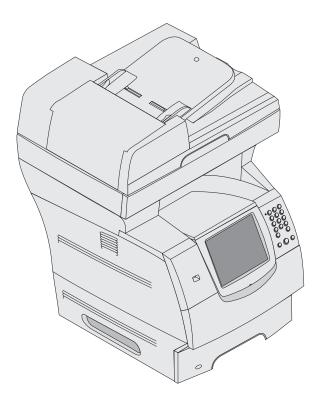


## X644e, X646e

## User's Guide



## January 2006

www.lexmark.com

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#### Safety information



• Connect the power cord to a properly grounded electrical outlet that is near the product and easily accessible. **CAUTION:** Do not use the fax feature during a lightning storm. Do not set up this product or make any electrical or cabling connections, such as the power cord or telephone, during a lightning storm.

- 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.



**CAUTION:** Make sure that all external connections (such as Ethernet and telephone system connections) are properly installed in their marked plug-in ports.

• Your product uses a laser.



**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.



• Use only a 26 AWG or larger telecommunications (RJ-11) cord when connecting this product to a public switched telephone network.

#### Mercury statement

This product contains mercury in the lamp (<5mg Hg). Disposal of mercury may be regulated due to environmental considerations. For disposal or recycling information, contact your local authorities or the Electronic Industries Alliance: www.eiae.org.

#### Static sensitivity notice



Warning: This symbol identifies static-sensitive parts. Do not touch in the areas near these symbols without first touching the metal frame of the MFP.

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## Identifying the MFP

Use the following table to determine the features and options of your Lexmark<sup>™</sup> X646e or X646dte MFP (multifunction printer).

For more information about installing input options, see **Installing and removing options** or the instructions that came with the option.



CAUTION: The MFP requires three people to lift it safely.



#### Models

The MFP is available in two models The following table lists some common features and differences between the models.

	X644e	X646e	X646dte
Input capacity	500 sheets	500 sheets	1000 sheets
Standard memory	256MB	256MB	256MB
Maximum memory capacity, non-network/ network	768MB	768MB	768MB
Hard drive	No	Yes	Yes
Option card connectors	1	1	1
Duplex ability	Duplex in, simplex out	Duplex in, simplex out	Duplex in, duplex out



**CAUTION:** Do not set up this product or make any electrical or cabling connections, such as the power cord or telephone, during a lightning storm.

## Using the scanner

#### Basic functions of the scanner

The Lexmark X646e and X646dte provide copy, fax, and scan-to-network capability for large workgroups. With either of these MFPs, you can:

- Make quick copies, or change the settings on the control panel to perform specific copying jobs.
- Send an outgoing fax using the MFP control panel.
- Send an outgoing fax to multiple fax destinations at the same time.
- Scan documents and send them to your PC, an e-mail address, or an FTP destination.
- Scan documents and send them to another printer (PDF by way of FTP).

#### Automatic document feeder and flatbed

**Note:** Color documents can be scanned to a PC, e-mail address, or an FTP destination. Printed output on this MFP is black and grayscale only, not color.

The ADF (automatic document feeder) can scan multiple pages including duplex pages. The ADF has two scanner elements. When using the ADF:

- Place the paper in the ADF face-up, short-edge first.
- Place up to 50 sheets of plain paper on the ADF input tray.
- Scan media from 114.0 x 139.4 mm (4.5 x 5.5 in.) to 215.9 x 355.6 mm (8.5 x 14 in.).
- Scan jobs with mixed page sizes (letter and legal).
- Scan media weight from 52 to 120 g/m<sup>2</sup> (14 to 32 lb).

Note: Color documents can be scanned to a PC, e-mail address, or an FTP destination.

• Copy and print documents at 600 dpi

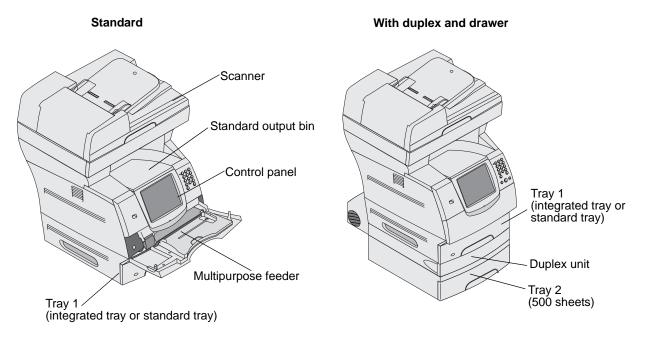
**Note:** Printed output is black and grayscale only, not color.

The flatbed (platen) can be used to scan or copy single pages or book pages. When using the flatbed:

- Place the document in the left rear corner.
- Scan or copy media up to 215.9 x 355.6 mm (8.5 x 14 in.).
- Copy books up to 25.3 mm (1 in.) thick.
- Copy and print documents at 600 dpi.

## **Configured models**

The following illustrations show a standard MFP and an MFP with a duplex unit and a 500-sheet drawer. Other print media handling options are also available.





**CAUTION:** Floor-mounted configurations require additional furniture for stability. You must use either a printer stand or printer base if you are using a 2000-sheet drawer. Certain other configurations also must have a printer stand or printer base. More information is available on our Lexmark Web site at **www.lexmark.com/multifunctionprinters**.

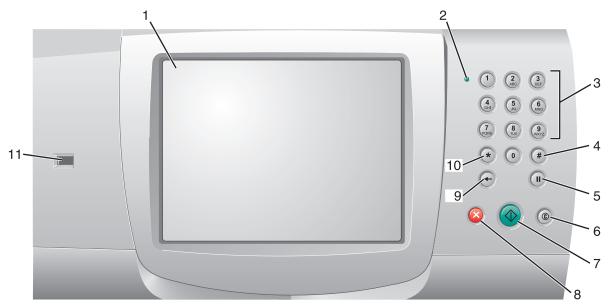
## Understanding the MFP control panel

MFP and scanner settings can be changed several ways: through the MFP control panel, the software application in use, the print driver, MarkVision<sup>™</sup> Professional, or the Web pages. Settings changed from the application or print driver apply only to the job being sent to the MFP.

Changes made to print, fax, copy, and e-mail settings from an application override changes made from the control panel.

If a setting cannot be changed from the application, use the MFP control panel, MarkVision Professional, or the Web pages. Changing a setting from the MFP control panel, MarkVision Professional, or the Web pages makes that setting the user default.

The MFP control panel consists of:



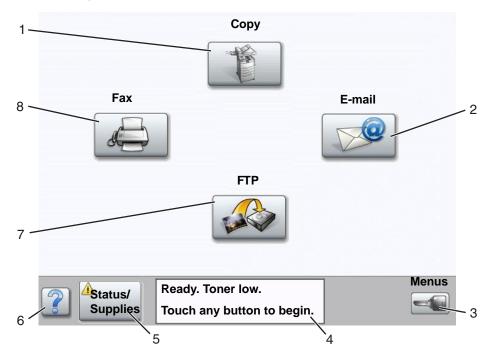
Callout	Control panel item	Function	
1	LCD	buttons, menus,	isplay (LCD) which shows home screen menu items, and values. Allows for is within Copy, Fax, and so on.
2	Indicator light	Gives information about the status of the MFP using the colors red and green.	
		Status	Indicates
		Off	MFP power is off.
		Blinking green	MFP is warming up, processing data, or printing a job.
		Solid green	MFP is on, but idle.
		Solid red	Operator intervention is required.

Callout	Control panel item	Function
3	0-9 <b>Note:</b> Referred to as the numeric keypad.	Press these buttons to enter numbers when the LCD screen has a field that accepts the entry of numbers. Also, use these buttons to dial phone numbers for faxes.
		<b>Note:</b> If a number is pressed while on the home screen without pressing the # button first, the Copy menu opens and changes the Copy Quantity.
4	# (Pound or number character)	Press this button:
		<ul> <li>For a shortcut identifier.</li> <li>Within phone numbers. For a Fax number with a #, enter it twice – ##.</li> <li>From the home screen, the Fax Destination List menu item, E-mail Destination List menu item, or Profile List menu item to access shortcuts.</li> </ul>
5	Dial Pause	Press to cause a two- or three-second dial pause in a fax number. The button only functions within the Fax menu or with fax functions.
		Press from the home screen to redial a fax number.
		When outside of the Fax menu, fax function, or home screen, pressing Dial Pause causes an error beep.
		When sending a fax, in the Fax To: field, a Dial Pause press is represented by a comma (,).
6	Clear All	When in the function menus, such as Copy, Fax, E-mail, and FTP, it returns all settings to their default values, and then returns the MFP to the home screen.
		When in any other menu while the MFP is <b>Ready</b> , it cancels all changes that have not been submitted and returns the MFP to the home screen.
7	Start	Press to initiate the current job indicated on the control panel.
		From the home screen, press it to start a copy job with the default settings.
		If pressed while a job runs through the scanner, the button has no effect.
8	Stop	Press to cause the printing or scanning to stop.
		During a scan job, the scanner finishes scanning the current page and then stops, which means paper may remain in the automatic document feeder (ADF).
		During a print job, the print media path is cleared before the printing stops.
		Stopping appears on the control panel during this process.
9	Backspace	Within the Copy menu, which is accessed by touching the Copy button, press <b>Backspace</b> to delete the right- most digit of the value in the Copy Count. The default value of 1 appears if the entire number is deleted by pressing <b>Backspace</b> numerous times.
		Within the Fax Destination List, press <b>Backspace</b> to delete the right-most digit of a number entered manually. It also deletes an entire shortcut entry. Once an entire line is deleted, another press of <b>Backspace</b> causes the cursor to move up one line.
		Within the E-mail Destination List, press <b>Backspace</b> to delete the character to the left of the cursor. If the entry is in a shortcut, the entire entry is deleted.

Callout	Control panel item	Function
10	Asterisk (*)	* is used as part of a fax number or as an alphanumeric character.
11	USB Direct interface	The host Universal Serial Bus (USB) direct interface on the control panel is used to plug in a USB flash memory device and print any Portable Document Format (PDF) [.pdf file], Joint Photographic Experts Group (JPEG) [.jpeg or .jpg file], Tagged Image File Format (TIFF) [.tiff or .tif file], Graphics Interchange Format (GIF) [.gif file], Basic Multilingual Plane (BMP) [.bmp file], Portable Network Graphics (PNG) [.png file], PiCture eXchange (PCX) [.pcx file], and PC Paintbrush File Format [.dcx file] files. The USB direct interface can also be used to scan a document to a USB flash memory device using the PDF, TIFF, or JPEG formats.

#### Home screen and Home screen buttons

After the MFP is turned on and a short warm-up period occurs, the LCD shows the following basic screen which is referred to as the Home screen. Use the Home screen buttons to initiate an action such as copy, fax, or scan, to open the menu screen, or to respond to messages.



Callout number	Button	Function
1	Сору	Touch to access the Copy menus. If the home screen is shown, press a number to access the Copy menus, too.
2	E-mail	Touch to access the E-mail menus. It is possible to scan a document directly to an e-mail address.
3	Menus (A key is shown on the button.)	Touch to access the menus. These menus are only available when the MFP is in the <b>Ready</b> state. The Menus button is on a gray bar called the navigation bar. The bar contains other buttons described as follows.
4	Status message bar	Shows the current MFP status such as <b>Ready</b> or <b>Busy</b> . Shows MFP conditions such as <b>Toner Low</b> . Shows intervention messages to give instructions on what the user should do so the MFP can continue processing, such as <b>Close door or insert print</b> <b>cartridge</b> .
5	Status/Supplies	Appears on the LCD whenever the MFP status includes a message requiring intervention. Touch it to access the messages screen for more information on the message including how to clear it.
6	? (Tips)	All menus have a Tips button. Tips is a context-sensitive Help feature within the LCD touch screens.

Callout number	Button	Function
7	FTP	Touch to access the File Transfer Protocol (FTP) menus. A document can be scanned directly to an FTP site.
8	Fax	Touch to access the Fax menus.

Other buttons may appear on the Home screen. They are:

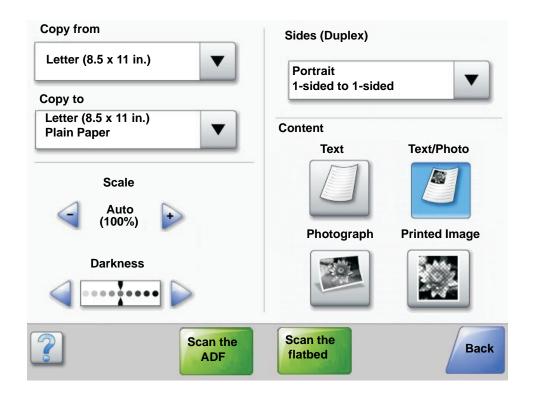
Button	Button name	Function
	Release Held Faxes (or Held Faxes if in Manual Mode)	There are held faxes with a scheduled hold time previously set. To access the list of held faxes, touch this button.
	Search Held Jobs	<ul> <li>To search on any of the following items and return any matches:</li> <li>User names for held or confidential print jobs</li> <li>Job names for held jobs, excluding confidential print jobs</li> <li>Profile names</li> <li>Bookmark container or job names</li> <li>USB container or job names for supported extensions only</li> </ul>
	Held Jobs	To open a screen containing all the held jobs containers.
Ê	Lock Device	<ul> <li>This button appears on the screen when the MFP is unlocked and Device Lockout Personal Identification Number (PIN) is not null or empty.</li> <li>To lock the MFP:</li> <li>1 Touch Lock Device to open a PIN entry screen.</li> <li>2 Enter the correct PIN to lock the control panel which locks both the control panel buttons and the touch-screen buttons. Once the control panel is locked, the PIN entry screen clears, and the Lock Device button is replaced with the Unlock Device button.</li> <li>Note: If an invalid PIN is entered, Invalid PIN. appears. A pop-up screen appears with the Continue button. Touch Continue. The home screen returns with the Lock Device button.</li> </ul>

Button	Button name	Function
	Unlock Device	This button appears on the screen when the MFP is locked. The control panel buttons and shortcuts cannot be used while it appears and no default copy starts may occur.
		To unlock the MFP:
		1 Touch Unlock Device to open a PIN entry screen.
		2 Enter the correct PIN to unlock the numeric keypad (0–9) and the Backspace button on the control panel.
		<b>Note:</b> If an invalid PIN is entered, <b>Invalid PIN.</b> appears. A pop-up screen appears with the Continue button. Touch Continue. The home screen returns with the Unlock Device button.
Cancel	Cancel Jobs	To open the Cancel Jobs screen. The Cancel Jobs screen shows any of the following items under three headings on the screen which are Print, Fax, and Network:
Jobs		<ul><li>print job</li><li>copy job</li></ul>
		• fax
		<ul><li>profile</li><li>FTP</li></ul>
		e-mail send
		Each heading has its own list of jobs shown in a column under the heading. Each column can only show three jobs per screen. The job appears as a button. If more than three jobs exist in a column, then the <b>down arrow</b> appears at the bottom of the column. Each touch of the <b>down arrow</b> accesses one job in the list. When more than three jobs exist, once the fourth job in the list is reached, then an <b>up arrow</b> appears at the top of the column. For illustrations of the up and <b>down</b> <b>arrow</b> buttons, see <b>Information on touch-screen buttons</b> .
		To cancel a job, see the <b>Canceling a print job</b> for instructions.

## Using the LCD touch-screen buttons

The following section provides information on navigating through several screens. Only a few are chosen to demonstrate the use of the buttons.

#### Sample screen one

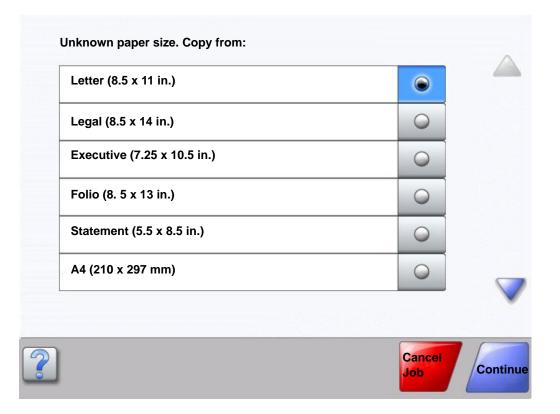


#### Information on touch-screen buttons

Button	Button name	Function or description
	Select button	Touch the <b>select</b> button to have another screen appear with additional items. On the first screen, the user default setting is shown. Once the <b>select</b> button is touched, and the next screen appears, touching another item shown on the screen changes the user default setting.
	Left scroll decrease button	Touch the <b>left scroll decrease</b> button to scroll to another value in decreasing order.

Button	Button name	Function or description
•	Right scroll increase button	Touch the <b>right scroll increase</b> button to scroll to another value in increasing order.
	Left arrow button	<ul> <li>Touch the left arrow button to scroll left to:</li> <li>Reach a decreased value shown by an illustration.</li> <li>See a full text field on the left.</li> </ul>
	Right arrow button	<ul> <li>Touch the <b>right arrow</b> button to scroll right to:</li> <li>Reach an increased value shown by an illustration.</li> <li>See a full text field on the right.</li> </ul>
Scan the ADF	Scan the ADF Scan the flatbed	On the gray navigation bar, these two choices indicate that two types of scanning are possible. One may choose to scan from the ADF or the flatbed.
	Submit	A green button indicates a choice. If a different value within a menu item is touched, it needs to be saved to become the current user default setting. To save the value as the new user default setting, touch <b>Submit</b> .
Scan the flatbed		Submit
Back	Back	When the <b>Back</b> button is shaped like this, no other navigation is possible from this screen except to go back. If any other choice is made on the navigation bar, the screen closes.
		For example, in <b>Sample screen one</b> , all the selections for scanning have been made. One of the preceding green buttons should be touched. The only other button available is <b>Back</b> . Touch <b>Back</b> to return to the previous screen, and all the settings for the scan job made on Sample screen one are lost.
Back	Back	When the <b>Back</b> button is shaped like this, both forward and backward navigation is possible from this screen, so there are other options available on the screen besides selecting <b>Back</b> .

#### Sample screen two



#### Information on touch-screen buttons

Button	Button name	Function or description
	Down arrow	Touch the <b>down arrow</b> to move down to the next item in a list, such as a list of menu items or values. The <b>down arrow</b> does not appear on a screen with a short listing. It only appears if the entire listing cannot be seen on one screen. On the last screen of the listing, the <b>down arrow</b> is gray to indicate that it is not active since the end of the list appears on this screen.
	Up arrow	Touch the <b>up arrow</b> to move up to the next item in a list, such as a list of menu items or values. When on the first screen presented with a long list, the <b>up arrow</b> is gray to indicate that it is not active. On the second screen needed to show the rest of the listed item, the <b>up arrow</b> is blue to show that it is active.
	Unselected radio button	This is an unselected <b>radio</b> button.
$\bigcirc$		

Button	Button name	Function or description
	Selected radio button	This is a selected <b>radio</b> button. Touch a <b>radio</b> button to select it. The <b>radio</b> button changes color to show it is selected. In <b>Sample screen two</b> , the only paper size selected is Letter.
Cancel Job	Cancel Job	See Cancel Jobs on page 16.
Continue	Continue	<ul> <li>Touch Continue after a menu item or value on a screen is selected and more changes need to be made for a job from the original screen. Once Continue is touched, the original screen appears.</li> <li>For example, if one touched Copy on the home screen, the Copy screen appears like Sample screen one on page 17. The following example shows how the Continue button reacts.</li> <li>1 Touch the select button by the Copy to box and a new screen appears.</li> <li>2 Touch MP Feeder and a new screen appears.</li> <li>3 Touch Legal and a new screen appears.</li> <li>5 Touch Plain Paper for the type of print media needed.</li> <li>6 Touch Continue. The Copy screen returns to allow other selections besides Copy to. The other settings on the Copy screen available are Duplex, Scale, Darkness, Collate, and Copies.</li> <li>Touch Continue to return to the original screen and make other setting changes for a copy job before the Copy it button is touched to start the job.</li> </ul>

#### Other touch-screen buttons

Button	Button name	Function or description
	Custom	Allows for creating a <b>custom</b> button based on the user's needs.
Cancel	Cancel	Touch <b>Cancel</b> to cancel an action or a selection. Touch to cancel out of a screen and return to the previous screen.

Button	Button name	Function or description
	Select	Touch to select a menu. The next screen appears showing menu items. Touch to select a menu item. The next screen appears showing values.
Done	Done	Allows specifying that a job is finished. For example, when scanning an original document, one could indicate that the last page is scanned, and then printing the job would begin.
Back	Back	Touch the <b>Back</b> button to return to the previous screen, and no settings are saved on the screen where it was touched. The <b>Back</b> button appears on each menu screen except for the home screen.
	Home	Touch the <b>Home</b> button to return to the home screen. The <b>Home</b> button appears on every screen except the home screen. See the <b>Home screen and Home</b> <b>screen buttons on page 14</b> for more information.
	Grayed out button	When this button appears, it looks faded with a faded word on it. It means the button is not active or unavailable on this screen. It was probably active on the previous screen, but the selections made on the previous screen caused it to be unavailable on the current screen.
	Gray button	Touch this button to select the action appearing on the button.

#### Features

Feature	Feature name	Description
Menus → Settings → Copy Settings → Number of Copies	Menu trail line	A line is located at the top of each menu screen. This feature acts as a trail. It gives the exact location within the menus. Touch any of the underlined words to return to that menu or menu item. The Number of Copies is not underlined since this is the current screen.
		If this feature is used on the Number of Copies screen before the Number of Copies is set and saved, then the selection is not saved, and it does not become the user default setting.
l	Attendance message alert	If an attendance message occurs which closes a function, such as copy or fax, then a blinking red exclamation point appears over the function button on the home screen. This feature indicates an attendance message exists.

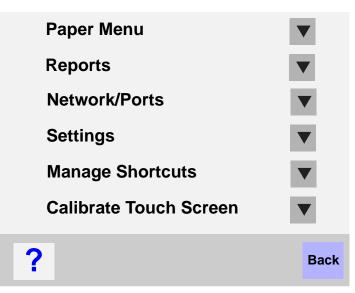
#### Menus

A number of menus are available to make it easy for you to change MFP settings or print reports. To access the menus and settings, press the menu button in the lower right corner of the home screen.

When a value or setting is selected and saved, it is stored in MFP memory. Once stored, these settings remain active until new ones are stored or the factory defaults are restored.

**Note:** Settings chosen for faxing, scanning, e-mailing, copying, and settings for printing from the application may override the settings selected from the control panel.

The following diagram shows the touch screen menu index and the menus and items available under each menu. For more information about menus and menu items, see the *Menus and Messages Guide* on the *Software and Documentation* CD.



Paper Menu Default Source Paper Size/Type Configure MP Envelope Enhance Substitute Size Paper Texture Paper Weight Paper Loading Custom Types Custom Names Custom Bin Name Universal Setup Bin Setup Reports

Menu Settings Page Device Statistics Network Setup Page Shortcut List Fax Job Log Fax Call Log E-mail Shortcuts Fax Shortcuts FTP Shortcuts Profiles List NetWare Setup Page Print Fonts Print Directory

#### Manage Shortcuts Manage Fax Shortcuts Manage E-mail Shortcuts Manage FTP Shortcuts Manage Profile Shortcuts

#### Network/Ports TCP/IP IPv6 E-mail Server Setup Address Book Setup Wireless Standard Network Network <x> Standard USB USB <x> Standard Parallel Parallel <x> Standard Serial Serial <x> **NetWare** AppleTalk LexLink

#### <u>Settings</u>

General Settings Copy Settings Fax Settings E-mail Settings FTP Settings Print Settings Security Set Date and Time

#### <u>Help</u>

Print all guides Copy guide E-mail guide Fax guide FTP guide Information guide Print defects guide Supplies guide



The following copy topics are available in this and other chapters.

Quick copy	Reducing and enlarging copies
Multiple page copying	Adjusting copy quality
Using the flatbed	Setting collation options
Understanding the copy screens and options	Placing separator sheets between copies
Copying from one size to another	Setting paper saving options
Making transparencies	Placing the date and time at the top of each page
Copying to letterhead	Placing an overlay message on each page
Copying photographs	Creating a custom job (job build)
Making copies using media from a selected tray	Canceling a copy job
Copying mixed-sized media	Copy tips
Setting the duplex option	Solving copy quality problems

## Quick copy

- 1 Place the original document face-up in the automatic document feeder (ADF) or face-down on the flatbed. Adjust the paper guides when using the ADF.
- 2 Go on the numeric pad.
  - **Note:** If an LDSS profile has been installed, you may receive an error when attempting a quick copy. Contact your system support person for access.

## Multiple page copying

- 1 Place the original document face-up in the automatic document feeder or face-down on the flatbed. Adjust the paper guides when using the ADF.
- 2 Touch **Copy** on the home screen, or use the numeric keypad to specify the number of copies you want. After touching Copy or entering the number of copies, the touch screen will automatically change to the copy settings menu.
- **3** Change the copy options to meet your requirements.
- 4 Touch Copy It.

## Using the flatbed

If you are using the flatbed (scanner glass) to make copies:

- **1** Open the document cover.
- **2** Place the document face-down on the scanner flatbed.
- **3** Close the document cover.
- 4 Touch Copy on the home screen, or press Go on the numeric pad.

For **Copy**, continue with **step 5**.

For Go, proceed with step 8.

- **5** Set the number of copies.
- 6 Change the copy options to meet your requirements.
- 7 Touch Copy It.
- 8 Touch Scan Next if you have more pages to scan, or touch Finish the Job if you are done. Touching Finish the Job returns the MFP to the copy screen.
- **9** Touch **Home** when you are finished.

#### Understanding the copy screens and options

**Copy From:** Opens a screen where you can enter the size of the documents you are going to copy.

- Touching any of the paper size icons on the follow-on screen will make that your selection and return you to the Copy Options Screen.
- When Original Size is set to Mixed Sizes, you can scan different size original documents (letter and legal size pages). They will be scaled automatically to fit the selected output media size.

Copy To: Opens a screen where you can enter the size and type of paper on which your copies will be printed.

- Touching any of the paper size icons on the follow-on screen will make that your selection and return you to the Copy Options Screen.
- If the size settings for Copy From and Copy To are different, the MFP will automatically adjust the Scale setting to accommodate the difference.
- If you have a special type or size of paper that you'd like to copy onto that is not normally in the MFP paper trays, you can select MP Feeder, and manually send the type of paper you want through the MP feeder.
- When using Auto Match, the MFP will match the size of the original document as specified in the Copy From box. If a matching paper size is not loaded in one of the paper trays, the MFP will scale the copy to fit loaded media.

**Scale:** Creates an image from your copy that is proportionally scaled anywhere between 25% and 400%. Scale can also be set for you automatically.

- When you want to copy from one size of paper to another, such as legal size to letter size, setting your Copy From and Copy To paper sizes will automatically change the scale to keep all the original document information on your copy.
- Touching the arrow to the left lowers the value by 1%; touching the arrow to the right increases the value by 1%.
- Holding your finger on an arrow makes a continuous increment.
- Holding your finger on an arrow for two seconds causes the pace of the change to accelerate.

Darkness: Adjusts how light or dark your copies will turn out in relation to the original document.

**Printed Image:** Copies halftone photographs or graphics such as documents printed on a laser printer or pages from a magazine or newspaper that are composed primarily of images. For original documents that are a mixture of text, line drawings, or other graphics, leave Printed Image off.

**Sides (Duplex):** Prints copies on 1 or 2 sides, makes 2-sided copies (duplex) of 2-sided originals, 2-sided copies from 1-sided originals or 1-sided copies (simplex) from 2-sided originals.

Note: For 2-sided output, you must have a duplex unit attached to your printer.

**Collate:** Keeps the pages of a print job stacked in sequence, particularly when printing multiple copies of the document. The default setting for Collate is on; the output pages of your copies will be ordered (1,2,3) (1,2,3) (1,2,3). If you want all the copies of each page to remain together, turn Collate off, and your copies will be ordered (1,1,1) (2,2,2) (3,3,3).

**Options:** Opens a screen to change Paper Saver, Advanced Imaging, Separator Sheets, Margin Shift, Edge Erase, Date/ Time Stamp, Overlay, Content, or Advance Duplex settings.

- Paper Saver: Takes two or more sheets of an original document and prints them together on the same page. Paper Saver is also called N-up printing. The N stands for Number. For example, 2-up would print two pages of your document on a single page, and 4-up would print four pages of your document on a single page. Touching **Print Page Borders** adds or removes the outline border surrounding the original document pages on the output page.
- **Create Booklet:** Creates a sequence of collated output that, when folded in half, forms a booklet half the page size of the original document and with all the pages in order.

Note: To use Create Booklet, you must have a duplex unit attached to the MFP.

- Advanced Imaging: Adjusts Background Removal, Contrast, and Shadow Detail before you copy the document.
- Custom Job (Job Build): Combines multiple scanning jobs into a single job.

Note: Custom Job is not supported on all models.

- **Separator Sheets:** Places a blank piece of paper between each copy of your copying job. The separator sheets can be drawn from a bin with a different kind or color of paper from your copies.
- **Margin Shift:** Increases the size of the margin the specified distance. This can be useful in providing space to bind or hole-punch copies. Use the increase or decrease arrows to set how much of a margin you want. If the additional margin is too large, the copy will be cropped.
- Edge Erase: Eliminates smudges or information around the edges of your document. You can choose to eliminate an equal area around all four sides of the paper, or pick a particular edge. Edge Erase will erase whatever is within the selected area, leaving nothing printed on that portion of the paper.
- Date/Time Stamp: Turns the Date/Time Stamp on and prints the date and time at the top of every page.
- **Overlay:** Creates a watermark (or message) that overlays the content of your copy. You can choose between Urgent, Confidential, Copy, and Draft. The word you pick will appear, faintly, in large print across each page.

**Note:** A custom overlay can be created by the System Administrator. An additional icon with that message will then be available.

- **Content:** Enhances copy quality. Choose *Text* for original documents that are mostly text or line art. Choose *Text/ Photo* when the original documents are a mixture of text and graphics or pictures. Choose *Photograph* when the original document is a high-quality photograph or inkjet print. Choose *Printed Image* when copying halftone photographs or graphics such as documents printed on a laser printer or pages from a magazine or newspaper.
- Advanced Duplex: Controls how many sides and what orientation your original documents have, and whether your original documents are bound along the long edge or the short edge.

#### Copying from one size to another

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- 2 Adjust the paper guides.
- 3 Touch Copy on the home screen.
- 4 Touch **Copy from**:, and then identify the size of your original document. For example, Legal.
- **5** Touch **Copy to**:, and then select the size you want the copy to be.

Note: If you select a paper size that is different from the "Copy from" size, the MFP will scale the size automatically.

6 Touch Copy It.

#### Making transparencies

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- 2 Adjust the paper guides.
- 3 Touch Copy on the home screen.
- 4 Touch Copy from:, and then identify the size of your original document.
- 5 Touch Copy to:, and then touch the tray that contains transparencies.

Note: If you do not see Transparency as an option, speak with your system support person.

6 Touch Copy It.

#### Copying to letterhead

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- **2** Adjust the paper guides.
- 3 Touch Copy on the home screen.
- 4 Touch Copy from:, and then identify the size of your original document.
- 5 Touch Copy to:, and then touch the tray that contains letterhead.

Note: If you do not see Letterhead as an option, speak with your system support person.

6 Touch Copy It.

## Copying photographs

- 1 Open the document cover.
- 2 Place the photograph face down on the flatbed.
- 3 Touch Copy on the home screen.
- 4 Touch Options.

- 5 Touch Content.
- 6 Touch Photograph.
- 7 Touch Copy It.
- 8 Touch Scan Next or Done.

## Making copies using media from a selected tray

During the copy process, you can select the input tray that contains the media type of choice. For example, if a special media type is located in the multipurpose feeder, and you want to make copies on that media:

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- 2 Adjust the paper guides.
- **3** Touch **Copy** on the home screen.
- 4 Touch Copy from:, and then identify the size of your original document.
- 5 Touch Copy to:, and then touch multipurpose feeder or the tray that contains the media type you want.
- 6 Touch Copy It.

## Copying mixed-sized media

You can place mixed-sized original documents in the ADF and then copy them. Depending on the paper size loaded in the trays, the scanner will print on the same size media or scale the document to fit the media in the tray.

Example 1, the MFP has two paper trays, one tray loaded with letter and the other with legal paper. A document mixed with letter and legal pages needs to be copied.

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- **2** Adjust the paper guides.
- 3 Touch Copy on the home screen.
- 4 Touch Copy From, and then touch Mixed Sizes.
- 5 Touch Copy To, and then touch Auto Size Match.
- 6 Touch Copy It.

The scanner will identify the different size pages as they scan, and then print them on the correct size paper.

Example 2, the MFP has one paper tray, loaded with letter-size paper. A document mixed with letter and legal pages needs to be copied.

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- 2 Adjust the paper guides.
- 3 Touch Copy on the home screen.
- 4 Touch Copy From, and then touch Mixed Sizes.
- 5 Touch Copy It.

The scanner will identify the different size pages as they scan, and then scale the legal size pages to print on letter-size paper.

## Setting the duplex option

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- 2 Adjust the paper guides.
- **3** Touch **Copy** on the home screen.
- **4** Touch the button that looks the way you want your copies duplexed.

The first number represents sides of the original documents; the second number represents sides of the copy.

For example, select 1 --> 2-sided if you have 1-sided original documents and you want 2-sided copies.

5 Touch Copy It.

## Reducing and enlarging copies

Copies can be reduced to 25% of the original document size or enlarged to 400% of the original document size. The default for Scale is Auto. If you leave Scale set to Auto, the content of your original document will be scaled to fit the size of the paper onto which you are copying.

To reduce or enlarge a copy:

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- **2** Adjust the paper guides.
- **3** Touch **Copy** on the home screen.
- 4 From Scale, touch + or —to enlarge or reduce your output.

Note: Touching Copy To or Copy From after setting Scale manually will turn the scale value back to Auto.

5 Touch Copy It.

## Adjusting copy quality

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- 2 Adjust the paper guides.
- **3** Touch **Copy** on the home screen.
- 4 Touch Options.
- 5 Touch Content.
- **6** Touch the icon that best represents what you are copying (for example, Text, Text/Photo, Photograph, or Printed Image).
  - Text: Used for original documents that are mostly text or line art.
  - Text/Photo: Used when the original documents are a mixture of text and graphics or pictures.
  - Photograph: Used when the original document is a high-quality photograph or inkjet print.
  - Printed Image: Used when copying halftone photographs, graphics such as documents printed on a laser printer, or pages from a magazine or newspaper that are composed primarily of images.
- 7 Touch Copy It.

## Setting collation options

If you want your copies collated, you don't need to do anything; this is the default setting.

For example, two copies of three pages will print page 1, page 2, page 3, page 1, page 2, page 3.

If you don't want your copies collated, you can change the setting.

For example, two copies of three pages will print page 1, page 1, page 2, page 2, page 3, page 3.

To turn collation off:

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- **2** Adjust the paper guides.
- **3** Touch **Copy** on the home screen.
- 4 Use the numeric keypad to enter the number of copies you want.
- 5 Touch Off if you do not want your copies collated.
- 6 Touch Copy It.

#### Placing separator sheets between copies

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- **2** Adjust the paper guides.
- **3** Touch **Copy** on the home screen.
- 4 Touch Options.
- 5 Touch Separator Sheets.

**Note:** Collation must be On for the separator sheets to be placed between copies. If Collation is Off, the separator sheets are inserted after the job has been printed.

6 Touch Copy It.

## Setting paper saving options

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- 2 Adjust the paper guides.
- 3 Touch Copy on the home screen.
- 4 Make your duplex choice.
- 5 Touch Options.
- 6 Touch Paper Saver.
- 7 Select the output you want.

For example, if you have four portrait-oriented original documents that you want copied to the same side of one sheet, touch **4 on 1 Portrait**.

- 8 Touch Print Page Borders if you want a box drawn around each page on the copies.
- 9 Touch Copy It.

#### Placing the date and time at the top of each page

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- 2 Adjust the paper guides.
- 3 Touch Copy on the home screen.
- 4 Touch Options.
- 5 Touch Date/Time Stamp.
- 6 Touch On.
- 7 Touch Done.
- 8 Touch Copy It.

#### Placing an overlay message on each page

An overlay message can be placed on each page. The message choices are Urgent, Confidential, Copy, or Draft. To place a message on the copies:

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- **2** Adjust the paper guides.
- **3** Touch **Copy** on the home screen.
- 4 Touch Options.
- 5 Touch the button containing the overlay you want to use.
- 6 Touch Done.
- 7 Touch Copy It.

#### Creating a custom job (job build)

The custom job or job build is used to combine one or more sets of original documents into a single copy job. Each set may be scanned using different job parameters. When a copy job is submitted and Custom Job is enabled, the scanner will scan the first set of original documents using the supplied parameters, then scan the next set with the same or different parameters.

The definition of a set depends on the Scan Source:

- From the flatbed, a set consists of one page.
- From the ADF, a set consists of all scanned pages until the ADF becomes empty.
- When one page is sent through the ADF, a set consists of one page.

For example:

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- **2** Adjust the paper guides.
- **3** Touch **Copy** on the home screen.
- 4 Touch Options.
- 5 Touch Custom Job.
- 6 Touch On.

- 7 Touch Done.
- 8 Touch Copy It.

When the end of a set is reached, the "Scan the next page" screen appears. Touch **Scan the next page** or touch **Done**. For more information on the Custom job or the job build setting, see the *Menus and Messages Guide* on the *Software and Documentation* CD.

## Canceling a copy job

#### While the document is in the ADF

When the ADF begins processing a document, the scanning screen is displayed. You can cancel the copy job by touching **Cancel Job** on the touch screen.

Touching **Cancel Job** cancels the entire job that is being scanned. The scanning screen will be replaced with a "Canceling scan job" screen. The ADF will clear any page that has started scanning and leave the other pages in the ADF.

#### While copying pages using the flatbed

During the copy process, the "Scan the next page" screen appears. To cancel the copy job, touch **Cancel Job** on the touch screen.

Touching **Cancel Job** cancels the entire job that has been scanned. The scanning screen will be replaced with a "Canceling scan job" screen. Once the job has been flushed, the touch screen will return to the copy screen.

#### When the pages are being printed

To cancel the print job, touch Cancel Job on the touch screen, or press cancel on the numeric keypad.

Touching **Cancel Job** or pressing cancel on the keypad cancels the remaining print job. Once the job has been deleted, the touch screen will return to the home screen.

## Copy tips

The following tips may improve the MFP copy quality. For additional information or to solve copy problems, see **Solving copy quality problems**.

Question	Тір	
When should I use Text mode?	<ul> <li>Text mode should be used when text preservation is the main goal of the copy, and preserving images copied from the original document is not a concern.</li> <li>Text is best used for receipts, carbon copy forms, and documents that only contain text or fine line art.</li> </ul>	
When should I use Text/Photo mode?	<ul> <li>Text/Photo mode should be used when copying an original document that contains a mixture of text and graphics.</li> <li>Text/Photo is best used for magazine articles, business graphics, and brochures.</li> </ul>	
When should I use Printed Image mode?	Printed Image mode should be used when copying halftone photographs, graphics such as documents printed on a laser printer, or pages from a magazine or newspaper.	
When should I use Photograph mode?	Photograph mode should be used when the original document is a high-quality photograph or inkjet print.	



The MFP can be used to e-mail scanned documents to one or more recipients.

There are four ways to send an e-mail from the MFP. You can type the e-mail address, use a shortcut number, use the address book, or a profile. Permanent e-mail destinations can be created in the Manage Destinations link located under the Configuration tab on the Web page.

For more information or detailed instructions, select one of the following:

Entering an e-mail address Using a shortcut number Using the address book E-mailing to a profile Adding e-mail subject and message information Changing the output file type E-mailing color documents Creating an e-mail shortcut Creating an e-mail profile Canceling an e-mail Understanding e-mail options E-mail server setup Address book setup

#### Entering an e-mail address

- **1** Place the original document in the automatic document feeder face-up or on the flatbed face-down. Adjust the paper guides when using the ADF.
- 2 Touch E-mail on the home screen.
- 3 Enter the recipient's address.

You can enter additional recipients by pressing next and then entering the recipient's address or shortcut number.

4 Touch E-mail It.

## Using a shortcut number

- 1 Place the original document in the automatic document feeder face-up or on the flatbed face-down. Adjust the paper guides when using the ADF.
- 2 Touch E-mail on the home screen.

- 3 Press #, and then enter the recipient's shortcut number.You can enter additional recipients by pressing next and then entering the recipient's shortcut number or address.
- 4 Touch E-mail It.

## Using the address book

- 1 Place the original document in the automatic document feeder face-up or on the flatbed face-down. Adjust the paper guides when using the ADF.
- 2 Touch E-mail on the home screen.
- 3 Touch Search Address Book.
- 4 Enter the name or part of the name you are searching for, and then touch **Search**.
- **5** Touch the name that you want to add to the To: field.

You can enter additional recipients by pressing next and then entering the recipient's address or shortcut number, or searching the address book.

6 Touch E-mail It.

## E-mailing to a profile

- **1** Place the original document in the automatic document feeder face-up or on the flatbed face-down. Adjust the paper guides when using the ADF.
- 2 Touch Held Jobs on the home screen.
- 3 Touch Profiles.
- 4 Select your e-mail destination from the profile list.
- 5 Touch E-mail It.

#### Adding e-mail subject and message information

- 1 Place the original document in the automatic document feeder face-up or on the flatbed face-down. Adjust the paper guides when using the ADF.
- 2 Touch E-mail on the home screen.
- 3 Touch Options.
- 4 Touch Subject.
- 5 Enter the e-mail subject.
- 6 Touch Done.
- 7 Touch Message.
- 8 Enter an e-mail message.
- 9 Touch Done.
- 10 Touch E-mail It.

## Changing the output file type

- **1** Place the original document in the automatic document feeder face-up or on the flatbed face-down. Adjust the paper guides when using the ADF.
- 2 Touch E-mail on the home screen.
- 3 Enter an e-mail address.
- 4 Touch Options.
- 5 Touch the button that represents the file type you want to send.
  - **PDF**: This creates a single file with multiple pages, viewable with Adobe Reader. Adobe Reader is provided free by Adobe at http://www.adobe.com.
  - **TIFF**: Creates multiple files or a single file. If Multi-page TIFF is turned off in the Configuration menu, then TIFF saves one page in each file. The file size is usually larger than an equivalent JPEG.
  - **JPEG**: Creates and attaches a separate file for each page of your original document, and is viewable by most Web browsers and graphics programs.
- 6 Touch E-mail It.

## E-mailing color documents

- **1** Place the original document in the automatic document feeder face-up or on the flatbed face-down. Adjust the paper guides when using the ADF.
- 2 Touch E-mail on the home screen.
- 3 Enter an e-mail address.
- 4 Touch Options.
- 5 Touch Color.
- 6 Touch E-mail It.

## Creating an e-mail shortcut

#### From a computer

- 1 Enter the IP address of the MFP into the URL field (address bar) of the Web browser.
- 2 Click Configuration (in the left frame), and then click Manage Destinations (in the right frame).

**Note:** You may be asked to enter a password. If you do not have an ID and password, get one from your system support person.

#### 3 Click E-mail Destination Setup.

4 Enter a unique name for the recipient, and specify the e-mail address.

Note: If you are entering multiple addresses, separate each address with a comma (,).

- 5 Choose your scan settings (Format, Content, Color, and Resolution).
- 6 Enter a shortcut number, and then click Add.

If you enter a number that is already in use, you are prompted to select another number.

- 7 Go to the MFP, and place your original document in the automatic document feeder face-up, short-edge first.
- 8 Press #, and then enter the recipient's shortcut number.
- 9 Touch E-mail It.

#### From the MFP

- 1 Load the original document in the ADF face-up, short-edge first, and adjust the paper guides.
- 2 Touch E-mail on the home screen.
- **3** Enter the recipient's e-mail address.
  - To create a group of recipients, touch Next number, and enter the next recipient's e-mail address.
- 4 Touch Save as Shortcut.
- 5 Enter a unique name for the shortcut.
- 6 Verify the shortcut name and number are correct, and then touch **OK**.

If the name or number is incorrect, touch Cancel, and reenter the information.

7 Touch E-mail It.

#### Creating an e-mail profile

- 1 Open your Web browser. In the address line, enter the IP address of the MFP you want to configure using the format: *http://ip\_address/*.
- 2 Click Configuration.
- 3 Click E-mail/FTP Settings.
- 4 Click Manage E-mail Shortcuts.
- 5 Fill in the fields with the appropriate information.
- 6 Click Add.

#### Canceling an e-mail

- 1 When using the automatic document feeder, touch **Cancel** while scanning... is displayed on the touch screen.
- 2 When using the scanner bed, touch **Cancel** while scan the Next Page / Finish the Job is displayed on the touch screen.

## Understanding e-mail options

Original Size: Opens a screen where you can enter the size of the documents you are going to e-mail.

- Touching any of the paper size icons on the follow-on screen will make that your selection and return you to the e-mail Options screen.
- When Original Size is set to Mixed Sizes, you can scan different size original documents (letter and legal size pages). They will be scaled automatically to fit the selected output media size.

**Sides (Duplex):** Tells the MFP if your original document is simplex (printed on one side) or duplex (printed on both sides). This lets the scanner know what needs to be scanned for inclusion in the e-mail.

**Orientation:** Tells the MFP whether the original document is portrait or landscape and then changes the Sides and Binding settings to match the original document orientation.

Binding: Tells the MFP whether the original document is bound on the long-edge or short-edge side.

E-mail Subject: Lets you enter a subject line to your e-mail. You can enter up to 255 characters.

E-mail Message: Lets you enter a message that will be sent with your scanned attachment.

**Resolution:** Adjusts the output quality of your e-mail. Increasing the image resolution increases the e-mail file size and the time needed to scan your original document. Image resolution can be decreased to reduce the e-mail file size.

**Send As:** Sets the output (PDF, TIFF, or JPEG) for the scanned image.

**PDF** output is a single file.

**TIFF** output is a single file. If Multi-page TIFF is turned off in the Configuration menu, then TIFF saves one page each in a series of files.

JPEG saves one page in each file. When multiple pages are scanned, the output will be a series of files.

**Content:** Tells the MFP the original document type. Choose from Text, Text/Photo, or Photo. Color can be turned on or off with any of the Content choices. Content affects the quality and size of your e-mail.

Text: Emphasize sharp, black, high-resolution text against a clean, white background.

Text/Photo: Used when the original documents are a mixture of text and graphics or pictures.

**Photo:** Tells the scanner to pay extra attention to graphics and pictures. This setting takes longer to scan but emphasizes a reproduction of the full dynamic range of tones in the original. This increases the amount of information saved.

**Color:** Sets the scan type and output for the e-mail. Color documents can be scanned and sent to an e-mail address.

Note: The MFP will print color documents in grayscale only.

Advanced Options: Lets you change Advanced Imaging, Custom Job, Transmission Log, Scan Preview, Edge Erase, or Darkness settings.

Advanced Imaging: Adjusts Background Removal, Contrast, and Shadow Detail before you copy the document.

Custom Job (Job Build): Combines multiple scanning jobs into a single job.

Note: Custom Job is not supported on all models.

Transmission Log: Prints the transmission log or transmission error log.

**Scan Preview:** Displays the first pages of the image before it is included in the e-mail. When the first page is scanned, the scanning is paused and a preview image appears.

Note: Scan Preview is not supported on all models.

**Edge Erase:** Eliminates smudges or information around the edges of your document. You can choose to eliminate an equal area around all four sides of the paper, or pick a particular edge.

Darkness: Adjusts how light or dark your scanned e-mails will turn out.

### E-mail server setup

For e-mail to operate, it must be turned on in the MFP configuration and have a valid IP address or gateway address. To set up the e-mail function:

- 1 Open your Web browser. In the address line, enter the IP address of the MFP you want to configure using the format: *http://ip\_address/*.
- 2 Click Configuration.
- 3 Click E-mail/FTP Settings.
- 4 Click Email Server Setup.
- 5 Fill in the fields with the appropriate information.
- 6 Click Submit.

# Address book setup

- 1 Open your Web browser. In the address line, enter the IP address of the MFP you want to configure using the format: *http://ip\_address/*.
- 2 Click Configuration.
- 3 Click E-mail/FTP Settings.
- 4 Click Manage E-mail Shortcuts.
- **5** Fill in the fields with the appropriate information.
- 6 Click Add.



Note: Faxing is not supported on all models.

The fax function lets you scan items and fax them to one or more recipients directly from the MFP. When you touch Fax, it opens the fax destination screen. You enter the fax number and touch Fax It to send your fax. You can also change the fax settings to fit your personal needs.

During initial MFP setup, you may be required to configure the MFP for faxing. For additional information, see Fax setup.

The following fax topics are available in this and other chapters.

Sending a fax	Adjusting the Darkness setting
Using fax destination shortcuts	Sending a fax at a later time
Using the address book	Cancel an outgoing fax
Sending faxes from a computer	Fax tips
Creating shortcuts	Fax setup
Understanding fax options	Solving fax quality problems
Changing the fax resolution	Viewing a fax log

# Sending a fax

There are two ways to send a fax: enter the number using a numeric keypad or use a shortcut number. Use the instructions below to send a fax using the keypad, or see **Using fax destination shortcuts** to fax your documents using a shortcut.

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- 2 Adjust the paper guides.
- **3** Touch **Fax** on the home screen.
- 4 Enter the fax number using the numbers on the touch screen or keypad.

Add recipients by touching next and then entering the recipient's telephone number or shortcut number, or search the address book.

Note: To place a two-second dialing pause within a fax number, use the Dial Pause button.



The dial pause will appear as a comma in the Fax to: box. Use this feature if you need to dial an outside line first.

5 Touch Fax It.

### Using fax destination shortcuts

Fax destination shortcuts are just like the speed dial numbers on a telephone or fax machine. You can assign shortcut numbers when creating permanent fax destinations. Permanent fax destinations or speed dial numbers are created in the Manage Destinations link located under the Configuration tab on the Web page. A shortcut number (1–99999) can contain a single recipient or multiple recipients. By creating a group fax destination with a shortcut number, you can quickly and easily fax broadcast information to an entire group.

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- **2** Adjust the paper guides.
- 3 Press # followed by the shortcut number on the keypad.

Press # followed by the shortcut number on the keypad, or touch Next Number to enter another address.

For information on creating shortcut numbers, see **Creating shortcuts**.

4 Touch Fax It.

### Using the address book

Note: If the address book feature is not enabled, contact your system support person.

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- 2 Touch Fax on the home screen.
- 3 Touch Search Address Book.
- 4 Using the touch screen keyboard, enter the name or part of the name of the person for whom you'd like to find a fax number. (Do not attempt to search for multiple names at the same time.)
- 5 Touch Enter.
- 6 Touch the name, to add it to the Fax to: list.
- 7 Repeat steps 5 through 6 to enter additional destinations.
- 8 Touch Fax It.

### Sending faxes from a computer

Faxing from a computer lets you send electronic documents without leaving your desk. This gives you the flexibility of faxing documents directly from software applications.

- 1 From your software application, click **File**  $\rightarrow$  **Print**.
- 2 From the Print window, select your MFP, and then click Properties.

**Note:** In order to perform this function from your computer, you must use the PostScript printer driver for your MFP.

- 3 Choose the **Paper** tab, and change Output format: to Fax.
- 4 Click OK. At the next screen, click OK.
- 5 From the Fax screen, enter the name and number for the fax recipient.
- 6 Click Send to send your job.

# **Creating shortcuts**

Instead of entering the entire phone number of a fax recipient on the control panel each time you want to send a fax, you can create a permanent fax destination and assign a shortcut number. A single shortcut number or a multiple number shortcut can be created. There are two methods for creating shortcut numbers: from a computer or from the MFP touch screen.

### From a computer

- 1 Enter the IP address of the MFP in the URL field (address bar) of your Web browser. If you do not know the IP address, see your administrator.
- 2 Click **Configuration** (in the left frame of your browser window), and then click **Manage Destinations** (in the right frame of your browser window).

**Note:** A password may be required. If you do not have an ID and password, get one from your system support person.

- 3 Click Fax Shortcut Setup.
- 4 Enter a unique name for the shortcut, and specify the fax number.

To create a multiple number shortcut, enter the fax numbers for the group.

Note: Separate each fax number in the group with a semicolon (;).

5 Assign a shortcut number.

If you enter a number that is already in use, you are prompted to select another number.

- 6 Click Add.
- 7 Go to the MFP, and load your original document in the automatic document feeder face-up, short-edge first.
- 8 From the numeric keypad, press #, and then enter your shortcut number.
- 9 Touch Fax It.

### From the MFP

- 1 Load the original document in the ADF face-up, short-edge first, and adjust the paper guides.
- 2 Touch Fax on the home screen.
- 3 Enter the recipient's fax number.

To create a group of recipients, touch Next number, and enter the next recipient's fax number.

- 4 Touch Save as Shortcut.
- 5 Enter a unique name for the shortcut.
- **6** Verify the shortcut name and number are correct, and then touch **OK**.

If the name or number is incorrect, touch Cancel, and reenter the information.

7 Touch Fax It.

### Understanding fax options

Original: Opens a screen where you can choose the size of the documents you are going to fax.

- Touching any of the paper size buttons on the follow-on screen will make that your selection and return you to the Fax Options Screen.
- When Original Size is set to Mixed Sizes, you can scan different size original documents (letter and legal size pages). They will be scaled automatically to fit the selected output media size.

**Content:** Used to select the type of document you are scanning (for example, Text, Text/Photo, or Photo). Content affects the quality and size of your scan by selecting how the scanner will handle the information on the original document.

The Text setting will emphasize sharp, black, high-resolution text against a clean, white background.

The Text/Photo setting is used when the original documents are a mixture of text and graphics or pictures.

 The Photo setting tells the scanner to pay extra attention to graphics and pictures. This setting takes longer to scan but emphasizes a reproduction of the full dynamic range of tones in the original document. This increases the amount of information saved.

**Sides:** Informs the MFP if your original document is simplex (printed on one side) or duplex (printed on both sides). This lets the scanner know what needs to be scanned for inclusion in the fax.

**Resolution:** Increases how closely the scanner examines the document you wish to fax. If you are faxing a photograph, a drawing with fine lines, or a document with very small text, increase the Resolution setting. This will increase the amount of time required for the scan and will increase the quality of the fax output. *Standard* is suitable for most documents. *Fine* is recommended for documents with small print. *Super fine* is recommended for original documents with fine detail. *Ultra fine* is recommended for documents with pictures or photographs.

Darkness: Adjusts how light or dark your faxes will turn out in relation to the original document.

Advanced Options: Accesses the Delayed Send, Advanced Imaging, Custom Job, Transmission Log, Scan Preview, Edge Erase, Advanced Duplex, or Fax Queue settings.

**Delayed Send:** Sets up a fax that will be sent at a later time or date. After setting up your fax, select **Delayed Send**, enter the time and date you would like to transmit your fax, and then touch **Done**. This setting can be especially useful in sending information to fax lines that are not readily available during certain hours, or when transmission times are cheaper.

**Note:** If the device is powered off when the delayed fax is due to be sent, the fax is sent the next time the MFP is powered up.

Advanced Imaging: Select this feature to adjust Background Removal, Contrast, and Shadow Detail before you copy the document.

Custom Job (Job Build): Combines multiple scanning jobs into a single job.

Note: Custom Job is not supported on all models.

Transmission Log: Prints the transmission log or transmission error log.

**Scan Preview:** Displays the image before it is included in the fax. When a page is scanned, the scanning is paused and a preview image appears.

Note: Scan Preview is not supported on all models.

**Edge Erase:** Eliminates smudges or information around the edges of your document. You can choose to eliminate an equal area around all four sides of the paper or pick a particular edge. Edge Erase will erase whatever is within the area selected, leaving nothing printed on that portion of the paper.

**Advanced Duplex**: Controls how many sides and what orientation your original document has, and whether your original documents are bound along the long edge or the short edge.

# Changing the fax resolution

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- 2 Adjust the paper guides.
- 3 Touch Fax on the home screen.
- 4 Enter the fax number.
- 5 Touch Options.
- 6 Touch the button that represents the resolution you want.
- 7 Touch Fax It.

# Adjusting the Darkness setting

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- **2** Adjust the paper guides.
- 3 Touch Fax on the home screen.
- 4 Enter the fax number.
- 5 Touch Options.
- 6 Touch the left **Darkness** arrow to reduce the darkness of the fax or touch the right **Darkness** arrow to increase the darkness of the fax.
- 7 Touch Fax It.

### Sending a fax at a later time

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- **2** Adjust the paper guides.
- 3 Touch Fax on the home screen.
- 4 Enter the fax number.
- 5 Touch Options.
- 6 Touch Advanced Options.
- 7 Touch Delayed Send.

**Note:** If Fax Mode is set to Fax Server, the Delayed Send button will not appear. Faxes waiting for transmission are listed in the Fax Queue.

8 Touch the left arrow to reduce the time or the right arrow to increase the time the fax will be transmitted.

**Note:** Touching the increase or decrease arrow increments the time by 30 minutes. If the current time is shown, the left arrow is grayed out.

9 Touch Done.

# Cancel an outgoing fax

There are two ways to cancel an outgoing fax:

#### While the original documents are still scanning

- 1 When using the automatic document feeder, touch **Cancel** while Scanning... is displayed on the touch screen.
- 2 When using the scanner bed, touch **Cancel** while Scan the Next Page / **Finish the Job** is displayed on the touch screen.

#### After the original documents have been scanned to memory

1 Touch **Cancel Jobs** on the home screen.

The Cancel Jobs screen will appear.

2 Touch the job or jobs you want to cancel.

Only three jobs appear on the screen, touch the down arrow until the job you want appears and then touch the job you want to cancel.

3 Touch Delete Selected Jobs.

The Deleting Selected Jobs screen appears, the selected jobs are deleted, and then the home screen appears.

# Fax tips

The following tips may improve the MFP fax quality. For additional information or to solve copy problems, see **Solving fax** quality problems

Question	Тір
When should I use Text mode?	<ul> <li>Text mode should be used when text preservation is the main goal of the fax, and preserving images copied from the original document is not a concern.</li> <li>Text is best used for receipts, carbon copy forms, and documents that only contain text or fine line art.</li> </ul>
When should I use Text/Photo mode?	<ul> <li>Text/Photo mode should be used when faxing an original document that contains a mixture of text and graphics.</li> <li>Text/Photo is best used for magazine articles, business graphics, and brochures.</li> </ul>
When should I use Photo mode?	Photo mode should be used for faxing photos printed on a laser printer or taken from a magazine or newspaper.

# Fax setup

When you first turn on the MFP or if the MFP has been off for an extended time, **set clock** will appear. Additionally, many countries and regions require outgoing faxes to contain the following information in a margin at the top or bottom of each transmitted page, or on the first page of the transmission:

- Date and time (date and time fax is sent)
- Station name (identification of the business, other entity, or individual sending the message)
- Station number (telephone number of the sending fax machine, business, other entity, or individual)

#### Note: See Electronic emission notices and Other telecommunications notices for FCC information.

There are two methods to enter your fax setup information. They are 1) manually entering the information through the MFP control panel, or 2) using your browser to access the MFP IP address and then entering the Configure menu.

**Note:** If you do not have a TCP/IP environment, you must use the MFP control panel to set your basic fax information.

Select one of the following to find the instructions for the method you want to use.

#### Performing manual fax setup

#### Performing browser fax setup

### Performing manual fax setup

- 1 Touch the menu button on the home screen.
- 2 Touch Settings.
- 3 Touch Fax Settings.
- 4 Touch General Fax Settings.
- 5 Touch Station Name.
- 6 Enter the Station Name (enter your name or company name).
- 7 Touch Done to save your choice.
- 8 Touch Station Number.
- **9** Enter your fax phone number.
- 10 Touch Done.

### Performing browser fax setup

**Note:** Configuration is a task usually done by a network administrator. If you are prompted for a password during the following instructions, see your network administrator for help.

- 1 Type the IP address of the MFP in the URL field of your browser (for example, http://192.168.236.24), and then press **Enter**.
- 2 Click Configuration.
- 3 Under the MFP heading, click Fax Setup.

4 Click Configuration.

If you are changing fax modes, you must click **Submit** before you can access the configuration page.

**Note:** During MFP power up, if the print server is configured to use Network Time Protocol (NTP) time, the current date and time are provided. However, you must set the time zone to get the correct time.

- **5** Enter the required FCC information:
  - Date and time (current date and time)
  - Station name (personal name or company name)
  - Station number (fax phone line number)
- 6 Select the Time Zone, such as Eastern (USA and Canada, Eastern Standard Time). This sets the required information.
- 7 Set your options for Rings to Answer, and so on.
- 8 After you finish entering the information, click **Submit**.

Changing optional settings such as setting up a fax transmission log, creating permanent fax destinations, and enabling the fax server function can be changed through your browser, or the MFP control.

### Viewing a fax log

When you send or receive a fax, an entry of the activity is recorded in a file. You can view or print this file when you want.

To view the fax log:

- 1 Type the IP address of the MFP in the URL field of your browser, and then press Enter.
- 2 Click Reports.
- 3 Click Fax Settings.
- 4 Click Fax Job Log or Fax Call Log.



The MFP scanner lets you scan documents directly to a File Transfer Protocol (FTP) server.

Note: Only one FTP address may be sent to at a time.

Once an FTP destination has been configured by your system administrator, the name of the destination becomes available as a shortcut number or listed as a profile under the Held Jobs icon. An FTP location could also be another PostScript printer: for example, a color document can be scanned and then sent to a color printer. Sending a document to an FTP server is similar to sending a fax. The difference is that you are sending the information over your network instead of the phone line.

For more information or detailed instructions, select one of the following:

Entering the FTP address	Using the address book
Using a shortcut number	FTP tips

# Entering the FTP address

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- 2 Touch FTP on the home screen.
- 3 Enter the FTP address.
- 4 Touch Send It.

### Using a shortcut number

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- 2 Touch FTP on the home screen.
- 3 Press #, and then enter the FTP shortcut number.
- 4 Touch Send It.

### Using the address book

- 1 Place your original document in the automatic document feeder face-up, short-edge first.
- 2 Touch FTP on the home screen.
- 3 Touch Search Address Book.
- 4 Enter name or part of the name you are searching for, and then touch Search.
- **5** Touch the name that you want to add to the To: field.
- 6 Touch Send It.

# **Creating shortcuts**

Instead of entering the entire FTP site address on the control panel each time you want to send a document to an FTP, you can create a permanent FTP destination and assign a shortcut number. A single shortcut number or a multiple number shortcut can be created. There are two methods for creating shortcut numbers: from a computer or from the MFP touch screen.

### From a computer

- 1 Enter the IP address of the MFP in the URL field (address bar) of your Web browser. If you do not know the IP address, see your administrator.
- 2 Click **Configuration** (in the left frame of your browser window) and then click **Manage Destinations** (in the right frame of your browser window).

**Note:** A password may be required. If you do not have an ID and password, get one from your system support person.

- 3 Click FTP Shortcut Setup.
- 4 Enter the appropriate information into the fields.
- 5 Assign a shortcut number.

If you enter a number that is already in use, you are prompted to select another number.

- 6 Click Add.
- 7 Go to the MFP, and load your original document in the automatic document feeder face-up, short-edge first.
- 8 From the numeric keypad, press #, and then enter your shortcut number.
- 9 Touch Send It.

### From the MFP

- 1 Load the original document in the ADF face-up, short-edge first, and adjust the paper guides.
- 2 Touch FTP on the home screen.
- 3 Enter the FTP site.
- 4 Touch Save as Shortcut.
- 5 Enter a unique name for the shortcut.
- 6 Verify the shortcut name and number are correct, and then touch OK.

If the name or number is incorrect, touch Cancel, and reenter the information.

7 Touch Send It.

# FTP options

Original Size: Opens a screen where you can enter the size of the documents you are going to copy.

- Touching any of the paper size icons on the follow-on screen will make that your selection and return you to the FTP Options Screen.
- When Original Size is set to Mixed Sizes, you can scan different size original documents (letter and legal size pages). They will be scaled automatically to fit the selected output media size.

**Sides (Duplex):** Tells the MFP if your original document is simplex (printed on one side) or duplex (printed on both sides). This lets the scanner know what needs to be scanned for inclusion in the e-mail.

FTP

Binding: Tells the MFP whether the original document is bound on the long-edge or short-edge side.

**Base File Name:** Lets you enter a file name. The default value is the word *image*. A timestamp is added to the file name to prevent overwriting files of the same name at the FTP site.

**Note:** There is a 53-character limit for the file name.

**Resolution:** Adjusts the output quality of your file. Increasing the image resolution increases the file size and the time needed to scan your original document. Image resolution can be decreased to reduce the file size.

**Send As:** Sets the output (PDF, TIFF, or JPEG) for the scanned image.

**PDF** output is a single file.

**TIFF** output is a single file. If Multi-page TIFF is turned off in the Configuration menu, then TIFF saves one page each in a series of files.

JPEG saves one page in each file. When multiple pages are scanned, the output will be a series of files.

**Content:** Tells the MFP the original document type. Choose from Text, Text/Photo, or Photo. Color can be turned on or off with any of the Content choices. Content affects the quality and size of your FTP file.

Text: Emphasizes sharp, black, high-resolution text against a clean, white background.

Text/Photo: Used when the original documents are a mixture of text and graphics or pictures.

**Photo:** Tells the scanner to pay extra attention to graphics and pictures. This setting takes longer to scan but emphasizes a reproduction of the full dynamic range of tones in the original document. This increases the amount of information saved.

**Color:** Sets the scan type and output for the copy. Color documents can be scanned and sent to an FTP site, PC, or e-mail address. The MFP will print color documents in grayscale only.

Advanced Options: Accesses the Advanced Imaging, Custom Job, Transmission Log, Scan Preview, Edge Erase, or Darkness settings.

Advanced Imaging: Select this feature to adjust Background Removal, Contrast, and Shadow Detail before you scan the document.

Custom Job (Job Build): Combines multiple scanning jobs into a single job.

Note: Custom Job is not supported on all models.

Transmission Log: Prints the transmission log or transmission error log.

**Scan Preview:** Displays the first pages of the image before it is included in the FTP file. When the first page is scanned, the scanning is paused and a preview image appears.

Note: Scan Preview is not supported on all models.

**Edge Erase:** Eliminates smudges or information around the edges of your document. You can choose to eliminate an equal area around all four sides, or pick a particular edge. Edge Erase will erase whatever is within the area selected and leave nothing printed on that portion of the paper.

Darkness: Adjusts how light or dark your scanned documents will turn out.

# FTP tips

The following tips may improve the MFP FTP quality.

Question	Тір
When should I use Text mode?	<ul> <li>Text mode should be used when text preservation is the main goal of sending a document to an FTP site, and preserving images copied from the original document is not a concern.</li> <li>Text is best used for receipts, carbon copy forms, and documents that only contain text or fine line art.</li> </ul>
When should I use Text/Photo mode?	<ul> <li>Text/Photo mode should be used when sending a document to an FTP site that contains a mixture of text and graphics.</li> <li>Text/Photo is best used for magazine articles, business graphics, and brochures.</li> </ul>
When should I use Photo mode?	Photo mode should be used when the original is composed mostly of photos printed on a laser printer or taken from a magazine or newspaper.



The MFP scanner lets you scan documents directly to your PC or a USB flash memory device.

Your computer does not have to be directly connected to the MFP for you to receive Scan to PC images. You can scan the document back to your computer over the network by creating a scan profile on your computer and then downloading the profile to the MFP.

For more information or detailed instructions, select one of the following:

Create a scan to PC profile Understanding scan to PC options Scanning to a USB flash memory device Scanning tips

### Create a scan to PC profile

- 1 Type the IP address of the MFP in the URL field of your browser, and then press **Enter**.
  - If the Java applet screen appears, click Yes.
- 2 Click Scan Profile.
- 3 Click Create Scan Profile.
- 4 Select your scan settings, and then click Next.
- 5 Select a location for saving the scanned output file somewhere on your computer.
- 6 Enter a profile name.

The profile name is the name that will appear on the SCAN PROFILE list on the MFP control panel.

- 7 Click Submit.
- 8 Review the instructions on the Scan to PC screen.

A shortcut number was automatically assigned when you clicked Submit. You can use this shortcut number when you are ready to scan your documents.

- a Go to the MFP, and place your original document in the automatic document feeder face-up, long-edge first.
- b Press # followed by the shortcut number on the keypad, or touch Profiles on the home screen.
- **c** After you enter the shortcut number, the scanner will scan and send the document to the directory or application you specified. If you touch Profiles on the home screen, locate your shortcut on the list.
- 9 Return to your computer to view your file.

Your output file is saved in the location you specified or launched in the application you specified.

### Understanding scan to PC options

To change the options for the scan to PC Profile, you must click the **Quick Setup** box, and select **Custom**. Quick Setup lets you select preset formats or customize your scan job settings. You can select:

Custom	Photo - Color JPEG
Text - BW PDF	Photo - Color TIFF
Text - BW TIFF	Photo - Gray JPEG
	Photo - Gray TIFF

Format Type: Sets the output (PDF, TIFF, or JPEG) for the scanned image.

**PDF** output is a single file.

**TIFF** output is a single file. If Multi-page TIFF is turned off in the Configuration menu, then TIFF saves one page each in a series of files.

JPEG saves one page in each file. When multiple pages are scanned, the output will be a series of files.

**Compression:** Sets the compression format used to compress the scanned output file.

**Default Content:** Tells the MFP the original document type. Choose from Text, Text/Photo, or Photo. Content affects the quality and size of your scanned file.

**Text:** Emphasizes sharp, black, high-resolution text against a clean, white background.

Text/Photo: Used when the original documents are a mixture of text and graphics or pictures.

**Photo:** Tells the scanner to pay extra attention to graphics and pictures. This setting takes longer to scan but emphasizes a reproduction of the full dynamic range of tones in the original document. This increases the amount of information saved.

Color: Tells the MFP the color of the original documents. You can select Gray, BW (Black and White), or Color.

Original Size: Opens a field where you can select the size of the document you are going to scan.

**Orientation:** Tells the MFP whether the original document is portrait or landscape and then changes the Sides and Binding settings to match the original document orientation.

**Duplex:** Tells the MFP if your original document is simplex (printed on one side) or duplex (printed on both sides). This lets the scanner know what needs to be scanned for inclusion in the e-mail.

Darkness: Adjusts how light or dark your scanned documents will turn out.

**Resolution:** Adjusts the output quality of your file. Increasing the image resolution increases the file size and the time needed to scan your original document. Image resolution can be decreased to reduce the file size.

Advanced Imaging: Select this feature to adjust Background Removal, Contrast, and Shadow Detail before you scan the document.

# Scanning to a USB flash memory device

- **1** Place the original document in the automatic document feeder (ADF) face-up or on the flatbed face-down. Adjust the paper guides when using the ADF.
- **2** Insert the USB flash memory device into the USB direct interface on the front of the MFP. The Held Jobs screen appears.
- 3 Touch Scan to USB drive.
- 4 Enter the name of the file.
- **5** Select your scan settings.
- 6 Touch Scan It.

# Scanning tips

The following tips may improve the MFP scanning quality. For additional information or to solve copy problems, see **Solving scan quality problems**.

Question	Тір
When should I use Text mode?	<ul> <li>Text mode should be used when text preservation is the main goal of the scan, and preserving images copied from the original document is not a concern.</li> <li>Text is best used for receipts, carbon copy forms, and documents that only contain text or fine line art.</li> </ul>
When should I use Text/Photo mode?	<ul> <li>Text/Photo mode should be used when scanning an original document that contains a mixture of text and graphics.</li> <li>Text/Photo is best used for magazine articles, business graphics, and brochures.</li> </ul>
When should I use Photo mode?	Photo mode should be used when scanning photos printed on a laser printer or taken from a magazine or newspaper.



This chapter covers information about sending a job to print, printing confidential jobs, canceling a print job, printing a menu settings page, a font list, and a directory list. This chapter also provides information on printing folio and statement size media. For tips on paper jam prevention and print media storage, see **Avoiding jams** and **Storing print media**.

# Sending a job to print

An MFP driver is software that lets your computer communicate with the MFP. When you choose **Print** from a software application, a window representing the MFP driver opens. You can then select the appropriate settings for the specific job you are sending to the MFP. Print settings selected from the driver override the default settings selected from the MFP control panel.

You may need to click **Properties** or **Setup** from the initial Print dialog to see all of the available MFP settings you can change. If you are not familiar with a feature in the MFP driver window, open the online Help for more information.

To support all the MFP features, use the Lexmark custom drivers supplied with the MFP. Updated drivers, as well as a complete description of the driver packages and Lexmark driver support, are available from the Lexmark Web site.

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** Select the MFP in the dialog. Modify the MFP settings as appropriate (such as the pages you want to print or the number of copies).
- 4 Click Properties or Setup to adjust MFP settings that were not available on the first screen, and then click OK.
- 5 Click OK or Print to send the job to the MFP.

# Printing from a USB flash memory device

A USB Direct interface is located on the control panel so you can insert a USB flash memory device and print the following types of documents:

- Portable Document Format (PDF) [.pdf file]
- Joint Photographic Experts Group (JPEG) [.jpeg or .jpg file]
- Tagged Image File Format (TIFF) [.tiff or .tif file]
- Graphics Interchange Format (GIF) [.gif file]
- Basic Multilingual Plane (BMP) [.bmp file]
- Portable Network Graphics (PNG) [.png file]
- PiCture eXchange (PCX) [.pcx file]
- PC Paintbrush File Format [.dcx file].

Printing a document from a USB flash memory device is similar to printing a held job.

Note: You cannot print encrypted files or files without printing permissions.

### Printing

We recommend using the following tested and approved USB flash memory devices in the 256 MB, 512 MB, and 1 GB sizes:

- Lexar JumpDrive 2.0 Pro
- SanDisk Cruzer Mini

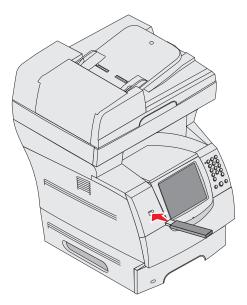
Other USB flash memory devices must:

- Be compatible with the USB 2.0 standard.
- Support the Full-Speed standard as well.
   Devices only supporting USB low speed capabilities are not supported.
- Use the FAT file system.

Devices formatted with NTFS or any other file system s are not supported.

To print from a USB flash memory device:

- 1 Make sure the MFP is on and **Ready** or **Busy** appears.
- 2 Insert a USB flash memory device into the USB Direct interface.



**Note:** If you insert the memory device when the MFP requires attention such as when a paper jam has occurred, the MFP ignores the memory device.

3 Touch the arrow next to the document you want to print.

A screen asking the number of copies to be printed will appear.

- 4 To print only one copy, touch **Print**, or touch **+** to enter the number of copies.
  - **Note:** Do not remove the USB flash memory device from the USB Direct interface until the document has finished printing.

The document will begin printing.

**Note:** If you insert the memory device when the MFP is busy printing other jobs, the message **Printer Busy** appears. Select **Continue**, and your job prints after the other jobs finish.

If you leave the device in the MFP after exiting the USB drive menu, you can still print PDFs on the device as held jobs. See **Printing confidential and held jobs**.

# Canceling a print job

There are several methods for canceling a print job.

- Canceling a job from the MFP control panel
- Canceling a job from a computer running Windows
  - Canceling a job from the taskbar
  - Canceling a job from the desktop
- Canceling a job from a Macintosh computer
  - Canceling a print job from a computer running Mac OS 9
  - Canceling a job from a computer running Mac OS X

### Canceling a job from the MFP control panel

If the job is formatting, scanning, or already printing, touch Cancel Job on the display.

### Canceling a job from a computer running Windows

### Canceling a job from the 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 in the printer window.

- 2 Select the job you want to cancel.
- 3 Press the Delete key on the keyboard.

### Canceling a job from the desktop

- **1** Minimize all programs to reveal the desktop.
- 2 Double-click the My Computer icon.
  - Note: If you do not have the My Computer icon, select Start  $\rightarrow$  Settings  $\rightarrow$  Control Panel, and then go to step 4.
- 3 Double-click the Printers icon.

A list of available printers appears.

4 Double-click the printer you selected when you sent the job.

A list of print jobs appears in the printer window.

- 5 Select the job you want to cancel.
- 6 Press the **Delete** key on the keyboard.

### Canceling a job from a Macintosh computer

### Canceling a print job from a computer running Mac OS 9

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

- 1 Double-click the printer icon on your desktop.
  - A list of print jobs appears in the printer window.
- 2 Select the print job you want to cancel.
- **3** Click the trash can button.

### Canceling a job from a computer running Mac OS X

When you send a job to print, the printer icon for your selected MFP appears in the dock.

- 1 Open Applications → Utilities, and then double-click Print Center or Printer Setup.
- 2 Double-click the MFP you are printing to.
- 3 In the printer window, select the print job you want to cancel, and then press Delete.

### Printing the menu settings page

You can print a menu settings page to review the default MFP settings and to verify the MFP options are installed correctly.

- 1 Make sure the MFP is on and the **Ready** message appears.
- 2 Touch the menu button on the control panel.
- 3 Touch Reports.
- 4 Touch Menu Settings Page.

### Printing a network setup page

You can print a network setup page to review the default MFP settings and to verify the MFP options are installed correctly.

- 1 Make sure the MFP is on and the **Ready** message appears.
- 2 Touch the menu button on the control panel.
- 3 Touch Reports.
- 4 Touch Network Setup Page.

# Printing a font sample list

To print samples of the fonts currently available for the MFP:

- 1 Make sure the MFP is on and the **Ready** message appears.
- 2 Touch the menu button on the control panel.
- 3 Touch Reports.
- 4 Touch the down arrow until **Print Fonts** appears, then touch **Print Fonts**.
- 5 Touch PCL Fonts or PostScript Fonts.

# Printing a directory list

A directory listing shows the resources stored in flash memory or on the hard disk. To print a listing:

- 1 Make sure the MFP is on and the **Ready** message appears.
- **2** Touch the menu button on the control panel.
- 3 Touch Reports.
- 4 Touch the down arrow until **Print Directory** appears, then touch **Print Directory**.

# Printing confidential and held jobs

The term *held job* refers to any type of print job that can be initiated by the user at the MFP. This includes a confidential job, a verify print job, a reserve print job, a repeat print job, a bookmark, a profile, or a file on a USB flash memory device. When sending a job to the MFP, you can specify in the driver that you want the MFP to hold the job in memory. Once your job is stored in MFP memory, go to the MFP, and use the MFP control panel to specify what you want to do with your print job.

All confidential and held jobs have a user name associated with them. To access confidential or held jobs, you must first select the type of job (confidential or held), and then select your user name from the user name list. Once you select your user name, you can print all your confidential jobs, or select an individual print job. You can then choose the number of copies for the print job, or you can delete the print job.

### Printing a confidential job

When you send a confidential job to the MFP, you must enter a personal identification number (PIN) from the driver. The PIN must be four digits using the numbers 0–9. The job is held in MFP memory until you enter the same four-digit PIN from the control panel and choose to print or delete the job. This ensures the job does not print until you are there to retrieve it. No one else using the MFP can print the job without the PIN.

#### Windows

- 1 From a word processor, spreadsheet, browser, or other application, select File  $\rightarrow$  Print.
- 2 Click Properties. (If there is no Properties button, click Setup, and then click Properties.)
- 3 Depending on the operating system, you may have to click the Other Options tab, and then click Print and Hold.

Note: If you have difficulty finding Print and Hold → Confidential Print, click **Help**, see the topic Confidential Print or Print and Hold, and then follow the driver instructions.

- 4 Enter a User Name and PIN.
- 5 Send your job to the MFP.

Go to the MFP when you are ready to retrieve your confidential print job, and follow the At the MFP steps.

#### Macintosh

- 1 From a word processor, spreadsheet, browser, or other application, select File  $\rightarrow$  Print.
- 2 In the Copies & Pages or General pop-up menu, select Job Routing.
  - a When using Mac OS 9, if Job Routing is not a choice on the pop-up menu, select **Plug-in Preferences** → **Print Time Filters.**
  - b Turn down the disclosure triangle to the left of Print Time Filters, and select Job Routing.
  - c In the pop-up menu, select Job Routing.
- 3 In the radio group, select **Confidential Print**.

- 4 Enter a User Name and PIN.
- 5 Send your job to the MFP.

Go to the MFP when you are ready to retrieve your confidential print job, and follow the At the MFP steps.

#### At the MFP

- 1 Touch Held jobs on the home screen.
- **2** Touch your user name.

**Note:** A maximum of 500 results can be displayed for held jobs. If your name does not appear, touch the down arrow until your name appears, or touch **Search Held Jobs** if there are a large number of held jobs in the MFP.

- 3 Select Confidential Jobs.
- 4 Enter your PIN.

For more information, see Entering a personal identification number (PIN).

- 5 Touch the job you want to print.
- 6 Touch Print, or touch + to input the number of copies, and then touch Print.

Note: After your job prints, it is deleted from MFP memory.

### Entering a personal identification number (PIN)

After you select a Confidential Job, the Enter PIN screen appears.

Use the touch screen number pad or the numeric pad to the right of the display to enter the four-digit PIN associated with the confidential job.

Note: As you enter the PIN, asterisks appear on the display to ensure confidentiality.

If you enter an invalid PIN, the Invalid PIN screen appears.

Reenter the PIN, or touch Cancel.

Note: After your job prints, it is deleted from MFP memory.

### Printing and deleting held jobs

Held jobs (Verify Print, Reserve Print, or Repeat Print) are printed or deleted from the MFP control panel and do not require a PIN.

#### Verify Print

If you send a Verify Print job, the MFP prints one copy and holds the remaining copies you requested in MFP memory. Use Verify Print to examine the first copy to see if it is satisfactory before printing the remaining copies. Once all copies are printed, the Verify Print job is automatically deleted from MFP memory.

#### **Reserve Print**

If you send a Reserve Print job, the MFP does not print the job immediately. It 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 MFP requires extra memory to process additional held jobs.

### Printing

#### **Repeat Print**

If you send a Repeat Print job, the MFP 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 MFP memory when the MFP requires extra memory to process additional held jobs.

#### Windows

- 1 From a word processor, spreadsheet, browser, or other application, select File  $\rightarrow$  Print.
- 2 Click **Properties**. (If there is no Properties button, click **Setup**, and then click **Properties**.)
- 3 Depending on the operating system, you may have to click the Other Options tab, and then click Print and Hold.

**Note:** If you have difficulty finding Print and Hold  $\rightarrow$  Held Jobs, click **Help**, and see the topic Held Jobs or Print and Hold, then follow the driver instructions.

- 4 Select the type of held job you want, and then send your job to the MFP.
  - Go to the MFP when you are ready to retrieve your confidential print job, and follow the At the MFP steps.

#### Macintosh

- 1 From a word processor, spreadsheet, browser, or other application, select File  $\rightarrow$  Print.
- 2 In the Copies & Pages or General pop-up menu, select Job Routing.
  - a When using Mac OS 9, if Job Routing is not a choice on the pop-up menu, select **Plug-in Preferences** → **Print Time Filters.**
  - b Turn down the disclosure triangle to the left of Print Time Filters, and select Job Routing.
  - c In the pop-up menu, select Job Routing.
- 3 In the radio group, select the type of held job you want, enter a user name, and then send your job to the MFP.

Go to the MFP when you are ready to retrieve your confidential print job, and follow the At the MFP steps.

#### At the MFP

- 1 Touch Held jobs on the home screen.
- 2 Touch your user name.

**Note:** A maximum of 500 results can be displayed for held jobs. If your name does not appear, touch the down arrow until your name appears, or touch **Search <your name>** if you have a large number of held jobs in the MFP.

3 Touch the job you want to print.

Touch the down arrow, or touch Search <your name> if you have a large number of held jobs in the MFP.

4 Touch **Print**, or touch + to input the number of copies, and then touch **Print**.

Note: You can also choose to Print All or Delete All.

### Printing

### Printing on specialty media

*Media* is paper, card stock, transparencies, labels, and envelopes. The last four are sometimes referred to as *specialty media*. Follow these instructions to print on specialty media.

- 1 Load the media as specified for the tray being used. See Loading standard trays and optional trays for help.
- 2 From the MFP control panel, set the Paper Type and Paper Size according to the media you loaded. See Setting the Paper Type and Paper Size for help.
- 3 From the computer software application, set the paper type, size, and source according to the media you loaded.

#### Windows

- a From a word processor, spreadsheet, browser, or other application, select File  $\rightarrow$  Print.
- b Click Properties (or Options, Printer, or Setup, depending on the application) to view the MFP driver settings.
- c Click the Paper tab.

A paper tray list will appear.

d Select the tray containing the specialty media.

Note: If you have difficulty, click Help, and then follow the driver instructions.

- e Select the media type (transparencies, envelopes, and so on) from the Paper Type list box.
- f Select the size of the specialty media from the Paper Size list box.
- g Click **OK**, and then send the print job as usual.

#### Mac OS 9

- a Select File → Page Setup.
- **b** Select the size of the specialty media from the **Paper** pop-up menu, and then click **OK**.
- c Select File  $\rightarrow$  Print.
- **d** With **General** selected on the top pop-up menu, go to the **Paper Source** pop-up menu, and select the tray containing the specialty media or the name of the media.
- e Click Print.

#### Mac OS X

- a Select File → Page Setup.
- **b** Select the MFP from the **Format for** pop-up menu.
- c Select the size of the specialty media from the Paper pop-up menu, and then click OK.
- d Select File  $\rightarrow$  Print.
- e On the Copies & Pages pop-up menu, select Imaging.
- f Select the specialty media on the **Paper Type** pop-up menu.
- g On the Imaging pop-up menu, select Paper Feed.
- h Select the tray containing the specialty media from the All pages from or First page from / Remaining from pop-up menus.
- i Click Print.

# Loading standard trays and optional trays

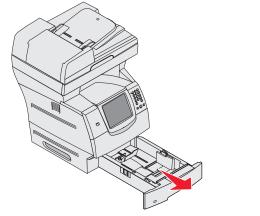
The MFP has a 500-sheet standard tray. You may have also purchased one or more 250-sheet or 500-sheet optional trays or a 2000-sheet drawer. The steps for loading a 250-sheet tray or 500-sheet tray are the same.

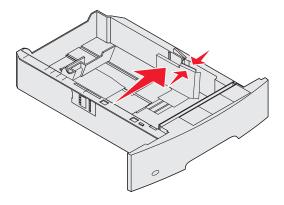
**Note:** The steps for loading a 2000-sheet drawer are different than the steps for loading a 250-sheet tray or 500-sheet tray.

To load print media:

**Note:** Do not remove a tray when a job is printing or when the control panel green indicator light is blinking. Doing so may cause a jam.

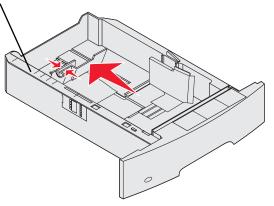
- 1 Remove the tray from the MFP, and place it on a flat, level surface.
- 2 Squeeze the side guide tab, and slide the guide to the outer edge of the tray.

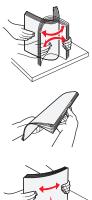




- 3 Squeeze the rear guide tab, and slide the guide to the correct position for the size media you are loading.
- 4 Flex the sheets back and forth to loosen them, then fan them. Do not fold or crease the print media. Straighten the edges on a level surface.

Size indicators





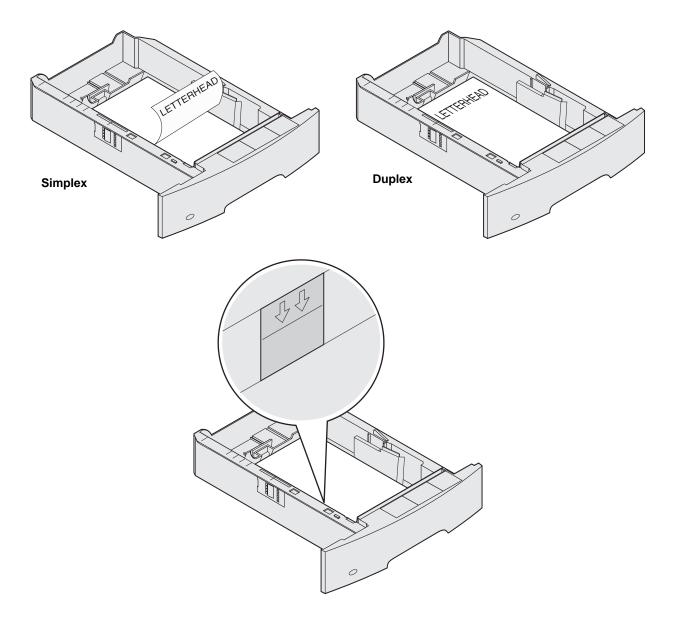
**5** Place the print media in the tray:

Note: Paper must be loaded differently in the trays, depending on the options you have installed.

- Print side face-down for simplex (single-sided) printing
- Print side face-up for duplex printing

Note: Do not fill paper above the load line. Overfilling the tray may cause jams.

- 6 Squeeze the side guide tab, and slide the guide toward the inside of the tray until it lightly rests against the edge of the media.
- 7 Insert the tray into the MFP.



# Setting the Paper Type and Paper Size

After setting the Paper Type and Paper Size to the correct values for the type and size used in the trays, then any trays containing the same size and type are automatically linked by the MFP.

**Note:** If the size of the media you are loading is the same size of the media previously loaded, do not change the Paper Size setting.

To change the Paper Size and Paper Type setting:

- 1 Make sure the MFP is on.
- **2** Touch the menu button on the control panel.
- 3 Touch Paper Menu.
- 4 Touch Paper Size.
- **5** Touch the left or right arrow to change the size for the desired tray.
- 6 Touch Submit.
- 7 Touch Paper Type.
- 8 Touch the left or right arrow to change the media type for the desired tray.
- 9 Touch Submit.
- **10** Touch the home icon.

# Loading the multipurpose feeder

The multipurpose feeder can hold several sizes and types of print media, such as transparencies, postcards, note cards, and envelopes. It can be used for single-page or manual printing or as an additional tray.

Note: If you install an optional envelope feeder, you can still use the multipurpose feeder.

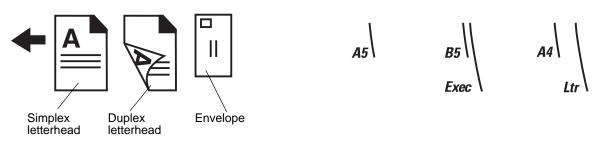
The multipurpose feeder can hold approximately:

- 100 sheets of 75 g/m<sup>2</sup> (20 lb) paper
- 10 envelopes
- 75 transparencies

The multipurpose feeder accepts print media within the following dimensions:

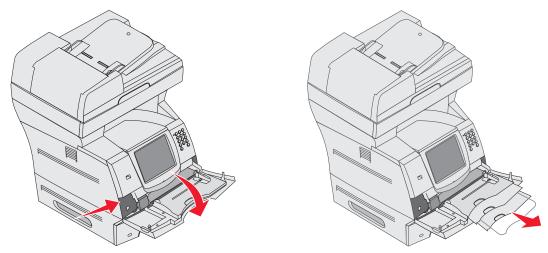
- Width- 69.85 mm (2.75 in.) to 215.9 mm (8.5 in.)
- Length- 127 mm (5 in.) to 355.6 mm (14 in.)

The icons on the multipurpose feeder show you how to load the multipurpose feeder with paper, how to turn an envelope for printing, and how to load letterhead paper for simplex and duplex printing. A finisher affects how letterhead documents should be loaded for duplexing. You can print simplex jobs on letterhead (or other preprinted media) that has been *loaded specifically for duplex printing* by changing the value in the Paper Loading menu.

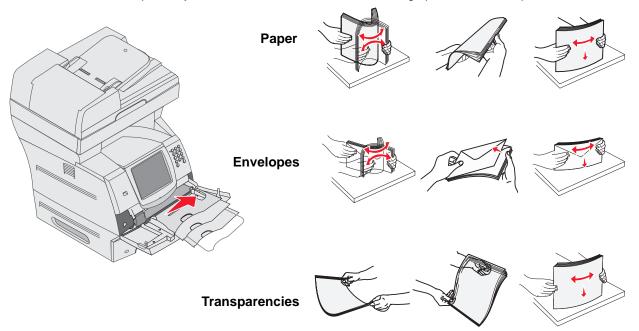


To load print media:

- **Note:** Do not add or remove print media when the MFP is printing from the multipurpose feeder or when the control panel indicator light is blinking. Doing so may cause a jam.
- **1** Push the release latch, and lower the multipurpose feeder.
- 2 Pull the tray extension out.
  - **Note:** Do not place objects on the multipurpose feeder. Also, avoid pressing down or applying excessive force on it.



- **3** Slide the width guide to the far right.
- 4 Flex the sheets or envelopes back and forth to loosen them, then fan them. Do not fold or crease the print media. Straighten the edges on a level surface.
  - **Note:** Hold transparencies by the edges, and avoid touching the print side. Fan the stack of transparencies to prevent jams. Be careful not to scratch or leave fingerprints on the transparencies.



### Loading the multipurpose feeder

5 Load the media in the tray.

Use the stack height label as a guide for stack height when loading print media.

#### Loading paper, transparencies, or envelopes

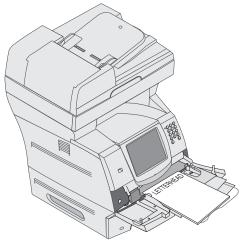
**Note:** Letterhead or other preprinted paper must be loaded differently depending on the options you have installed.

- Load paper or transparencies with the left edge of the stack against the stack height label and with the recommended print side face-up.
- Load envelopes flap side down with the stamp area and flap on the left. The end of the envelope with the stamp area enters the multipurpose feeder first.
  - Never use envelopes with stamps, clasps, snaps, windows, coated linings, or self-stick adhesives. These envelopes may severely damage the MFP.

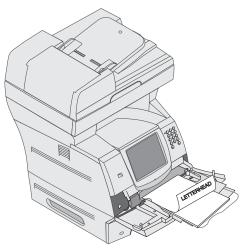
**Note:** Load only one size and type of print media at a time in the multipurpose feeder. *Do not* mix sizes and types in the same tray.

#### Loading letterhead or preprinted paper

- Follow the illustrations for loading the paper according to your options.
- Do not fill paper above the load line. Overfilling the tray may cause jams.

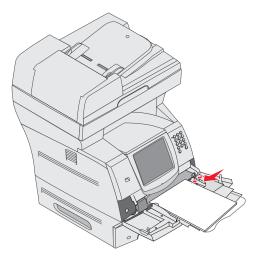






**Duplex** 

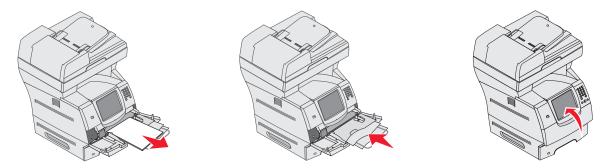
6 Slide the side guide toward the inside of the tray until it lightly rests against the edge of the media.



7 Set the Paper Size and Paper Type for the multipurpose feeder to the correct value for the print media you loaded. See Setting the Paper Type and Paper Size for more information.

#### Closing the multipurpose feeder

- **1** Remove print media from the multipurpose feeder.
- 2 Push the extension tray in.
- **3** Close the multipurpose feeder cover.



### Loading the 2000-sheet drawer

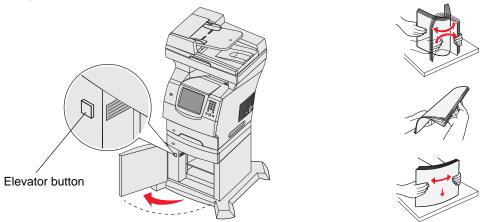
The optional 2000-sheet drawer can be used for plain paper, letterhead or other preprinted paper, labels, or transparencies. For trouble-free printing, make sure you:

- Do not load print media above the load line.
- Do not fold or crease the paper.
- Do not mix sizes or weights in the same source.
- Do not open the door or remove any print media when a job is printing or when the control panel indicator light is blinking. Doing so may cause a jam.

**Note:** Before loading print media in the drawer, you should know the recommended print side of the paper you are using. This information is usually on the paper package.

To load the 2000-sheet drawer:

- 1 Open the loading door. If the elevator tray is not already in the lowered position, push the elevator button to lower the tray.
- 2 Flex the sheets back and forth to loosen them, then fan them. Do not fold or crease the print media. Straighten the edges on a level surface.

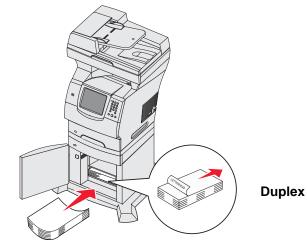


**3** Slightly bend the stack of print media as shown, and place it on the elevator tray with the preferred print side facing down. Align the stack of print media to the back of the drawer.

Note: For duplex printing, letterhead or other preprinted paper must be loaded differently.

Carefully align each stack as you load it to ensure a smooth edge where the stacks meet. Do not load print media above the load line.

Note: When loading more than one ream of paper, we recommend you remove the top and bottom sheet.



#### Simplex (single sided)

4 Close the loading door.



**CAUTION:** Floor-mounted configurations require additional furniture for stability. You must use either a printer stand or printer base if you are using a 2000-sheet drawer. Certain other configurations also must have a printer stand or printer base. More information is available on our Lexmark Web site at **www.lexmark.com/multifunctionprinters**.

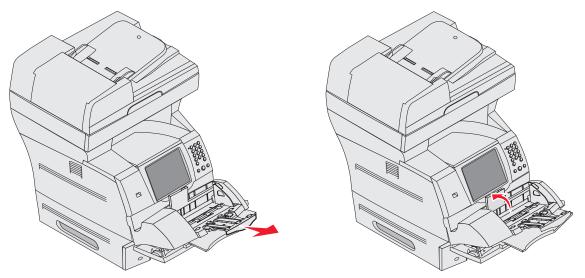
# Loading the envelope feeder

The optional envelope feeder can accept a variety of envelope sizes. However, the envelope feeder must be adjusted correctly to ensure trouble-free printing. To load the envelope feeder:

- **1** Adjust the envelope support for the length of envelope you are loading.
  - Fully closed (pushed in toward the MFP) for short envelopes
  - Extended to the middle position for medium-length envelopes
  - Fully open (extended to its full length) for long envelopes

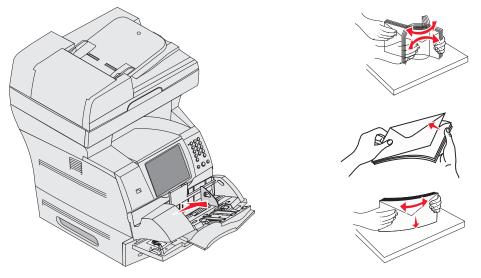
Warning: Do not place objects on the envelope feeder. Avoid pressing down on it or applying excessive force.

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



- **3** Slide the width guide to the far right.
- 4 Flex a stack of envelopes back and forth, and then straighten the edges on a level surface. Press down the corners to flatten them.

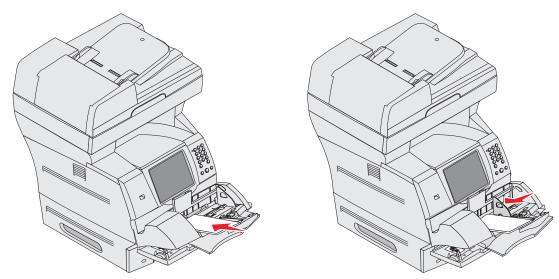
Fan the envelopes. This prevents the edges of the envelopes from sticking together and helps them feed properly.



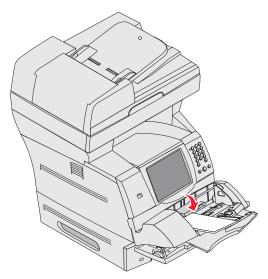
5 Load the stack of envelopes flap side down with the stamp area and the flap on the left. The end of the envelopes with the stamp area enters the envelope feeder first.

Let the envelopes at the bottom of the stack slide into the envelope feeder slightly more than the ones at the top of the stack.

- Warning: Never use envelopes with stamps, clasps, snaps, windows, coated linings, or self-stick adhesives. These envelopes may severely damage the MFP.
  - **Note:** When you load envelopes, do not exceed the maximum stack height. Use the stack height label as a guide for the correct stack height when loading. Do not try to load more envelopes indicated by the stack height label; overloading can cause jams.
- 6 Slide the width guide to the left until it lightly touches the stack. Make sure the envelopes do not buckle.



7 Lower the envelope weight to touch the stack.



8 Set the Paper Size and Paper Type for the envelope feeder to the correct value for the print media you loaded. See Setting the Paper Type and Paper Size for more information.

# Linking trays

Tray linking enables the automatic linking feature for trays when you load the same size and type of print media in multiple sources. The MFP automatically links the trays; when one tray is empty, print media feeds from the next linked tray.

For example, if you have the same size and type of print media loaded in tray 2 and tray 4, the MFP selects print media from tray 2 until it becomes empty, and then the MFP automatically feeds print media from the next linked tray– tray 4.

By linking all trays (standard and optional), you effectively create a single source with a capacity of up to 4,100 sheets.

Make sure you load the same size and type of print media in each tray and then, using the Paper menu, set the same paper size and type for the trays to link.

Set the paper size and type for each tray. See Setting the Paper Type and Paper Size for more information.

To disable tray linking, set the Paper Type to a unique value for each tray.

If all the trays do not have the same type of print media loaded when linked, you could mistakenly print a job on the wrong paper.

# Understanding paper and specialty media guidelines

*Print media* is paper, card stock, transparencies, labels, and envelopes. The MFP provides high-quality printing on a variety of print media. You must consider a number of things concerning print media before you print. This chapter provides information to help you make print media selections.

- Supported print media
- Selecting print media
- Storing print media
- Avoiding jams

For more details about the types of paper and specialty media the MFP supports, see the Card Stock & Label Guide available on our Lexmark Web site at **www.lexmark.com**.

We recommend that you try a limited sample of any paper or specialty media you are considering using with the MFP before purchasing large quantities.

### Supported print media

The following tables provide information on standard and optional sources for both input and output trays and bins.

- Print media sizes
- Print media types
- Print media weights

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

#### Print media sizes

Legend / - indicate	es support				(u			
Print media size	Dimensions	250-sheet trav	500-sheet tray	Multipurpose feeder	2000-sheet drawer (option)	Envelope feeder (option)	Duplex unit (option)	Output bin
A4	210 x 297 mm (8.27 x 11.7 in.)	1	✓	✓	✓		1	✓
A5	148 x 210 mm (5.83 x 8.27 in.)	1	1	1	~		✓	✓
JIS B5	182 x 257 mm (7.17 x 10.1 in.)	1	1	1	1		✓	✓
Letter	215.9 x 279.4 mm (8.5 x 11 in.)	1	1	1	1		1	✓
Legal	215.9 x 355.6 mm (8.5 x 14 in.)	1	1	1	✓		1	✓
Executive	184.2 x 266.7 mm (7.25 x 10.5 in.)	1	1	1	1		1	1
Folio <sup>1</sup>	216 x 330 mm (8.5 x 13 in.)	1	1	1			✓	✓
Statement <sup>1</sup>	139.7 x 215.9 mm (5.5 x 8.5 in.)	1	1	1				✓
Universal <sup>2</sup>	139.7 x 210 mm to 215.9 x 355.6 mm (5.5 x 8.27 in. to 8.5 x 14 in.)	1	1	~				1
	69.85 x 127 mm to 215.9 x 355.6 mm (2.75 x 5 in. to 8.5 x 14 in.)			1				1
	69.85 x 127 mm to 229 x 355.6 mm (2.75 x 5 in. to 9.01 x 14 in.)	1	1	1			1	1
	148 x 182 mm to 215.9 x 355.6 mm (5.83 x 7.17 in. to 8.5 x 14 in.)	~	1	1			1	1
7 ¾ Envelope	98.4 x 190.5 mm (3.875 x 7.5 in.)			1		✓		1
9 Envelope	98.4 x 225.4 mm (3.875 x 8.87 in.)			1		✓		✓
10 Envelope	104.8 x 241.3 mm (4.12 x 9.5 in.)			1		1		1
DL Envelope	110 x 220 mm (4.33 x 8.66 in.)			1		1		1
B5 Envelope	176 x 250 mm (6.93 x 9.84 in.)			1		1		1
C5 Envelope	162 x 229 mm (6.38 x 9.01 in.)			1		1		✓
Other Envelope <sup>1</sup>	98.4 x 162 mm to 176 x 250 mm (3.87 x 6.38 in. to 6.93 x 9.84 in.)			~		~		~

<sup>1</sup> This size does not appear in the Paper Size menu until Tray Size Sensing is turned off. See "Printing folio and statement sizes" for more information.

<sup>2</sup> This size setting formats the page for 215.9 x 355.6 mm (8.5 x 14 in.) unless the size is specified by the software application.

#### Understanding paper and specialty media guidelines

#### **Print media types**

Print media	250-sheet drawer	500-sheet drawer	Multipurpose feeder	2000-sheet drawer	Duplex unit	Output bin
Paper	1	~	✓	1	1	1
Card stock	1	1	~			1
Transparencies	1	1	~			1
Vinyl labels <sup>*</sup>	1	1	~			1
Paper labels <sup>*</sup>	1	1	~			1
Polyester label <sup>*</sup>	1	1	~			1
Dual-web and integrated labels*	1	1	1			1

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

#### Print media weights

		Print media weight			
Print media	Print media Type		Multipurpose feeder and optional 250-sheet drawer	Envelope feeder	
Paper	Xerographic or business paper	60 to 176 g/m <sup>2</sup> grain long (16 to 47 lb bond)	60 to 135 g/m <sup>2</sup> grain long (16 to 36 lb bond)	n/a	
Card stock-	Index Bristol	163 g/m <sup>2</sup> (90 lb)	120 g/m <sup>2</sup> (67 lb)		
maximum (grain long) <sup>1</sup>	Тад	163 g/m <sup>2</sup> (100 lb)	120 g/m <sup>2</sup> (74 lb)		
	Cover	176 g/m <sup>2</sup> (65 lb)	135 g/m <sup>2</sup> (50 lb)		

<sup>1</sup> Grain short is preferred for papers over 135 g/m<sup>2</sup>.

<sup>2</sup> Includes envelopes fed from the multipurpose feeder only.

<sup>3</sup> 28 lb bond envelopes are limited to 25% cotton content.

<sup>4</sup> Printing label applications on the MFP requires a special label fuser cleaner. See **Ordering supplies** for more information on obtaining a fuser cleaner.

<sup>5</sup> Information on whether your vinyl label converter has passed Lexmark criteria is available at the Lexmark Web site (www.lexmark.com); search for "converter list." You can also check the Lexmark Automated Fax system (LEXFAX<sup>SM</sup>).

#### Print media weights (continued)

		Print media weight			
Print media	Туре	Integrated tray and optionalMultipurpose feeder and optional500-sheet drawer250-sheet drawer		Envelope feeder	
Card stock-	Index Bristol	199 g/m <sup>2</sup> (110 lb)	163 g/m <sup>2</sup> (90 lb)	n/a	
maximum (grain short) <sup>1</sup>	Тад	203 g/m <sup>2</sup> (125 lb)	163 g/m <sup>2</sup> (100 lb)		
	Cover	216 g/m <sup>2</sup> (80 lb)	176 g/m <sup>2</sup> (65 lb)		
Transparencies	Laser printer	138 to 146 g/m <sup>2</sup> (37 to 39 lb bond)	138 to 146 g/m <sup>2</sup> (37 to 39 lb bond)		
Labels- maximum <sup>4</sup>	Paper	180 g/m <sup>2</sup> (48 lb bond)	163 g/m <sup>2</sup> (43 lb bond)	n/a	
			<b>Note:</b> Not supported in the multipurpose feeder.		
	Dual-web paper	180 g/m <sup>2</sup> (48 lb bond)	163 g/m <sup>2</sup> (43 lb bond)		
			<b>Note:</b> Not supported in the multipurpose feeder.		
	Polyester	220 g/m <sup>2</sup> (59 lb bond)	220 g/m <sup>2</sup> (59 lb bond)		
			<b>Note:</b> Not supported in the multipurpose feeder.		
	Vinyl <sup>5</sup>	300 g/m <sup>2</sup> (92 lb liner)	260 g/m <sup>2</sup> (78 lb liner)		
			<b>Note:</b> Not supported in the multipurpose feeder.		
Integrated forms	Pressure- sensitive area (must enter the MFP first)	140 to 175 g/m <sup>2</sup>	140 to 175 g/m <sup>2</sup>		
	Paper base (grain long)	75 to 135 g/m <sup>2</sup> (20 to 36 lb bond)	75 to 135 g/m <sup>2</sup> (20 to 36 lb bond)		
Envelopes 100% cotton content	Sulfite, wood-free, or up to 100%	Not recommended	60 to 105 g/m <sup>2</sup> (16 to 28 lb bond) <sup>2, 3</sup>	60 to 105 g/m <sup>2</sup> (16 to 28 lb bond) <sup>3</sup>	
maximum weight– 24 lb	cotton bonds		Note: 28 lb envelopes al content.	re limited to 25% cotton	

<sup>1</sup> Grain short is preferred for papers over 135 g/m<sup>2</sup>.

<sup>2</sup> Includes envelopes fed from the multipurpose feeder only.

<sup>3</sup> 28 lb bond envelopes are limited to 25% cotton content.

<sup>4</sup> Printing label applications on the MFP requires a special label fuser cleaner. See **Ordering supplies** for more information on obtaining a fuser cleaner.

<sup>5</sup> Information on whether your vinyl label converter has passed Lexmark criteria is available at the Lexmark Web site (www.lexmark.com); search for "converter list." You can also check the Lexmark Automated Fax system (LEXFAX<sup>SM</sup>).

# Selecting print media

Selecting the appropriate print media for the MFP helps you avoid printing problems. The following sections contain guidelines for choosing the correct print media for the MFP.

- Paper
- Card stock
- Envelopes
- Transparencies

### Paper

For the best print quality, use 75 g/m<sup>2</sup> (20 lb) xerographic, grain long paper. Try a sample of any paper you are considering using with the MFP before buying large quantities.

Labels

When loading paper, note the recommended print side on the paper package, and load paper accordingly. See **Loading** standard trays and optional trays, Loading the multipurpose feeder, or Loading the 2000-sheet drawer for detailed tray-loading instructions.

#### Paper characteristics

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

For detailed information, see the Card Stock & Label Guide located on the Lexmark Web site at www.lexmark.com.

The laser printing process heats paper to high temperatures of 230°C (446°F). For Magnetic Ink Character Recognition (MICR) applications and for non-MICR applications, use only paper able to withstand these temperatures without discoloring, bleeding, or releasing hazardous emissions. Check with the manufacturer or vendor to determine whether the paper you have chosen is acceptable for laser printers.

#### Weight

The MFP can automatically feed paper weights from 60 to 176 g/m<sup>2</sup> (16 to 47 lb bond) grain long in the integrated and optional 500-sheet trays and paper weights from 60 to 135 g/m<sup>2</sup> (16 to 36 lb bond) grain long in the multipurpose feeder and optional 250-sheet trays. Paper lighter than 60 g/m<sup>2</sup> (16 lb) might not be stiff enough to feed properly, causing jams. For best performance, use 75 g/m<sup>2</sup> (20 lb bond) grain long paper. When using paper narrower than 182 x 257 mm (7.2 x 10.1 in.), make sure the weight is greater than or equal to 90 g/m<sup>2</sup> (24 lb bond).

#### Unacceptable paper

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

- Some chemically treated papers used to make copies without carbon paper, also known as carbonless papers, carbonless copy paper (CCP), or no carbon required (NCR) paper (see the *Card Stock & Label Guide* located on the Lexmark Web site at **www.lexmark.com** for supported chemically treated papers)
- Preprinted papers with chemicals that may contaminate the MFP
- Preprinted papers that can be affected by the temperature in the MFP fuser
- Preprinted papers that require a *registration* (the precise print location on the page) greater than ±0.09 in., such as optical character recognition (OCR) forms

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

- Coated papers (erasable bond), synthetic papers, thermal papers
- Rough-edged, rough or heavily textured surface papers or curled papers
- Recycled papers containing more than 25% post-consumer waste that do not meet DIN 19 309
- Recycled paper having a weight less than 60 g/m<sup>2</sup> (16 lb)
- Multiple-part forms or documents

## Transparencies

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

The Paper Type setting should be set to Transparency to help prevent jams. In Macintosh, be sure to set the Paper Type to Transparency in the Print dialog on the Imaging choice in the Copies & Pages pop-up menu.

Use transparencies designed specifically for laser printers. Check with the manufacturer or vendor to determine whether your transparencies are compatible with laser printers that heat transparencies to 230°C (446°F). Use only transparencies that are able to withstand these temperatures without melting, discoloring, offsetting, or releasing hazardous emissions. For detailed information, see the *Card Stock & Label Guide*, which is available on the Lexmark Web site at **www.lexmark.com**.

Transparencies can be fed automatically from the multipurpose feeder and all standard and optional trays, except the 2000sheet drawer. Before loading transparencies, fan the stack to prevent sheets from sticking together.

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

### Envelopes

You can load up to 10 envelopes in the multipurpose feeder and 85 envelopes in the envelope feeder. Try a sample of any envelopes you are considering using with the MFP before buying large quantities. See **Loading the multipurpose feeder** and **Loading the envelope feeder** for instructions on loading envelopes.

When printing on envelopes:

- To achieve the best possible print quality, use only high-quality envelopes that are designed for use in laser printers.
- Set the Paper Size/Type in the Paper menu to MP Feeder, Manual Env, or Env Feeder depending on the source you are using. Set the paper type to Envelope, and select the correct envelope size from the control panel, the MFP driver, or from MarkVision<sup>™</sup>.
- For best performance, use envelopes made from 75 g/m<sup>2</sup> (20 lb bond) paper. You can use up to 105 g/m<sup>2</sup> (28 lb bond) weight for the multipurpose feeder or 105 g/m<sup>2</sup> (28 lb bond) weight for the envelope feeder as long as the cotton content is 25% or less. Envelopes with 100% cotton content must not exceed 90 g/m<sup>2</sup> (24 lb bond) weight.
- Use only new, undamaged envelopes.
- For best performance and to minimize jams, do not use envelopes that:
  - Have excessive curl or twist.
  - Are stuck together or damaged in any way.
  - Contain windows, holes, perforations, cutouts or embossing.
  - Use metal clasps, string ties, or metal folding bars.
  - Have an interlocking design.
  - Have postage stamps attached.
  - Have any exposed adhesive when the flap is in the sealed or closed position.
  - Have nicked edges or bent corners.
  - Have rough, cockle, or laid finishes.
- Use envelopes that can withstand temperatures of 230°C (446°F) without sealing, excessive curling, wrinkling, or releasing hazardous emissions. If you have any doubts about the envelopes you are considering using, check with the envelope supplier.
- Load only one size of envelope at a time in the envelope feeder.
- A combination of high humidity (over 60%) and the high printing temperatures may seal the envelopes.

## Labels

The MFP can print on many labels designed for use with laser printers. These labels are supplied in letter size, A4 size, and legal size sheets. Label adhesives, face sheet (printable stock), and topcoats must be able to withstand temperatures of 230°C (446°F) and pressure of 25 pounds per square inch (psi).

Try a sample of any labels you are considering using with the MFP before purchasing a large quantity.

For detailed information on label printing, characteristics, and design, see the *Card Stock & Label Guide* available on the Lexmark Web site at **www.lexmark.com/publications**.

**Note:** Labels are one of the most difficult print media for laser MFPs. All MFP models require a special fuser cleaner for label applications to optimize feed reliability. See **Ordering supplies** for information on obtaining a label fuser cleaner.

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

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

When printing on labels:

- Set the Paper Size/Type menu item to Labels in the Paper menu. You can set the Paper Size/Type from the MFP control panel, the MFP driver, or from MarkVision.
- Feed vinyl labels from the standard 250- or 500-sheet trays or the optional 250- or 500-sheet drawers. For vinyl labels, set the Paper Type to Labels, the Labels Texture to Smooth, and the Label Weight to Heavy, or set the Paper Type to vinyl labels and the texture and weight to normal.
- Do not load labels with paper or transparencies in the same source; mixing print media can cause feeding problems and print quality problems.
- Do not use label sheets with a slick backing material.
- Use full label sheets. Partial sheets may cause labels to peel off during printing, resulting in a jam. Partial sheets also contaminate the MFP and your cartridge with adhesive, and could void the MFP and cartridge warranties.
- Use labels that can withstand temperatures of 230°C (446°F) without sealing, excessive curling, wrinkling, or releasing hazardous emissions.
- Do not print within 1 mm (0.04 in.) of the edge of the label, of the perforations, or between die-cuts of the label.
- Do not use label sheets that have adhesive to the edge of the sheet. We recommend zone coating of the adhesive at least 1 mm (0.04 in.) away from edges. Adhesive material contaminates the MFP and could void the warranty.
- If zone coating of the adhesive is not possible, a 1.6 mm (0.1 in.) strip should be removed on the leading and driver edge, and a non-oozing adhesive should be used.
- Remove a 1.6 mm (0.1 in.) strip from the leading edge to prevent labels from peeling inside the MFP.
- Portrait orientation is preferred, especially when printing bar codes.
- Do not use labels that have exposed adhesive.

## Card stock

Card stock is single ply, and has a large array of properties, such as the moisture content, thickness, and texture, that can significantly affect print quality. See **Supported print media** for information on the preferred weight and for the grain direction of print media.

Try a sample of any card stock you are considering using with the MFP before purchasing a large quantity.

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

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

When printing on card stock:

- Set the Paper Type menu item in the Paper menu to Card Stock from the control panel, from the MFP driver, or from MarkVision.
- Be aware that preprinting, perforation, and creasing can significantly affect the print quality and cause print media handling or jamming problems.
- Avoid using card stock that may release hazardous emissions when heated.
- Do not use preprinted card stock manufactured with chemicals that may contaminate the MFP. Preprinting introduces semi-liquid and volatile components into the MFP.
- We recommend the use of grain short card stock.

# Storing print media

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.
- Store paper in its original wrapper until you load it into the MFP.

# Avoiding jams

Use appropriate print media (paper, transparencies, labels, and card stock) to help ensure trouble-free printing. See **Supported print media** for more information.

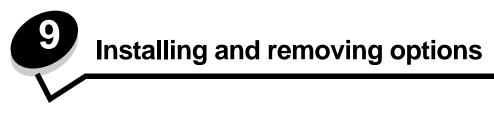
**Note:** Try a limited sample of any print media you are considering using with the MFP before purchasing large quantities.

By selecting the appropriate print media and loading it properly, you can avoid most jams. See **Loading standard trays** and optional trays, Loading the multipurpose feeder, or Loading the 2000-sheet drawer for detailed tray-loading instructions.

The following hints can help you avoid jams:

- Use only recommended print media.
- Do not overload the print media sources. Make sure the stack height does not exceed the maximum height indicated by the stack line on the labels in the sources.
- Do not load wrinkled, creased, damp, or curled print media.
- Flex, fan, and straighten print media before you load it. If jams do occur with print media, try feeding one sheet at a time through the multipurpose feeder.
- Do not use print media that you have cut or trimmed yourself.
- Do not mix print media sizes, weights, or types in the same print media source.
- Make sure the recommended print side is loaded in the source according to your simplex or duplex needs.
- Keep print media stored in an acceptable environment. See **Storing print media**.
- Do not remove trays during a print job.
- Push all trays in firmly after loading them.
- Make sure the guides in the trays are properly positioned for the size of print media you have loaded. Make sure the guides are not placed too tightly against the stack of print media.
- If a jam occurs, clear the entire media path. See **Clearing jams** for more information.

Note: If you have a recurring paper jam, see Paper frequently jams.



# Installing input options

### Order of installation

Floor-mounted configurations require additional furniture. You must use either a printer stand or printer base if you are using a 2000-sheet drawer, a duplex unit and an input option, or more than one input option. If you purchased an MFP that scans, copies, and faxes, you may need additional furniture. More information is available on our Lexmark Web site at **www.lexmark.com/multifunctionprinters**.

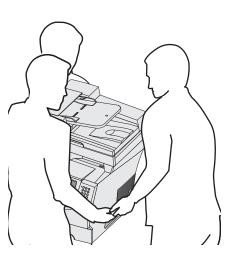
Install the MFP and any options you have purchased in the following order:



**CAUTION:** If you are installing options after setting up the MFP, turn the MFP off, and unplug the power cord from the wall outlet before continuing.

- MFP stand or MFP base
- 2000-sheet drawer
- 250-sheet or 500-sheet drawer
- Duplex unit
- MFP

CAUTION: The MFP requires three people to lift it safely.



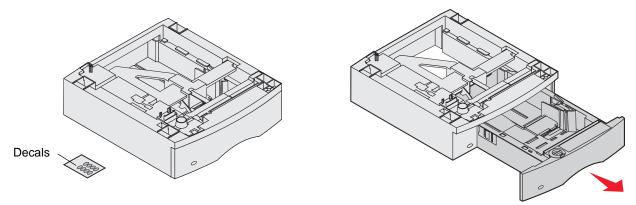
For information on installing an MFP stand, MFP base, or 2000-sheet drawer, see the instructions included with the option.

#### Installing a 250-sheet or 500-sheet drawer

Optional drawers attach under the MFP and optional duplex unit. The MFP automatically recognizes any drawer that is installed.

A drawer consists of a tray and a support unit. The 250-sheet drawer and the 500-sheet drawer are installed the same way.

1 Remove the tray from the support unit. Remove all packing material and tape from both the support unit and the tray.

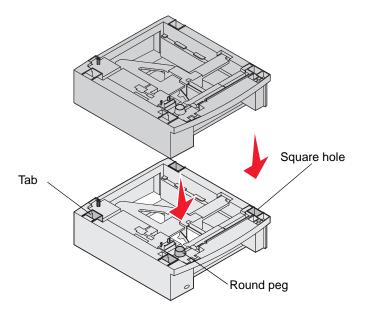


2 Place the support unit on top of any previously installed drawers or the table or MFP cabinet where you plan to use the MFP.

The tab, round peg, and square holes on top of any drawer help you position the support unit so the edges are aligned properly. Make sure the support unit is securely in place.

3 Attach another optional drawer, a duplex unit, or the MFP.

You can attach a label to the trays to indicate the tray number.

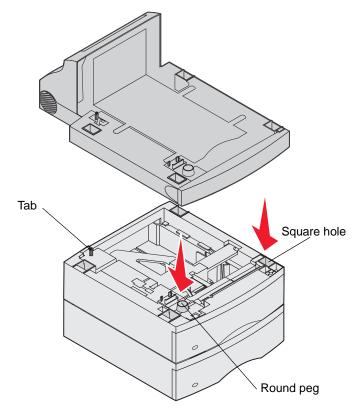


# Installing a duplex unit

The duplex unit attaches under the MFP, below the standard tray and above any drawers.

Place the duplex unit on top of any installed drawers or the table or MFP cabinet where you plan to use the MFP.

The tab, round peg, and square holes on top of any drawer help you position the duplex unit so the edges are aligned properly. Make sure it is securely in place.



## Installing memory or option cards



**CAUTION:** If you are installing memory or option cards sometime after setting up the MFP, turn the MFP off and unplug the power cord from the wall outlet before continuing.

You can customize the MFP memory capacity and connectivity by adding optional cards. The instructions in this section help you install any of the following options:

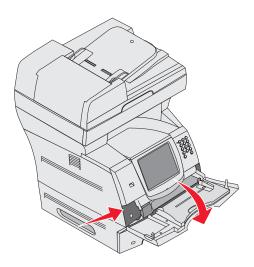
- Memory cards
  - MFP memory
  - Flash memory
  - Firmware cards
  - Bar Code
  - IPDS and SCS/TNe
  - PrintCryption<sup>™</sup>
- Other options
  - RS-232 serial interface card
  - Parallel 1284-B interface card
  - Ethernet 100BaseFX-SC
  - Ethernet 100BaseFX-MTRJ
  - 802g Wireless Adapter

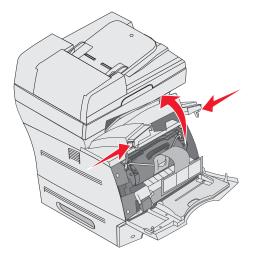
## Accessing the MFP system board

You must access the MFP system board to install MFP memory, flash memory, a firmware card, or an option card.

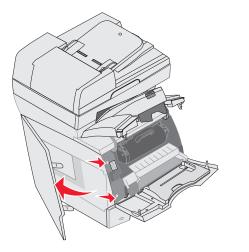
Note: Use a Phillips screwdriver to remove the system board access cover.

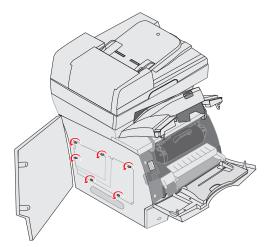
- 1 Push the release latch, and lower the multipurpose feeder.
- 2 Push both release latches, and open the top front cover.



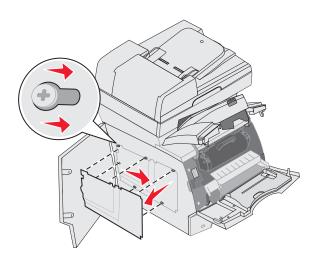


- **3** Press both side door latches, and open the side door.
- 4 Loosen, but do not remove, the six screws on the shield.



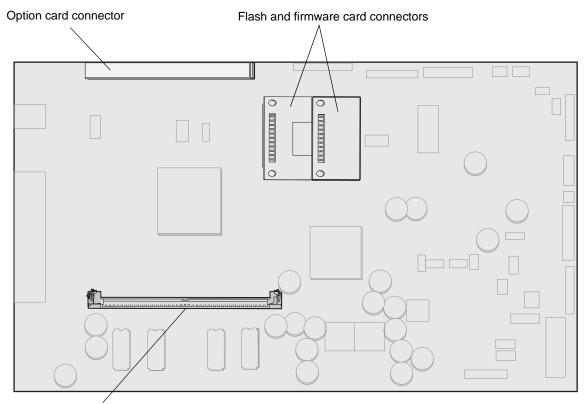


**5** Slide the shield to the right, and then remove it.



6 Set the shield aside.

Use the illustration to locate the connector for the card you want to install.



Memory card connector

# Installing or removing a memory card

#### Installation

Note: MFP or printer memory cards designed for other Lexmark MFPs or printers may not work with this MFP.

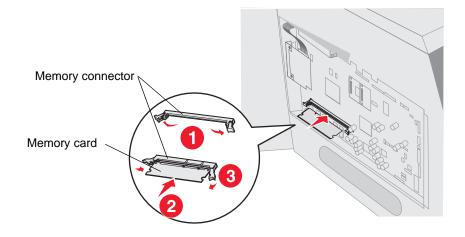
1 Remove the system board access cover. (See Accessing the MFP system board.)

Warning: MFP memory cards are easily damaged by static electricity. Touch something metal such as the MFP frame before you touch a memory card.

- 2 Push open the latches on both ends of the memory card connector.
- **3** Unpack the memory card.

Avoid touching the connection points along the edge of the card. Save the packaging.

- 4 Align the notches on the bottom of the card with the notches on the connector.
- **5** Push the memory card firmly into the connector until the latches on either end of the connector *snap* into place. It may require some force to fully seat the card.
- 6 Make sure each latch fits over the notch on the end of the card.



#### Removal

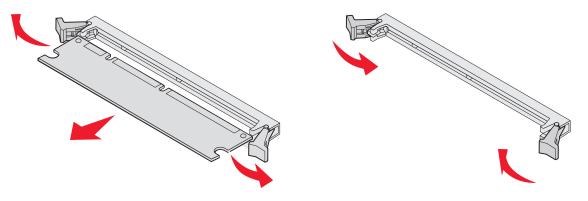
1 Remove the system board access cover. (See Accessing the MFP system board.)

Warning: MFP memory cards are easily damaged by static electricity. Touch something metal such as the MFP frame before you touch a memory card.

**2** Push the latches away from the card on both ends of the memory card connector.

The memory card moves out of the connector as the latches open.

- Pull the memory card out of the connector.Avoid touching the connection points along the edge of the card.
- Place the card into the original packaging.If you do not have the original packaging, wrap the card in paper, and store it in a box.
- 5 Close both latches.



# Installing or removing a flash memory or firmware card

#### Installation

Note: Flash memory or firmware cards designed for other Lexmark MFPs may not work with this MFP.

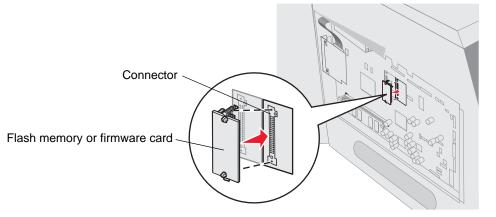
1 Remove the system board access cover. (See Accessing the MFP system board.)

**Note:** If an option card has been installed, you may need to remove the option card before installing the flash memory or firmware card.

- 2 Unpack the flash memory or firmware card.
- **3** Holding the flash memory or firmware card by the locking clips, align the plastic pins on the card with the holes on the system board.
- 4 Push the flash memory or firmware card firmly into place, and release the locking clips.

The entire length of the connector on the flash memory or firmware card must touch the system board and be locked into the connector.

Be careful not to damage the connectors.



#### Removal

1 Remove the system board access cover. (See Accessing the MFP system board.)

**Note:** If an option card has been installed, you may need to remove the option card before removing the flash memory or firmware card.

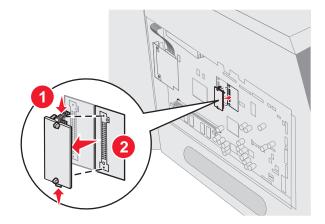
- 2 Squeeze the flash memory or firmware card locking clips.
- 3 Pull the card out.

Avoid touching the metal pins on the bottom of the card.

4 Place the flash memory or firmware card in its original packaging.

If you do not have the original packaging, wrap the flash memory or firmware card in paper, and store it in a box.

5 If you removed an option card to access the flash memory or firmware card, reinstall the option card.



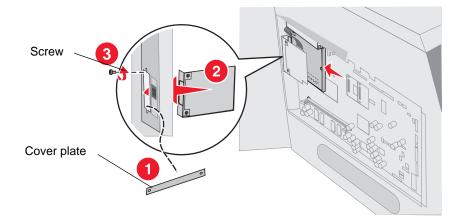
# Installing an option card

The MFP has one connector that supports the following option cards:

- MarkNet N8000 series internal print server
- RS-232 Serial Interface Card
- Parallel 1284-B Interface Card
- Coax/Twinax Adapter for SCS

Warning: Option cards are easily damaged by static electricity. Touch something metal such as the MFP frame before you touch an option card.

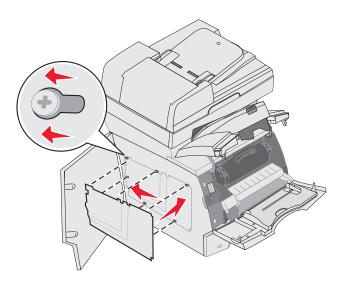
- 1 Locate the card connectors on the system board.
- 2 Remove the screw and the cover plate, and save them.
- **3** Unpack the card. Save the packaging materials.
- 4 Align the connection points on the card with the connector on the system board, and push the card firmly into the system board connector.
- 5 Insert the screw saved from the cover plate (or the extra screw shipped with the card).
- **6** Tighten the screw to secure the card.

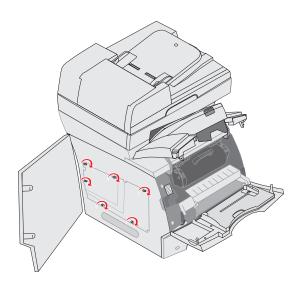


# Replacing the shield

After you have installed options on the MFP system board, follow these steps to reattach the shield and close the doors.

- **1** Align the keyholes on the shield with the screws on the frame.
- 2 Slide the shield down onto the screws.
- **3** Tighten the screws.





- 4 Close the side door.
- **5** Close the top front cover.
- 6 Close the multipurpose feeder.



Periodically, you need to complete certain tasks to maintain optimum print quality. These tasks are covered in this chapter.

If several people are using the MFP, you may want to designate a key operator to do the setup and maintenance of the MFP. Refer printing problems and maintenance tasks to this key operator.

In the U.S., contact Lexmark at 1-800-539-6275 for information about Lexmark Authorized Supplies Dealers in your area. In other countries or regions, visit the Lexmark Web site at **www.lexmark.com**, or contact the place where you bought the MFP.

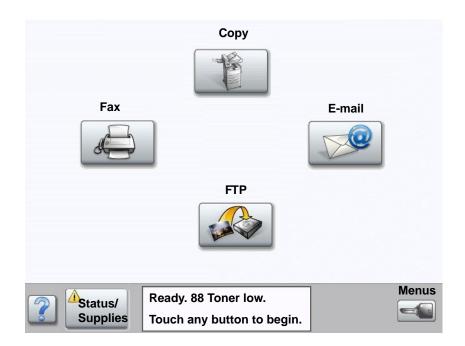
### Storing supplies

Choose a cool, clean storage area for the MFP 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

# Determining the status of supplies



The MFP control panel alerts you once a supply item or maintenance is required. The Print status message bar at the bottom of the touch screen indicates if the MFP is **Ready** and lets you know if any supplies are low or empty. Touching **Status / Supplies** on the bottom of the touch screen will open the **Status / Supplies** screen where you can view the status of the various trays and other supply items.

# **Conserving supplies**

Several settings in your application software or through the touch screen let you conserve toner and paper. For more information on changing these settings, see the *Menus and Messages Guide* on the *Software and Documentation* CD.

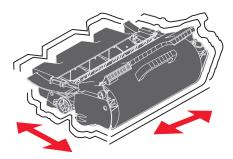
Supply	Menu selection item	What the setting does
Toner	Toner Darkness, touch the menu button $\rightarrow$ Printer Settings $\rightarrow$	Lets you adjust the level of toner released on a sheet of print media. The values range from 1 (lightest setting) to 10 (darkest setting).
Quality Menu		<b>Note:</b> When toner is low, firmly shake the cartridge to redistribute any remaining toner. See <b>Ordering a print cartridge</b> for more information.
Print media	Multipage Print, touch the menu button $\rightarrow$ Printer Settings $\rightarrow$ Finishing Menu	Causes the MFP to print 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).
	Duplex, touch the menu button $\rightarrow$ Printer Settings $\rightarrow$ Finishing Menu	Duplex printing is available when you have a duplex unit. It lets you print on both sides of a sheet of paper.
	Use your software application or MFP driver to send a 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 can cancel the job.
		See <b>Printing and deleting held jobs</b> for more information about a Verify Print job.

# **Ordering supplies**

To order supplies in the U.S., contact Lexmark at 1-800-539-6275 for information about Lexmark Authorized Supplies Dealers in your area. In other countries or regions, visit the Lexmark Web site at **www.lexmark.com**, or contact the place where you bought the MFP.

## Ordering a print cartridge

When the **88** Toner is low message appears or when you experience faded print, remove the toner cartridge. Firmly shake it side-to-side and front-to-back several times to redistribute the toner, then reinsert it and continue printing. Repeat this procedure multiple times until the print remains faded. When the print remains faded, replace the print cartridge.



Have a new cartridge available when the current one no longer prints satisfactorily.

The recommended print cartridges specifically designed for the MFP are:

Part number	Description	Average cartridge yield <sup>1</sup>
For the USA ar	nd Canada <sup>2</sup>	
X644A11A	Return Program Print Cartridge	10,000 standard pages
X644H11A	High Yield Return Program Print Cartridge	21,000 standard pages
X644X11A	Extra High Yield Return Program Print Cartridge	32,000 standard pages
X644H01A	High Yield Return Program Print Cartridge for Label Applications	21,000 standard pages
X644X01A	Extra High Yield Return Program Print Cartridge for Label Applications	32,000 standard pages
Other available	print cartridges	·
X644A21A	Print Cartridge	10,000 standard pages
X644H21A	High Yield Print Cartridge	21,000 standard pages
X644X21A	Extra High Yield Print Cartridge	32,000 standard pages
For Europe, th	e Middle East and Africa <sup>3</sup>	
X644A11E	Return Program Print Cartridge	10,000 standard pages
X644H11E	High Yield Return Program Print Cartridge	21,000 standard pages
X644X11E	Extra High Yield Return Program Print Cartridge	32,000 standard pages
Other available	print cartridges	
X644A21E	Print Cartridge	10,000 standard pages
X644H21E	High Yield Print Cartridge         21,000 standard page	
X644X21E	Extra High Yield Print Cartridge   32,000 standard page	
For the Asia Pa	acific Region <sup>4</sup>	
X644A11P	Return Program Print Cartridge	10,000 standard pages
X644H11P	High Yield Return Program Print Cartridge	21,000 standard pages
X644X11P	Extra High Yield Return Program Print Cartridge	32,000 standard pages
X644H01P	High Yield Return Program Print Cartridge for Label Applications	21,000 standard pages
X644X01P	Extra High Yield Return Program Print Cartridge for Label Applications	32,000 standard pages
Other available	print cartridges	
X644A21P	Print Cartridge	10,000 standard pages
X644H21P	High Yield Print Cartridge	21,000 standard pages
<sup>2</sup> Designed for ι <sup>3</sup> Designed for ι <sup>4</sup> Designed for ι	l value in accordance with ISO/IEC 19752 ise only in the USA and Canada ise only in Europe, Middle East, and Africa ise only in Asia Pacific Region ise only in Latin America	

#### Maintaining the MFP

Part number	Description	Average cartridge yield <sup>1</sup>			
X644X21P	Extra High Yield Print Cartridge	32,000 standard pages			
For Latin Ame	For Latin America <sup>5</sup>				
X644A11L	Return Program Print Cartridge	10,000 standard pages			
X644H11L	High Yield Return Program Print Cartridge	21,000 standard pages			
X644X11L	Extra High Yield Return Program Print Cartridge	32,000 standard pages			
X644H01L	High Yield Return Program Print Cartridge for Label Applications	21,000 standard pages			
X644X01L	Extra High Yield Return Program Print Cartridge for Label Applications 32,000 standard pages				
Other available	print cartridges				
X644A21L	Print Cartridge	10,000 standard pages			
X644H21L	High Yield Print Cartridge	21,000 standard pages			
X644X21L	Extra High Yield Print Cartridge	32,000 standard pages			
<sup>2</sup> Designed for the <sup>3</sup> Designed for the <sup>4</sup> Designed for <sup>4</sup>	I value in accordance with ISO/IEC 19752 use only in the USA and Canada use only in Europe, Middle East, and Africa use only in Asia Pacific Region use only in Latin America				

You can use the packing material from the new cartridge to ship the old cartridge back to Lexmark for recycling. See **Recycling Lexmark products** for more information.

## Ordering a maintenance kit

80 Scheduled maintenance advised appears on the display after 300,000 pages have printed to let you know it is time to replace MFP maintenance items. Order a maintenance kit when 80 Scheduled maintenance advised first appears on the display. The maintenance kit contains all the items necessary to replace the pick rollers, the charge roll, transfer roller, and the fuser.

**Note:** Using certain types of media may require more frequent replacement of the maintenance kit. Although the charge roll, transfer roller, and pick rollers are contained within the maintenance kit, they should also be individually ordered and replaced as necessary.

See the following table for the maintenance kit part number for your specific MFP.

Maintenance kit for	Part numbers
X644e and X646e	40X0102 (100 V) 40X0100 (110 V) 40X0101 (220 V)

Replacement of the fuser must be performed by an authorized service technician.

## Ordering charge rolls

We recommend ordering new charge rolls when toner fog or background shading appears on printed pages. Order Lexmark part number 40X0127.

### Ordering a transfer roller

Order Lexmark part number 40X0130.

## Ordering pick rollers

Order Lexmark part number 40X0070. Order new pick rolls when the paper fails to properly feed from the tray.

When ordering pick rollers, you need one set per input tray excluding the multipurpose feeder.

## Ordering an ADF pick mechanism

Order Lexmark part number 40X0453.Order a new pick mechanism if you experience problems with paper double-feeding through the automatic document feeder or if you have scanned 120,000 pages.

## Ordering an ADF separator roller

Order Lexmark part number 40X0454. Order a new separator roller when the paper fails to properly feed from the automatic document feeder or if you have scanned 120,000 pages.

### Ordering a label fuser cleaner

A special label fuser cleaner should be used for label applications to optimize feeding reliability. To order this item, visit our Web site at **www.lexmark.com**, or contact your Lexmark representative.

Label fuser cleaners are not recommended for duplex printing.

# **Recycling Lexmark products**

To return Lexmark products to Lexmark for recycling:

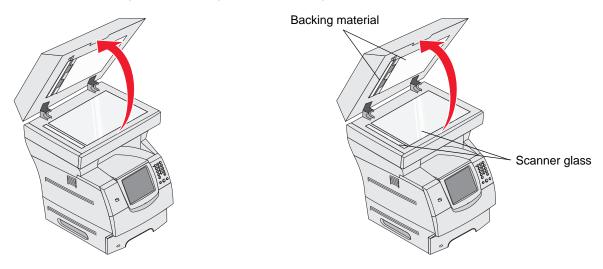
1 Visit our Web site:

#### www.lexmark.com/recycle

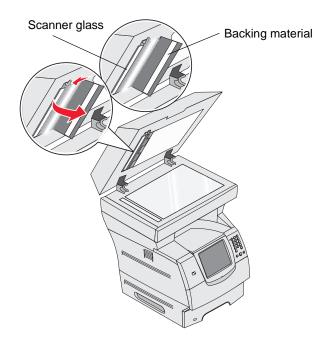
2 Follow the instructions on the computer screen.

# Cleaning the scanner glass and backing material

- **1** Open the document cover.
- 2 Dampen a clean, lint-free cloth or cotton swab with isopropyl alcohol (95%).
- 3 Wipe the scanner glass and backing material by moving the cloth or swab from side to side.



- 4 Open the scan unit access door.
- 5 Wipe the scanner glass and backing material by moving the cloth or swab from side to side.



- 6 Close the scan unit access door.
- 7 Close the document cover.

# Scanner registration

Scanner Registration is a process to align the scan area with the paper location. Two pieces of either letter or A4 *dark* colored paper are needed for this process.

- 1 Turn the MFP off.
- 2 Open the document cover.
- 3 Clean the scanner glass and backing material.

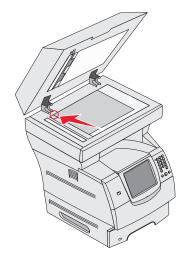
For more information, see Cleaning the scanner glass and backing material.

- 4 Hold down the number 2 and number 6 keys on the numeric pad.
- 5 Continue to hold the buttons, and turn the MFP on.

Hold the buttons for about 10 seconds while the MFP is powering up, then release the buttons. The MFP will enter the Configuration menu.

- 6 Touch the down arrow until Automatic Scanner Registration appears.
- 7 Touch Automatic Scanner Registration.
- 8 Load the dark colored paper.
  - a Place a blank piece of dark colored paper (A4 or Letter) on the flatbed.

Position the paper so it is aligned with the upper corner of the plastic guides.



- **b** Close the document cover.
- c Place a blank piece of dark colored paper (A4 or Letter) in the ADF, and adjust the guides.
  - Make sure the paper guides are snug against the paper; do not bend the paper.

#### 9 Press Start.

The registration process will scan the pages in the flatbed and ADF, and then display a sucess or failure message.

If a failure message appeared, do another scanner registration, realign the paper, and verify each step as it is performed. If a second failure message appears, contact an authorized service representative.

#### 10 Touch Exit Configuration Menu.

The printer will reboot and return to the home page.

# Moving the MFP

Follow these guidelines to move the MFP within the office or to prepare the MFP for shipment.

CAUTION: Follow these guidelines to avoid injuring yourself or damaging the MFP.

- Always use at least three people to lift the MFP.
- Always turn off the MFP using the power switch.
- Disconnect all cords and cables from the MFP before attempting to move the MFP.
- Failure to repackage the MFP properly for shipment can result in damage to the MFP not covered by the MFP warranty.
- Damage to the MFP caused by improper moving is not covered by the MFP warranty.

### Moving the MFP within the office

The MFP can be safely moved from one location within an office to another following these precautions:

- The MFP must remain in an upright position.
- Any cart used to move the MFP should have a surface able to support the full footprint of the MFP.
- Severe jarring movements may cause damage to the MFP and must be avoided.

### Preparing the MFP for shipment

To transport the MFP by vehicle or by commercial carrier, the MFP must be repackaged for shipment using the proper packaging. The MFP package must be securely fastened to its pallet. Do not use a shipping or transport method that requires the MFP to be shipped without a pallet. The MFP must stay upright throughout the shipment. If you do not have all the original packaging, contact your local service representative to order the repackaging kit. Additional instructions for repackaging the MFP are provided in the repackaging kit.

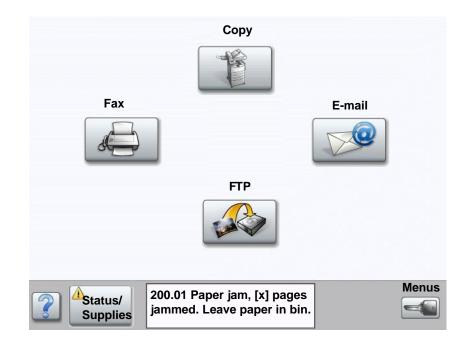


By carefully selecting print media and loading it properly, you should be able to avoid most paper jams. For more information on avoiding paper jams, see **Avoiding jams**. If jams do occur, follow the steps outlined in this section.

To resolve the paper jam messages, you must clear the entire paper path, and then touch **Continue** to clear the message and resume printing. The MFP prints a new copy of the page that jammed if Jam Recovery is set to On or Auto; however, the Auto setting does not guarantee the page will print.

# Identifying jams

If the MFP jams, the appropriate jam message will be displayed on the touch screen Print status message bar.

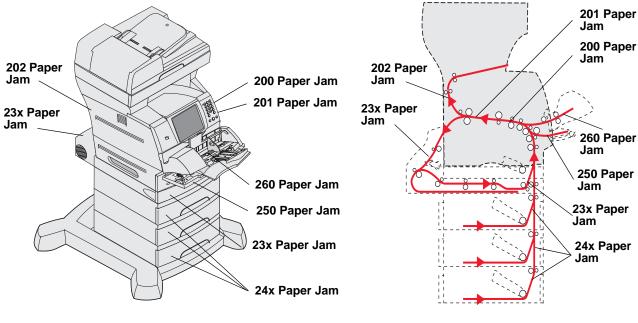


See the diagram on **page 103** for an overview of the paper path and areas where jams may occur. The path varies depending on the MFP paper sources.

# Access doors and trays

The following illustration shows the path that print media travels through the MFP. The path varies depending on the input source (trays, multipurpose feeder, envelope feeder) you are using.

The numbers in following illustration indicate the numbers that can appear on the control panel and designate the general area of a paper jam.



#### **Doors and trays**

Path and locations



**CAUTION:** Floor-mounted configurations require additional furniture for stability. You must use either a printer stand or printer base if you are using a 2000-sheet drawer. Certain other configurations also must have a printer stand or printer base. More information is available on our Lexmark Web site at **www.lexmark.com/multifunctionprinters**.

# Understanding jam messages

The following table lists the jam messages that can occur and the action necessary to clear the message. The jam message indicates the area where the jam occurred. However, it is best to clear the entire paper path to ensure you have cleared all possible jams.

Message	What to do*
200 and 201 Paper Jam Remove Cartridge	Open the bottom then top front covers, remove the print cartridge, and then remove the jam.
202 Paper Jam Open Rear Door	Open the rear door on the MFP, and remove the jam.
23x Paper Jam Check Duplex	Remove the duplex tray from the duplex unit, raise duplex deflector, and remove the jam. Open the rear duplex door, and remove the jam.
24x Paper Jam Check Tray <x></x>	Open each tray, and remove any jammed media.
250 Paper Jam Check MP Feeder	Remove all media from the multipurpose feeder, flex and stack the media, reload the multipurpose feeder, and adjust the guide.

Message	What to do*
260 Paper Jam Check Env Feeder	Lift the envelope weight, remove all envelopes, flex and stack the envelopes, reload the envelope feeder, and adjust the guide.
290, 291, 292, and 294 Scanner Jams	Remove all original documents from the ADF. Open the ADF cover, and remove any jammed pages. Open the document cover, and remove any jammed pages. Open the scan unit access door, and remove any jammed pages.

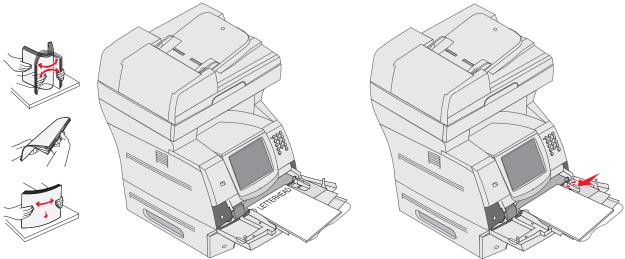
# Clearing jams

Although there are several places a jam can occur, clearing the paper path is fairly easy. Paper jams can occur in three areas: the front of the MFP, inside the MFP, and at the rear of the MFP. Jams in the front of the MFP occur in the input options or the duplex tray. Jams inside the MFP occur in two locations and require the removal of the print cartridge. Jams can also occur at the rear of the MFP or duplex unit.

**Note:** The following clearing jam instructions may seem out of numerical sequence. However, they have been grouped to help you quickly clear the print path. To go to a specific jam, see **Understanding jam messages**.

#### 250 Paper Jam Check MP Feeder

- **1** Remove the paper from the multipurpose feeder.
- 2 Flex, fan, and restack the media, and place it into the multipurpose feeder.
- 3 Load the print media.
- 4 Slide the side guide toward the inside of the tray until it lightly rests against the edge of the media.
- 5 Touch Continue.



#### 260 Paper Jam Check Env Feeder

The envelope feeder feeds envelopes from the bottom of the stack; the bottom envelope will be the one that is jammed.

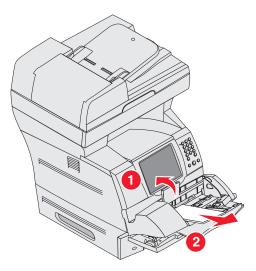
- **1** Lift the envelope weight.
- 2 Remove all envelopes.

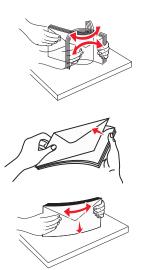
If the jammed envelope has entered the MFP and cannot be pulled out, remove the envelope feeder.

- **a** Lift the envelope feeder out of the MFP, and then set it aside.
- **b** Remove the envelope from the MFP.

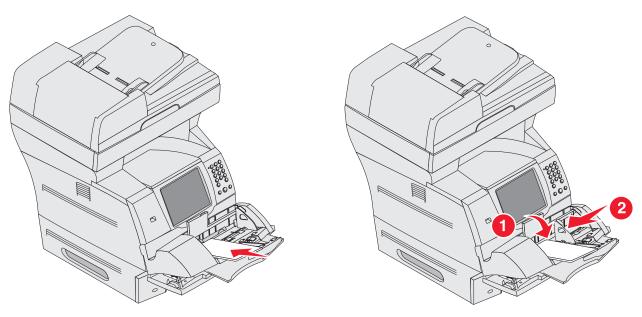
Note: If you cannot remove the envelope, the print cartridge will have to be removed. See 200 and 201 Paper Jam Remove Cartridge for more information.

- c Reinstall the envelope feeder. Make sure it *snaps* into place.
- **3** Flex and stack the envelopes.





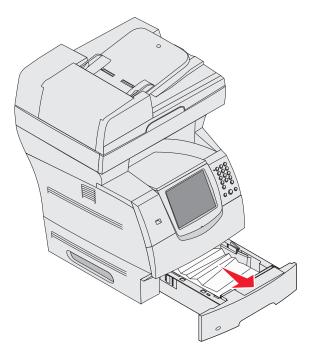
- 4 Load the envelope feeder.
- 5 Adjust the guide.
- 6 Lower the envelope weight.
- 7 Touch Continue.



#### 23x and 24x jams

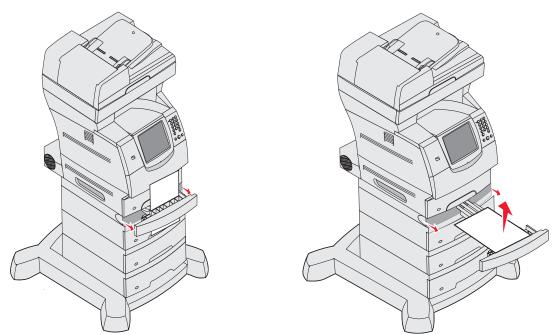
Paper jams in these areas can occur on the incline surface of a tray or across more than one tray. To clear these areas:

**1** Open the MFP paper tray, and remove any jammed media.

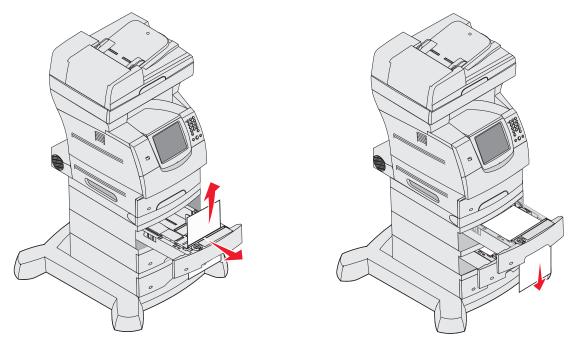


**2** Open the duplex tray.

To remove the media, pull up.



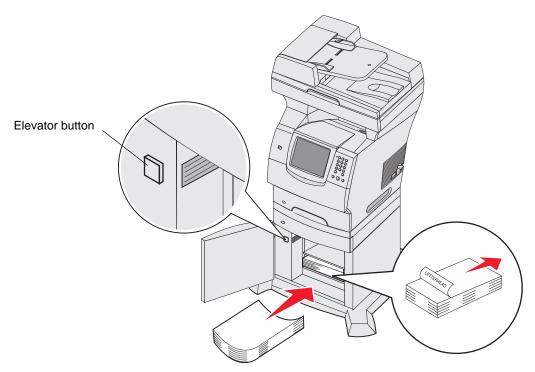
Open any optional trays beginning at the top, and remove any jammed media.Pull the print media either up or down. If it does not pull easily one way, try the other way.





**CAUTION:** Floor-mounted configurations require additional furniture for stability. You must use either a printer stand or printer base if you are using a 2000-sheet drawer. Certain other configurations also must have a printer stand or printer base. More information is available on our Lexmark Web site at **www.lexmark.com/multifunctionprinters**.

- 4 If you have an optional 2000-sheet feeder, open the front door, press the elevator button to lower the tray, remove the jam, and make sure the stack of print media is neat and aligned.
- 5 Touch Continue.





**CAUTION:** Floor-mounted configurations require additional furniture for stability. You must use either a printer stand or printer base if you are using a 2000-sheet drawer. Certain other configurations also must have a printer stand or printer base. More information is available on our Lexmark Web site at **www.lexmark.com/multifunctionprinters**.

#### 200 and 201 Paper Jam Remove Cartridge

- **1** Push the release latch, and lower the multipurpose feeder.
- **2** Push the release latch, and open the top front cover.



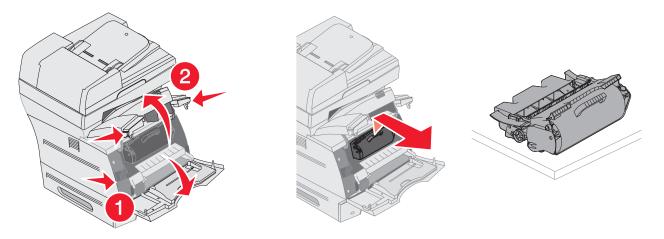
**CAUTION:** The inside of the MFP may be hot. Allow the MFP to cool before touching any internal components.

3 Lift and pull the print cartridge out of the MFP.

Warning: Do not touch the photoconductor drum on the underside of the cartridge. Use the cartridge handle whenever you are holding the cartridge.

4 Place the print cartridge aside.

Note: Do not leave the cartridge exposed to light for extended periods.



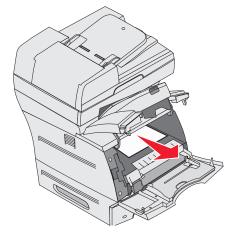
Note: The print media may be covered with unfused toner, which can stain garments and skin.

**5** Pull the print media up and toward you.

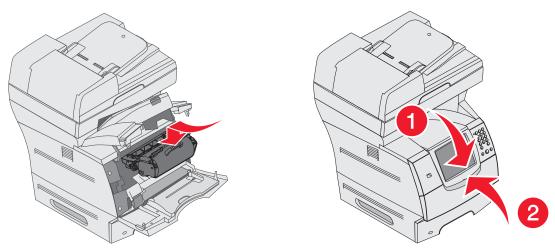


**CAUTION:** Do not use any pointed objects to remove the paper. This could cause personal injury or damage to the MFP.

Warning: If the print media does not move immediately when you pull, stop pulling. You need to access the print media from the MFP rear door.



- 6 Align and reinstall the toner cartridge.
- 7 Close the top front cover.
- 8 Close the multipurpose feeder.
- 9 Touch Continue.

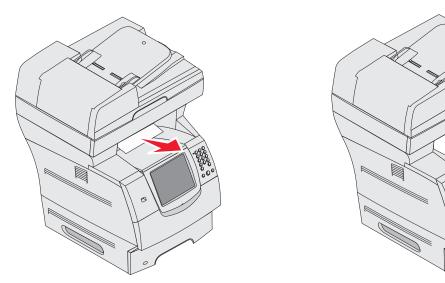


#### 202 Paper Jam Open Rear Door

- 1 If the paper is exiting the MFP, pull the media straight out, and then touch **Continue**. Otherwise, continue with step 2.
- **2** Open the MFP rear door.

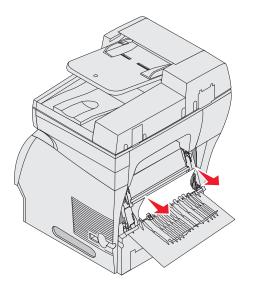


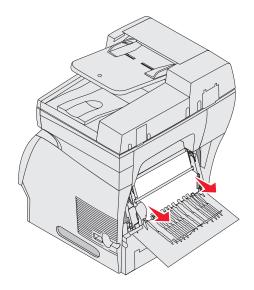
**CAUTION:** The inside of the MFP may be hot. Allow the MFP to cool before touching any internal components.



**CAUTION:** Do not use any pointed objects to remove the paper. This could cause personal injury or damage to the MFP.

- **3** Remove the jammed media.
- 4 Close the rear door.
- 5 Touch Continue.

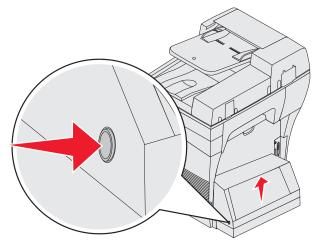




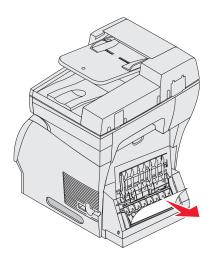
#### **Clearing jams**

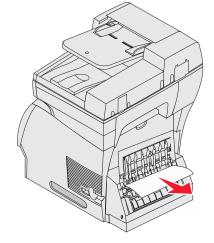
#### 23x Paper Jam Open Duplex Rear Door

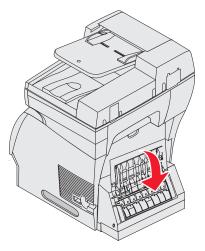
**1** Open the duplex rear door.



- 2 Remove the jammed media.Depending on the media location, pull the media either up or down.
- **3** Close the duplex rear door. Make sure it *snaps* into place.
- 4 Touch Continue.



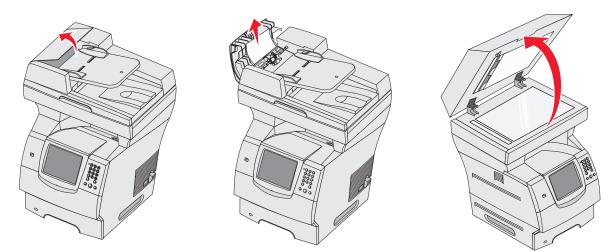




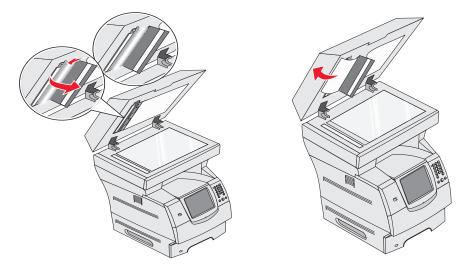
# **Clearing ADF Jams**

#### 290, 291, 292, and 294 Scanner Jams

- 1 Remove all original documents from the ADF.
- 2 Open the ADF cover, and remove any jammed pages.
- **3** Open the document cover, and remove any jammed pages.



4 Open the scan unit access door, and remove any jammed pages.



- **5** Close the scan unit access door.
- 6 Close the ADF cover.

Administrative support

# Adjusting control panel brightness

If you are having trouble reading your control panel display, the LCD brightness can be adjusted through the Settings menu.

#### Brightness

- 1 Make sure the MFP is on.
- 2 Touch the **Menus** button on the home screen.
- 3 Touch Settings.
- 4 Touch General Settings.
- 5 Touch the down arrow until Brightness appears.
- **6** Touch the left arrow to decrease the brightness, or touch the right arrow to increase the brightness. Brightness values can be adjusted from 5–400 (100 is the default value).
- 7 Touch Submit.
- 8 Touch Home.

# Restoring factory default settings

When you first enter the MFP menus from the control panel, you may notice an asterisk (\*) to the left of a value in the menus. This asterisk indicates the *factory default setting*. These settings are the original MFP settings. (Factory defaults may vary for different regions.)

When you select a new setting from the control panel, **Submitting Selection** appears. When the Submitting Selection message disappears, an asterisk appears next to the setting to identify it as the current *user default setting*. These settings are active until new ones are stored, or the factory defaults are restored. To restore the original MFP factory default settings:

Warning: All downloaded resources (fonts, macros, and symbol sets) in MFP memory (RAM) will be deleted. (Resources residing in flash memory or on the hard disk remain unaffected.)

- 1 Make sure the MFP is on.
- 2 Touch the Menus button on the home screen.
- 3 Touch Settings.
- 4 Touch General Settings.
- 5 Touch the down arrow until **Restore Defaults** appears.
- 6 Touch the left arrow or right arrow until **Restore Now** appears.

When you touch Restore Now, all menu settings return to the factory default values, except:

• The control panel Display Language setting in the Setup menu.

- All settings in the Parallel menu, Serial menu, Network menu, and USB menu.
- 7 Touch Submit.
- 8 Touch Home.

# Adjusting screen timeout

To adjust the screen Timeout setting:

- 1 Make sure the MFP is on.
- 2 Touch the **Menus** button on the home screen.
- 3 Touch Settings.
- 4 Touch General Settings.
- 5 Touch the down arrow until **Screen Timeout** appears.
- **6** Touch the left arrow to decrease the time, or touch the right arrow to increase the time. The settings available range from 15–300 minutes.

# Adjusting Power Saver

To adjust the Power Saver setting:

- 1 Make sure the MFP is on.
- 2 Touch the **Menus** button on the home screen.
- 3 Touch Settings.
- 4 Touch General Settings.
- 5 Touch the down arrow until **Power Saver** appears.
- 6 Touch the left arrow to decrease the time, or touch the right arrow to increase the time.

The settings available range from 2-240 minutes.

# Configuring the MFP

A variety of functions can be used to increase the level of Information Technology (IT) security for the device. The following sections show how to configure these functions.

#### Setting Password Protect for the menus

Apply an administrative password to restrict unauthorized users from making changes to the MFP configuration from either the control panel or the Embedded Web Server (EWS).

- 1 Touch the **Menus** button on the home screen.
- 2 Touch Settings.
- **3** Touch the **down arrow** and then touch **Security**.
- 4 Touch the down arrow and then touch Create/Change Passwords  $\rightarrow$  Create/Change Advanced Password.
- 5 Enter and reenter a password of both alphabetic and non-alphabetic characters. The password must be a minimum of 8 characters.

- 6 Touch Submit.
- 7 Touch Settings → Security → Password Protect to view what configuration settings are protected by the Advanced Password.
  - Note: Settings → Security → Password Protect and Settings → Security → Create/Change Passwords → Create Change User Password can be used to restrict access with a different password than the Advanced Password. Use Settings → Security → Password Protect to select the menus that are accessible with both an Advanced Password and a User Password.
  - **Note:** The Advanced Password and the User Password protect the menus on the touch screen control panel of the MFP and the Configuration section of the EWS pages.

#### **Restricting Function Access**

The MFP supports a variety of methods for authenticating users prior to allowing access to functions.

- 1 Open a Web browser. In the address line, enter the IP address of the MFP being configured using this format: http://ip\_address/.
- 2 Click Configuration.
- 3 Under Other Settings, click Security.
  - d Select an authentication method.
  - e Click Submit.
- 4 Click on the setup link for the authentication method previously selected in step d.
  - a Fill out the appropriate information for the environment.
  - b Click Submit.
- 5 Click Function Access.
  - a Set the function authentication level for each function. Select Off to prevent anyone from using a function.
  - b Click Submit.

#### Preventing access to the menus from the control panel

It is possible to prevent access to all the menus using the control panel touch screen. To prevent access:

- 1 Touch the **Menus** button on the home screen.
- 2 Touch Settings.
- 3 Touch the down arrow.
- 4 Touch Security  $\rightarrow$  Function Access  $\rightarrow$  Menus  $\rightarrow$  Disabled.
- 5 Touch Submit.

#### Disabling the Driver to Fax menu item

- 1 Touch the **Menus** button on the home screen.
- 2 Touch Settings  $\rightarrow$  Fax Settings  $\rightarrow$  Analog Fax Setup  $\rightarrow$  Fax Send Settings.
- 3 Touch the down arrow.
- 4 Touch Driver to fax  $\rightarrow$  Off.
- 5 Touch Submit.

#### Setting the Device Lockout personal identification number (PIN)

The Device Lockout PIN allows locking and unlocking the functional state of the MFP. A locked MFP automatically buffers each job received to its hard disk. To initiate the printing of jobs on a locked MFP hard disk, enter the correct PIN on the control panel to unlock the MFP.

A locked MFP also prevents all use of the control panel except to unlock the MFP.

- **Note:** This setting is only available on MFP models with an integrated hard disk drive. Back channel data is processed while the MFP is locked. Reports, such as user or event logs, can be retrieved from a locked MFP.
- 1 Touch the **Menus** button on the home screen.
- 2 Touch Settings.
- 3 Touch the down arrow and then touch Security.
- 4 Touch the down arrow and then touch Create/Change Passwords → Create/Change Device Lockout PIN.
- 5 Enter and reenter a 4-digit PIN.
- 6 Touch Submit.

#### Locking the MFP using the Device Lockout PIN

- 1 Touch the Lock Device button.
- 2 Enter the 4-digit Device Lockout PIN.

#### Unlocking the MFP using the Device Lockout PIN

- 1 Touch the Unlock Device button.
- 2 Enter the 4-digit Device Lockout PIN.

#### Setting a password before printing received faxes

To prevent received faxes from being printed until a password is entered:

- 1 Open a Web browser. In the address line, enter the IP address of the MFP being configured using this format: http://ip\_address/.
- 2 Click Configuration.
- 3 Under Default Settings, click Fax Settings → Analog Fax Setup.
- 4 Scroll to Holding Faxes and click it.
- 5 Select Always On for Held Fax Mode.
- 6 Define a Print Faxes Password in the field.
- 7 Click Submit.

#### Releasing held faxes for printing

1 On the MFP touch screen control panel, touch the **Release Held Faxes** button.

**Note:** If the **Release Held Faxes** button appears as pale gray and the words appear faded on the button, then the button is inactive because no fax jobs are being held.

2 Enter the defined password in the **Print Faxes Password** field.

This releases any received and held fax jobs, so they print.

Note: The defined password was created in step 6 of Setting a password before printing received faxes.

#### Setting security using the Embedded Web Server (EWS)

To enhance the security of network communications and MFP configuration, use the advanced security features. These features are available through the Web page of the MFP.

#### **Setting the Advanced Password**

The Advanced Password is used to password-protect the menus. Setting the Advanced Password is required for Secure Mode and confidential communication with MarkVision Professional.

If the Advanced Password was not created using the touch screen control panel by following the instructions in **Setting Password Protect for the menus on page 115**, it can also be created from the EWS. To create it:

- 1 Open a Web browser. In the address line, enter the IP address of the MFP being configured using this format: http://ip\_address/.
- 2 Click Configuration.
- 3 Under Other Settings, click Security.
- 4 Click Create/Change Password.
- 5 Click Create/Change Advanced Password.
- 6 Enter and reenter a password of both alphabetic and non-alphabetic characters. The password must be a minimum of 8 characters.
- 7 Touch Submit.

#### Using the secure EWS

The SSL (Secure Sockets Layer) allows for secure connections to the Web server within the print device. To connect to the EWS more securely, connect to the SSL port instead of the default HTTP port. The SSL port connection will encrypt all Web server network communications between the PC and the MFP.

To connect to the SSL port:

- 1 Open a Web browser.
- 2 In the address line, enter the IP address of the MFP being configured using the format: https://ip\_address/.

#### Supporting SNMPv3 (Simple Network Management Protocol version 3)

SNMPv3 protocol allows for encrypted and authenticated network communications. It also lets the administrator select a desired level of security. Prior to use, at least one user name and password must be established from the settings page. To configure for SNMPv3 through the EWS of the MFP:

- 1 Open a Web browser. In the address line, enter the IP address of the MFP being configured using the format: http://ip\_address/.
- 2 Click Configuration.
- 3 Under Other Settings, click Network/Ports.
- 4 Click SNMP.

SNMPv3 authentication and encryption has three levels of support:

- No authentication and no encryption
- Authentication with no encryption
- Authentication and encryption

**Note:** The selected level serves as a minimum level of protection. The MFP negotiates with the SNMPv3 requestor, and a higher level of protection may be agreed upon and used by both.

- 5 Indicate the setting for each sub-item as required for the network environment.
- 6 Click Submit.

#### **Disabling SNMPv1 and SNMPv2**

- 1 Open a Web browser. In the address line, enter the IP address of the MFP being configured using the format: http://ip\_address/.
- 2 Click Configuration.
- 3 Under Other Settings, click Network/Ports.
- 4 Click SNMP.
- 5 Click to clear the Enabled check box unless SNMPv1 and SNMPv2 are used in this environment.
- 6 Click Submit.

#### Supporting IPSec (Internet Protocol Security)

IP Security protocol provides authentication and encryption of communications at the network layer allowing all application and network communications over the IP protocol to be secure. IPSec can be set up between the MFP and up to five hosts, using both IPv4 and IPv6. To configure IPSec through the EWS:

- 1 Open a Web browser. In the address line, enter the IP address of the MFP being configured using the format: http://ip\_address/.
- 2 Click Configuration.
- 3 Under Other Settings, click Network/Ports.
- 4 Click IPSec.

Two types of authentication are supported for IPSec:

- Shared Key Authentication Any ASCII phrase shared among all the participating hosts. This is the easiest way to configure when only a few hosts on the network use IPSec.
- Certificate Authentication- Allows any hosts or subnet of hosts to authenticate for IPSec. Each host must have a public/private key pair. Validate Peer Certificate is enabled by default, requiring each host to have a signed certificate. The certificate authority certificate must be installed. Each host must have its identifier in the Subject Alternate Name of the signed certificate.

**Note:** After an MFP is configured for IPSec with a host, IPSec is required for any IP communication to take place.

- 5 Indicate the setting for each sub-item as required for the network environment.
- 6 Click Submit.

#### Disabling ports and protocols

The TCP and UDP ports can be configured to one of three modes or values:

- **Disabled** Never allows network connections to this port
- Secure and Unsecure Allows the port to remain open, even in Secure mode
- Unsecured Only- Allows the port to only open when the MFP is not in Secure mode

**Note:** A password must be set to enable Secure mode. Once enabled, only the ports set to Secure and Unsecure will be open.

To configure the mode for TCP and UDP ports from the EWS:

- 1 Open a Web browser. In the address line, enter the IP address of the MFP being configured using the format: http://ip\_address/.
- 2 Click Configuration.
- 3 Under Other Settings, click Network/Ports.
- 4 Click TCP/IP Port Access.
- 5 For each port listed, select the appropriate value from the list previously described.

Note: Disabling ports will disable function on the MFP.

6 Click Submit.

#### Using 802.1x Authentication

802.1x port authentication allows the MFP to join networks that require authentication before allowing access. 802.1x port authentication can be used with the WPA (Wi-Fi Protected Access) feature of an optional internal wireless print server to provide WPA-Enterprise security support.

Support for 802.1x requires the establishment of credentials for the MFP. The MFP must be known to the Authentication Server (AS). The AS will allow network access to devices presenting a valid set of credentials which typically involves a name/password combination and possibly a certificate. The AS will allow network access to MFPs presenting a valid set of credentials. The credentials can be managed by using the EWS of the MFP. To use certificates as part of the credentials:

- 1 Open a Web browser. In the address line, enter the IP address of the MFP being configured using the format: http://ip\_address/.
- 2 Click Configuration.
- 3 Under Other Settings, click Network/Ports.
- 4 Click Certificate Management.

To enable and configure 802.1x on the EWS after installing the required certificates:

- 1 Open a Web browser. In the address line, enter the IP address of the MFP being configured using the format: http://ip\_address/.
- 2 Click Configuration.
- 3 Under Other Settings, click Network/Ports.
- 4 Click 802.1x Authentication.

**Note:** If an optional internal wireless print server is installed, click **Wireless** instead of 802.1x Authentication.

5 Select the check box next to **Active** to enable 802.1x Authentication.

- 6 Indicate the setting for each sub-item as required for the network environment.
- 7 Click Submit.

#### **Confidential Print Setup**

Confidential Print Setup allows the designation of a maximum number of PIN entry attempts and allows setting an expiration time for print jobs. When a user exceeds a specific number of PIN entry attempts, all of that user's print jobs are deleted. When a user has not printed their jobs within a designated time period, the print jobs are deleted. To activate Confidential Print Setup:

- 1 Open a Web browser. In the address line, enter the IP address of the MFP being configured using the format: http://ip\_address/.
- 2 Click Configuration.
- 3 Under Other Settings, click Security.
- 4 Click Confidential Print Setup.
- 5 Set the value for the maximum number of invalid PINs allowed. Set Job Expiration to the maximum amount of time before a submitted confidential print job is deleted.
- 6 Click Submit.

# Encrypting the hard disk

Warning: All resources on the hard disk will be deleted. Resources residing in flash memory or in RAM remain unaffected.

Note: This setting is only available on MFP models with an integrated internal hard disk drive.

- 1 Turn the MFP off. Wait 10 seconds.
- 2 Press and hold the 2 and 6 buttons on the numeric keypad while turning the MFP on.
- **3** Release the buttons when the touch screen blinks and is blank momentarily. Wait.

The Config Menu appears.

- 4 Touch the **down arrow** to scroll to **Disk Encryption**.
- 5 Touch the **right arrow** to enter the **Disk Encryption** menu.
- 6 Touch the **right arrow** next to **Enable** to encrypt the hard disk.

Contents will be lost. Continue? appears.

7 Touch **Yes** to continue the process.

The Encrypting Disk progress bar appears.

Warning: Do not power off the MFP until the process completes.

- 8 When hard disk encryption is finished, touch **Back** to return to the Config Menu.
- 9 Touch Exit Config Menu to exit.

To disable disk encryption:

- **1** Turn the MFP off. Wait 10 seconds.
- 2 Press and hold the 2 and 6 buttons on the numeric keypad while turning the MFP on.

- **3** Release the buttons when the touch screen blinks and is blank momentarily. Wait. The **Config Menu** appears.
- 4 Touch the **down arrow** to scroll to **Disk Encryption**.
- 5 Touch the **right arrow** to enter the **Disk Encryption** menu.
- 6 Touch the **right arrow** next to **Disable** to decrypt the hard disk. Contents will be lost. Continue? appears.
- 7 Touch Yes to continue the process.The Formatting Disk progress screen appears.

Warning: Do not power off the MFP until the process completes.

- 8 When hard disk decryption is finished, touch **Back** to return to the **Config Menu**.
- 9 Touch Exit Config Menu to exit.

# Hard disk wiping

Warning: All resources on the hard disk will be irretrievably deleted. (Resources residing in flash memory or in RAM remain unaffected.)

Note: This setting is only available on MFP models with an integrated internal hard disk drive.

- 1 Turn the MFP off. Wait 10 seconds.
- 2 Press and hold the 2 and 6 buttons on the numeric keypad while turning the MFP on.
- **3** Release the buttons when the touch screen blinks and is blank momentarily. Wait.

The Config Menu appears.

- 4 Touch the **down arrow** to scroll to Wipe Disk.
- 5 Touch the **right arrow** to enter the **Wipe Disk** menu.
- 6 Touch the **right arrow** next to Wipe Disk now to wipe the hard disk. Contents will be lost. Continue? appears.
- 7 Touch **Yes** to continue the process.

The Wiping Disk progress screen appears.

Warning: Do not power off the MFP until the process completes.

- 8 When hard disk wiping is finished, touch **Back** to return to the **Config Menu**.
- 9 Touch Exit Config Menu to exit.

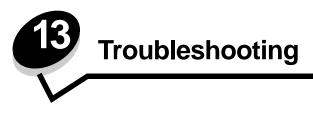
# Using the restricted server list function

The Restricted Server List lets a system support person restrict which hosts are allowed to communicate with the MFP over the network which prevents other hosts from managing and printing to the MFP.

**Note:** The Restricted Server List only restricts TCP traffic; it does not affect UDP traffic. The Restricted Server List supports up to ten host addresses or ten network addresses.

To configure the Restricted Server List from the EWS of the MFP:

- 1 Open a Web browser.
- 2 In the address line, enter the IP address of the MFP requiring configuration using the format: http://ip\_address/.
- 3 Click Configuration.
- 4 Under Other Settings, click Network/Ports.
- 5 Click TCP/IP.
- 6 Enter the list of addresses in the **Restricted Server List** field for network communications permission separated by commas in the following format: *111.222.333.444*. To indicate an entire subnet, provide the subnet mask bits in the format: *111.222.333.0/24*.
- 7 Click Submit.



# Understanding MFP messages

The MFP displays three types of messages: status messages, attendance messages, and service messages. Status messages provide information about the current state of the MFP. They require no action on your part. Attendance messages alert you to MFP problems that require your intervention. Service messages also alert you to problems that require intervention. However, the MFP will stop printing and the errors are non-recoverable. It may be possible to power the MFP off and back on to temporarily recover from the service message error condition. For more information about MFP messages, see the *Menus and Messages* Guide on the *Software and Documentation* CD.

If you receive the following message, see Ordering a print cartridge.

Message	Action		
42.xy Cartridge region mismatch <b>Note:</b> x = the MFP region, y = the cartridge region	Region codes a	ct cartridge for the l are: Cartridge region	MFP region. Location
	REGCDW REGCDA REGCDE REGCDR REGCDL	0 1 2 3 4	Worldwide USA and Canada EMEA Asia Pacific Region Latin America

# **Online technical support**

Technical support is available on our Lexmark Web site at www.lexmark.com.

# Checking an unresponsive MFP

If the MFP is not responding, first make sure:

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

Once you have checked each of these possibilities, turn the MFP off, wait at least 10 seconds, and then turn the MFP back on. This often fixes the problem.

# Printing multiple language PDFs

Symptom	Cause	Solution
Some documents do not print.	The documents contain unavailable fonts.	<ol> <li>Open the document you want to print in Adobe Reader.</li> <li>Click the printer icon. The Print dialog appears.</li> <li>Check the Print as image box.</li> <li>Click OK.</li> </ol>

# Solving printing problems

Symptom	Cause	Solution
The control panel display is blank.	The MFP self test failed.	Turn the MFP off, wait about 10 seconds, and turn the MFP back on. If the <b>Ready</b> message does not appear, turn the MFP off, and call for service.
The message USB device unsupported appears when using a USB device.	The USB device you are using may not be supported or has an error. Only specific USB flash memory devices are supported.	For information regarding tested and approved USB flash memory devices, see <b>Printing from a USB flash memory device</b> .
Jobs do not print.	The MFP is not ready to receive data.	Make sure <b>Ready</b> or <b>Power Saver</b> appears on the display before sending a job to print.
	The output bin is full.	Remove the stack of paper from the output bin.
	The specified input tray is empty.	Load paper in the tray.
	You are using the wrong MFP driver or are printing to a file.	<ul> <li>Verify you are using the MFP driver associated with the MFP.</li> <li>If you are using a USB port, make sure you are running Windows 98/Me, Windows 2000, Windows XP, or Windows Server 2003 and using a Windows 98/Me, Windows 2000, Windows XP, or Windows Server 2003 compatible MFP driver.</li> </ul>
	Your MarkNet™ N8000 series internal print server is not set up properly or is not connected properly.	Verify that you have properly configured the MFP for network printing. See the <i>Software and Documentation</i> CD or the Lexmark Web site for information.
	You are using the wrong interface cable, or the cable is not securely connected.	Make sure you are using a recommended interface cable. Make sure the connection is secure.

### Troubleshooting

Symptom	Cause	Solution
Held jobs do not print.	A formatting error has occurred.	<ul><li>Print the job. (Only part of the job may print.)</li><li>Delete the job.</li></ul>
	The MFP has insufficient memory.	<ul> <li>Free up additional MFP memory by scrolling through the list of held jobs and deleting others you have sent to the MFP.</li> </ul>
	The MFP 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.	Set <b>Page Protect</b> to Off under Settings $\rightarrow$ General Settings $\rightarrow$ Print Recovery.
		For more information, see the Menus and Messages Guide.
Job prints from the wrong tray or on the wrong paper or specialty media.	The control panel menu settings do not match the media loaded in the tray.	Make sure the Paper Size and Paper Type specified in the MFP driver match the paper size and type in the tray.
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. We recommend Lexmark part number 1329605 (10 ft) or 1427498 (20 ft) for the standard parallel port.
	The MFP is in Hex Trace mode.	If <b>Ready</b> Hex appears on the display, you must exit Hex Trace mode before you can print your job. Turn the MFP off, wait 10 seconds, and then turn the MFP back on to exit Hex Trace mode.
Tray linking does not work.	Tray linking is not configured properly.	<ul> <li>Make sure both the size and type of media are the same in both trays.</li> <li>Make sure the paper guides in the trays are set for the correct size media.</li> <li>Make sure the menu values for both size and type are set correctly in the Paper Menu.</li> <li>See Linking trays, or see the Menus and Messages Guide for more information.</li> </ul>
Large jobs do not collate.	Collate is not set to On.	Set <b>Collation</b> to on in the <b>Finishing Menu</b> or through the MFP driver.
		Note: Setting Collation to Off in the driver overrides the setting in the Finishing Menu.
		See the Menus and Messages Guide for more information.
	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 MFP does not have enough memory.	Add MFP memory.
Unexpected page breaks occur.	The job has timed out.	Set <b>Print Timeout</b> to a higher value from the <b>Setup Menu</b> . See the <i>Menus and Messages Guide</i> for more information.

# Solving copy quality problems

The following solutions will help solve copy problems. For additional information, see Copy tips.

Symptom	Solution	
Unwanted background is visible.	Adjust the Background Removal setting under Copy $\rightarrow$ Options $\rightarrow$ Advanced Imaging. Touch the right arrow to remove more background.	
Unwanted patterns (Moire) appear when a document is copied using Photograph mode.	Change the content mode to Printed Image under Copy $\rightarrow$ Options $\rightarrow$ Content.	
Black text is too light or disappearing.	<ul> <li>Change the content mode to Text under Copy → Options → Content.</li> <li>Adjust the Background Removal setting under Copy → Options → Advanced Imaging. Touch the left arrow to remove less background.</li> <li>Adjust the Contrast setting under Copy → Options → Advanced Imaging. Touch the right arrow to add more contrast.</li> <li>Adjust the Shadow Detail setting under Copy → Options → Advanced Imaging. Touch the left arrow to decrease shadow detail.</li> <li>Adjust the Darkness setting under the Copy menu. Touch the right arrow to increase the darkness setting.</li> </ul>	
The copy looks washed out or overexposed.	<ul> <li>Adjust the Background Removal setting under Copy → Options → Advanced Imaging. Touch the left arrow to remove less background.</li> <li>Adjust the Shadow Detail setting under Copy → Options → Advanced Imaging. Touch the left arrow to remove more shadow detail.</li> </ul>	

# Solving scan quality problems

The following solutions will help solve scan problems. For additional information, see Scanning tips.

Symptom	Solution
The file size is too big when I scan a document to the network.	<ul> <li>Touch Options, then under Resolution, decrease the output resolution.</li> <li>Touch Options, then under Content, change the Color option to black and white.</li> <li>Touch Options, then under Content, change the setting to Text.</li> </ul>
Text characters do not look sharp when I scan a document to the network.	<ul> <li>Touch Options, then under Resolution, increase the output resolution.</li> <li>Touch Options, then under Content, change the setting to Text.</li> </ul>
Black text is too light or disappearing.	<ul> <li>Adjust the Darkness setting. Touch the right arrow to increase the darkness setting.</li> <li>Change the content mode to Text.</li> <li>Adjust the Background Removal setting under Advanced Imaging. Touch the left arrow to remove less background.</li> <li>Adjust the Contrast setting under Advanced Imaging. Touch the right arrow to add more contrast.</li> <li>Adjust the Shadow Detail setting under Advanced Imaging. Touch the left arrow to decrease shadow detail.</li> </ul>
Unwanted background is visible.	Adjust the Background Removal setting under Advanced Imaging. Touch the right arrow to remove more background.

# Solving fax quality problems

The following solutions will help solve copy problems. For additional information, see Fax tips.

Symptom	Solution
The fax document takes a long time to transmit.	Touch <b>Options</b> , then under Content, change the setting to Text, and then set the resolution to Standard.
The images on the fax I sent are not clear.	Touch <b>Options</b> , then under Content, change the setting to Text/Photo or Photo. Increase the output resolution. <b>Note:</b> This will increase the amount of time required for the scan and will increase the quality of the fax output.

# Solving option problems

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

- Turn the MFP off, wait for about 10 seconds, and turn the MFP on. If this does not fix the problem, unplug the MFP, and check the connection between the option and MFP.
- Print the menu settings page, and check to see if the option is listed in the Installed Options list. If the option is not listed, reinstall it. See **Printing the menu settings page** for more information.
- Make sure the option is selected in the software application you are using.

The following table lists MFP options and suggested corrective actions for related problems. If the suggested corrective action does not fix the problem, call your service representative.

Option	Action
Drawers	<ul> <li>Make sure the connection between drawers (250-sheet drawer, 500-sheet drawer, or 2000-sheet drawer) or the connection between a drawer and a duplex unit or the MFP is secure.</li> <li>Make sure the print media is loaded correctly. See Loading standard trays and optional trays for more details.</li> </ul>
Duplex unit	<ul> <li>Make sure the connection between the duplex unit and the MFP is secure. If the duplex unit is listed on the menu settings page, but print media jams when it enters or exits the duplex unit, the MFP and duplex unit may not be properly aligned.</li> <li>Make sure the duplex front access cover is securely installed.</li> </ul>
Envelope feeder	<ul> <li>Make sure the connection between the envelope feeder and the MFP is secure.</li> <li>Make sure the Paper Size setting is correct in both the Paper menu and in the software application.</li> <li>Make sure the envelopes are loaded correctly. See Loading the envelope feeder for more details.</li> </ul>
Flash memory	Make sure flash memory is securely connected to the MFP system board.
Internal print server	<ul> <li>Make sure the internal print server (also called an internal network adapter or INA) is securely connected to the MFP system board.</li> <li>Make sure you are using the correct cable, that it is securely connected, and the network software is correctly set up.</li> <li>See the <i>Software and Documentation</i> CD that shipped with the MFP for more details.</li> </ul>
Large capacity feeder (2000-sheet drawer)	See Solving 2000-sheet drawer problems.
MFP memory	Make sure MFP memory is securely connected to the MFP system board.

## Solving 2000-sheet drawer problems

Problem	Solution
The elevator tray does not raise when the loading door is closed, or the elevator tray does not lower when the door is opened and the elevator button is pushed.	<ul> <li>Check the following:</li> <li>The MFP is properly attached to the 2000-sheet drawer.</li> <li>The MFP is powered on.</li> <li>The power cord is plugged firmly into the back of the 2000-sheet drawer.</li> <li>The power cord is plugged into an outlet.</li> <li>The outlet has power.</li> </ul>
The elevator tray lowers unexpectedly.	Check to see if the MFP is out of print media or has a jam.
More than one sheet of print media is fed, or a sheet is fed improperly.	Remove the print media in the MFP paper path, and check the stack to ensure the print media has been loaded properly. Be sure to remove the
A jam occurs.	top and bottom sheets of each ream of paper that is loaded.
Rubber feed rollers do not turn to advance print media.	<ul> <li>Check the following:</li> <li>The power cord is plugged firmly into the back of the 2000-sheet drawer.</li> <li>The power cord is plugged into an outlet.</li> <li>The outlet has power.</li> </ul>
Consistent misfeeds or jams in the drawer	<ul> <li>Try the following:</li> <li>Flex the paper.</li> <li>Turn the print media over.</li> <li>Check the following:</li> <li>Drawer is properly installed.</li> <li>Print media is loaded correctly.</li> <li>Print media is not damaged.</li> <li>Print media meets specifications.</li> <li>Guides are positioned correctly for the print media size selected.</li> </ul>
Service messages	A service message indicates an MFP failure that may require service. Turn the MFP off, wait about 10 seconds, and then turn the MFP on. If the error recurs, write down the error number, the problem, and a detailed description. Call for service.

# Solving paper feed problems

Symptom	Cause	Solution
Paper frequently jams.	You are using paper that does not meet the MFP specifications.	Use recommended paper and other specialty media. See the <i>Card Stock &amp; Label Guide</i> available on our Lexmark Web site at <b>www.lexmark.com</b> for detailed specifications. See <b>Avoiding jams</b> 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 in the tray or on the multipurpose feeder.
	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.
	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 <b>Storing print media</b> for more information.
	The pick rolls may be worn.	Replace the pick rolls. See <b>Ordering pick rollers</b> for more information.
The Paper Jam message remains after you remove the jammed paper.	You have not pressed <b>Continue</b> or have not cleared the entire paper path.	Clear the entire paper path, and then press <b>Continue</b> . See <b>Clearing jams</b> 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 <b>Jam Recovery</b> to Auto or On. See the <i>Menus and Messages Guide</i> for more information.
Blank pages feed into the output bin.	An incorrect media type is loaded in the tray being printed from.	Load the correct type media for your print job, or change the Paper Type to match the type of media loaded. See the <i>Menus and Messages Guide</i> for more information.
Original documents misfeed in the ADF.	The guides are not adjusted properly.	Adjust the guides toward the media until they lightly rest against the edge of the media.
	The pick roller mechanism may be worn.	Replace the roller mechanism. See <b>Ordering an ADF pick mechanism</b> for more information.
Multiple pages feed into the ADF.	The separator roll may be worn.	Replace the separator roll. See <b>Ordering an ADF separator roller</b> for more information.

# Print quality troubleshooting

To help isolate print quality problems, print the "Print defects guide," and check for repeating defects. If repeating defects appear, print the Print Quality Test Pages.

#### Printing the print defects guide

- **1** Touch the help icon (?).
- 2 Touch Print Defects Guide.

#### Printing the print quality test pages

- 1 Turn the MFP off.
- 2 Hold down the number 2 and number 6 keys on the numeric pad.
- **3** Continue to hold the buttons, and turn the MFP on.

Hold the buttons for about 10 seconds while the MFP is powering up, then release the buttons. The MFP enters the Configuration menu.

- 4 Touch Print Quality Pages.
- 5 Touch Exit Configuration Menu.

The printer restarts and returns to the home page.

# Solving print quality problems

The information in the following table may help you solve print quality problems. If these suggestions still do not correct the problem, call for service. You may have an MFP part that requires adjustment or replacement.

Problem	Action
Print is too light.	<ul> <li>The toner may be low. To utilize the remaining toner, remove the cartridge by gripping the handles with both hands. With the cartridge arrows pointing downward, firmly shake the print cartridge side-to-side and front-to-back several times to redistribute the toner. Reinstall the cartridge. Repeat this procedure multiple times until the print remains faded. When the print remains faded, replace the print cartridge.</li> <li>Change the <b>Toner Darkness</b> setting in the Quality menu.</li> <li>Change the <b>Brightness</b> setting in the Quality menu.</li> <li>Change the <b>Contrast</b> setting in the Quality menu.</li> <li>If you are printing on an uneven print surface, change the Paper Weight and Paper Texture settings in the Paper menu.</li> <li>Verify the correct print media is being used.</li> <li>Verify you are using the correct MFP drivers.</li> <li>Verify the environment is 16 to 32 degrees C (60 to 90<sup>o</sup> F).</li> </ul>
Toner smears or print comes off the page.	<ul> <li>If you are printing on an uneven print surface, change the Paper Weight and Paper Texture settings in the Paper menu.</li> <li>Verify the print media is within the MFP specifications. See Understanding paper and specialty media guidelines for more details.</li> </ul>
Toner appears on the back of the printed page.	Toner is on the transfer roll. To help prevent this, do not load print media that is smaller than the page size of the job to be printed. Open and close the MFP top front cover to run the MFP setup cycle and clean the transfer roll.
Toner fog or background shading appears on the page.	<ul> <li>Check the print cartridge to make sure it is installed correctly.</li> <li>The Toner Darkness setting may be too dark. Change the Toner Darkness setting in the Quality menu.</li> <li>Verify the environment is Class B.</li> <li>Replace the charge rolls.</li> <li>Replace the print cartridge.</li> </ul>

#### Troubleshooting

Problem	Action
Entire page is white.	<ul> <li>Make sure the packaging material is removed from the print cartridge.</li> <li>Check the print cartridge to be sure it is installed correctly.</li> <li>The toner may be low. To utilize the remaining toner, remove the cartridge by gripping the handles with both hands. With the cartridge arrows pointing downward, firmly shake the print cartridge side-to-side and front-to-back several times to redistribute the toner. Reinstall the cartridge. Repeat this procedure multiple times until the print remains faded. When the print remains faded, replace the print cartridge.</li> </ul>
Streaks appear on the page.	<ul> <li>The toner may be low. To utilize the remaining toner, remove the cartridge by gripping the handles with both hands. With the cartridge arrows pointing downward, firmly shake the print cartridge side-to-side and front-to-back several times to redistribute the toner. Reinstall the cartridge. Repeat this procedure multiple times until the print remains faded. When the print remains faded, replace the print cartridge.</li> <li>If you are using preprinted forms, make sure the ink can withstand temperatures of 230°C (446°F).</li> </ul>
Printing is too dark.	<ul> <li>Change the Toner Darkness setting in the Quality menu.</li> <li>Change the Brightness setting in the Quality menu.</li> <li>Change the Contrast setting in the Quality menu.</li> <li>Verify the environment is 16 to 32 degrees C (60 to 90° F).</li> <li>Note: Macintosh computer users should make sure the job lines per inch (lpi) setting is not set too high in the software application.</li> </ul>
Characters have jagged or uneven edges.	<ul> <li>Change the Print Resolution setting in the Quality menu to 600 dpi, 1200 Image Q, 1200 dpi, or 2400 Image Q.</li> <li>Enable Enhance Fine Lines.</li> <li>See the tables on page 135 for more settings information.</li> <li>If you are using downloaded fonts, verify the fonts are supported by the MFP, the host computer, and the software application.</li> <li>Verify the print media type and print tray type settings match.</li> <li>Verify you are using the correct MFP drivers.</li> <li>Verify the environment is 16 to 32 degrees C (60 to 90° F).</li> </ul>

#### Troubleshooting

Problem	Action
Part or all of the page is printed in black.	Check the print cartridge to see if it is installed correctly.
The job prints, but the top and side margins are incorrect.	<ul> <li>Make sure the <b>Paper Size</b> setting in the Paper menu is correct.</li> <li>Make sure the margins are set correctly in your software application.</li> </ul>
Ghost images appear.	<ul> <li>Make sure the Paper Type setting in the Paper menu is correct.</li> <li>Verify the environment is Class B.</li> <li>Replace the charge rolls.</li> <li>Replace the print cartridge.</li> </ul>
Some of the print is cut off on the sides, top, or bottom of the media. Print is skewed or inappropriately slanted.	Move the guides in the tray to the proper positions for the size loaded.
Transparency print quality is poor.	<ul> <li>Use only transparencies recommended by the MFP manufacturer.</li> <li>Make sure the <b>Paper Type</b> setting in the Paper menu is set to Transparency.</li> </ul>

The Quality menu control panel options can be adjusted to help improve print quality.

Menu selection	Purpose	Values <sup>†</sup>	
Print Resolution	To select printed output resolution	600 dpi* 1200 Image 1200 dpi 2400 Image	
Toner Darkness	Lightens or darkens printed output and alters toner consumption	110	8* is the default setting. Select a lower number to lighten the printed output or save toner.
Brightness	Adjusts the gray value of printed graphics and pictures	-6 -+6	<b>0</b> * is the default setting.
Contrast	Adjusts the contrast of printed graphics and pictures	0-5	<b>0</b> * is the default setting.
<sup>†</sup> Values marked by an asterisk (*) are the factory default settings.			

In addition, the Enhance Fine Lines and Gray Correction options can be enabled to improve print quality. These settings are available on the driver and on the MFP Embedded Web Server (EWS) interface. For more information about these options, see the driver Help.

to enable a print mode	On	
	011	In the driver, enable the check box.
preferable for certain files containing fine line detail, such as architectural drawings, maps, electronic circuit diagrams, and flow charts	Off*	In the driver, disable the check box.
Automatically adjusts the contrast enhancement applied to images	Auto	In the driver, enable the check box.
	Off*	In the driver, disable the check box.
	naps, electronic circuit nd flow charts Iy adjusts the contrast	Ily adjusts the contrast integration of flow charts Auto Off*



# **Conventions**

Note: A note identifies something that could help you.

CAUTION: A caution identifies something that could cause you harm.

Warning: A warning identifies something that could damage your product hardware or software.

# Electronic emission notices

#### Federal Communications Commission (FCC) compliance information statement

#### Part 15

The X644e and X646e machine types 7002-101, 7002-102, 7002-111, 7002-112, 7002-001, 7002-011, 7002-012, and 7002-002 have 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 for parallel attach or 12A2405 for USB attach. 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 ICES-003.

#### Avis de conformité aux normes de l'industrie du Canada

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement ICES-003 sur le matériel brouilleur du Canada.

#### European Community (EC) directives conformity

Declaration of Conformity with Regard to the EU Directive 1999/5/EC (R&TTE Directive) in languages of the European Community.

English	Hereby, Lexmark International Inc., declares that this Product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Suomi	Valmistaja Lexmark International Inc. vakuuttaa täten että Product tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
	Hierbij verklaart Lexmark International Inc. dat het toestel Product in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG
Nederlands	Bij deze verklaart Lexmark International Inc. dat deze Product voldoet aan de essentiële eisen en aan de overige relevante bepalingen van Richtlijn 1999/5/EC.
	Par la présente Lexmark International Inc. déclare que l'appareil Product est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE
Français	Par la présente, Lexmark International Inc. déclare que ce Product est conforme aux exigences essentielles et aux autres dispositions de la directive 1999/5/CE qui lui sont applicables
Svenska	Härmed intygar Lexmark International Inc. att denna Product står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/ 5/EG.
Dansk	Undertegnede Lexmark International Inc. erklærer herved, at følgende udstyr Product overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF
	Hiermit erklärt Lexmark International Inc., dass sich dieses Product in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet. (BMWi)
German	Hiermit erklärt Lexmark International Inc. die Übereinstimmung des Gerätes Product mit den grundlegenden Anforderungen und den anderen relevanten Festlegungen der Richtlinie 1999/ 5/EG. (Wien)
Ελληνικά	Με την παρούσα Lexmark International Inc. δηλώνει οτι Product συμμορφώνεται προς τις ουσιώδεις απαιτησεις και τις λοιπές σχετικές διατάξεις της οδηγίας 1999/5/ΕΚ.
Italiano	Con la presente Lexmark International Inc. dichiara che questo Product è conforme ai requisiti essenziali e alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Español	Por medio de la presente Lexmark International Inc. declara que el Product cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE
Português	Lexmark International Inc. declara que este Product está conforme com os requisitos essenciais e outras provisões da Directiva 1999/5/CE.
Česky	Lexmark International Inc. tímto prohlašuje, že tento výrobek s typovým oznacením Product vyhovuje základním požadavkům a dalším ustanovením směrnice 1999/5/ES, které se na tento výrobek vztahují.
Magyar	Lexmark International Inc. ezennel kijelenti, hogy ez a Product termék megfelel az alapvető követelményeknek és az 1999/5/EC irányelv más vonatkozó ndelkezéseinek.
Eesti	Käesolevaga kinnitab Lexmark International Inc. seadme Product vastavust direktiivi 1999/5/ EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.

Latviski	Ar šo Lexmark International Inc. deklarē, ka Product atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lithuanian	Lexmark International Inc. deklaruoja, kad irenginys Product tenkina 1999/5/EB Direktyvos esminius reikalavimus ir kitas sios direktyvos nuostatas
Maltese	B'dan, Lexmark International Inc., tiddikjara li t-Tagħmir huwa konformi mal-ħtiġijiet essenzjali u disposizzjonijiet rilevanti oħrajn tad-Direttiva 1999/5/KE.
Polski	Lexmark International Inc., deklarujemy z pelną odpowiedzialnością, że wyrób Product spełnia podstawowe wymagania i odpowiada warunkom zawartym w dyrektywie 1999/5/EC
Slovak	Lexmark International Inc. týmto vyhlasuje, že tento Product vyhovuje technickým požiadavkám a ďalším ustanoveniam smernice 1999/5/ES, ktoré sa na tento výrobok vz`ahujú.
Slovenščina	S tem dokumentom Lexmark International Inc., izjavlja, da je ta Product v skladu z bistvenimi zahtevami in z drugimi ustreznimi določili Direktive 1999/5/EC

This product is in conformity with the protection requirements of EC Council directives 89/336/EEC, 73/23/EEC, and 1999/ 5/EC 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 and on radio equipment and telecommunications terminal equipment. The Official Declaration of Conformity may be viewed at www.lexmark.com/rtte.

Compliance is indicated by the following CE marking:

# CE

#### **Radio interference notice**

Warning: 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. This Class A digital device is marketed for use in a commercial, industrial or business environment, and not intended for use in homes, or a home office.

#### **CCC EMC notice**

**声 明** 此为A级产品,在生活环境中,该产品可能会造成无线电干扰。在这种情况下,可能需要用户对其 干扰采取切实可行的措施

#### Japanese VCCI notice

If this statement appears on your product, the following statement is applicable.

この装置は、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。 VCCI-A

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。

#### Korean MIC statement

If this symbol appears on your product, the accompanying statement is applicable.



이 기기는 업무용으로 형식승인/전자파적합등록을 한 기기이오니 판매자 또는 사용자는 이 점을 주의하시기 바라며 만약 잘못 판매 또는 구입하였을 때에는 가정용으로 교환하시기 바랍니다.

This equipment has undergone Type Approval/EMC registration as a business product. It should not be used in a residential area.

#### **BSMI EMC notice**

If this statement appears on your product, the accompanying statement is applicable.

警告使用者:
這是甲類的資訊產品,在居住的環境中使用時,可能會造成無線
電干擾,在這種情況下,使用者會被要求採取某些適當的對策。

#### Part 68

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the Administrative Council for Terminal Attachments (ACTA). On the back of this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. If requested, this number must be provided to your telephone company.

This equipment uses the RJ-11C Universal Service Order Code (USOC) jack.

A plug and jack used to connect this equipment to the premises' wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See the *Setup Sheet* for more information.

The Ringer Equivalence Number (REN) is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact your local telephone company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX. The digits represented by ## are the REN without a decimal point (for example, 03 is a REN of 0.3). For earlier products, the REN is shown separately on the label.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice is not practical, the telephone company will notify the customer as soon as possible. You will also be advised of your right to file a complaint with the FCC.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of this equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

If you experience trouble with this equipment, for repair or warranty information, contact Lexmark International, Inc. at www.Lexmark.com or your Lexmark representative. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

This equipment contains no user serviceable parts. For repair and warranty information, contact Lexmark International, Inc. See the previous paragraph for contact information.

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission, or corporation commission for information.

If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this equipment does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

Telephone companies report that electrical surges, typically lightning transients, are very destructive to customer terminal equipment connected to AC power sources. This has been identified as a major nationwide problem. It is recommended that the customer install an appropriate AC surge arrestor in the AC outlet to which this device is connected. An appropriate AC surge arrestor is defined as one that is suitably rated, and certified by UL (Underwriter's Laboratories), another NRTL (Nationally Recognized Testing Laboratory), or a recognized safety certification body in the country/region of use. This is to avoid damage to the equipment caused by local lightning strikes and other electrical surges.

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including fax machines, to send any message unless said message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business or other entity, or other individual sending the message, and the telephone number of the sending machine or such business, other entity, or individual. (The telephone number provided may not be a 900 number or any other number for which charges exceed local or long-distance transmission charges.)

See the section in this publication entitled Fax setup in order to program this information into your fax machine.

## Other telecommunications notices

#### Notice to users of the Canadian telephone network

This product meets the applicable Industry Canada technical specifications.

The Ringer Equivalence Number (REN) is an indication of the maximum number of terminals allowed to be connected to a telephone interface. The terminus of an interface may consist of any combination of devices, subject only to the requirement that the sum of the RENs of all the devices does not exceed five. The modem REN is located on the rear of the equipment on the product labeling.

Telephone companies report that electrical surges, typically lightning transients, are very destructive to customer terminal equipment connected to AC power sources. This has been identified as a major nationwide problem. It is recommended that the customer install an appropriate AC surge arrestor in the AC outlet to which this device is connected. An appropriate AC surge arrestor is defined as one that is suitably rated, and certified by UL (Underwriter's Laboratories), another NRTL (Nationally Recognized Testing Laboratory), or a recognized safety certification body in the country/region of use. This is to avoid damage to the equipment caused by local lightning strikes and other electrical surges.

This equipment uses CA11A telephone jacks.

#### Notice to users of the New Zealand telephone network

The following are special conditions for the Facsimile User Instructions.

The grant of a telepermit for any item of terminal equipment indicates only that Telecom has accepted that the item complies with minimum conditions for connection to its network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any item will work correctly in all respects with another item of telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom's network services.

This equipment shall not be set up to make automatic calls to the Telecom's 111 Emergency Service.

This equipment may not provide for the effective hand-over of a call to another device connected to the same line.

This equipment should not be used under any circumstances that may constitute a nuisance to other Telecom customers.

Some parameters required for compliance with Telecom's telepermit requirements are dependent on the equipment associated with this device. The associated equipment shall be set to operate within the following limits for compliance to Telecom's specifications:

- There shall be no more than 10 call attempts to the same number within any 30 minute period for any single manual call initiation, and
- The equipment shall go on-hook for a period of not less than 30 seconds between the end of one attempt and the beginning of the next call attempt.
- The equipment shall be set to ensure that automatic calls to different numbers are spaced such that there is not less than 5 seconds between the end of one call attempt and the beginning of another.

#### South Africa telecommunications notice

This modem must be used in conjunction with an approved surge protection device when connected to the PSTN.

#### Using this product in Germany

This product requires a German billing tone filter (Lexmark part number 14B5123) to be installed on any line which receives metering pulses in Germany. Metering pulses may or may not be present on analog lines in Germany. The subscriber may request that metering pulses be placed on the line, or can have them removed by calling the German network provider. Normally, metering pulses are not provided unless specifically requested by the subscriber at the time of installation.

#### Using this product in Switzerland

This product requires a Swiss billing tone filter (Lexmark part number 14B5109) to be installed on any line which receives metering pulses in Switzerland. The Lexmark filter must be used, as metering pulses are present on all analog telephone lines in Switzerland.

#### Notices

#### Noise emission levels

#### German GS mark notice

Model: X644e, X646e

Machine types: 7002-101, 7002-102, 7002-111, 7002-112, 7002-001, 7002-011, 7002-012, and 7002-002

#### Mailing address

Lexmark Deutschland GmbH Postfach 1560 63115 Dietzenbach

#### Physical address

Lexmark Deutschland GmbH Max-Planck-Straße 12 63128 Dietzenbach

Phone: 0180 - 564 56 44 (Product Information)Phone: 01805 - 00 01 15 (Technical Support)E-mail: internet@lexmark.de

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

1-meter average sound pressure, dBA			
	MFP Model		
	X644	X646e	
Printing	53	56	
Idling	30	30	
Scanning	51	53	
Copying	56	57	

## **ENERGY STAR**



# Waste from Electrical and Electronic Equipment (WEEE) directive



The WEEE logo signifies specific recycling programs and procedures for electronic products in countries of the European Union. We encourage the recycling of our products. If you have further questions about recycling options, visit the Lexmark Web site at **www.lexmark.com** for your local sales office phone number.

# Laser advisory label

A laser notice label may be affixed to this MFP.

## LUOKAN 1 LASERLAITE

**VAROITUS**! Laitteen käyttäminen muulla kuin tässä käyttoohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

#### **KLASS 1 LASER APPARAT**

VARNING! Om apparaten används på annat sätt än i denna bruksanvisning specificerats, kan avnändaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

# Laser notice

This MFP 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 MFP 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 MFP 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.



#### **Numerics**

42.xy Cartridge region mismatch 124

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