

Infoprint Color 1220



User's Reference

Infoprint Color 1220



User's Reference

Note:

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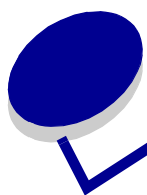


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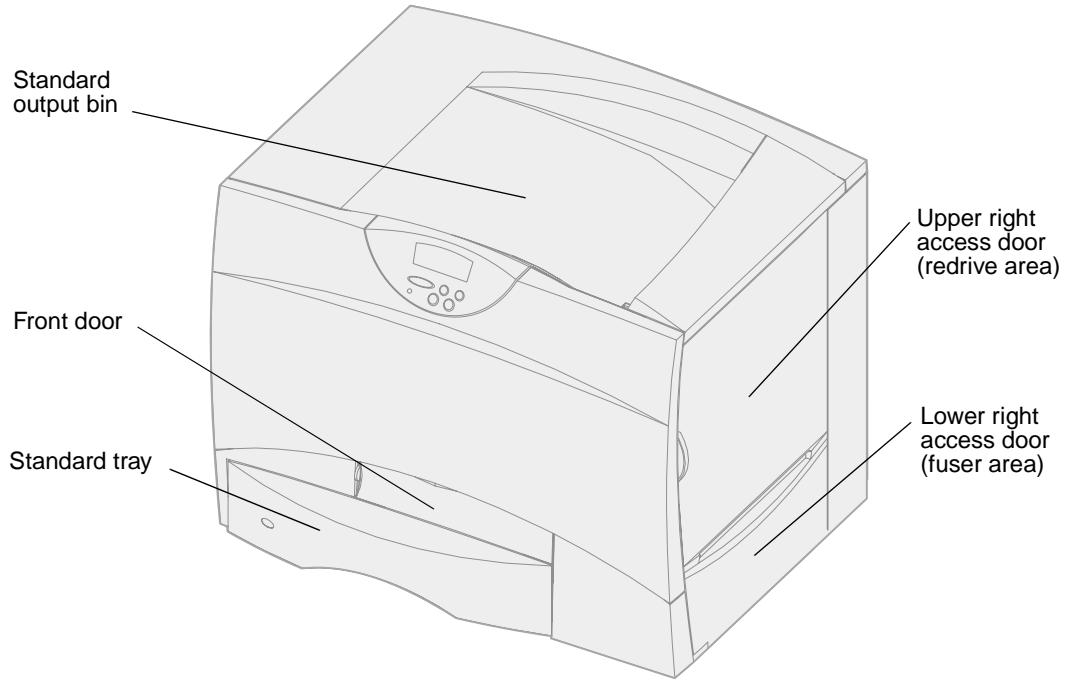
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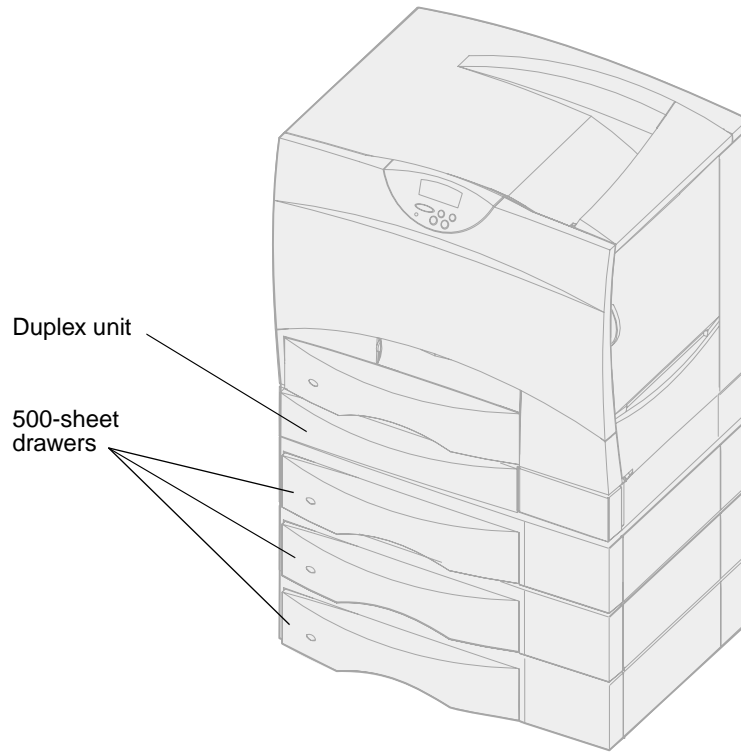
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Printer overview

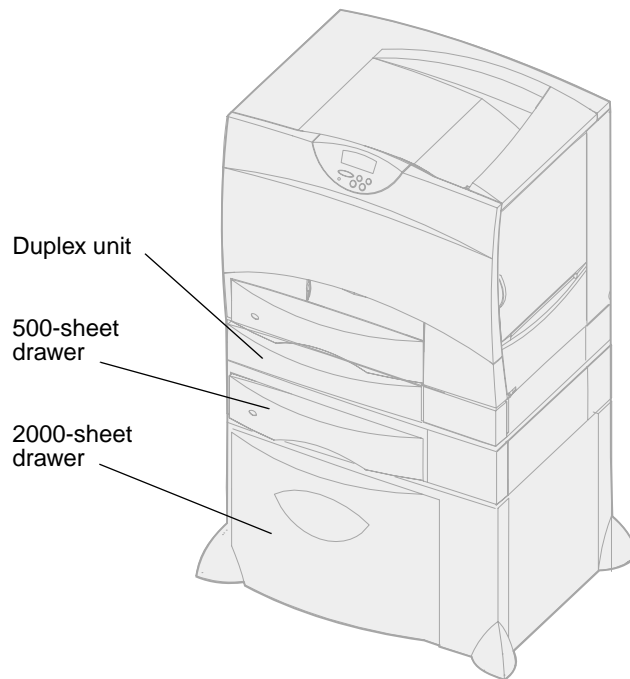
The following illustration shows the laser printer.



The following illustration shows the printer configured with a duplex unit and three optional 500-sheet drawers.

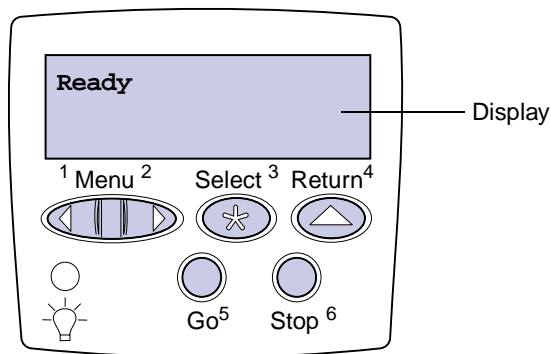


The following illustration shows the printer configured with a duplex unit, one optional 500-sheet drawer, and one optional 2000-sheet drawer.



2 Understanding the printer operator panel

The operator panel has five buttons, a display, and a light that flashes when the printer is processing a job indicated by the **Busy** message.



Operator panel buttons

Button	Function
Go	<p>Press Go to:</p> <ul style="list-style-type: none"> Return to the Ready state if the printer is offline (the Ready message does not appear on the display). Exit printer menus and return to the Ready state. Clear some operator panel messages. Resume printing after loading paper or clearing paper jams. Exit Power Saver. <p>If you have 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.</p>
Menu	<p>Press Menu to:</p> <ul style="list-style-type: none"> Take the printer offline (out of the Ready state) and enter the menus. When the printer is offline, press Menu to scroll through the menus and menu items. List the menu items in the Job Menu (during Busy state). <p>For menu items that have numerical values, such as Copies, press and hold Menu to scroll through the list of values. Release the button when the number you want appears.</p> <p>If you see a Menus Disabled message, you will not be able to change default settings. You can still clear messages and select items from the Job Menu when printing. When you send a job to print, change printer properties to select the settings you want for your job.</p>

Button	Function
Select	Press Select to: <ul style="list-style-type: none"> • Open the menu shown on the second line of the display. • Save the displayed menu item as the new user default setting. • Clear certain messages from the display. • Continue printing after the Change <x> message appears. See Change <x> for more information.
Return	Press Return to go back to the previous menu level or menu item.
Stop	Press Stop at the Ready , Busy , or Waiting message to temporarily take the printer offline. The message changes to Not Ready . No data is lost. Press Go to return the printer to the Ready, Busy, or Waiting state.
1, 2, 3, 4, 5, 6	Use the numbers located next to the names of the buttons to enter your personal identification number (PIN) after you send a confidential job.

See the [menu map](#) for a brief overview of the printer menus available from the operator panel.



Sending a job to print

To print a job from a typical Windows application:

- 1 Open the file you want to print.
- 2 From the File menu, select **Print**.
- 3 Verify that the correct printer is selected in the dialog box.
- 4 Modify the printer settings as appropriate (such as the pages you want to print or the number of copies).

Note: Click **Properties** or **Setup** to adjust printer settings not available from the first screen, and click **OK**.

- 5 Click **OK** or **Print** to send the job to the selected printer.



Canceling a print job

Cancel a job from the printer operator panel

If the job you want to cancel is printing, and **Busy** appears on the display:

- 1 Press **Menu** until you see Job Menu, and then press **Select**.
- 2 Press **Menu** until you see Cancel Job, and then press **Select**.

Cancel a job from the Windows taskbar

When you send a job to print, a small printer icon appears in the right corner of the taskbar.

- 1 Double-click the printer icon. A list of print jobs appears.
- 2 Select the job you want to cancel.
- 3 Press **Delete** on your keyboard.

Cancel a job from a Windows desktop

- 1 Minimize all programs to reveal the contents of the desktop.
- 2 Double-click My Computer.
- 3 Double-click Printers. A list of available printers appears.
- 4 Double-click the printer you selected when you sent the job. A list of print jobs appears.
- 5 Select the job you want to cancel.
- 6 Press **Delete** on your keyboard.

Cancel a job from a Macintosh computer

When you send a job to print, the icon for your selected printer appears on the desktop.

- 1 Double-click the printer icon on your desktop. A list of print jobs appears.
- 2 Press **Control** and click the print job you want to cancel.
- 3 Select Stop Queue from the pop-up menu that appears.

5

Conserving supplies

Several settings in your application software or on the display let you conserve toner and paper:

Supply	Setting	What the setting does	For more information, see...
Toner	Toner Darkness in the Color Menu	Lets you adjust the amount of toner released on a sheet of paper. The values range from 1 (lightest setting) to 5 (darkest setting).	Toner Darkness
Paper and specialty media	Multipage Print in the Finishing Menu	Prints two or more page images on one side of a sheet. Values for Multipage Print are 2 Up, 3 Up, 4 Up, 6 Up, 9 Up, 12 Up, and 16 Up. Combined with the duplex setting, Multipage Print lets you print up to 32 pages on one sheet of paper (16 images on the front and 16 on the back).	Multipage Print
	Duplex in the Finishing Menu	Available when you attach an optional duplex unit.	Duplex
Paper and specialty media	Use your software application or printer driver to send a Verify Print job. Use Held Jobs in the Job Menu to access your Verify Print job.	Lets you examine the first copy of a multiple-copy job to be sure it is satisfactory before you print the other copies. If the job is unsatisfactory, you cancel the job.	Verify Print Canceling a print job Holding a job in the printer



Holding a job in the printer

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 jobs](#)
- [Accessing held jobs from the operator panel](#)
- [Recognizing when format errors occur](#)
- [Repeating print jobs at a later time](#)
- [Verifying print jobs](#)
- [Printing confidential jobs](#)
- [Reserving print jobs](#)

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 ⚡ 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 ⚡ 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

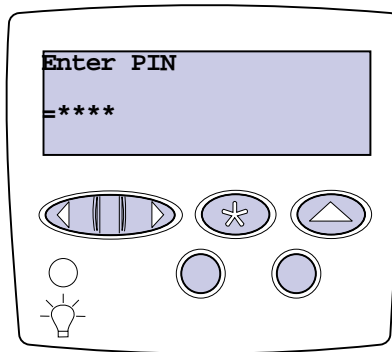
When you send a job to the printer, you can enter a personal identification number (PIN) from the driver. The PIN must be four digits using the numbers 1–6. The job is then held in printer memory until you enter the same four-digit PIN from the printer operator panel and choose to print or delete the 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.

7

Paper and specialty media specifications

The following table lists supported paper and specialty media sizes and types for the standard and optional trays, as well as for the multipurpose feeder. We recommend that you try a limited sample of any paper or specialty media you are considering using with the printer before purchasing large quantities.

Source	Paper sizes supported	Paper types supported	Capacity
500-sheet trays	Letter, A4, A5, Legal, Executive, JIS B5, Folio ¹ , Statement ¹ , Universal ^{2,3}	Paper, transparencies, labels, card stock	500 sheets of 20 lb paper 400 transparencies 250 sheets of labels or card stock ⁴
2000-sheet tray	Letter, A4, A5, Legal, Executive, JIS B5	Paper	2000 sheets of 20 lb paper
Multipurpose feeder	Letter, A4, A5, Legal, Executive, JIS B5, Folio ¹ , Statement ¹ , Universal ^{2,3}	Paper, transparencies, labels, card stock	100 sheets of 20 lb paper 85 transparencies 85 sheets of labels or card stock
	7¼, 9, 10, DL, C5, B5, other ²	Envelopes	10 envelopes

¹Supported as selected paper with tray size sensing turned off in the appropriate trays.

²When selected, the page is formatted for 215.9 x 355.6 mm (8.5 x 14 in.) unless otherwise specified.

³Load narrow media with the length in the feed direction (portrait).

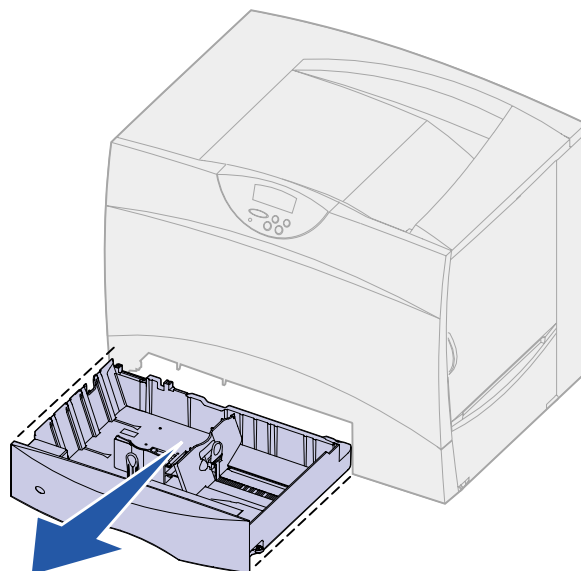
⁴If you print large quantities of labels or other glossy print media, replace the fuser housing with a web oiler field upgrade kit. Contact your point of purchase for more information.

8 Loading the trays

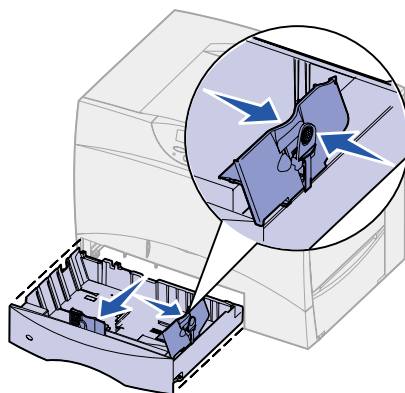
Loading the 500-sheet trays

Follow these instructions to load any of the 500-sheet trays.

- 1 Remove the tray.



- 2 Squeeze the front guide lever and slide the guide to the front of the tray.

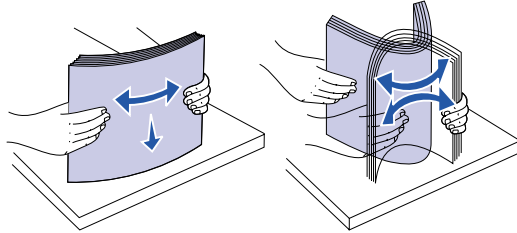


- 3 Squeeze the side guide lever and slide the guide to the correct position for the size paper you are loading.

Icons along the back of the tray indicate paper sizes.

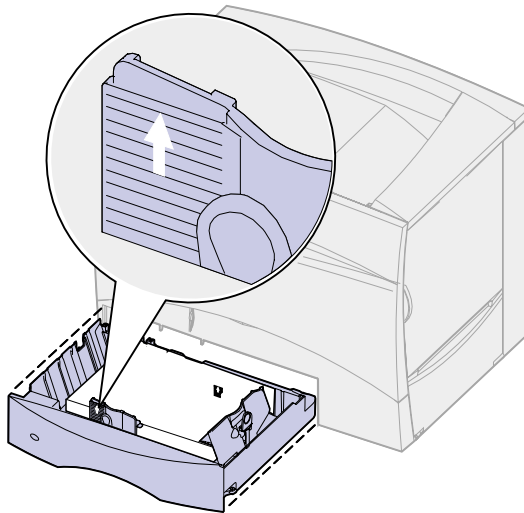
- 4 Flex the sheets back and forth to loosen them, and then fan them.

Do not fold or crease the paper. Straighten the edges of the stack on a level surface.



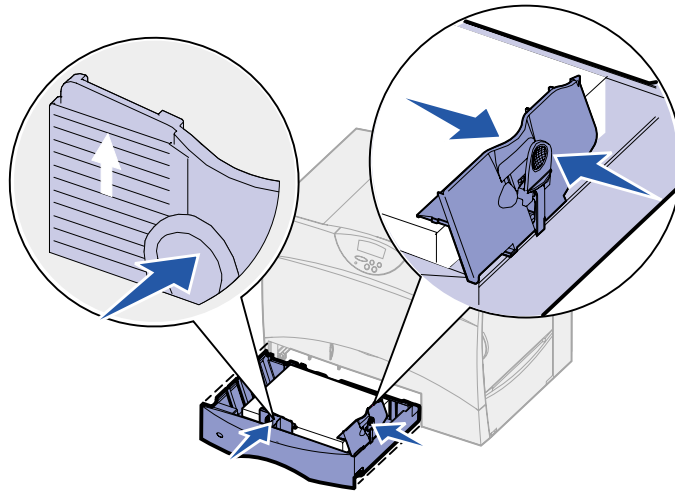
- 5 Place the paper against the back left corner of the tray, print side down.

Do not load bent or wrinkled paper.



Note: Do not exceed the maximum stack height. Overfilling the tray may cause jams.

- 6 Squeeze the front guide lever and slide the guide until it lightly touches the stack of paper.



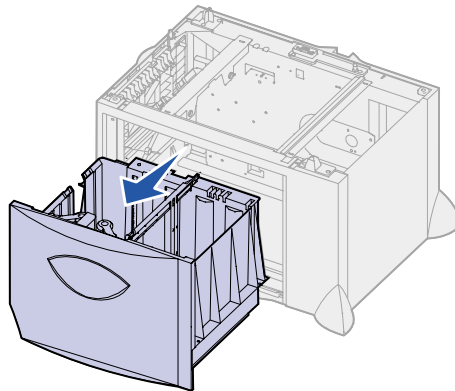
- 7 Reinstall the tray.

Make sure the tray is pushed completely into the printer.

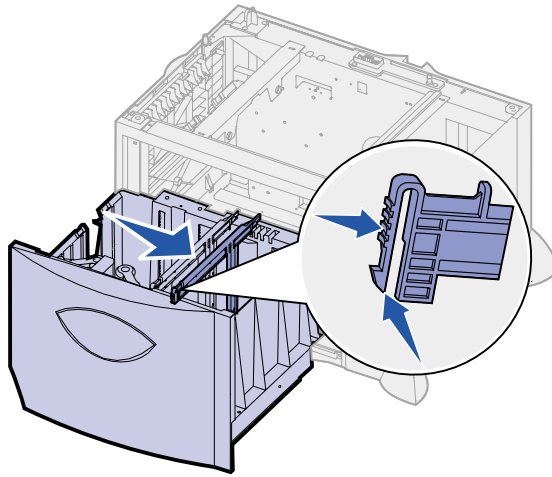
Loading the 2000-sheet tray

Follow these instructions to load a 2000-sheet tray. *Do not load any print media other than paper in the 2000-sheet tray.*

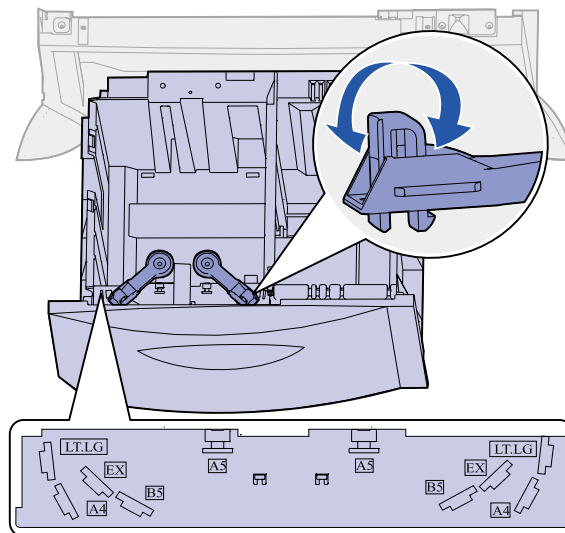
- 1 Pull open the tray.



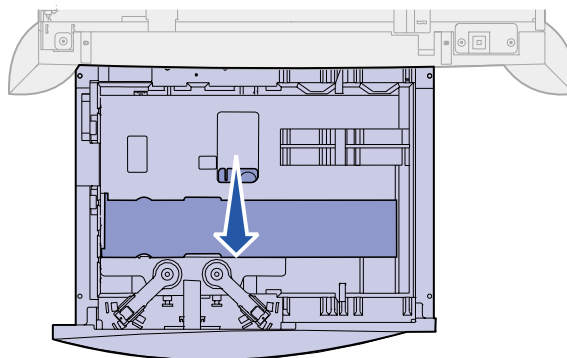
- 2** Squeeze the side guide lever, lift the guide, and place it into the appropriate slot for the size paper you are loading.



- 3** Squeeze the two front guide levers and slide the guide to the correct position for the size paper you are loading.

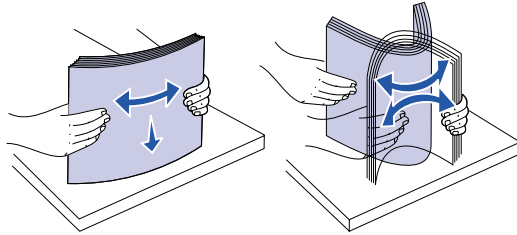


- 4** Slide the bottom support toward the front of the tray until it touches the front guide.



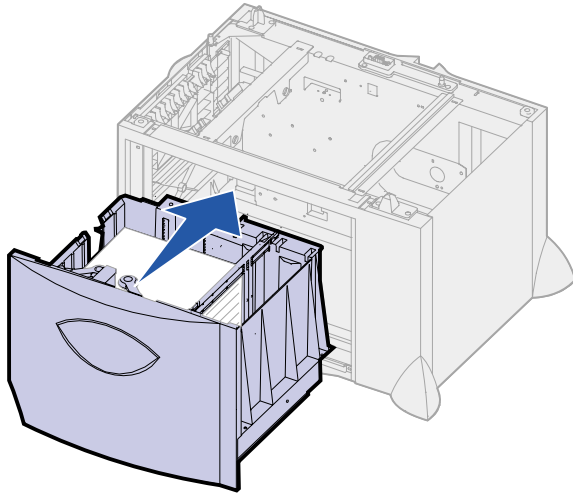
- 5** Flex the sheets back and forth to loosen them, and then fan them.

Do not fold or crease the paper. Straighten the edges of the stack on a level surface.



- 6** Place the paper against the back left corner of the tray, print side down.

Do not load bent or wrinkled print media.



- 7** Close the tray.

Make sure the tray is pushed completely into the printer.

Note: Do not exceed the maximum stack height. Overfilling the tray may cause paper jams.

9

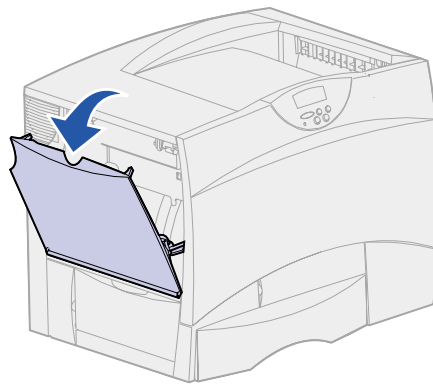
Loading the multipurpose feeder

You can use the multipurpose feeder one of two ways:

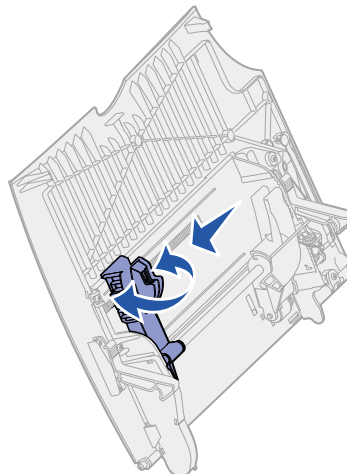
- **Paper tray**—As a paper tray, you can load print media in the feeder with the intention of leaving the media in the feeder.
- **Manual bypass feeder**—As a manual bypass feeder, you send a print job to the feeder while specifying the type and size of media from your computer. The printer then prompts you to load the appropriate print media before it prints.

Follow these instructions to load the multipurpose feeder.

- 1 Open the multipurpose feeder.

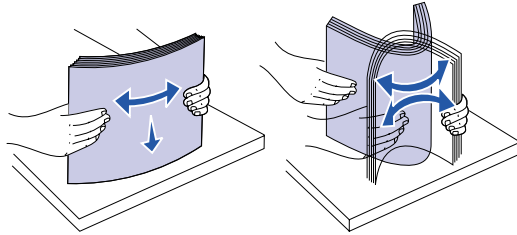


- 2 Squeeze the paper guide lever and slide the guide all the way toward the front of the printer.

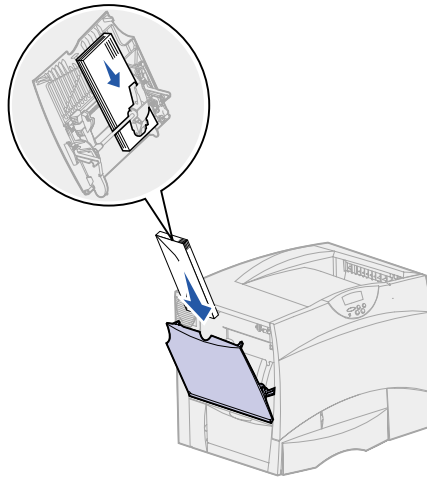


- 3** Flex the sheets back and forth to loosen them, and then fan them.

Do not fold or crease the print media. Straighten the edges of the stack on a level surface.



- 4** Arrange the stack of print media correctly for the size, type, and print method you are using.

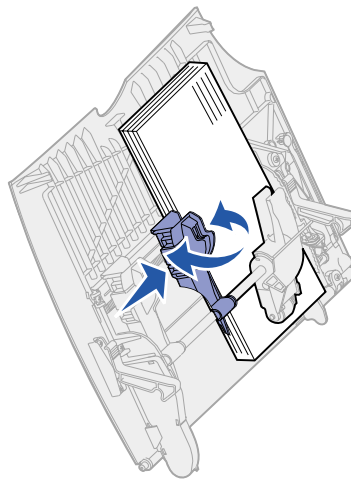


- 5** Place the print media, print side up, along the left side of the multipurpose feeder, and then push it in as far as it will go.

Do not force the print media.

Note: Do not exceed the maximum stack height. Overfilling the feeder may cause jams.

- 6** Squeeze the paper guide lever and slide the guide until it lightly touches the side of the stack.



10

Linking trays

- If you load the same size and type of paper or specialty media in more than one tray, the printer automatically links the trays. This means that when one tray is empty, it feeds from the next linked tray.

For example, if you have the same size and type of paper or specialty media loaded in tray 2 and tray 4, the printer feeds from tray 2 until it becomes empty, and then it feeds from the next linked tray—tray 4.

- If you load the same *size* paper or specialty media in each tray, make sure it is also all the same *type* to link the trays.

Once the trays you selected are loaded with the same size and type of paper or specialty media, select the same **Paper Type** setting in the **Paper Menu** for these sources.

- To disable tray linking, set the **Paper Type** to a unique value in each one of the trays.

Note: To link trays loaded with Executive, Legal, JIS B4, or JIS B5 size paper, see **Size Sensing**.

11 Linking bins

If you attach an optional finisher or mailbox to your printer, you can link output bins, or otherwise specify how the printer sends jobs to the bins, by changing the Configure Bins settings in the Paper Menu.

Value	Description
Mailbox	Lets you select an output bin when you send a job to print. (If you prefer, you can select a default output bin for all print jobs to go to.) The printer alerts you when the bin you selected becomes full, and stops printing until you empty the bin.
Link	Links all available bins so that when one bin becomes full, the printer sends jobs to the next linked bin.
Mail Overflow*	Sends jobs automatically to a preassigned overflow bin when the current bin becomes full.
Type Assignment	Lets you assign different types of media to specific output bins or set of linked bins. The printer then sends all printed media to the bin or set of linked bins that you designated to receive each type of paper or specialty media.

Only available if you have attached an optional mailbox.

To change the Configure Bins setting:

- 1 Press **Menu** until you see Paper Menu, and then press **Select**.
- 2 Press **Menu** until you see Configure Bins, and then press **Select**. Mailbox appears on the second line of the display.
- 3 Press **Menu** until you see the value you want, and then press **Select** to save the value as the bin configuration default.
- 4 Press **Go** to return the printer to the Ready state.

For more information, see [Configure Bins](#) and [Bin <x> Full](#).



Tips for successful printing

Storing paper

Use the following guidelines to avoid paper feeding problems and uneven print quality.

- 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 paper packages.

Storing supplies

Choose a cool, clean storage area for your printer supplies. Store supplies *right side up* in their original packaging until you are ready to use them.

Do not expose supplies to:

- Direct sunlight
- Temperatures above 35°C (95°F)
- High humidity (above 80%)
- Salty air
- Corrosive gases
- Heavy dust

Avoiding jams

You can avoid most paper jams by correctly loading paper and specialty media in the printer.

See the following for loading instructions:

- **Loading the 500-sheet trays**
- **Loading the 2000-sheet tray**
- **Loading the multipurpose feeder**

The following hints can help you avoid paper jams:

- Use only recommended paper.
- Do not load wrinkled, creased, or damp paper.
- Flex, fan, and straighten paper before you load it.
- Do not overload the trays or the multipurpose feeder. Make sure the stack height does not exceed the maximum height indicated.
- Push all trays *firmly* into the printer after loading them.
- Make sure the guides in the trays are properly positioned for the size paper you have loaded.
- Do not load paper in a tray while a job is printing. Wait for a **Load Tray <x>** message before you remove the tray from the printer.

You may remove another tray and load it so long as the print job is not selecting the paper from it.

- Do not send jobs to staple, hole punch, or offset for transparencies, labels, or card stock.
- We recommend that transparencies, labels, card stock, and envelopes not be sent to the optional mailbox or optional finisher. These specialty media types should be sent to the standard bin.
- If an optional finisher or mailbox is attached to your printer, make sure the printer and option are correctly aligned. Refer to the *Setup Guide* for alignment instructions.
- Make sure all cables that connect the duplex unit, high capacity feeder, finisher, or mailbox to the printer are correctly attached. Refer to the *Setup Guide* for more information.
- If a jam should occur, clear the entire paper path. See [Clearing the paper path](#) for more information.

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Checking an unresponsive printer

Sometimes printer problems are very easy to solve. If your printer is not responding, first make sure:

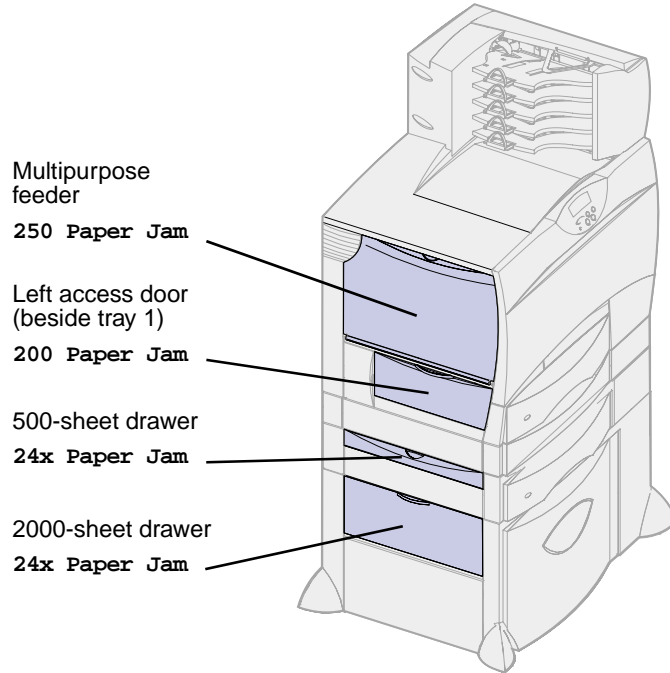
- The power cord is plugged into the printer and a properly grounded electrical outlet.
- The electrical outlet is not turned off by any switch or breaker.
- Other electrical equipment plugged into the outlet is working.
- The printer is turned on.
- The printer cable is securely attached to the printer and the host computer, print server, option, or other network device.

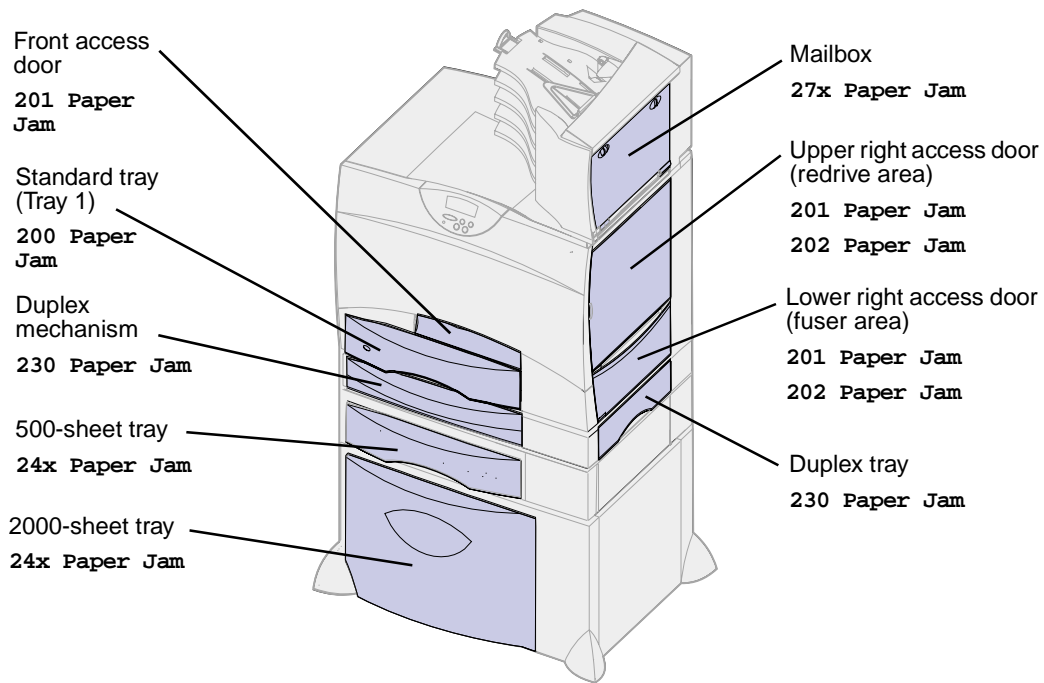
Once you have checked each of these possibilities, turn the printer off and back on. This often fixes the problem.

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Understanding jam messages

Always clear the entire paper path when you receive any jam message.





Paper jam messages

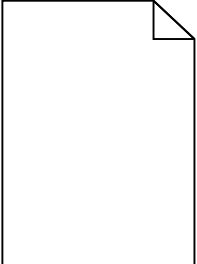
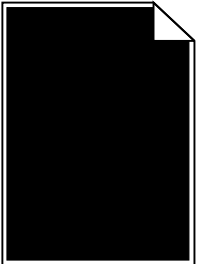
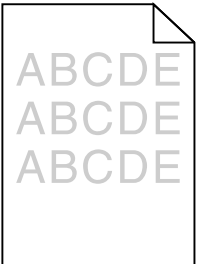
Message	What to do...
200 Paper Jam (tray 1)	Follow the instructions for Clearing the paper path .
201 Paper Jam (fuser area)	Follow the instructions for Clearing the paper path . If the jam message persists, paper may be caught in the fuser. See Clearing fuser jams for instructions.
202 Paper Jam (fuser area)	
230 Paper Jam (duplex area)	Follow the instructions for Clearing the paper path .
24x Paper Jam (trays 2–4)	
250 Paper Jam (multipurpose feeder)	
27x Paper Jam (mailbox and output expander)	Follow the instructions for clearing the entire paper path. If the jam message persists, paper may be caught in the mailbox or output expander. See Clearing mailbox jams for instructions.

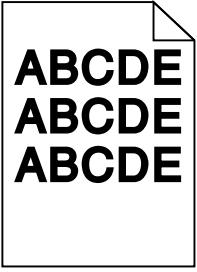
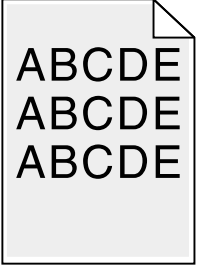
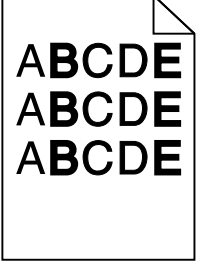
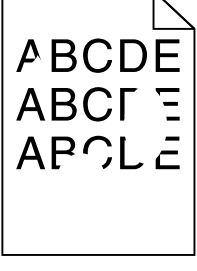
15

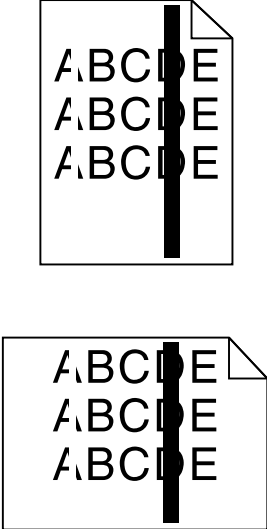
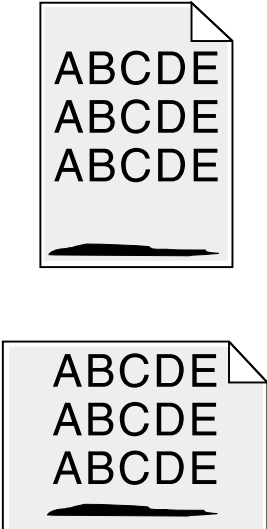
Solving print quality problems

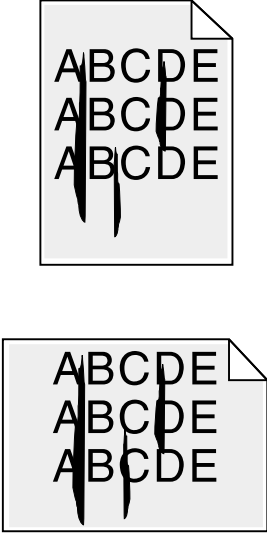
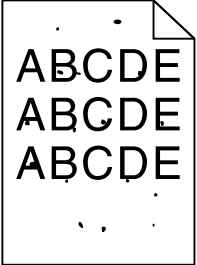
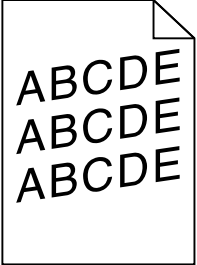
You can solve many print quality problems by replacing a supply or maintenance item that has reached the end of its intended life. Check the operator panel for a message about a printer consumable. See **Determining the status of supplies** for information about other ways to identify consumables that need to be replaced.

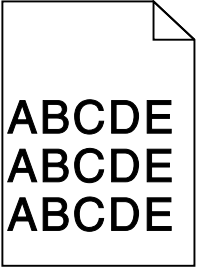
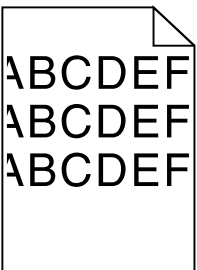
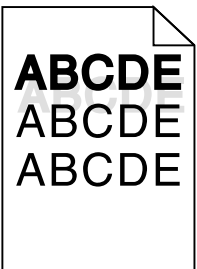
Use the following table to find solutions to print quality problems.

Symptom	Cause	Solution
Blank pages 	<ul style="list-style-type: none"> The print cartridges are defective or empty. The transfer roller is defective. The image transfer unit is defective. 	<ul style="list-style-type: none"> Replace the print cartridges. See Replacing print cartridges. Replace the transfer roller. See Replace the image transfer unit and transfer roller. Replace the image transfer unit. See Replace the image transfer unit and transfer roller.
Black pages 	<ul style="list-style-type: none"> The print cartridges are defective. Your printer requires servicing. 	<ul style="list-style-type: none"> Replace the print cartridges. See Replacing print cartridges. Call for service.
Print too light 	<ul style="list-style-type: none"> The Toner Darkness setting is too light. You are using paper that does not meet the printer specifications. The print cartridges are low on toner. The print cartridges are defective or have been installed in more than one printer. 	<ul style="list-style-type: none"> Select a different Toner Darkness setting from the printer driver before sending the job to print. Perform a Color Adjust in the Utilities Menu. See Utilities Menu. Load paper from a new package. Avoid textured paper with rough finishes. Make sure the paper you load in the trays is not damp. Replace the print cartridges. See Replacing print cartridges.

Symptom	Cause	Solution
<p>Print too dark</p> 	<ul style="list-style-type: none"> • The Toner Darkness setting is too dark. • The print cartridges are defective. 	<ul style="list-style-type: none"> • Select a different Toner Darkness setting from the printer driver before sending the job to print. • Replace the print cartridges. See Replacing print cartridges.
<p>Gray background</p> 	<ul style="list-style-type: none"> • The Toner Darkness setting is too dark. • The print cartridges are defective. 	<ul style="list-style-type: none"> • Select a different Toner Darkness setting from the printer driver before sending the job to print. • Replace the print cartridges. See Replacing print cartridges.
<p>Uneven print density</p> 	<ul style="list-style-type: none"> • The print cartridges are defective. • The transfer roller is worn or defective. • The image transfer unit is worn or defective. 	<ul style="list-style-type: none"> • Replace the print cartridges. See Replacing print cartridges. • Replace the transfer roller. See Replace the image transfer unit and transfer roller. • Replace the image transfer unit. See Replace the image transfer unit and transfer roller.
<p>Print irregularities</p> 	<ul style="list-style-type: none"> • Paper has absorbed moisture due to high humidity. • You are using paper that does not meet the printer specifications. • The image transfer unit and transfer roller are worn or defective. • The fuser is worn or defective. 	<ul style="list-style-type: none"> • Load paper from a fresh package in the paper tray. For information on storing paper, see Storing paper. • Avoid textured paper with rough finishes. • Replace the image transfer unit and transfer roller. See Replace the image transfer unit and transfer roller. • Replace the fuser. See Replacing the fuser.

Symptom	Cause	Solution
<p data-bbox="246 245 461 273">White or black line</p> 	<ul data-bbox="571 245 876 380" style="list-style-type: none"> • Either the print cartridges are defective, the image transfer unit and transfer roller are defective, or the fuser is defective. 	<ol data-bbox="912 245 1370 485" style="list-style-type: none"> 1 First, replace the print cartridges. See Replacing print cartridges. 2 If you still have the problem, replace the image transfer unit and transfer roller. See Replace the image transfer unit and transfer roller. 3 If you still have the problem, replace the fuser. See Replacing the fuser.
<p data-bbox="246 850 535 877">Streaked horizontal lines</p> 	<ul data-bbox="571 850 876 984" style="list-style-type: none"> • The print cartridges, the transfer roller, image transfer unit, or fuser may be defective, empty, or worn. 	<ul data-bbox="912 850 1370 1039" style="list-style-type: none"> • Replace the print cartridges, the transfer roller, the image transfer unit, or fuser as needed. See Replacing print cartridges, Replace the image transfer unit and transfer roller, and Replacing the fuser for more information.

Symptom	Cause	Solution
<p>Streaked vertical lines</p> 	<ul style="list-style-type: none"> • Toner is smeared before fusing to the paper. 	<ul style="list-style-type: none"> • If paper is stiff, try feeding from another tray.
<p>Toner specks</p> 	<ul style="list-style-type: none"> • The print cartridges are defective. • The transfer roller is worn or defective. • The image transfer unit is worn or defective. • The fuser is worn or defective. • Toner is in the paper path. 	<ul style="list-style-type: none"> • Replace the print cartridges. See Replacing print cartridges. • Replace the transfer roller. See Replace the image transfer unit and transfer roller. • Replace the image transfer unit. See Replace the image transfer unit and transfer roller. • Replace the fuser. See Replacing the fuser. • Call for service.
<p>Toner rubs off the paper easily when you handle the sheets.</p>	<ul style="list-style-type: none"> • The Texture setting is wrong for the type of paper or specialty media you are using. 	<ul style="list-style-type: none"> • Change Paper Texture from Normal to Smooth or Rough.
<p>Skewed print</p> 	<ul style="list-style-type: none"> • Guides in the selected tray are not in the correct position for the paper size loaded in the tray. 	<ul style="list-style-type: none"> • Move the guides in the tray to the proper positions for the size loaded. See Loading the trays for detailed instructions on adjusting the guides in each tray.

Symptom	Cause	Solution
<p data-bbox="248 243 456 275">Incorrect margins</p> 	<ul data-bbox="573 243 898 552" style="list-style-type: none"> • Guides in the selected tray are set for a different size paper than what is loaded in the tray. • Auto size sensing is set to off, but you loaded a different size paper in a tray. For example, you inserted A4 size paper into the selected tray but did not set the Paper Size to A4. 	<ul data-bbox="914 243 1375 415" style="list-style-type: none"> • Move the guides in the tray to the proper positions for the size loaded. See Loading the trays for detailed instructions on adjusting the guides in each tray. • Set the Paper Size to A4.
<p data-bbox="248 594 427 625">Clipped images</p> 	<ul data-bbox="573 594 889 699" style="list-style-type: none"> • Guides in the selected tray are set for a different size paper than what is loaded in the tray. 	<ul data-bbox="914 594 1375 730" style="list-style-type: none"> • Move the guides in the tray to the proper positions for the size loaded. See Loading the trays for detailed instructions on adjusting the guides in each tray.
<p data-bbox="248 936 410 968">Ghost images</p> 	<ul data-bbox="573 936 849 993" style="list-style-type: none"> • Toner level is low in the print cartridges. 	<ul data-bbox="914 936 1367 1077" style="list-style-type: none"> • Make sure the Paper Type setting is correct for the paper or specialty media you are using. • Replace the print cartridges. See Replacing print cartridges.
<p data-bbox="248 1297 540 1381">The paper curls badly once it prints and exits to a bin.</p>	<ul data-bbox="573 1297 889 1402" style="list-style-type: none"> • The Texture setting is wrong for the type of paper or specialty media you are using. 	<ul data-bbox="914 1297 1359 1350" style="list-style-type: none"> • Change Paper Texture from Rough to Normal or Smooth.

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Solving option problems

Symptom	Cause	Solution
The option does not operate correctly after it is installed, or it stops working.	The option is not installed correctly.	Remove the option, and then reinstall it.
	Cables connecting the option to the printer are not attached correctly.	Check the cable connections. Refer to the <i>Setup Guide</i> for instructions.
	The printer driver does not recognize that the option is installed.	Your printer driver may not automatically recognize that an option is attached to your printer. Look at the driver settings and verify that all the printer configuration settings are correct.
Cannot print using the infrared port on the optional Tri-Port Adapter.	The infrared port is not configured properly.	<ul style="list-style-type: none"> • Make sure neither Infrared Port nor Infrared Buffer is set to Disabled in the Infrared Menu. • Make sure the Window Size and Transmit Delay settings are correct.

Symptom	Cause	Solution
<p>Cannot print using the infrared port on the optional Tri-Port Adapter (continued).</p>	<p>A connection between the two infrared devices cannot be made.</p>	<ul style="list-style-type: none"> • Make sure the distance between the two infrared ports is 3 m (10 ft) or less. If necessary, move the ports closer together. • Make sure no objects are between the two ports. • Make sure the computer is set on a level surface. • If necessary, turn off the lights in the room or close window shades or blinds. Bright light, such as direct sunshine or nearby artificial lights, may interfere with communication.
<p>Cannot print using the LocalTalk port.</p>	<p>The LocalTalk port is not set up correctly.</p>	<ul style="list-style-type: none"> • Make sure neither LocalTalk Port nor LocalTalk Buffer is set to Disabled in the LocalTalk Menu. • Verify that the printer is set up correctly in the Macintosh Chooser. • If two Tri-Port Adapters are installed, only one LocalTalk and one infrared port works. The Tri-Port Adapter installed in connector slot 1 is active.

Solving mailbox problems

Symptom	Cause	Solution
Paper jams before reaching the mailbox.	The mailbox and the printer are misaligned.	Realign the mailbox and the printer. Refer to the <i>Setup Guide</i> for instructions. See Clearing mailbox jams for more information.
	The mailbox cable is not connected properly.	Check the cable connection. Refer to the <i>Setup Guide</i> for instructions on connecting the mailbox to the printer.

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Solving paper feed problems

Symptom	Cause	Solution
Paper frequently jams.	You are using paper that does not meet the printer specifications.	See Clearing the paper path , Clearing fuser jams , Clearing image transfer unit jams , or Clearing mailbox jams for more information. See Avoiding jams for information that can help prevent jams from occurring.
	You have loaded too much paper or too many envelopes.	Make sure the stack of paper you load does not exceed the maximum stack height indicated at the back of the tray or on the multipurpose feeder.
Paper frequently jams (continued).	Guides in the selected tray are not set to the appropriate position for the size paper loaded.	Move the guides in the tray to the correct position. See Loading the trays for detailed instructions.
	The paper has absorbed moisture due to high humidity.	Load paper from a fresh package. Store paper in its original wrapper until you load it. See Storing paper for more information.
The Paper Jam message remains after you remove the jammed paper.	You have not cleared the entire paper path, or you did not open the door specified by the message to check for jams in this area.	Clear paper from the entire paper path, open the door indicated by the operator panel message, clear the jam, and close the door. The printer resumes printing. See Clearing the paper path for more information.
The page that jammed does not reprint after you clear the jam.	Jam Recovery in the Setup Menu is set to Off.	Set Jam Recovery to Auto or On.

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Solving printing problems

Symptom	Cause	Solution
The operator panel display is blank or displays only diamonds.	The printer self test failed.	Turn the printer off, wait about 10 seconds, and turn the printer back on. Performing Self Test appears on the display. When the test is completed, the Ready message is displayed. If the messages do not appear, turn the printer off and call for service.
Jobs do not print.	The printer is not ready to receive data.	Make sure Ready or Power Saver appears on the display before sending a job to print. Press Go to return the printer to the Ready state.
	The specified output bin is full.	Remove the stack of paper from the output bin, and then press Go .
	The specified tray is empty.	Load paper in the tray. See Loading the trays for detailed instructions.

Symptom	Cause	Solution
Jobs do not print (continued).	You are using the wrong printer driver or are printing to a file.	<ul style="list-style-type: none"> Verify that you selected the printer driver associated with the printer. If you are using a USB port, make sure you are running Windows 98/Me or Windows 2000, and using a Windows 98/Me or Windows 2000 compatible printer driver.
	Your MarkNet™ print server is not set up properly or is not connected properly.	Verify that you have properly configured the printer for network printing.
	You are using the wrong interface cable, or the cable is not securely connected.	<p>Make sure you are using a recommended interface cable.</p> <p>Refer to the <i>Setup Guide</i> for cable specifications.</p>
Held jobs do not print.	A formatting error has occurred.	<ul style="list-style-type: none"> Print the job. (Only part of the job may print.) Delete the job. Free up additional printer memory by scrolling through the list of held jobs and deleting others you have sent to the printer.
	The printer has insufficient memory.	
	The printer has received invalid data.	Delete the job.
Job takes longer than expected to print.	The job is too complex.	Reduce the complexity of your print job by eliminating the number and size of fonts, the number and complexity of images, and the number of pages in the job.
	Page Protect is set to On.	<p>Set Page Protect to Off from the Setup Menu.</p> <ol style="list-style-type: none"> Press Menu until you see Setup Menu, and then press Select. Press Menu until you see Page Protect, and then press Select. Press Menu until you see Off, and then press Select.
Job prints from the wrong tray or on the wrong paper or specialty media.	Printer driver settings are overriding the operator panel menu settings.	Make sure the Paper Size and Paper Type specified in the printer driver are correct for the job you are printing.
Incorrect characters print.	You are using an incompatible parallel cable.	If you are using a parallel interface, make sure you are using an IEEE 1284-compliant parallel cable.
	The printer is in Hex Trace mode.	If Ready Hex appears on the display, you must exit Hex Trace mode before you can print your job. Turn the printer off and back on to exit Hex Trace mode.
Tray linking does not work.	Tray linking is not configured properly.	<p>To configure the linked trays:</p> <ul style="list-style-type: none"> Make sure the Tray x Type value in the Paper Type menu item in the Paper Menu is the same for all linked trays. Make sure the Tray x Size value in the Paper Size menu item in the Paper Menu is the same for all linked trays.

Symptom	Cause	Solution
Large jobs do not collate.	Collate is not set to On.	Set Collation to On in the Finishing Menu or through the printer driver.
	The job is too complex.	Reduce the complexity of the print job by eliminating the number and size of fonts, the number and complexity of images, and the number of pages in the job.
	The printer does not have enough memory.	Add printer memory or an optional hard disk. Refer to the <i>Setup Guide</i> for information on selecting memory options to install.
Unexpected page breaks occur.	The job has timed out.	Set Print Timeout to a higher value from the Setup Menu .



Calling for service

When you call for printer service, describe the problem you are experiencing, the message on the display, and the troubleshooting steps you have already taken to find a solution.

You need to know your printer model type and serial number. Refer to the label on the back of the printer near the power cord for this information.

Note: The serial number is also listed on the menu settings page you can print from the Utilities Menu. See [Printing a menu settings page](#) for more information.

Contact your point of purchase for more information.

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Configuring printer alerts

You can configure the printer several ways to let you know when it requires attention.

Using the Setup Menu

Menu item	Function	Value	Result
Alarm Control	Lets you establish whether the printer sounds an alarm when it requires operator intervention.	Off	The alarm does not sound, but printing stops until the interventions are cleared.*
		Single	The printer stops printing, displays a message, and activates the selected alarm type.
		Continuous	
Toner Alarm	Lets you choose how the printer responds when toner is low.	Off	The printer displays a message and continues printing.
		Single	The printer stops printing, displays a message, and activates the selected alarm type.
		Continuous	

If multiple attendance conditions are pending, the alarm only sounds when the first message is displayed. No additional alarms sound as subsequent attendance conditions arise.

Selecting **Auto Continue** may affect how the printer alerts execute. This setting defines how long the printer waits after displaying a message before it resumes printing.

Using MarkVision Professional

MarkVision™ Professional, the network printer management utility, indicates when it is time to replace supplies and points out actual or potential problems. When a printer needs attention, it alerts the network administrator with a detailed graphic of the printer showing the cause for the alert (for example, an empty paper tray). For more information about MarkVision Professional, refer to the drivers CD that shipped with your printer.

Using MarkVision Messenger

MarkVision Messenger lets you create Actions that execute specific commands whenever messages like **Tray x Missing** or **88 Toner Low** appear on the display. For example, you can create an Action that sends an e-mail to the administrator when the printer runs out of paper.

Actions can be set up to occur automatically, as well as conditionally or repeatedly. For more information about MarkVision Messenger, refer to the drivers CD that shipped with your printer.



Determining the status of supplies

To determine the status of all of the consumables installed in your printer, print the menu settings page.

See [Printing a menu settings page](#) for detailed instructions.

One or two pages print depending on the number of menu settings you have. Look for “Consumable Status” on the page; the percentage of life remaining for each of the items is indicated.



Size Sensing

The Size Sensing menu item lets you disable or enable auto size sensing on trays. Size Sensing also lets the printer detect the difference between similar paper sizes that it otherwise cannot.

Note: If you load both Executive and JIS B5 size paper, or Legal and JIS B4 size paper, load one size in the multipurpose feeder. Do not use two trays when you load these similar sizes of paper.

Enabling size sensing

To instruct the printer to sense Executive or JIS B5:

- 1 Turn the printer off.
- 2 Press and hold the **Select** and **Return** buttons, and then turn the printer on.
- 3 Release the buttons when **Performing Self Test** appears on the display.
When the printer self test completes, **Config Menu** appears.
- 4 Press **Menu** until you see Size Sensing, and then press **Select**.
- 5 Press **Menu** until you see Executive/B5. Make sure the one you want to select is on the second line of the display, and then press **Select**. The operator panel displays two choices: Sense Executive and Sense JIS B5.
- 6 Press **Menu** until you see the size you want, and then press **Select**.
saved briefly appears. Config Menu appears again with Size Sensing on the second line.
- 7 Press **Return**.
- 8 Press **Menu** until you see Exit Config Menu, and then press **Select**.
Activating Menu Changes briefly appears, followed by **Performing Self Test**. The printer returns to the **Ready** message.

Size sensing and tray linking

If you want to link printer trays and have selected to load Executive or JIS B5 size paper, complete the steps beginning on [page 48](#) of this topic to specify the size you want the printer to sense. Then, if you load JIS B5 in trays 1 through 3, for example, those trays are linked. If one tray runs out of JIS B5, the printer automatically selects JIS B5 from another one of these trays. See [Linking trays](#) for more information.

Disabling size sensing

To disable auto size sensing:

- 1** Turn the printer off.
- 2** Press and hold the **Select** and **Return** buttons, and then turn the printer on.
- 3** Release the buttons when **Performing Self Test** appears on the display.

When the printer self test completes, Config Menu appears.

- 4** Press **Menu** until you see Size Sensing, and then press **Select**.

Note: Only paper trays that support auto size sensing are displayed on the operator panel.

- 5** Press **Menu** until you see Tray x Sensing, where x represents the number of the tray for which you want to disable size sensing, and then press **Select**.

Repeat for other trays, if necessary.

- 6** Press **Menu** until you see Off, and then press **Select**.

saved briefly appears. Config Menu appears again with Size Sensing on the second line.

- 7** Press **Return**.

- 8** Press **Menu** until you see Exit Config Menu, and then press **Select**.

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



Ordering supplies and maintenance items

Replacing maintenance items as needed helps you maintain top performance, optimize print quality, and avoid printing problems.

Ordering a fuser

When the **80 Fuser Maintenance** or **ITU/Fuser Maint** message appears on the display, you should order a new fuser. See [Replacing the fuser](#) for more information.

Ordering an image transfer unit and transfer roller

When the **83 ITU Maintenance** or **ITU/Fuser Maint** message appears on the display, you should order a new image transfer unit and transfer roller. See [Replace the image transfer unit and transfer roller](#) for more information.

Ordering a print cartridge

When the **88 <color> Toner Low** message appears on the display, you should order a new print cartridge. You can continue to print after the **88 <color> Toner Low** message appears for a few hundred pages until the print fades or no longer prints satisfactorily. See [Replacing print cartridges](#) for more information.

Aligning the image transfer unit

For best print quality, make sure you align the image transfer unit after replacement or if colors print too lightly.

To align the image transfer unit:

- 1 On the printer operator panel, press and hold **Select** and **Return** while turning the printer on.
- 2 When **Performing Self Test** appears, release the buttons.
- 3 When **Config Menu** appears, press **Menu** until you see **ITU Alignment**, and then press **Select**.

A test page prints.

- 4 Look at the test page and select a number value for each of the twelve settings where the color is most intense. Select a value in the range of -10 to +10 to the nearest .5 increment. For example, you may find for the Test A alignment that your color is most intense at the 4.5 value.

It is helpful to write all twelve alignment values in the lines provided on the test page before going on to step 5. You must select a value for all twelve settings.

- 5 When you see **Test A Alignment**, press **Menu** until you find the number value you want to use, and then press **Select**. A **Saved** message briefly appears and then the next test alignment displays.
- 6 After you have completed all twelve settings, **Config Menu** appears. Press **Menu** until you see **Exit Config Menu**, and then press **Select**.

The printer returns to the Ready state.

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Other maintenance and troubleshooting documents

Consult the following table to determine the name of the PDF file associated with a particular maintenance or troubleshooting task. You can then share the file with other printer users by copying it to a shared drive or to an intranet site.

Topic	Document size	File location
Clearing fuser jams	22.75" x 8.5" sheet ¹	...\Acrobat\English\bjjamsref2_online.pdf
Clearing mailbox jams		
Clearing the paper path		
Replacing the fuser	11" x 17" sheet ²	...\Acrobat\English\fuserasm_online.pdf
Replacing print cartridges		...\Acrobat\English\printcart_online.pdf
Replacing the toner waste container		...\Acrobat\English\tonwaste2_online.pdf
Replace the image transfer unit and transfer roller	7.5" x 9" booklet	...\Acrobat\English\replace_online.pdf

¹Check the Fit to page box in Acrobat and print on Legal size paper.
²Check the Fit to page box in Acrobat and print on Letter size paper.

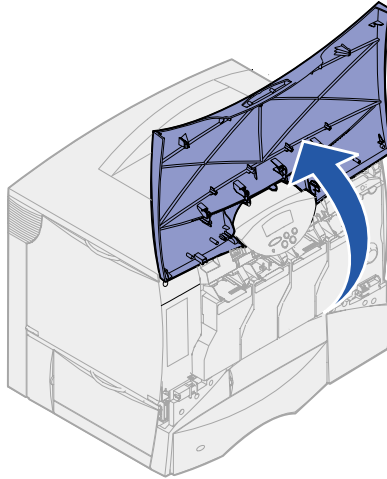
If some maintenance and troubleshooting documents do not print, do the following:

- 1 Open the document you want to print in Adobe Acrobat.
- 2 Click the printer icon.
The Print dialog box appears.
- 3 Check the **Print as image** box.
- 4 Click **OK**.

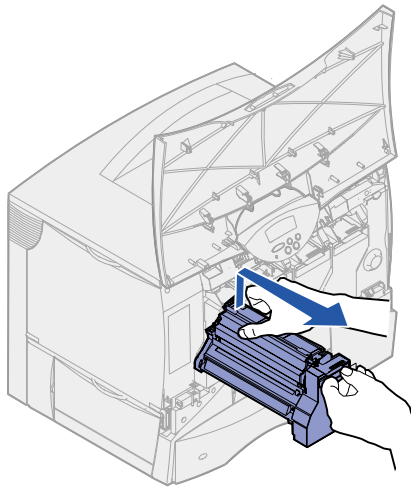
27

Clearing image transfer unit jams

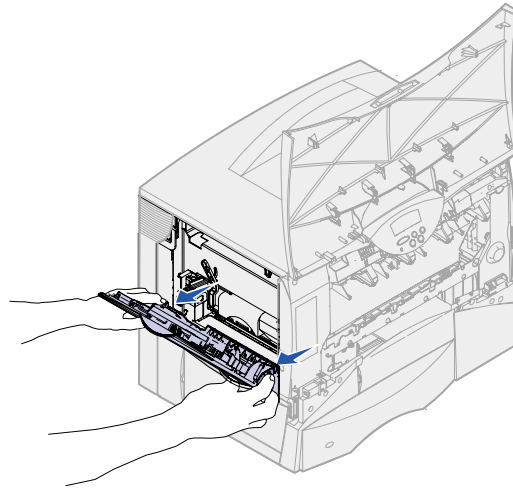
- 1 Turn the printer off. Open the front cover.



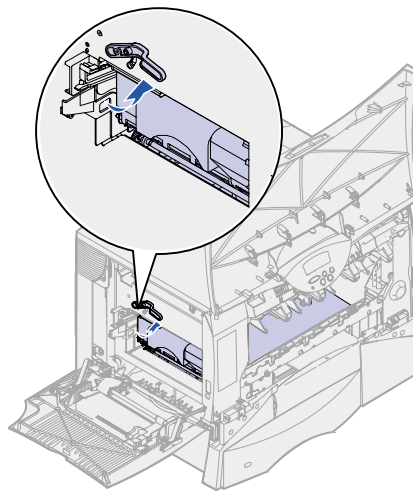
- 2 Remove all the print cartridges.
 - a Pull up slightly on the cartridge handhold.
 - b Pull the cartridge straight out and use the handle to lift it off the guides.
 - c Place the cartridges on a clean flat surface out of direct light.



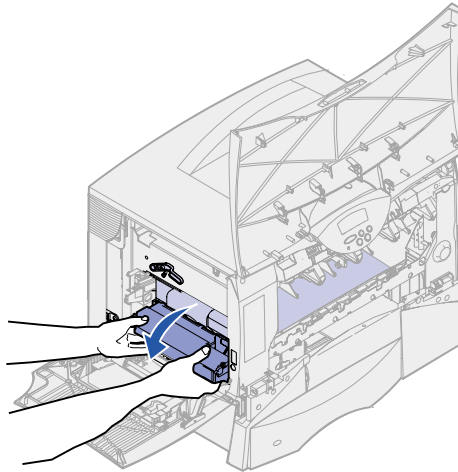
- 3** Release the latches to open the multipurpose feeder all the way.



- 4** Remove the image transfer unit.
- a** Raise the lever to unlock the image transfer unit.

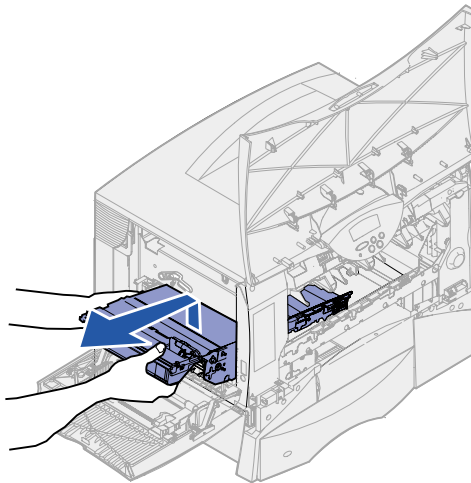


- b** Pull down on the handle.

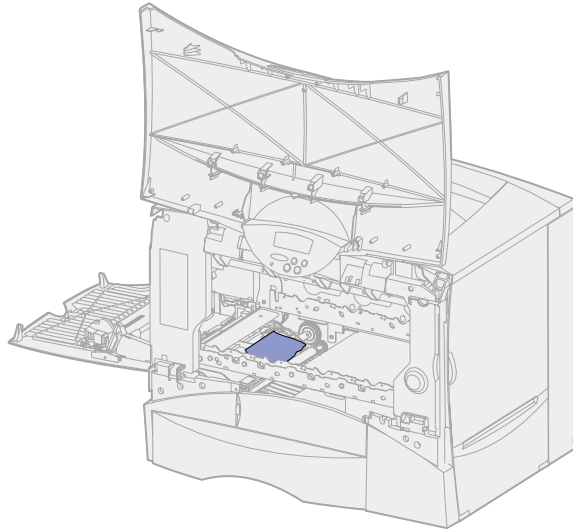


- c** Slide the image transfer unit out and place it on a clean, flat surface.

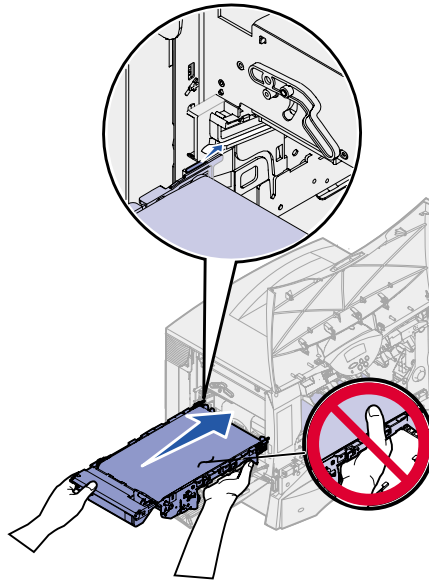
WARNING: Do not touch the transfer belt. Touching the belt will damage the image transfer unit.



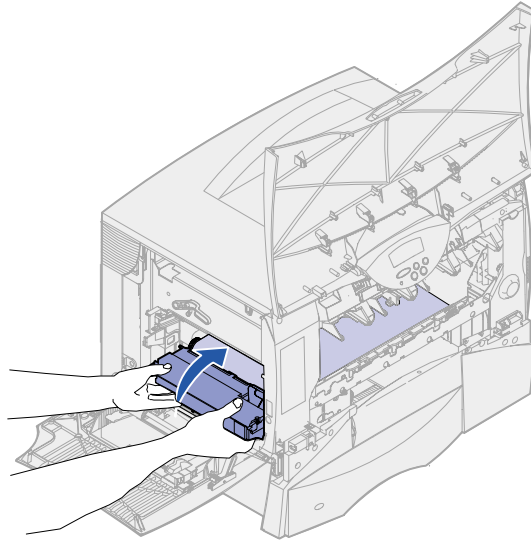
- 5** Look inside the printer. Remove all torn paper or other jams.



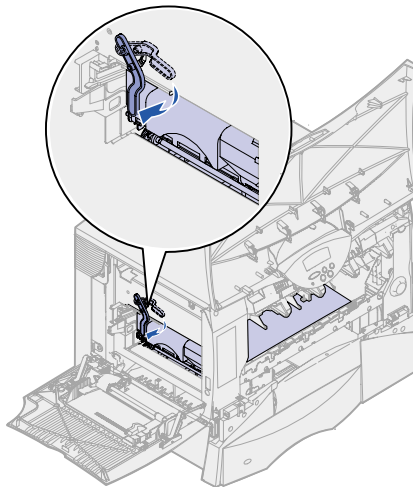
- 6** Insert the image transfer unit back into the printer.
a Align the guides with the insertion grooves.



- b** Push the handle up using both hands, and gently slide the unit in.

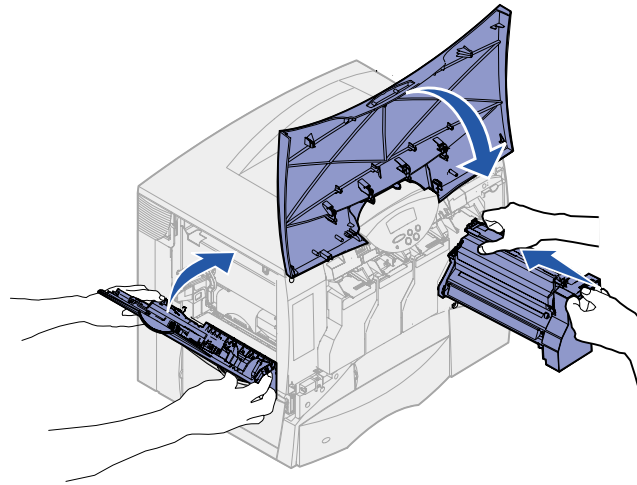


- c** Lower the lever to lock the image transfer unit into place.

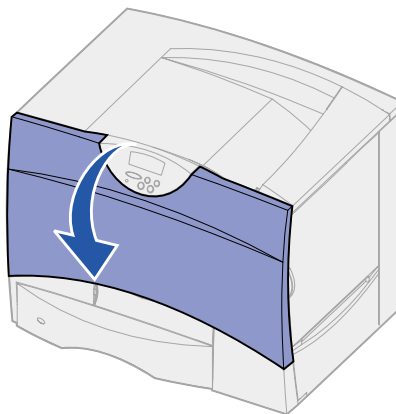


- 7 Return the multipurpose feeder to its working position.

Reinstall all the print cartridges. For helping installing the print cartridges, refer to the printer *Setup Guide* or *Publications CD*.



- 8 Close the printer door.

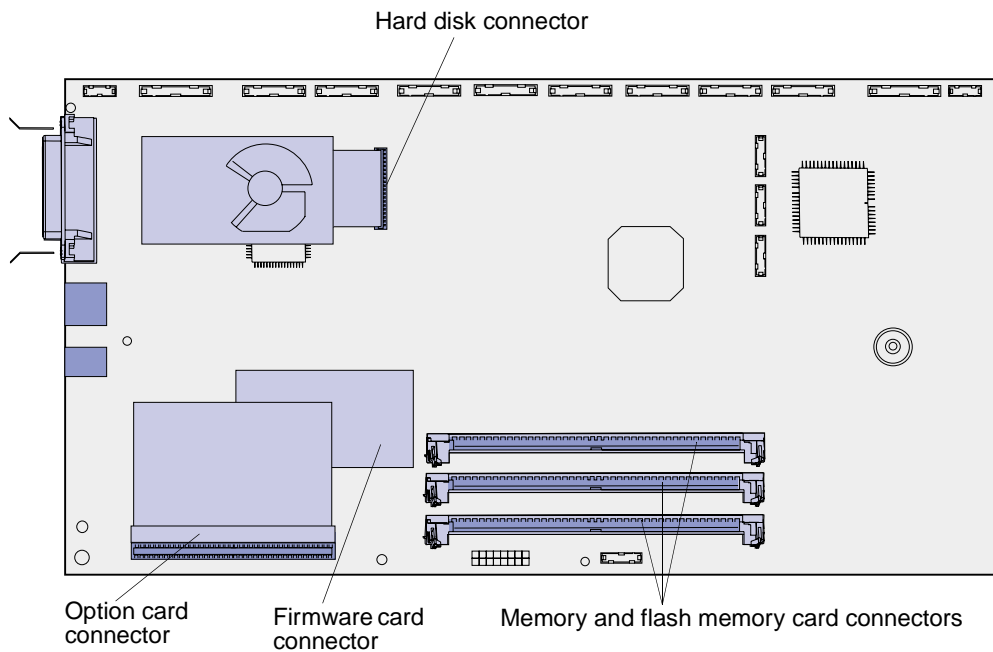


- 9 Turn the printer on. The printer returns to a Ready state.

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Removing memory and option cards

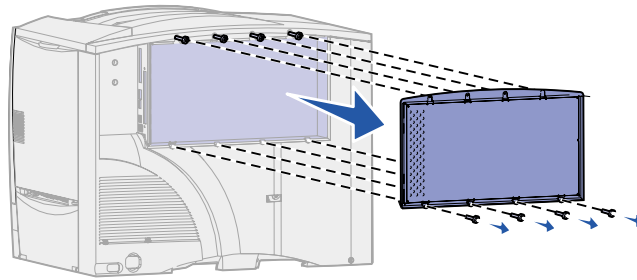
These instructions can help you remove memory or option cards. Use the following illustration to locate the connector for the card you want to remove.



Accessing the printer system board

- 1 Turn the printer off.
- 2 Unplug the printer power cord.
- 3 Disconnect all cables from the back of the printer.
- 4 Locate the access cover on the back of the printer.

- 5 Loosen the four screws at the top of the access cover, but do not remove the screws completely.



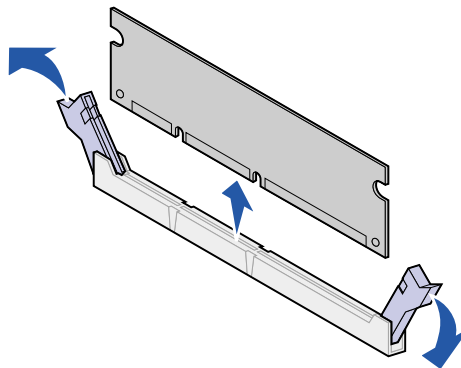
- 6 Remove the four screws at the bottom of the cover.
- 7 Slide the cover down to remove it.

Removing memory cards

Complete the following steps to remove printer memory or flash memory cards.

WARNING: Printer memory and flash memory cards are easily damaged by static electricity. Touch something metal on the printer before you touch a memory card.

- 1 Remove the system board access cover. See [Accessing the printer system board](#).
- 2 Locate the memory card you want to remove.
- 3 Push open the latches on both ends of the connector away from the card.
- 4 Pull the card straight out of the connector.



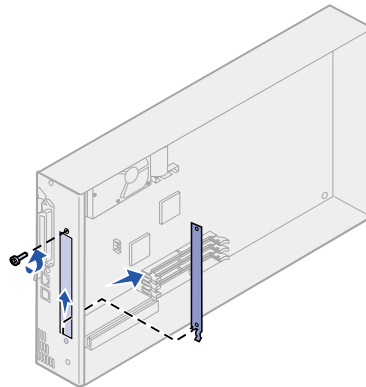
- 5 Place the card in its original packaging, or wrap the card in paper and store it in a box.
- 6 Reinstall the system board access cover. See [Reinstalling the system board access cover](#).

Removing an option card

Complete the following steps to remove an internal print server, Tri-Port Adapter, Infrared Adapter, Coax/Twinax Adapter, or USB/Parallel Interface Card.

WARNING: Option cards are easily damaged by static electricity. Touch something metal on the printer before you touch an option card.

- 1 Remove the system board access cover. See [Accessing the printer system board](#).
- 2 Locate the option card.
- 3 Remove the screw that secures the card to the system board connector slot.



- 4 Gently pull the card out of the connector.
- 5 If you saved the metal plate that covers the connector slot and you do not plan to insert another card, attach the plate:
 - a Slide the clip side of the plate in first, making sure the clip end covers the groove on the system board.
 - b Use the screw to secure the other end of the metal plate to the system board.
- 6 Place the card in its original packaging, or wrap the card in paper and store it in a box.
- 7 Replace the system board access cover. See [Reinstalling the system board access cover](#).

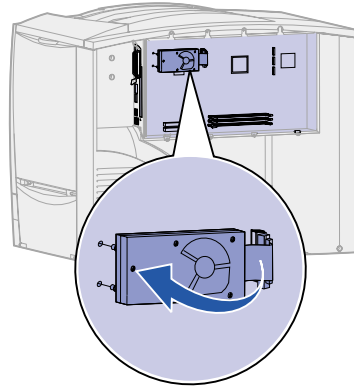
Removing a hard disk

Complete the following steps to remove a hard disk. If an option card has been installed, you must remove it before removing the firmware card. See [Removing an option card](#).

WARNING: Hard disks are easily damaged by static electricity. Touch something metal on the printer before you touch a disk.

- 1 Remove the system board access cover. See [Accessing the printer system board](#).
- 2 Locate the hard disk.

- 3 Gently pull the three posts on the hard disk mounting plate out of the holes on the system board.



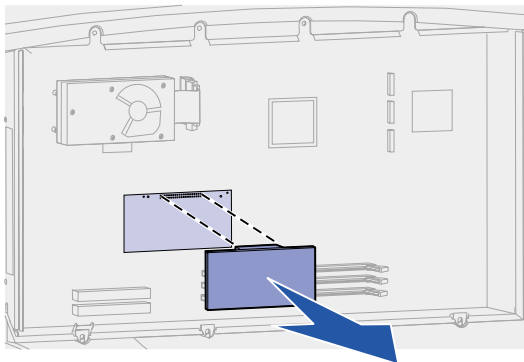
- 4 Gently pull the ribbon cable connector out of the connector on the system board.
- 5 Place the disk in its original packaging, or wrap the disk in paper and store it in a box.
- 6 Replace the system board access cover. See [Reinstalling the system board access cover](#).

Removing a firmware card

Complete the following steps to remove a firmware card. If an option card has been installed, you must remove it before removing the firmware card. See [Removing an option card](#).

WARNING: Optional firmware cards are easily damaged by static electricity. Touch something metal on the printer before you touch an optional firmware card.

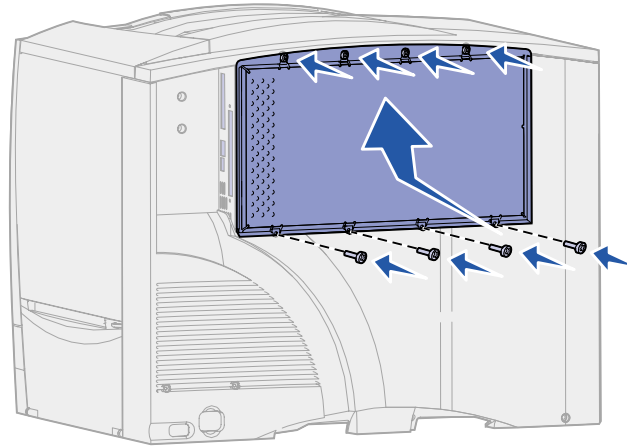
- 1 Remove the system board access cover. See [Accessing the printer system board](#).
- 2 Grasp the firmware card gently and pull it straight out in one motion. Do not pull one side and then the other.



- 3 Place the card in its original packaging, or wrap the card in paper and store it in a box.
- 4 Replace the system board access cover. See [Reinstalling the system board access cover](#).

Reinstalling the system board access cover

- 1** Align the slots at the top of the access cover with the screws near the top of the printer.
- 2** Slide the cover up under the top cover lip as far as it will go, and then tighten the screws at the top of the cover.
- 3** Insert and tighten the four screws to the bottom of the cover.



- 4** Reconnect all cables on the back of the printer.
- 5** Plug in the printer power cord.
- 6** Turn the printer on.

Restoring factory default settings

- 1 Make sure the printer 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 Factory Defaults, and then press **Select**.
- 4 When Restore appears, press **Select**. The message **Restoring Factory Defaults** appears followed by the **Ready** message.

When you select Restore:

- No other button actions are available on the operator panel while **Restoring Factory Defaults** appears.
- All downloaded resources (fonts, macros, and symbol sets) in printer memory (RAM) are deleted. (Resources residing in flash memory or on the optional hard disk are unaffected.)
- All menu settings are returned to the factory default values, except:
 - The operator panel Display Language setting in the Setup Menu.
 - All settings in the Parallel Menu, Serial Menu, Network Menu, Infrared Menu, LocalTalk Menu, and USB Menu.

If you need more information about changing menu settings or selecting new user default settings, see [Changing menu settings](#).

Disabling the operator panel menus

A network administrator can lock the printer menus to keep others from changing default menu settings from the operator panel.

To disable the menus:

- 1 Turn the printer off.
- 2 Press and hold the **Select** and **Return** buttons, and then turn the printer on.
- 3 Release the buttons when **Performing Self Test** appears on the display.

When the printer self test completes, **Config Menu** appears.

- 4 Press **Menu** until you see Panel Menus, and then press **Select**.
- 5 Press **Menu** until you see Disable, and then press **Select**.

saved briefly appears, followed by **Disabling Menus**. **Config Menu** appears again with Panel Menus on the second line.

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

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

Note: Once this procedure is completed, if the **Menu** button is pressed when the printer displays the **Ready** status message, the message **Menus Disabled** appears. If the printer is holding a confidential job or held job (Reserve Print, Repeat Print, or Verify Print), you can still access these jobs through the Job Menu.

Enabling the menus

To enable the menus, repeat the steps in **Disabling the operator panel menus**. However, in **step 5 on page 65**, select Enable instead of Disable. After you press **Select**, **Enabling Menus** is displayed.

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Disabling Power Saver

Disabling **Power Saver** in the **Setup Menu** helps keep your printer ready to print without delays.

- 1 Press **Menu** until you see Setup Menu, and then press **Select**.
- 2 Press **Menu** until you see Power Saver, and then press **Select**.
- 3 Press **Menu** until you see Disabled, and then press **Select**.

If the Disabled value is not available, first change the Energy Conserve setting to Off in the Config Menu:

- 1 Turn the printer off.
- 2 Press and hold the **Select** and **Return** buttons, and then turn the printer on.
- 3 Release the buttons when **Performing Self Test** appears on the display.

When the printer self test is done, **Config Menu** is displayed.

- 4 Press **Menu** until you see **Energy Conserve**, and then press **Select**.
- 5 Press **Menu** until you see **Off**, and then press **Select**.
Energy Conserve SAVED briefly appears, and then Config Menu is displayed.
- 6 Press **Menu** until you see Exit Config Menu, and then press **Select**.

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

Now you can select the Disabled value from the Power Saver menu item.

Note: You can also disable Power Saver by issuing a Printer Job Language (PJL) command.

Changing menu settings

You can use the operator panel to change printer menu settings and customize your printer to meet your specific needs.

Note: Changes to specific print jobs made from a software application override the settings made from the operator panel.

See the [menu map](#) for a list of the menus and their menu items.

To select a new value:

- 1 Press **Menu** until you see the menu you need, and then press **Select**.

The menu opens and the first menu item in the menu appears on the second line of the display.

- 2 Press **Menu** until you see the menu item you need, and then press **Select**.

An asterisk (*) appears beside the current default setting for that menu item.

A value can be:

- An On or Off setting.
- A phrase or word that describes a setting.
- A numerical value that you can increase or decrease.

When you press **Select**, an asterisk (*) appears beside the new value to indicate that it is now the default setting. The **saved** message appears, then the previous list of menu items appears on the display.

Note: Some menu items have submenus. For example, if you select Paper Menu, and then select the Paper Type menu item, you must select another menu (such as Tray 1 Type) before the available values display.

- 3 Press **Return** to go back to previous menus or menu items and set new default settings.
- 4 Press **Go** to return to the **Ready** message if this is the last printer setting you want to change.

Note: User default settings remain in effect until you save new settings or restore the factory defaults.

Printing a menu settings page

Print the menu settings page to review the printer settings and to verify that printer options are installed correctly.

Note: See [Understanding the printer operator panel](#) to identify the display and operator panel buttons if you need help.

- 1 Make sure the printer 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** to print the page.

The message **Printing Menus** is displayed.

Note: If any other message appears when you print this page, see [Understanding printer messages](#) for more information.

- 4 Verify that the options you installed are correctly listed under “Installed Features.”
If an option you installed is not listed, turn the printer off, unplug the power cord, and reinstall the option.
- 5 Verify the amount of memory installed is correctly listed under “Printer Information.”
- 6 Verify that the paper trays are configured for the sizes and types of paper you loaded.

Your printer has resident fonts stored permanently in its memory. Different fonts may be available in PCL and PostScript emulations.

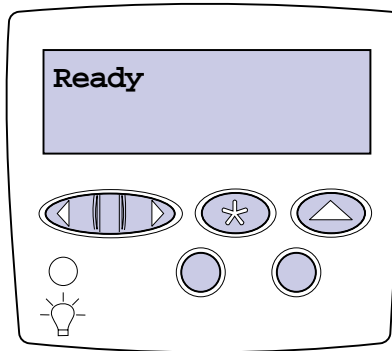
To print samples of all the fonts currently available for your printer:

- 1 Make sure the printer is on and **Ready** appears on the display.
- 2 Press **Menu** until you see Utilities Menu, and then press **Select**.
- 3 Press **Menu** until you see Print Fonts, and then press **Select**.
- 4 Press **Menu** to display either PCL Fonts or PS Fonts.
 - Select PCL Fonts to print a listing of the fonts available in PCL emulation.
 - Select PS Fonts to print a listing of the fonts available in PostScript 3 emulation.
- 5 Press **Select**.

The message **Printing Font List** remains on the display until all pages print. The printer returns to the **Ready** message after the font sample list prints.

Understanding printer messages

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.

A

Activating Menu Changes

<x> Alignment

B

Bin <x> Full

Busy

C

Calibrating Tray <x>

Cancelling Fax

Cancelling Job

Change <x>

Change <x> Invalid Refill

Check <device> Connection

Clearing Job Accounting Stat

Close Door

Close Finisher Door

Close Tray X Door

Copying

D

Defragmenting

Delete All Jobs

Deleting Jobs

Disabling Menus

Disk Corrupted. Reformat?

Disk Recovery x/5 yyy%

E

Enabling Menus

Engine Warming

F

Fax <x>

Flushing Buffer

Formatting Disk

Formatting Disk yyy%

Formatting Flash

G

H

Held Jobs may be lost

Held Jobs May Not Be Restored

Hole Punch Waste Full

I

Incorrect Media

Infrared <x>

Insert Staple Cartridge

Insert Tray <x>

Install <device> or Cancel Job

Invalid Engine Code

Invalid Network <x> Code

Invalid Standard Network Code

ITU/Fuser Maint

J

K

L

Load Manual

Load <x> Plain Letter

Load Staples

Load Tray <x>

LocalTalk <x>

M

Menus Disabled

N

Network Card Busy

Network <x>

Network <x>, <y>

No DRAM Installed

No Jobs Found. Retry?

Not Ready

O

Ovrfow Bin Full

P

Parallel <x>

Performing Self Test

Power Saver

Printer Calibrating
Print Jobs on Disk
Printing Alignment Page
Printing Directory List
Printing Font List
Printing Job Accounting Stat
Printing Menu Settings
Prog Engine Code
Prog System Code
Program Flash
Programming Disk
Programming Error P<x>
Q
Queuing and Deleting Jobs
Queuing Jobs
R
Ready
Ready Hex
Reattach <device>
Remove Paper <specified bin>
Resetting Active Bin
Resetting Fuser Cnt Value
Resetting the Printer
Restore Held Jobs. Go/Stop?
Restoring Factory Defaults
Restoring Held Job xxx/yyy
Restoring Held Jobs
S
Serial <x>
Setup Required

Staples Low
Std Bin Full
Supplies
T
Tray <x> Empty
Tray <x> Low
Tray <x> Missing
Tray <x> Not Calibrated
<type> in <source>. Go?
U
USB <x>
V
W
Waiting
X
Y
Z
0
1
100–199 Service <message>
1565 Emul Error Load Emul Option
2
2<xx> Paper Jam
3
30 ITU Missing
30 <color> Toner Cart Missing
31 Defective <x> Cartridge
32 Unsupported <color> Cartridge

33 Calibration Error <x>
34 Short Paper
35 Res Save Off Deficient Memory
37 Insufficient Collation Area
37 Insufficient Defrag Memory
37 Insufficient Memory
38 Memory Full
39 Complex Page

4

4<x> Unsupported Firmware Card

5

51 Defective Flash
52 Flash Full
53 Unformatted Flash
54 Network <x> Software Error
54 Par <x> ENA Connection Lost
54 Serial Option <x> Error
54 Standard Serial Error
54 Std Network Software Error
54 Std Par ENA Connection Lost
56 Parallel Port <x> Disabled
56 Serial Port <x> Disabled
56 Standard Serial Disabled
56 Standard USB Port Disabled
56 Std Parallel Port Disabled
56 USB Port <x> Disabled
58 Input Config Error
58 Too Many Disks Installed
58 Too Many Flash Options
59 Incompatible <device>

6

61 Defective Disk
62 Disk Full
63 Unformatted Disk
64 Disk Not Supported
64 Unsupported Disk Format

7

8

80 Fuser Maintenance
81 Engine Code CRC Failure
82 Waste Bottle Nearly Full
82 Waste Toner Bottle Full
82 Waste Toner Bottle Missing
83 ITU Maintenance
84 Oiler Nearly Exhausted
84 Replace Oiler
87 Fuser Missing
88 <color> Toner Low

9

900–999 Service <message>

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.

See also:

[Disabling the operator panel menus](#)

<x> Alignment

What this message means:

An image transfer unit alignment procedure is in progress and the user is being prompted for a series of alignment values. The values range from A to L.

What you can do:

- Enter the alignment value, and then press **Select** to continue to the next alignment value.
- Press **Go** or **Return** to cancel the alignment procedure.

See also:

[Aligning the image transfer unit](#)

Bin <x> Full

What this message means:

The specified bin is full.

What you can do:

Remove the stack of paper from the bin to clear the message. If you assigned the bin a name, the bin name is displayed instead of the bin number.

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.

Calibrating Tray <x>

What this message means:

A tray calibration procedure is in progress.

What you can do:

- Wait for the message to clear.

See also:

[Load <x> Plain Letter; Tray <x> Not Calibrated](#)

Cancelling Fax

What this message means:

The printer is processing a request to cancel a fax job.

What you can do:

Wait for the message to clear.

Cancelling 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.

See also:

[Canceling a print job](#)

Change <x>

What this message means:

The printer is requesting that a different type of paper be loaded in one of the input sources.

What you can do:

Change the paper type in the specified source.

See also:

[Loading the trays](#); *Setup Guide*

Change <x> Invalid Refill

What this message means:

The printer has detected a refilled *Prebate* cartridge.

What you can do:

Remove the indicated print cartridge and install a new one.

See also:

[Replacing print cartridges](#)

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.
- In the case of a hardware failure, 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

What this message means:

The printer front cover is open.

What you can do:

- Close the printer front cover to clear the message.

Close Finisher Door

What this message means:

The finisher top cover is open.

What you can do:

Close the finisher top cover to clear the message.

Close Tray X Door

What this message means:

The 2000-sheet drawer is open.

What you can do:

Close the 2000-sheet drawer to clear the message.

Copying

What this message means:

The printer is processing a copy job originating from an OptraImage™ scanner.

What you can do:

Wait for the message to clear.

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.

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

Delete All Jobs

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 the operator panel menus](#)

Disk Corrupted. Reformat?

What this message means:

The printer has attempted a disk recovery process and cannot repair the disk.

What you can do:

- Press **Go** to reformat the disk and delete all files currently stored on the disk.
- Press **Stop** to clear the message without reformatting the disk. The printer may display **Disk Recovery** and attempt to recover the disk.

See also:

[Disk Recovery x/5 yyy%](#)

Disk Recovery x/5 yyy%

What this message means:

The printer is attempting to recover the hard disk. Disk recovery takes place in five phases; the second line on the operator panel display shows the percent complete of the current phase.

What you can do:

Wait for the message to clear.

WARNING: Do not turn the printer off while this message 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, then press **Menu** to view the menus from the operator panel.

See also:

[Enabling the menus](#)

Engine Warming

What this message means:

The printer is warming the fuser assembly to prepare for printing.

What you can do:

Wait for the message to clear.

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:

[Holding a job in the printer](#)

Fax <x>**What this message means:**

The printer is processing an incoming fax.

What you can do:

Wait for the message to clear.

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.

What you can do:

Wait for the message to clear.

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

Formatting Disk

yyy%

What this message means:

The printer is formatting the hard disk. When formatting takes longer than usual, the second line of the display 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.
- Press **Stop** to clear the message without deleting any held jobs. The current job may not print correctly.
- Press **Menu** to open the Job Menu and cancel the current 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.

See also:

[Holding a job in the printer; 37 Insufficient Memory](#)

Held Jobs May Not Be Restored

What this message means:

The printer memory cannot restore Print and Hold jobs from the printer hard disk.

What you can do:

Press **Go** to clear the message. Some of the Print and Hold jobs stored on the disk will not be restored.

See also:

[37 Insufficient Memory](#)

Hole Punch Waste Full

What this message means:

The hole punch box in the finisher is full.

What you can do:

Empty the hole punch box.

Incorrect Media

What this message means:

The printer detects a media type mismatch feeding from the multipurpose feeder.

What you can do:

- Replace the media in the multipurpose feeder with the requested media and press **Go**.
- Press **Menu** to access the **Busy/Waiting Menu** group, and select one of the following options:
 - Cancel Job
 - Reset Printer
 - Reset Active Bin

Infrared <x>

What this message means:

An infrared interface is the active communication link.

Insert Staple Cartridge

What this message means:

The staple cartridge in the finisher is missing or is installed incorrectly.

What you can do:

- Correctly install the staple cartridge to clear the message.
- Press **Go** to ignore the message and continue printing without stapling.

Insert Tray <x>

What this message means:

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

What you can do:

Insert the specified tray completely into the printer.

See also:

[Loading the trays](#)

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.

Invalid Engine Code

What this message means:

The printer engine code has not been programmed or is not valid.

What you can do:

Call for service.

See also:

[Calling for service](#)

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.

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

ITU/Fuser Maint

What this message means:

The counters that track wear on the image transfer unit and fuser have reached their limit.

What you can do:

Replace the image transfer unit and fuser.

See also:

[Replacing the fuser; Replace the image transfer unit and transfer roller](#)

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 in the second line of the display in the manual feed tray or 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 <x> Plain Letter

What this message means:

Someone has initiated a tray calibration procedure.

What you can do:

- Load paper into <x> and press **Go** to continue the calibration process.

See also:

[Calibrating Tray <x>; Tray <x> Not Calibrated](#)

Load Staples

What this message means:

The printer is trying to staple a print job, but the stapler is empty.

What you can do:

- Install a new staple cartridge in the stapler.
- Press **Go** to clear the message and continue printing without stapling.
- Press **Menu** to open the Job Menu and cancel the current job.

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 in 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.

See also:

[Loading the trays](#)

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.

See also:

[Disabling the operator panel menus](#)

**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 DRAM Installed**What this message means:**

No DRAM is installed in the printer.

What you can do:

Turn the printer off, install DRAM and turn the printer back on.

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.

See also:

[Holding a job in the printer](#)

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.

Ovrflow Bin Full

What this message means:

The mailbox's designated overflow bin is full.

What you can do:

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

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.

See also:

[Aligning the image transfer unit](#)

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 (20 minutes is the factory default), the **Power Saver** message replaces the **Ready** message on the display.

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.

Printer Calibrating

What this message means:

The printer is adjusting the color tables to correct variations caused by environmental conditions.

What you can do:

Wait for the message to clear.

See also:

[Color Menu](#)

Print Jobs on Disk

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 Alignment Page

What this message means:

The printer is processing or printing a test page that shows alignment values.

What you can do:

Wait until the page has completed printing.

See also:

[<x> Alignment](#)

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.

See also:

[Print Directory](#)

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.

See also:

[Print Fonts](#)

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.

See also:

[Job Acct Stat](#)

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.

See also:

[Print Menus; Printing a menu settings page](#)

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.

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.

Programming Error P<x>

What this message means:

An error occurred while the printer was programming code into memory.

What you can do:

Correct the problem specified on the second line of the display:

P105	A network file was used to program a non-network printer, or a non-network file was used to program a network printer.
P109	An update file was used to program the printer, but the information did not fit within the space allocated in the Master Boot Record.
P112	An updle.fls file was used to update the DLE code on a printer with a firmware card installed, but the DLE was not found on the firmware card.
P200	No firmware card is installed.

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.

See also:

[Printing and deleting held jobs](#)

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.

See also:

[Holding a job in the printer](#)

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.

What you can do:

- 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.

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.
- In the case of a hardware failure, turn the printer off and back on. If the error recurs, turn the printer off, remove the specified device, and call for service.

See also:

[Calling for service](#)

Remove Paper
<specified bin>**What this message means:**

The specified output bin, or bins, is full.

What you can do:

Remove the stack of paper from the specified bin(s) to clear the message.

Resetting
Active Bin**What this message means:**

The printer is resetting to the active bin in a linked set of bins.

What you can do:

Wait for the message to clear.

Resetting
Fuser 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.

Resetting the
Printer**What this message means:**

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

What you can do:

Wait for the message to clear.

See also:

[Changing menu settings](#)

Restore Held Jobs. Go/Stop?

What this message means:

Someone reset the printer or turned it on, and the printer detects Print and Hold jobs stored on the hard disk.

What you can do:

- Press **Go**. All Print and Hold jobs on the hard disk are restored to printer memory.
- Press **Return** or **Stop**. No Print and Hold jobs are restored to printer memory. The printer returns to the Ready state.

See also:

[Holding a job in the printer](#)

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, USB Menu, and Fax Menu.

What you can do:

Wait for the message to clear.

See also:

[Restoring factory default settings](#)

Restoring Held Job `xxx/yyy`

What this message means:

The printer is restoring held jobs from the hard disk.

Note: `xxx` represents the number of the job being restored.
`yyy` represents the total number of jobs to be restored.

What you can do:

- Wait for the message to clear.
- Select the Abort Restore menu item in the Job Menu.

See also:

[Holding a job in the printer](#)

Restoring Held Jobs

What this message means:

The printer is restoring held jobs from the hard disk.

What you can do:

Wait for the message to clear.

See also:

[Holding a job in the printer](#)

Serial `<x>`

What this message means:

A serial interface is the active communication link.

Setup Required

What this message means:

- When you unpacked the printer, you left a piece of packing material inside.
- A hardware component, such as an optional paper drawer, has not been installed correctly.

What you can do:

- Remove all packing material from inside the printer.
- Correctly install the component.

See also:

Setup Guide

Staples Low

What this message means:

The stapler has only a few staples remaining.

What you can do:

- Press **Go** to continue printing.
- Install a new staple cartridge to clear the message.

Std Bin Full

What this message means:

The standard bin is full.

What you can do:

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

Supplies

What this message means:

At least one of the printer supplies requires attention. For example, you may have a toner cartridge that is low on toner.

What you can do:

Press **Menu** to open the Supplies Menu and identify which supply item needs replacing. Replace the appropriate printer supplies.

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.

See also:

[Loading the trays](#)

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.

See also:

[Loading the trays](#)

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.

See also:

[Loading the trays](#)

Tray <x> Not Calibrated

What this message means:

The transparency sensor (in trays that have transparency sensing capability) is not calibrated.

What you can do:

- Press **Go** to clear the message.

Note: Paper will not be fed from the tray until the tray has been calibrated.

- Calibrate the tray in the Configuration Menu.

<type> in <source>. Go?

What this message means:

The printer detects a type change in a type-sensing tray. The types are:

Bond	Cardstock	Colored
Envelope	Labels	Ltrhead
Plain	Preprint	Trnsprncy
Glossy	Custom type	

What you can do:

- Press **Go** to clear the message.
- Remove the tray and change the paper to a desired type.

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.

See also:

[Canceling a print job](#)

100–199 Service <message>**What these messages mean:**

Messages labeled 100–199 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.

See also:

[Calling for service](#)

1565 Emul Error Load Emul Option

What this message means:

The download emulator version on the firmware card does not match the printer code version.

This error can occur if you update printer firmware or move a firmware card from one printer to another.

What you can do:

The printer automatically clears the message in 30 seconds, and then disables the download emulator on the firmware card.

Obtain the correct download emulator version.

2<xx> Paper Jam

What this message means:

The printer detects a paper jam.

What you can do:

Clear the paper path.

See also:

[Clearing the paper path](#)

30 ITU Missing

What this message means:

The image transfer unit (ITU) is not installed or is installed incorrectly.

What you can do:

Turn the printer off, correctly install the image transfer unit, and then turn the printer on.

See also:

[Replace the image transfer unit and transfer roller](#)

30 <color> Toner Cart Missing

What this message means:

The specified toner cartridge is either missing or incorrectly installed.

What you can do:

Insert the toner cartridge completely into the printer. The printer automatically clears the message.

See also:

[Replacing print cartridges](#)

31 Defective <x> Cartridge

What this message means:

A defective print cartridge is installed.

What you can do:

Remove the specified print cartridge and install a new one.

See also:

[Replacing print cartridges](#)

32 Unsupported <color> Cartridge

What this message means:

An unsupported print cartridge is installed.

What you can do:

Remove the specified print cartridge and install a new one.

See also:

[Replacing print cartridges](#)

33 Calibration Error <x>

What this message means:

The printer detects a calibration error for a particular color.

What you can do:

Press **Go** to continue printing.

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.

What you can do:

- 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.

See also:

[Paper and specialty media specifications](#)

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.

See also:

[Canceling a print 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.

What you can do:

- 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.
- Press **Stop** to clear the message without deleting any held jobs. The current job may not print correctly.
- Press **Menu** to open the Job Menu and cancel the current 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.

See also:

[Holding a job in the printer; Held Jobs may be lost](#)

38 Memory Full

What this message means:

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

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:
 - 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.

See also:

[Canceling a print job](#)

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.

See also:

[Setup Menu](#)

4<x> Unsupported Firmware Card

What this message means:

The printer detects an unsupported version of firmware on the installed firmware card.

What you can do:

- Turn the printer off, and then press and hold **Go** while turning it on. The printer reads the code on the system card and bypasses the code on the firmware card.
- Remove the firmware card.

See also:

Setup Guide

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.

What you can do:

- 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

54 Standard Serial 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.

What you can do:

- 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 parallel port.
- Press **Menu** to open the Job Menu and reset the printer.

**54 Std Par ENA
Connection Lost**

**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.

**56 Serial
Port <x> Disabled**

56 Standard Serial 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.

See also:

[Serial Buffer](#)

**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.

What you can do:

- 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.

See also:

[Parallel Buffer](#)

**56 USB Port <x>
Disabled**

**56 Standard USB
Port Disabled**

What this message means:

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

What you can do:

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

See also:

[USB Buffer](#)

58 Input Config Error

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.

See also:

Setup Guide

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.

See also:

[Removing memory and option cards](#)

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.

See also:

[Removing memory and option cards](#)

59 Incompatible <device>

What this message means:

You have installed an incompatible device.

What you can do:

- Remove the device and press **Go** to clear the message.

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.

See also:

Setup Guide

62 Disk Full

What this message means:

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

What you can do:

- 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.

See also:

[Format Disk](#)

64 Disk Not Supported

What this message means:

The printer detects that an incompatible hard disk is installed.

What you can do:

Turn the printer off and remove the disk.

See also:

[Removing memory and option cards](#)

64 Unsupported Disk Format

What this message means:

The printer detects an unsupported disk format.

What you can do:

- Press **Go** to clear the message.
- Format the disk.

Note: Disk operations will not be allowed until the disk is formatted.

80 Fuser Maintenance

What this message means:

The counter that tracks wear on the fuser has reached its limit.

What you can do:

- Press **Go** to continue printing.
- If print quality is unacceptable, replace the fuser.

See also:

[Replacing the fuser](#)

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.
- Discard the code. Retransmit the microcode data from the host computer.

82 Waste Bottle Nearly Full

What this message means:

The toner waste container is almost full.

What you can do:

- Press **Go** to clear the message and continue printing.
- Replace the toner waste container.

See also:

[82 Waste Toner Bottle Full; Replacing the toner waste container](#)

82 Waste Toner Bottle Full

What this message means:

The toner waste container is full.

What you can do:

Replace the toner waste container and press **Go** to clear the message.

See also:

[Replacing the toner waste container](#)

82 Waste Toner Bottle Missing

What this message means:

The toner waste container is missing.

What you can do:

Replace the toner waste container and press **Go** to clear the message.

See also:

[Replacing the toner waste container](#)

83 ITU Maintenance

What this message means:

The counter that tracks wear on the image transfer unit has reached its limit.

What you can do:

- Press **Go** to continue printing.
- If print quality is unacceptable, replace the image transfer unit.

See also:

[Replace the image transfer unit and transfer roller](#)

84 Oiler Nearly Exhausted

What this message means:

The web oiler is nearing the end of its life.

What you can do:

- Press **Go** to clear the message and continue printing.
- Replace the web oiler.

See also:

[84 Replace Oiler](#)

84 Replace Oiler

What this message means:

The web oiler has reached its end of life or is missing from the printer.

What you can do:

Replace the web oiler.

See also:

[84 Oiler Nearly Exhausted](#)

87 Fuser Missing

What this message means:

The fuser is either missing or incorrectly installed.

What you can do:

Correctly install the fuser to clear the message and continue printing.

See also:

[Replacing the fuser](#)

**88 <color> Toner
Low**

What this message means:

The printer has detected that the toner supply in the specified cartridge is low. If you do not have the specified toner cartridge on hand, order one now. You can print approximately 250 more pages before the cartridge becomes empty.

What you can do:

- Replace the specified toner cartridge.
- Press **Go** to clear the message and continue printing. The **supplies** message is displayed until you replace the specified toner cartridge.

See also:

[Replacing print cartridges](#)

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.

See also:

[Calling for service](#)



Using printer menus

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.

- **Color Menu**
- **Finishing Menu**
- **Infrared Menu**
- **Job Menu**
- **LocalTalk Menu**
- **Network Menu**
- **Paper Menu**
- **Parallel Menu**
- **PCL Emul Menu**
- **PostScript Menu**
- **Serial Menu**
- **Setup Menu**
- **Supplies Menu**
- **USB Menu**
- **Utilities Menu**

Select a menu or menu item for more details.

Finishing Menu Duplex Duplex Bind Copies Blank Pages Collation Separator Sheets Separator Source Hole Punch Offset Pages Staple Job Staple Prime Src Multipage Print Multipage Order Multipage View Multipage Border	Job Menu Cancel Job Reset Printer Print Buffer Cancel Fax Confidential Job Held Jobs Reset Active Bin	Paper Menu Paper Source Paper Size Paper Type Custom Types Output Bin Configure Bins Overflow Bin Assign Type/Bin Substitute Size Configure MP Paper Texture Paper Weight Paper Loading Universal Setup	PCL Emul Menu Font Source Font Name Point Size Pitch Symbol Set Orientation Lines per Page A4 Width Auto CR after LF Auto LF after CR Tray Renummer	Serial Menu PCL SmartSwitch PS SmartSwitch NPA Mode Serial Buffer Job Buffering RS-232/RS-422 RS-422 Polarity Serial Protocol Robust XON Baud Data Bits Parity Honor DSR	Supplies Menu <color> Toner Oiler Waste Bottle
Network Menu PCL SmartSwitch PS SmartSwitch MAC Binary PS NPA Mode Network Buffer Job Buffering Network <x> Setup Std Net Setup	LocalTalk Menu LocalTalk Port PCL SmartSwitch PS SmartSwitch NPA Mode LocalTalk Buffer Job Buffering NPA Hosts LocalTalk Name LocalTalk Addr LocalTalk Zone	Parallel Menu PCL SmartSwitch PS SmartSwitch MAC Binary PS NPA Mode Parallel Buffer Job Buffering Advanced Status Protocol Honor Init Parallel Mode 1 Parallel Mode 2	Setup Menu Printer Language Printer Usage Power Saver Resource Save Download Target Print Timeout Auto Continue Wait Timeout Jam Recovery Page Protect Display Language Alarm Control Hole Punch Alarm Staple Alarm Toner Alarm Job Accounting Job Acct Limit Print Area	PostScript Menu Print PS Error Font Priority Image Smoothing	USB Menu PCL SmartSwitch PS SmartSwitch MAC Binary PS NPA Mode USB Buffer Job Buffering
	Infrared Menu Infrared Port PCL SmartSwitch PS SmartSwitch NPA Mode Infrared Buffer Job Buffering Window Size Transmit Delay Max Baud Rate			Color Menu Color Correction Manual Color Print Mode Print Resolution Toner Darkness	Utilities Menu Color Adjust Color Samples Print Demo Print Menus Print Net <x> Setup Print Fonts Print Directory Factory Defaults Format Flash Defragment Flash Format Disk Job Acct Stat Hex Trace

A

A4 Width
 Advanced Status
 Alarm Control
 Assign Type/Bin
 Auto Continue
 Auto CR after LF
 Auto LF after CR

B

Baud
 Blank Pages

C

Cancel Fax
 Cancel Job
 Collation
 Color Adjust
 Color Samples
 <color> Toner
 Color Correction
 Color Menu
 Confidential Job
 Configure Bins
 Configure MP
 Copies
 Custom Types

D

Data Bits
 Defragment Flash
 Display Language
 Download Target

Duplex
 Duplex Bind

E**F**

Factory Defaults
 Finishing Menu
 Font Name
 Font Priority
 Font Source
 Format Disk
 Format Flash

G**H**

Held Jobs
 Hex Trace
 Hole Punch
 Honor DSR
 Honor Init

I

Image Smoothing
 Infrared Buffer
 Infrared Port
 Infrared Menu

J

Jam Recovery
 Job Acct Limit
 Job Acct Stat
 Job Accounting

Job Buffering

Parallel Menu

Serial Menu
 Network Menu
 Infrared Menu
 LocalTalk Menu
 USB Menu

Job Menu

K**L**

Lines per Page
 LocalTalk Addr
 LocalTalk Buffer
 LocalTalk Menu
 LocalTalk Name
 LocalTalk Port
 LocalTalk Zone

M**Mac Binary PS**

Network Menu
 Parallel Menu
 USB Menu

Manual Color

Max Baud Rate

Multipage Border

Multipage Order

Multipage Print

Multipage View

N

Network Buffer

Network Menu

Network <x> Setup

NPA Hosts

NPA Mode

Parallel Menu

Serial Menu	PostScript Menu	Separator Source
Network Menu	Power Saver	Serial Buffer
Infrared Menu	Print Area	Serial Menu
LocalTalk Menu	Print Buffer	Serial Protocol
USB Menu	Print Demo	Setup Menu
O	Print Directory	Staple Job
Offset Pages	Print Fonts	Staple Prime Src
Orientation	Print Menus	Substitute Size
Output Bin	Print Mode	Supplies Menu
Overflow Bin	Print Net <x> Setup	Staple Alarm
P	Print PS Error	Std Net Setup
Page Protect	Print Resolution	Symbol Set
Paper Loading	Print Timeout	T
Paper Menu	Printer Language	Toner Alarm
Paper Size	Printer Usage	Transmit Delay
Paper Source	Protocol	Tray Renumber
Paper Texture	PS SmartSwitch	U
Paper Type	Parallel Menu	Universal Setup
Paper Weight	Serial Menu	USB Buffer
Parallel Buffer	Network Menu	USB Menu
Parallel Menu	Infrared Menu	Utilities Menu
Parallel Mode 1	LocalTalk Menu	V
Parallel Mode 2	USB Menu	W
Parity	Q	Wait Timeout
PCL SmartSwitch	R	Waste Bottle
Parallel Menu	Reset Active Bin	Window Size
Serial Menu	Reset Printer	X
Network Menu	Resource Save	Y
Infrared Menu	Robust XON	Z
LocalTalk Menu	RS-422 Polarity	
USB Menu	RS-232/RS-422	
PCL Emul Menu	S	
Pitch	Separator Sheets	
Point Size		



LocalTalk Menu

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 job buffering. Any jobs already buffered on the disk are printed before normal processing of incoming jobs resumes.
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>	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*)

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:

- | | |
|--------------|--|
| 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](#)



Job Menu

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 Fax**
- **Cancel Job**
- **Confidential Job**
- **Held Jobs**
- **Print Buffer**
- **Reset Active Bin**
- **Reset Printer**

Cancel Fax

Purpose:

To cancel outgoing faxes before they are transmitted or to cancel incoming faxes before they finish printing.

Values:

- R** Cancels an incoming fax. When the fax number for the sending machine is displayed, press **Select** to cancel the incoming fax.
- D** Cancels an outgoing fax. When the fax number for the receiving machine is displayed, press **Select** to cancel the fax job. If the telephone number of the fax you want to cancel is not displayed, use the **Menu** button to scroll through the list. The printer can display up to five outgoing fax numbers in the outgoing fax queue. When more than five faxes are in the queue, the next fax job appears on the display as an outgoing fax is transmitted or canceled.

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.)

First 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.
------------------	--

Then select a value:

Print All Jobs	Prints all jobs associated with your PIN.
Print A Job	Prints the specified Confidential Job. Press Menu to scroll through the list of confidential jobs associated with your PIN. Press Select to print a specific job.
Delete All Jobs	Deletes all jobs associated with your PIN.
Delete A Job	Deletes the specified Confidential Job. Press Menu to scroll through the list of Confidential Jobs associated with your 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 PIN. Press Select to specify the job you want to print. Press Menu to increase or decrease the number of copies, then press Select .

Held Jobs

Purpose:

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

Values:

Print All Jobs	Prints all held jobs.
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.
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, 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 Active Bin

Purpose:

To define the active bin as the start bin (the first bin to receive printed output) in a set of linked bins.

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.



Infrared Menu

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 job buffering. Any jobs already buffered on the disk are printed before normal processing of incoming jobs resumes.
Auto*	Printer automatically calculates the Infrared Buffer size (recommended setting).
36K 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](#)

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>	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:

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

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 hosts can communicate without some transmission delays. |
| 1...15 | 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. |



Finishing Menu

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**
- **Hole Punch**
- **Multipage Border**
- **Multipage Order**
- **Multipage Print**
- **Multipage View**
- **Offset Pages**
- **Separator Sheets**
- **Separator Source**
- **Staple Job**
- **Staple Prime Src**

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](#)

Hole Punch

Purpose:

To punch holes along the edge of all printed output. (Select Hole Punch from the printer driver to punch holes only in output for a specific job.)

Values:

Off*	Does not punch holes in printed output.
On	Punches holes in every printed page.

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.

For example, if you select 4-Up multipage printing and portrait orientation, the results differ depending on the Multipage Order value you select:

Horizontal Order	Vertical Order	Reverse Horizontal Order	Reverse Vertical Order																
<table border="1"><tr><td>page 1</td><td>page 2</td></tr><tr><td>page 3</td><td>page 4</td></tr></table>	page 1	page 2	page 3	page 4	<table border="1"><tr><td>page 1</td><td>page 3</td></tr><tr><td>page 2</td><td>page 4</td></tr></table>	page 1	page 3	page 2	page 4	<table border="1"><tr><td>page 2</td><td>page 1</td></tr><tr><td>page 4</td><td>page 3</td></tr></table>	page 2	page 1	page 4	page 3	<table border="1"><tr><td>page 3</td><td>page 1</td></tr><tr><td>page 4</td><td>page 2</td></tr></table>	page 3	page 1	page 4	page 2
page 1	page 2																		
page 3	page 4																		
page 1	page 3																		
page 2	page 4																		
page 2	page 1																		
page 4	page 3																		
page 3	page 1																		
page 4	page 2																		

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](#)

Offset Pages

Purpose:

To offset the output of each print job or each copy of a print job, making it easier to separate the documents stacked in the output bin.

Values:

None*	Stacks all sheets directly on top of each other.
Between Copies	Offsets each copy of a print job.
Between Jobs	Offsets each print job.

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*)	Selects separator sheets from the specified tray.
MP Feeder	Selects separator sheets from the multipurpose feeder. (You must also set Configure MP to Cassette.)

See also:

[Separator Sheets](#); [Configure MP](#)

Staple Job

Purpose:

To set stapling as the default for all print jobs. (Select stapling from the printer driver if you want to staple only specific jobs.)

Values:

Off*	Does not staple print jobs.
On	Staples each print job sent to the printer.

Staple Prime Src

Purpose:

To specify the paper source you want the printer to use when it primes the stapler. When a staple cartridge is replaced or a staple jam is cleared, the printer may need to prime the stapler by stapling a sheet of paper several times.

Values:

Tray <x> (Tray 1*)	Selects paper from the specified tray.
MP Feeder	Selects paper from the multipurpose feeder.



Color Menu

Use the Color Menu to adjust print quality and customize color printing.

Select a menu item for more details:

- **Color Correction**
- **Print Resolution**
- **Manual Color**
- **Toner Darkness**
- **Print Mode**

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

Color Correction

Purpose:

To adjust the printed color to better match the colors of other output devices or standard color systems.

Values:

Auto*	Applies different color correction to each object on the printed page depending upon the type of object and how the color for each object is specified.
Vivid	Applies a color correction algorithm that produces brighter, more saturated colors.
Off	No color correction is implemented.
CMYK	Applies color correction to approximate SWOP color output.
Display	Applies color correction to approximate the colors on a computer display.

Note: Due to the differences between additive and subtractive colors, certain colors that appear on your monitor are impossible to duplicate on your printer.

Manual Color

Purpose:

To let users customize color correction output from the operator panel.

Values:

RGB Image	Vivid: Applies a color correction algorithm that produces brighter, more saturated colors. May be selected for all incoming color formats. sRGB Display*: Applies color correction to produce output that approximates the colors displayed on a computer monitor. sRGB Vivid: Increases color saturation for the sRGB Display color correction. Off: No color correction is implemented.
RGB Text	Vivid sRGB Display sRGB Vivid* Off
RGB Graphics	Vivid sRGB Display sRGB Vivid* Off
CMYK Image	US CMYK: Applies color correction to approximate SWOP color output. Euro CMYK*: Applies color correction to approximate EuroScale color output. Vivid: Applies a color correction algorithm that produces brighter, more saturated colors. May be selected for all incoming color formats. Vivid CMYK: Increases color saturation for the US CMYK color correction. Off: No color correction is implemented.
CMYK Text	US CMYK Euro CMYK* Vivid Vivid CMYK Off
CMYK Graphics	US CMYK Euro CMYK* Vivid Vivid CMYK Off

Print Mode

Purpose:

To determine whether images are printed in a monochrome grayscale or in color.

Values:

Color*

Black & White

Note: Selections made in the printer PostScript or PCL drivers for Windows will override other selections.

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:

2400 IQ*

Provides the highest resolution for detailed line art or images.

1200 dpi

Provides high quality output for text and business graphics, such as line art and electronically generated charts. This setting also provides increased gloss.

Toner Darkness

Purpose:

To lighten or darken text images, or conserve toner.

Values:

1–5 (4*)

1 is lightest; 5 is darkest.

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 5 for very bold text. Select a value less than 4 to conserve toner.

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



Utilities Menu

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:

- **Color Adjust**
- **Color Samples**
- **Defragment Flash**
- **Factory Defaults**
- **Format Disk**
- **Format Flash**
- **Hex Trace**
- **Job Acct Stat**
- **Print Demo**
- **Print Directory**
- **Print Fonts**
- **Print Menus**
- **Print Net <x> Setup**

Color Adjust

Purpose:

To manually relinearize the color tables, adjusting for variations in output that occur as a result of environmental conditions.

Color Samples

Purpose:

To assist in selecting colors used by certain applications.

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 | <ul style="list-style-type: none">• All menu items are returned to the factory default values except:<ul style="list-style-type: none">– 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 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. |
| Clear | Deletes all accumulated job statistics from the hard disk. |

See also:

[Job Accounting](#), [Job Acct Limit](#)

Print Demo

Purpose:

To view a list of the demo files available in printer memory, in flash memory, and on optional hard disk.

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 either a nondefective flash or disk is installed and formatted, and Job Buffer Size is not set to 100%.

Print Fonts

Purpose:

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

Values:

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.



USB Menu

Use the USB Menu to change printer settings affecting a Universal Serial Bus (USB) port (USB Option <x>).

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 processes 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](#)

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 | Job buffering is disabled. Any jobs already buffered on the disk are printed before normal processing of incoming jobs resumes. |
| 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](#)



Supplies Menu

The Supplies Menu provides information about printer supplies that require attention. It is only available when a supply is low or needs replacement.

Select a menu item for more details:

- **<color> Toner**
- **Oiler**
- **Waste Bottle**

<color> Toner

Purpose:

To view the status of the color print cartridges.

Values:

Low
Change Cartridge

See also:

[Replacing print cartridges](#)

Oiler

Purpose:

To view the status of the web oiler.

Values:

Near Exhausted

Waste Bottle

Purpose:

To view the status of the toner waste container.

Values:

Near Full The toner waste container is nearly full.

Note: Once the toner waste container reaches Full, the printer will print up to 15 more pages from the buffer and then stop until the container is replaced.



Setup Menu

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**
- **Hole Punch Alarm**
- **Jam Recovery**
- **Job Accounting**
- **Job Acct Limit**
- **Page Protect**
- **Power Saver**
- **Print Area**
- **Print Timeout**
- **Printer Language**
- **Printer Usage**
- **Resource Save**
- **Staple Alarm**
- **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.

Values:

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 operator panel 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.

Hole Punch Alarm

Purpose:

To specify how the printer responds when the hole punch box becomes full.

Values:

Off*	Hole Punch Waste Full is displayed until someone empties the hole punch box. 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 Hole Punch Waste Full , and sounds three quick beeps.
Continuous	Printer stops printing, displays Hole Punch Waste Full , and repeats three beeps every 10 seconds until the hole punch box is emptied.

See also:

[Auto Continue](#)

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, is neither defective nor Read/Write or Write protected, and Job Buffer Size is not set to 100%.

See also:

[Job Acct Limit](#); [Job Acct Stat](#)

Job Acct Limit

Purpose:

To specify the number of print jobs for which statistics are maintained on your printer hard disk.

Values:

- Disabled** Stores statistics for each print job until the hard disk is full.
- 10...1000 (1000*)** Stores statistics for the specified number of print jobs.

If you set Job Acct Limit to 10, the statistics from the 10 most recent print jobs are stored on the hard disk. When the limit is reached, statistics for the oldest print job are discarded and replaced with the statistics from the current print job. If you change the Job Accounting Limit, all job statistics currently stored on the hard disk are deleted.

Note: Job Acct Limit is only displayed when a hard disk is installed, is neither defective nor Read/Write or Write protected, Job Buffer Size is not set to 100%, and Job Accounting is set to On.

See also:

[Job Accounting](#), [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.

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** Specifies the amount of time after a print job before the printer goes into Power Saver mode. (Your printer may not support the entire range of values.)

The factory default Power Saver setting depends on your printer model. Print the menu settings page to determine the current Power Saver setting. 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 Area

Purpose:

To modify the logical and physical printable area.

Values:

Normal*

Fit to Page

Whole Page

Note: The Whole Page setting only affects pages printed using PCL 5 interpreter. This setting has no effect on pages printed using the PCL XL or PostScript interpreters. If you try to print any data in the non-printable area defined by Normal Print Area, the printer will clip the image at the boundary defined by the Normal defined printable area.

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: <ul style="list-style-type: none">• The printer receives enough information to fill the page.• The printer receives a Form Feed command.• You select Print Buffer from the Job Menu. |
| 1...255 (90*) | The printer prints the last page after the specified time. (Your printer may not support the entire range of values.) |

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.

Printer Usage

Purpose:

To determine the behavior of the image transfer unit during printing.

Values:

Max Speed	The image transfer unit is engaged throughout the print job.
Max Yield*	The image transfer unit position is engaged based on page content. This may extend the life of certain print supplies.

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.

Staple Alarm

Purpose:

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

Values:

Off*	Load Staples is displayed until someone loads staples. 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 Load Staples , and sounds three quick beeps.
Continuous	Printer stops printing, displays Load Staples , and repeats three beeps every 10 seconds until the staple cartridge is replaced.

See also:

[Auto Continue](#)

Toner Alarm

Purpose:

To specify how the printer responds when it is low on 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.
15...65535 (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.



Serial Menu

Use the Serial Menu to change printer settings affecting jobs sent to the printer through a serial port (either Standard Serial or Serial Opt <x>).

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.

Values:

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](#)

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.

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.

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.

Serial Buffer

Purpose:

To configure the size of the serial input buffer.

Values:

Disabled	Disables job buffering. Any jobs already buffered on the disk are printed before normal processing of incoming jobs resumes.
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.

Values:

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.



PostScript Menu

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**
- **Image Smoothing**
- **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, is neither defective nor Read/Write or Write protected, and Job Buffer Size is not set to 100%.

Image Smoothing

Purpose:

To enhance the contrast and sharpness of low resolution bitmapped images (such as images downloaded from the World Wide Web) and smooth their color transitions.

Values:

- Off*** Uses default resolution when printing all images.
- On** Enhances low resolution images, such as graphics with a resolution of 72 dpi.

Note: Image Smoothing has no effect on images that are 300 dpi or higher resolution.

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.



PCL Emul Menu

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.

Values:

- | | |
|----------------|--|
| 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](#)

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 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...255
- 60* (country-specific factory default values)
- 64* (country-specific factory default values)

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 factory default values)

12U PC-850* (country-specific factory default values)

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>	Assign Man Env
Assign MP Feeder	Assign Man Paper

Then select a value:

Off*	Printer uses factory default paper source assignments.
0...199	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.



Parallel Menu

Use the Parallel Menu to change printer settings affecting jobs sent to the printer through a parallel port (either Std Parallel or Parallel Opt <x>).

Select a menu item for more details:

- **Advanced Status**
- **Honor Init**
- **Job Buffering**
- **MAC Binary PS**
- **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:

- | | |
|------------|---|
| Off | Disables 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.

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.

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 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 job buffering. Any jobs already buffered on the disk are printed before normal processing of incoming jobs resumes.
- 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:

- On** Disables 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.

Values:

- 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.

Values:

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



Paper Menu

Use the Paper Menu to define the paper loaded in each paper tray and the default paper source and output bin.

Select a menu item for more details:

- **Assign Type/Bin**
- **Configure Bins**
- **Configure MP**
- **Custom Types**
- **Output Bin**
- **Overflow Bin**
- **Paper Loading**
- **Paper Size**
- **Paper Source**
- **Paper Texture**
- **Paper Type**
- **Paper Weight**
- **Substitute Size**
- **Universal Setup**

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

Assign Type/Bin

Purpose:

To send print jobs to a specific output bin based on the requested paper type.

Values (for Standard Bin* and Bin <x>):

Plain Paper Bin	Envelope Bin
Card Stock Bin	Letterhead Bin
Transparency Bin	Preprinted Bin
Glossy Paper Bin	Colored Bin
Labels Bin	Custom <x> Bin (where <x> represents 1 through 6)
Bond Bin	

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

Configure Bins

Purpose:

To determine which output bin(s) the printer uses for a particular job.

Values:

Mailbox*	Sends print jobs to the output bin designated for that user.
Link	Links two or more bins together as though they were one large bin. When one linked bin is full, the printer starts filling the next linked bin, and continues with each additional linked bin.
Mail Overflow	Sends print jobs to the output bin designated for that user until it is full, and then sends jobs to the designated overflow bin.
Link Optional	Links all optional output bins as though they were one large bin, while leaving the standard bin individually addressable.
Type Assignment	Sends each job to the output bin specified for that paper type.

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 job requests a paper size or type that is only loaded in the multipurpose feeder, the printer pulls 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, 2, 3, 4, 6 (paper only), or 5 (transparencies only):

Paper*	Glossy 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.

Output Bin

Purpose:

To specify the default bin for printed material.

Values:

Standard Bin*
Bin <x>

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

Overflow Bin

Purpose:

To designate an output bin as the overflow bin. If Configure Bins is set to Mail Overflow and a specific output bin is full, the printer automatically diverts printed material to the overflow bin.

Values:

Standard Bin*

Bin <x>

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

Paper Loading

Purpose:

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

Values:

First select a paper type:

Card Stock Load

Colored Loading

Ltrhead Loading

Bond Loading

Glossy Loading

Custom <x> Loading

Preprint Loading

Then 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.

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

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:

First select a paper source:

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

*Then select a value (*denotes country-specific factory default values):*

Letter*	A4*	10 Envelope*	7 3/4 Envelope
Legal	A5	9 Envelope	DL Envelope*
Executive	B5	B5 Envelope	C5 Envelope
Statement	Folio	Other Envelope	

Universal Select Universal when you load paper that does not match any of the other available sizes. The printer automatically formats the page for the maximum possible size. You can then set the actual page size from your application software.

Note: Size sensing must be turned off for Statement and Folio values to appear.

Paper Source

Purpose:

To identify the default paper source.

Values:

Tray <x> (Tray 1*)
MP 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:

First select a paper type:

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

Then 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:

First select a paper source:

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

Then select a value:

Plain Paper	Labels	Preprinted	Envelope
Card Stock	Bond	Custom Type <x>	Colored Paper
Transparency	Letterhead	Glossy 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	Manual Pap Type –Plain Paper
Tray 3 –Custom Type 3	

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.

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:

First select a paper type:

Plain Weight	Preprint Weight	Bond Weight	Labels Weight
CardStock Weight	Colored Weight	Envelope Weight	Ltrhead Weight
Trnsprncy Weight	Custom <x> Weight	Glossy Weight	

Then 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.

Values:

Off	Printer prompts the user to load the requested paper size.
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.
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.
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. (8.5 in.*)	=76–360 mm (216 mm*)
Portrait Height	=3.00–14.17 in. (14.17 in.*)	=76–360 mm (360 mm*)
Feed Direction	=Short Edge* =Long Edge	



Network Menu

Use the Network Menu to change printer settings affecting jobs sent to the printer through a network port (either Standard Network or Network Opt <x>).

Select a menu item for more details:

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

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.

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:

- 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](#)

Std Net 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.



Understanding fonts

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 fonts in the PCL emulation are compatible with the fonts in the HP4500 and include four additional fonts and many extra symbol sets to support extra languages and applications. The fonts in the PostScript emulation are compatible with Adobe PostScript 3 and include 20 additional fonts.

The following tables list all the fonts resident in your printer. See [Printing sample fonts](#) 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.

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

PCL 6 emulation	PostScript 3 emulation
ITC Bookman Demi Italic	Bookman-Demiltalic
Clarendon Condensed Bold	
Coronet	Coronet-Regular
CourierPS	Courier
CourierPS Oblique	Courier-Oblique
CourierPS Bold	Courier-Bold
CourierPS Bold Oblique	Courier-BoldOblique
CG Omega	
CG Omega Bold	
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

PCL 6 emulation	PostScript 3 emulation
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
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

PCL 6 emulation	PostScript 3 emulation
Wingdings	Wingdings-Regular
ITC Zapf Chancery Medium Italic	ZapfChancery-MediumItalic
ITC Zapf Dingbats	ZapfDingbats
	Univers-Extended
	Univers-ExtendedObl
	Univers-BoldExt
	Univers-BoldExtObl
	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

PCL 6 emulation	PostScript 3 emulation
	Copperplate-ThirtyTwoBC
	Copperplate-ThirtyThreeBC
	Eurostile
	Eurostile-Bold
	Eurostile-ExtendedTwo
	Eurostile-BoldExtendedTwo
	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

Resident bitmapped fonts

PCL 6 emulation	PostScript 3 emulation
Line Printer 16	
POSTNET Bar code	

Symbol sets

A *symbol set* is an encoded 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.

The symbol set encoding 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.

Downloadable fonts

ABICOMP Brazil/Portugal	Wingdings	ISO 25: French
ABICOMP International	POSTNET Bar code	ISO 57: Chinese
DeskTop	ISO : German	ISO 60: Norwegian version 1
Legal	ISO : Spanish	ISO 61: Norwegian version 2
MC Text	ISO 2: IRV (Int'l Ref Version)	ISO 69: French
Microsoft Publishing	ISO 4: United Kingdom	ISO 84: Portuguese
Russian-GOST	ISO 6: ASCII	ISO 85: Spanish
Ukrainian	ISO 10: Swedish	ISO 8859-1 Latin 1 (ECMA-94)
PCL ITC Zapf Dingbats	ISO 11: Swedish for Names	ISO 8859-2 Latin 2
PS ITC Zapf Dingbats	ISO 14: JIS ASCII	ISO 8859-5 Latin/Cyrillic
PS Math	ISO 15: Italian	ISO 8859-7 Latin/Greek
PS Text	ISO 16: Portuguese	ISO 8859-9 Latin 5
Pi Font	ISO 17: Spanish	ISO 8859-10 Latin 6
Symbol	ISO 21: German	ISO 8859-15 Latin 9
PC-8 Bulgarian	PC-857 Latin 5 (Turkish)	Roman-9
PC-8 Danish/Norwegian (437N)	PC-858 Multilingual Euro	Roman Extension
PC-8 Greek Alternate (437G)	PC-860 Portugal	Ventura ITC Zapf Dingbats
PC-8 Turkish (437T)	PC-861 Iceland	Ventura International
PC-8 Latin/Greek	PC-863 Canadian French	Ventura Math
PC-8 PC Nova	PC-865 Nordic	Ventura US

PC-8 Polish Mazovia	PC-866 Cyrillic	Windows 3.0 Latin 1
PC-8 Code Page 437	PC-869 Greece	Windows 98 Cyrillic
PC-775 Baltic (PC-8 Latin 6)	PC-911 Katakana	Windows 98 Greek
PC-850 Multilingual	PC-1004 OS/2	Windows 98 Latin 1
PC-851 Greece	Math-8	Windows 98 Latin 2
PC-852 Latin 2	Greek-8	Windows 98 Latin 5
PC-853 Latin 3 (Turkish)	Turkish-8	Windows 98 Latin 6 (Baltic)
PC-855 Cyrillic	Roman-8	

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.

Euro support

Support for the euro currency character is included in all applicable fonts for both the PostScript and PCL emulations. Twelve of the PCL symbol sets support the euro character, including all seven Windows symbol sets.

Hebrew and Arabic fonts

A variety of downloadable fonts for Hebrew and Arabic are included on the CD that shipped with the printer.



Notices

- **Edition notice**
- **Licensing notice**
- **Safety information**
- **Cautions and warnings**
- **Electronic emission notices**
- **Noise emission levels**
- **Laser notice**

Edition notice

August 2001

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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 multiple lasers.

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 or high-capacity output finisher installed

Federal Communications Commission (FCC) compliance information statement

The 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 (parallel) or Lexmark part number 12A2405 (USB). 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 or high capacity output finisher is installed, 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.

Japanese VCCI notice

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラス A 情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

Without a network cable or high-capacity output finisher installed

Federal Communications Commission (FCC) compliance information statement

The 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 (parallel) or Lexmark part number 12A2405 (USB). 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.

Japanese VCCI notice

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラス B 情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

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.

Noise emission levels

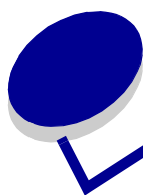
The following measurements were made in accordance with ISO 7779 and reported in conformance with ISO 9296.

1-meter average sound pressure, dBA	
Printing	51 dBA
Idling	42 dBA

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 60825-1.

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.



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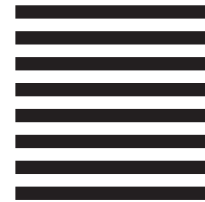
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