
- **Off** Printer does not examine the incoming data. The printer uses PostScript emulation to process the job if PS SmartSwitch is On, or uses the default printer language specified in the Setup Menu if PS SmartSwitch is Off.

See also:

PS SmartSwitch; Printer Language

PS SmartSwitch

Purpose:

To configure the printer so it automatically switches to PostScript emulation when a print job received through the LocalTalk port requires it, regardless of the default printer language.

Values:

- **On**^{*} Printer examines data on the LocalTalk interface and selects PostScript emulation if the data indicates that is the required printer language.
- Off Printer does not examine the incoming data. The printer uses PCL emulation to process the job if PCL SmartSwitch is On, or uses the default printer language specified in the Setup Menu if PCL SmartSwitch is Off.

See also:

PCL SmartSwitch; Printer Language



Use the Network Menu to change printer settings affecting jobs sent to the printer through a network port (either Standard Network or Network Opt $\langle x \rangle$).

Select a menu item for more details:

- Job Buffering
- MAC Binary PS
- Network Buffer
- Network <x> Setup
- NPA Mode
- PCL SmartSwitch
- PS SmartSwitch

Note: Values marked by an asterisk are the factory default settings.

Job Buffering

Purpose:

To temporarily store jobs on the printer hard disk before printing.

Values:

- **Off*** Does not buffer jobs to the hard disk.
- **On** Buffers print jobs to the hard disk.
- Auto Buffers print jobs only if the printer is busy processing data from another input port.

Note: Changing the Job Buffering menu item automatically resets the printer.

MAC Binary PS

Purpose:

To configure the printer to process Macintosh binary PostScript print jobs.

Values:

On	Printer processes raw binary PostScript print jobs from computers using the Macintosh operating system.
	Note: This setting often causes Windows print jobs to fail.
Off	Printer filters PostScript print jobs using standard protocol.
Auto*	Printer processes print jobs from computers using either Windows or Macintosh operating systems.

Network Buffer

Purpose:

To configure the size of the network input buffer.

Values:

Auto*	Printer automatically calculates the Network Buffer size (recommended setting).
3K to maximum size allowed	User specifies the Network Buffer size. The maximum size depends on the amount of memory in your printer, the size of the other link buffers, and whether Resource Save is set to On or Off. To maximize the range for the Network Buffer size, disable or reduce the size of the parallel, serial, infrared, LocalTalk, and USB buffers.

Note: Changing the Network Buffer menu item automatically resets the printer.

See also:

Resource Save

Network <x> Setup

Purpose:

To configure an internal print server.

Values:

Values for this menu item are supplied by the specific print server. Select the menu item to see the available values.

Note: Refer to the documentation on the drivers CD for more information.

135

NPA Mode

Purpose:

To specify whether the printer performs the special processing required for bidirectional communication, following the conventions defined in the Network Printing Alliance (NPA) Protocol.

Values:

On	Printer performs NPA processing. If data is not in NPA format, it is rejected as bad data.
Off	Printer does not perform NPA processing.
Auto*	Printer examines the data to determine the format and then processes it appropriately.

Note: Changing this menu item automatically resets the printer.

PCL SmartSwitch

Purpose:

To configure the printer so it automatically switches to PCL emulation when a print job received through the network port requires it, regardless of the default printer language.

Values:

- **On*** Printer examines data on the network interface and selects PCL emulation if the data indicates that is the required printer language.
- Off Printer does not examine the incoming data. The printer uses PostScript emulation to process the job if PS SmartSwitch is On, or uses the default printer language specified in the Setup Menu if PS SmartSwitch is Off.

See also:

PS SmartSwitch; Printer Language

PS SmartSwitch

Purpose:

To configure the printer so it automatically switches to PostScript emulation when a print job received through the network port requires it, regardless of the default printer language.

Values:

- **On**^{*} Printer examines data on the network interface connection and selects PostScript emulation if the data indicates that is the required printer language.
- Off Printer does not examine the incoming data. The printer uses PCL emulation to process the job if PCL SmartSwitch is On, or uses the default printer language specified in the Setup Menu if PCL SmartSwitch is Off.

See also:

PCL SmartSwitch; Printer Language



Use the Paper Menu to define the paper loaded in each paper tray and the default paper source. Select a menu item for more details:

- Configure MP •
- Custom Types
- Envelope Enhance
 Paper Weight
- Paper Loading •
- Paper Size •
- Paper Source •

- Paper Texture
- Paper Type
- Substitute Size
 - Universal Setup

Note: Values marked by an asterisk are the factory default settings.

Configure MP

Purpose:

To determine when the printer selects paper loaded in the multipurpose feeder.

Values:

Cassette* Printer treats the multipurpose feeder like any other paper tray. If a print jol a paper size or type that is only loaded in the multipurpose feeder, the print paper from the multipurpose feeder for the job.	
Manual	Printer treats the multipurpose feeder like a manual feed tray, and displays Load Manual when you need to insert a single sheet of paper in the feeder.
First	Printer pulls paper from the multipurpose feeder until it is empty, regardless of the paper source or paper size requested for the job.

Custom Types

Purpose:

To specify the kind of paper associated with each of the Custom Types available in the Paper Type menu item.

Values (for Custom Type <x>, where <x> represents 1 through 6):

Paper*	Cotton Paper
Card Stock	Labels
Transparency	Envelope

Note: If a user-defined name is available, it is displayed instead of Custom Type <x>. The user-defined name is truncated to 14 characters. If two or more custom types share the same name, the name only appears once in the Custom Types value list.

Envelope Enhance

Purpose:

To ensure high quality printed envelopes and minimize envelope wrinkling.

Values:

- **Off** Prints envelopes as any other printed material.
- **On*** Modifies the printing process to prevent wrinkling as envelopes move through the fuser.

If Envelope Enhance is On, you may hear a tapping sound as the envelopes print. We recommend you leave Envelope Enhance set to On unless the tapping sound is too loud for your work area. To eliminate this sound, select Off. Print a few envelopes. If the quality of print is acceptable, leave Envelope Enhance set to Off. If envelopes crease or wrinkle, select On.

Paper Loading

Purpose:

To properly handle preprinted paper loaded in a tray, whether the job is a duplexed job or a singlesided job.

Values:

1 Select a paper type:

Card Stock Load	Colored Loading	Ltrhead Loading	Bond Loading
Labels Loading	Custom <x> Loading</x>	Preprint Loading	

2 Select a value:

Duplex	Notifies the printer that the specified paper type is loaded properly for duplex printing. If the printer receives a single-sided job using that paper type, the printer inserts blank pages as necessary to print the job properly on preprinted forms. This setting may slow single-sided printing.
Off*	Printer assumes preprinted material is loaded for single-sided printing. Duplexed jobs may not print properly.
	If a user-defined name is available, it is displayed instead of Custom <x> Loading. The name is truncated to 14 characters.</x>

See also:

Loading print material

Paper Size

Purpose:

To identify the default paper size for each paper source. For trays with automatic size sensing, only the value detected by the hardware is displayed.

Values:

1 Select a paper source:

Tray <x> Size</x>	Env Feeder Size	MP Feeder Size
Manual Pap Size	Manual Env Size	

2 Select a value (*denotes country-specific values):

Letter*	A4*	B4	9 Envelope	C5 Envelope	Folio
Legal	A5	JIS B5	10 Envelope*	7 3/4 Envelope	Statement
Executive			DL Envelope*	Other Envelope	
			B5 Envelope		
Universal	Select Universal when you load paper that doesn't match any of the other available				

sizes. You can then set the actual page size from your application software.

Paper Source

Purpose:

To identify the default paper source.

Values:

Tray <x> (Tray 1*) MP Feeder Env Feeder Manual Paper Manual Env

If you loaded the same size and type of paper in two paper sources (and the Paper Size and Paper Type menu items are correctly set), the trays are automatically linked. When one paper source is empty, paper automatically feeds from the next linked source.

Paper Texture

Purpose:

To identify the texture of the paper loaded in a specific source and to ensure that characters print clearly.

Values:

1 Select a paper type:

Plain Texture	Preprint Texture	Labels Texture	Ltrhead Texture
Card Stock Text	Colored Texture	Bond Texture	
Trnsprncy Text	Custom <x> Texture</x>	Envelope Texture	

2 Select a value:

Smooth
Normal*
Rough

Note: The default for Bond Texture is Rough instead of Normal. If a user-defined name is available for a custom Type, then the name is displayed instead of Custom <x> Texture. The name is truncated to 14 characters.

Use Paper Texture in connection with the Paper Type and Paper Weight menu items. You may need to change those menu items to optimize print quality for your specific paper.

See also:

Paper Type; Paper Weight

Paper Type

Purpose:

To identify the type of paper installed in each paper source.

Values:

1 Select a paper source:

Tray <x> Type</x>	Env Feeder Type	MP Feeder Type
Manual Pap Type	Manual Env Type	

2 Select a value:

Plain Paper	Labels	Preprinted	Envelope
Card Stock	Bond	Colored Paper	Preprinted
Transparency	Letterhead	Custom Type <x></x>	Colored Paper

The Paper Type default for each envelope source is Envelope. The Paper Type default for each paper tray is as follows:

Tray 1–Plain Paper	Tray 4–Custom Type 4
Tray 2–Custom Type 2	Tray 5–Custom Type 5
Tray 3–Custom Type 3	Manual Pap Type–Plain Paper

Note: If a user-defined name is available, it is displayed instead of Custom Type <x>. The user-defined name is truncated to 14 characters. If two or more custom types share the same name, the name only appears once in the Paper Type value list.

Use this menu item to:

- Optimize print quality for the specified paper.
- Select paper sources through your software application by selecting type and size.
- Automatically link paper sources. Any sources containing the same type and size of paper are automatically linked by the printer, if you have set the Paper Size and the Paper Type to the correct values.

See also:

Custom Types

Paper Weight

Purpose:

To identify the relative weight of the paper loaded in a specific source and ensure that the toner adheres properly to the printed page.

Values:

1 Select a paper type:

Plain Weight	Preprint Weight	Bond Weight	Labels Weight
Cardstock Weight	Color Weight	Envelope Weight	Ltrhead Weight
Trnsprncy Weight	Custom <x> Weight</x>		

2 Select a value:

Light Normal* Heavy

> **Note:** If a user-defined name is available, it is displayed instead of Custom <x> Weight. The name is truncated to 14 characters.

Substitute Size

Purpose:

To have the printer substitute the specified paper size if the requested size is not loaded.

Off	Printer prompts the user to load the requested paper size.
Letter/A4	Prints A4 size jobs on letter size paper if only letter size paper is loaded, and prints letter size jobs on A4 size paper if only A4 size paper is loaded.
Statement/A5	Prints A5 size jobs on statement size paper if only statement size paper is loaded, and prints statement size jobs on A5 paper if only A5 paper is loaded.
All Listed*	Substitutes Letter/A4.

Universal Setup

Purpose:

To determine the default size when the Paper Size setting for a tray or feeder is Universal.

Values:

First select a unit of measure (* denotes a country-specific factory default value):

Inches* Millimeters*

Then select the values:

Portrait Width	3.00–14.17 in.	76–360 mm
	(8.50 in.*)	(216 mm*)
Portrait Height	3.00–14.17 in.	76–360 mm
	(14.17 in.*)	(360 mm*)
Feed Direction	Short Edge*	
	Long Edge	

See also:

Print material specifications



Use the PCL Emul Menu to change printer settings that only affect jobs using the PCL emulation printer language.

Select a menu item for more details:

- A4 Width
- Auto CR after LF
- Auto LF after CR
- Font Name
- Font Source
- Lines per Page

- Orientation
- Pitch
- Point Size
- Symbol Set
- Tray Renumber

Note: Values marked by an asterisk are the factory default settings.

A4 Width

Purpose:

To select the width of the logical page for A4 size paper.

198 mm*	Makes the logical page compatible with the Hewlett-Packard LaserJet 5 Printer.
203 mm	Makes the logical page wide enough to print eighty 10-pitch characters.

Auto CR after LF

Purpose:

To specify whether the printer automatically performs a carriage return after a line feed control command.

Values:

- Off* Printer does not perform a carriage return after a line feed control command.
- **On** Printer performs a carriage return after a line feed control command.

Auto LF after CR

Purpose:

To specify whether the printer automatically performs a line feed after a carriage return control command.

Values:

	Off*	Printer does not perform a line feed after a carriage return control command.
--	------	---

On Printer performs a line feed after a carriage return control command.

Font Name

Purpose:

To choose a specific font from the specified font source.

Values:

R0 Courier 10*

The font name and font ID for all fonts in the selected font source are displayed. The font source abbreviation is R for resident, F for flash, K for disk, and D for download.

See also:

Font Source

147

Font Source

Purpose:

To determine the set of fonts displayed in the Font Name menu item.

Values:

Resident*	Displays all fonts resident in printer RAM when the printer ships from the factory.
Download	Displays all fonts downloaded to printer RAM.
Flash	Displays all fonts stored in flash memory.
Disk	Displays all fonts stored on the printer's hard disk.
All	Displays all fonts available to the printer from all sources.

See also:

Font Name

Lines per Page

Purpose:

To determine the number of lines that print on each page.

Values:

1...25560* (country-specific)64* (country-specific)

The printer sets the amount of space between each line (vertical line spacing) based on the Lines per Page, Paper Size, and Orientation menu items. Select the correct Paper Size and Orientation before changing Lines per Page.

See also:

Orientation; Paper Size

Orientation

Purpose:

To determine how text and graphics are oriented on the page.

Values:

Portrait*	Prints text and graphics parallel to the short edge of the paper.
Landscape	Prints text and graphics parallel to the long edge of the paper.

Pitch

Purpose:

To specify the font pitch for scalable monospaced fonts.

Values:

0.08...100 (in increments of 0.01 cpi) 10*

Pitch refers to the number of fixed-space characters in a horizontal inch of type. You can select a pitch from 0.08 to 100 characters per inch (cpi) in increments of 0.01 cpi. For nonscalable monospaced fonts, the pitch is displayed, but cannot be changed.

Note: Pitch is only displayed for fixed, or monospaced, fonts.

Point Size

Purpose:

To change the point size for scalable typographic fonts.

Values:

1...1008 (in increments of 0.25 points)

12*

Point size refers to the height of the characters in the font. One point equals approximately 1/72 of an inch. You can select point sizes from 1 to 1008 in increments of 0.25 points.

Note: Point Size is only displayed for typographic fonts.

Symbol Set

Purpose:

To choose a symbol set for a specified font name.

Values:

10U PC-8* (country-specific) 12U PC-850* (country-specific)

A symbol set is a set of alphabetic and numeric characters, punctuation, and special symbols used when printing with a selected font. Symbol sets support the different requirements for languages or specific applications, such as math symbols for scientific text. Only the symbol sets supported for the selected font name are displayed.

See also:

Font Name

Tray Renumber

Purpose:

To configure your printer to work with printer drivers or applications that use different source assignments for the paper trays.

First select a paper source:

Assign Tray <x></x>	Assign Env Feeder	Assign Man Env
Assign MP Feeder	Assign Man Paper	

Then select a value:

Off*	Printer uses factory default paper source assignments.
0199	Select a numeric value to assign a custom value to a paper source.
None	Paper source ignores the Select Paper Feed command.

Other Tray Renumber selections:

View Factory Def	Press Menu to display the factory default value assigned to each paper source.
Restore Defaults	Select Yes to return all tray assignments to factory default values.



Use the Parallel Menu to change printer settings affecting jobs sent to the printer through a parallel port (either Std Parallel or Parallel Opt $\langle x \rangle$).

Select a menu item for more details:

- Advanced Status
- Honor Init
- Job Buffering
- NPA Mode
- Parallel Buffer

- Parallel Mode 1
- Parallel Mode 2
- PCL SmartSwitch
- PS SmartSwitch
- Protocol

Note: Values marked by an asterisk are the factory default settings.

Advanced Status

Purpose:

To enable bidirectional communication through the parallel port.

Values:

OffDisables parallel port negotiation.On*Enables bidirectional communication through the parallel interface.

Honor Init

Purpose:

To determine whether the printer honors hardware initialization requests from the computer. The computer requests initialization by activating the INIT signal on the parallel interface. Many personal computers activate the INIT signal each time the computer is turned on and off.

Values:

- **Off*** Printer does not honor hardware initialization requests from the computer.
- **On** Printer honors hardware initialization requests from the computer.

Job Buffering

Purpose:

To temporarily store jobs on the printer hard disk before printing.

Values:

Off*	Does not buffer print jobs to the hard disk.	
On	Buffers print jobs to the hard disk.	
Auto	Buffers print jobs only if the printer is busy processing data from another input port.	

Note: Changing the Job Buffering menu item automatically resets the printer.

NPA Mode

Purpose:

To specify whether the printer performs the special processing required for bidirectional communication, following the conventions defined in the Network Printing Alliance (NPA) Protocol.

Values:

On	Printer performs NPA processing. If data is not in NPA format, it is rejected as bad data.
04	

- Off Printer does not perform NPA processing.
- Auto* Printer examines data and determines the format and then processes it appropriately.

Note: Changing this menu item automatically resets the printer.

Parallel Buffer

Purpose:

To configure the size of the parallel input buffer.

Values:

Disabled	Disables the parallel port.
Auto*	Printer automatically calculates the Parallel Buffer size (recommended setting).
3K to maximum size allowed	User specifies the Parallel Buffer size. The maximum size depends on the amount of memory in your printer, the size of the other link buffers, and whether Resource Save is set to On or Off. To maximize the range for the Parallel Buffer size, disable or reduce the size of the serial, infrared, LocalTalk, and USB buffers.

Note: Changing the Parallel Buffer menu item automatically resets the printer.

See also:

Resource Save

Parallel Mode 1

Purpose:

To control the pull-up resistors on the parallel port signals. This menu item is useful for personal computers that have open collector outputs on the parallel port signals.

Values:

OnDisables the resistors.Off*Enables the resistors.

Parallel Mode 2

Purpose:

To determine whether the parallel port data is sampled on the leading or trailing edge of strobe.

- **On**^{*} Samples parallel port data on the leading edge of strobe.
- Off Samples parallel port data on the trailing edge of strobe.

PCL SmartSwitch

Purpose:

To configure the printer so it automatically switches to PCL emulation when a print job received through the parallel port requires it, regardless of the default printer language.

Values:

- **On*** Printer examines data on the parallel interface and selects PCL emulation if the data indicates that is the required printer language.
- Off Printer does not examine the incoming data. The printer uses PostScript emulation to process the job if PS SmartSwitch is On, or uses the default printer language specified in the Setup Menu if PS SmartSwitch is Off.

See also:

Printer Language; PS SmartSwitch

PS SmartSwitch

Purpose:

To configure the printer so it automatically switches to PostScript emulation when a print job received through the parallel port requires it, regardless of the default printer language.

Values:

- **On*** Printer examines data on the parallel interface and selects PostScript emulation if the data indicates that is the required printer language.
- Off Printer does not examine the incoming data. The printer uses PCL emulation to process the job if PCL SmartSwitch is On, or uses the default printer language specified in the Setup Menu if PCL SmartSwitch is Off.

See also:

PCL SmartSwitch; Printer Language

Protocol

Purpose:

To specify the parallel interface protocol.

Standard	May resolve some parallel interface problems.
Fastbytes*	Provides compatibility with most existing parallel interface implementations (recommended setting).



Use the PostScript Menu to change printer settings that only affect jobs using the PostScript emulation printer language.

Select a menu item for more details:

- Font Priority •
- Print PS Error •

Note: Values marked by an asterisk are the factory default settings.

Font Priority

Purpose:

To establish the font search order.

Values:

Resident*	Printer searches printer memory for the requested font before searching flash memory or hard disk.	
Flash/Disk	Printer searches the hard disk and flash memory for the requested font before searching printer memory.	

Note: Font Priority is only displayed when a formatted flash or hard disk is installed and is neither defective nor Read/Write or Write protected.

Print PS Error

Purpose:

To print a page defining the PostScript emulation error when an error occurs.

Values:

Off*	Discards the print job without printing an error message.
On	Prints an error message before it discards the job.

Prints an error message before it discards the job.



Use the Quality Menu to change printer settings affecting the quality of printed characters and images. Select a menu item for more details:

- PictureGrade™
- PQET
- Print Resolution
- Toner Darkness

Note: Values marked by an asterisk are the factory default settings.

PictureGrade

Purpose:

To improve the quality of grayscale printing at 300 and 600 dots per inch (dpi) in PostScript emulation.

Values:

- **On*** Uses modified screening parameters to improve print quality of graphics.
- Off Uses standard screening parameters.

PQET

Purpose:

To improve the quality of text and make characters appear smoother when Print Resolution is set to 300 dots per inch (dpi).

Off	Does not alter quality of text characters printed at 300 dpi.
On*	Smooths characters with jagged or uneven edges.

Print Resolution

Purpose:

To define the number of dots printed per inch (dpi). The higher the value, the sharper the clarity of printed characters and graphics.

Values:

300 dpi	Offers a lower resolution printing option when memory is at a premium.
600 dpi*	Produces high quality output for print jobs that are mostly text.
1200 Image Q	Uses line screening for print jobs that contain bitmapped images, such as scanned photos.
1200 dpi	Produces highest quality output for jobs where print speed is not important and memory is abundant.

Toner Darkness

Purpose:

To lighten or darken text images, or conserve toner.

Values:

1	6
2	7
3	8*
4	9
5	10

Select a lower value for finer line width, higher definition in graphics, and lighter grayscale images. Select a higher value for bolder line widths or darker grayscale images. Select 10 for very bold text. Select a value less than 8 to conserve toner.

A vertical bar (|) indicates the factory default value. An arrow symbol (V) indicates a user default value.



Use the Serial Menu to change printer settings affecting jobs sent to the printer through a serial port (Serial Opt $\langle x \rangle$).

Select a menu item for more details:

- Baud
- Data Bits
- Honor DSR
- Job Buffering
- NPA Mode
- Parity
- PCL SmartSwitch

- PS SmartSwitch
- Robust XON
- RS-232/RS-422
- RS-422 Polarity
- Serial Buffer
- Serial Protocol

Note: Values marked with an asterisk (*) are the factory default settings.

Baud

Purpose:

To specify the rate at which data can be received through the serial port.

1200	57600
2400	115200
4800	138200
9600*	172800
19200	230400
38400	345600

Data Bits

Purpose:

To specify the number of data bits that are sent in each transmission frame.

Values:

7 8*

Honor DSR

Purpose:

To determine whether the printer uses the Data Set Ready (DSR) signal. DSR is one of the handshaking signals for most serial interface cables.

Values:

- Off* All data received by the serial port is treated as valid data.
- **On** Only data received while the DSR signal is high is treated as valid.

The serial interface uses DSR to distinguish data sent by the computer from data created by electrical noise in the serial cable. This electrical noise can cause stray characters to print. Select On to prevent stray characters from printing.

Job Buffering

Purpose:

To temporarily store jobs on the printer hard disk before printing.

Values:

Off*	Does not buffer print jobs to the hard disk.
On	Buffers print jobs to the hard disk.
Auto	Buffers print jobs only if the printer is busy processing data from another input port.

Note: Changing the Job Buffering menu item automatically resets the printer.

NPA Mode

Purpose:

To specify whether the printer performs the special processing required for bidirectional communication, following the conventions defined in the Network Printing Alliance (NPA) Protocol.

Values:

On	Printer performs NPA processing. If data is not in NPA format, it is rejected as bad data.
Off	Printer does not perform NPA processing.
Auto*	Printer examines the data to determine the format and then processes it appropriately.

Note: Changing this menu item automatically resets the printer.

Parity

Purpose:

To select the parity for serial input and output data frames.

Values:

Even Odd None* Ignore

PCL SmartSwitch

Purpose:

To configure the printer so it automatically switches to PCL emulation when a print job received through the serial port requires it, regardless of the default printer language.

Values:

- **On*** Printer examines data on the serial interface and selects PCL emulation if the data indicates that is the required printer language.
- Off Printer does not examine the incoming data. The printer uses PostScript emulation to process the job if PS SmartSwitch is On, or uses the default printer language specified in the Setup Menu if PS SmartSwitch is Off.

See also:

PS SmartSwitch; Printer Language

160

PS SmartSwitch

Purpose:

To configure the printer so it automatically switches to PostScript emulation when a print job received through the serial port requires it, regardless of the default printer language.

Values:

- **On**^{*} Printer examines data on the serial interface and selects PostScript emulation if the data indicates that is the required printer language.
- Off Printer does not examine the incoming data. The printer uses PCL emulation to process the job if PCL SmartSwitch is On, or uses the default printer language specified in the Setup Menu if PCL SmartSwitch is Off.

See also:

PCL SmartSwitch; Printer Language

Robust XON

Purpose:

To determine whether the printer communicates availability to the computer.

Values:

Off*	Printer waits to receive data from the computer.
On	Printer sends a continuous stream of XONs to the host computer to indicate that the serial port is ready to receive more data.

This menu item only applies to the serial port if Serial Protocol is set to XON/XOFF.

See also:

RS-232/RS-422

Purpose:

To specify the type of serial communication.

Values:

RS-232* RS-422

Note: Selecting RS-422 automatically sets Serial Protocol to XON/XOFF.

161

RS-422 Polarity

Purpose:

To establish the behavior of the positive and negative signals when using RS-422 serial communication.

Values:

Normal*	Uses default definition of one and zero.
Reverse	Reverses the definition of one and zero, thereby allowing a positive connection to a host's negative terminal without changing the physical cable.

See also:

Serial Buffer

Purpose:

To configure the size of the serial input buffer.

Values:

Disabled	Disables the serial port.
Auto*	Printer automatically calculates the Serial Buffer size (recommended setting).
3K to maximum size allowed	User specifies the Serial Buffer size. The maximum size depends on the amount of memory in your printer, the size of the other link buffers, and whether Resource Save is set to On or Off. To maximize the range for the Serial Buffer size, disable or reduce the size of the parallel, infrared, LocalTalk, and USB buffers.

Note: Changing the Serial Buffer menu item automatically resets the printer.

See also:

Resource Save

Serial Protocol

Purpose:

To select the hardware and software handshaking values for the serial interface.

DTR*	Hardware handshaking.
DTR/DSR	Hardware handshaking.
XON/XOFF	Software handshaking.
XON/XOFF/DTR	Combined hardware and software handshaking.
XONXOFF/DTRDSR	Combined hardware and software handshaking.



Use the Setup Menu to configure a variety of printer features. Select a menu item for more details:

- Alarm Control
- Auto Continue
- Display Language
- Download Target
- Jam Recovery
- Job Accounting
- Page Protect

- Power Saver
- Print Timeout
- Printer Language
- Resource Save
- Toner Alarm
- Wait Timeout

Note: Values marked by an asterisk are the factory default settings.

Alarm Control

Purpose:

To establish whether the printer sounds an alarm when the printer requires operator intervention.

Off	Printer does not sound an alarm.
Single*	Printer sounds three quick beeps.
Continuous	Printer repeats three beeps every 10 seconds.

Auto Continue

Purpose:

To define the amount of time (in seconds) the printer waits after displaying an operator intervention error message before it resumes printing.

Values:

Disabled* Printer does not resume printing until someone clears the error message.

5...255 Printer waits the specified amount of time, and then automatically resumes printing. This timeout value also applies if the menus are displayed (and the printer is offline) for the specified period of time.

Display Language

Purpose:

To determine the language of the text on the display.

Values:

English	Norsk	Russian
Français	Nederlands	Polski
Deutsch	Svenska	Hungarian
Italiano	Português	Turkish
Español	Suomi	Czech
Dansk	Japanese	

Note: All values may not be available.

Download Target

Purpose:

To specify the storage location for downloaded resources.

Values:

RAM*	All downloaded resources are automatically stored in printer memory (RAM).
Flash	All downloaded resources are automatically stored in flash memory.
Disk	All downloaded resources are automatically stored on the hard disk.

Storing downloaded resources in flash memory or on a hard disk is permanent storage rather than the temporary storage that RAM provides. The resources remain in the flash memory or on the hard disk even when the printer is turned off. Use MarkVision to download resources to the printer.

Jam Recovery

Purpose:

To establish whether the printer reprints jammed pages.

Values:

On	Printer reprints jammed pages.
Off	Printer does not reprint jammed pages.
Auto*	Printer reprints a jammed page unless the memory required to hold the page is needed for other printer tasks.

Job Accounting

Purpose:

To store statistical information about your most recent print jobs on the hard disk. The statistics include whether the job printed with or without errors, the print time, the job size (in bytes), the requested paper size and paper type, the total number of printed pages, and the number of copies requested.

Values:

Off*	Printer does not store job statistics on disk.
On	Printer stores job statistics for the most recent print jobs.
	Note: Job Accounting is only displayed when a hard disk is installed and is neither defective nor Read/Write or Write protected.

See also:

Job Acct Stat

Page Protect

Purpose:

To successfully print a page that may otherwise generate Complex Page errors.

Values:

- Off* Prints a partial page of data if memory is insufficient to process the entire page.
- On Ensures that an entire page is processed before it prints.

If, after selecting On, you still cannot print the page, you may also have to reduce the size and number of fonts on the page, or increase the installed printer memory.

For most print jobs, you do not need to select On. When On is selected, printing may be slower.

166

Power Saver

Purpose:

To specify the amount of time (in minutes) the printer waits after a job is printed before it goes into a reduced power state.

Values:

1...240 (60*) Specifies the amount of time after a print job before the printer goes into Power Saver mode.

Power Saver replaces the **Ready** message. When the printer is in Power Saver mode, it is still ready to receive print jobs.

Select 1 to put the printer in Power Saver mode one minute after it finishes a print job. This uses much less energy, but requires more warm-up time for the printer. Select 1 if your printer shares an electrical circuit with room lighting and you notice lights flickering.

Select a high value if your printer is in constant use. Under most circumstances, this keeps the printer ready to print with minimum warm-up time. Select a value between 1 and 240 minutes if you want a balance between energy consumption and a shorter warm-up period.

Print Timeout

Purpose:

To specify the amount of time (in seconds) the printer waits before printing the last page of a print job that does not end with a command to print the page. The print timeout counter does not start until **Waiting** is displayed.

Values:

Disabled	The printer does not print the last page of a print job until one of the following occurs:
	 The printer receives enough information to fill the page.
	 The printer receives a Form Feed command.
	You select Print Buffer from the Job Menu.
1225 (90*)	The printer prints the last page after the specified time.

See also:

Print Buffer

Printer Language

Purpose:

To establish the default printer language used to communicate data from the computer to the printer.

Values:

PCL Emulation*	PCL emulation, compatible with Hewlett-Packard printers.
PS Emulation	PostScript emulation, compatible with Adobe PostScript language.

Note: Setting a printer language as the default does not prevent a software application from sending print jobs that use the other language.

Resource Save

Purpose:

To determine what the printer does with downloaded resources, such as fonts and macros stored in RAM, if the printer receives a job that requires more memory than is available.

Values:

Off*	Printer retains downloaded resources only until memory is needed. It then deletes those resources associated with the inactive printer language.
On	Printer retains all downloaded resources for all printer languages during language changes and printer resets. If the printer runs out of memory, 38 Memory Full is displayed.

Toner Alarm

Purpose:

To specify how the printer responds when it is out of toner.

Values:

Off*	An error message is displayed until someone replaces the toner cartridge. If an Auto Continue value is selected from the Setup Menu, the printer resumes printing after the specified timeout value.
Single	Printer stops printing, displays an error message, and sounds three quick beeps.
Continuous	Printer stops printing, displays an error message, and repeats three beeps every 10 seconds until the toner cartridge is replaced.

See also:

Auto Continue

Wait Timeout

Purpose:

To specify the amount of time (in seconds) the printer waits to receive additional bytes of data from the computer. When this timeout expires, the print job is canceled.

Values:

Disabled	Disables Wait Timeout.
1565535 (40*)	Specifies the amount of time the printer waits for additional data before it cancels the job.

Note: Wait Timeout is only available when you use PostScript emulation. This menu item has no effect on PCL emulation print jobs.



Use the Utilities Menu to print a variety of listings relating to available printer resources, printer settings, and print jobs. Other menu items let you set up printer hardware and troubleshoot printer problems.

Select a menu item for more details:

- Defragment Flash
- Factory Defaults
- Format Disk
- Format Flash
- Hex Trace

- Job Acct Stat
- Print Directory
- Print Fonts
- Print Menus
- Print Net <x> Setup

Defragment Flash

Purpose:

To retrieve storage area lost when resources are deleted from flash memory.

Values:

- Yes Printer transfers all resources stored in flash memory to printer memory and then reformats the flash memory option. When the format operation is complete, the resources are loaded back into flash memory.
- **No** Printer cancels the request to defragment the flash memory.

WARNING: Do not turn off the printer while the flash is defragmenting.

Factory Defaults

Purpose:

To return your printer settings to the factory default values.

Values:

Restore	 All menu items are returned to the factory default values except: Display Language. All settings in the Parallel Menu, Serial Menu, Network Menu, Infrared Menu, LocalTalk Menu, and USB Menu. All downloaded resources (fonts, macros, and symbol sets) in printer
	memory (RAM) are deleted. (Resources residing in flash memory or on the hard disk are unaffected.)
Do Not Restore	User-defined settings remain.

Format Disk

Purpose:

To format the printer's hard disk.

Values:

Yes	Deletes any data stored on the hard disk and prepares the device to receive new resources.
No	Cancels the request to format the hard disk and leaves current resources stored on the disk.

WARNING: Do not turn off the printer while the hard disk is formatting.

Format Flash

Purpose:

To format the flash memory.

Values:

- Yes Deletes any data stored in flash memory and prepares the flash memory to receive new resources.
- **No** Cancels the request to format the flash memory and leaves current resources stored in flash memory.

WARNING: Do not turn off the printer while the flash is formatting.

Hex Trace

Purpose:

To help isolate the source of a print job problem. With Hex Trace selected, all data sent to the printer is printed in hexadecimal and character representation. Control codes are not executed.

To exit Hex Trace, turn the printer off or reset the printer from the Job Menu.

Job Acct Stat

Purpose:

To print a listing of all job statistics stored on the hard disk, or to clear all statistics on the disk.

Values:

Print	Prints all statistics available for the most recent print jobs.
01	Deletes all economicated tele statistics from the bound disk

Clear Deletes all accumulated job statistics from the hard disk.

See also:

Job Accounting

Print Directory

Purpose:

To print a list of all the resources stored in flash memory or on the hard disk.

Note: Print Directory is available only when a nondefective flash or disk is installed and formatted.

Print Fonts

Purpose:

To print a sample of all the fonts available for the selected printer language.

PCL Fonts	Prints a sample of all printer fonts available for PCL emulation.
PS Fonts	Prints a sample of all printer fonts available for PostScript emulation.

Print Menus

Purpose:

To print a listing of the current user default values, the installed options, the amount of installed printer memory, and the status of printer supplies.

Print Net <x> Setup

Purpose:

To print information relating to the internal print server and the network settings defined by the Network <x> Setup menu item in the Network Menu.

See also:

Network <x> Setup



Use the USB Menu to change printer settings affecting a Universal Serial Bus (USB) port (USB Option $\langle x \rangle$).

Select a menu item for more details:

- Job Buffering
- MAC Binary PS
- NPA Mode
- PCL SmartSwitch
- PS SmartSwitch
- USB Buffer

Note: Values marked by an asterisk are the factory default settings.

Job Buffering

Purpose:

To temporarily store jobs on the printer hard disk before printing.

Values:

Off*	Does not buffer print jobs to the hard disk.
On	Buffers print jobs to the hard disk.
Auto	Buffers print jobs only if the printer is busy processing data from another input port.

Note: Changing the Job Buffering menu item automatically resets the printer.

MAC Binary PS

Purpose:

To configure the printer to process Macintosh binary PostScript print jobs.

Values:

On	Printer processes raw binary PostScript print jobs from computers using the Macintosh operating system.
	Note: This setting often causes Windows print jobs to fail.
Off	Printer filters PostScript print jobs using standard protocol.
Auto*	Printer accepts print jobs from computers using either Windows or Macintosh operating systems.

NPA Mode

Purpose:

To specify whether the printer performs the special processing required for bidirectional communication, following the conventions defined in the Network Printing Alliance (NPA) Protocol.

Values:

On	Printer performs NPA processing. If data is not in NPA format, it is rejected as bad data.
Off	Printer does not perform NPA processing.
Auto*	Printer examines the data to determine the format and then processes it appropriately.

Note: Changing this menu item automatically resets the printer.

PCL SmartSwitch

Purpose:

To configure the printer so it automatically switches to PCL emulation when a print job received through the USB port requires it, regardless of the default printer language.

Values:

- **On**^{*} Printer examines the data on the USB interface and selects PCL emulation if the data indicates that is the required printer language.
- Off Printer does not examine the incoming data. The printer uses PostScript emulation to process the job if PS SmartSwitch is On, or uses the default printer language specified in the Setup Menu if PS SmartSwitch is Off.

See also:

PS SmartSwitch; Printer Language

175

PS SmartSwitch

Purpose:

To configure the printer so it automatically switches to PostScript emulation when a print job received through the USB port requires it, regardless of the default printer language.

Values:

- **On*** Printer examines data on the USB interface and selects PostScript emulation if the data indicates that is the required printer language.
- Off Printer does not examine the incoming data. The printer uses PCL emulation to process the job if PCL SmartSwitch is On, or uses the default printer language specified in the Setup Menu if PCL SmartSwitch is Off.

See also:

PCL SmartSwitch; Printer Language

USB Buffer

Purpose:

To configure the size of the USB input buffer.

Values:

Disabled	Disables the USB port.
Auto*	Printer automatically calculates the USB Buffer size (recommended setting).
3K to maximum size allowed	User specifies the USB Buffer size. The maximum size depends on the amount of memory in your printer, the size of the other link buffers, and whether Resource Save is set to On or Off. To maximize the range for the USB Buffer size, disable or reduce the size of the parallel, serial, network, infrared, and LocalTalk buffers.

Note: Changing the USB Buffer menu item automatically resets the printer.

See also:

Resource Save



To disable the operator panel menus so that changes cannot be made to the printer default settings:

1 Turn the printer off.

Note: Disabling the operator panel menus does not prevent access to the Job Menu or to Print and Hold functionality.

- 2 Press and hold Select and Return and turn the printer on.
- **3** Release the buttons when you see **Performing Self Test**.

Config Menu appears on the first line of the display.

4 Press Menu until you see Panel Menus, and then press Select.

Disable appears on the second line of the display.

5 Press Select.

Locking Menus appears briefly.

6 Press Menu until you see Exit Config Menus, and then press Select.

The menus are disabled. If you press **Menu**, the message **Menus Disabled** appears. To enable the menus:

- 1 Repeat steps 1 through 4.
- 2 Press Menu until you see Enable.
- **3** Continue with steps 5 and 6.



Keep the following guidelines in mind when removing any options:

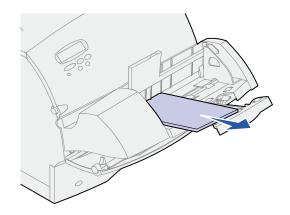
- Remove all print material from any option before removing it from the printer.
- To remove any input option, you must first remove the printer and any options installed above it.
- Remove paper options individually; never attempt to remove two or more paper options at once.
- Make sure the printer power is off and the power cord and any cables are unplugged *before* removing any options.

For more information, click a topic:

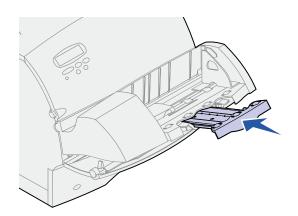
- Removing the envelope feeder
- Removing a paper tray or duplex unit
- Removing printer or flash memory
- Removing an option card



1 Remove envelopes from the envelope feeder.

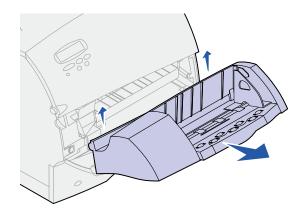


2 Push the envelope support to the closed position.



3 Open the printer upper front door.

4 Pull the envelope feeder up slightly and straight out of the printer. Set it aside.

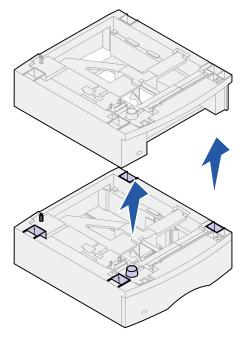


- **5** Close both front doors.
- 6 Refer to the *Setup Guide* when you are ready to reattach options.

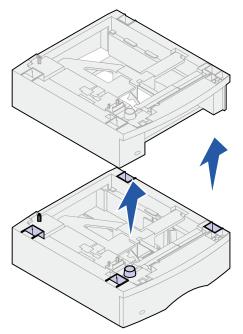


1 Ask someone to help you lift the printer by the handholds and set it aside.

CAUTION: Make sure your fingers are not under the printer when you set it down.



2 Carefully lift the option straight up until it is completely disconnected from the option below it. Set it aside.



3 Refer to the *Setup Guide* when you are ready to reattach options.

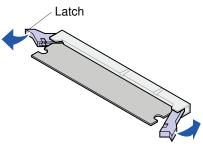


If necessary, refer to the Setup Guide for instructions on accessing the printer system board.

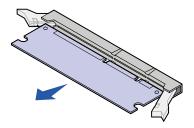
1 Locate the memory option you want to remove.

WARNING: Electronic components are easily damaged by static electricity. Touch something metal on the printer before you touch the memory option.

2 Push out on the latches at each end of the connector.



3 Pull the memory option out of the connector.



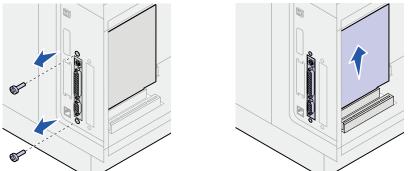
- 4 Place the memory option in its original packaging. If you did not save the packaging, wrap it in paper and store it in a box.
- **5** If you need to install a replacement memory option or other option on the system board, refer to the *Setup Guide*.
- 6 Refer to the Setup Guide for instructions on closing the printer system board cover.



If necessary, refer to the Setup Guide for instructions on accessing the printer system board.

WARNING: Electronic components are easily damaged by static electricity. Touch something metal on the printer before you touch the card.

- 1 Locate the option you want to remove.
- **2** Loosen and remove the two screws over and under the slot. Gently pull the card out of the connector on the system board.



- **3** Place the option card in its original packaging. If you did not save the packaging, wrap the card in paper and store it in a box.
- 4 If you need to install another option on the system board, refer to the *Setup Guide*.
- 5 Refer to the *Setup Guide* for instructions on closing the printer system board cover.



Typefaces and fonts

A font is a set of characters and symbols created with a distinct design. The distinct design is called a typeface. The typefaces you select add personality to a document. Well-chosen typefaces make a document easier to read.

The printer has numerous resident fonts in PCL 6 and PostScript 3 emulations. See Resident fonts for a listing of all resident fonts.

Weight and style

Typefaces are often available in different weights and styles. These variations modify the original typeface so you can, for example, emphasize important words in text or highlight book titles. The different weights and styles are designed to complement the original typeface.

Weight refers to the thickness of the lines that form the characters. Thicker lines result in darker characters. Some words commonly used to describe the weight of a typeface are bold, medium, light, black, and heavy.

Style refers to other typeface modifications, such as tilt or character width. Italic and oblique are styles where the characters are tilted. Narrow, condensed, and extended are three common styles that modify the character widths.

Some fonts combine several weight and style modifications; for example, Helvetica Narrow Bold Italic. A group of several weight and style variations of a single typeface is called a typeface family. Most typeface families have four variations: regular, italic, bold, and bold italic. Some families have more variations, as the following illustration for the Helvetica typeface family shows:

Helvetica	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Helvetica-Italic	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Helvetica-Bold	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Helvetica-BoldItalic	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Helvetica-Narrow	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Helvetica-Narrow Italic	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Helvetica-Narrow Bold	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Helvetica-Narrow-BoldItalic	ABCDEFGHIJKLMNOPQRSTUVWXYZ

Pitch and point size

The size of a font is specified as either a pitch or point size, depending on whether the font is fixed space or proportional.

In *fixed space* fonts, each character has the same width. *Pitch* is used to specify the size of fixed space fonts. It is a measure of the number of characters that will print in one horizontal inch of type. For example, all 10-pitch fonts print 10 characters per inch (cpi) and all 12-pitch fonts print 12 cpi:

Courier	± 0	Pitch	1234567890
Courier-Bold		Pitch	1234567890
Courier		Pitch	123456789012
Courier-Bold		Pitch	123456789012
			▲ 1 inch

In *proportional* (or *typographic*) fonts, every character can have a different width. Since proportional fonts have characters with different widths, the font size is specified in point size, not pitch. *Point size* refers to the height of the characters in the font. A *point* is defined as 1/72 inch. The characters in a font printed at 24 point will be twice as large as the characters in the same font printed at 12 point.

The following illustration shows samples of a font printed in different point sizes:

48 point 36 point

24 point 18 point 12 point 10 point

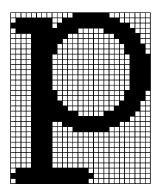
The point size of a font is defined as the distance from the top of the tallest character in the font to the bottom of the lowest character in the font. Due to the definition of point size, different fonts printed at the same point size may appear quite different in size. This is because there are other font parameters that affect how the font looks. However, the point size of a font is an excellent specification of the relative size of a font. The following examples illustrate two very different proportional fonts at 14 point:

ITC Avant Garde abcdefghABCDEFGH ITC Zapf Chancery abcdefghABCDEFGH

Bitmapped and scalable fonts

The printer uses both bitmapped and scalable fonts.

Bitmapped fonts are stored in printer memory as predefined patterns of bits that represent a typeface at a specific size, style, and resolution. The following illustration shows an example of a character from a bitmapped font.



Bitmapped fonts are available in different type styles and point sizes as downloadable fonts. Contact the place where you bought your printer for more information about downloadable fonts.

Scalable fonts (also called *outline* fonts) are stored as computer programs that define the outlines of the characters in the font. Each time you print characters from a scalable font, the printer creates a bitmap of the characters at the point size you choose and saves it temporarily in printer memory.





These temporary bitmapped fonts are deleted when you turn off or reset the printer. Scalable fonts provide the flexibility of printing in many different point sizes.

Your printer uses different scalable font formats for downloading fonts to the printer. PCL 6 emulation uses *Intellifont* and *TrueType* scalable fonts. PostScript 3 emulation uses *Type 1* and *TrueType* scalable fonts. There are thousands of different scalable fonts available in these different font formats from numerous font suppliers.

If you plan to use many downloadable bitmapped or scalable fonts or if you plan to use many different sizes of scalable fonts, you may need to purchase additional memory for your printer.

Resident fonts

Your printer is equipped with resident fonts stored permanently in printer memory. Different fonts are available in PCL 6 and PostScript 3 emulations. Some of the most popular typefaces, like Courier and Times New Roman, are available for all printer languages.

The following table lists all the fonts resident in your printer. See **Printing a font sample list** for instructions on how to print samples of the fonts. You can select the resident fonts from your software application, or from the operator panel if you are using PCL 6 emulation.

Resident scalable fonts	
PCL 6 emulation	PostScript 3 emulation
Albertus Medium	AlbertusMT
	AlbertusMT-Italic
	AlbertusMT-Light
Albertus Extra Bold	
Antique Olive	AntiqueOlive-Roman
Antique Olive Italic	AntiqueOlive-Italic
Antique Olive Bold	AntiqueOlive-Bold
	AntiqueOlive-Compact
Arial	ArialMT
Arial Italic	Arial-ItalicMT
Arial Bold	Arial-BoldMT
Arial Bold Italic	Arial-BoldItalicMT
ITC Avant Garde Book	AvantGarde-Book
ITC Avant Garde Book Oblique	AvantGarde-BookOblique
ITC Avant Garde Demi	AvantGarde-Demi
ITC Avant Garde Demi Oblique	AvantGarde-DemiOblique
ITC Bookman Light	Bookman-Light
ITC Bookman Light Italic	Bookman-LightItalic
ITC Bookman Demi	Bookman-Demi
ITC Bookman Demi Italic	Bookman-Demiltalic
Clarendon Condensed Bold	
Coronet	Coronet-Regular
CourierPS	Courier
CourierPS Oblique	Courier-Oblique
CourierPS Bold	Courier-Bold
CourierPS Bold Italic	Courier-BoldOblique
CG Omega	
CG Omega Bold	

Resident scalable fonts (continued)	
PCL 6 emulation	PostScript 3 emulation
CG Omega Italic	
CG Omega Bold Italic	
Garamond Antiqua	Garamond-Antiqua
Garamond Halbfett	Garamond-Halbfett
Garamond Kursiv	Garamond-Kursiv
Garamond Kursiv Halbfett	Garamond-KursivHalbfett
Helvetica Light	Helvetica-Light
Helvetica Light Oblique	Helvetica-LightOblique
Helvetica Black	Helvetica-Black
Helvetica Black Oblique	Helvetica-BlackOblique
Helvetica	Helvetica
Helvetica Italic	Helvetica-Oblique
Helvetica Bold	Helvetica-Bold
Helvetica Bold Italic	Helvetica-BoldOblique
Helvetica Narrow	Helvetica-Narrow
Helvetica Narrow Italic	Helvetica-Narrow-Oblique
Helvetica Narrow Bold	Helvetica-Narrow-Bold
Helvetica Narrow Bold Italic	Helvetica-Narrow-BoldOblique
CG Times	Intl-CG-Times
CG Times Italic	Intl-CG-Times-Italic
CG Times Bold	Intl-CG-Times-Bold
CG Times Bold Italic	Intl-CG-Times-BoldItalic
Univers Medium	Intl-Univers-Medium
Univers Medium Italic	Intl-Univers-MediumItalic
Univers Bold	Intl-Univers-Bold
Univers Bold Italic	Intl-Univers-BoldItalic
Courier	Intl-Courier
Courier Italic	Intl-Courier-Oblique
Courier Bold	Intl-Courier-Bold
Courier Bold Italic	Intl-Courier-BoldOblique
Letter Gothic	LetterGothic
Letter Gothic Italic	LetterGothic-Slanted
Letter Gothic Bold	LetterGothic-Bold
	LetterGothic-BoldSlanted
Marigold	Marigold
Century Schoolbook Roman	NewCenturySchlbk-Roman

Resident scalable fonts (continued)	
PCL 6 emulation	PostScript 3 emulation
Century Schoolbook Italic	NewCenturySchlbk-Italic
Century Schoolbook Bold	NewCenturySchlbk-Bold
Century Schoolbook Bold Italic	NewCenturySchlbk-BoldItalic
	Optima
	Optima-Bold
	Optima-BoldItalic
	Optima-Italic
Palatino Roman	Palatino-Roman
Palatino Italic	Palatino-Italic
Palatino Bold	Palatino-Bold
Palatino Bold Italic	Palatino-BoldItalic
SymbolPS	Symbol
Symbol	
Times Roman	Times-Roman
Times Italic	Times-Italic
Times Bold	Times-Bold
Times Bold Italic	Times-BoldItalic
Times New Roman	TimesNewRomanPSMT
Times New Roman Italic	TimesNewRomanPS-ItalicMT
Times New Roman Bold	TimesNewRomanPS-BoldMT
Times New Roman Bold Italic	TimesNewRomanPS-BoldItalicMT
	Univers
	Univers-Oblique
	Univers-Bold
	Univers-BoldOblique
Univers Condensed Medium	Univers-Condensed
Univers Condensed Medium Italic	Univers-CondensedOblique
Univers Condensed Bold	Univers-CondensedBold
Univers Condensed Bold Italic	Univers-CondensedBoldOblique
Wingdings	Wingdings-Regular
ITC Zapf Chancery Medium Italic	ZapfChancery-MediumItalic
ITC Zapf Dingbats	ZapfDingbats
	Univers-Extended
	Univers-ExtendedObl
	Univers-BoldExt
	Univers-BoldExtObl

Resident scalable fonts (continued)		
PCL 6 emulation	PostScript 3 emulation	
	Univers-Light	
	Univers-LightOblique	
	Clarendon	
	Clarendon-Light	
	Clarendon-Bold	
	Helvetica-Condensed	
	Helvetica-Condensed-Bold	
	Helvetica-Condensed-BoldObl	
	Helvetica-Condensed-Oblique	
	StempelGaramond-Bold	
	StempelGaramond-BoldItalic	
	StempelGaramond-Italic	
	StempelGaramond-Roman	
	Apple-Chancery	
	Chicago	
	Geneva	
	Monaco	
	NewYork	
	Oxford	
	Taffy	
	MonaLisa-Recut	
	Candid	
	Bodoni	
	Bodoni-Italic	
	Bodoni-Bold	
	Bodoni-BoldItalic	
	Bodoni-Poster	
	Bodoni-PosterCompressed	
	CooperBlack	
	CooperBlack-Italic	
	Copperplate-ThirtyTwoBC	
	Copperplate-ThirtyThreeBC	
	Eurostile	
	Eurostile-Bold	
	Eurostile-ExtendedTwo	
	Eurostile-BoldExtendedTwo	

191

Resident scalable fonts (continued)	
PCL 6 emulation	PostScript 3 emulation
	GillSans
	GillSans-Italic
	GillSans-Bold
	GillSans-BoldItalic
	GillSans-Condensed
	GillSans-BoldCondensed
	GillSans-Light
	GillSans-LightItalic
	GillSans-ExtraBold
	Goudy
	Goudy-Italic
	Goudy-Bold
	Goudy-BoldItalic
	Goudy-ExtraBold
	HoeflerText-Regular
	HoeflerText-Italic
	HoeflerText-Black
	HoeflerText-BlackItalic
	HoeflerText-Ornaments
	JoannaMT
	JoannaMT-Italic
	JoannaMT-Bold
	JoannaMT-BoldItalic
	LubalinGraph-Book
	LubalinGraph-BookOblique
	LubalinGraph-Demi
	LubalinGraph-DemiOblique
Line Printer 16	
POSTNET Barcode	

Symbol sets

A *symbol set* is the collection of alphabetic and numeric characters, punctuation, and special characters available in the font you select. Symbol sets support the requirements for different languages or specific applications, such as math symbols used for scientific text.

In PCL 6 emulation, a symbol set also defines which character will print for each key on the keyboard (or more specifically, for each *code point*). Some applications require different characters at some code points. To support multiple applications and languages, your printer has 83 symbol sets for the resident PCL 6 emulation fonts.

Symbol sets for PCL 6 emulation

Note: Not all font names support all of the symbol sets listed.

ABICOMP Brazil/Portugal	ISO 21: German	PC-853 Latin 3 (Turkish)
ABICOMP International	ISO 25: French	PC-855 Cyrillic
DeskTop	ISO 57: Chinese	PC-857 Latin 5 (Turkish)
Legal	ISO 60: Norwegian version 1	PC-858 Multilingual Euro
MC Text	ISO 61: Norwegian version 2	PC-860 Portugal
Microsoft Publishing	ISO 69: French	PC-861 Iceland
Russian-GOST	ISO 84: Portuguese	PC-863 Canadian French
Ukrainian	ISO 85: Spanish	PC-865 Nordic
PCL ITC Zapf Dingbats	ISO 8859-1 Latin 1 (ECMA-94)	PC-866 Cyrillic
PS ITC Zapf Dingbats	ISO 8859-2 Latin 2	PC-869 Greece
PS Math	ISO 8859-5 Latin/Cyrillic	PC-911 Katakana
PS Text	ISO 8859-7 Latin/Greek	PC-1004 OS/2
Pi Font	ISO 8859-9 Latin 5	Math-8
Symbol	ISO 8859-10 Latin 6	Greek-8
Wingdings	ISO 8859-15 Latin 9	Turkish-8
POSTNET Barcode	PC-8 Bulgarian	Roman-8
ISO : German	PC-8 Danish/Norwegian (437N)	Roman-9
ISO : Spanish	PC-8 Greek Alternate (437G)	Roman Extension
ISO 2: IRV (Int'l Ref Version)	PC-8 Turkish (437T)	Ventura ITC Zapf Dingbats
ISO 4: United Kingdom	PC-8 Latin/Greek	Ventura International
ISO 6: ASCII	PC-8 PC Nova	Ventura Math
ISO 10: Swedish	PC-8 Polish Mazovia	Ventura US
ISO 11: Swedish for Names	PC-8 Code Page 437	Windows 3.0 Latin 1
ISO 14: JIS ASCII	PC-775 Baltic (PC-8 Latin 6)	Windows 98 Cyrillic
ISO 15: Italian	PC-850 Multilingual	Windows 98 Greek
ISO 16: Portuguese	PC-851 Greece	Windows 98 Latin 1

193

PC-852 Latin 2

Windows 98 Latin 2 Windows 98 Latin 5 Windows 98 Latin 6 (Baltic)

Downloadable fonts

You can download scalable fonts in PostScript 3 emulation and either scalable or bitmapped fonts in PCL 6 emulation. Fonts can be downloaded to printer memory or to a flash memory option or hard disk option. Fonts downloaded to flash memory or hard disk remain in memory even after the printer language changes, the printer resets, or the printer is turned off.

MarkVision includes a remote management function that lets you manipulate the font files you have downloaded to flash memory or hard disk. See the **drivers CD** for more information about MarkVision.

Printing a font sample list

To print samples of all the fonts currently available for your printer:

- 1 Make sure the printer power is on and the **Ready** status message is displayed.
- 2 Press Menu to enter the menus.
- 3 Continue to press and release **Menu** until you see Utilities Menu, and then press **Select**.
- 4 Press Menu until Print Fonts displays, and then press Select.
- 5 Press Menu until either PCL Fonts or PS Fonts appears on the second line of the display.
 - Select PCL Fonts to print a listing of the fonts available to the PCL emulator.
 - Select PS Fonts to print a listing of the fonts available to the PostScript 3 emulator. This
 choice only displays when the PostScript printer language is available in the printer.
- 6 Press Select.

The message **Printing Font List** appears and remains on the operator panel until the page prints. The printer returns to the Ready state after the font sample list prints.



Dimensions

Height	379 mm (14.9 in.)
with 500-sheet drawer	513 mm (20.2 in.)
Width	418 mm (16.5 in.)
Depth	513 mm (20.2 in.)
Weight (with print cartridge)	20.4 kg (45 lb)
with 500-sheet drawer	23.6 kg (52 lb)

Duty cycle

Up to 75,000 pages per month.



- Edition notice
- Trademarks
- Licensing notice
- Safety information
- Cautions and warnings
- Electronic emission notices
- Laser notices

Edition notice

May 2001

© Copyright 2001 Lexmark International, Inc. All rights reserved.

UNITED STATES GOVERNMENT RESTRICTED RIGHTS

This software and documentation are provided with RESTRICTED RIGHTS. Use, duplication or disclosure by the Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 and in applicable FAR provisions: Lexmark International, Inc., Lexington, KY 40550.

Trademarks

Lexmark and Lexmark with diamond design, MarkNet, and MarkVision are trademarks of Lexmark International, Inc., registered in the United States and/or other countries. PictureGrade is a trademark of Lexmark International, Inc.

PCL[®] is a registered trademark of the Hewlett-Packard Company. PCL is Hewlett-Packard Company's designation of a set of printer commands (language) and functions included in its printer products. This printer is intended to be compatible with the PCL language. This means the printer recognizes PCL commands used in various application programs, and that the printer emulates the functions corresponding to the commands.

PostScript[®] is a registered trademark of Adobe Systems Incorporated. PostScript 3 is Adobe Systems' designation of a set of printer commands (language) and functions included in its software products. This printer is intended to be compatible with the PostScript 3 language. This means the printer recognizes PostScript 3 commands used in various application programs, and that the printer emulates the functions corresponding to the commands.

The following terms are trademarks or registered trademarks of these companies:

Helvetica	Linotype-Hell AG and/or its subsidiaries
ITC Avant Garde	International Typeface Corporation
Times New Roman	The Monotype Corporation plc
Zapf Chancery	International Typeface Corporation

Other trademarks are the property of their respective owners.

Licensing notice

The printer resident software contains:

- Software developed and copyrighted by Lexmark
- Lexmark modified software licensed under the provisions of the GNU General Public License version 2 and the GNU Lesser General Public License version 2.1
- Software licensed under the BSD license and warranty statements

Click the title of the document you want to review:

BSD License and Warranty statements



The Lexmark modified GNU licensed software is free software; you can redistribute it and/or modify it under the terms of the licenses referenced above. These licenses do not provide you any rights to the Lexmark copyrighted software in this printer.

Since the GNU licensed software that the Lexmark modifications are based upon is supplied explicitly without warranty, use of the Lexmark modified version is similarly provided without warranty. See the warranty disclaimers in the referenced licenses for additional details.

To obtain source code files for the Lexmark modified GNU licensed software, launch the drivers CD that shipped with your printer and click Contact Lexmark.

Safety information

- If your product is NOT marked with this symbol , it MUST be connected to an electrical outlet that is properly grounded.
- The power cord must be connected to an electrical outlet that is near the product and easily accessible.
- Refer service or repairs, other than those described in the operating instructions, to a
 professional service person.
- This product is designed, tested and approved to meet strict global safety standards with the use of specific Lexmark components. The safety features of some parts may not always be obvious. Lexmark is not responsible for the use of other replacement parts.
- Your product uses a laser, exercise

CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

• Your product uses a printing process that heats the print media, and the heat may cause the media to release emissions. You must understand the section in your operating instructions that discusses the guidelines for selecting print media to avoid the possibility of harmful emissions.

Cautions and warnings

CAUTION: A caution identifies something that might cause you harm.

WARNING: A warning identifies something that might damage your printer hardware or software.

Electronic emission notices

With a network cable attached

Federal Communications Commission (FCC) Compliance Information Statement

Your printer has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The FCC Class A limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

The manufacturer is not responsible for any radio or television interference caused by using other than recommended cables or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate this equipment.

Note: To assure compliance with FCC regulations on electromagnetic interference for a Class A computing device, use a properly shielded and grounded cable such as Lexmark part number 1329605. Use of a substitute cable not properly shielded and grounded may result in a violation of FCC regulations.

Industry Canada Compliance Statement

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Avis de conformité aux normes d'Industrie Canada

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

European Community (EC) Directives Conformity

This product is in conformity with the protection requirements of EC Council directives 89/336/EEC and 73/23/EEC on the approximation and harmonization of the laws of the Member States relating to electromagnetic compatibility and safety of electrical equipment designed for use within certain voltage limits.

A declaration of conformity with the requirements of the directives has been signed by the Director of Manufacturing and Technical Support, Lexmark International, S.A., Boigny, France.

This product satisfies the Class A limits of EN 55022 and safety requirements of EN 60950.

WARNING: When a network cable is attached, this is a Class A product. In a domestic environment, this product may cause radio interference, in which case, the user may be required to take adequate measures.

Without a network cable attached

Federal Communications Commission (FCC) Compliance Information Statement

Your printer has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The FCC Class B limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult your point of purchase or service representative for additional suggestions.

The manufacturer is not responsible for any radio or television interference caused by using other than recommended cables or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate this equipment.

Note: To assure compliance with FCC regulations on electromagnetic interference for a Class B computing device, use a properly shielded and grounded cable such as Lexmark part number 1329605. Use of a substitute cable not properly shielded and grounded may result in a violation of FCC regulations.

Industry Canada Compliance Statement

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Avis de conformité aux normes d'Industrie Canada

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

European Community (EC) Directives conformity

This product is in conformity with the protection requirements of EC Council directives 89/336/EEC and 73/23/EEC on the approximation and harmonization of the laws of the Member States relating to electromagnetic compatibility and safety of electrical equipment designed for use within certain voltage limits.

A declaration of conformity with the requirements of the directives has been signed by the Director of Manufacturing and Technical Support, Lexmark International, S.A., Boigny, France.

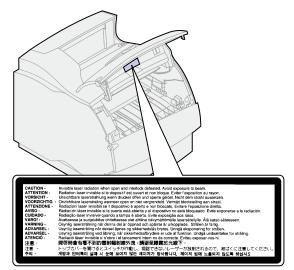
This product satisfies the Class B limits of EN 55022 and safety requirements of EN 60950.

The United Kingdom Telecommunications Act 1984

This apparatus is approved under the approval number NS/G/1234/J/100003 for the indirect connections to the public telecommunications systems in the United Kingdom.

Laser notices

Laser advisory label



Laser notice

The printer is certified in the U.S. to conform to the requirements of DHHS 21 CFR Subchapter J for Class I (1) laser products, and elsewhere is certified as a Class I laser product conforming to the requirements of IEC 825.

Class I laser products are not considered to be hazardous. The printer contains internally a Class IIIb (3b) laser that is nominally a 5 milliwatt gallium arsenide laser operating in the wavelength region of 770-795 nanometers. The laser system and printer are designed so there is never any human access to laser radiation above a Class I level during normal operation, user maintenance, or prescribed service condition.



Α

A4 Width (PCL Emul Menu) 146 Advanced Status (Parallel Menu) 151 Alarm Control (Setup Menu) 164 alarm, toner 168 alarms, setting 164 Auto Continue (Setup Menu) 165 Auto CR after LF (PCL Emul Menu) 147 Auto LF after CR (PCL Emul Menu) 147 avoiding paper jams 46

В

Baud (Serial Menu) 158 bitmapped fonts 187 Blank Pages (Finishing Menu) 116 buffer, infrared 122 buffer, LocalTalk 131 buffer, network 135 buffer, parallel 153 buffer, serial 162 buffer, USB 176

С

Cancel Job (Job Menu) 127 card stock, choosing 23 charge roll, replacing 48 clearing paper jams 55 Collation (Finishing Menu) 117 collation, enabling 117 complex page errors 166 Confidential Job (Job Menu) 128 Configure MP (Paper Menu) 138 Copies (Finishing Menu) 117 copies, specifying number 117 Custom Types (Paper Menu) 139

D

Data Bits (Serial Menu) 159 Defragment Flash (Utilities Menu) 170 disk (hard disk) 171 Display Language (Setup Menu) 165 Download Target (Setup Menu) 165 downloaded resources, directory 172 downloaded resources, saving 168 downloaded resources, storage location 165 Duplex (Finishing Menu) 117 Duplex Bind (Finishing Menu) 118 duplex, enabling 117

Ε

Envelope Enhance (Paper Menu) 139 envelopes 39 guidelines 21 loading feeder 39 loading the multipurpose feeder 31 settings 42

F

Factory Defaults (Utilities Menu) 171 factory defaults, restoring 171 Finishing Menu 116 Blank Pages 116 Collation 117 Copies 117 Duplex 117 Duplex Bind 118 Multipage Border 118 Multipage Order 119 Multipage Print 119 Multipage View 120 Separator Sheets 120 Separator Source 121 flash memory, defragmenting 170 flash memory, directory 172 flash memory, formatting 171 flash memory, storage location 165 folio size 17 Font Name (PCL Emul Menu) 147 Font Priority (PostScript Menu) 155 Font Source (PCL Emul Menu) 148 fonts 185 bitmapped 187 choosing in PCL emulation 147 description 185 pitch and point size 185 printing sample list 194 priority 155 resident 188 scalable 187 symbol sets (PCL 6 emulation) 193 symbol sets supported 150 weight and style 185 Format Disk (Utilities Menu) 171 Format Flash (Utilities Menu) 171 fuser, replacing 50

Η

hard disk, directory 172 hard disk, formatting 171 hard disk, storage location 165 held jobs 12 Held Jobs (Job Menu) 128 Hex Trace (Utilities Menu) 172 hole-punched paper 20 Honor DSR (Serial Menu) 159 Honor Init (Parallel Menu) 152

I

indicator lights 8 Infrared Buffer (Infrared Menu) 122 Infrared Menu 122 Infrared Buffer 122 Infrared Port 123 Job Buffering 123 Max Baud Rate 123 NPA Mode 124 PCL SmartSwitch 124 PS SmartSwitch 125 Transmit Delay 125 Window Size 126

infrared port 122 activating 123 buffer size 122 maximum baud rate 123 NPA Mode 124 PCL SmartSwitch 124 PS SmartSwitch 125 transmit delay 125 window size 126 Infrared Port (Infrared Menu) 123 integrated forms 27 Intellifont fonts 187 interfaces, infrared 122 interfaces, LocalTalk 130 interfaces, network 134 interfaces, parallel 151 interfaces, serial 158 interfaces, USB 174

J

Jam Recovery (Setup Menu) 166 jams 55 avoiding 46 clearing 55 Job Accounting (Setup Menu) 166 Job Acct Stat (Utilities Menu) 172 Job Buffering (Infrared Menu) 123 Job Buffering (LocalTalk Menu) 130 Job Buffering (Network Menu) 134 Job Buffering (Parallel Menu) 152 Job Buffering (Serial Menu) 159 Job Buffering (USB Menu) 174 Job Menu 127 Cancel Job 127 Confidential Job 128 Held Jobs 128 Print Buffer 129 Reset Printer 129 job statistics 166 jobs, canceling 127 jobs, confidential 128

L

labels 22 guidelines 22 printer maintenance 23 laser notices 201 letterhead 20 Lines per Page (PCL Emul Menu) 148 linking trays 45 loading envelopes 39 LocalTalk Addr (LocalTalk Menu) 130 LocalTalk Buffer (LocalTalk Menu) 131 LocalTalk Menu 130 Job Buffering 130 LocalTalk Addr 130 LocalTalk Buffer 131 LocalTalk Name 131 LocalTalk Port 131 LocalTalk Zone 131 NPA Hosts 132 NPA Mode 132 PCL SmartSwitch 132 PS SmartSwitch 133 LocalTalk Name (LocalTalk Menu) 131 LocalTalk port 130 activating 131 buffer size 131 NPA hosts 132 NPA mode 132 PCL SmartSwitch 132 PS SmartSwitch 133 LocalTalk Port (LocalTalk Menu) 131 LocalTalk Zone (LocalTalk Menu) 131

Μ

MAC Binary PS (Network Menu) 135 MAC Binary PS (USB Menu) 175 maintenance replacing charge roll 48 replacing fuser 50 replacing print cartridge 47 replacing transfer roll 49 resetting maintenance counter 51 Max Baud Rate (Infrared Menu) 123 media guidelines 18 card stock 23 envelopes 21 labels 22 recommended paper 19 storing paper 44 unacceptable paper 19 memory, Print and Hold function 12 menu map 113 menus 113 complete list 113 display language 165 Messages 81 2<xx> Paper Jam 102 31 Defective Print Cartridge 102 32 Unsupported Print Cartridge 103 34 Short Paper 103

35 Res Save Off Deficient Memory 104 37 Insufficient Collation Area 104 37 Insufficient Defrag Memory 104 37 Insufficient Memory 105 38 Memory Full 105 39 Complex Page 106 51 Defective Flash 106 52 Flash Full 106 53 Unformatted Flash 107 54 Network <x> Software Error 107 54 Par <x> ENA Connection Lost 108 54 Parallel Error 108 54 Parallel Option <x> Error 108 54 Serial Option <x> Error 107 54 Standard Serial Error 107 54 Std Network Software Error 107 54 Std Par ENA Connection Lost 108 56 Parallel Port <x> Disabled 108 56 Serial Port <x> Disabled 109 56 Standard Serial Disabled 109 56 Std Parallel Port Disabled 108 58 Too Many Disks Installed 109 58 Too Many Flash Options 109 58 Too Many Trays Attached 110 59 Incompatible <device> 110 61 Defective Disk 110 62 Disk Full 110 63 Unformatted Disk 111 70-79 messages 111 80 Scheduled Maintenance 111 81 Engine Code CRC Failure 112 88 Toner Low 112 900-999 Service 112 Activating Menu Changes 84 Busy 84 Canceling Job 84 Check <device> Connection 85 **Clearing Job Accounting Stat** 85 Close Door or Insert Cartridge 85 Defragmenting 86 Delete All Jobs 86

204

Deleting Jobs 86 **Disabling Menus 87** Disk Corrupted 87 **Disk Recovery 88** Enabling Menus 88 Enter PIN 14 Flushing Buffer 89 Formatting Disk 89 Formatting Flash 89 Held Jobs may be lost 90 Infrared 90 Insert Tray <x> 90 Install <device> or Cancel Job 91 Invalid Network <x> Code 91 Invalid Standard Network Code 91 Load Manual 92 Load Tray <x> 92 LocalTalk <x> 92 Menus Disabled 93 Network <x> 93 Network <x>,<y> 93 Network Card Busy 93 No Jobs Found. Retry? 94 Not Ready 94 Parallel <x> 94 Performing Self Test 94 Power Saver 95 Print Jobs on Disk 95 Printing Directory List 95 Printing Font List 96 Printing Job Accounting Stat 96 Printing Menu Settings 96 Prog Engine Code 96 Prog System Code 97 Program Flash 97 Programming Disk 97 Queuing and Deleting Jobs 97 Queuing Jobs 98 Ready 98 Readv Hex 98 Reattach <device> 99 **Res Reduced 99** Resetting Maint Cnt Value 100 Resetting the Printer 99 Restoring Factory Defaults 100 Serial <x> 100 Std Bin Full 100 Toner Low 101 Tray <x> Empty 101 Tray <x> Low 101 Tray <x> Missing 101 USB <x> 102 Waiting 102 Multipage Border (Finishing Menu) 118 Multipage Order (Finishing Menu) 119

multipage print 119 borders 118 configuring 119 page order 119 page orientation 120 Multipage Print (Finishing Menu) 119 Multipage View (Finishing Menu) 120 multipurpose feeder 31 choosing print materials 31 closing 38 configuring 138 loading envelopes 33 loading paper 33 loading print materials 34 loading transparencies 34

Ν

Network <x> Setup (Network Menu) 135 Network Buffer (Network Menu) 135 Network Menu 134 Job Buffering 134 MAC Binary PS 135 Network <x> Setup 135 Network Buffer 135 NPA Mode 136 PCL SmartSwitch 136 PS SmartSwitch 137 network port 134 buffer size 135 NPA mode 136 PCL SmartSwitch 136 PS SmartSwitch 137 NPA Hosts (LocalTalk Menu) 132 NPA Mode (Infrared Menu) 124 NPA Mode (LocalTalk Menu) 132 NPA Mode (Network Menu) 136 NPA Mode (Parallel Menu) 152 NPA Mode (Serial Menu) 160 NPA Mode (USB Menu) 175 n-up printing 119

0

operator panel 8 Orientation (PCL Emul Menu) 149

Ρ

Page Protect (Setup Menu) 166 paper avoiding jams 46 choosing letterhead 20 choosing preprinted forms 20 choosing pre-punched 20 clearing jams 55

if requested size not loaded 144 recommended types 19 specifying custom type 139 specifying preprinted forms 140 specifying size 141 specifying source 141 specifying texture 142 specifying type 143 specifying weight 144 storing 44 unacceptable types 19 paper jams 55 200 Paper Jam Remove Cartridge 56 201 Paper Jam Remove Cartridge 56 202 Paper Jam Open Rear Door 58 230 Paper Jam Check Duplex 60 24x Paper Jams Check Tray x 63 250 Paper Jam Check MP Feeder 68 260 Paper Jam Check Env Feeder 68 reprinting pages 166 paper length guide 29 Paper Loading (Paper Menu) 140 Paper Menu 138 Configure MP 138 Custom Types 139 Envelope Enhance 139 Paper Loading 140 Paper Size 141 Paper Source 141 Paper Texture 142 Paper Type 143 Paper Weight 144 Substitute Size 144 Universal Setup 145 Paper Size (Paper Menu) 141 Paper Source (Paper Menu) 141 Paper Texture (Paper Menu) 142 paper tray, length guide 29 paper tray, width guide 29 Paper Type (Paper Menu) 143 Paper Weight (Paper Menu) 144 paper, letterhead 20 Parallel Buffer (Parallel Menu) 153 Parallel Menu 151 Advanced Status 151 Honor Init 152 Job Buffering 152 NPA Mode 152 Parallel Buffer 153 Parallel Mode 1 153 Parallel Mode 2 153

PCL SmartSwitch 154 Protocol 154 PS SmartSwitch 154 Parallel Mode 1 (Parallel Menu) 153 Parallel Mode 2 (Parallel Menu) 153 parallel port 151 bidirectional communication 151 configuring buffer size 153 configuring protocol 154 data sampling 153 enabling resistors 153 hardware initialization 152 NPA mode 152 PCL SmartSwitch 154 PS SmartSwitch 154 Parity (Serial Menu) 160 PCL Emul Menu 146 A4 Width 146 Auto CR after LF 147 Auto LF after CR 147 Font Name 147 Font Source 148 Lines per Page 148 Orientation 149 Pitch 149 Point Size 149 Symbol Set 150 Tray Renumber 150 PCL emulation 146 automatic carriage return 147 automatic line feed 147 font name 147 font source 148 lines per page 148 orientation 149 pitch 149 point size 149 printing font samples 172 resident fonts 188 symbol set 150 tray renumber 150 PCL SmartSwitch (Infrared Menu) 124 PCL SmartSwitch (LocalTalk Menu) 132 PCL SmartSwitch (Network Menu) 136 PCL SmartSwitch (Parallel Menu) 154 PCL SmartSwitch (Serial Menu) 160 PCL SmartSwitch (USB Menu) 175 PictureGrade (Quality Menu) 156 Pitch (PCL Emul Menu) 149, 185 Point Size (PCL Emul Menu) 149,

185 PostScript emulation 155 font priority 155 printing font samples 172 printing PS errors 155 resident fonts 188 PostScript Menu 155 Font Priority 155 Print PS Error 155 Power Saver (Setup Menu) 167 power saver, configuring 167 PQET (Quality Menu) 156 preprinted forms 20 pre-punched paper 20 Print and Hold function (held jobs) 12 Print Buffer (Job Menu) 129 print cartridge, replacing 47 Print Directory (Utilities Menu) 172 Print Fonts (Utilities Menu) 172 print materials 18 degree of smoothness 19 direction of grain 19 fiber content 19 moisture content 19 tendency to curl 18 weight specifications 18 Print Menus (Utilities Menu) 173 Print Net<x> Setup (Utilities Menu) 173 Print PS Error (PostScript Menu) 155 print quality 156 adjusting PictureGrade 156 adjusting resolution 157 character smoothing 156 toner darkness 157 Print Resolution (Quality Menu) 157 print statistics 166 Print Timeout (Setup Menu) 167 print timeout, configuring 167 Printer Language (Setup Menu) 168 printer testing, Hex Trace mode 172 printer with paper handling options printer, resetting 129 printing folio size paper 17 font samples 194 held jobs 12 iob statistics 172 list of menu settings 173 statement size paper 17 Protocol (Parallel Menu) 154 PS SmartSwitch (Infrared Menu) 125

PS SmartSwitch (LocalTalk Menu) 133 PS SmartSwitch (Network Menu) 137

- PS SmartSwitch (Parallel Menu) 154
- PS SmartSwitch (Serial Menu) 161
- PS SmartSwitch (USB Menu) 176

Q

Quality Menu 156 PictureGrade 156 PQET 156 Print Resolution 157 Toner Darkness 157

R

recommended paper types 19 replacing charge roll 48 fuser 50 print cartridge 47 transfer roll 49 Reset Printer (Job Menu) 129 resetting maintenance counter 51 resetting printer 129 resident fonts 188 Resource Save (Setup Menu) 168 Robust XON (Serial Menu) 161 RS-232/RS-422 (Serial Menu) 161 RS-422 Polarity (Serial Menu) 162

S

Safety information 198 scalable fonts 187 definition 187 resident 188 Separator Sheets (Finishing Menu) 120 Separator Source (Finishing Menu) 121 Serial Buffer (Serial Menu) 162 Serial Menu 158 Baud 158 Data Bits 159 Honor DSR 159 Job Buffering 159 NPA Mode 160 Parity 160 PCL SmartSwitch 160 PS SmartSwitch 161 Robust XON 161 RS-232/RS-422 161 RS-422 Polarity 162 Serial Buffer 162 Serial Protocol 163

serial port configuring 158 buffer size 162 DSR (Data Set Ready) signals 159 NPA mode 160 parity 160 PCL SmartSwitch 160 polarity 162 protocol 163 PS SmartSwitch 161 robust XON 161 transmission speeds 158, 159 Serial Protocol (Serial Menu) 163 Setup Menu 164 Alarm Control 164 Auto Continue 165 Display Language 165 Download Target 165 Jam Recovery 166 Job Accounting 166 Page Protect 166 Power Saver 167 Print Timeout 167 Printer Language 168 Resource Save 168 Toner Alarm 168 Wait Timeout 169 size sensing 17 statement size 17 statistics, printing 172 statistics, storing 166 storing paper 44 Substitute Size (Paper Menu) 144 supplies charge roll 52 fuser assembly 52 label fuser cleaner 52 maintenance kit 52 print cartridges 52 storing 53 transfer roll 52 Symbol Set (PCL Emul Menu) 150 symbol sets, definition 193

Т

test printing, Hex Trace mode 172 test printing, menus page 173 timeout, print 167 timeout, wait 169 toner alarm 168 Toner Alarm (Setup Menu) 168 Toner Darkness (Quality Menu) 157 transfer roll, replacing 49 Transmit Delay (Infrared Menu) 125 tray linking 45 Tray Renumber (PCL Emul Menu) 150 TrueType fonts 187 typeface, description 185

U

unacceptable paper types 19 Universal Setup (Paper Menu) 145 USB Buffer (USB Menu) 176 USB Menu 174 Job Buffering 174 MAC Binary PS 175 NPA Mode 175 PCL SmartSwitch 175 PS SmartSwitch 176 USB Buffer 176 USB port 174 configuring buffer size 176 NPA mode 175 PCL SmartSwitch 175 PS SmartSwitch 176 Utilities Menu 170 Defragment Flash 170 Factory Defaults 171 Format Disk 171 Format Flash 171 Hex Trace 172 Job Acct Stat 172 Print Directory 172 Print Fonts 172 Print Menus 173 Print Net<x> Setup 173

W

Wait Timeout (Setup Menu) 169 wait timeout, configuring 169 width guide 29 Window Size (Infrared Menu) 126

Argecy Computer Corporation 248-324-1800

Argecy Computer Corporation 248-324-1800



Part Number: 53P9071



Printed in the United States of America on recycled paper containing 10% recovered post-consumer fiber.

(1P) P/N: 53P9071

S510-2101-00



Argecy Computer Corporation 248-324-1800

Free Manuals Download Website <u>http://myh66.com</u> <u>http://usermanuals.us</u> <u>http://www.somanuals.com</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.com</u> <u>http://www.404manual.com</u> <u>http://www.luxmanual.com</u> <u>http://aubethermostatmanual.com</u> Golf course search by state

http://golfingnear.com Email search by domain

http://emailbydomain.com Auto manuals search

http://auto.somanuals.com TV manuals search

http://tv.somanuals.com