HP LaserJet M4349x MFP User Guide







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Table of contents

1	Device basics	
	Device introduction	2
	Features comparison	3
	Walkaround	7
	Accessories and supplies	8
	Interface ports	9
	Locking and unlocking optional accessories	9
	Device software	11
	Supported operating systems	11
	Supported printer drivers	11
	Select the correct printer driver	12
	Universal printer drivers	12
	Driver Autoconfiguration	12
	Update Now	13
	HP Driver Preconfiguration	13
	Priority for print settings	13
	Open the printer drivers	14
	Software for Macintosh computers	15
	Remove software from Macintosh operating systems	15
	Utilities	16
	HP Web Jetadmin	16
	Embedded Web server	16
	Other components and utilities	16
2	Control Panel	
	Use the control panel	18
	Control-panel layout	18
	Home screen	19
	Buttons on the touchscreen	20
	Control-panel help system	20
	Navigate the Administration menu	
	Information menu	22
	Default Job Options menu	23
	Default Options for Originals	23

	Default Copy Options	24
	Default Fax Options	25
	Default E-mail Options	26
	Default Send to Folder Options	27
	Default Print Options	28
	Time/Scheduling menu	29
	Management menu	31
	Initial Setup menu	32
	Networking and I/O	
	Fax Setup	40
	E-mail Setup	43
	Send Setup menu	43
	Device Behavior menu	44
	Print Quality menu	48
	Troubleshooting menu	50
	Resets menu	54
	Service menu	55
3 Inj	put/output (I/O)	
	USB configuration	58
	Network configuration	59
	Configure TCP/IPv4 parameters	59
	Set an IP address	59
	Set the subnet mask	60
	Set the default gateway	60
	Configure TCP/IPv6 parameters	61
	Disable network protocols (optional)	61
	Disable IPX/SPX	61
	Disable AppleTalk	62
	Disable DLC/LLC	62
	HP Jetdirect EIO print servers	62
4 Me	edia and trays	
	General media specifications	64
	General guidelines for media	65
	Paper to avoid	65
	Paper that can damage the device	65
	General media specifications	66
	Media considerations	67
	Envelopes	67
	Envelopes with double side seams	67
	Envelopes with adhesive strips or flaps	68
	Envelope margins	68

iv ENWW

Envelope storage	68
Labels	68
Label construction	69
Transparencies	69
Card stock and heavy media	69
Card stock construction	69
Card stock guidelines	69
Letterhead and preprinted forms	70
Select the correct fuser mode	70
Select print media	72
Printing and paper-storage environment	77
Load media	78
Load the flatbed scanner	78
Load the ADF	78
Load tray 1	78
Load trays 2, 3, 4 and 5	79
Load special media	83
Load envelopes	83
Load labels	84
Load transparencies	85
Load letterhead, prepunched, or preprinted paper	85
Load paper that has a special finish	86
Load small sizes, custom sizes, or heavy paper	87
Weight and sizes	87
Guidelines for heavy paper	87
Guidelines for custom-size paper	87
Additional guidelines for small or narrow paper	87
Control print jobs	88
Select output bins	89
Select an output location	89
3-bin mailbox output bins	89
Selecting face-up or face-down output for copy jobs	89
5 Use device features	
Use the stapler	92
Configure the printer driver to recognize the optional stapler	92
Staple media	92
Load staples	94
Use job storage features	96
Gain access to the job storage features	96
Use the proof and hold feature	96
Create a proof and hold job	96
Print the remaining copies of a proof and hold job	97

ENWW

	Delete a proof and hold job	97
	Use the private job feature	98
	Create a private job	98
	Print a private job	98
	Delete a private job	98
	Use the QuickCopy feature	99
	Create a QuickCopy job	99
	Print additional copies of a QuickCopy job	99
	Delete a QuickCopy job	99
	Use the stored job feature	100
	Create a stored copy job	100
	Create a stored print job	100
	Print a stored job	100
	Delete a stored job	101
6 Print		
	Use features in the Windows printer driver	104
	Create and use quick sets	104
	Use watermarks	104
	Resize documents	105
	Set a custom paper size from the printer driver	106
	Use different paper and printing covers	106
	Print a blank first page	106
	Print multiple pages on one sheet of paper	107
	Print on both sides of the paper	108
	Use automatic duplex printing	108
	Print on both sides manually	109
	Layout options for printing on both sides	109
	Use features in the Macintosh printer driver	110
	Create and use presets	110
	Print a cover page	111
	Print multiple pages on one sheet of paper	111
	Print on both sides of the paper	112
	Cancel a print job	113
	Stop the current print job from the control panel	113
	Stop the current print job from the software program	113
7 Copy		
	Use the Copy screen	116
	Set the default copy options	117
	Basic copy instructions	118
	Copy from the scanner glass	118
	Copy from the document feeder	118

vi ENWW

	Adjust the copy settings	119
	Copy two-sided documents	120
	Copying two-sided documents manually	120
	Copy two-sided documents automatically (duplex models only)	120
	Copy mixed-size originals	122
	Change the copy-collation setting	123
	Copy photos and books	124
	Combine copy jobs by using Job Build	125
	Cancel a copy job	126
8 Scan	and send to e-mail	
	Configure e-mail settings	128
	Supported protocols	128
	Configure e-mail server settings	128
	Find gateways	129
	Find the SMTP gateway from the device control panel	129
	Find the SMTP gateway from an e-mail program	129
	Use the Send E-mail screen	130
	Perform basic e-mail functions	131
	Load documents	131
	Send documents	131
	Send a document	131
	Use the auto-complete function	132
	Use the address book	133
	Create a recipient list	133
	Use the local address book	133
	Add e-mail addresses to the local address book	134
	Delete e-mail addresses from the local address book	134
	Change e-mail settings for the current job	135
	Scan to a folder	136
	Scan to a workflow destination	137
9 Fax		
	Analog fax	140
	Install the fax accessory	140
	Connect the fax accessory to a phone line	142
	Configure and use the fax features	142
	Digital fax	143
10 Mar	nage and maintain the device	
	Use information pages	146
	Configure e-mail alerts	148
	Use the embedded Web server	149

ENWW vii

	Open the embedded Web server by using a network connection	149
	Embedded Web server sections	150
	Use HP Web Jetadmin software	152
	Use the HP Printer Utility for Macintosh	153
	Open the HP Printer Utility	153
	HP Printer Utility features	153
	Manage supplies	154
	Supplies life expectancy	154
	Change the print cartridge	154
	Manage the print cartridge	154
	Print-cartridge storage	154
	Use genuine HP print cartridges	154
	HP policy on non-HP print cartridges	154
	Print-cartridge authentication	155
	HP fraud hotline and Web site	155
	Clean the device	156
	Clean the exterior	156
	Clean the scanner glass	156
	Clean the scanner lid backing	157
	Clean the paper path	157
	Clean the document feeder	157
	Clean the document feeder delivery system	158
	Clean the document feeder-rollers	158
	Calibrate the scanner	161
11 Pr	roblem solving	
	Problem-solving checklist	164
	Factors that affect performance	164
	Problem-solving flowchart	165
	Solve general device problems	170
	Control-panel message types	173
	Control-panel messages	174
	Common causes of jams	183
	Clear jams	184
	Clear jams from the top-cover and print-cartridge areas	185
	Clear jams from the optional envelope-feeder area	187
	Clear jams from the tray 1 area	188
	Clear jams from the tray 2, 3, 4, or 5 areas	190
	Clear jams from the optional duplexer	191
	Clear jams from the output areas	193
	Clear jams from the fuser	194
	Clear jams from the document feeder	197
	Solve repeated jams	198

viii ENWW

	Paper-path test	198
Clear sta	aple jams	199
Solve pr	int-quality problems	201
	Print-quality problems associated with media	201
	Print-quality problems associated with the environment	201
	Print-quality problems associated with jams	201
	Image defect examples	201
	Light print (partial page)	203
	Light print (entire page)	203
	Specks	203
	Dropouts	204
	Lines	204
	Gray background	204
	Toner smear	205
	Loose toner	205
	Repeating defects	206
	Repeating image	206
	Misformed characters	206
	Page skew	207
	Curl or wave	207
	Wrinkles or creases	208
	Vertical white lines	208
	Tire tracks	208
	White spots on black	209
	Scattered lines	209
	Blurred print	210
	Random image repetition	210
Solve ne	etwork printing problems	211
Solve co	py problems	212
	Prevent copy problems	212
	Image problems	212
	Media-handling problems	213
	Performance problems	214
Solve fa	x problems	216
	Solve sending problems	216
	Solve receiving problems	217
Solve e-	mail problems	219
	Validate the SMTP gateway address	219
	Validate the LDAP gateway address	219
Solve co	mmon Windows problems	220
Solve co	mmon Macintosh problems	221
Solve Lii	nux problems	224
Solve Po	ostScript problems	225
	General problems	225

Appendix A Accessories and consumables

	Order parts, accessories, and supplies	228
	Part numbers	229
	Accessories	229
	Print cartridges	229
	Maintenance kits	230
	Memory	230
	Cables and interfaces	230
	Print media	230
Append	dix B Specifications	
	Physical specifications	234
	Electrical specifications	
	Acoustic specifications	
	Operating environment	
Append	dix C Regulatory information	
	FCC regulations	238
	Environmental product stewardship program	
	Protecting the environment	
	Ozone production	
	Power consumption	
	Toner consumption	
	Paper use	
	Plastics	
	HP LaserJet print supplies	
	HP print supplies returns and recycling program information	
	Paper	
	Material restrictions	241
	Disposal of waste equipment by users in private households in the European Union	241
	Material Safety Data Sheet (MSDS)	242
	For more information	242
	Telecom statement	243
	Declaration of conformity	244
	Safety statements	245
	Laser safety	245
	Canadian DOC regulations	245
	VCCI statement (Japan)	245
	Power cord statement (Japan)	245
	EMC statement (Korea)	245
	Laser statement for Finland	245

x ENWW

Appendix D Working with memory and print server cards

	Overview	248
	Adding printer memory	249
	Installing printer memory	249
	Checking DIMM installation	252
	Save resources (permanent resources)	253
	Enabling memory for Windows	254
	Using HP Jetdirect print server cards	255
	Install an HP Jetdirect print server card	255
	Remove an HP Jetdirect print server card	256
ndex		257

ENWW

xii ENWW

1 Device basics

- Device introduction
- Features comparison
- Walkaround
- Device software

Device introduction

Figure 1-1 HP LaserJet M4349x MFP



The HP LaserJet M4349x comes standard with the following items:

- 100-sheet input tray (tray 1)
- 500-sheet input tray (tray 2)
- Automatic document feeder (ADF) that holds up to 50 pages
- HP Jetdirect embedded print server for connecting to a 10/100Base-T network
- 256 megabytes (MB) synchronous dynamic random access memory (SDRAM)
- Automatic duplex printing accessory (duplexer)
- Additional 500-sheet feeder (tray 3)
- 33.6 kbps analog-fax accessory

Features comparison

Feature	HP LaserJet M4349x
Functions	Two-sided copying (duplexing)
	Image modification
	Color digital sending
	 Document finishing
Speed and throughput	 45 pages per minute (ppm) when scanning and printing on letter-size paper; 43 ppm when copying and printing on A4-size paper
	 25% to 400% scalability when using the scanner glass
	 25% to 200% scalability when using the automatic document feeder (ADF)
	 Less than 10 seconds to print the first page
	 Transmit Once, Raster Image Processing (RIP) ONCE technology
	 Duty cycle of up to 200,000 pages per month
Resolution	 1200 dots per inch (dpi) with Resolution Enhancement technology (REt)
	 FastRes1200 provides 1200 dpi quality at full speed
	 Up to 220 levels of gray
Memory	 256 megabytes (MB) of random-access memory (RAM), expandable to 512 MB by using an industry standard 100- pin double data rate memory module (DDR SDRAM DIMM)
	 Memory Enhancement technology (MEt) that automatically compresses data to use RAM more efficiently
User interface	Graphical touchscreen control panel
	 An embedded Web server to gain access to support (for network-connected products)
Drivers	HP provides the following drivers for downloading:
	 HP Universal Print Driver (UPD): Postscript, PCL 6, PCL 5
	Mac Driver
	• Linux
	• SAP
	UNIX Model Script
	To download the drivers, to go www.hp.com/go/ljm4349mfp_software

ENWW Features comparison

Language and fonts	HP PCL 6
	HP PCL 5
	Printer Management Language
	• PDF
	 XHTML
	80 scalable TrueType typefaces
	HP Postscript 3 emulation
Copying and sending	 Modes for text, graphics, and mixed text and graphics formats
	 A job-interrupt feature (at copy boundaries)
	 Xenon lamp for instant-on copying
	 Multiple pages per sheet
	 Operator attendance animations (for example, jam recovery)
	E-mail compatibility
	 A sleep feature that saves energy
	 Automatic duplex (two-sided) scanning
	NOTE: An automatic duplex printing accessory is required for two-sided copying.
	NOTE: To use e-mail functionality, the device must be connected to an IP-based server that has simple mail transfer protocol (SMTP). This server can be on the local area network or at an outside Internet service provider (ISP). HP recommends that the device be located on the same local area network (LAN) as the SMTP server. If you are using an ISP, you must connect to the ISP by using a digital subscriber line (DSL) connection. If you obtain e-mail services from an ISP, ask the ISP to provide the correct SMTP address.
	Dial-up connections are not supported. If you do not have an SMTP server on your network, you can purchase third-party software that allows you to create an SMTP server.
Print cartridge	 Prints up to 18,000 pages at 5% coverage.
	 No-shake cartridge design
	 Authentic HP print cartridge detection

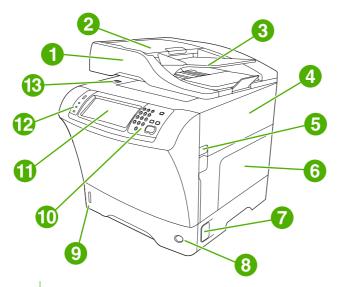
Paper Input	 Tray 1 (multipurpose tray): A multipurpose tray for paper, transparencies, labels, and envelopes. Holds up to 100 sheets of paper or 10 envelopes.
	 Tray 2 and optional trays 3, 4, and 5: 500-sheet trays. These trays automatically detect standard paper sizes up to Legal and accommodate printing on custom-size paper.
	 Automatic document feeder (ADF): Holds up to 50 sheets of paper.
	 Duplex printing and copying: With the optional duplexing accessory, provides two-sided printing and copying (printing on both sides of the paper).
	 ADF duplex scanning: The ADF has an automatic duplex feature for scanning two-sided documents.
	 Optional envelope feeder: Holds up to 75 envelopes.
Paper output	 Standard output bin: The standard output bin is located on the left side of the device. This bin can hold up to 500 sheets of paper.
	 ADF output bin: The ADF output bin is underneath the ADF input tray. The bin holds up to 50 sheets, and the device automatically stops when this bin is full.
	 Optional stapler/stacker: The stapler/stacker staples up to 30 sheets and stacks up to 500 sheets.
	 Optional 3-bin mailbox: One bin stacks up to 500 sheets, and two bins stack up to 100 sheets each for a total capacity of 700 sheets.
Connectivity	 Local area network (LAN) connector (RJ-45) for the embedded HP Jetdirect print server
	Optional analog-fax card
	 Optional HP Digital Sending Software (DSS)
	High-speed USB 2.0
	 Jetlink for paper handling solutions
	 Optional HP Jetdirect enhanced input/output (EIO) print server cards:
	∘ LocalTalk
	 Fast Ethernet 10/100TX
	 Ethernet 802.11b wireless
	 Bluetooth wireless printer adapter
	∘ Infrared adapter

ENWW Features comparison

5

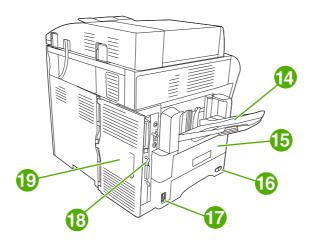
Environmental features	•	The Sleep setting saves energy (meets ENERGY STAR guidelines).
Security features	•	Secure Disk Erase
	•	Security lock
	•	Job retention
	•	DSS authentication

Walkaround



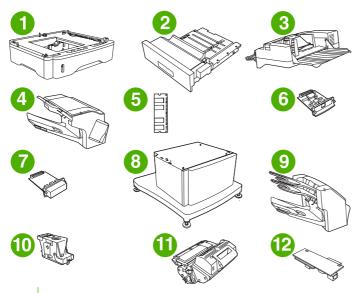
- 1 Document-feeder assembly
- 2 Document-feeder top cover
- 3 Document-feeder input tray
- 4 Top cover (provides access to the print cartridge)
- 5 Top-cover lever
- 6 Tray 1 (multipurpose tray)
- 7 Jam-access lever
- 8 Tray-number indicator
- 9 Paper-level indicator
- 10 Control-panel keypad
- 11 Control-panel display
- 12 Control-panel status lights
- 13 Scanner lock

ENWW Walkaround



14	Output bin
15	Optional duplexer
16	On/off switch
17	Power connection
18	Interface ports
19	Formatter cover (provides access to the memory DIMM slot, hard disk, and analog-fax accessory)

Accessories and supplies



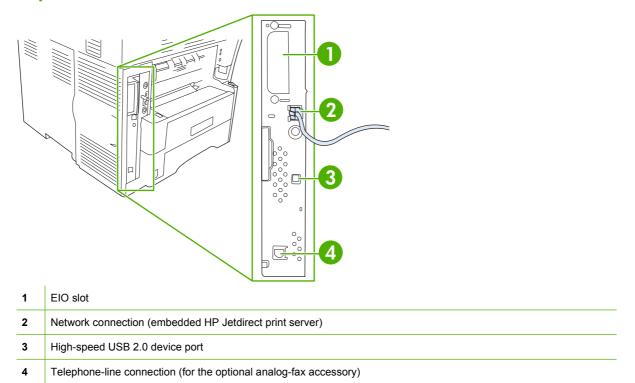
- 1 500-sheet feeder (Q5968A) (See the note that follows)
- 2 Duplexer (Q5969A)
- 3 Envelope feeder (Q2438B)
- 4 Stapler/stacker (Q5691A)

5	Memory DIMM
6	HP Jetdirect print server (EIO card)
7	Hard-disk accessory (EIO card)
8	Storage cabinet/stand (Q5970A)
9	3-bin mailbox (Q5692A)
10	Staple cartridge (C8091A)
11	Print cartridge (CE267C)
12	HP LaserJet Analog Fax Accessory 300 (Q3701A)

See Order parts, accessories, and supplies on page 228 for information about ordering accessories and supplies.

NOTE: The device accommodates up to three optional 500-sheet feeders. HP recommends using a cabinet when using the optional 500-sheet feeders.

Interface ports

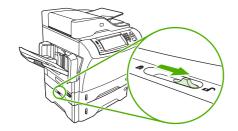


Locking and unlocking optional accessories

For more stability to prevent the device from tipping over, the optional 500-sheet feeders and the cabinet are automatically locked to the bottom of the device. When accessories are installed, verify that the lock on each accessory is in the rear (locked) position.

To unlock the accessories, slide the lever to the forward (unlocked) position.

ENWW Walkaround



Device software

The printing-system software is only available for download from the Web. See the getting started guide for installation instructions.

The printing system includes software for end users and network administrators, and printer drivers for access to the features and communication with the computer.

NOTE: For a list of printer drivers and updated software, go to www.hp.com/go/lim4349mfp software.

Supported operating systems

The device supports the following operating systems:

Full software installation

- Windows XP (32-bit and 64-bit)
- Windows Server 2003 (32-bit and 64-bit)
- Windows Server 2008 (32-bit and 64-bit)
- Windows 2000
- Mac OS X V10.3, V10.4 and later

Printer driver only

- Linux (Web only)
- UNIX model scripts (Web only)

NOTE: For Mac OS V10.4 and later, PPC and Intel Core Processor Macs are supported.

Supported printer drivers

Operating system	PCL 5	PCL 6	Postscript level 3 emulation
Windows	V	V	V
Mac OS X V10.3, V10.4 and later			V
Linux ¹			✓

For Linux, download the postscript level 3 emulation driver from www.hp.com/go/linuxprinting.

The printer drivers include online Help that has instructions for common printing tasks and also describes the buttons, checkboxes, and drop-down lists that are in the printer driver.

ENWW Device software 11

Select the correct printer driver

Printer drivers allow you to gain access to the device features and allow the computer to communicate with the device (using a printer language).

The device uses the PCL 5, PCL 6, and HP postscript level 3 emulation printer description language (PDL) drivers.

- Use the PCL 6 printer driver for the best overall performance.
- Use the PCL 5 printer driver for general office printing.
- Use the HP postscript level 3 emulation driver for printing from postscript level 3 emulation needs, or for postscript flash font support.

Universal printer drivers

The HP Universal Print Driver Series for Windows includes separate HP postscript level 3 emulation and HP PCL 5 versions of a single driver that provides access to almost any HP device while providing system administrator with tools to manage devices more effectively. For more information, go to www.hp.com/go/universalprintdriver.

Driver Autoconfiguration

The HP LaserJet PCL 5, PCL 6, and PS level 3 emulation drivers for Windows 2000 and Windows XP feature automatic discovery and driver configuration for device accessories at the time of installation. Some accessories that the Driver Autoconfiguration supports are the duplexing unit, optional paper trays, and dual inline memory modules (DIMMs).

Update Now

If you have modified the device configuration since installation, the driver can be automatically updated with the new configuration. In the **Properties** dialog box (see Open the printer drivers on page 14), on the **Device Settings** tab, click the **Update Now** button to update the driver.

HP Driver Preconfiguration

HP Driver Preconfiguration is a software architecture and set of tools that you can use to customize and distribute HP software in managed corporate printing environments. Using HP Driver Preconfiguration, information technology (IT) administrators can preconfigure the printing and default settings for HP printer drivers before installing the drivers in the network environment. For more information, see the *HP Driver Preconfiguration Support Guide*, which is available at www.hp.com/go/hpdpc sw.

Priority for print settings

Changes to print settings are prioritized depending on where the changes are made:

NOTE: The names of commands and dialog boxes might vary depending on your software program.

- Page Setup dialog box: Click Page Setup or a similar command on the File menu of the program
 you are working in to open this dialog box. Settings changed here override settings changed
 anywhere else.
- Print dialog box: Click Print, Print Setup, or a similar command on the File menu of the program
 you are working in to open this dialog box. Settings changed in the Print dialog box have a lower
 priority and do not override changes made in the Page Setup dialog box.
- Printer Properties dialog box (printer driver): Click Properties in the Print dialog box to open
 the printer driver. Settings changed in the Printer Properties dialog box do not override settings
 anywhere else in the printing software.
- Default printer driver settings: The default printer driver settings determine the settings used in all print jobs, unless settings are changed in the Page Setup, Print, or Printer Properties dialog boxes.
- Printer control panel settings: Settings changed at the printer control panel have a lower priority than changes made anywhere else.

ENWW Device software 13

Open the printer drivers

Operating System	pri	change the settings for all nt jobs until the software gram is closed			To change the device configuration settings		
Windows 2000, XP, Server 2003, and Server 2008	1.	On the File menu in the software program, click Print .	1.	Click Start, click Settings, and then click Printers or Printers and Faxes.	1.	Click Start, click Settings, and then click Printers or Printers and Faxes.	
	2.	Select the driver, and then click Properties or Preferences .	2.	Right-click the driver icon, and then select Printing Preferences .	2.	Right-click the driver icon, and then select Properties .	
		e steps can vary; this cedure is most common.			3.	Click the Device Settings tab.	
Mac OS X V10.3, V10.4 and later	1.	On the File menu, click Print.	1.	On the File menu, click Print .	1.	In the Finder, on the Go menu, click Applications .	
	2.	Change the settings that you want on the various pop-up menus.	2.	Change the settings that you want on the various pop-up menus.	2.	Open Utilities , and then open Printer Setup Utility .	
		pop up monuo.			3.	Click on the print queue.	
			3.	On the Presets pop-up menu, click Save as and type a name for the preset.	4.	On the Printers menu, click Show Info .	
			These settings are saved in the Presets menu. To use the new		5.	Click the Installable Options menu.	
			sav	settings, you must select the saved preset option every time you open a program and print.		TE: Configuration settings tht not be available in Classic de.	

Software for Macintosh computers

The HP installer provides PostScript Printer Description (PPD) files, Printer Dialog Extensions (PDEs), and the HP Printer Utility for use with Macintosh computers.

For network connections, use the embedded Web server (EWS) to configure the device. See <u>Embedded Web server on page 16</u>.

The printing system software includes the following components:

PostScript Printer Description (PPD) files

The PPDs, in combination with the Apple PostScript printer drivers, provide access to device features. Use the Apple PostScript printer driver that comes with the computer.

HP Printer Utility

Use the HP Printer Utility to set up device features that are not available in the printer driver:

- Name the device.
- Assign the device to a zone on the network.
- Assign an internet protocol (IP) address to the device.
- Download files and fonts.
- Configure the device for IP or AppleTalk printing.

You can use the HP Printer Utility when your device uses a universal serial bus (USB) cable or is connected to a TCP/IP-based network. For more information, see <u>Use the HP Printer Utility for Macintosh on page 153</u>.

NOTE: The HP Printer Utility is supported for Mac OS X V10.3 or later.

Remove software from Macintosh operating systems

To remove the software from a Macintosh computer, drag the PPD files to the trash can.

ENWW Device software 15

Utilities

The device is equipped with several utilities that make it easy to monitor and manage the device on a network.

HP Web Jetadmin

HP Web Jetadmin is a browser-based management tool for HP Jetdirect-connected printers within your intranet, and it should be be installed only on the network administrator's computer.

NOTE: HP Web Jetadmin 10.0 or later is required for full support of this product.

To download a current version of HP Web Jetadmin and for the latest list of supported host systems, visit www.hp.com/go/webjetadmin.

When installed on a host server, any client can gain access to HP Web Jetadmin by using a supported Web browser (such as Microsoft® Internet Explorer 4.x or Netscape Navigator 4.x or later) by navigating to the HP Web Jetadmin host.

Embedded Web server

The device is equipped with an embedded Web server, which provides access to information about device and network activities. This information appears in a Web browser, such as Microsoft Internet Explorer or Netscape Navigator.

The embedded Web server resides on the device. It is not loaded on a network server.

The embedded Web server provides an interface to the device that anyone who has a network-connected computer and a standard Web browser can use. No special software is installed or configured, but you must have a supported Web browser on your computer. To gain access to the embedded Web server, type the IP address for the device in the address line of the browser. (To find the IP address, print a configuration page. For more information about printing a configuration page, see <u>Use information pages on page 146</u>.)

For a complete explanation of the features and functionality of the embedded Web server, see <u>Embedded Web server on page 16</u>.

Other components and utilities

Wii	Windows		Macintosh OS		
•	Software installer — automates the printing system installation	•	PostScript Printer Description files (PPDs) — use with the Apple PostScript drivers that come with the Mac OS		
•	Online Web registration	•	The HP Printer Utility — change device settings, view status, and set up printer-event notification from a Mac. This utility is supported for Mac OS X V10.3 and later.		

2 Control Panel

- Use the control panel
- Navigate the Administration menu
- Information menu
- <u>Default Job Options menu</u>
- <u>Time/Scheduling menu</u>
- Management menu
- Initial Setup menu
- Device Behavior menu
- Print Quality menu
- <u>Troubleshooting menu</u>
- Resets menu
- Service menu

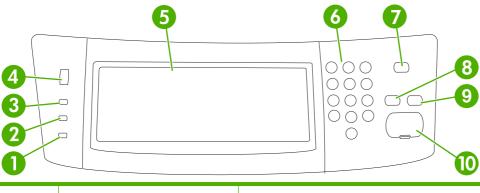
ENWW 17

Use the control panel

The control panel has a VGA touchscreen that provides access to all device functions. Use the buttons and numeric keypad to control jobs and the device status. The LEDs indicate overall device status.

Control-panel layout

The control panel includes a touchscreen graphical display, job-control buttons, a numeric keypad, and three light-emitting diode (LED) status lights.

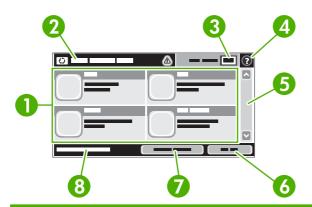


1	Attention light	The Attention light indicates that the device has a condition that requires intervention. Examples include an empty paper tray or an error message on the touchscreen.	
2	Data light	The Data light indicates that the device is receiving data.	
3	Ready light	The Ready light indicates that the device is ready to begin processing any job.	
4	Brightness-adjustment dial	Turn the dial to control the brightness of the touchscreen.	
5	Touchscreen graphical display	Use the touchscreen to open and set up all device functions.	
6	Numeric keypad	Allows you to type numeric values for number of copies required and other numeric values.	
7	Sleep button	If the device is inactive for a long period of time, it automatically enters a sleep mode. To place the device into sleep mode or to reactivate the device, press the Sleep button.	
8	Reset button	Resets the job settings to factory or user-defined default values.	
9	Stop button	Stops the active job. While stopped, the control panel shows the options for the stopped job (for example, if you press the Stop button while the device is processing a print job, the control panel message prompts you to cancel or resume the print job).	
10	Start button	Begins a copy job, starts digital sending, or continues a job that has been interrupted.	

Home screen

The home screen provides access to the device features, and it indicates the current status of the device.

NOTE: Depending on how the system administrator has configured the device, the features that appear on the home screen can vary.



1 Features

Depending on how the system administrator has configured the device, the features that appear in this area can include any of the following items:

- Copy
- Fax
- E-mail
- Secondary E-mail
- Network Folder
- Job Storage
- Workflow
- Supplies Status
- Administration

2	Device status line	The status line provides information about the overall device status. Various buttons appear in this area, depending on the current status. For a description of each button that can appear in the status line, see Buttons on the touchscreen on page 20 .	
3	Copy count	The copy count box indicates the number of copies that the device is set to make.	
4	Help button	Touch the Help button to open the embedded help system.	
5	Scroll bar	Touch the up or down arrows on the scroll bar to see the complete list of available features.	
6	Sign Out	Touch Sign Out to sign out of the device if you have signed in for access to restricted feature After you sign out, the device restores all options to the default settings.	
7	Network Address	Touch Network Address to find information about the network connection.	
8	Date and time	The current date and time appear here. The system administrator can select the format the device uses to show the date and time, for example 12-hour format or 24-hour format.	

ENWW Use the control panel 19

Buttons on the touchscreen

The status line on the touchscreen provides information about the status of the device. Various buttons can appear in this area. The following table describes each button.



Home button. Touch the home button to go to the Home screen from any other screen.



Start button. Touch the Start button to begin the action for the feature that you are using.

NOTE: The name of this button changes for each feature. For example, in the Copy feature, the button is named Start Copy.



Stop button. If the device is processing a print or fax job, the Stop button appears instead of the Start button. Touch the Stop button to halt the current job. The device prompts you to cancel the job or to resume it.



Error button. The error button appears whenever the device has an error that requires attention before it can continue. Touch the error button to see a message that describes the error. The message also has instructions for solving the problem.



Warning button. The warning button appears when the device has a problem but can continue functioning. Touch the warning button to see a message that describes the problem. The message also has instructions for solving the problem.



Help button. Touch the help button to open the built-in online Help system. For more information, see <u>Control-panel help system on page 20</u>.

Control-panel help system

The device has a built-in Help system that explains how to use each screen. To open the Help system, touch the Help button (②) in the upper-right corner of the screen.

For some screens, the Help opens to a global menu where you can search for specific topics. You can browse through the menu structure by touching the buttons in the menu.

For screens that contain settings for individual jobs, the Help opens to a topic that explains the options for that screen.

If the device alerts you of an error or warning, touch the error (II) or warning ((a)) button to open a message that describes the problem. The message also contains instructions to help solve the problem.

Navigate the Administration menu

From the Home screen, touch Administration to open the menu structure. You might need to scroll to the bottom of the Home screen to see this feature.

The Administration menu has several sub-menus, which are listed on the left side of the screen. Touch the name of a menu to expand the structure. A plus sign (+) next to a menu name means that it contains sub-menus. Continue opening the structure until you reach the option that you want to configure. To return to the previous level, touch Back.

To exit the Administration menu, touch the Home button (a) in the upper-left corner of the screen.

The device has built-in Help that explains each of the features that are available through the menus. Help is available for many menus on the right-hand side of the touchscreen. Or, to open the global Help system, touch the Help button (?) in the upper-right corner of the screen.

The tables in the sections that follow indicate the overall structure of each menu.

Information menu

Use this menu to print information pages and reports that are stored internally on the device.

Table 2-1 Information menu

Menu item	Sub-menu item	Sub-menu item	Values	Description
Configuration/Status Pages	Administration Menu Map		Print (button)	Shows the basic structure of the Administration menu and current administration settings.
	Configuration Page		Print (button)	A set of configuration pages that show the current device settings.
	Supplies Status Page		Print (button)	Shows the status of supplies such as cartridges, maintenance kits, and staples.
	Usage Page		Print (button)	Shows information about the number of pages that have been printed on each paper type and size.
	File Directory		Print (button)	A directory page that contains information for any mass-storage devices, such as flash drives, memory cards, or hard disks, that are installed in this device.
Fax Reports	Fax Activity Log		Print (button)	Contains a list of the faxes that have been sent from or received by this device.
	Fax Call Report	Fax Call Report	Print (button)	A detailed report of the last fax operation, either sent or received.
		Thumbnail on Report	Yes	Choose whether or not to include a thumbnail of the first page of the fax on the report.
			No (default)	
		When to Print Report	Never auto print	
			Print after any fax job	
			Print after fax send job	os
			Print after any fax erro	or
			Print after send errors	only
			Print after receive erro	ors only
	Billing Codes Report		Print	A list of billing codes that have been used for outgoing faxes. This report shows how many sent faxes were billed to each code.
	Blocked Fax List		Print	A list of phone numbers that are blocked from sending faxes to this device.
	Speed Dial List		Print	Shows the speed dials that have been set up for this device.
Sample Pages/Fonts	PCL Font List		Print	A list of printer control language (PCL) fonts that are currently available on the device.
	PS Font List		Print	A list of PostScript (PS) fonts that are currently available on the device.

Default Job Options menu

Use this menu to define the default job options for each function. If the user does not specify the job options when creating the job, the default options are used.

The Default Job Options menu contains the following sub-menus:

- Default Options for Originals
- Default Copy Options
- Default Fax Options
- Default E-mail Options
- Default Send To Folder Options
- Default Print Options

Default Options for Originals

Table 2-2 Default Options for Originals menu

Menu item	Values	Description
Paper Size	Select a paper size from the list.	Select the paper size that is most often used for copy or scan originals.
Number of Sides	1	Select whether copy or scan originals are most often single-sided or
double	double-sided.	
Orientation	Portrait	Select the orientation that is most often used for copy or scan
	Landscape	 originals. Select Portrait if the short edge is at the top or select Landscape if the long edge is at the top.
Optimize Text/Picture	Manually Adjust	Use this setting to optimize the output for a particular type of original.
	Text	You can optimize the output for text, pictures, or a mixture.
	Photograph	If you select Manually Adjust, you can specify the mix of text and pictures that will most often be used.
Darkness	Select a value.	

Default Copy Options

Table 2-3 Default Copy Options menu

Menu item	Sub-menu item	Values	Description
Number of Copies		Type the number of copies. The factory default setting is 1.	Set the default number of copies for a copy job.
Number of Sides		1	Set the default number of sides for copies.
		2	
Staple/Collate	Staple	None (default)	Set up options for stapling and collating sets of copies.
		One left angled	If collation is selected, the device prints a complete
	Collate	Off	 copy before starting on the next copy. If collation is not selected, the device prints page 1 for all copies, then
		On (default)	page 2 for all copies, etc.
Image Adjustment	Background Cleanup	Adjust the value within the range.	Increase the Background Cleanup setting to remove faint images from the background or to remove a light background color.
	Sharpness	Adjust the value within the range.	Adjust the Sharpness setting to clarify or soften the image.
Output Bin	Output Bin	<binname></binname>	Select the default output bin, if applicable, for copies.
	Paper Path	Face-up (straightest path)	Select the default paper path for copies.
		Face-down (correct order)	
Edge-To-Edge		Normal (recommended) (default)	If the original document is printed close to the edges, use the Edge-To-Edge feature to avoid shadows that
		Edge-To-Edge Output	can appear along the edges. Combine this feature with the Reduce/Enlarge feature to ensure that the entire page is printed on the copies.

Default Fax Options

Table 2-4 Fax Send menu

Menu item	Sub-menu item	Values	Description	
Resolution		Standard (100x200dpi) (default)	Use this feature to set the resolution for sent documents. Higher resolution images have more do	
		Fine (200x200dpi)	per inch (dpi), so they show more detail. Lower resolution images have fewer dots per inch and show	
		Superfine (300x300dpi)	less detail, but the file size is smaller.	
range. faint i backg Sharpness Adjust the value within the Adjust	Increase the Background Cleanup setting to remove faint images from the background or to remove a light background color.			
	Sharpness	•	Adjust the Sharpness setting to clarify or soften the image.	
Fax Header		Prepend	Use this feature to select the position of the fax header on the page.	
		Overlay	on the page.	
		•	Select Prepend to print the fax header above the fax content and move the fax content down on the page. Select Overlay to print the fax header over the top of the fax content without moving the fax content down.	
			Using this option could prevent a single-page fax from flowing onto another page.	

Table 2-5 Fax Receive menu

Menu item	Values	Description
Forward Fax	Fax Forwarding	To forward received faxes to another fax device, select Fax
Change PIN fax device into the Fax Forwarding Nun this menu item for the fist time, you are p will be prompted to enter that PIN every	Forwarding and Custom. You can then type the number of the other fax device into the Fax Forwarding Number field. When you select this menu item for the fist time, you are prompted to set up a PIN. You will be prompted to enter that PIN every time you try to use this menu. This is the same PIN that is used to access the Fax Printing menu.	
Stamp Received Faxes	Enabled	Use this option to add the date, time, senders phone number, and page number to each page of the faxes that this device receives.
	Disabled (default)	page number to each page of the lakes that the device receives.
Fit to Page	Enabled	Use this feature to shrink faxes that are larger than Letter-size or A4- size so that they can fit onto a Letter-size or A4-size page. If it this
	Disabled	feature set to Disabled, faxes larger than Letter or A4 will be flow across multiple pages.
Fax Paper Tray	Select from the list of trays.	Select the tray that holds the size and type of paper that you want to use for incoming faxes.
Output Bin	<binname></binname>	Select the default output bin, if applicable, to use for faxes.

Default E-mail Options

Use this menu to set default options for e-mails that are sent from the device.

Menu item	Values	Description
Document File Type	PDF (default)	Choose the file format for the e-mail.
	JPEG	
	TIFF	
	M-TIFF	
Output Quality		Choosing higher quality for output increases the size of the
	Medium (default)	output file.
	Low (small file)	
Resolution	75 DPI	Use this feature to select the resolution. Use a lower setting to
	150 DPI (default)	create smaller files.
	200 DPI	
	300 DPI	
Color/Black	Color scan (default)	Specify whether the e-mail will be in black or in color.
	Black/white scan	
TIFF Version	TIFF 6.0 (default)	Use this feature to specify the TIFF version to use when saving
	TIFF (Post 6.0)	scanned files.

Default Send to Folder Options

Use this menu to set default options for scan jobs sent to the computer.

Menu item	Values	Description
Color/Black	Color scan	Specify whether the file will be in black or in color.
	Black/white scan (default)	
Document File Type	PDF (default)	Choose the file format for the file.
	M-TIFF	
	TIFF	
	JPEG	
TIFF version	TIFF 6.0 (default)	Use this feature to specify the TIFF version to use when saving scanned files.
TIFF (post 6.0)	scanned mes.	
Output Quality	High (large file)	Choosing higher quality for output increases the size of the
	Medium (default)	output file.
	Low (small file)	
Resolution	75 DPI	Use this feature to select the resolution. Use a lower setting to
	150 DPI (default)	create smaller files.
	200 DPI	
	300 DPI	
	400 DPI	
	600 DPI	

Default Print Options

Use this menu to set default options for jobs that are sent from a computer.

Table 2-6 Default Print Options menu

Menu item	Sub-menu item	Values	Description
Copies Per Job		Type a value.	Use this feature to set the default number of copies for print jobs.
Default Paper Size		(List of supported sizes.)	Choose a paper size.
Default Custom Paper	Unit of measure	Millimeters	Configure the default paper size that is used when the
Size		Inches	user selects Custom as the paper size for a print job.
	X Dimension		Configure the width measurement for the Default Custom Paper Size.
	Y Dimension		Configure the height measurement for the Default Custom Paper Size.
Output Bin	Output Bin	 dinname>	Select the default output bin, if applicable, for print jobs.
	Paper Path	Face-up (straightest path)	Select the default paper path for print jobs.
		Face-down (correct order)	
Print Sides		1-sided	Use this feature to select whether print jobs should be
		2-sided	single-sided or double-sided by default.
2-Sided Format		Book style	Use this feature to configure the default style for 2-
		Flip style	sided print jobs. If Book style is selected, the back side of the page is printed the right way up. This option is for print jobs that are bound along the left edge. If Flip style is selected, the back side of the page is printed upside-down. This option is for print jobs that are bound along the top edge.

Time/Scheduling menu

Use this menu to set options for setting the time and for setting the device to enter and exit sleep mode.

NOTE: Values shown with "(default)" are the factory-default values. Some menu items have no default.

Table 2-7 Time/Scheduling menu

Menu item	Sub-menu item	Sub-menu item	Values	Description
Date/Time	Date Format		YYYY/MMM/DD (default)	Use this feature to set the current date and time, and to set the date format and time
			MMM/DD/YYYY	format that are used to time-stamp outgoing faxes.
			DD/MMM/YYYY	
	Date	Month		
		Day		
		Year		_
	Time Format		12 hour (AM/PM) (default)	
			24 hour	
	Time	Hour		
		Minute		
		AM		
		PM		
Sleep Delay			20 minutes	Use this feature to select the time interval that the device should remain inactive before
			30 minutes (default)	entering Sleep Mode.
			45 minutes	
			1 hour (60 minutes)	
			90 minutes	
			2 hours	
			4 hours	
Wake Time	Monday		Off (default)	Select Custom to set a wake time for each
	Tuesday		Custom according to this schedule	day of the week. The device exits sleep mode according to this schedule. Using a sleep
	Wednesday			schedule helps conserve energy and prepares the device for use so that users do
	Thursday			not have to wait for it to warm up.
	Friday			
	Saturday			
	Sunday			

Table 2-7 Time/Scheduling menu (continued)

Menu item	Sub-menu item	Sub-menu item	Values	Description
Fax Printing	Fax Printing Mode		Store all received faxes Print all received	If you have concerns about the security of private faxes, use this feature to store faxes rather than having them automatically print by creating a printing schedule.
			faxes	
			Use Fax Printing Schedule	For the fax printing schedule, the control panel prompts you to select days and times to print faxes.
	Change PIN			Select Change PIN to change the PIN number that users must provide to print faxes.

Management menu

Use this menu to set up global device-management options.

NOTE: Values shown with "(default)" are the factory-default values. Some menu items have no default.

Table 2-8 Management menu

Menu item	Sub-menu item	Values	Description
Stored Job Management	Quick Copy Job Storage Limit	Select the maximum number of jobs to store	Use this menu to view and manage any jobs that are stored on the device.
	Quick Copy Job Held Timeout	1 Hour	_
	Timeout	4 Hours	
		1 Day	
		1 Week	
Sleep mode		Disable	Use this feature to customize the sleep mode settings
		Use Sleep Delay (default)	for this device.
		, , ,	Select Use Sleep Delay to set the device to enter sleep mode after the delay that is specified in the Time/Scheduling menu.
Manage Supplies	Supply Low/Order Threshold	Select a value in the range.	Use this menu to carry out administrative supply management tasks such as changing the threshold
	Replace Black Cartridge	Stop at low	when supplies should be ordered.
		Stop at out	
		Override at out (default)	

ENWW Management menu 31

Initial Setup menu

The Initial Setup menu contains the sub-menus shown:

- Networking and I/O menu
- Fax Setup menu
- E-mail Setup menu
- NOTE: Values shown with "(default)" are the factory-default values. Some menu items have no default.

Networking and I/O

Table 2-9 Networking and I/O

Menu item	Sub-menu item	Values	Description
I/O Timeout		Select a value in the range. The factory default setting is 15 seconds.	I/O timeout refers to the elapsed time before a print job fails. If the stream of data that the device receives for a print job gets interrupted, this setting indicates how long the device will wait before it reports that the job has failed.
Parallel Input	High Speed	No	Use the High Speed setting to configure the speed that
NOTE: This item		Yes (default)	the parallel port uses to communicate with the host.
appears only if an EIO accessory is installed.	Advanced Functions	Enabled (default)	Use the Advanced Functions setting to enable or
		Disabled	disable bidirectional parallel communication.
Embedded Jetdirect	See Table 2-10 Jetdirec	t menus on page 32 for the list	of options.
EIO <x> Jetdirect</x>			

Table 2-10 Jetdirect menus

Menu item	Sub-menu item	Sub-menu item	Values and Description
TCP/IP	Enable		Off: Disable the TCP/IP protocol.
			On (default): Enable the TCP/IP protocol.
	Host Name		An alphanumeric string, up to 32 characters, used to identify the device. This name is listed on the HP Jetdirect configuration page. The default host name is NPIxxxxxx, where xxxxxx is the last six digits of the LAN hardware (MAC) address.

Chapter 2 Control Panel

Table 2-10 Jetdirect menus (continued)

Menu item	Sub-menu item	Sub-menu item	Values and Description
	IPV4 Settings	Config Method	Specifies the method that TCP/IPv4 parameters will be configured on the HP Jetdirect print server.
			Bootp: Use BootP (Bootstrap Protocol) for automatic configuration from a BootP server.
			DHCP: Use DHCP (Dynamic Host Configuration Protocol) for automatic configuration from a DHCPv4 server. If selected and a DHCP lease exists, DHCP Release and DHCP Renew menus are available to set DHCP lease options.
			Auto IP: Use automatic link-local IPv4 addressing. An address in the form 169.254.x.x is assigned automatically.
			Manual: Use the Manual Settings menu to configure TCP/IPv4 parameters.
		DHCP Release	This menu appears if Config Method was set to DHCP and a DHCP lease for the print server exists.
			No (default): The current DHCP lease is saved.
			Yes: The current DHCP lease and the leased IP address are released.
		DHCP Renew	This menu appears if Config Method was set to DHCP and a DHCP lease for the print server exists.
			No (default): The print server does not request to renew the DHCP lease.
			Yes: The print server requests to renew the current DHCP lease.
		Manual Settings	(Available only if Config Method is set to Manual) Configure parameters directly from the printer control panel:
			IP Address: The unique IP address of the printer (n.n.n.n), where n is a value from 0 to 255.
			Subnet Mask: The subnet mask for the printer (m.m.m.m), where m is a value from 0 to 255.
			Syslog Server: The IP address of the syslog server used to receive and log syslog messages.
			Default Gateway: The IP address of the gateway or router used for communications with other networks.
			Idle Timeout: The time period, in seconds, after which an idle TCP print data connection is closed (default is 270 seconds, 0 disables the timeout).

Table 2-10 Jetdirect menus (continued)

Menu item	Sub-menu item	Sub-menu item	Values and Description
		Default IP	Specify the IP address to default to when the print server is unable to obtain an IP address from the network during a forced TCP/IP reconfiguration (for example, when manually configured to use BootP or DHCP).
			Auto IP: A link-local IP address 169.254.x.x is set.
			Legacy: The address 192.0.0.192 is set, consistent with older HP Jetdirect devices.
		Primary DNS	Specify the IP address (n.n.n.n) of a Primary DNS Server.
		Secondary DNS	Specify the IP address (n.n.n.n) of a Secondary Domain Name System (DNS) Server.
	IPV6 Settings	Enable	Use this item to enable or disable IPv6 operation on the print server.
			Off (default): IPv6 is disabled.
			On: IPv6 is enabled.
		Address	Use this item to manually configure an IPv6 address.
			Manual Settings: Use the Manual Settings menu to enable and manually configure a TCP/ IPv6 address.
		DHCPV6 Policy	Router Specified: The stateful auto-configuration method to be used by the print server is determined by a router. The router specifies whether the print server obtains its address, its configuration information, or both from a DHCPv6 server.
			Router Unavailable: If a router is not available, the prin server should attempt to obtain its stateful configuration from a DHCPv6 server.
			Always: Whether or not a router is available, the print server always attempts to obtain its stateful configuration from a DHCPv6 server.
		Primary DNS	Use this item to specify an IPv6 address for a primary DNS server that the print server should use.
		Manual Settings	Use this item to manually set IPv6 addresses on the print server.
			Enable: Select this item and choose On to enable manual configuration, or Off to disable manual configuration.
			Address: Use this item to type a 32 hexadecimal digit IPv6 node address that uses the colon hexadecimal syntax.

Table 2-10 Jetdirect menus (continued)

Menu item	Sub-menu item	Sub-menu item	Values and Description
	Proxy Server		Specifies the proxy server to be used by embedded applications in the device. A proxy server is typically used by network clients for Internet access. It caches Web pages, and provides a degree of Internet security, for those clients.
			To specify a proxy server, enter its IPv4 address or fully-qualified domain name. The name can be up to 255 octets.
			For some networks, you may need to contact your Independent Service Provider (ISP) for the proxy server address.
	Proxy Port		Type the port number used by the proxy server for client support. The port number identifies the port reserved for proxy activity on your network, and can be a value from 0 to 65535.
IPX/SPX	Enable		Off: Disable the IPX/SPX protocol.
			On (default): Enable the IPX/SPX protocol.
	Frame Type		Selects the frame-type setting for your network.
			Auto: Automatically sets and limits the frame type to the first one detected.
			EN_8023, EN_II, EN_8022, and EN_SNAP: Frametype selections for Ethernet networks.
AppleTalk	Enable		Off (default): Disable the AppleTalk protocol.
			On: Enable the AppleTalk protocol.
DLC/LLC	Enable		Off (default): Disable the DLC/LLC protocol.
			On: Enable the DLC/LLC protocol.

Table 2-10 Jetdirect menus (continued)

Menu item	Sub-menu item	Sub-menu item	Values and Description
Security	Print Sec Page		Yes: Prints a page that contains the current security settings on the HP Jetdirect print server.
			No (default): A security settings page is not printed.
	Secure Web		For configuration management, specify whether the embedded Web server will accept communications using HTTPS (Secure HTTP) only, or both HTTP and HTTPS.
			HTTPS Required: For secure, encrypted communications, only HTTPS access is accepted. The print server will appear as a secure site.
			HTTP/HTTPS optional: Access using either HTTP or HTTPS is permitted.
	IPsec or Firewall		Specify the IPsec or Firewall status on the print server.
			Keep: IPsec/Firewall status remains the same as currently configured.
			Disable: IPsec/Firewall operation on the print server is disabled.
	Reset Security		Specify whether the current security settings on the print server will be saved or reset to factory defaults.
			No*: The current security settings are maintained.
			Yes: Security settings are reset to factory defaults.
Diagnostics	Embedded Test		This menu provides tests to help diagnose network hardware or TCP/IP network connection problems.
			Embedded tests help to identify whether a network fault is internal or external to the device. Use an embedded test to check hardware and communication paths on the print server. After you select and enable a test and set the execution time, you must select Execute to initiate the test.
			Depending on the execution time, a selected test runs continuously until either the device is turned off, or an error occurs and a diagnostic page is printed.
		LAN HW Test	CAUTION: Running this embedded test will erase your TCP/IP configuration.
			This test performs an internal loopback test. An internal loopback test will send and receive packets only on the internal network hardware. There are no external transmissions on your network.
			Select Yes to choose this test, or No to not choose it.
		HTTP Test	This test checks operation of HTTP by retrieving predefined pages from the device, and tests the embedded Web server.
			Select Yes to choose this test, or No to not choose it.

Table 2-10 Jetdirect menus (continued)

Menu item	Sub-menu item	Sub-menu item	Values and Description
		SNMP Test	This test checks operation of SNMP communications by accessing predefined SNMP objects on the device.
			Select Yes to choose this test, or No to not choose it.
		Select All Tests	Use this item to select all available embedded tests.
			Select Yesto choose all tests. Select No to select individual tests.
		Data Path Test	This test helps to identify data path and corruption problems on an HP postscript level 3 emulation device. It sends a predefined PS file to the device, However, the test is paperless; the file will not print.
			Select Yes to choose this test, or No to not choose it.
		Execution Time [H]	Use this item to specify the length of time (in hours) that an embedded test will be run. You can select a value from 1 to 60 hours. If you select zero (0), the test runs indefinitely until an error occurs or device is turned off.
			Data gathered from the HTTP, SNMP, and Data Path tests is printed after the tests have completed.
		Execute	No*: Do not initiate the selected tests.
			Yes: Initiate the selected tests.
	Ping Test		This test is used to check network communications. This test sends link-level packets to a remote network host, then waits for an appropriate response. To run a ping test, set the following items:
		Dest Type	Specify whether the target device is an IPv4 or IPv6 node.
		Dest IP	IPV4: Type the IPv4 address.
			IPV6: Type the IPv6 address.
		Packet Size	Specify the size of each packet, in bytes, to be sent to the remote host. The minimum is 64 (default) and the maximum is 2048.
		Timeout	Specify the length of time, in seconds, to wait for a response from the remote host. The default is 1 and the maximum is 100.
		Count	Specify the number of ping test packets to send for this test. Select a value from 1 to 100. To configure the test to run continuously, select 0.
		Print Results	If the ping test was not set for continuous operation, you can choose to print the test results. Select Yes to print results. If you select No (default), results are not printed.
		Execute	Specify whether to initiate the ping test. Select Yes to initiate the test, or No to not run the test.

Table 2-10 Jetdirect menus (continued)

Menu item	Sub-menu item	Sub-menu item	Values and Description
	Ping Results		Use this item to view the ping test status and results using the control panel display. You can select the following items:
		Packets Sent	Shows the number of packets (0 - 65535) sent to the remote host since the most recent test was initiated or completed.
		Packets Received	Shows the number of packets (0 - 65535) received from the remote host since the most recent test was initiated or completed.
		Percent Lost	Shows the percent of ping test packets that were sent with no response from the remote host since the most recent test was initiated or completed.
		RTT Min	Shows the minimum detected roundtrip- time (RTT), from 0 to 4096 milliseconds, for packet transmission and response.
		RTT Max	Shows the maximum detected roundtrip- time (RTT), from 0 to 4096 milliseconds, for packet transmission and response.
		RTT Average	Shows the average round-trip-time (RTT), from 0 to 4096 milliseconds, for packet transmission and response.
		Ping In Progress	Shows whether a ping test is in progress. Yes indicates a test in progress, and No indicates that a test completed or was not run.
		Refresh	When viewing the ping test results, this item updates the ping test data with current results. Select Yes to update the data, or No to maintain the existing data. However, a refresh automatically occurs when the menu times out or you manually return to the main menu.

Table 2-10 Jetdirect menus (continued)

Menu item	Sub-menu item	Sub-menu item	Values and Description
Link Speed			The link speed and communication mode of the print server must match the network. The available settings depend on the device and installed print server. Select one of the following link configuration settings:
			CAUTION: If you change the link setting, network communications with the print server and network device might be lost.
			Auto (default): The print server uses auto-negotiation to configure itself with the highest link speed and communication mode allowed. If auto-negotiation fails, either 100TX HALF or 10TX HALF is set depending on the detected link speed of the hub/switch port. (A 1000T half-duplex selection is not supported.)
			10T Half: 10 Mbps, half-duplex operation.
			10T Full: 10 Mbps, Full-duplex operation.
			100TX Half: 100 Mbps, half-duplex operation.
			100TX Full: 100 Mbps, full-duplex operation.
			100TX Auto: Limits auto-negotiation to a maximum link speed of 100 Mbps.
			1000TX Full: 1000 Mbps, full-duplex operation.
Print Protocols			Use this item to print a page that lists the configuration of the following protocols: IPX/SPX, Novell NetWare, AppleTalk, DLC/LLC.

Fax Setup

Table 2-11 Fax Setup menu

Menu item	Sub-menu item	Sub-menu item	Values	Description
Required Settings	Location		(Countries/regions listed)	Configure the settings that are legally required for outgoing faxes.
	Date/Time			_
	Fax Header	Phone Number		_
	Information	Company Name		
PC Fax Send			Disabled	Use this feature to enable or disable PC Fax
			Enabled (default)	Send. PC Fax Send enables users to send faxes through the device from their computers if they have the correct driver installed.

Table 2-11 Fax Setup menu (continued)

Menu item	Sub-menu item	Sub-menu item	Values	Description
Fax Send Settings	Fax Dial Volume		Off	Use this feature to set the volume of the tones
			Medium (default)	that you hear while the device dials the fax number.
			High	
	Error Correction		Enabled (default)	When Error Correction Mode is enabled and
	Mode		Disabled	an error occurs during fax transmission, the device sends or receives the error portion again.
	JBIG Compression		Disabled	The JBIG Compression reduces fax-
			Enabled (default)	transmission time, which can result in lower phone charges. However, using JBIG Compression sometimes causes compatibility problems with older fax machines. If this occurs, turn off the JBIG Compression.
	Maximum Baud Rate		Select a value from the list.	Use this feature to set the maximum baud rate for receiving faxes. This can be used as a diagnostic tool for troubleshooting fax problems.
	Dialing Mode		Tone (default)	Select whether the device should use tone or
			Pulse	pulse dialing.
	Redial On Busy		The range is between 0 and 9. The factory default is 3 times.	Type the number of times the device should attempt to redial if the line is busy.
	Redial On No Answer		Never (default)	Use this feature to specify the number of times the device should attempt to dial if the
			Once	recipient fax number does not answer.
			Twice	NOTE: Twice is available in locations other than the United States and Canada.
	Redial Interval		The range is between 1 and 5 minutes. The factory default is 5 minutes.	Use this feature to specify the number of minutes between dialing attempts if the recipient number is busy or not answering.
	Detect Dial Tone		Enabled	Use this feature to specify whether the device
			Disabled (default)	should check for a dial tone before sending a fax.
	Dialing Prefix		Off (default)	Use this feature to specify a prefix number that must be dialed when sending faxes from
			Custom	the device.
	Billing Codes		Off (default)	When billing codes are enabled, a prompt appears that asks the user to enter the billing
			Custom	code for an outgoing fax.
		Minimum Length	The range is between	1 and 16 digits. The default is 1 digit.

Table 2-11 Fax Setup menu (continued)

Menu item	Sub-menu item	Sub-menu item	Values	Description
Fax Receive Settings	Rings To Answer		The range varies by location. The factory default is 2 rings.	Use this feature to specify the number of rings that must occur before the fax modem answers.
	Ring Interval		Default (default)	Use this feature to control the time between
			Custom	rings for incoming faxes.
	Ringer Volume		Off	Set the volume for the fax ring-tone.
			Low (default)	
			High	
	Blocked Fax Numbers	Add Blocked Numbers	Type the fax number to add.	Use this feature to add or delete numbers from the blocked fax list. The blocked fax
		Remove Blocked Numbers	Select a fax number to remove.	can contain up to 30 numbers. When the device receives a call from one of the blocked fax numbers, it deletes the incoming fax. It
		Clear All Blocked	No (default)	also logs the blocked fax in the activity log along with job-accounting information.
	1	Numbers	Yes	

E-mail Setup

Use this menu to enable the e-mail feature and to configure basic e-mail settings.

NOTE: To configure advanced e-mail settings, use the embedded Web server. For more information, see Embedded Web server on page 16.

Table 2-12 E-mail Setup menu

Menu item	Values	Description
Address Validation		
	Off	an e-mail address. Valid e-mail addresses require the "@" sign and a ".".
Find Send Gateways		Search the network for SMTP gateways that the device can use to send e-mail.
SMTP Gateway	Enter a value.	Specify the IP address of the SMTP gateway that is used to send e-mail from the device.
Test Send Gateway		Test the configured SMTP gateway to see if it is functional.

Send Setup menu

Table 2-13 Send Setup menu

Menu item	Values	Description
Replicate MFP	Enter a value (IP Address).	Copy the local Send settings from one device to another.
Use this feature to allow the transfer of the device from or Sending Software (DSS) server to another.		Use this feature to allow the transfer of the device from one HP Digital Sending Software (DSS) server to another.
		HP DSS is a software package that handles digital sending tasks such as faxing, e-mail, and sending a scanned document to a network folder.
Allow Use of Digital Send Service		This feature allows you to configure the device for use with an HP Digital Sending Software (DSS) server.

Device Behavior menu

NOTE: Values shown with "(default)" are the factory-default values. Some menu items have no default.

Table 2-14 Device Behavior menu

Menu item	Sub-menu item	Sub-menu item	Values	Description
Language			Select the language from the list.	Use this feature to select a different language for control-panel messages. When you select a new language, the keyboard layout might also change.
Key Press Sound			On (default)	Use this feature to specify whether you hear a sound when you touch the screen or press buttons on the control panel.
Inactivity Timeout			Type a value between 10 and 300 seconds. The factory default is 60 seconds.	Use this feature to specify the amount of time that elapses between any activity on the control panel and the device resetting to the default settings.
Warning/Error Behavior	Clearable Warnings		On Job (default)	Use this feature to set the amount of time that a clearable warning appears on the control panel.
	Continuable Events		Auto continue (10 seconds) (default) Touch OK to	Use this option to configure the device behavior when the device encounters certain errors.
			continue	
	Jam Recovery		Auto (default)	Use this feature to configure how the device handles pages that are lost during a jam.
			On	nanaico pageo tilat ale lost during a jam.
			Off	
Tray Behavior	Use Requested Tray		Exclusively (default)	Use this feature to control how the device handles jobs that have specified a specific
			First	input tray.
	Manually Feed Prompt		Always (default)	Use this feature to indicate whether a prompt should appear when the type or size for a job
			Unless Loaded	does not match the specified tray and the device pulls from the multipurpose tray instead.
	PS Defer Media		Enabled (default)	Use this feature to choose either the
			Disabled	PostScript (PS) or HP paper-handling model.
	Use Another Tray		Enabled (default)	Use this feature to turn on or off the control-
			Disabled	panel prompt to select another tray when the specified tray is empty.
	Size/Type Prompt		Display	Use this feature to control whether the tray
			Do not display (default)	configuration message appears whenever a tray is opened or closed.
	Duplex Blank Pages		Auto (default)	Use this feature to control how the device
			Yes	handles two-sided jobs (duplexing).

Table 2-14 Device Behavior menu (continued)

Menu item	Sub-menu item	Sub-menu item	Values	Description
Stapler/Stacker	Staple		None	If the optional stapler/stacker is installed, use
			One	this feature to set stapling characteristics for the device.
	Staples Out		Continue (default)	_
			Stop	
MBM-3	Operation Mode		Function Separator	Use this feature to configure the optional 3-
Configuration			Mailbox	bin mailbox accessory.
			Stacker	
General Copy	Scan Ahead		Enabled (default)	Use this feature to turn on no-wait scanning.
Behavior				With Scan Ahead enabled, the pages in the original document are scanned to disk and held until the device becomes available.
	Auto Print Interrupt		Enabled	When this feature is enabled, copy jobs ca
			Disabled	copies.
				The copy job is inserted into the print queue at the end of one copy of the print job. After the copy job is complete, the device continues printing the remaining copies of the print job.
	Copy Interrupt		Enabled	When this feature is enabled, a copy job that
			Disabled	is currently printing can be interrupted when a new copy job is started. You are prompted to confirm that you want to interrupt the current job.
	First Copy Speed		No early warm up	
			Early warm up	

ENWW Device Behavior menu 45

Table 2-14 Device Behavior menu (continued)

Menu item	Sub-menu item	Sub-menu item	Values	Description
General Print Behavior	Default Paper Size		Select from the list of paper sizes.	Use this feature to configure the default paper size used for print jobs.
	Override A4/Letter		No	Use this feature to print on letter-size paper
			Yes (default)	when an A4 job is sent but no A4-size paper is loaded in the device (or to print on A4 paper when a letter-size job is sent but no letter-size paper is loaded). This option will also override A3 with ledger-size paper and ledger with A3-size paper.
	Manual Feed		Enabled	When this feature is enabled, the user can
			Disabled (default)	select manual feed from the control panel as the paper source for a job.
	Courier Font		Regular (default)	Use this feature to select which version of the
			Dark	Courier font you want to use.
	Wide A4		Enabled	Use this feature to change the printable are of A4-size paper. If you enable this option, eighty 10-pitch characters can be printed or a single line of A4 paper.
			Disabled (default)	
	Print PS Errors		Enabled	Use this feature to select whether a PostScript (PS) error page is printed when the device encounters a PS error.
			Disabled (default)	
	Print PDF Errors		Enabled	Use this feature to select whether a PDF error
			Disabled (default)	page is printed when the device encounters a PDF error.
	Personality		Auto (default)	Select the printer language that the device
			PCL	should use.
			PDF	Normally you should not change the language. If you change the setting to a
			PS	specific language, the device does not automatically switch from one language to another unless specific software commands are sent to the device.

Table 2-14 Device Behavior menu (continued)

Menu item	Sub-menu item	Sub-menu item	Values	Description
	PCL	Form Length	Type a value between 5 and 128 lines. The factory default is 60 lines.	PCL is a set of printer commands that Hewlett-Packard developed to provide access to printer features.
		Orientation	Portrait (default) Landscape	Select the orientation that is most often used print jobs. Select Portrait if the short edge is at the top or select Landscape if the long edge is at the top.
		Font Source	Select the source from the list.	Use this feature to select the font source for the user-soft default font.
		Font Number	Type the font number. The range is between 0 and 999. The factory default is 0.	Use this feature to specify the font number for the user-soft default font using the source that is specified in the Font Source menu item. The device assigns a number to each font and lists it on the PCL font list (available from the Administration menu).
		Font Pitch	Type a value between 0.44 and 99.99. The factory default is 10.00.	If Font Source and Font Number indicate a contour font, then use this feature to select a default pitch (for a fixed-spaced font).
	PCL	Font Point Size	Type a value between 4.00 and 999.75. The factory default is 12.00.	If Font Source and Font Number indicate a contour font, then use this feature to select a default point size (for a proportional-spaced font).
		Symbol Set	PC-8 (default) (50 additional symbol sets from which to choose)	Use this feature to select any one of severa available symbol sets from the control panel A symbol set is a unique grouping of all the characters in a font.
		Append CR to LF	No (default) Yes	Use this feature to configure whether a carriage return (CR) is appended to each line feed (LF) encountered in backwards-compatible PCL jobs (pure text, no job control).
		Suppress Blank Pages	No (default) Yes	This option is for users who are generating their own PCL, which could include extra form feeds that would cause blank pages to be printed. When Yes is selected, form feeds are ignored if the page is blank.
		Media Source Mapping	Standard (default) Classic	Use this feature to select and maintain input trays by number when you are not using the device driver, or when the software program has no option for tray selection.

ENWW Device Behavior menu 47

Print Quality menu

NOTE: Values shown with "(default)" are the factory-default values. Some menu items have no default.

Table 2-15 Print Quality menu

Menu item	Sub-menu item	Values	Description
Set Registration	Test Page	Print (button)	Use Set Registration to shift the margin alignment to center the image on the page from top to bottom and from left to right. You can also align the image on the front with the image printed on the back.
			Print a test page for setting the registration.
	Source	All trays Tray <x>: <contents> (choose a tray)</contents></x>	Select the source input tray for printing the Set Registration page.
	Adjust Tray <x></x>	Shift from -20 to 20 along	Perform the alignment procedure for each tray.
		the X or Y axes. 0 is the default.	When it creates an image, the device <i>scans</i> across the page from side to side as the sheet <i>feeds</i> from top to bottom into the device.
			The scan direction is referred to as X. X1 is the scan direction for the first side of a 2-sided page. X2 is the scan direction for the second side of a 2-sided page. The feed direction is referred to as Y.
Fuser Modes	<paper type=""></paper>		Configure the fuser mode associated with each media type.
	Restore Modes	Restore (button)	Restore the fuser modes to the default settings.
Optimize	High Transfer	Normal (default)	Optimizes certain parameters for all jobs rather than (or
		Increased	in addition to) optimizing by paper path.
	Line Detail	Off (default)	
		On	
Resolution		300	Use this feature to select the print resolution.
		600	
		FastRes 1200 (default)	
		ProRes 1200	
REt		Off	Enable Resolution Enhancement technology (REt),
		Light	which produces print output with smooth angles, curves, and edges. All print resolutions, including
		Medium (default)	FastRes 1200, benefit from REt.
		Dark	
Economode		Enabled	When Economode is enabled, the device prints with a
		Disabled	reduced amount of toner per page; however, the print quality of the page is slightly reduced.
Toner Density		Choose from a range of 1 to 5. 3 is the default.	Lighten or darken the print on the page. 1 is the lightest and 5 is the darkest.

Table 2-15 Print Quality menu (continued)

Menu item	Sub-menu item	Values	Description
Calibration/Cleaning	Auto Cleaning	Enabled	When auto-cleaning is on, the device prints a cleaning
		Disabled	page when the page count reaches the value that is set in Cleaning Interval.
	Cleaning Interval	1000	Set the interval when the cleaning page should be
		2000	printed. The interval is measured by the number of pages printed.
		5000	
		10000	
		20000	
	Auto Cleaning Size	Letter	Select the size of paper used for the cleaning page.
		A4	
	Process Cleaning Page	Process (button)	Use this feature to create and process a cleaning page for cleaning excess toner off the pressure roller in the fuser. The process takes up to 2.5 minutes.

ENWW Print Quality menu 49

Troubleshooting menu

NOTE: Values shown with "(default)" are the factory-default values. Some menu items have no default.

Table 2-16 Troubleshooting menu

Menu item	Sub-menu item	Sub-menu item	Values	Description
Event Log			Print (button)	This feature shows the event codes and their corresponding engine cycles on the display, and it allows you to print the full event log.
Calibrate Scanner			Calibrate (button)	Use this feature to compensate for offsets in the scanner imaging system (carriage head) for ADF and flatbed scans.
				You might need to calibrate the scanner if it is not capturing the correct sections of scanned documents.
Fax T.30 Trace	Print T.30 Report			Use this feature to print or configure the fax
	When to Print Report		Never auto print	T.30 trace report. T.30 is the standard that specifies handshaking, protocols, and error
			Print after any fax job	correction between fax machines.
			Print after fax send jobs	
			Print after any fax error	
			Print after send errors only	
			Print after receive errors only	
Fax Transmit Signal Loss			A value between 0 and 30.	Use this feature to set loss levels to compensate for phone line signal loss. You should not modify this setting unless requested to do so by an HP service representative because it could cause the fax to stop functioning.
Fax V.34			Normal (default)	Use this feature to disable V.34 modulations if several fax failures have occurred or if phone line conditions require it.
Fax Speaker Mode			Normal (default)	This feature can be used by a technician to
,			Diagnostic	evaluate and diagnose fax issues by listening to the sounds of fax modulations. The factory default setting is Normal.
Paper Path Sensors				Initiate a test of the paper path sensors.

Table 2-16 Troubleshooting menu (continued)

Menu item	Sub-menu item	Sub-menu item	Values	Description
Paper Path Test	Test Page		Print (button)	Generate a test page for testing paper handling features. You can define the path that is used for the test in order to test specific paper paths.
	Source		All trays	Specify whether the test page will be printed
			Tray 1	from all trays or from a specific tray.
			Tray 2	
			(Additional trays are shown, if applicable.)	
	Destination		All bins	Select the output option for the test page. You
			Stacker Bin	can choose to send the test page to all output bins or only to a specific bin.
			Standard Output Bin	
	Duplex		Off (default)	Select whether the duplexer should be
			On	included in the Paper Path test.
	Copies		Range: 2-30, Default=2	Select how many pages should be sent from the specified source as part of the Paper Path test.

ENWW Troubleshooting menu 51

Table 2-16 Troubleshooting menu (continued)

Menu item	Sub-menu item	Sub-menu item	Values	Description
Finishing Paper Path	Staples	Finishing Options	Choose from a list of	Test paper handling features for the finisher.
Test			available options.	Select the option that you want to test.
		Media Size	Letter	Select the paper size for the Finishing Paper
			Legal	Path Test.
			A4	
			Executive (JIS)	
			8.5 x 13	
		Media Type		Select the paper type for the Finishing Paper Path Test.
		Copies	Range: 2-30, Default=2	Select the number of copies to include in the Finishing Paper Path Test.
		Duplex	Off	Select whether to use the duplexer in the
			On	Finishing Paper Path Test.
		Print Test Page	Print (button)	Print a test page to use for the Finishing Paper Path Test.
	Stack	Media Size	Letter	Select the options that you want to use to test
			Legal	the stacker.
			A4	
			Executive (JIS)	
			8.5 x 13	
		Media Type	Select from a list of types.	Select the type of media to use for the Finishing Paper Path Test.
		Copies		Select the number of copies to include in the
			10	Finishing Paper Path Test.
			50	
			100	
			500	
		Duplex	Off	Select whether to use the duplexer in the
			On	Finishing Paper Path Test.
		Print Test Page	Print (button)	Print a test page to use for the Finishing Paper Path Test.
Manual Sensor Test				Test the device sensors and switches for correct operation. Each sensor is displayed on the control-panel screen, along with its status. Manually trip each sensor and watch for it to change on the screen. Press the Stop button to abort the test.

Table 2-16 Troubleshooting menu (continued)

Menu item	Sub-menu item	Sub-menu item	Values	Description
Component Test				Exercise individual parts independently to isolate noise, leaking, or other issues. To start the test, select one of the components. The test will run the number of times specified by the Repeat option. You might be prompted to remove parts from the device during the test. Press the Stop button to abort the test.
Print/Stop Test			Continuous value from 0 to 60,000 milliseconds. The default is 0 milliseconds.	Isolate faults by stopping the device during the print cycle and observing where in the process the image degrades. To run the test, specify a stop time. The next job that is sent to the device will stop at the specified time in the process.
Scanner Tests				This menu item is used by a service technician to diagnose potential problems with the device scanner.
Control Panel	LEDs			Use this feature to make sure the
	Display			 components of the control panel are functioning correctly.
	Buttons			_
	Touchscreen			

ENWW Troubleshooting menu 53

Resets menu

Table 2-17 Resets menu

Menu item	Values	Description
Clear Local Address Book	Clear (button)	Use this feature to clear all addresses from the address books that are stored on the device.
Clear Fax Activity Log	Yes	Use this feature to clear all events from the Fax Activity Log.
	No (default)	
Restore Factory Telecom Setting	Restore (button)	Use this option to restore the telephone-related settings that are in the Initial Setup menu to factory default values.
Restore Factory Settings	Restore (button)	Use this feature to restore all device settings to their factory defaults.
Clear Maintenance Message	Clear (button)	Clear the Order Maintenance Kit and Replace Maintenance Kit warning messages.
Clear Document Feeder Message	Clear (button)	Use this feature to clear the Order Document Feeder Kit and Replace Document Feeder Kit warning messages.
Reset Supplies	New Maintenance Kit (Yes/No)	Notify the device that a new maintenance kit or document feeder kit
	New Document Feeder Kit (Yes/No)	has been installed.

Service menu

The Service menu is locked and requires a PIN for access. This menu is intended for use by authorized service personnel.

ENWW Service menu 55

3 Input/output (I/O)

This chapter describes how to configure certain network parameters on the device. The following topics are covered:

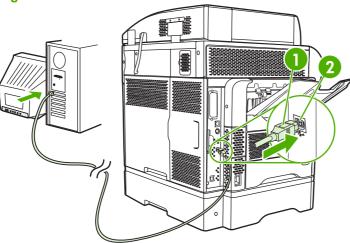
- USB configuration
- Network configuration

ENWW 57

USB configuration

This device supports a USB 2.0 connection. You must use an A-to-B type USB cable for printing.

Figure 3-1 USB connection



- 1 USB connector
- 2 USB port (type B)

Network configuration

You might need to configure certain network parameters on the device. You can configure these parameters in the following locations:

- Installation software
- Device control panel
- Embedded Web server
- Management software (HP Web Jetadmin or HP LaserJet Utility for Macintosh)
- NOTE: For more information about using the embedded Web server, see <u>Embedded Web server</u> on page 16

For more information on supported networks and network configuration tools, see the *HP Jetdirect Print Server Administrator's Guide*. The guide comes with printers in which an HP Jetdirect print server is installed.

This section contains the following information about configuring network parameters:

- Configure TCP/IPv4 parameters
- Configure TCP/IPv6 parameters
- Disable network protocols (optional)
- HP Jetdirect EIO print servers

Configure TCP/IPv4 parameters

If your network doesn't provide automatic IP addressing through DHCP, BOOTP, RARP, or another method, you might need to enter the following parameters manually before you can print over the network:

- IP address (4 bytes)
- Subnet mask (4 bytes)
- Default gateway (4 bytes)

Set an IP address

You can view the current IP address of the device from the control-panel Home screen by touching Network Address.

Use the following procedure to change the IP address manually.

- Scroll to and touch Administration.
- Scroll to and touch Initial Setup.
- 3. Touch Networking and I/O.
- Touch Embedded Jetdirect.
- 5. Touch TCP/IP.

ENWW Network configuration

59

- 6. Touch IPV4 Settings.
- 7. Touch Config Method.
- 8. Touch Manual.
- 9. Touch Save.
- 10. Touch Manual Settings.
- 11. Touch IP Address.
- 12. Touch the IP Address text box.
- 13. Use the touchscreen keypad to type the IP address.
- 14. Touch OK.
- 15. Touch Save.

Set the subnet mask

- 1. Scroll to and touch Administration.
- 2. Scroll to and touch Initial Setup.
- 3. Touch Networking and I/O.
- 4. Touch Embedded Jetdirect.
- **5.** Touch TCP/IP.
- 6. Touch IPV4 Settings.
- **7.** Touch Config Method.
- 8. Touch Manual.
- 9. Touch Save.
- 10. Touch Manual Settings.
- 11. Touch Subnet Mask.
- 12. Touch the Subnet Mask text box.
- **13**. Use the touchscreen keypad to type the subnet mask.
- 14. Touch OK.
- 15. Touch Save.

Set the default gateway

- 1. Scroll to and touch Administration.
- 2. Scroll to and touch Initial Setup.
- 3. Touch Networking and I/O.
- 4. Touch Embedded Jetdirect.

- Touch TCP/IP.
- 6. Touch IPV4 Settings.
- 7. Touch Config Method.
- 8. Touch Manual.
- 9. Touch Save.
- 10. Touch Manual Settings.
- 11. Touch Default Gateway.
- 12. Touch the Default Gateway text box.
- **13.** Use the touchscreen keyboard to type the default gateway.
- 14. Touch OK.
- 15. Touch Save.

Configure TCP/IPv6 parameters

For information about configuring the device for a TCP/IPv6 network, see the *HP Jetdirect Print Server Administrator's Guide*.

Disable network protocols (optional)

By factory default, all supported network protocols are enabled. Disabling unused protocols has the following benefits:

- It decreases device-generated network traffic.
- It prevents unauthorized users from printing to the device.
- It provides only pertinent information on the configuration page.
- It allows the device control panel to display protocol-specific error and warning messages.

Disable IPX/SPX

- NOTE: Do not disable this protocol in Windows-based systems that print to the printer through IPX/SPX.
 - 1. Scroll to and touch Administration.
 - 2. Scroll to and touch Initial Setup.
 - 3. Touch Networking and I/O.
 - 4. Touch Embedded Jetdirect.
 - Touch IPX/SPX.
 - 6. Touch Enable.
 - 7. Touch Off.
 - 8. Touch Save.

ENWW Network configuration

Disable AppleTalk

- 1. Scroll to and touch Administration.
- 2. Scroll to and touch Initial Setup.
- 3. Touch Networking and I/O.
- 4. Touch Embedded Jetdirect.
- 5. Touch AppleTalk.
- 6. Touch Enable.
- 7. Touch Off.
- 8. Touch Save.

Disable DLC/LLC

- 1. Scroll to and touch Administration.
- 2. Scroll to and touch Initial Setup.
- 3. Touch Networking and I/O.
- 4. Touch Embedded Jetdirect.
- 5. Touch DLC/LLC.
- 6. Touch Enable.
- 7. Touch Off.
- 8. Touch Save.

HP Jetdirect EIO print servers

HP Jetdirect print servers (network cards) can be installed in the EIO slot. These cards support multiple network protocols and operating systems. HP Jetdirect print servers facilitate network management by allowing you to connect a printer directly to your network at any location. HP Jetdirect print servers also support the Simple Network Management Protocol (SNMP), which provides remote printer management and troubleshooting through the HP Web Jetadmin software.

NOTE: Configure the card through the control panel, the printer installation software, or HP Web Jetadmin. Refer to the HP Jetdirect print server documentation for more information.

4 Media and trays

This chapter contains the following sections:

- General media specifications
- General guidelines for media
- Media considerations
- Select print media
- Printing and paper-storage environment
- Load media
- Control print jobs
- Select output bins

ENWW 63

General media specifications

For complete paper specifications for all HP LaserJet devices, see the *HP LaserJet Printer Family Print Media Guide* (available at www.hp.com/support/lipaperguide).

Category	Specifications
Acid content	5.5 pH to 8.0 pH
Caliper	0.094 to 0.18 mm (3.0 to 7.0 mils)
Curl in ream	Flat within 5 mm (0.02 in)
Cut edge conditions	Cut with sharp blades with no visible fray.
Fusing compatibility	Must not scorch, melt, offset, or release hazardous emissions when heated to 200° C (392°F) for 0.1 second.
Grain	Long grain
Moisture content	4% to 6% by weight
Smoothness	100 to 250 Sheffield

General guidelines for media

Before purchasing any paper or specialized forms in quantity, verify that your paper supplier has obtained and understands the print-media requirements that are specified in the *HP LaserJet Printer Family Print Media Guide*.

To download a copy of the *HP LaserJet Printer Family Print Media Guide*, go to <u>www.hp.com/support/lipaperguide</u>.

It is possible that paper could meet all of the guidelines in this chapter or the *HP LaserJet Printer Family Print Media Guide* and still not print satisfactorily. This can result from abnormal characteristics of the printing environment or other variables over which HP has no control (for example, extremes in temperature and humidity).

Hewlett-Packard Company recommends testing any paper before buying it in large quantities.

△ CAUTION: Using paper that does not conform to the specifications listed here or in the print media guide can cause problems that require service. This service is not covered by the Hewlett-Packard warranty or service agreements.

Paper to avoid

The product can handle many types of paper. Using paper that does not meet specifications will cause lower print quality and increase the chance of jams.

- Do not use paper that is too rough. Use paper with a tested smoothness rating of 100–250 Sheffield.
- Do not use paper, other than standard 3-hole punched paper, that contains cutouts or perforations.
- Do not use multipart forms.
- Do not use paper that has already been printed on, or that has been fed through a photocopier.
- Do not use paper that contains a watermark if you are printing solid patterns.
- Do not use heavily embossed or raised-letterhead papers.
- Do not use papers that have heavily textured surfaces.
- Do not use offset powders or other materials that prevent printed forms from sticking together.
- Do not use paper that has a colored coating that was added after the paper was produced.

Paper that can damage the device

In rare circumstances, paper can damage the device. The following paper must be avoided to prevent possible damage to the device:

- Do not use paper with staples attached.
- Do not use transparencies, labels, or photo or glossy paper designed for Inkjet printers or other low temperature printers. Use only media that is specified for use with HP LaserJet printers.

- Do not use any media that produces hazardous emissions, or that melts, offsets, or discolors when exposed to the temperature of the fuser.
- Do not use paper that is embossed or coated, or any media that is not designed to withstand the fusing temperature of the device. Do not use letterhead paper or preprinted forms that are made with dyes or inks that cannot withstand the heat of the fuser.

To order HP LaserJet printing supplies, see Order parts, accessories, and supplies on page 228.

General media specifications

For complete paper specifications for all HP LaserJet devices, see the *HP LaserJet Printer Family Print Media Guide* (available at www.hp.com/support/lipaperquide).

Category	Specifications
Acid content	5.5 pH to 8.0 pH
Caliper	0.094 to 0.18 mm (3.0 to 7.0 mils)
Curl in ream	Flat within 5 mm (0.02 in)
Cut edge conditions	Cut with sharp blades with no visible fray.
Fusing compatibility	Must not scorch, melt, offset, or release hazardous emissions when heated to 200° C (392°F) for 0.1 second.
Grain	Long grain
Moisture content	4% to 6% by weight
Smoothness	100 to 250 Sheffield

Media considerations

Envelopes

Envelope construction is critical. Envelope fold lines can vary considerably, not only between manufacturers, but also within a box from the same manufacturer. Successful printing on envelopes depends upon the quality of the envelopes. When selecting envelopes, consider the following components:

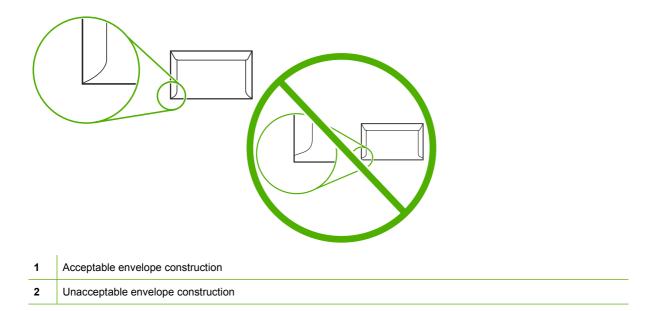
- Weight: The weight of the envelope paper should not exceed 105g/m² (28lb) or jamming might occur.
- **Construction:** Prior to printing, envelopes should lie flat with less than 6mm (0.25 inch) curl, and should not contain air.
- Condition: Envelopes should not be wrinkled, nicked, or otherwise damaged.
- Temperature: You should use envelopes that are compatible with the heat and pressure of the printer.
- Size: You should use only envelopes within the following size ranges.
 - Minimum: 76 x 127mm (3 x 5 inches)
 - Maximum: 216 x 356mm (8.5 x 14 inches)

NOTE: Use only tray 1 or the optional envelope feeder to print envelopes. You might experience some jams when using any media with a length less than 178mm (7 inches). This might be caused by paper that has been affected by environmental conditions. For optimum performance, make sure you are storing and handling the paper correctly. Also, choose envelopes in the printer driver (see Supported printer drivers on page 11).

Envelopes with double side seams

Double side-seam construction has vertical seams at both ends of the envelope rather than diagonal seams. This style might be more likely to wrinkle. Be sure the seam extends all the way to the corner of the envelope as illustrated below.

ENWW Media considerations 67



Envelopes with adhesive strips or flaps

Envelopes with a peel-off adhesive strip or with more than one flap that folds over to seal must use adhesives compatible with the heat and pressure in the printer. The extra flaps and strips might cause wrinkling, creasing, or even jams and might even damage the fuser.

Envelope margins

The following gives typical address margins for a commercial #10 or DL envelope.

Type of address	Top margin	Left margin
Return address	15mm (0.6 inch)	15mm (0.6 inch)
Delivery address	51mm (2.0 inches)	89mm (3.5 inches)

NOTE: For the best print quality, position margins no closer than 15mm (0.6 inch) from the edges of the envelope. Avoid printing over the area where the envelope's seams meet.

Envelope storage

Proper storage of envelopes helps contribute to print quality. Envelopes should be stored flat. If air is trapped in an envelope, creating an air bubble, then the envelope might wrinkle during printing.

For more information, see Printing and paper-storage environment on page 77.

Labels

△ CAUTION: To avoid damaging the MFP, use only labels recommended for laser printers. Never print on the same sheet of labels more than once or print on a partial sheet of labels.

Label construction

When selecting labels, consider the quality of each component:

- Adhesives: The adhesive material should be stable at 200°C (392°F), the printer's fusing temperature.
- **Arrangement:** Only use labels with no exposed backing between them. Labels can peel off sheets with spaces between the labels, causing serious jams.
- Curl: Prior to printing, labels must lie flat with no more than 13mm (0.5 inch) of curl in any direction.
- Condition: Do not use labels with wrinkles, bubbles, or other indications of separation.
- NOTE: Choose labels in the printer driver (see Supported printer drivers on page 11).

Transparencies

Transparencies used in the printer must be able to withstand 200°C (392°F), the printer's fusing temperature.

- △ CAUTION: To avoid damaging the MFP, use only transparencies recommended for use in HP LaserJet printers, such as HP-brand transparencies.
- NOTE: Choose transparencies in the printer driver (see Supported printer drivers on page 11).

Card stock and heavy media

You can print many types of card stock from the paper input tray, including index cards and postcards. Some card stock performs better than others because its construction is better suited for feeding through a laser printer.

For optimum printer performance, do not use paper heavier than 157g/m² (42lb). Paper that is too heavy might cause misfeeds, stacking problems, paper jams, poor toner fusing, poor print quality, or excessive mechanical wear.

NOTE: You might be able to print on heavier paper if you do not fill the input tray to capacity and if you use paper with a smoothness rating of 100-180 Sheffield.

Card stock construction

- **Smoothness**: 135-157g/m² (36-42lb) card stock should have a smoothness rating of 100-180 Sheffield. 60-135g/m² (16-36lb) card stock should have a smoothness rating of 100-250 Sheffield.
- Construction: Card stock should lie flat with less than 5mm (0.2in.) of curl.
- Condition: Make sure that the card stock is not wrinkled, nicked, or otherwise damaged.
- Sizes: Only use card stock within the following size ranges:
 - Minimum: 76 x 127mm (3 x 5in.)
 - Maximum: 216 x 356mm (8.5 x 14.0in.)

Card stock guidelines

Set margins at least 2mm (0.08in.) away from the edges.

ENWW Media considerations 69

Letterhead and preprinted forms

Many manufacturers now offer premium paper advertised as laser-compatible or laser-guaranteed. Some of the rougher surface finishes, such as cockle, laid, or linen, might require the special fuser modes that are available on some printer models in order to achieve adequate toner adhesion.

NOTE: Some page-to-page variation is normal when printing with laser printers. This variation cannot be observed when printing on plain paper. However, this variation is obvious when printing on preprinted forms because the lines and boxes are already placed on the page.

To avoid problems when using preprinted forms, embossed paper, and letterhead, observe the following guidelines:

- Avoid using low-temperature inks (the kind used with some types of thermography).
- Use preprinted forms and letterhead paper that have been printed by offset lithography or engraving.
- Use forms that have been created with heat-resistant inks that will not melt, vaporize, or release undesirable emissions when heated to 200°C (392°F) for 0.1 second. Typically, oxidation-set or oil-based inks meet this requirement.
- When the form is preprinted, be careful not to change the moisture content of the paper, and do
 not use materials that change the paper's electrical or handling properties. Seal the forms in
 moisture-proof wrap to prevent moisture changes during storage.
- Avoid processing preprinted forms that have a finish or coating.
- Avoid using heavily embossed or raised-letterhead papers.
- Avoid papers that have heavily textured surfaces.
- Avoid using offset powders or other materials that prevent printed forms from sticking together.

Select the correct fuser mode

The device automatically adjusts the fuser mode based on the media type to which the tray is set. For example, heavy paper, such as card stock, might need a higher fuser-mode setting in order to make the toner adhere better to the page, but transparencies need a lower fuser-mode setting to avoid damage to the device. The default setting generally provides the best performance for most print-media types.

The fuser mode can be changed only if the media type has been set for the tray that you are using. See <u>Control print jobs on page 88</u>. After the media type has been set for the tray, then the fuser mode for that type can be changed on the <u>Administration</u> menu in the <u>Print Quality</u> submenu at the device control panel. See <u>Print Quality menu on page 48</u>.

NOTE: Using the High 1 or High 2 fuser mode setting improves the ability of the toner to adhere to paper, but it might cause other problems, such as excessive curl. The device might print at a slower speed when the fuser mode is set to High 1 or High 2. The table below describes the ideal fuser mode setting for supported media types.

Media type	Fuser mode setting
Plain	Normal
Preprinted	Normal
Letterhead	Normal

Media type	Fuser mode setting
Transparency	Low 2
Prepunched	Normal
Labels	Normal
Bond	Normal
Recycled	Normal
Color	Normal
Light	Low 1
Card stock	Normal
Rough	High 1
Envelope	Normal

To reset the fuser modes to the default settings, touch the Administration menu at the device control panel. Touch Print Quality, touch Fuser Modes, and then touch Restore Modes.

ENWW Media considerations 71

Select print media

Table 4-1 Supported types of media

Type of media	Tray 1	Trays 2, 3, 4, and 5	Optional duplexer	Optional envelope feeder	3-bin mailbox or stacker part of stapler/stacker	Stapler part of stapler/stacker
Plain	Х	Х	Х	Х	Х	Х
Preprinted	Х	Х	Х	Х	Х	Х
Letterhead	Х	Х	Х	Х	Х	Х
Transparency	Х	Х			Х	
Prepunched	Х	Х		Х	Х	Х
Labels	Х	Х	Х	Х	X	
Bond	Х	Х	Х	Х	X	Х
Recycled	Х	Х	Х	Х	X	Х
Color	Х	Х	Х	Х	Х	Х
Cardstock	Х			X	X 1 2	
Rough	Х	X	Х	Х	X	Х
Envelope	Х			Х	X ¹	

Face-up delivery only.

Table 4-2 Tray 1 supported sizes and weights

Size	Dimensions ¹	Weight	Capacity ²
Letter	216 x 279mm (8.5 x 11 inches)	60 to 200g/m² (16 to 53lb)	100 sheets of 75g/m² (20lb)
A4	210 x 297mm (8.3 x 11.7 inches)	-	paper
Legal	216 x 356mm (8.5 x 14 inches)	-	
Executive	184 x 267mm (7.3 x 10.5 inches)	-	
Statement	140 x 216mm (5.5 x 8.5 inches)	-	
8.5 x 13	216 x 330mm (8.5 x 13 inches)	-	
A5	148 x 210mm (5.8 x 8.3 inches)	-	
B5 (JIS)	182 x 257mm (7.2 x 10.1 inches)	-	
Executive (JIS)	216 x 330mm (8.5 x 13 inches)	-	
D Postcard (JIS)	148 x 200mm (5.8 x 7.9 inches)	-	
16K	197 x 273mm (7.75 x 10.75 inches)	-	
Custom ³	Minimum: 76 x 127mm (3 x 5 inches)	-	
	Maximum: 216 x 356mm (8.5 x 14 inches)		

² If a 3-bin mailbox is installed, select the bottom bin when printing on cardstock. Media weights that are 200g/m² or greater are supported only in the bottom bin.

Table 4-2 Tray 1 supported sizes and weights (continued)

Size	Dimensions ¹	Weight	Capacity ²
Envelope Commercial #10	105 x 241mm (4.1 x 9.5 inches)	75 to 105g/m² (20 to 28lb)	10 envelopes
EnvelopeDL ISO	110 x 220mm (4.3 x 8.7 inches)	_	
EnvelopeC5 ISO	162 x 229mm (6.4 x 9.0 inches)	_	
EnvelopeB5 ISO	176 x 250mm (6.9 x 9.8 inches)	_	
EnvelopeMonarch #7-3/4	98 x 191mm (3.9 x 7.5 inches)	_	

- 1 The MFP supports a wide range of sizes. Check the MFP software for supported sizes.
- $^{2}\,\,$ Capacity can vary depending on paper weight and thickness, as well as environmental conditions.
- 3 To print on custom-size paper, see <u>Load small sizes, custom sizes, or heavy paper on page 87</u>.

Table 4-3 Trays 2, 3, 4, and 5 supported sizes and weights

Size	Dimensions ¹	Weight	Capacity ²
Letter	216 x 279mm (8.5 x 11 inches)	60 to 120g/m² (16 to 32lb)	500 sheets of 75g/m ² (20lb)
A4	210 x 297mm (8.3 x 11.7 inches)		paper
Executive	184 x 267mm (7.3 x 10.5 inches)	_	
Legal	216 x 356mm (8.5 x 14 inches)	_	
B5 (JIS)	182 x 257mm (7.2 x 10.1 inches)	-	
A5	148 x 210mm (5.8 x 8.3 inches)	_	
8.5 x 13	216 x 330mm (8.5 x 13 inches)	_	
Executive (JIS)	216 x 330mm (8.5 x 13 inches)		
16K	197 x 273mm (7.75 x 10.75 inches)	_	
Custom ³	Minimum: 148 x 210mm (5.8 x 8.3 inches)	_	
	Maximum: 216 x 356mm (8.5 x 14 inches)		

- 1 The MFP supports a wide range of sizes. Check the MFP software for supported sizes.
- ² Capacity can vary depending on paper weight and thickness, as well as environmental conditions.
- ³ To print on custom-size paper, see <u>Load small sizes, custom sizes, or heavy paper on page 87</u>.

ENWW Select print media 73

Table 4-4 Optional duplexer supported sizes and weights

Size	Dimensions	Weight
Letter	216 x 279mm (8.5 x 11 inches)	60 to 120g/m ² (16 to 32lb)
A4	210 x 297mm (8.3 x 11.7 inches)	-
Executive	184 x 267mm (7.3 x 10.5 inches)	-
Legal	216 x 356mm (8.5 x 14 inches)	-
B5 (JIS)	182 x 257mm (7.2 x 10.1 inches)	_
A5	148 x 210 mm (5.8 x 8.3 inches)	-
8.5 x 13	216 x 330mm (8.5 x 13 inches)	_
Executive (JIS)	216 x 330mm (8.5 x 13 inches)	-
16K	197 x 273mm (7.75 x 10.75 inches)	

Table 4-5 Optional envelope feeder supported sizes and weights

Size	Dimensions	Weight	Capacity
Monarch #7-3/4	98 x 191mm (3.9 x 7.5 inches)	75 to 105g/m² (20 to 28lb)	75 envelopes
Commercial#10	105 x 241mm (4.1 x 9.5 inches)	_	
DL ISO	110 x 220mm (4.3 x 8.7 inches)	_	
C5 ISO	162 x 229mm (6.4 x 9.0 inches)	_	
B5 ISO	176 x 250mm (6.9 x 9.8 inches)	_	

Table 4-6 Optional 3-bin mailbox or stacker part of the stapler/stacker supported sizes and weights

Size	Dimensions ¹	Weight	Capacity ²
Letter	216 x 279mm (8.5 x 11 inches)		For the stacker on the stapler/
A4	210 x 297mm (8.3 x 11.7 inches)	_	stacker or the lower bin on the 3- bin mailbox: 500 sheets of 75g/
Executive	184 x 267mm (7.3 x 10.5 inches)	_	m ² (20lb) paper
Legal	216 x 356mm (8.5 x 14 inches)	_	For the top two bins on the 3-bin mailbox: each can hold 100
B5 (JIS)	182 x 257mm (7.2 x 10.1 inches)	-	sheets of 75g/m ² (20lb) paper.
A5	148 x 210mm (5.8 x 8.3 inches)	_	
Statement	140 x 216mm (5.5 x 8.5 inches)	_	
8.5 x 13	216 x 330mm (8.5 x 13 inches)	-	
Executive(JIS)	216 x 330mm (8.5 x 13 inches)	-	
DPostcard(JIS)	148 x 200mm (5.8 x 7.9 inches)	_	
16K	197 x 273mm (7.75 x 10.75 inches)	_	
Envelope #10 ⁴	105 x 241mm (4.1 x 9.5 inches)	-	
Envelope Monarch #7-3/4 4	98 x 191mm (3.9 x 7.5 inches)	_	
Envelope C5 ISO ⁴	162 x 229mm (6.4 x 9.0 inches)	_	
Envelope DL ISO ⁴	110 x 220mm (4.3 x 8.7 inches)	_	
Envelope B5 ISO ⁴	176 x 250mm (6.7 x 9.8mm)	_	
Custom ³	Minimum: 76 x 127mm (3 x 5 inches)	_	
	Maximum: 216 x 356mm (8.5 x 14 inches)		

¹ The MFP supports a wide range of sizes. Check the MFP software for supported sizes.

Table 4-7 Stapler part of the optional stapler/stacker supported sizes and weights

Size	Dimensions	Weight	Capacity
Letter	216 x 279mm (8.5 x 11 inches)	For plain media: 60 to 120g/m ²	For plain media: 30 sheets of 75g/
A4	210 x 297mm (8.3 x 11.7 inches)	(16 to 32lb)	m ² (20lb) paper
Legal	216 x 356mm (8.5 x 14 inches)	For thick media: 128 to 199g/ m² (34 to 53lb)	For glossy media: 20 sheets
8.5 x 13	216 x 330mm (8.5 x 13 inches)	-	For thick media: the stack height must not exceed 7mm (0.27 inch)
Executive(JIS)	216 x 330mm (8.5 x 13 inches)	-	

ENWW Select print media 75

² Capacity can vary depending on paper weight and thickness, as well as environmental conditions.

³ To print on custom-size paper, see <u>Load small sizes, custom sizes, or heavy paper on page 87</u>.

⁴ Face-up delivery only.

Table 4-8 ADF supported sizes and weights

Size	Dimensions	Weight	Capacity
Letter	216 x 279mm (8.5 x 11 inches)	60 to 120g/m ² (16 to 32lb)	50 sheets of 75g/m ² (20lb) paper
A4	210 x 297mm (8.3 x 11.7 inches)		
A5	148 x 210mm (5.8 x 8.3 inches)	-	
Legal	216 x 356mm (8.5 x 14 inches)	-	

Printing and paper-storage environment

Ideally, the printing and paper-storage environment should be at or near room temperature, and not too dry or too humid. Remember paper is hygroscopic; it absorbs and loses moisture rapidly.

Heat works with humidity to damage paper. Heat causes the moisture in paper to evaporate, while cold causes it to condense on the sheets. Heating systems and air conditioners remove most of the humidity from a room. As paper is opened and used, it loses moisture, causing streaks and smudging. Humid weather or water coolers can cause the humidity to increase in a room. As paper is opened and used it absorbs any excess moisture, causing light print and dropouts. Also, as paper loses and gains moisture it can distort. This can cause jams.

As a result, paper storage and handling are as important as the paper-making process itself. Paper storage environmental conditions directly affect the feed operation.

Care should be taken not to purchase more paper than can be easily used in a short time (about 3 months). Paper stored for long periods might experience heat and moisture extremes, which can cause damage. Planning is important to prevent damage to a large supply of paper.

Unopened paper in sealed reams can remain stable for several months before use. Opened packages of paper have more potential for environmental damage, especially if they are not wrapped with a moisture-proof barrier.

The paper-storage environment should be properly maintained to ensure optimum product performance. The required condition is 20° to 24°C (68° to 75°F), with a relative humidity of 45% to 55%. The following guidelines should be helpful when evaluating the paper's storage environment:

- Paper should be stored at or near room temperature.
- The air should not be too dry or too humid (due to the hygroscopic properties of paper).
- The best way to store an opened ream of paper is to rewrap it tightly in its moisture-proof wrapping.
 If the product environment is subject to extremes, unwrap only the amount of paper to be used during the day's operation to prevent unwanted moisture changes.
- Proper storage of envelopes helps contribute to print quality. Envelopes should be stored flat. If air
 is trapped in an envelope, creating an air bubble, then the envelope might wrinkle during
 printing.

Load media

This section contains information about loading standard- and custom-size media into the input trays.

△ CAUTION: To avoid a jam, never add or remove paper from a tray while printing or copying from that tray. To avoid damaging the MFP, print labels and envelopes from tray 1 only. Print on only one side of labels, envelopes, and transparencies.

Load the flatbed scanner

Place the document face-down on the scanner glass.

Load the ADF

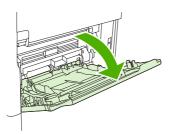
Load the document face-up in the ADF.

Load tray 1

Tray 1 holds up to 100 sheets of paper or 10 envelopes. For more information about supported media, see <u>Select print media on page 72</u>.

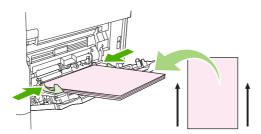
Use the following procedure if tray 1 is loaded continually with the same type of media, and the media is not usually removed from tray 1 between print jobs. The following procedure can also increase the MFP performance when printing from tray 1.

- △ CAUTION: To avoid a jam, never add or remove media from a tray while printing from that tray.
 - 1. Touch Copy.
 - 2. Touch Paper Selection.
 - 3. Touch Tray 1 Any Size.
 - 4. Touch the correct media size.
 - NOTE: If you select Custom as the media size, also select the unit of measure and the X and Y dimensions.
 - 5. Touch OK.
 - 6. Touch OK again.
 - 7. Open tray 1.



- Load paper according to size and finishing options. See <u>Select print media on page 72</u> for information about loading preprinted, letterhead, and prepunched paper.
- △ CAUTION: To avoid jams, print sheets of labels one sheet at a time.

9. Adjust the media guides so they lightly touch the media stack, but do not bend the media.



- 10. Make sure the media fits under the tabs on the guides and not above the load level indicators.
 - NOTE: If printing on long media also pull out the tray extension until it stops.
- 11. Touch Start Copy.

Load trays 2, 3, 4 and 5

Trays 2, 3, 4, and 5 hold up to 500 sheets of standard media. For information about paper specifications, see Select print media on page 72.

The following are the *detectable* standard sizes, which are marked inside the tray:

- A4
- Letter
- Legal
- Executive
- B5 (JIS)
- A5

The following are the *undetectable* standard sizes:

- 16K
- Executive (JIS)
- 8.5 x 13 (216 x 330 mm).

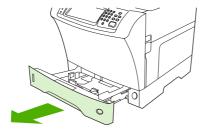
When loading undetectable sizes, you need to manually set the size at the control panel. For information about loading custom-size media, see <u>Load custom-size media in trays 2, 3, 4, and 5 on page 81</u>.

△ CAUTION: To avoid a jam, never add or remove paper from a tray while printing from that tray.

ENWW Load media 79

Load standard-size media in trays 2, 3, 4, and 5

- NOTE: Do not load envelopes in trays 2, 3, 4, or 5. Use only tray 1 for printing on envelopes.
 - 1. Open the tray until it stops.



2. Load the media into the tray.



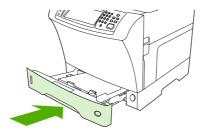
- NOTE: See <u>Load letterhead</u>, <u>prepunched</u>, <u>or preprinted paper on page 85</u> for information about loading preprinted, letterhead, and prepunched paper.
- 3. Adjust the media-length guide by pressing the tab on the guide and moving it until it touches the media stack.



4. Adjust the media-width guide by pressing the tab on the guide and moving it until it touches the media stack.



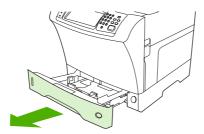
5. Close the tray.



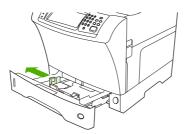
NOTE: Depending on the size that you selected, the MFP might prompt you to move the media guides. Follow the instructions on the control panel.

Load custom-size media in trays 2, 3, 4, and 5

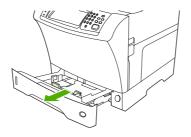
1. Open the tray until it stops.



2. Press the tab on the left media guide and slide the guide all the way out.

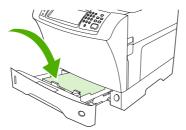


3. Press the tab on the front media guide and slide the guide all the way out.

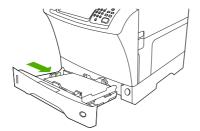


ENWW Load media 81

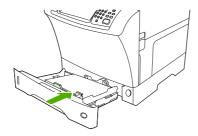
4. Load the media into the tray.



- NOTE: See <u>Load letterhead</u>, <u>prepunched</u>, <u>or preprinted paper on page 85</u> for information about loading preprinted, letterhead, and prepunched paper.
- Adjust the left media guide by pressing the tab on the guide and sliding the guide until it gently touches the media stack



6. Adjust the front media guide by pressing the tab on the guide and sliding the guide until it gently touches the media stack.



- 7. Look at the package for the ream of paper. Note the value of the width (X dimension) and the length (Y dimension). You will need this information for a later step.
- Close the tray.



9. If the size that appears on the control panel is Custom, then the tray size is set to ANY CUSTOM. The tray will match any custom-size print job, even if the print-job dimensions are different from the dimensions of the media that is loaded in the tray. If you prefer, you can specify the exact dimensions of the custom-size media that is loaded in the tray. When you specify exact dimensions, the dimensions appear as the size, rather than Custom.

Touch Custom. The UNIT OF MEASURE menu appears.

- NOTE: The MFP might prompt you to move the media guides. Follow the instructions on the control panel.
- 10. Touch MILLIMETERS or touch INCHES.
- 11. Use the numeric keypad to select the X dimension (short edge).
- 12. Touch OK.
- **13.** Use the numeric keypad to select the Y dimension (long edge).
- **14.** Touch OK. SETTING SAVED appears on the control-panel display for a moment. The tray size then appears.
- **15.** Touch EXIT to accept the settings. The tray is ready to use.

Load special media

Load envelopes

You can print on envelopes from tray 1 or the optional envelope feeder. Tray 1 holds up to 10 envelopes and supports standard or custom sizes. The optional envelope feeder holds up to 75 envelopes and supports only standard envelope sizes.

For printing on any size of envelope, make sure to set the margins in your program at least 15mm (0.6 inch) from the edge of the envelope.

Printing performance depends on the construction of the envelope. Always test a few sample envelopes before purchasing a large quantity. For envelope specifications, see <u>Select print media on page 72</u>.

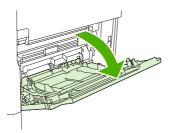
- ▲ WARNING! Never use envelopes that contain coated linings, exposed self-stick adhesives, or other synthetic materials. These items can emit noxious fumes.
- △ CAUTION: Envelopes that have clasps, snaps, windows, coated linings, exposed self-stick adhesives, or other synthetic materials can severely damage the MFP. To avoid jamming and possible MFP damage, never try to print on both sides of an envelope. Before you load envelopes, make sure that they are flat and are not damaged or stuck together. Do not use envelopes that have pressure-sensitive adhesive.
- NOTE: The MFP prints at a slower speed when printing on envelopes.

Many types of envelopes can be printed on from tray 1. Up to 10 can be stacked in the tray. See <u>Select print media on page 72</u> for specifications.

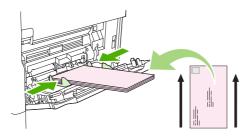
ENWW Load media 83

Load envelopes in tray 1

1. Open tray 1, but do not pull out the extension. Most envelopes feed best without the extension. However, oversize envelopes might need the extension.



2. Load up to 10 envelopes in the center of tray 1 with the front side facing up, and the postage-end toward the MFP. Slide the envelopes into the MFP as far as they will go without forcing them.



3. Adjust the guides to touch the envelope stack without bending the envelopes. Make sure that the envelopes fit under the tabs and maximum-height indicators on the guides.

Load labels

Use only labels that are recommended for use in laser printers. Make sure that labels meet the correct specifications. See <u>Labels on page 68</u>.

Follow these guidelines when printing on labels:

- Print on a stack of up to 50 label sheets from tray 1 or a stack of up to 100 label sheets from other trays.
- Load labels in tray 1 with the front side facing up, and the top, short edge toward the MFP. For other trays, load media with the front side facing down, and the top edge toward the right.

Do not load or print on labels in the following ways:

△ CAUTION: Failure to follow these instructions can damage the MFP.

- Do not load the trays to maximum capacity, because labels are heavier than paper.
- Do not use labels that are separating from the backing sheet, wrinkled, or damaged in any way.
- Do not use labels that have the backing sheet exposed. (Labels must cover the entire backing sheet, leaving no exposed spaces.)
- Do not feed a sheet of labels through the MFP more than once. The adhesive backing is designed for only one pass through the MFP.
- Do not print on both sides of labels.
- Do not print on sheets from which labels have been removed.

Load transparencies

Use only transparencies that are recommended for use in laser printers. For transparency specifications, see <u>Transparencies on page 69</u>.

 At the control panel, scroll to and touch Administration, scroll to and touch Print Quality, touch Fuser Modes, touch Transparency, and touch Low2.

△ CAUTION: Failure to set the fuser mode to Low2 can permanently damage the MFP and fuser.

- In the printer driver, set the paper type to Transparency.
- At the control panel, touch Copy, touch Paper Selection, select the desired tray, and touch Transparency.
- Load transparencies face up in tray 1 with the top toward the MFP. Up to 50 transparencies can be loaded in tray 1.
- A stack of up to 100 transparencies can be printed from tray 2 and the optional trays (although stacking more than 50 at a time is not recommended).
- Because transparencies are heavier than paper, do not load trays to maximum capacity.
- Load transparencies in tray 2 or the optional trays with the side to be printed on facing down, and the top, short edge toward the right.
- To prevent transparencies from becoming too hot or from sticking together, remove each transparency from the output bin before printing another.
- Print on only one side of a transparency.
- Place transparencies on a flat surface to cool after removing them from the MFP.
- If two or more transparencies feed at the same time, try fanning the stack.
- Do not feed transparencies through the MFP more than once.

Load letterhead, prepunched, or preprinted paper

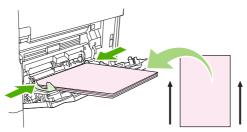
When printing on letterhead, prepunched, or preprinted paper, it is important to orient the paper correctly. For most printing situations, follow the guidelines in this section for printing on one side only. For duplexing guidelines, see Print on both sides of the paper on page 108.

NOTE: If you want to always load letterhead or preprinted paper the same way for all print jobs, whether you are printing on one side of the sheet or on both sides of the sheet, use the **Alternative**Letterhead Mode setting in the printer driver. Load the paper as you would for printing on both sides. When this option is selected, the MFP speed slows to the speed that is required for printing on both sides. The information presented in this section is for printing without using Alternative Letterhead Mode.

NOTE: For more information about paper that has a special finish, such as laid or bond paper, see <u>Load paper that has a special finish on page 86</u>.

For tray 1, load the paper with the front side facing up, and the top, short edge toward the MFP.

ENWW Load media 85



For tray 2 and the optional 500-sheet trays, load the paper with the front side facing down, and the top, short edge toward the right.

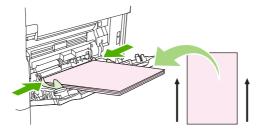


Load paper that has a special finish

Some paper has a special finish, such as laid paper, bond paper, and cockled paper. These types of paper can cause issues in regard to toner adhesion and print quality. Follow these guidelines when printing on paper that has a special finish.

- At the control panel, scroll to and touch Administration, touch Print Quality, and touch Fuser Modes. Touch the paper type that you are using (such as Bond). Set the fuser mode to High1 or High2. High2 provides better toner adhesion and optimal print quality for paper that has a highly textured finish. At the control panel home screen, touch Copy, touch Paper Selection, select the desired tray, and touch the type of paper that you are using (such as Bond) to turn on the appropriate fuser mode.
- NOTE: The MFP might print at a slower speed when set at High1 or High2. Use the High1 and High2 settings only if you are experiencing toner-adhesion problems. The High1 and High2 settings might increase problems with curl and jams.
 - Some makers of these types of paper are now coating one side of the paper to enhance toner adhesion and print quality. To take advantage of this feature, make sure to load the paper correctly. The side on which you can read the watermark correctly is the front side, or the side to be printed on.

For tray 1, load paper with the front side facing up, and the top, short edge toward the MFP.



For tray 2 and the optional 500-sheet trays, load paper with the front side facing down, and the top, short edge toward the right.



Load small sizes, custom sizes, or heavy paper

Custom-size paper can be printed from tray 1, tray 2, or an optional 500-sheet tray.

NOTE: The MFP might print at a slower speed when printing on small sizes, custom sizes, and heavy paper. For more information about paper that has a special finish, such as laid or bond paper, see <u>Load paper that has a special finish on page 86</u>.

Weight and sizes

See the following table for specifications when printing on custom or heavy paper.

Tray	Minimum size	Maximum size	Supported weights
Tray 1	76 x 127mm (3 x 5 inches)	216 x 356mm (8.5 x 14 inches)	60 to 200g/m ² (16 to 53lb)
Tray 2 and optional 500-sheet tray	148 x 210mm (5.8 x 8.2 inches)	216 x 356mm (8.5 x 14 inches)	60 to 120g/m ² (16 to 32lb)

Guidelines for heavy paper

To help prevent toner from rubbing off of the paper, some heavier paper types should be printed using a higher fuser mode. At the control panel, scroll to and touch Administration, touch Print Quality, and touch Fuser Modes. Touch the paper type that you are using. Set the fuser mode to High1 or High2. Using these modes helps prevent toner from rubbing off the page, but using them might slow the device speed or create other problems, such as increased curl.

Guidelines for custom-size paper

Follow these guidelines when printing on any custom-size paper:

- Feed the paper short-edge first.
- In your program, set page margins at least 4.23mm (0.17 inch) away from the edges.
- Set the custom size in the program, in the printer driver, or at the MFP control panel.

Additional guidelines for small or narrow paper

Follow these additional guidelines when printing on small or narrow paper:

- Do not attempt to print on paper smaller than 76mm (3 inches) wide or 127mm (5 inches) long.
- HP does not recommend printing large quantities of small or narrow paper. This could result in excessive wear on the print-cartridge components that might result in print-quality problems or toner leaking into the MFP.

ENWW Load media 87

Control print jobs

When a job is sent to the printer, the printer driver controls what paper tray is used to pull media through the printer. By default, the printer automatically selects the tray, but a specific tray can be chosen based on three user-specified settings: **Source**, **Type**, and **Size**. These settings are available from the **Application Setting** dialog box, the **Print** dialog box, or the printer driver.

Setting	Description
Source	Directs the printer to pull paper from a user-specified tray. The printer tries to print from this tray, no matter what type or size media is loaded in it. To begin printing, load the selected tray with the correct type or size of print media for the print job. After loading the tray, the printer begins printing. If the printer does not begin printing:
	 Verify the tray configuration matches the size or type of the print job.
	 Press OK to have the printer try to print from another tray.
Type or Size	Directs the printer to pull paper or print media from the first tray that is loaded with the type or size that you selected. Always print by Type for special print media such as labels or transparencies.

Select output bins

The MFP has two output-bin locations: the ADF output bin and the standard output bin(s) on the output device.



When documents are scanned or copied by using the ADF, the original documents are automatically delivered to the ADF output bin. Copies are delivered to the standard output bin or the output bin(s) on the stapler/stacker or to the 3-bin mailbox.

Documents that are sent to the MFP from a computer are delivered to the standard output bin or the output bin(s) on the stapler/stacker or to the 3-bin mailbox.

Select an output location

It is recommended that you select an output location (bin) through your program or driver. Where and how you make selections depends on your program or driver. If you cannot select an output location from the program or driver, set the default output location from the MFP control panel.

- Scroll to and touch Administration.
- 2. Touch Default Job Options.
- 3. Touch Output Bin.
- 4. Touch the desired output bin.

3-bin mailbox output bins

If you are using the 3-bin mailbox, three output bins are available. You can configure these bins to act as individual mailboxes, or they can be combined as a single bin to stack documents. You can set up these options in the Device Behavior menu, on the MBM-3 Configuration submenu. This menu is available only when the 3-bin mailbox is installed.

The top two bins hold up to 100 sheets of paper. A sensor causes the MFP to stop when the bin is full. MFP operation continues when you empty or reduce the amount of media in the bin.

The lower bin holds up to 500 sheets of paper.

Selecting face-up or face-down output for copy jobs

The MFP can deliver pages either face-up or face-down. The default setting is to deliver jobs face-down. Documents that have multiple pages are delivered with the correct page order. Face-down output is the fastest delivery method.

Select face-up output when you want to use the straightest paper path, such as when printing on heavy media. Documents that have multiple pages are delivered with the pages in reverse order.

You can select face-up or face-down output on the **Output** tab in the printer driver. See <u>Supported printer</u> drivers on page 11.

ENWW Select output bins 89

NOTE: If you select Face-up (Straightest Path), the stapler/stacker cannot staple the job.

5 Use device features

- Use the stapler
- Use job storage features

ENWW 91

Use the stapler

The optional stapler/stacker can staple jobs of up to 30 sheets of $75g/m^2$ (20lb) paper. The stapler can staple these sizes: A4, Letter, Legal, Executive (JIS), and 8.5 x 13. It can stack up to 500 sheets of paper.

- Paper weight can range from 60 to 120g/m² (16 to 32lb). Heavier paper might have a stapling limit
 of fewer than 30 sheets.
- If the job consists of only one sheet, or if it consists of more than 30 sheets, the MFP delivers the
 job to the bin, but the MFP does not staple the job.
- The stapler supports paper only. Do not try to staple other types of print media, such as envelopes, transparencies, or labels.

When you want the MFP staple a document, select stapling in the software. You can usually select the stapler in your program or printer driver, although some options might be available only in the printer driver. Where and how you make selections depends on your program or printer driver.

If you cannot select the stapler in the program or printer driver, select the stapler at the MFP control panel.

The stapler accepts print jobs if it is out of staples, but it does not staple the pages. The printer driver can be configured to disable the staple option if the staple cartridge is empty.

Configure the printer driver to recognize the optional stapler

You need to configure the printer driver to recognize the optional stapler/stacker. You need to configure this setting only once. The procedure to configure the driver to recognize the accessory depends on the operating system that you are using. For instructions, see <u>Supported printer drivers on page 11</u>. Look for the column with the heading "To change the configuration settings," and follow the procedure for the operating system that you are using. Select the HP 500-Sheet Stapler/Stacker as an optional paper destination or accessory.

Staple media

Select the stapler in the software (Windows)

- 1. On the File menu, click **Print**, and then click **Properties**.
- 2. On the Output tab, click the drop-down list under Staple, and click One Staple Angled.

Select the stapler in the software (Mac)

- On the File menu, click Print, and then select Finishing from the print options.
- 2. In the **Output Destination** pop-up menu, select the **Stapler** option.
- In the Finishing Options pop-up menu, select the stapling style that you want to use.

Select the stapler at the control panel for printed jobs

- Scroll to and touch Administration.
- 2. Touch Default Job Options.
- 3. Touch Default Copy Options.

- Touch Staple/Collate.
- 5. Touch Staple.
- Touch the staple option you want to use.
- NOTE: Selecting the stapler at the printer control panel changes the default setting to Staple. It is possible that all print jobs will be stapled. However, settings that are changed in the printer driver override settings that are changed at the control panel.

Select the stapler in the printer driver for printed jobs (Windows)

- NOTE: The following procedure changes the default setting to staple all print jobs.
 - 1. Open the printer driver. See Open the printer drivers on page 14. Look for the column with the heading "To change the print job default settings."
 - 2. On the Output tab, click the drop-down list under Staple, and click One Staple Angled.
- NOTE: You can create a Quick Set that has the appropriate settings.

Select the stapler in the printer driver for printed jobs (Mac)

Select the stapler by creating a new preset in the printer driver.

- Open the printer driver. See <u>Open the printer drivers on page 14</u>. Look for the column with the heading "To change the print job default settings," and follow the instructions for the operating system that you are using.
- Create the new preset.

Set the stapler at the control panel for all copy jobs

- NOTE: The following procedure changes the default setting for all copy jobs.
 - 1. Scroll to and touch Administration.
 - 2. Touch Default Job Options.
 - 3. Touch Default Copy Options.
 - 4. Touch Staple/Collate.
 - 5. Touch Staple.
 - Touch the staple option you want to use.

Set the stapler at the control panel for a single copy job

- NOTE: The following procedure sets the stapling option for only the current copy job.
 - Scroll to and touch Copy.
 - 2. Touch Staple/Collate.
 - Touch the staple option you want to use.

ENWW Use the stapler 93

Configure the device to stop or continue when the staple cartridge is empty

You can specify whether the MFP stops printing when the staple cartridge is empty or if it continues printing but does not staple the jobs.

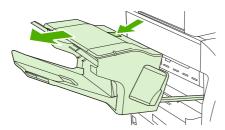
- 1. Scroll to and touch Administration.
- 2. Scroll to and touch Device Behavior.
- 3. Scroll to and touch Stapler Stacker.
- 4. Touch Staples Out.
- 5. Touch the option that you want to use:
 - Select Stop to stop all printing until the staple cartridge is replaced.
 - Select Continue to continue printing jobs without stapling them.

Load staples

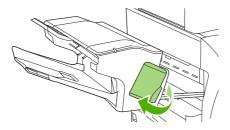
Load staples if the printer control-panel display prompts you with a STAPLER LOW ON STAPLES message (the stapler has fewer than 20 usable staples left) or a REPLACE STAPLE CARTRIDGE message (the stapler is empty, or the remaining staples cannot be used).

You can specify whether the MFP stops printing when the staple cartridge is empty or if it continues printing but does not staple the jobs.

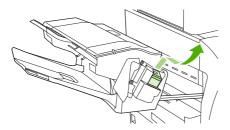
 Press and hold the release button on the top of the stapler/stacker. Pull the stapler/stacker away from the MFP.



2. Open the staple-cartridge cover.



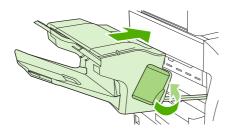
3. Grasp the green staple-cartridge handle and pull the old staple cartridge out of the stapler unit.



4. Insert the new staple cartridge into the stapler unit and push down on the green handle until the unit snaps into place.



5. Close the staple-cartridge cover, and slide the stapler/stacker into the MFP.



ENWW Use the stapler 95

Use job storage features

The following job-storage features are available for this device:

- Proof and hold jobs: This feature provides a quick and easy way to print and proof one copy of a job and then print the additional copies.
- Private jobs: When you send a private job to the device, the job does not print until you provide
 the required personal identification number (PIN) at the control panel.
- **QuickCopy jobs**: You can print the requested number of copies of a job and then store a copy of the job on the device hard disk. Storing the job allows you to print additional copies of the job later.
- **Stored jobs**: You can store a job such as a personnel form, time sheet, or calendar on the device and allow other users to print the job at any time. Stored jobs also can be protected by a PIN.

Follow the instructions in this section to gain access to the job storage features at the computer. See the specific section for the type of job that you want to create.

△ CAUTION: If you turn off the device, all QuickCopy, proof and hold, and private jobs are deleted.

Gain access to the job storage features

For Windows

- 1. On the File menu, click Print.
- 2. Click **Properties**, and then click the **Job Storage** tab.
- 3. Select the job storage mode that you want.

For Macintosh

In newer drivers: Select **Job Storage** in the pull-down menu in the **Print** dialog box. In older drivers, select **Printer Specific Options**.

Use the proof and hold feature

The proof and hold feature provides a quick and easy way to print and proof one copy of a job and then to print the additional copies.

To permanently store the job and prevent the device from deleting it when space is needed for something else, select the **Stored Job** option in the driver.

Create a proof and hold job

△ CAUTION: If the device needs additional space to store newer proof and hold jobs, the device deletes other stored proof and hold jobs, starting with the oldest job. To permanently store a job and prevent the device from deleting it when space is needed, select the **Stored Job** option in the driver instead of the **Proof and Hold** option.

In the driver, select the **Proof and Hold** option and type a user name and job name.

The device prints one copy of the job for you to proof. Then, see <u>Navigate the Administration menuon page 21</u>.

Print the remaining copies of a proof and hold job

At the device control panel, use the following procedure to print the remaining copies of a job held on the hard disk.

- From the Home screen, touch Job Storage.
- 2. Touch the Retrieve tab.
- 3. Scroll to and touch the job storage folder that holds the job.
- 4. Scroll to and touch the job that you want to print.
- 5. Touch the Copies field to change the number of copies to print. Touch Retrieve Stored Job (♠) to print the document.

Delete a proof and hold job

When you send a proof and hold job, the device automatically deletes your previous proof and hold job.

- 1. From the Home screen, touch Job Storage.
- 2. Touch the Retrieve tab.
- 3. Scroll to and touch the job storage folder that holds the job.
- 4. Scroll to and touch the job that you want to delete.
- 5. Touch Delete.
- Touch Yes.

Use the private job feature

Use the private printing feature to specify that a job is not printed until you release it. First, set a 4-digit PIN by typing the PIN in the printer driver. The PIN is sent to the device as part of the print job. After you have sent the print job to the device, you must use the PIN to print the job.

Create a private job

To specify that a job is private, in the driver, select the Private Job option, type a user name and job name, and then type a four-digit PIN. The job will not print until you enter the PIN at the device control panel.

Print a private job

You can print a private job at the control panel after the job has been sent to the device.

- 1. From the Home screen, touch Job Storage.
- 2. Touch the Retrieve tab.
- 3. Scroll to and touch the job storage folder that holds the private job.
- 4. Scroll to and touch the private job that you want to print.
- NOTE: A private job will have a [[lock symbol] next to it.
- Touch the PIN field.
- 6. Use the numeric keypad to type the PIN, and then touch **OK**.
- 7. Touch the Copies field to change the number of copies to print.
- 8. Touch Retrieve Stored Job ((a)) to print the document.

Delete a private job

A private job is automatically deleted from the device hard disk after you release it for printing. If you want to delete the job without printing it, use this procedure.

- From the Home screen, touch Job Storage.
- 2. Touch the Retrieve tab.
- 3. Scroll to and touch the job storage folder that holds the private job.
- 4. Scroll to and touch the private job that you want to delete.
- NOTE: A private job will have a [[lock symbol] next to it.)
- 5. Touch the PIN field.
- 6. Use the numeric keypad to type the PIN, and then touch OK.
- 7. Touch Delete.

Use the QuickCopy feature

The QuickCopy feature prints the requested number of copies of a job and stores a copy on the device hard disk. Additional copies of the job can be printed later. This feature can be turned off in the printer driver.

The default number of different QuickCopy jobs that can be stored on the device is 32. At the control panel, you can set a different default number. See <u>Navigate the Administration menu on page 21</u>.

Create a QuickCopy job

△ CAUTION: If the device needs additional space to store newer QuickCopy jobs, the device deletes other stored QuickCopy jobs, starting with the oldest job. To permanently store a job and prevent the device from deleting it when space is needed, select the **Job Storage** option in the driver instead of the **QuickCopy** option.

In the driver, select the **QuickCopy** option, and then type a user name and a job name.

When you send the job to print, the device prints the number of copies that you set in the driver. To print more quick copies at the device control panel, see Print additional copies of a QuickCopy job on page 99.

Print additional copies of a QuickCopy job

This section describes how to print additional copies of a job stored on the device hard disk at the control panel.

- 1. From the Home screen, touch Job Storage.
- 2. Touch the Retrieve tab.
- 3. Scroll to and touch the job storage folder that holds the job.
- 4. Scroll to and touch the job that you want to print.
- 5. Touch the Copies field to change the number of copies to print.
- 6. Touch Retrieve Stored Job (14) to print the document.

Delete a QuickCopy job

Delete a QuickCopy job at the device control panel when you no longer need it. If the device requires additional space to store new QuickCopy jobs, the device automatically deletes other stored QuickCopy jobs, starting with the oldest job.

- NOTE: Stored QuickCopy jobs can be deleted at the control panel or in HP Web Jetadmin.
 - From the Home screen, touch Job Storage.
 - 2. Touch the Retrieve tab.
 - 3. Scroll to and touch the job storage folder that holds the job.
 - 4. Scroll to and touch the job that you want to delete.
 - 5. Touch Delete.
 - Touch Yes.

Use the stored job feature

You can save a print job to the device hard disk without printing it. You can then print the job at any time at the device control panel. For example, you might want to download a personnel form, calendar, time sheet, or accounting form that other users can print when they need it.

You also can create a stored copy job at the device control panel that can be printed at a later time.

Create a stored copy job

- 1. Place the original document face-down on the glass or face-up in the ADF.
- 2. From the Home screen, touch Job Storage.
- 3. Touch the Create tab.
- **4.** Specify the name for the stored job in one of these ways:
 - Select an existing folder from the list. Touch New Job and type a job name.
 - Touch the box below the existing Folder Name: or Job Name: on the right-hand side of the screen, and then edit the text.
- A private stored job has a lock icon next to the name, and it requires that you specify a PIN to retrieve it. To make the job private, select PIN to Print and then type the PIN for the job. Touch OK.
- 6. Touch More Options to view and change other job storage options.
- 7. After all the options are set, touch Create Stored Job (♠) in the upper-left corner of the screen to scan the document and store the job. The job is saved on the device until you delete it, so you can print it as often as necessary.

For information about printing the job, see Print a stored job on page 100.

Create a stored print job

In the driver, select the **Stored Job** option, and then type a user name and job name. The job does not print until someone requests it at the device control panel. See <u>Print a stored job on page 100</u>.

Print a stored job

At the control panel, you can print a job that is stored on the device hard disk.

- From the Home screen, touch Job Storage.
- 2. Touch the Retrieve tab.
- 3. Scroll to and touch the job storage folder that holds the stored job.
- 4. Scroll to and touch the stored job that you want to print.
- 5. Touch Retrieve Stored Job (1) to print the document.
- **6.** Touch the Copies field to change the number of copies to print.
- 7. Touch Retrieve Stored Job (**) to print the document.

If the file has ♣ (lock symbol) next to it, the job is a private job and requires a PIN. See Print a private job on page 98.

Delete a stored job

Jobs stored on the device hard disk can be deleted at the control panel.

- From the Home screen, touch Job Storage.
- Touch the Retrieve tab.
- Scroll to and touch the job storage folder that holds the stored job.
- Scroll to and touch the stored job that you want to delete.
- 5. Touch Delete.
- 6. Touch Yes.

If the file has ♣ (lock symbol) next to it, the job requires a PIN to delete it. See Print a private job on page 98.

6 Print

- Use features in the Windows printer driver
- Use features in the Macintosh printer driver
- Cancel a print job

ENWW 103

Use features in the Windows printer driver

When you print from a software program, many of the product features are available from the printer driver. For complete information about the features that are available in the printer driver, see the printer-driver Help. The following features are described in this section:

- Create and use quick sets
- Use watermarks
- Resize documents
- Set a custom paper size from the printer driver
- Use different paper and printing covers
- Print a blank first page
- Print multiple pages on one sheet of paper
- Print on both sides of the paper
- NOTE: Settings in the printer driver and software program generally override control-panel settings. Software-program settings generally override printer-driver settings.

Create and use quick sets

Use quick sets to save the current driver settings for reuse. Quick sets are available on most printer-driver tabs. You can save up to 25 Print Task Quick Sets.

Create a quick set

- 1. Open the printer driver (see Open the printer drivers on page 14).
- 2. Select the print settings that you want to use.
- 3. In the **Print Task Quick Sets** box, type a name for the quick set.
- 4. Click Save.

Use quick sets

- 1. Open the printer driver (see Open the printer drivers on page 14).
- Select the quick set that you want to use from the Print Task Quick Sets drop-down list.
- 3. Click OK.
- NOTE: To use printer-driver default settings, select **Default Print Settings** from the **Print Task Quick Sets** drop-down list.

Use watermarks

A watermark is a notice, such as "Confidential," that is printed in the background of each page of a document.

- 1. On the **File** menu in the software program, click **Print**.
- 2. Select the driver, and then click **Properties** or **Preferences**.

104 Chapter 6 Print ENWW

- From the **Effects** tab, click the **Watermarks** drop-down list.
- 4. Click the watermark that you want to use. To create a new watermark, click Edit.
- If you want the watermark to appear only on the first page of the document, click First Page Only.
- Click OK. 6.

To remove the watermark, click (none) in the Watermarks drop-down list.

Resize documents

Use the document resizing options to scale a document to a percentage of its normal size. You can also choose to print a document on a different size paper, with or without scaling.

Reduce or enlarge a document

- 1. On the **File** menu in the software program, click **Print**.
- 2. Select the driver, and then click **Properties** or **Preferences**.
- On the Effects tab, next to % of Normal Size, type the percentage by which you want to reduce or enlarge your document.

You can also use the scroll bar to adjust the percentage.

4. Click OK.

Print a document onto a different paper size

- On the **File** menu in the software program, click **Print**.
- 2. Select the driver, and then click **Properties** or **Preferences**.
- 3. On the Effects tab, click Print Document On.
- 4. Select the paper size to print on.
- **5**. To print the document without scaling it to fit, make sure that the **Scale to Fit** option is *not* selected.
- 6. Click OK.

Set a custom paper size from the printer driver

- 1. On the **File** menu in the software program, click **Print**.
- 2. Select the driver, and then click **Properties** or **Preferences**.
- 3. On the Paper or Paper/Quality tab, click Custom.
- 4. On the **Custom Paper Size** window, type the name of the custom paper size.
- Type the paper-size length and width. If you type a size that is too small or too large, the driver adjusts the size to the minimum or maximum size that is allowed.
- If necessary, click the button to change the unit of measure between millimeters and inches.
- 7. Click Save.
- 8. Click Close. The name that you saved appears in the paper-size list for future use.

Use different paper and printing covers

Follow these instructions for printing a first page that is different from other pages in the print job.

- 1. Open the printer driver (see Open the printer drivers on page 14).
- 2. On the Paper or Paper/Quality tab, select the appropriate paper for the first page of the print job.
- 3. Click Use Different Paper/Covers.
- 4. In the list box, click the pages or covers that you want to print on different paper.
- 5. To print front or back covers, you must also select **Add Blank or Preprinted Cover**.
- 6. In the **Source is** and **Type is** list boxes, select the appropriate paper type or source for the other pages of the print job.
- NOTE: The paper size must be the same for all pages of the print job.

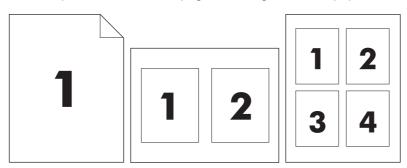
Print a blank first page

- 1. Open the printer driver (see Open the printer drivers on page 14).
- 2. On the Paper or Paper/Quality tab, click Use Different Paper/Covers.
- 3. In the list box, click Front Cover.
- 4. Click Add Blank or Preprinted Cover.

106 Chapter 6 Print ENWW

Print multiple pages on one sheet of paper

You can print more than one page on a single sheet of paper.



- 1. On the File menu in the software program, click Print.
- 2. Select the driver, and then click **Properties** or **Preferences**.
- Click the **Finishing** tab. 3.
- 4. In the section for **Document Options**, select the number of pages that you want to print on each sheet (1, 2, 4, 6, 9, or 16).
- If the number of pages is greater than 1, select the correct options for Print Page Borders and Page Order.
 - If you need to change the page orientation, click the Finishing tab, and then click Portrait or Landscape.
- Click **OK**. The product is now set to print the number of pages per sheet that you have selected.

Print on both sides of the paper

When duplex printing is available, you can automatically print on both sides of a page. If duplex printing is not available, you can manually print on both sides of a page by feeding the paper through the product a second time.

NOTE: In the printer driver, **Print on Both Sides (manually)** is available only when duplex printing is not available or when duplex printing does not support the type of print media being used.

To configure the product for automatic or manual duplex printing, open the printer-driver properties, click the **Device Settings** tab, and then select the appropriate settings under **Installable Options**.

NOTE: The **Device Settings** tab is not available from within software programs.

NOTE: The procedure to open the printer-driver properties depends on the operating system that you are using. For information about opening the printer-driver properties for your operating system, see Open the printer drivers on page 14. Look for the column titled "To change the device configuration settings".

Use automatic duplex printing

- Insert enough paper into one of the trays to accommodate the print job. If you are loading special paper such as letterhead, load it in one of the following ways:
 - For tray 1, load the letterhead paper with the front side up, bottom-edge first.
 - For all other trays, load the letterhead paper with front side down, and the top edge at the back of the tray.
- \triangle **CAUTION:** To avoid jams, do not load paper that is heavier than 105 g/m² (28 lb bond).
- Open the printer driver (see Open the printer drivers on page 14).
- 3. On the Finishing tab, click Print on Both Sides.
 - If necessary, select **Flip Pages Up** to change the manner in which pages are turned, or select a binding option in the **Booklet Layout** list box.
- 4. Click OK.

108 Chapter 6 Print ENWW

Print on both sides manually

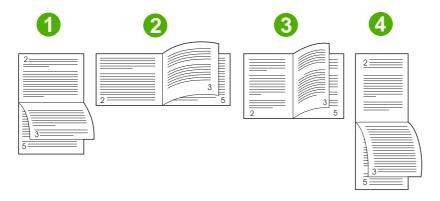
- Insert enough paper into one of the trays to accommodate the print job. If you are loading special paper such as letterhead, load it in one of the following ways:
 - For tray 1, load the letterhead paper with the front side up, bottom-edge first.
 - For all other trays, load letterhead paper with front side down, and the top edge at the back of the tray.

 \triangle CAUTION: To avoid jams, do not load paper that is heavier than 105 g/m² (28 lb bond).

- Open the printer driver (see Open the printer drivers on page 14). 2.
- On the Finishing tab, select Print on Both Sides (manually).
- Click OK.
- Send the print job to the product. Follow the instructions in the pop-up window that appears before feeding the output stack into tray 1 for printing the second half.
- Go to the product. Remove any blank paper that is in tray 1. Insert the printed stack with the printed side up, and the bottom-edge feeding into the product first. You must print the second side from tray 1.
- If prompted, press a control-panel button to continue.

Layout options for printing on both sides

The four duplex orientation options are shown here. To select option 1 or 4, select Flip Pages Up in the printer driver.



1. Long-edge landscape	Every other printed image is oriented upside-down. Facing pages are read continuously from top to bottom.
2. Short-edge landscape	Every printed image is oriented right-side-up. Facing pages are read from top to bottom.
3. Long-edge portrait	This is the default setting, and the most common layout used. Every printed image is oriented right-side-up. Facing pages are read from top to bottom.
4. Short-edge portrait	Every other printed image is oriented upside-down. Facing pages are read continuously from top to bottom.

Use features in the Macintosh printer driver

When you print from a software program, many of the device features are available from the printer driver. For complete information about the features that are available in the printer driver, see the printer-driver Help. The following features are described in this section:

- Create and use presets
- Print a cover page
- Print multiple pages on one sheet of paper
- Print on both sides of the paper
- NOTE: Settings in the printer driver and software program generally override control-panel settings. Software-program settings generally override printer-driver settings.

Create and use presets

Use presets to save the current printer driver settings for reuse.

Create a preset

- 1. Open the printer driver (see Open the printer drivers on page 14).
- Select the print settings.
- 3. In the **Presets** box, click **Save As...**, and type a name for the preset.
- Click OK.

Use presets

- 1. Open the printer driver (see Open the printer drivers on page 14).
- 2. In the **Presets** menu, select the preset that you want to use.
- NOTE: To use printer-driver default settings, select the Standard preset.

110 Chapter 6 Print ENWW

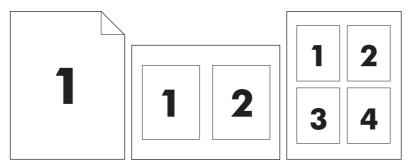
Print a cover page

You can print a separate cover page for your document that includes a message (such as "Confidential").

- Open the printer driver (see Open the printer drivers on page 14).
- 2. On the Cover Page or Paper/Quality pop-up menu, select whether to print the cover page Before **Document** or After Document.
- In the Cover Page Type pop-up menu, select the message that you want to print on the cover page.
- NOTE: To print a blank cover page, select **Standard** as the **Cover Page Type**.

Print multiple pages on one sheet of paper

You can print more than one page on a single sheet of paper. This feature provides a cost-effective way to print draft pages.



- Open the printer driver (see Open the printer drivers on page 14). 1.
- 2. Click the **Layout** pop-up menu.
- Next to Pages per Sheet, select the number of pages that you want to print on each sheet (1, 2, 4, 6, 9, or 16).
- 4. Next to Layout Direction, select the order and placement of the pages on the sheet.
- Next to **Borders**, select the type of border to print around each page on the sheet. 5.

Print on both sides of the paper

When duplex printing is available, you can automatically print on both sides of a page. Otherwise, you can manually print on both sides of a page by feeding the paper through the device a second time.

△ CAUTION: To avoid jams, do not load paper that is heavier than 105g/m² (28-lb bond).

Use automatic duplex printing

- 1. Insert enough paper into one of the trays to accommodate the print job. If you are loading special paper such as letterhead, load it in one of the following ways:
 - For tray 1, load the letterhead paper face-up with the bottom edge feeding into the printer first.
 - For all other trays, load the letterhead paper face-down with the top edge at the back of the tray.
- 2. Open the printer driver (see Open the printer drivers on page 14).
- 3. Open the Layout pop-up menu.
- 4. Next to Two Sided Printing, select either Long-Edge Binding or Short-Edge Binding.
- Click Print.

Print on both sides manually

- Insert enough paper into one of the trays to accommodate the print job. If you are loading special paper such as letterhead, load it in one of the following ways:
 - For tray 1, load the letterhead paper face-up with the bottom edge feeding into the printer first.
 - For all other trays, load the letterhead paper face-down with the top edge at the back of the tray.
- \triangle **CAUTION:** To avoid jams, do not load paper that is heavier than 105 g/m² (28-lb bond).
- 2. Open the printer driver (see Open the printer drivers on page 14).
- 3. On the **Finishing** pop-up menu, select the **Manual Duplex** option.
 - NOTE: If the Manual Duplex option is not enabled, select Manually Print on 2nd Side.
- 4. Click **Print**. Follow the instructions in the pop-up window that appears on the computer screen before replacing the output stack in tray 1 for printing the second half.
- 5. Go to the printer, and remove any blank paper that is in tray 1.
- 6. Insert the printed stack face-up with the bottom edge feeding into the printer first in tray 1. You *must* print the second side from tray 1.
- **7.** If prompted, press the appropriate control-panel button to continue.

112 Chapter 6 Print ENWW

Cancel a print job

You can stop a print request by using the control panel or by using the software program. For instructions about how to stop a print request from a computer on a network, see the online Help for the specific network software.

NOTE: It can take some time for all printing to clear after you have canceled a print job.

Stop the current print job from the control panel

- 1. Press Stop on the control panel.
- 2. On the touchscreen, on the Device Has Been Paused screen, touch Cancel current job.
- NOTE: If the print job is too far into the printing process, you might not have the option to cancel it.

Stop the current print job from the software program

A dialog box will appear briefly on the screen, giving you the option to cancel the print job.

If several requests have been sent to the device through your software, they might be waiting in a print queue (for example, in Windows Print Manager). See the software documentation for specific instructions about canceling a print request from the computer.

If a print job is waiting in a print queue (computer memory) or print spooler (Windows 2000 or XP), delete the print job there.

Click **Start** and then click **Printers**. Double-click the device icon to open the print spooler. Select the print job that you want to cancel, and then press **Delete**. If the print job is not cancelled, you might need to shut down and restart the computer.

ENWW Cancel a print job 113

114 Chapter 6 Print ENWW

7 Copy

This device can function as a standalone, walk-up copier. It is not necessary to install the printing system software on the computer, nor is it necessary to have the computer turned on to make photocopies. You can adjust the copy settings at the control panel. You can also copy originals by using either the document feeder or the scanner glass. The device can process copying, printing, and digital-sending jobs simultaneously.

This chapter provides information about how to make copies and how to change copy settings, including the following topics:

- Use the Copy screen
- Set the default copy options
- Basic copy instructions
- Adjust the copy settings
- Copy two-sided documents
- Copy mixed-size originals
- Change the copy-collation setting
- Copy photos and books
- Combine copy jobs by using Job Build
- Cancel a copy job

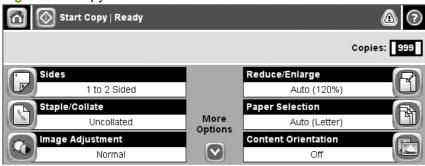
It is recommended that you review the basic control-panel information before using the device copying functions. See <u>Use the control panel on page 18</u> for more information.

ENWW 115

Use the Copy screen

From the Home screen, touch Copy to view the Copy screen. The Copy screen is shown in <u>Figure 7-1 Copy screen on page 116</u>. Note that only the first six copy features are immediately visible. In order to view additional copy features, touch <u>More Options</u>.

Figure 7-1 Copy screen



116 Chapter 7 Copy ENWW

Set the default copy options

You can use the administration menu to establish default settings that apply to all copy jobs. If necessary, you can override most settings for an individual job. After that job is complete, the device returns to the default settings.

- From the Home screen, scroll to and touch Administration.
- 2. Touch Default Job Options, and then touch Default Copy Options.
- Several options are available. You can configure defaults for all options, or for only some options.
 - For information about each option, see Adjust the copy settings on page 119. The built-in Help system also provides an explanation of each option. Touch the Help button (2) in the upper-right corner of the screen.
- To exit the administration menu, touch the Home button (a) in the upper-left corner of the screen.

Basic copy instructions

This section provides the basic instructions for copying.

Copy from the scanner glass

Use the scanner glass to make as many as 999 copies of small, lightweight media (less than 60 g/m² or 16 lb) or heavy media (more than 105 g/m² or 28 lb). This includes media such as receipts, newspaper clippings, photographs, old documents, worn documents, and books.

Place original documents face-down on the glass. Align the corner of the original with the upper-left corner of the glass.

To make copies by using the default copy options, use the numeric keypad on the control panel to select the number of copies, and press Start. To use customized settings, touch Copy. Specify the settings, and then press Start. For more information about using customized settings, see Adjust the copy settings on page 119.

Copy from the document feeder

Use the document feeder to make as many as 999 copies of a document that has up to 50 pages (depending on the thickness of the pages). Place the document into the document feeder with the pages facing up.

To make copies by using the default copy options, use the numeric keypad on the control panel to select the number of copies, and press Start. To use customized settings, touch Copy. Specify the settings, and then press Start. For more information about using customized settings, see Adjust the copy settings on page 119.

Before starting another copy job, retrieve the original document from the document-feeder output bin that is under the document feeder input tray, and retrieve the copies from the appropriate output bin.

118 Chapter 7 Copy ENWW

Adjust the copy settings

The device offers several features so you can optimize copied output. These features are all available on the Copy screen.

The Copy screen consists of several pages. From the first page, touch More Options to go to the next page. Then touch the up or down arrow buttons to scroll to other pages.

For details about how to use an option, touch the option, and then touch the help (②) button in the upperright corner of the screen. The following table provides an overview of the copy options.

NOTE: Depending on how the system administrator has configured the device, some of these options might not appear. The options in the table are listed in the order in which they can appear.

Option name	Description
Sides	Use this feature to indicate whether the original document is printed on one or both sides, and whether the copies should be printed on one or both sides.
Staple/Collate or Collate	If the optional HP Stapler/Stacker/Separator is attached, the Staple/Collate option is available. Use this feature to set up options for stapling and assembling the pages in sets of copies.
	If the optional HP Stapler/Stacker/Separator is not attached, the Collate option is available. Use this feature to assemble each set of copied pages in the same order as the original document.
Paper Selection	Use this feature to select the tray that holds the size and type of paper that you want to use.
Image Adjustment	Use this feature to improve the overall quality of the copy. For example, you can adjust the darkness and sharpness, and you can use the Background Cleanup setting to remove faint images from the background or to remove a light background color.
Content Orientation	Use this feature to specify the way the content of the original page is placed on the page: portrait or landscape.
Output Bin	Use this feature to select an output bin for the copies.
Optimize Text/Picture	Use this feature to optimize the output for a particular type of content. You can optimize the output for text or printed pictures, or you can manually adjust the values.
Pages per Sheet	Use this feature to copy multiple pages onto one sheet of paper.
Original Size	Use this feature to describe the page size of the original document.
Booklet Format	Use this feature to copy two or more pages onto one sheet of paper so you can fold the sheets in the center to form a booklet.
Edge-To-Edge	Use this feature to avoid shadows that can appear along the edges of copies when the original document is printed close to the edges. Combine this feature with the Reduce/Enlarge feature to ensure that the entire page is printed on the copies.
Job Build	Use this feature to combine several sets of original documents into one copy job. Also use this feature to copy an original document that has more pages than the document feeder can accommodate at one time.

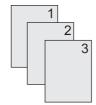
Copy two-sided documents

Two-sided documents can be copied manually or automatically.

Copying two-sided documents manually

Copies resulting from this procedure are printed on one side, and need to be hand-collated.

- 1. Load the documents to be copied into the document feeder input tray with the first page facing up, and with the top of the page leading into the document feeder.
- 2. Touch Start Copy. The odd-numbered pages are copied and printed.
- 3. Remove the stack from the document feeder output tray and reload the stack with the last page facing up, and with the top of the page leading into the document feeder.
- 4. Touch Start Copy. The even-numbered pages are copied and printed.
- 5. Collate the odd- and even-numbered printed copies.



Copy two-sided documents automatically (duplex models only)

The default copy setting is one-sided to one-sided. Use the following procedures to change the setting so you can copy from or to documents that are two-sided.

Make two-sided copies from one-sided documents

- Load the documents to be copied into the document feeder with the first page facing up, and with the top of the page leading.
- 2. On the control panel, touch Copy.
- 3. Touch Sides.
- 4. Touch 1-sided original, 2-sided output.
- 5. Touch OK.
- Touch Start Copy.

Make two-sided copies from two-sided documents

- Load the documents to be copied into the document feeder with the first page facing up, and with the top of the page leading.
- NOTE: Two-sided copying from the flatbed scanner glass is not supported.
- 2. On the control panel, touch Copy.

120 Chapter 7 Copy ENWW

- Touch Sides. 3.
- Touch 2-sided original, 2-sided output. 4.
- Touch OK. **5**.
- 6. Touch Start Copy.

Make one-sided copies from two-sided documents

- Load the documents to be copied into the document feeder with the first page facing up, and with the top of the page leading.
- 2. On the control panel, touch Copy.
- 3. Touch Sides.
- Touch 2-sided original, 1-sided output. 4.
- **5**. Touch OK.
- Touch Start Copy.

Copy mixed-size originals

You can copy original documents that are printed on different sizes of paper as long as the sheets of paper have one common dimension. For example, you could combine letter and legal sizes, or you could combine A4 and A5 sizes.

- 1. Arrange the sheets in the original document so they all have the same width.
- Place the sheets face-up into the document feeder, and adjust both paper guides against the document.
- 3. From the Home screen, touch Copy.
- 4. Touch Original Size.
 - NOTE: If this option is not on the first screen, touch More Options until the option appears.
- Select Mixed Ltr/Lgl, and then touch OK.
- 6. Touch Start Copy.

122 Chapter 7 Copy ENWW

Change the copy-collation setting

You can set the device to automatically collate multiple copies into sets. For example, if you are making two copies of three pages and the automatic collation is on, the pages print in this order: 1,2,3,1,2,3. If automatic collation is off, the pages print in this order: 1,1,2,2,3,3.

To use the automatic collation, the original document size must fit into the memory. If it does not, the device makes only one copy and a message appears notifying you of the change. If that happens, use one of the following methods to finish the job:

- Split the job into smaller jobs that contain fewer pages.
- Make only one copy of the document at a time.
- Turn off the automatic collation.

The collation setting you select is in effect for all copies until you change the setting. The default setting for automatic copy collation is On.

- 1. On the control panel, touch Copy.
- 2. Touch Staple/Collate.
- Touch Collate. 3.

Copy photos and books

Copy a photo

- NOTE: Photos should be copied from the flatbed scanner, not from the document feeder.
 - 1. Lift the lid and place the photo on the flatbed scanner with the picture-side down and the upper-left corner of the photo in the upper-left corner of the glass.
 - 2. Gently close the lid.
 - 3. Touch Start Copy.

Copy a book

- 1. Lift the lid and place the book on the flatbed scanner with the page that you want to copy at the upper-left corner of the glass.
- 2. Gently close the lid.
- 3. Gently press down on the lid to press the book to the flatbed scanner surface.
- 4. Touch Start Copy.

124 Chapter 7 Copy ENWW

Combine copy jobs by using Job Build

Use the Job Build feature to build a single copy job from multiple scans. You can use either the document feeder or the scanner glass. The settings for the first scan are used for subsequent scans.

- Touch Copy.
- 2. Scroll to and touch Job Build.
- 3. Touch Job Build On.
- Touch OK.
- **5**. If necessary, select the desired copy options.
- 6. Touch Start Copy. After each page is scanned, the control panel prompts you for more pages.
- 7. If the job contains more pages, load the next page, and then touch Start Copy.

If the job contains no more pages, touch Finished to print.

NOTE: In Job Build, if you scan the first page of a document by using the document feeder, then you must scan all of the pages in that document by using the document feeder. If you scan the first page of a document by using the scanner glass, then you must scan all of the pages in that document by using the scanner glass.

Cancel a copy job

To cancel the copy job that is currently running, touch Stop on the control panel. This pauses the device. Then touch Cancel Current Job.

NOTE: If you cancel a copy job, clear the document from the flatbed scanner or from the automatic document feeder.

126 Chapter 7 Copy ENWW

8 Scan and send to e-mail

The device offers color-scanning and digital-sending capabilities. By using the control panel, you can scan black-and-white or color documents and send them to an e-mail address as an e-mail attachment. To use digital sending, the device must be connected to a local area network (LAN). The device connects directly to your LAN.

NOTE: The device cannot copy or print in color, but it can scan and send color images.

This chapter addresses the following topics:

- Configure e-mail settings
- Use the Send E-mail screen
- Perform basic e-mail functions
- Use the address book
- Change e-mail settings for the current job
- Scan to a folder
- Scan to a workflow destination

ENWW 127

Configure e-mail settings

Before you can send a document to e-mail, you must configure the device for e-mailing.

NOTE: The instructions that follow are for configuring the device at the control panel. You can also perform these procedures by using the embedded Web server. For more information, see <u>Embedded</u> Web server on page 16.

Supported protocols

The HP LaserJet M4349x MFP supports Simple Mail Transfer Protocol (SMTP) and Lightweight Directory Access Protocol (LDAP).

SMTP

- SMTP is a set of rules that define the interaction between programs that send and receive e-mail.
 In order for the device to send documents to e-mail, it must be connected to a LAN that has a valid SMTP IP address. The SMTP server must also have Internet access.
- If you are using a LAN connection, contact your system administrator to obtain the IP address for your SMTP server. If you are connecting through a DSL connection, contact the service provider to obtain the SMTP server IP address.

LDAP

- LDAP is used to gain access to a database of information. When the device uses LDAP, it searches
 a global list of e-mail addresses. As you begin to type the e-mail address, LDAP uses an autocomplete feature that supplies a list of e-mail addresses that match the characters you type. As
 you type additional characters, the list of matching e-mail addresses becomes smaller.
- The device supports LDAP, but a connection to an LDAP server is not required in order for the device to be able to send to e-mail.
 - NOTE: If you need to change the LDAP settings, you must change them by using the embedded Web server. For more information, see Embedded Web server on page 16, or see the Embedded Web Server User Guide.

Configure e-mail server settings

Consult your system administrator to find the IP address for the SMTP server. Or, find the IP address from the device control panel (see). Then use the following procedures to manually configure and test the IP address.

Configure the SMTP gateway address

- 1. From the Home screen, touch Administration.
- 2. Touch Initial Setup.
- 3. Touch E-mail Setup, and then touch SMTP Gateway.
- 4. Type the SMTP gateway address, either as an IP address or as a fully qualified domain name. If you do not know the IP address or domain name, contact the network administrator.
- Touch OK.

Test the SMTP settings

- 1. From the Home screen, touch Administration.
- Touch Initial Setup.
- Touch E-mail Setup, and then touch Test Send Gateways.

If the configuration is correct, **Gateways OK** appears on the control-panel display.

If the first test was successful, send an e-mail to yourself by using the digital-send feature. If you receive the e-mail, you have successfully configured the digital-sending feature.

If you do not receive the e-mail, use these actions to resolve issues with the digital-sending software:

- Check the SMTP and address to make sure that you typed them correctly.
- Print a configuration page. Verify that the SMTP gateway address is correct.
- Make sure that the network is operating correctly. Send an e-mail to yourself from a computer. If you receive the e-mail, the network is operating correctly. If you do not receive the e-mail, contact your network administrator or Internet service provider (ISP).
- Run the DISCOVER.EXE file. This program attempts to find the gateway. You can download the file from the HP Web site at www.hp.com/support/lim4349mfp.

Find gateways

If you do not know the SMTP gateway address, you can use one of the following methods to find it.

Find the SMTP gateway from the device control panel

- 1. From the Home screen, touch Administration.
- 2. Touch Initial Setup.
- 3. Touch E-mail Setup, and then touch Find Send Gateways.

The touchscreen displays a list of detected SMTP servers.

4. Select the correct SMTP server, and then touch OK.

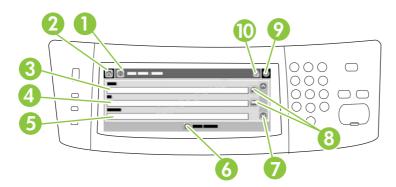
Find the SMTP gateway from an e-mail program

Because most e-mail programs also use SMTP to send e-mail and LDAP to address e-mail messages, you might be able to find the hostname of the SMTP gateway and LDAP server by looking at the settings for your e-mail program.

NOTE: The find gateway features might be unable to detect a valid SMTP server on the network if it uses an internet service provider (ISP). To find the ISP e-mail server address, contact the ISP.

Use the Send E-mail screen

Use the touchscreen to navigate through the options on the Send E-mail screen.



1	Send E-mail button	Touching this button scans the document and sends an e-mail file to the provided e-mail addresses.
2	Home button	Touching this button opens the Home screen.
3	From: field	Touch this field to open the keyboard, and then type your e-mail address. If the system administrator has configured the device to do so, this field might automatically insert a default address.
4	To: field	Touch this field to open the keyboard, and then type the e-mail addresses of those whom you want to receive the scanned document.
5	Subject: field	Touch this field to open the keyboard, and then type a subject title.
6	More Options button	Touch this button to change certain e-mail settings for the current scan job.
7	Scroll bar	Use the scroll bar to view and set up the CC:, BCC:, Message, and File Name fields. Touch any of those fields to open the keyboard and add the necessary information.
8	Address book buttons	Touch these buttons to use the address book to populate the To:, CC:, or BCC: fields. For more information, see <u>Use the local address book on page 133</u> .
9	Help button	Touch this button for control-panel help. For more information, see <u>Use the control panel</u> on page 18.
10	Error/warning button	This button appears only when there is an error or warning in the status line area. Touch it to open a pop-up screen that will help you resolve the error or warning.

Perform basic e-mail functions

The device e-mail feature offers the following benefits:

- Sends documents to multiple e-mail addresses, saving time and delivery costs.
- Delivers files in black-and-white or in color. Files can be sent in different file formats that the recipient can manipulate.

With e-mail, documents are scanned into the device memory and sent to an e-mail address or multiple addresses as an e-mail attachment. Digital documents can be sent in several graphics formats, such as .TFF and .JPG, which allows recipients to manipulate the document file in various programs to meet their specific needs. Documents arrive in near-original quality, and then can be printed, stored, or forwarded.

In order to use the e-mail feature, the device needs to be connected to a valid SMTP local area network that includes Internet access.

Load documents

You can scan a document by using either the glass or the ADF. The glass and ADF can accommodate Letter-, Executive-, A4-, and A5-size originals. The ADF can also accommodate Legal-size originals. Smaller originals, receipts, irregular and worn documents, stapled documents, previously folded documents, and photographs should be scanned by using the glass. Multiple-page documents can be scanned easily by using the ADF.

Send documents

The device scans both black-and-white and color originals. You can use default settings or change the scanning preferences and file formats. The following are the default settings:

- Color
- PDF (requires the recipient to have an Adobe Acrobat viewer to view the e-mail attachment)

For information about changing the settings for the current job, see Change e-mail settings for the current job on page 135.

Send a document

- Place the document face-down on the scanner glass or face-up in the ADF.
- From the Home screen, touch E-mail. 2.
- If prompted, type your user name and password. 3.
- Complete the From:, To:, and Subject: fields. Scroll down and complete the CC:, BCC:, and Message fields if appropriate. Your user name or other default information might appear in the From: field. If so, you might not be able to change it.
- (Optional) Touch More Options to change the settings for the document that you are sending (for example, the document's original size). If you are sending a two-sided document, you should select Sides and an option with a two-sided original.
- Press Start to begin sending.
- When you are finished, remove the original document from the scanner glass or ADF.

Use the auto-complete function

When you type characters into the To:, CC:, or From: fields on the Send E-mail screen, the auto-complete function is activated. As you type the required address or name by using the keyboard screen, the device automatically searches the address book list and completes the address or name by using the first match. You can then select that name by touching Enter, or continue typing the name until auto-complete finds the correct entry. If you type a character that does not match any entry in the list, the auto-complete text is removed from the display to indicate that you are typing an address that is not in the address book.

Use the address book

You can send e-mail to a list of recipients by using the address book feature of the device. See your system administrator for information about configuring address lists.

NOTE: You can also use the embedded Web server to create and manage the e-mail address book. For more information, see Embedded Web server on page 16.

Create a recipient list

- 1. From the Home screen, touch E-mail.
- Complete one of the following steps:
 - Touch To: to open the keyboard screen, and then type the recipients' e-mail addresses.
 Separate multiple e-mail addresses with a semicolon or by touching Enter on the touchscreen.
 - Use the address book.
 - a. On the Send E-mail screen, touch the address book button () to open the address book
 - b. Navigate the entries in the address book by using the scroll bar. Hold down the arrow to scroll quickly through the list.
 - **c.** Highlight the name to select a recipient, and then touch the add button ().

You can also select a distribution list by touching the drop-down list at the top of the screen and then touching All, or add a recipient from a local list by touching Local in the drop-down list. Highlight the appropriate names, and then touch to add the name to your list of recipients.

You can remove a recipient from your list by scrolling to highlight the recipient, and then touching the remove button ().

- 3. The names in the recipient list are placed in the text line of the keyboard screen. If you want, you can add a recipient that is not found in the address book by typing the e-mail address on the keyboard. After you are satisfied with your recipient list, touch OK.
- 4. Touch OK.
- **5.** Finish typing information in the CC: and Subject: fields on the Send E-mail screen, if necessary. You can check the list of recipients by touching the down arrow in the To: text line.
- 6. Press Start.

Use the local address book

Use the local address book to store frequently-used e-mail addresses. The local address book can be shared between devices that use the same server to gain access to the HP Digital Sending software.

You can use the address book when you type e-mail addresses in the From:, To:, CC:, or BCC: fields. You can also add or delete addresses in the address book.

To open the address book, touch the address book button (...).

ENWW Use the address book 133

Add e-mail addresses to the local address book

- 1. Touch Local.
- 2. Touch .
- (Optional) Touch the Name field, and in the keyboard that appears type a name for the new entry. Touch OK.

The name is the alias for the e-mail address. If you do not type an alias name, the alias will be the e-mail address itself.

4. Touch the Address field, and in the keyboard that appears type the e-mail address for the new entry. Touch OK.

Delete e-mail addresses from the local address book

You can delete e-mail addresses that you no longer use.

- NOTE: To *change* an e-mail address, you must first delete the address and then add the corrected address as a new address in the local address book.
 - 1. Touch Local.
 - 2. Touch the e-mail address that you want to delete.
 - 3. Touch .

The following confirmation message appears: Do you want to delete the selected address(es)?

4. Touch Yes to delete the e-mail address(es) or touch No to return to the Address Book screen.

Change e-mail settings for the current job

Use the More Options button to change the following e-mail settings for the current print job:

Button	Description	
Document File Type	Touch this button to change the type of file the device creates after scanning the document.	
Output Quality	Touch this button to increase or decrease the print quality of the file being scanned. A higher quality setting produces a larger file size.	
Resolution	Touch this button to change the scan resolution. A higher resolution setting produces a larger file size.	
Color/Black	Touch this button to determine whether you will scan the document in color or in black-and-white.	
Original Sides	Touch this button to indicate if the original document is one-sided or two-sided.	
Content Orientation	Touch this button to select either the portrait or landscape orientation for the original.	
Original Size	Touch this button to select the size of the document: letter, A4, legal, or mixed letter/legal.	
Optimize Text/ Picture	Touch this button to change the scanning procedure based on the type of document that you are scanning.	
Job Build	Touch this button to activate or deactivate the Job Build mode, which enables you to scan several small scan jobs and send them as one file.	
Image Adjustment	Touch this button to change the darkness and sharpness settings, or to clean up background clutter on the original.	

Scan to a folder

NOTE: This device feature is supported for the HP LaserJet M4349x MFP only.

If the system administrator has made the feature available, the device can scan a file and send it to a folder on the network. Supported operating systems for folder destinations include Windows 2000, Windows XP, Windows Server 2003, Windows Server 2008, and Novell.

- NOTE: You might be required to supply a user name and password in order to use this option, or to send to certain folders. See your system administrator for more information.
 - 1. Place the document face-down on the scanner glass or face-up in the ADF.
 - 2. From the Home screen, touch **Network Folder**.
 - 3. In the Quick Access Folders list, select the folder in which you want to save the document.
 - 4. Touch the **File Name** field to open the keyboard pop-up screen, and then type the file name.
 - 5. Touch Send to Network Folder.

Scan to a workflow destination

NOTE: This device feature is provided by the optional Digital Sending Software product and is supported for the HP LaserJet M4349x MFP only.

If the system administrator has enabled the workflow functionality, you can scan a document and send it to a custom workflow destination. A workflow destination gives you the ability to send additional information, along with the scanned document, to a specified network or file transfer protocol (FTP) location. Prompts for specific information appear on the control-panel display. The system administrator can also designate a printer as a workflow destination, which allows you to scan a document and then send it directly to a network printer for printing.

- Place the document face-down on the scanner glass or face-up in the ADF.
- 2. From the Home screen, touch Workflow.
- 3. Select the destination to which you want to scan.
- In the Text Field field, type the data that you want to accompany the file, and then touch Send Workflow.

9 Fax

The HP LaserJet M4349x MFP comes with an HP LaserJet Analog Fax Accessory 300 installed. Windows users can also install the optional HP Digital Sending Software (DSS), which provides digital faxing services.

For complete instructions for configuring the fax accessory and using the fax features, see the *HP LaserJet Analog Fax Accessory 300 User Guide*.

This chapter provides a summary of analog and digital fax.

- Analog fax
- Digital fax

ENWW 139

Analog fax

When the HP LaserJet Analog Fax Accessory 300 is installed, the device can function as a standalone fax machine.

NOTE: The HP LaserJet M4349x MFP comes with an HP LaserJet Analog Fax Accessory 300 installed.

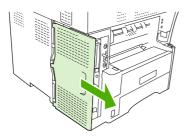
Install the fax accessory

If your device does not have the HP LaserJet Analog Fax Accessory 300 installed, use the following procedure to install it.

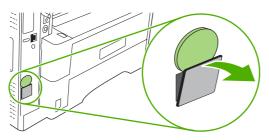
- 1. Unpack the fax accessory from the box, but do not remove it from the antistatic pouch.
- 2. Turn off the device, and unplug the power cable.



3. At the back of the device, remove the side cover by placing your fingers in the indented area and sliding the cover off.

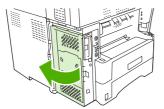


4. If necessary, remove the plastic fax-accessory cover from the formatter. Insert a coin into the groove at the top of the cover, and use it to pry the cover away from the formatter.



140 Chapter 9 Fax ENWW

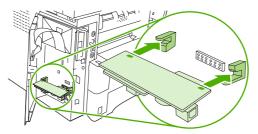
5. Open the formatter-cage door by grasping the metal tab and pulling the door open.



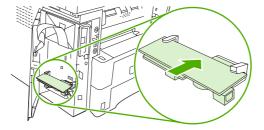
- 6. If you are replacing an existing fax accessory, remove the old card from the formatter by pulling it out of the slot.
- 7. Remove the new fax accessory from the antistatic pouch.
- △ CAUTION: The fax accessory contains parts that are sensitive to electrostatic discharge (ESD). When handling the fax accessory, use static protection such as a grounding wrist strap that is connected to the metal frame of the device, or touch the metal frame of the device with your other hand.

CAUTION: When handling the fax accessory, do not press the yellow component on the card. Doing so can damage the card and cause a fax malfunction.

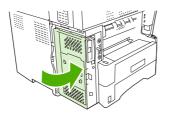
8. Align the two cutouts on the new fax accessory with the two fax-accessory guides on the formatter.



9. Push the fax accessory into place, and then verify that it is securely connected to the formatter. The phone connector on the fax accessory should be aligned with the square opening in the formatter cage.

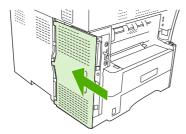


10. Close the formatter-cage door.



ENWW Analog fax 141

11. Replace the formatter cover.

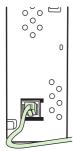


12. Plug the power cable into the device, and turn on the device.

Connect the fax accessory to a phone line

When connecting the fax accessory to a phone line, ensure that the phone line that is being used for the fax accessory is a dedicated line that is not used by any other devices. In addition, this line should be an analog line because the fax will not function correctly if it is connected to some digital PBX systems. If you are not sure whether you have an analog or digital phone line, contact your telecom provider.

- NOTE: HP recommends using the phone cord that comes with the fax accessory to ensure that the accessory functions correctly.
 - Locate the phone cord that is included in the fax accessory kit. Connect one end of the phone cord
 to the fax-accessory phone jack on the formatter. Push the connector until it clicks.



- △ CAUTION: Be sure to connect the phone line to the fax-accessory phone jack, which is near the bottom of the formatter. Do not connect the phone line to the HP Jetdirect LAN port, which is closer to the top of the formatter.
- Connect the other end of the phone cord to the phone jack on the wall. Push the connector until it clicks or until it is securely seated. Because different types of connectors are used in different countries/regions, the connector might not make an audible click.

Configure and use the fax features

Before you can use the fax features, you must configure them in the control-panel menus. For example, you need to specify the following information:

- Date and time
- Location
- Fax header

For complete information about configuring and using the fax accessory, and for information about troubleshooting fax-accessory problems, see the *HP LaserJet Analog Fax Accessory 300 User Guide*, which is provided with the fax accessory.

142 Chapter 9 Fax ENWW

Digital fax

Digital faxing is available when you install the optional HP Digital Sending Software. For information about ordering this software, go to www.hp.com/go/ljm4349mfp software.

With digital faxing, the device does *not* need to be connected directly to a phone line. Instead, the device can send a fax in one of three ways:

- LAN fax sends faxes through a third-party fax provider.
- **Microsoft Windows 2000 fax** is a fax modem and digital sender module that the computer uses to operate as a turnkey gateway fax.
- **Internet fax** uses an Internet fax provider to process faxes. The fax is delivered to a traditional fax machine or sent to the user's e-mail.

For complete information about using digital faxing, see the documentation that is provided with the HP Digital Sending Software.

ENWW Digital fax 143

144 Chapter 9 Fax ENWW

10 Manage and maintain the device

This chapter describes how to manage the printer:

- Use information pages
- Configure e-mail alerts
- Use the embedded Web server
- Use HP Web Jetadmin software
- Use the HP Printer Utility for Macintosh
- Manage supplies
- Clean the device
- Calibrate the scanner

ENWW 145

Use information pages

From the control panel, print pages that give details about the device and its current configuration. The table below provides the instructions for printing the information pages.

Page description	How to print the page		
Menu map	1. From the Home screen, touch Administration.		
Shows the control-panel menus and	2. Touch Information.		
available settings.	3. Touch Configuration Page.		
	4. Touch Administration Menu Map.		
	5. Touch Print.		
	The content of the menu map varies, depending on the options currently installed in the device.		
	For a complete list of control panel menus and possible values, see $\frac{\text{Use the control}}{\text{panel on page 18}}$.		
Configuration page	1. From the Home screen, touch Administration.		
Shows device settings and installed	2. Touch Information.		
accessories.	3. Touch Configuration Page.		
	4. Touch Configuration Page.		
	5. Touch Print.		
	NOTE: If the device contains an HP Jetdirect print server or an optional hard disk drive, additional configuration pages print that provide information about those devices.		
Supplies status page	From the Home screen, touch Administration.		
Shows print-cartridge toner levels.	2. Touch Information.		
	3. Touch Configuration Page.		
	4. Touch Supplies Status Page.		
	5. Touch Print.		
	NOTE: If you are using non-HP supplies, the supplies status page might not show the remaining life for those supplies. For more information, see <u>HP policy on non-HP print cartridges on page 154</u> .		
Usage page	1. From the Home screen, touch Administration.		
Shows a page count for each size of	2. Touch Information.		
paper printed, the number of one-sided (simplexed) or two-sided (duplexed)	3. Touch Configuration Page.		
pages, and the average percentage of coverage.	4. Touch Usage Page.		
	5. Touch Print.		

Page description	How to print the page		
File directory	1. From the Home screen, touch Administration.		
Contains information for any mass	2. Touch Information.		
storage devices, such as flash drives, memory cards, or hard disks, that are	3. Touch Configuration Page.		
installed in the device.	4. Touch File Directory.		
	5. Touch Print.		
Fax reports	1. From the Home screen, touch Administration.		
Five reports show fax activity, fax calls, billing codes, blocked fax numbers, and	2. Touch Information.		
speed-dial numbers.	3. Touch Fax Reports.		
NOTE: Fax reports are available only on device models that have fax	4. Touch one of the following buttons to print the corresponding report:		
capabilties.	• Fax Activity Log		
	Fax Call Report		
	Billing Codes Report		
	Blocked Fax List		
	Speed Dial List		
	5. Touch Print.		
	For more information, see the fax guide that came with the device.		
Font lists	I. From the Home screen, touch Administration.		
Shows which fonts are currently installed in the device.	2. Touch Information.		
motarieu in the device.	3. Touch Sample Pages/Fonts.		
	4. Touch either PCL Font List or PS Font List.		
	5. Touch Print.		
	NOTE: The font lists also show which fonts reside on a hard disk accessory or DIMM.		

Configure e-mail alerts

NOTE: If your company does not have e-mail, this feature might not be available.

You can use HP Web Jetadmin or the embedded Web server to configure the system to alert you of problems with the device. The alerts take the form of e-mail messages to the e-mail account(s) that you specify.

You can configure the following:

- The device(s) you want to monitor
- The alerts you want to receive (for example, alerts for paper jams, paper out, supplies status, and cover open)
- The e-mail account(s) to which the alerts should be forwarded

Software	Information location	
HP Web Jetadmin	See <u>Use HP Web Jetadmin software on page 152</u> for general information about HP Web Jetadmin.	
	See the HP Web Jetadmin Help system for details about alerts and how to set them up.	
Embedded Web server See Embedded Web server on page 16 for general information about the emserver.		
	See the embedded Web server Help system for details about alerts and how to set them up.	

Use the embedded Web server

- View device control status information
- Set the type of paper loaded in each tray
- Determine the remaining life on all supplies
- View and change tray configurations
- View and change the device control panel menu configuration
- View and print internal pages
- Receive notification of device and supplies events
- View and change network configuration
- View support content that is specific to the current state of the device

When the device is connected to the network, the embedded Web server is automatically available. You can open the embedded Web server from Windows 95 and later.

To use the embedded Web server, you must have Microsoft Internet Explorer 4 and later or Netscape Navigator 4 and later. The embedded Web server works when the device is connected to an IP-based network. The embedded Web server does not support IPX-based or AppleTalk printer connections. You do not need Internet access to open and use the embedded Web server.

Open the embedded Web server by using a network connection

- In a supported Web browser on your computer, type the device IP address or host name in the address/URL field. To find the IP address or host name, print a configuration page. See Use information pages on page 146.
- NOTE: After you open the URL, you can bookmark it so that you can return to it quickly in the future.
- The embedded Web server has three tabs that contain settings and information about the device: the Information tab, the Settings tab, and the Networking tab. Click the tab that you want to view.

See Embedded Web server sections on page 150 for more information about each tab.

Embedded Web server sections

Tab or section	Op	tions
Information tab Provides device, status, and configuration information	•	Device Status : Shows the device status and shows the life remaining of HP supplies, with 0% indicating that a supply is empty. The page also shows the type and size of print paper set for each tray. To change the default settings, click Change Settings .
	•	Configuration Page: Shows the information found on the configuration page.
	•	Supplies Status : Shows the life remaining of HP supplies, with 0 percent indicating that a supply is empty. This page also provides supplies part numbers. To order new supplies, contact your dealer.
	•	Event log: Shows a list of all device events and errors.
	•	Usage page : Shows a summary of the number of pages the device has printed, grouped by size and type.
	•	Device Information : Shows the device network name, address, and model information. To change these entries, click Device Information on the Settings tab.
	•	Control Panel: Shows messages from the device control panel, such as Ready or Sleep mode on.
	•	Print: Allows you to send print jobs to the device.

Tab or section **Options**

Settings tab

Provides the ability to configure the device from your computer

- Configure Device: Allows you to configure device settings. This page contains the traditional menus found on devices using a control-panel display.
- E-mail Server: Network only. Used in conjunction with the Alerts page to set up incoming and outgoing e-mail, as well as to set e-mail alerts.
- Alerts: Network only. Allows you to set up to receive e-mail alerts for various device and supplies events.
- AutoSend: Allows you to configure the device to send automated e-mails regarding device configuration and supplies to specific e-mail addresses.
- Security: Allows you to set a password that must be entered to gain access to the Settings and Networking tabs. Enable and disable certain features of the embedded Web server.
- Edit Other Links: Allows you to add or customize a link to another Web site. This link is displayed in the Other Links area on all embedded Web server pages.
- Device Information: Allows you to name the device and assign an asset number to it. Enter the name and e-mail address for the primary contact who will receive information about the device.
- Language: Allows you to determine the language in which to display the embedded Web server information.
- Date & Time: Allows time synchronization with a network time server.
- Wake Time: Allows you to set or edit a wake time for the device.

NOTE: The **Settings** tab can be password-protected. If this device is on a network, always consult with the system administrator before changing settings on this tab.

Networking tab

Provides the ability to change network settings from your computer

Network administrators can use this tab to control network-related settings for the device when it is connected to an IP-based network. This tab does not appear if the device is directly connected to a computer, or if the device is connected to a network using anything other than an HP Jetdirect print server.

NOTE: The **Networking** tab can be password-protected.

Use HP Web Jetadmin software

HP Web Jetadmin is a Web-based software solution for remotely installing, monitoring, and troubleshooting network-connected peripherals. The intuitive browser interface simplifies cross-platform management of a wide range of devices, including HP and non-HP devices. Management is proactive, allowing network administrators the ability to resolve issues before users are affected. Download this free, enhanced-management software at www.hp.com/go/webjetadmin.software.

NOTE: HP Web Jetadmin 10.0 or later is required for full support of this product.

To obtain plug-ins to HP Web Jetadmin, click **plug-ins**, and then click the **download** link that is next to the name of the plug-in that you want. The HP Web Jetadmin software can automatically notify you when new plug-ins are available. On the **Product Update** page, follow the directions to automatically connect to the HP Web site.

If installed on a host server, HP Web Jetadmin is available to any client through a supported Web browser, such as Microsoft Internet Explorer 6.0 for Windows or Netscape Navigator 7.1 for Linux. Browse to the HP Web Jetadmin host.

NOTE: Browsers must be Java-enabled. Browsing from an Apple PC is not supported.

Use the HP Printer Utility for Macintosh

Use the HP Printer Utility to configure and maintain a printer from a Mac OS X computer.

Open the HP Printer Utility

Open the HP Printer Utility in Mac OS X V10.3, V10.4 and later

- In the Dock, click the **Printer Setup Utility** icon.
- NOTE: If the Printer Setup Utility icon does not appear in the Dock, open the Finder, click Applications, click Utilities, and then double-click Printer Setup Utility.
- Select the device that you want to configure, and then click **Utility**.

HP Printer Utility features

The HP Printer Utility consists of pages that you open by clicking in the Configuration Settings list. The following table describes the tasks that you can perform from these pages.

Item	Description	
Configuration Page	Prints a configuration page.	
Supplies Status	Shows the device supplies status.	
File Upload	Transfers files from the computer to the device.	
Upload Fonts	Transfers font files from the computer to the device.	
Firmware Update	Transfers updated firmware files from the computer to the device.	
Duplex Mode	Turns on the automatic two-sided printing mode.	
Economode & Toner Density	Turns on the Economode setting to conserve toner, or adjusts toner density.	
Resolution	Changes the resolution settings, including the REt setting.	
Lock Resources	Locks or unlocks storage products, such as a hard disk.	
Stored Jobs	Manages print jobs that are stored on the device hard disk.	
Trays Configuration	Changes the default tray settings.	
IP Settings	Changes the device network settings and provides access to the embedded Web server.	
Bonjour Settings	Provides the ability to turn on or off Bonjour support or change the device service name that is listed on a network.	
Additional Settings	Provides access to the embedded Web server.	
E-mail Alerts	Configures the device to send e-mail notices for certain events.	

Manage supplies

Monitor the print cartridge to ensure high-quality output.

Supplies life expectancy

The life of the print cartridge depends on the amount of toner that print jobs require and the length of life for the components inside the cartridge. When printing text at approximately 5% coverage (typical for a business letter), the HP print cartridge lasts an average of 18,000 pages. The page-yield specification that HP provides is a general guideline. Actual yield can vary according to usage conditions.

Change the print cartridge

1. Pull the top-cover release to open the top cover.



- 2. Grasp the print cartridge by the handle, and remove it from the device.
- 3. Remove the new print cartridge from the packaging.
- 4. Remove any protective tape from the print cartridge.
- 5. Insert the new print cartridge in the device, and close the top cover.

Manage the print cartridge

Print-cartridge storage

Do not remove the print cartridge from its package until you are ready to use it.

△ CAUTION: To prevent damage to the print cartridge, do not expose it to light for more than a few minutes.

Use genuine HP print cartridges

When you use a genuine new HP print cartridge, you can obtain the following supplies information:

- Percentage of supplies remaining
- Estimated number of pages remaining
- Number of pages printed

HP policy on non-HP print cartridges

Hewlett-Packard Company cannot recommend the use of non-HP print cartridges, either new or remanufactured. Because they are not HP products, HP cannot influence their design or control their quality.

To install a new HP print cartridge, see <u>Change the print cartridge on page 154</u>. To recycle the used cartridge, follow the instructions included with the new cartridge.

Print-cartridge authentication

The device automatically authenticates the print cartridge when it is inserted into the device. During authentication, the device notifies you whether a cartridge is a genuine HP print cartridge.

If the device control-panel message states that this is not a genuine HP print cartridge and you believe you purchased an HP print cartridge, see HP fraud hotline and Web site on page 155.

HP fraud hotline and Web site

Call the HP fraud hotline (1-877-219-3183, toll-free in North America) or go to www.hp.com/go/anticounterfeit when you install an HP print cartridge and the control-panel message says the cartridge is non-HP. HP will help determine if the cartridge is genuine and take steps to resolve the problem.

Your print cartridge might not be a genuine HP print cartridge if you notice the following:

- You are experiencing a high number of problems with the print cartridge.
- The cartridge does not look like it usually does (for example, the orange pull tab is missing, or the packaging differs from HP packaging).

ENWW Manage supplies 155

Clean the device

During the printing process, paper, toner, and dust particles can accumulate inside the product. Over time, this buildup can cause print-quality problems, such as toner specks or smearing. This product has a cleaning mode that can correct and prevent these types of problems.

Clean the exterior

Use a soft, damp, lint-free cloth to wipe dust, smudges, and stains off of the exterior of the device.

Clean the scanner glass

Dirty glass, from fingerprints, smudges, hair, and so on, slows down performance and affects the accuracy of special features such as fit-to-page and copy.

- NOTE: If streaks or other defects appear only on copies produced using the automatic document feeder (ADF), clean the scanner strip (step 3). It is not necessary to clean the scanner glass.
 - 1. Open the scanner lid.
 - 2. Clean the glass by using a damp, lint-free cloth.



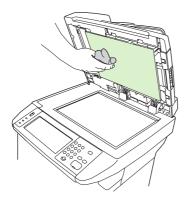
- △ CAUTION: Do not use abrasives, acetone, benzene, ammonia, ethyl alcohol, or carbon tetrachloride on any part of the device; these can damage the device. Do not place liquids directly on the glass. They might seep under it and damage the device.
- 3. Clean the scanner strip by using a damp, lint-free cloth.



Clean the scanner lid backing

Minor debris can accumulate on the white document lid backing that is located underneath the scanner lid.

- 1. Open the scanner lid.
- 2. Clean the white document lid backing by using a soft cloth or sponge that has been moistened with a mild soap and warm water. Also, clean the scanner strip next to the ADF scanner glass.



- Wash the backing gently to loosen debris; do not scrub the backing.
- **4.** Dry the backing by using a chamois or soft cloth.
 - △ CAUTION: Do not use paper-based wipes because they might scratch the backing.
- 5. If this does not clean the backing well enough, repeat the previous steps and use isopropyl alcohol to dampen the cloth or sponge, and then wipe the backing thoroughly with a damp cloth to remove any residual alcohol.

Clean the paper path

- 1. From the Home screen, touch Administration.
- 2. Touch Print Quality.
- 3. Touch Calibration/Cleaning.
- 4. Touch Create Cleaning Page.

The device prints a cleaning page.

Follow the instructions printed on the cleaning page.

Clean the document feeder

Clean the document feeder only if it is visibly marked or dirty, or if you are experiencing a decrease in copy quality (such as streaking).

ENWW Clean the device 157

Clean the document feeder delivery system

Open the scanner lid.



2. Locate the white, vinyl document-feeder backing.



3. Locate the white, vinyl calibration strips.



- 4. Clean the document-feeder backing and the calibration strips by wiping them with a clean, damp, lint-free cloth. Use an ammonia-based surface cleaner only when a water-dampened cloth does not clean the document-feeder components.
- Clean the scanner glass by wiping it gently with a clean, slightly damp, lint-free cloth. Use an ammonia-based surface cleaner only when a water-dampened cloth does not clean the scanner glass.
- 6. Close the scanner lid.



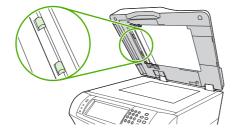
Clean the document feeder-rollers

You should clean the rollers in the document feeder if you are experiencing misfeeds or if your originals show marks as they exit the document feeder.

- △ CAUTION: Clean the rollers only if you experience misfeeds or marks on the originals, and you notice dust on the rollers. Cleaning the rollers frequently could introduce dust into the device.
 - 1. Open the scanner lid.



2. Locate the rollers near white, vinyl calibration strips.



- 3. Wipe the rollers gently with a clean, water-dampened, lint-free cloth.
- △ CAUTION: Do not pour water directly onto the rollers. Doing so might damage the device.
- 4. Close the scanner lid.

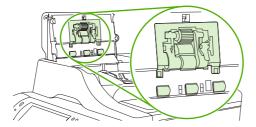


5. Pull the release lever to open the document-feeder cover.

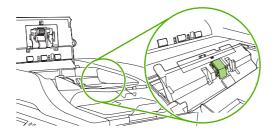


ENWW Clean the device 159

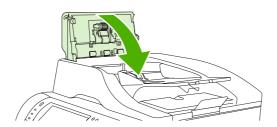
Locate the rollers.



- 7. Wipe the rollers with a clean, water-dampened, lint-free cloth.
 - △ CAUTION: Do not pour water directly onto the rollers. Doing so might damage the device.
- 8. Locate the separation pad.



- 9. Wipe the pad with a clean, water-dampened, lint-free cloth.
- 10. Close the document-feeder cover.



Calibrate the scanner

Calibrate the scanner to compensate for offsets in the scanner imaging system (carriage head) for ADF and flatbed scans. Because of mechanical tolerances, the scanner's carriage head might not read the position of the image accurately. During the calibration procedure, scanner offset values are calculated and stored. The offset values are then used when producing scans so that the correct portion of the document is captured.

Scanner calibration should be carried out only if you notice offset problems with the scanned images. The scanner is calibrated before it leaves the factory. It needs to be calibrated again only rarely.

- 1. From the Home screen, touch Administration.
- 2. Touch Troubleshooting.
- 3. Touch Calibrate Scanner and then follow the instructions in the onscreen dialog box.

The device starts the calibration process, and **Calibrating** appears on the touchscreen status line until the process is complete.

ENWW Calibrate the scanner 161

11 Problem solving

This chapter provides information about the following topics.

- Problem-solving checklist
- Problem-solving flowchart
- Solve general device problems
- Control-panel message types
- Control-panel messages
- Common causes of jams
- Clear jams
- Clear staple jams
- Solve print-quality problems
- Solve network printing problems
- Solve copy problems
- Solve fax problems
- Solve e-mail problems
- Solve common Windows problems
- Solve common Macintosh problems
- Solve Linux problems
- Solve PostScript problems

ENWW 163

Problem-solving checklist

If you are experiencing problems, use the following checklist to identify the cause of the problem:

- Is the device connected to power?
- Is the device on?
- Is the device in the Ready state?
- Are all necessary cables connected?
- Do any messages appear on the control panel?
- Are genuine HP supplies installed?
- Was a recently replaced print cartridge installed correctly, and was the pull tab and/or attached tape on the cartridge removed?

For additional information about installation and setup, see the getting started guide.

If you cannot find solutions to problems in this guide, go to www.hp.com/support/ljm4349mfp or contact your dealer for support.

Factors that affect performance

Several factors affect the time it takes to print a job:

- The use of special paper (such as transparencies, heavy paper, and custom-size paper)
- Device processing and download time
- The complexity and size of graphics
- The speed of the computer you are using
- The USB connection
- The I/O configuration
- The amount of memory installed
- The network operating system and configuration (if applicable)
- Device personality (PCL or PS)

NOTE: Although additional memory can resolve memory problems, improve how the device handles complex graphics, and improve download times, it will not increase maximum printing speed (ppm).

Problem-solving flowchart

Symptom	Check	Possible causes	Possible solutions	
The control-panel display is blank, no lights are lit, and the device makes no sounds from the motors.	Is the power on?	The power switch might be off. The power cord might be unplugged. The power outlet might not be working correctly. The internal power supply might have failed.	 Make sure the device is plugged in and the power switch is on. Test the power outlet by plugging the device into an outlet that is known to work. If the problem persists, contact your dealer for 	
The control panel indicates an error.	Do error messages appear on the control-panel display?	Several conditions can cause an error message to appear.	support. 1. Follow the instructions on the control panel to resolve the problem.	
			2. For more information, see Control-panel messages on page 174.	
			If the problem persists, contact your dealer for support.	
	Are the main features, such as Copy and E-mail, inactive on the touchscreen?	The scanner shipping lock might be in the locked position.	Make sure the scanner shipping lock is unlocked. The scanner lock is on the left side of the device, underneath the scanner.	
Paper-feed problems	Do jams occur frequently?	The media does not meet specifications. Paper remains in the device after	Make sure the media meets specifications for the device. See <u>Select print media on page 72</u> .	
		clearing a previous jam. Some of the shipping tape, cardboard, or shipping locks are still in the device.	 Open all doors and trays and check for jammed media. See <u>Clear jams</u> on page 184. 	
		The maintenance kit items might be ready for replacement.	3. Make sure the print cartridge is installed correctly. See Change the print cartridge on page 154.	
			4. Install the device maintenance kit. See Order parts, accessories, and supplies on page 228.	
			If the problem persists, contact your dealer for support.	

Symptom	Check	Possible causes	Possible solutions
	Do original documents feed correctly through the ADF?	The original document might be printed on media that is too light or too heavy for the ADF. The ADF rollers and separation pad might be dirty. The ADF maintenance kit parts might need to be replaced.	 If the original document is printed on very heavy or light media, copy by using the flatbed glass. Clean the ADF rollers and separation pad. See Clean the document feeder on page 157. Install the ADF maintenance kit. See Order parts, accessories, and supplies on page 228 If the problem persists, contact your dealer for support.
Copy problems	Are copies blank?	The originals might have been loaded upside-down.	 In the ADF, load original documents face-up. On the scanner glass, load original documents face-down. If the problem persists, contact your dealer for support.
	Are copies of poor quality from the ADF and the scanner glass? Are copies of poor quality only from the ADF? The copy settings need to be adjusted for the original document. The ADF glass strip might be dirty.	adjusted for the original	See Adjust the copy settings on page 119. If the problem persists, contact your dealer for support.
			Clean the scanner glass. See Clean the device on page 156. If the problem persists, contact your dealer for support.
	Are copies of poor quality only from the scanner glass?	The scanner glass might be dirty	Clean the glass strip that is to the left of the scanner glass. See Clean the device on page 156. If the problem persists, contact your dealer for support.

Symptom	Check	Possible causes	Pos	ssible solutions
Print-quality problems	Is the overall print quality poor? Is the printing too light? Do lines, streaks, or dots appear on the pages?	The media does not meet specifications. The print cartridge might be empty or damaged. The maintenance kit items might be ready for replacement.	1. 2. 3.	Make sure the media meets specifications for the device. See Select print media on page 72. Replace the print cartridge. See Change the print cartridge on page 154 Install the device maintenance kit. See Order parts, accessories, and supplies on page 228.
			4.	If the problem persists, contact your dealer for support.
General printing problems	Can you print documents from a computer?	The computer cable might be defective. The printer driver might need to be reinstalled.	1.	Try printing a configuration page at the control panel. Touch Network Address and then touch Print. If the page prints, the problem is with the cable or the driver.
			 3. 4. 	Reconnect the cables. Reinstall the printer driver. If the problem persists, contact your dealer for support.
	Can you print over the network?	The network might not be configured correctly.	1.	Try connecting the computer directly to the device. If you can print, the problem is with the network configuration. See Solve network printing problems on page 211. If the problem persists, contact your dealer for
	Are you having problems printing from specific software programs?	The problem might be with the software program.	1.	Try printing from a different software program. If you can print, the problem is with the original software program.
			2.	See the documentation for the software program.
Stapling problems	Are jobs stapled?	The staple cassette might be jammed. The staple cassette might need to be replaced.	1.	Remove the staple cassette and check if it is jammed or empty. See <u>Clear staple</u> jams on page 199.
			2.	If the problem persists, contact your dealer for support.

Symptom	Check	Possible causes	Possible solutions
E-mail problems	Are you able to send e-mail attachments?	The SMTP gateway might need to be reconfigured.	See Solve e-mail problems on page 219.
	Does an "E-mail gateway not responding" message appear on the control panel?		
	Are you able to change the "From" e-mail address? The device might be configured so that the "From" e-mail address cannot be changed.		Use the embedded Web server to change these settings. See Embedded Web server
		The device might require you to sign in before you can change the "From" e-mail address.	
	Are you able to change the file type or the color setting for e-mail attachments?	Change the settings at the control panel or by using the embedded Web server.	At the control panel, touch E-mail, and then touch More Options. See <u>Change</u> e-mail settings for the current job on page 135.
			2. To change the settings by using the embedded Web server, see Embedded Web server on page 16.
	Do you receive a "job failed" e- mail message when you try to send an e-mail attachment?	The e-mail address to which you are sending the document might be incorrect.	Send a test e-mail from your computer.
	Serio an e-man attachment:	The file size might be larger than the maximum allowable size for the SMTP gateway.	2. Use the embedded Web server to change the maximum allowable size for e-mail attachments. See Embedded Web server on page 16.
Fax problems	Is the Fax feature on the control panel inactive?	You need to provide required settings before using the Fax feature.	At the control panel, touch Administration, touch Initial Setup, and touch Fax Setup.
			Configure the settings for Location, Date/Time, and Fax Header.
	Is the Fax feature on the control panel completely missing?	The fax accessory might be installed incorrectly.	Make sure the fax accessory is installed correctly and that none of the pins are bent. See Install the fax accessory on page 140.
			2. Print a configuration page and check the modem status. It should indicate "Operational/Enabled". If the modem status is anything else, the problem is with the fax accessory.

Symptom	Check	Possible causes	Possible solutions
	Is the Fax feature configured correctly but you cannot send faxes?	You must use the phone cord that came with the device.	See Solve fax problems on page 216.
	iaxes:	The phone cord might not be connected securely or the telephone line might not be working. You might have connected the	 Always use the phone cord that came with the device. Test the telephone line by connecting a telephone to it and making a call.
		device to a digital phone line instead of an analog phone line. The fax accessory requires an analog phone line.	3. Make sure you are connecting the device to an analog phone line.
	Is the Fax feature configured correctly but you cannot receive faxes?	A line splitter or surge-protection device might be interfering with incoming faxes.	See Solve fax problems on page 216.
		An answering machine or voice- mail system might be intercepting	Do not use line splitters or surge-protection devices.
		the incoming fax transmission.	Disconnect the answering machine or voice-mail system.
			3. Set the number of rings-to- answer for the fax accessory to a lower number. See <u>Initial Setup</u> menu on page 32.
			Make sure the device is connected to an a dedicated analog phone line. Do not use a roll-over line.

Solve general device problems

Device selects media from the wrong tray.

Cause	Solution
The tray selection in the software program might be incorrect.	For many software programs, the paper tray selection is found on the Page Setup menu within the program.
	Remove any media in other trays to make the device select from the correct tray.
	For Macintosh computers, use the HP Printer Utility to change the priority of the tray.
The configured size does not match the size of the media that is loaded in the tray.	Adjust the width guides to match the size of the media that is loaded in the tray.

Device does not pull paper from tray.

Cause	Solution
The tray is empty.	Load paper in the tray.
The paper guides are set incorrectly.	To set the guides correctly, see Load media on page 78.
	For tray 2, 3, 4, or 5, make sure that the leading edge of the paper stack is even. An uneven edge can prevent the lift plate from rising.

Paper curls when it exits the device.

Cause	Solution
The paper curls when it exits to the top output bin.	Choose the straightest paper path in the printer driver or control panel.
	Turn over the paper that you are printing on.
	Reduce the fusing temperature to reduce the curling. (See Print Quality menu on page 48.)

Print job is extremely slow.

Cause	Solution
The job might be very complex.	Reduce the complexity of the page or try adjusting the print- quality settings. If this problem occurs frequently, add memory to the device.
The maximum speed of the device cannot be exceeded even when more memory is added.	
Printing speeds might be automatically reduced when printing on custom-sized media.	
Note: Slower speeds are expected when printing on narrow paper, when printing from tray 1, or when using the High2 fuser mode.	
You are printing a PDF or PostScript (PS) file but are using a PCL device driver.	Try using the PS device driver rather than the PCL device driver. (You can usually do this from a software program.)

Print job prints on both sides of the paper.

Cause	Solution
The device is set for duplexing.	See Open the printer drivers on page 14 to change the setting, or see the online Help.

Print job contains only one page but the device processes the back side of the page as well (the page comes part of the way out, and then goes back into the device).

Cause	Solution
The device is set for duplexing. Even if the print job contains only one page, the device also processes the back side.	See Open the printer drivers on page 14 to change the setting, or see the online Help.
	Do not try to pull the page out of the device before duplexing is complete. Jamming might result.

Pages print, but are totally blank.

Cause	Solution	
The sealing tape might still be on the print cartridge.	Remove the print cartridge and pull out the sealing tape. Reinstall the print cartridge.	
The file might have blank pages.	Check the file to make sure that it does not contain blank pages.	

The device prints, but the text is wrong, garbled, or incomplete.

Cause	Solution
The device cable is loose or defective.	Disconnect the device cable and reconnect it. Try a print job that you know works. If possible, attach the cable and device to another computer and try a print job that you know works. Finally, try a new cable.

The device prints, but the text is wrong, garbled, or incomplete.

Cause	Solution
The wrong driver was selected in the software.	Check the software device selection menu to make sure that an HP LaserJet M4349x device is selected.
The software program is malfunctioning.	Try printing a job from another program.

The device does not respond when you select Print in the software.

Cause	Solution
The device is out of media.	Add media.
The device might be in the manual-feed mode.	Change the device from manual-feed mode.
The cable between the computer and the device is not connected correctly.	Disconnect and reconnect the cable.
The device cable is defective.	If possible, attach the cable to another computer and print a job that you know works. You might also try using a different cable.
The wrong device was selected in the software.	Check the software device selection menu to make sure that an HP LaserJet M4349x device is selected.
The device might have a jam.	Clear any jams, paying careful attention to the duplexer area (if your model has a duplexer). See Clear jams on page 184.
The software for the device is not configured for the device port.	Check the software device selection menu to make sure that it is using the correct port. If the computer has more than one port, make sure that the device is attached to the correct one.
The device is on a network and is not receiving a signal.	Check cable connections. Reinstall the printing software. Print a job that you know works.
	Clear any stopped jobs from the print queue.
The device is not receiving power.	If no lights are on, check the power cord connections. Check the power switch. Check the power source.
The device is malfunctioning.	Check the control-panel display for messages and lights to determine if the device is indicating an error. Note any message and see Control-panel messages on page 174.

Control-panel message types

Four types of control-panel messages can indicate the status of or problems with the device.

Message type	Description
Status messages	Status messages reflect the current state of the device. They inform you of normal device operation and require no interaction to clear them. They change as the state of the device changes. Whenever the device is ready, not busy, and has no pending warning messages, the status message Ready appears if the device is online.
Warning messages	Warning messages inform you of data and print errors. These messages typically alternate with the Ready or status messages and remain until you touch OK. Some warning messages are clearable. If Clearable Warnings is set to Job on the device Device Behavior menu, the next print job clears these messages.
Error messages	Error messages communicate that some action must be performed, such as adding paper or clearing a jam.
	Some error messages are auto-continuable. If Auto-Continue is set on the menus, the device will continue normal operation after an auto-continuable error message appears for 10 seconds.
	NOTE: Pressing any button during the 10-second auto-continuable error message overrides the auto-continue feature, and the button function takes precedence. For example, pressing the Stop button pauses printing and offers the option to cancel the print job.
Critical-error messages	Critical error messages inform you of a device failure. Some of these messages can be cleared by turning the device off and then on. These messages are not affected by the Auto-Continue setting. If a critical error persists, service is required.

Control-panel messages

Table 11-1 Control-panel messages

Control panel message	Description	Recommended action
	A duplexed (2-sided) document was requested from a tray that is set to Any Size or Any Custom . Duplexing is not allowed from a tray configured to Any Size or Any Custom .	Select another tray or reconfigure the tray.
	A user name or password is incorrect.	Type the information again.
	A digital send or copy job has been performed from the scanner glass, but the original document needs to be removed.	Remove the original document from the scanner glass and press Start.
	The control panel function that you are trying to use has been locked to prevent unauthorized access.	Contact the network administrator.
10.XX.YY SUPPLY MEMORY ERROR	The MFP cannot read or write to at least one print cartridge e-label or an e-label is missing from a print cartridge.	Install a new HP print cartridge.
11.XX Internal clock error To continue touch OK	The MFP real time clock has experienced an error.	Whenever the MFP is turned off and then turned on again, set the time and date at the control panel. See <u>Use the control panel</u> on page 18.
		If the error persists, you might need to replace the formatter.
13.JJ.NT JAM IN ENVELOPE FEEDER	Media is jammed in the envelope feeder.	Remove the jammed media from the envelope feeder. Follow the instructions in the onscreen dialog box. See <u>Clear jams from the optional envelope-feeder area on page 187</u> .
13.JJ.NT JAM IN OUTPUT BIN	Media is jammed in the output bin.	Remove the output bin and gently remove the jammed media. Reattach output bin. Follow the instructions in the onscreen dialog box.
13.JJ.NT JAM IN TRAY 1	Media is jammed in tray 1.	Remove the jammed media from tray 1. Follow the instructions in the onscreen dialog box. See Clear jams from the tray 1 area on page 188.
13.JJ.NT JAM IN TRAY X	Media is jammed in the specified tray.	Follow the instructions in the onscreen dialog box. See <u>Clear jams from the tray 2, 3, 4, or 5 areas on page 190</u> .
13.JJ.NT JAM INSIDE DUPLEXER Remove duplexer from lower left area	Media is jammed in the duplexer.	Follow the instructions in the onscreen dialog box. See <u>Clear jams from the optional</u> duplexer on page 191.
13.JJ.NT JAM INSIDE LEFT OUTPUT AREA Remove output bin and duplexer	Media is jammed in the output area.	Follow the instructions in the onscreen dialog box. See Clear jams from the output areas on page 193.
13.JJ.NT JAM INSIDE RIGHT ACCESS DOOR Open all right access doors ABOVE tray X	Media is jammed inside the jam-access door for the tray that is indicated.	Follow the instructions in the onscreen dialog box.

Table 11-1 Control-panel messages (continued)

Control panel message	Description	Recommended action
13.JJ.NT JAM INSIDE TOP COVER AREA	Media is jammed in the top cover area.	Follow the instructions in the onscreen dialog box. See <u>Clear jams from the top-cover and print-cartridge areas on page 185</u> .
13.JJ.NT JAM INSIDE TOP COVER AREA Remove print cartridge	Media is jammed in the top cover area and you must remove the print cartridge to clear the jam.	Follow the instructions in the onscreen dialog box. See <u>Clear jams from the top-cover and print-cartridge areas on page 185</u> .
13.JJ.NT JAM INSIDE TRAY 2 AREA	Media is jammed in tray 2.	Follow the instructions in the onscreen dialog box. See <u>Clear jams from the tray 2, 3, 4, or 5 areas on page 190</u> .
13.JJ.NT JAM INSIDE TRAY 2 RIGHT ACCESS DOOR	Media is jammed inside tray 2 in the jamaccess door.	Follow the instructions in the onscreen dialog box.
13.JJ.NT JAMS INSIDE TOP COVER AREA Remove print cartridge	Media is jammed in more than one location inside the top cover area. You must remove the print cartridge to clear the jams.	Follow the instructions in the onscreen dialog box. See <u>Clear jams from the top-cover and print-cartridge areas on page 185</u> .
13.JJ.NT PAPER JAM OPEN INPUT TRAYS	Media is jammed inside one or more of the trays.	Follow the instructions in the onscreen dialog box.
20 INSUFFICIENT MEMORY To continue touch OK	The MFP received more data than can fit in the available memory. You might have tried to transfer too many macros, soft fonts, or complex graphics.	Touch OK to print the transferred data (some data might be lost), and then simplify the print job or install additional memory. See <u>Adding</u> <u>printer memory on page 249</u> .
21 PAGE TOO COMPLEX To continue touch OK	The page formatting process was not fast enough for the MFP.	Touch OK to print the transferred data. (Some data might be lost.) If this message appears often, simplify the print job.
22 EIO X BUFFER OVERFLOW To continue touch OK	Too much data was sent to the EIO card in the specified slot (x). An incorrect communications protocol might be in use.	Touch OK to print the transferred data. (Some data might be lost.)
		Check the host configuration. If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
22 EMBEDDED I/O BUFFER OVERFLOW To continue touch OK	Too much data was sent to the embedded HP Jetdirect print server.	Touch OK to print the transferred data. (Some data might be lost.)
30.1.YY SCANNER FAILURE	An error has occurred in the scanner.	Check the scanner lock. Turn the MFP off and then on.
		If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
40 BAD EIO X TRANSMISSION To continue touch OK	The connection between the MFP and the EIO card in the specified slot has been broken.	Touch OK to clear the error message and continue printing.
40 BAD SERIAL TRANSMISSION To continue touch OK	A serial data error (parity, framing, or line overrun) occurred as data was being sent by the computer.	Touch OK to clear the error message. (Data will be lost.)
40 EMBEDDED I/O BAD TRANSMISSION To continue touch OK	A temporary printing error has occurred.	Turn the MFP off, and then turn the MFP on.
10 continue touch OK		If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
41.3 MEDIA TOO SHORT CANNOT DUPLEX	The MFP cannot print on both sides of the selected media because the media does not meet the minimum length specification.	Select single-sided printing or load a longer- size media. Resend the job. See <u>Select print</u> media on page 72.

Table 11-1 Control-panel messages (continued)

Control panel message	Description	Recommended action
41.3 MEDIA TOO SHORT CANNOT SEND TO FACE DOWN OUTPUT BIN	The MFP cannot deliver the selected media face-down because the media does not meet the minimum length specification.	Select the face-up output option, or load a longer-size media in the tray. Resend the job. See Select print media on page 72.
41.3 UNEXPECTED SIZE IN TRAY XX LOAD TRAY XX <type> <size></size></type>	This is typically caused if two or more sheets of media stick together in the MFP or if the tray is not adjusted correctly.	Reload the tray with the correct media size. Reconfigure the size in a tray so that the MFP will use a tray that contains the size required for the print job. Follow the instructions in the onscreen dialog box.
41.3 UNEXPECTED SIZE IN TRAY XX To use another tray touch OK	The specified tray is loaded with media that is longer or shorter in the feed direction than the size adjusted for the tray.	Touch OK to use another tray. Reconfigure the size in a tray so that the MFP will use a tray that is loaded with the size of media required for the print job. If the message does not clear automatically from the control-panel display, turn the MFP off, and then turn the MFP on.
41.X ERROR To continue touch OK	A temporary printing error occurred.	Touch OK to clear the error. If the error is not cleared, turn the MFP off, and then turn the MFP on.
		If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
49.XXXXX ERROR To continue turn off then on	A critical firmware error has occurred.	Remove third-party devices. Turn the MFP off, and then turn the MFP on.
		If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
50.X FUSER ERROR	A fuser error has occurred.	Make sure you have the correct fuser. Reseat the fuser. Turn the MFP off, and then turn the MFP on.
		If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
51.XY ERROR To continue turn off then on	A temporary printing error has occurred.	Turn the MFP off, and then turn the MFP on.
		If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
52.XY ERROR To continue turn off then on	A temporary printing error has occurred.	Turn the MFP off, and then turn the MFP on.
		If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
53.XY.ZZ CHECK RAM DIMM SLOT <x> To continue touch OK</x>	A problem exists with the MFP memory. The DIMM that caused the error will not be used. The following are the values of X :	You might need to reseat or replace the specified DIMM.
	X = Device location	Turn the MFP off, and then replace the DIMM that caused the error. See <u>Adding printer</u>
	0 = Onboard memory	memory on page 249.
	1 = Slot 1	If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .

Table 11-1 Control-panel messages (continued)

Control panel message	Description	Recommended action
55.XX.YY DC CONTROLLER ERROR To continue turn off then on	The print engine is not communicating with the formatter.	Turn the MFP off, and then turn the MFP on. If this message persists, contact your dealer for support, or go to www.hp.com/support/
		<u>ljm4349mfp.</u>
56.X ERROR To continue turn off then on	A temporary printing error has occurred.	Turn the MFP off, and then turn the MFP on. If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
57.XX ERROR To continue turn off then on	A temporary printing error has occurred.	Turn the MFP off, and then turn the MFP on.
		If this message persists, contact dealer for support, or go to www.hp.com/support/lim4349mfp .
58.XX ERROR To continue turn off then on	A temporary printing error has occurred.	Turn the MFP off, and then turn the MFP on.
		If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
59.XY ERROR To continue turn off then on	A temporary printing error has occurred.	Turn the MFP off, and then turn the MFP on.
		If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
60.X ERROR To continue turn off then on	The tray specified by X is not lifting correctly.	Follow the instructions in the onscreen dialog box.
62 NO SYSTEM To continue turn off then	A problem exists with the MFP firmware.	Turn the MFP off, and then turn the MFP on.
on		If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
64 ERROR To continue turn off then on	A scan buffer error occurred.	Turn the MFP off, and then turn the MFP on.
		If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
66.XY.ZZ OUTPUT DEVICE FAILURE	An error occurred in an external paper-	Turn the MFP power off.
	handling accessory.	Check that the accessory is properly seated on and connected to the MFP, without any gaps between the MFP and the accessory. If the accessory uses cables, disconnect and reconnect them.
		3. Verify that there is no packaging material in or around the output device.
		4. Turn the MFP power on.
		 If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp.

Table 11-1 Control-panel messages (continued)

Control panel message	Description	Recommended action
68.X PERMANENT STORAGE FULL To continue touch OK	The MFP NVRAM is full. Some settings saved in the NVRAM might have been reset to the factory defaults. Printing can continue, but some unexpected functions might occur	Touch OK to clear the message. If the message is not cleared, turn the MFP off, and then turn the MFP on.
	if an error occurred in permanent storage.	If this message persists, contact your dealer for support, or go to www.hp.com/support/lim4349mfp .
68.X PERMANENT STORAGE WRITE FAIL To continue touch OK	can continue, but some unexpected functions might occur if an error occurred in permanent	Touch OK to clear the message. If the message is not cleared, turn the MFP off, and then turn the MFP on.
	storage.	If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
68.X STORAGE ERROR SETTINGS CHANGED To continue touch OK	One or more MFP settings are invalid and have been reset to the factory-default settings. Printing can continue, but some	Touch OK to clear the message. If the message is not cleared, turn the MFP off, and then turn the MFP on.
	unexpected functions might occur if an error occurred in permanent storage.	If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
69.X ERROR To continue turn off then on	A temporary printing error occurred.	Turn the MFP off, and then turn the MFP on
		If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
79 ERROR To continue turn off then on	A critical hardware error occurred.	Turn the MFP off, and then turn the MFP on
		If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
8X.YYYY EIO ERROR	The EIO accessory card has encountered a critical error, as specified by YYYY.	Try the following actions to clear the message.
		Turn the MFP off, and then turn the MFP on.
		2. Turn the MFP off, reseat the EIO accessory, and then turn the MFP on.
		3. Replace the EIO accessory.
8X.YYYY INTERNAL JETDIRECT ERROR	The embedded HP Jetdirect print server has encountered a critical error, as specified by	Turn the MFP off, and then turn the MFP on.
	YYYY.	If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
Authentication required	Authentication has been enabled for this feature or destination. A username and password are required.	Type the user name and password, or contact the network administrator.
Authentication required to use this feature	A user name and password are required.	Type the user name and password, or contact the network administrator.
Bad duplexer connection	The duplex printing accessory is not connected correctly to the MFP.	Remove and reinstall the duplexer. If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .

Table 11-1 Control-panel messages (continued)

Control panel message	Description	Recommended action
Bad env feeder connection	The envelope feeder is not connected properly.	Remove and reinstall the envelope feeder. If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
Cartridge failure return for replacement	The print cartridge still contains part of the sealing tape.	Try to remove the remaining sealing tape. If it cannot be removed, insert a new print cartridge and return the faulty print cartridge to receive a replacement. (See Order parts, accessories, and supplies on page 228, or go to www.hp.com/support/ljm4349mfp .)
Check output device	An error has occurred with the output device.	Remove and reinstall the output device. Observe the LED on the device. If is flashing or is amber, see Solve general device problems on page 170.
Chosen personality not available. To continue touch OK.	A print job requested a MFP language (personality) that is not available for this MFP. The job will not print and will be cleared from memory.	Print the job by using a printer driver for a different printer language, or add the requested language to the MFP (if possible). To see a list of available personalities, print a configuration page. (See <u>Use information pages on page 146</u> .)
Close right access door <x></x>	The specified jam-access cover is open.	Close the specified jam-access cover.
Close right access doors	More than one jam-access cover is open.	Close all jam-access covers to continue printing.
Close top cover	The top cover is open.	Close the top cover.
Digital Send Communication Error	An error has occurred during a digital send task.	Contact the network administrator.
Digital Send server is not responding Contact administrator	The MFP cannot communicate with the server.	Verify the network connection. Contact the network administrator.
Document feeder bin full	The document feeder output bin holds 50 sheets of paper. The MFP stops when the bin is full.	Remove the paper from the document feeder output bin.
Document feeder cover open	The document feeder cover is open.	Close the document feeder cover. Follow the instructions in the onscreen dialog box.
Document feeder pick error	The document feeder experienced an error while picking media.	Make sure that you have not overloaded the document feeder. Do not load more than 50 sheets of 20 lb paper in the document feeder.
Document feeder skew error	Media has become skewed in the document feeder.	Make sure that the paper guides are aligned on the sides of the originals, and that all of the originals are the same size. Remove the remaining media from the document feeder and close the document feeder cover. Follow the instructions in the onscreen dialog box.
DUPLEXER ERROR Remove duplexer Install duplexer with power off	The duplexer has been removed.	Reinstall the duplexer. (Any print jobs at the MFP might be lost.)
E-mail Gateway did not accept the job because the attachment was too large.	The scanned documents have exceeded the size limit of the server.	Send the job again using a lower resolution, smaller file size setting, or fewer pages. See Solve e-mail problems on page 219 to learn how to reduce the size of the attachment. Contact the network administrator to enable sending the scanned documents by using multiple e-mails.

Table 11-1 Control-panel messages (continued)

Control panel message	Description	Recommended action
E-mail Gateway did not respond. Job failed.	A gateway has exceeded the time out value.	Validate the SMTP IP address. See Solve email problems on page 219.
E-mail Gateway rejected the job because of the addressing information. Job failed.	One or more of the e-mail addresses is incorrect.	Send the job again with the correct addresses.
Error executing Digital Send job. Job failed.	A digital send job has failed and cannot be delivered.	Try to send the job again.
Folder list is full. To add a folder, you must first delete a folder.	The MFP limits the number of folders that can be established.	Delete an unused folder to add a new folder
HP Digital Sending: Delivery Error	A digital send job has failed and cannot be delivered.	Try to send the job again.
Incompatible Cartridge	A print cartridge that is not designed for this product is installed.	Check to ensure that the print cartridge is a valid HP print cartridge with product number CE267C.
Insert or close tray XX	The specified tray is missing or open.	Insert or close the specified tray to continue
Install cartridge	The print cartridge has been removed or has been installed incorrectly.	Replace or reinstall the print cartridge correctly to continue printing.
Insufficient memory to load fonts/data <device> To continue touch OK</device>	The MFP does not have enough memory to load the data (for example, fonts or macros) from the location specified.	Touch OK to continue without this information. If the message persists, add more memory.
JAM IN DOCUMENT FEEDER	Media is jammed in the document feeder.	Remove jammed media from the document feeder. Follow the instructions in the onscreen dialog box. See <u>Clear jams from the document feeder on page 197</u> . Also see <u>Solve repeated jams on page 198</u> .
		If the message persists after all jams have been cleared, a sensor might be stuck or broken. Contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
Jam in document feeder	Media is jammed in the document feeder.	Follow the instructions in the onscreen dialog box. See Clear jams from the document feeder on page 197. Also see Solve repeated jams on page 198.
LDAP Server is not responding Contact administrator	The LDAP server has exceeded the time out value for an address request.	Verify the LDAP server address. See <u>Solve</u> e-mail problems on page 219. Contact the network administrator.
Load envelope feeder <type> <size></size></type>	The envelope feeder is empty.	Load the envelope feeder.
Load Tray 1 <type> <size></size></type>	The tray is empty or configured for a different size than the size requested.	Follow the instructions in the onscreen dialog box.
Manually feed <type> <size></size></type>	The specified job requires manual feed from	Load the requested media into tray 1.
	tray 1.	To override the message, touch OK to use a type and size of media that is available in another tray.
Network connection required for Digital Sending. Contact administrator.	A digital-sending feature has been configured, but a network connection is not detected.	Verify the network connection. See <u>Solve</u> network printing problems on page 211. Contact the network administrator.
Non HP supply installed Economode disabled	A non-HP supply or a refilled HP supply has been installed.	Follow the instructions in the onscreen dialog box.

Table 11-1 Control-panel messages (continued)

Control panel message	Description	Recommended action
Novel login required	Novell authentication has been enabled for this destination.	Enter Novell network credentials to access the requested feature.
Order cartridge	The number of pages remaining for the print cartridge has reached the low threshold. The	Touch OK to continue printing until the print cartridge is out of toner.
	MFP was set to stop printing when a supply needs to be ordered.	To order a new print cartridge, see Order parts, accessories, and supplies on page 228.
Output bin <x> full</x>	The specified output bin is full and printing cannot continue.	Empty the bin to continue printing.
Output paper path open	The paper path between the MFP and the output device is open and must be closed before printing can continue.	If you have a 3-bin mailbox installed, make sure the jam-access door is closed.
		2. If you have a stapler/stacker installed, make sure the staple cartridge is snapped into position and that the staple-cartridge door is closed.
PAPER WRAPPED AROUND FUSER	A jam has occurred because paper has wrapped around the fuser.	Follow the instructions in the onscreen dialog box. See <u>Clear jams on page 184</u> .
Password or name is incorrect. Please enter correct login.	The user name or password was typed incorrectly.	Retype the user name and password.
PIN is incorrect. Please enter a 4-digit number.	The PIN format is incorrect.	Type the 4-digit PIN.
PIN is incorrect. Please re-enter PIN.	The PIN was typed incorrectly.	Retype the PIN.
Please turn device off and install hard disk.	The requested job requires a hard disk, but the MFP does not have a hard disk installed.	Turn the MFP off and install a hard disk. See Order parts, accessories, and supplies on page 228.
Reattach output bin	The standard output bin was detached when the MFP was turned on, or the cable on the stapler/stacker or the 3-bin mailbox is not connected to the MFP.	Turn the MFP off. If you are using the stapler stacker or the 3-bin mailbox, make sure that the cable is connected to the MFP. Reattach the output bin, and then turn the MFP on. Observe the LED on the output device. If it is flashing or amber, see Solve general device problems on page 170.
Reinsert duplexer	The duplexer has been removed and must be reinstalled.	Reinsert the duplexer in the MFP.
Reinstall output device	The output device has been removed or is not attached.	Make sure the output bin, 3-bin mailbox, or stapler/stacker is correctly installed on the MFP.
Replace cartridge	The print cartridge has reached the end of its life. Printing cannot continue.	Replace the print cartridge. To order a new print cartridge, see <u>Order parts</u> , accessories and supplies on page 228.
Replace staple cartridge	The stapler is out of staples.	Replace the staple cartridge. For information about replacing the staple cartridge see Order parts, accessories, and supplies on page 228.
SANITIZING DISK <x>% COMPLETE Do not power off</x>	The hard disk is being cleaned.	Contact the network administrator.

Table 11-1 Control-panel messages (continued)

Control panel message	Description	Recommended action
SCAN FAILURE Press 'Start' to rescan	The scan was unsuccessful and the document needs to be rescanned.	If necessary, reposition the document to rescan it, and then press Start.
SMTP Gateway	The SMTP gateway has exceeded a time out value.	Verify the e-mail server address. See <u>Solve</u> e-mail problems on page 219. Contact the network administrator.
STAPLER LOW ON STAPLES	Fewer than 20 staples remain in the staple cartridge. Printing continues when the cartridge runs out of staples unless you have configured the device to stop when staples run out.	Replace the staple cartridge. For information about replacing the staple cartridge see Order parts, accessories, and supplies on page 228.
The Digital Sending Service at <ip Address> does not service this MFP. Contact administrator.</ip 	The MFP cannot communicate with the specified IP address.	Verify the IP address. Contact the network administrator.
The Digital Sending Service must be upgraded to support this version of the MFP firmware. Contact administrator.	The Digital Sending Service is not supported by the version of the firmware that is currently installed for the MFP.	Check the firmware version. Contact the network administrator.
The folder you have entered is not a valid folder.	The folder name was entered incorrectly, or the folder does not exist.	Re-enter the folder name correctly, or add the folder.
TOO MANY PAGES IN JOB TO STAPLE	The maximum number of sheets the stapler can staple is 30.	For print jobs that have more than 30 pages, staple them manually.
Unable to connect		To temporarily hide this message in order to fax or send to e-mail, touch Hide . If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
UNABLE TO COPY	The MFP was unable to copy the document. If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .	To temporarily hide this message in order to fax or send to e-mail, touch IGNORE .
UNABLE TO SEND		To temporarily hide this message in order to fax or send to e-mail, touch IGNORE . If this message persists, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp .
Unable to send Fax. Please check fax configuration.	The MFP was unable to send the fax.	Contact the network administrator.
UNABLE TO SEND JOB		To temporarily hide this message in order to fax or send to e-mail, touch IGNORE . If this message persists, contact your dealer for support, or go to www.hp.com/support/lim4349mfp .
User name or password is incorrect. Please re-enter.	The user name or password was typed incorrectly.	Retype the user name and password.
User Name, Job Name, or PIN is missing.	One or more of the required items has not been selected or typed.	Select the correct user name and job name, and type the correct PIN.

Common causes of jams

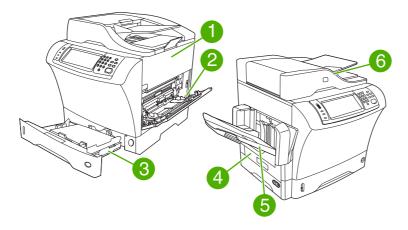
The device is jammed.1

Cause	Solution
The media does not meet specifications.	Use only media that meets HP specifications. See <u>Select print</u> media on page 72.
A component is installed incorrectly.	Verify that the print cartridge is correctly installed.
You are using media that has already passed through a device or copier.	Do not use media that has been previously printed on or copied.
An input tray is loaded incorrectly.	Remove any excess media from the input tray. Make sure that the stack is below the maximum stack height mark in the tray. See <u>Load media on page 78</u> .
The media is skewed.	The input-tray guides are not adjusted correctly. Adjust them so they hold the stack firmly in place without bending it.
The media is binding or sticking together.	Remove the media, flex it, rotate it 180°, or flip it over. Reload the media into the input tray.
The media is removed before it settles into the output bin.	Reset the device. Wait until the page completely settles in the output bin before removing it.
During two-sided printing, you removed the paper before the second side of the document was printed.	Reset the device and print the document again. Wait until the page completely settles in the output bin before removing it.
The media is in poor condition.	Replace the media.
The internal tray rollers are not picking up the media.	If the media is heavier than 120 g/m² (32 lb), it might not be picked from the tray.
The media has rough or jagged edges.	Replace the media.
The media is perforated or embossed.	Perforated or embossed media does not separate easily. Feed single sheets from tray 1.
Device supply items have reached the end of their useful life.	Check the device control panel for messages prompting you to replace supplies, or print a supplies status page to verify the remaining life of the supplies. See Use information pages on page 146.
Paper was not stored correctly.	Replace the paper in the trays. Paper should be stored in the original packaging in a controlled environment.
Not all device packing material was removed.	Verify that the packing tape, cardboard, and plastic shipping locks have been removed from the device.

¹ If the device still continues to jam, contact your dealer for support.

Clear jams

If a jam message appears on the control-panel display, look for jammed paper or other print media in the locations that are indicated in the following figure.



1	Top-cover and print-cartridge areas			
2	Envelope-feeder area and tray 1 area (the envelope feeder is optional)			
3	Tray 2 and optional 500-sheet feeder areas			
4	Duplexing area (the duplexer is optional)			
5	Output area			
6	Document feeder			

The following table lists the jam messages that might appear on the control-panel display. For information about clearing the jam, see the section that is indicated. You might need to look for media in locations other than those that are indicated in the jam message. If the location of the jam is not obvious, look first in the top-cover area underneath the print cartridge.

Table 11-2 Control-panel messages for jams

Jam message	Procedure for clearing the jam
JAM IN DOCUMENT FEEDER	See Clear jams from the document feeder on page 197.
ADF PAPER JAM	See Clear jams from the document feeder on page 197.
ADF PICK ERROR	See Clear jams from the document feeder on page 197.
13.JJ.NT JAM IN ENVELOPE FEEDER	See Clear jams from the optional envelope-feeder area on page 187.
13.JJ.NT JAM IN OUTPUT BIN	See Clear jams from the output areas on page 193.
13.JJ.NT JAM IN TRAY 1	See Clear jams from the tray 1 area on page 188.
13.JJ.NT JAM IN TRAY 2 (or TRAY 3, 4 or 5)	See Clear jams from the tray 2, 3, 4, or 5 areas on page 190.
13.JJ.NT JAM INSIDE DUPLEXER	See Clear jams from the optional duplexer on page 191.
13.JJ.NT JAM INSIDE LEFT OUTPUT AREA	See Clear jams from the output areas on page 193.

Table 11-2 Control-panel messages for jams (continued)

Jam message	Procedure for clearing the jam
13.JJ.NT JAM INSIDE RIGHT ACCESS DOOR	See Clear jams from the tray 2, 3, 4, or 5 areas on page 190.
13.JJ.NT JAM INSIDE TOP COVER AREA	See Clear jams from the top-cover and print-cartridge areas on page 185.
13.JJ.NT JAM INSIDE TRAY 2 AREA	See Clear jams from the tray 2, 3, 4, or 5 areas on page 190.
13.JJ.NT JAM INSIDE TRAY 2 RIGHT ACCESS DOOR	See Clear jams from the tray 2, 3, 4, or 5 areas on page 190.
13.JJ.NT JAM INSIDE TOP COVER AREA	See Clear jams from the top-cover and print-cartridge areas on page 185.
13.JJ.NT PAPER JAM OPEN INPUT TRAYS	See Clear jams from the tray 2, 3, 4, or 5 areas on page 190.
13.JJ.NT JAM IN STAPLER	See Clear staple jams on page 199.

When clearing jams, be very careful not to tear jammed media. If a small piece of media is left in the device, it could cause additional jams. If jams are a recurring problem, see Solve repeated jams on page 198.

NOTE: Loose toner might remain in the device after a jam and cause temporary print-quality problems. These problems should clear up within a few pages.

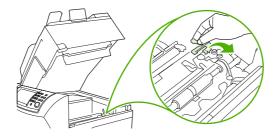
Clear jams from the top-cover and print-cartridge areas

Clear jams that occur during the printing process by using this procedure.

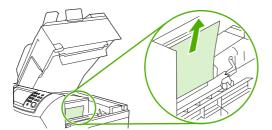
1. Open the top cover and remove the print cartridge.



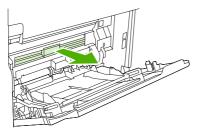
- △ CAUTION: To prevent damage to the print cartridge, do not expose it to light for more than a few minutes. Cover the print cartridge with a sheet of paper while it is outside of the device.
- 2. Use the green handle to lift the paper-access plate.



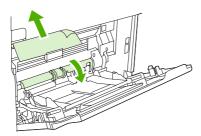
3. Slowly pull the jammed media out of the device. Do not tear the media.



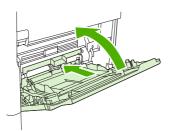
4. If jammed media is difficult to remove, open tray 1 and remove the envelope-entrance cover. If media is present, remove it.



5. Rotate the paper-release guide to check for additional jammed media underneath. If jammed media is present, remove it.



6. Replace the envelope-entrance cover and close tray 1.



7. Reinstall the print cartridge and close the top cover.

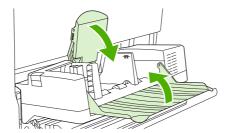


8. If a jam message persists, jammed media is still in the device. Look for the jam in another location.

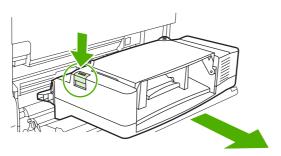
Clear jams from the optional envelope-feeder area

This section applies only to jams that occur when you are using an optional envelope feeder.

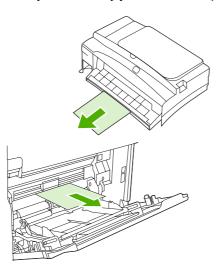
1. Remove any envelopes that are loaded in the envelope feeder. Lower the envelope weight and lift the tray extension up, to the closed position.



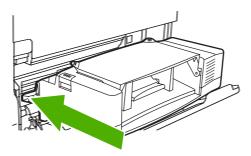
2. Press and hold the release button on the left side of the optional envelope feeder. Grasp both sides of the optional envelope feeder and carefully pull it out of the device.



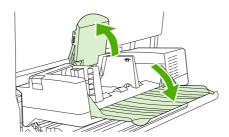
3. Slowly remove any jammed envelopes from the optional envelope feeder and from the device.



4. Insert the optional envelope feeder into the device until it locks into place. Pull gently on the optional envelope feeder to be sure that it is securely in place.



5. Fold down the envelope-feeder tray. Lift the envelope weight.



- **6.** Reload the envelopes, making sure that you push the bottom envelopes in slightly farther than the top envelopes.
- 7. If a jam message persists, jammed media is still in the device. Look for the jam in another location.

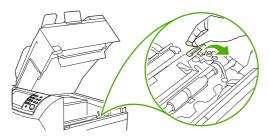
Clear jams from the tray 1 area

Use this procedure to clear jams that occur in the tray 1 input area.

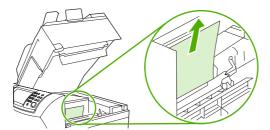
1. Open the top cover, open tray 1, and remove the print cartridge.



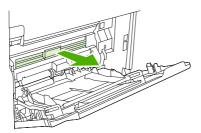
2. Use the green handle to lift the paper-access plate.



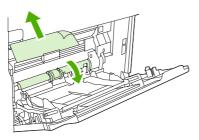
3. Slowly pull any jammed media out of the device. Do not tear the media. If part of the sheet has already been pulled into the device, follow the steps for <u>Clear jams from the top-cover and print-cartridge areas on page 185</u>.



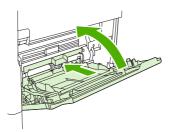
4. If jammed media is difficult to remove, remove the envelope-entrance cover. If media is present, remove it.



5. Rotate the paper-release guide to check for additional jammed media underneath. If jammed media is present, remove it.



6. Replace the envelope-entrance cover and close tray 1.



7. Reinstall the print cartridge and close the top cover.

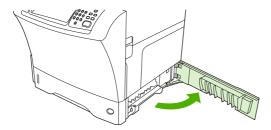


8. If a jam message persists, jammed media is still in the device. Look for the jam in another location.

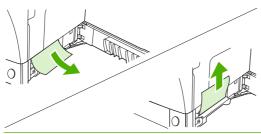
Clear jams from the tray 2, 3, 4, or 5 areas

Use this procedure to clear jams that occur in tray 2 or in the optional 500-sheet feeders.

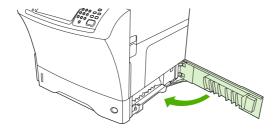
1. Pull the jam-access lever to open the jam-access cover.



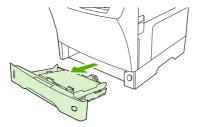
2. Carefully pull out any jammed media from either the top or the bottom of the jam-access area.



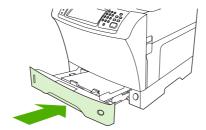
- NOTE: Use an upward or downward pulling motion to avoid tearing the media and to prevent toner from falling into the device.
- 3. Close the jam-access cover.



4. Slide the tray completely out of the device, and remove any damaged media from the tray.



Slide the tray into the device.

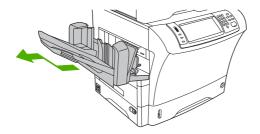


6. If a jam message persists, jammed media is still in the device. Look for the jam in another location.

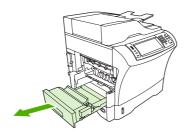
Clear jams from the optional duplexer

If a jam occurs during a duplex printing job, use this procedure to check for the jam and to clear it.

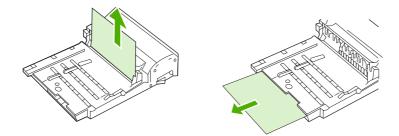
1. Remove the output bin (or remove the stapler/stacker or the mailbox).



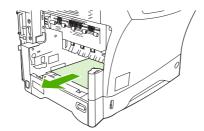
2. Remove the optional duplexer.



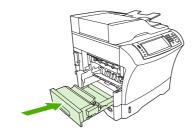
3. Check for jammed paper in the optional duplexer. Carefully pull out the jammed paper.



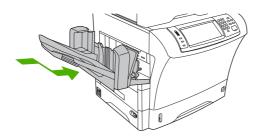
- 4. Set the duplexer aside.
- **5.** Check for jammed paper inside the device. Carefully pull out the jammed paper.



6. Reinstall the duplexer.



7. Reinstall the output bin (or reinstall the 3-bin mailbox or the stapler/stacker).

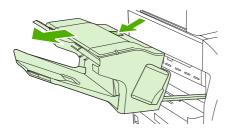


8. If a jam message persists, jammed media is still in the device. Look for the jam in another location.

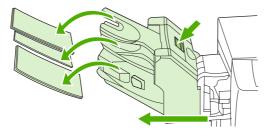
Clear jams from the output areas

Use this procedure to clear jams that occur in the output bin, the 3-bin mailbox, or the stapler/stacker.

1. If you are using the standard output bin, slide the standard output bin away from the device.



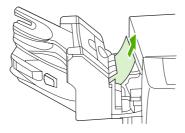
If you are using a 3-bin mailbox or a stapler/stacker, remove any media that is stacked, and then press and hold the release button on the top of the accessory. Slide the accessory away from the device.



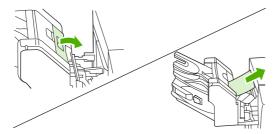
3. If the jammed media is inside the device, carefully pull the jammed media out of the device.



4. If the jammed media is inside the 3-bin mailbox or the stapler/stacker, carefully pull the jammed media up and out of the device.



5. If you are using a 3-bin mailbox, the jammed media might be completely inside the device. Open the jam-access cover that is on the top of the 3-bin mailbox, and carefully pull the jammed media out of the mailbox.

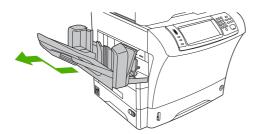


- 6. Reinstall the output-bin assembly, the 3-bin mailbox, or the stapler/stacker. Insert the device at an angle, and then slide it into the device.
- 7. If a jam message persists, jammed media is still in the device. Look for the jam in another location.

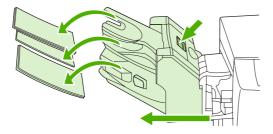
Clear jams from the fuser

Use this procedure to clear jams that occur in the fuser.

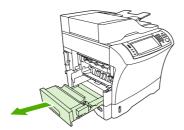
- 1. Turn the device off and wait 30 minutes for the fuser to cool.
 - ⚠ **WARNING!** The fuser is very hot. To avoid minor burns, wait 30 minutes for the fuser to cool before removing it from the device.
- 2. If you are using the standard output bin, grasp the handle at the bottom of the output-bin assembly, and pull it out and then up to remove it.



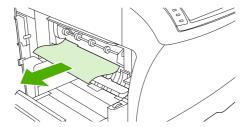
3. If you are using a 3-bin mailbox or a stapler/stacker, remove any media that is stacked, and then press and hold the release button on the top of the device. Pull the device away from the device.



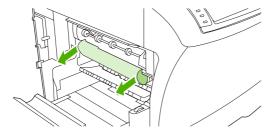
4. Remove the optional duplexer or the duplex cover.



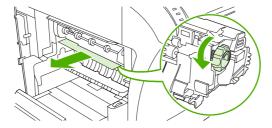
- 5. If you cannot see the jammed media inside the fuser, skip to step 9.
- **6.** If you can see either the leading edge or the trailing edge of the jammed media inside the fuser, carefully pull it out.



7. If you can see the jammed media, but neither the leading edge nor the trailing edge is visible, gently pull on the sides of the sheet of media until one edge becomes free. Then carefully pull the jammed media out of the fuser.

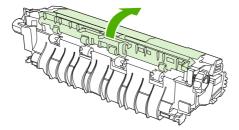


8. If the media tears as you are removing it, turn the green dial on the fuser, and then carefully pull out the jammed media. Go to step 13.

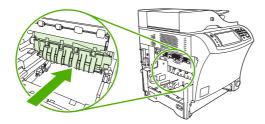


9. To remove the fuser-entrance guide, push inward at the left edge to free the left-side alignment pin. Then lift up slightly on the fuser-entrance guide, and remove it from the device. Place your forefingers on the blue levers on the bottom of each side of the fuser. Place your thumbs on the grip points on the top of each side of the fuser. Squeeze the blue levers up, and remove the fuser from the device.

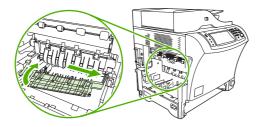
10. Open the black cover at the top of the fuser, and remove the jammed media.



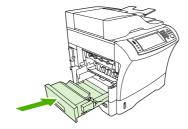
11. Reinstall the fuser. Push on the fuser with your thumbs to be sure it snaps securely into place.



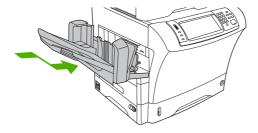
12. To reinstall the fuser-entrance guide, first insert the right-side mounting pin into the hole on the right side, and then lower the left-side mounting pin into the hole on the left side.



13. Reinstall the duplexer or the duplex cover.



14. Reinstall the output-bin assembly, the 3-bin mailbox, or the stapler/stacker. Insert the device at an angle, and then slide it into the device.

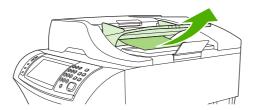


15. If a jam message persists, jammed media is still in the device. Look for the jam in another location.

Clear jams from the document feeder

Use this procedure to clear jams from the document feeder.

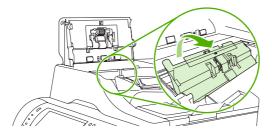
1. Lift the document-feeder input tray, and check for jammed media underneath the tray. Carefully remove any jammed media.



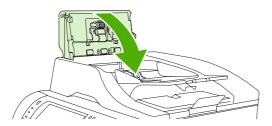
2. Pull up on the document-feeder-cover-release lever, and open the document feeder cover. Carefully remove any jammed media.



3. Lift the green jam lever on the document guide, and then check for jammed media. Carefully remove any jammed media.



4. Close the document feeder cover.



5. If a jam message persists, jammed media is still in the device. Look for the jam in another location.

Solve repeated jams

Situation		Solution		
General repeated jam problems	1.	Make sure that the media is loaded correctly in the trays and that all width guides are set correctly (see Load media on page 78).		
	2.	Make sure that the tray is set for the size of media that is installed and that the tray is not overloaded.		
	3.	Try turning over the stack of media in the tray. If you are using prepunched or letterhead paper, try printing from tray 1.		
	4.	Do not use media that has been printed on previously or torn, worn, or irregular media. See <u>Select print media on page 72</u> .		
	5.	Check the media specifications. (See <u>Select print media on page 72</u> .) If media is outside of the recommended specifications, problems can occur.		
	6.	The device might be dirty. Clean the device as described in <u>Clean the device</u> on page 156.		
	7.	Check that all damaged or jammed media is removed from device.		
Repeated jams in the document feeder	1.	The document feeder might be dirty. Clean the document feeder as described in Clean the document feeder on page 157.		
	2.	Make sure that the media is loaded squarely and that the media-width guides are adjusted to the sides of the media stack.		
	3.	Make sure that no more than 50 sheets of 75g/m 2 (20lb) bond paper are loaded in the document feeder.		
	4.	If the original document that is being copied has been folded or stapled, flatten it as much as you can and smooth any wrinkles. Make sure the pages are not stuck together where the staple was.		
	5.	Media that has been pre-punched or perforated in any way might be difficult to feed through the document feeder. If the leading edge of the document is excessively worn or frayed, try rotating the document 180 degrees before copying.		

NOTE: If jams continue, contact your dealer for support, or go to www.hp.com/support/ljm4349mfp.

Paper-path test

The paper path test can be used to verify that various paper paths are working correctly or to troubleshoot problems with tray configuration.

- 1. Scroll to and touch Administration.
- 2. Scroll to and touch Troubleshooting.
- 3. Scroll to and touch Paper Path Test.
- 4. Touch Print Test Page.

Clear staple jams

The stapler is designed to be free of staple jams. To reduce the risk of staple jams, make sure that you observe the following media limits:

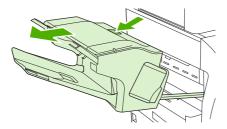
Plain media: 30 sheets of 75 g/m² (20 lb) media

Glossy media: 20 sheets

Thick media (128-199 g/m² [34-53 lb]): Stack height must not exceed 3mm (0.27 inches)

Occasionally, staples become jammed in the optional stapler/stacker. If jobs are not being stapled correctly or are not being stapled at all, use the following procedure to clear staple jams.

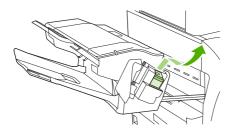
- 1. Turn off the device.
- 2. Press and hold the release button on the top of the stapler/stacker. Pull the stapler/stacker away from the device.



Open the staple-cartridge cover.



4. To remove the staple cartridge, pull up on the green handle and pull out the staple cartridge.

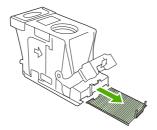


ENWW Clear staple jams 199

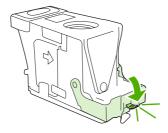
5. Lift up on the small lever at the back of the staple cartridge.



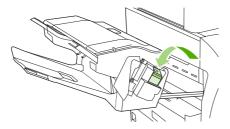
6. Remove the staples that protrude from the staple cartridge.



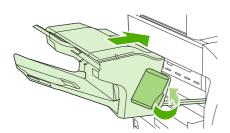
7. Close the lever at the back of the staple cartridge. Be sure that it snaps into place.



8. Reinsert the staple cartridge into the staple-cartridge holder, and push down on the green handle until it snaps into place.



9. Close the staple-cartridge cover, and slide the stapler/stacker into the device.



Solve print-quality problems

This section helps you define print-quality problems and what to do to correct them. Often print-quality problems can be handled easily by making sure that the device is correctly maintained, using print media that meets HP specifications, or running a cleaning page.

Print-quality problems associated with media

Some print-quality problems arise from the use of inappropriate media.

- Use media that meets HP specifications. See Select print media on page 72.
- The surface of the media is too smooth. Use media that meets HP specifications. See Select print media on page 72.
- The moisture content is uneven, too high, or too low. Use media from a different source or from an unopened ream.
- Some areas of the media reject toner. Use media from a different source or from an unopened
- The letterhead you are using is printed on rough media. Use a smoother, xerographic media. If this solves your problem, ask the supplier of your letterhead to use media that meets the specifications for this device. See Select print media on page 72.
- The media is excessively rough. Use a smoother, xerographic media.
- The driver setting is incorrect. To change the media type setting, see Control print jobs on page 88.
- The media that you are using is too heavy for the media type setting that you selected, and the toner is not fusing to the media.

Print-quality problems associated with the environment

If the device is operating in excessively humid or dry conditions, verify that the printing environment is within specifications. See Printing and paper-storage environment on page 77.

Print-quality problems associated with jams

Make sure that all sheets are cleared from the paper path. See Clear jams on page 184.

- If the device recently jammed, print two to three pages to clean the device.
- If the sheets do not pass through the fuser and cause image defects on subsequent documents. print three pages to clean the device. If the problem persists, print and process a cleaning page. See Clean the device on page 156.

Image defect examples

Use the examples in this image-defect table to determine which print-quality problem you are experiencing, and then see the corresponding reference pages to resolve the problem. These examples identify the most common print-quality problems. If you still have problems after trying the suggested remedies, contact your dealer for support.



See <u>Light print (partial</u> page) on page 203

AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc

See <u>Light print (entire</u> page) on page 203

AaBbCc AaBbCc AaBbCc AaBbCc

See <u>Specks</u> on page 203 AaBbCc AaBbCc AaBbCc AaBbCc

See <u>Specks</u> on page 203 A

See <u>Dropouts</u> on page 204

AaBbCc AaBbCc AaBbCc AaBbCc

See <u>Dropouts</u> on page 204



See <u>Dropouts</u> on page 204

ACIBINICO ACIBINICO ACIBINICO ACIBINICO ACIBINICO

See <u>Lines</u> on page 204

AaBbCc AaBbCc AaBbCc AaBbCc

See <u>Gray background</u> on page 204

AaBbCc AaBbCc AaBbCc AaBbCc

See <u>Toner smear</u> on page 205

AaBbCc AaBbCc AaBbCc AaBbCc

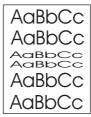
See <u>Loose toner</u> on page 205



See Repeating defects on page 206



See Repeating image on page 206



See Misformed characters on page 206



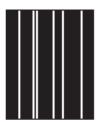
See <u>Page skew</u> on page 207



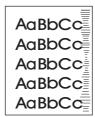
See <u>Curl or wave</u> on page 207



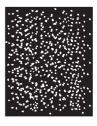
See Wrinkles or creases on page 208



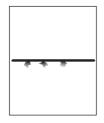
See <u>Vertical white lines</u> on page 208



See <u>Tire tracks</u> on page 208



See White spots on black on page 209



See <u>Scattered lines</u> on page 209.



See Blurred print on page 210.



See Random image repetition on page 210 (dark)



See Random image repetition on page 210 (light)

NOTE: These examples depict letter-size media that has passed through the device.

Light print (partial page)



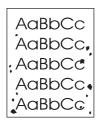
- Make sure that the print cartridge is fully installed.
- 2. The toner level in the print cartridge might be low. Replace the print cartridge.
- 3. The media might not meet HP specifications (for example, the media is too moist or too rough). See Select print media on page 72.

Light print (entire page)



- Make sure that the print cartridge is fully installed.
- 2. Make sure that the Economode setting is turned off at the control panel and in the printer driver.
- 3. Open the Administration menu at the device control panel. Open the Print Quality menu and increase the Toner Density setting. See Print Quality menu on page 48.
- Try using a different type of media.
- The print cartridge might be almost empty. Replace the print cartridge.

Specks



Specks might appear on a page after a jam has been cleared.

- 1. Print a few more pages to see if the problem corrects itself.
- Clean the inside of the device and run a cleaning page. See Clean the device on page 156.

- 3. Try using a different type of media.
- 4. Check the print cartridge for leaks. If the print cartridge is leaking, replace it.

Dropouts



- **1.** Make sure that the environmental specifications for the device are being met. See <u>Printing and paper-storage environment on page 77</u>.
- 2. If the media is rough, and the toner easily rubs off, open the Administration menu at the device control panel. Open the Print Quality menu, select Fuser Modes, and then select the media type you are using. See Print Quality menu on page 48.
- 3. Try using a smoother media.

Lines



- 1. Print a few more pages to see if the problem corrects itself.
- 2. Clean the inside of the device and run a cleaning page. See Clean the device on page 156.
- 3. Replace the print cartridge.

Gray background



- 1. Do not use media that has already been run through the device.
- Try using a different type of media.
- 3. Print a few more pages to see if the problem corrects itself.
- 4. Turn over the stack in the tray. Also, try rotating the stack 180°.

- Open the Administration menu at the device control panel. On the Print Quality menu, increase the Toner Density setting. See <u>Print Quality menu on page 48</u>.
- 6. Make sure that the environmental specifications for the device are being met. See <u>Printing and paper-storage environment on page 77</u>.
- 7. Replace the print cartridge.

Toner smear

AaBbCc AaBbCc AaBbCc AaBbCc

- 1. Print a few more pages to see if the problem corrects itself.
- **2.** Try using a different type of media.
- 3. Make sure that the environmental specifications for the device are being met. See <u>Printing and paper-storage environment on page 77</u>.
- 4. Clean the inside of the device and run a cleaning page. See Clean the device on page 156.
- 5. Replace the print cartridge.

Also see Loose toner on page 205.

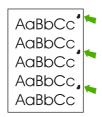
Loose toner



Loose toner, in this context, is defined as toner that can be rubbed off the page.

- 1. If media is heavy or rough, open the Administration menu at the device control panel. On the Print Quality submenu, select Fuser Modes, and then select the media type you are using.
- 2. If you have observed a rougher texture on one side of your media, try printing on the smoother side.
- 3. Make sure that the environmental specifications for the device are being met. See <u>Printing and paper-storage environment on page 77</u>.
- **4.** Make sure that type and quality of the media you are using meet HP specifications. See <u>Select print media on page 72</u>.

Repeating defects



- 1. Print a few more pages to see if the problem corrects itself.
- 2. If the distance between defects is 44 mm (1.7 in), 58 mm (2.3 in), or 94 mm (3.7 in), the print cartridge might need to be replaced.
- 3. Clean the inside of the device and run a cleaning page. See Clean the device on page 156.)

Also see Repeating image on page 206.

Repeating image



This type of defect might occur when using preprinted forms or a large quantity of narrow media.

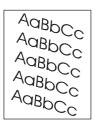
- 1. Print a few more pages to see if the problem corrects itself.
- 2. Make sure that type and quality of the media you are using meet HP specifications. See <u>Select print media on page 72</u>.
- 3. If the distance between defects is 44 mm (1.7 in), 58 mm (2.3 in), or 94 mm (3.7 in), the print cartridge might need to be replaced.

Misformed characters



- 1. Print a few more pages to see if the problem corrects itself.
- 2. Make sure that the environmental specifications for the device are being met. See Printing and paper-storage environment on page 77.

Page skew



- 1. Print a few more pages to see if the problem corrects itself.
- 2. Verify that no torn pieces of media are inside the device.
- Make sure that media is loaded correctly and that all adjustments have been made. See <u>Load</u> media on page 78. Make sure that the guides in the tray are not too tight or too loose against the media.
- 4. Turn over the stack in the tray. Also, try rotating the stack 180°.
- 5. Make sure that the type and quality of the media you are using meet HP specifications. See <u>Select print media on page 72</u>.
- 6. Make sure that the environmental specifications for the device are being met. (See <u>Printing and paper-storage environment on page 77</u>.)
- 7. Perform a tray alignment by opening the Administration menu at the device control panel. On the Print Quality submenu, touch Set Registration. Choose a tray under Source and then run a test page. For more information, see Print Quality menu on page 48.

Curl or wave



- 1. Turn over the stack in the tray. Also, try rotating the stack 180°.
- 2. Make sure that the type and quality of the media you are using meet HP specifications. (See <u>Select print media on page 72</u>.)
- 3. Make sure that the environmental specifications for the device are being met. (See <u>Printing and paper-storage environment on page 77.</u>)
- Try printing to a different output bin.
- 5. If media is lightweight and smooth, open the Administration menu at the device control panel. On the Print Quality submenu, touch Fuser Modes, and then select the media type you are using. Change the setting to Low, which helps reduce the heat in the fusing process.

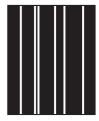
Wrinkles or creases



- 1. Print a few more pages to see if the problem corrects itself.
- 2. Make sure that the environmental specifications for the device are being met. See <u>Printing and paper-storage environment on page 77</u>.
- 3. Turn over the stack in the tray. Also, try rotating the stack 180°.
- **4.** Make sure that media is loaded correctly and all adjustments have been made. See <u>Load media</u> on page 78.
- Make sure that the type and quality of the media you are using meet HP specifications. See <u>Select</u> print media on page 72.
- 6. If envelopes are creasing, try storing envelopes so that they lie flat.

If the above actions do not improve wrinkles or creases, open the Administration menu at the device control panel. On the Print Quality submenu, select Fuser Modes, and then select the media type you are using. Change the setting to Low, which helps reduce the heat in the fusing process.

Vertical white lines



- 1. Print a few more pages to see if the problem corrects itself.
- Make sure that the type and quality of the media you are using meet HP specifications. See <u>Select print media on page 72</u>.
- 3. Replace the print cartridge.

Tire tracks



This defect typically occurs when the print cartridge has far exceeded its rated life. For example, if you are printing a very large quantity of pages with very little toner coverage.

- Replace the print cartridge.
- 2. Reduce the number of pages that you print with very low toner coverage.

White spots on black



- Print a few more pages to see if the problem corrects itself.
- 2. Make sure that the type and quality of the media you are using meet HP specifications. See Select print media on page 72.
- Make sure that the environmental specifications for the device are being met. See Printing and paper-storage environment on page 77.
- Replace the print cartridge.

Scattered lines



- Make sure that the type and quality of the media you are using meet HP specifications. See Select print media on page 72.
- Make sure that the environmental specifications for the device are being met. See Printing and paper-storage environment on page 77.
- 3. Turn over the stack in the tray. Also, try rotating the stack 180°.
- Open the Administration menu at the device control panel. Open the Print Quality submenu and change the Toner Density setting. See Print Quality menu on page 48.
- Open the Administration menu at the device control panel. On the Print Quality submenu, open Optimize and set Line Detail=On.

Blurred print



- Make sure that the type and quality of the media you are using meet HP specifications. See <u>Select print media on page 72</u>.
- 2. Make sure that the environmental specifications for the device are being met. See <u>Printing and paper-storage environment on page 77</u>.
- 3. Turn over the stack in the tray. Also, try rotating the stack 180°.
- 4. Do not use media that already has been run through the device.
- Decrease the toner density. Open the Administration menu at the device control panel. Open the Print Quality submenu and change the Toner Density setting. See Print Quality menu on page 48.
- Open the Administration menu at the device control panel. On the Print Quality submenu, open Optimize and set High Transfer=On. See <u>Print Quality menu on page 48</u>.

Random image repetition





If an image that appears at the top of the page (in solid black) repeats further down the page (in a gray field), the toner might not have been completely erased from the last job. (The repeated image might be lighter or darker than the field it appears in.)

- Change the tone (darkness) of the field that the repeated image appears in.
- Change the order in which the images are printed. For example, have the lighter image at the top of the page, and the darker image farther down the page.
- From your software program, rotate the whole page 180° to print the lighter image first.
- If the defect occurs later in a print job, turn the device off for 10 minutes, and then turn it on to restart the print job.

Solve network printing problems

- Print a configuration page (see <u>Use information pages on page 146</u>). If an HP Jetdirect print server
 is installed, printing a configuration page also prints a second page that shows the network settings
 and status.
- See the HP Jetdirect Embedded Print Server Administrator's Guide for help and for more information about the Jetdirect configuration page.
- Try printing the job from another computer.
- To verify that a device works with a computer, use a USB cable to connect it directly to a computer, and then reinstall the printing software. Print a document from a program that has printed correctly in the past. If this works, a problem with the network might exist.
- Contact a network administrator for assistance.

Solve copy problems

Prevent copy problems

The following are a few simple steps you can take to improve copy quality:

- Copy from the flatbed scanner. This will produce a higher quality copy than copying from the automatic document feeder (ADF).
- Use quality originals.
- Load the media correctly. If the media is loaded incorrectly, it might skew, causing unclear images and problems with the OCR program. See <u>Load media on page 78</u> for instructions.
- Use or make a carrier sheet to protect your originals.
- NOTE: Verify that the media meets HP specifications. If the media meets HP specifications, recurring feed problems indicate the pickup roller or separation pad is worn.

Image problems

Problem	Cause	Solution
Images are missing or faded.	The print-cartridge toner-level might be low.	Replace the print cartridge. See Change the print cartridge on page 154.
	The original might be of poor quality.	If your original is too light or damaged, the copy might not be able to compensate, even if you adjust the darkness. If possible, find an original document in better condition.
	The original might have a colored background.	Touch Copy, and then touch Image Adjustment. Adjust the Background Cleanup slider to the right to decrease the background.
Vertical white or faded stripes appear on the copy.	The media might not meet HP specifications.	Use media that meets HP specifications. See <u>Select print media on page 72</u> .
AaBbCc AaBbCc AaBbCc AaBbCc	The print-cartridge toner-level might be low.	Replace the print cartridge. See Change the print cartridge on page 154.
Unwanted lines appear on the copy.	Tray 1 or tray 2 might not be installed correctly.	Verify that the tray is in place.
AdBb/Co AdBb/Co	The flatbed scanner or the ADF glass might be dirty.	Clean the flatbed scanner or the ADF glass. See Clean the device on page 156.
AdBbiCo AdBbiCo AdBbiCo	The photosensitive drum inside the print cartridge might have been scratched.	Install a new HP print cartridge. See Change the print cartridge on page 154.

Problem	Cause	Solution
Black dots or streaks appear on the copy.	Ink, glue, correction fluid, or an unwanted substance might be on the automatic document feeder (ADF) or flatbed scanner.	Clean the device. See <u>Clean the device</u> on page 156.
Copies are too light or dark.	The darkness setting needs to be adjusted.	Touch Copy, and then touch Image Adjustment. Adjust the Darkness slider to lighten or darken the image.
Text is unclear.	The sharpness setting needs to be adjusted. The image should be optimized for text.	To adjust the sharpness, touch Copy, and then touch Image Adjustment. Adjust the Sharpness slider to the right to increase the sharpness.
		To optimize the image for text, touch Copy and then touch Optimize Text/ Picture. Select Text.

Media-handling problems

Problem	Cause	Solution	
Poor print quality or toner adhesion	The paper is too moist, too rough, too heavy or too smooth, or it is embossed or from a faulty paper lot.	Try another kind of paper, between 100 and 250 Sheffield, 4 to 6% moisture content.	
Dropouts, jamming, or curl	The paper has been stored incorrectly.	Store paper flat in its moisture-proof wrapping.	
	The paper has variability from one side to the other.	Turn the paper over.	
Excessive curl	The paper is too moist, has the wrong grain direction, or is of short-grain construction	Open the rear output bin, or use long- grain paper.	
	The paper varies from side-to-side.	Turn the paper over.	
Jamming, damage to device	The paper has cutouts or perforations.	Use paper that is free of cutouts or perforations.	
Problems with feeding	The paper has ragged edges.	Use high-quality paper that is made for laser printers.	
	The paper varies from side-to-side.	Turn the paper over.	
	The paper is too moist, too rough, too heavy or too smooth, has the wrong grain direction, or is of short-grain construction or it is embossed or from a faulty paper	Try another kind of paper, between 100 and 250 Sheffield, 4 to 6% moisture content.	
	lot.	Use long-grain paper.	

ENWW Solve copy problems 213

Problem	Cause	Solution
Print is crooked or misaligned on the page.	The media guides might be incorrectly adjusted.	Remove all media from the input tray, straighten the stack, and then load the media in the input tray again. Adjust the media guides to the width and length of the media that you are using and try printing again.
	The scanner might require a calibration.	Perform a tray alignment, and then calibrate the scanner.
		 Perform a tray alignment by opening the Administration menu at the device control panel. On the Print Quality submenu, touch Set Registration. Choose a tray under Source and then run a test page. For more information, see Print Quality menu on page 48. See Calibrate the scanner on page 161 for information about calibrating the scanner.
More than one sheet feeds at one time.	The media tray might be overloaded.	Remove some of the media from the tray. See <u>Load media on page 78</u> .
	The media might be wrinkled, folded, or damaged.	Verify that the media is not wrinkled, folded, or damaged. Try printing on media from a new or different package.
The device does not pull media from a media tray.	The device might be in manual feed mode.	If Manual Feed appears on the control-panel display, press OK to print the job.
		 Verify that the device is not in manual feed mode, and then print your job again.
	The pickup roller might be dirty or damaged.	Contact your dealer for support.
	The paper-length adjustment control in the tray is set at a length that is greater than the media size.	Adjust the paper-length adjustment control to the correct length.

Performance problems

Problem	Cause	Solution
No copy came out.	The input tray might be empty.	Load media in the device. See <u>Load</u> media on page 78 for more information.
	The original might have been loaded incorrectly.	Load the original correctly in the ADF or flatbed scanner. See Load media on page 78.

Problem	Cause	Solution
Copies are blank.	The sealing tape might not have been removed from the print cartridge.	Remove the print cartridge from the device, pull out the sealing tape, and then reinstall the print cartridge.
	The original might have been loaded incorrectly.	Load the original correctly in the ADF or flatbed scanner. See Load media on page 78.
	The media might not meet HP specifications.	Use media that meets HP specifications. See Select print media on page 72.
	The print-cartridge toner-level might be low.	Replace the print cartridge. See Change the print cartridge on page 154.
The wrong original was copied.	The ADF might be loaded.	Make sure that the ADF is empty.
Copies are reduced in size.	The device software settings might be set to reduce the scanned image.	See the device software Help for more information about changing the settings.

Solve fax problems

Solve sending problems

Faxes quit during sending.

Cause	Solution
The fax machine to which you are sending might be malfunctioning.	Call the recipient to make sure that the receiving fax machine is turned on and ready to receive faxes, or try sending to another fax machine.
Your telephone line might not be working, or the line might be experiencing interference.	Disconnect the fax cable from the telephone jack, and then connect a telephone. Make a phone call to ensure that the telephone line is working.
	Try using a lower baud rate by adjusting the Maximum Baud Rate setting in the Administration menu. See Initial Setup menu on page 32.

The device fax is receiving faxes but is not sending them.

Cause	Solution
If the device is on a PBX system, the PBX system might be generating a dial tone that the fax cannot detect.	Disable the detect dial tone setting. See the fax guide for information about changing the setting.
There might be a poor telephone connection.	Resend the fax later.
The fax machine to which you are sending might be malfunctioning.	Call the recipient to make sure that the receiving fax machine is turned on and ready to receive faxes, or try sending to another fax machine.
Your telephone line might not be working.	Disconnect the fax cable from the telephone jack, and then connect a telephone. Make a phone call to ensure that the telephone line is working.

Outgoing fax calls keep dialing.

Cause	Solution
,	Disable the Redial on Busy and Redial on No Answer features. See the fax guide for information about changing the settings.

Faxes you send are not arriving at the receiving fax machine.

Cause	Solution
The receiving fax machine might be turned off or might have an error condition, such as being out of paper.	Call the recipient to make sure that the fax machine is turned on and ready to receive faxes.
A fax might be stored in memory because it is waiting to redial a busy number, or there are other jobs ahead of it waiting to be sent.	If a fax job is in memory for either of these reasons, an entry for the job appears in the fax log. Print the fax activity log (see the fax guide), and check the Result column for jobs with a Pending designation.

Solve receiving problems

Incoming fax calls are not being answered by the fax (no fax detected).

Cause	Solution
The rings-to-answer setting might not be set correctly.	Check the rings-to-answer setting. See the fax guide for information about changing the setting.
The telephone cord might not be connected properly, or the telephone cord is not working.	Check the installation. Make sure you are using the telephone cord that came with the device.
The telephone line might not be working.	Disconnect the fax cable from the telephone jack, and then connect a telephone. Make a phone call to ensure that the telephone line is working.
A voice-messaging service might be interfering with the ability to answer calls.	 Do one of the following: Discontinue the messaging service. Get a telephone line dedicated to fax calls. Decrease the rings-to-answer setting for the fax to a number less than the rings-to-answer for the voice mail. See the fax guide for information about changing the setting.

Faxes are transmitting or being received very slowly.

Cause	Solution
You might be sending or receiving a very complex fax, such as one with many graphics.	Complex faxes take longer to be sent or received.
The receiving fax machine might have a slow modem speed.	The device fax only sends the fax at the fastest modem speed the receiving fax machine can use.
The resolution at which the fax was sent or is being received is very high. A higher resolution typically results in better quality, but also requires a longer transmission time.	If you are receiving the fax, call and ask the sender to decrease the resolution and resend the fax. If you are sending, decrease the resolution or change the Page Content mode setting. See the fax guide for information about changing the settings.
A poor telephone-line connection is forcing the device fax and the sending or receiving fax machine to slow down the transmission to adjust for errors.	Cancel and resend the fax. Have the telephone company check the telephone line.

Faxes are not printing at the device.

Cause	Solution
There is no media in the input trays.	Load media. Any faxes received while the input trays are empty are stored and will print after the trays have been refilled.

ENWW Solve fax problems 217

Faxes are not printing at the device.

Cause	Solution
The Schedule Printing of Faxes mode is enabled. Faxes will not print until it is disabled	Disable the Schedule Printing of Faxes mode. See the fax guide for information about changing the setting.
The device toner level is low, or it has run out of toner.	Replace the print cartridge.
The device stops printing as soon as it is low on toner or runs out of toner. Any faxes received are stored in memory and are printed after the toner has been replaced.	

Solve e-mail problems

If you are unable to send e-mails by using the digital-send feature, you might need to reconfigure the SMTP gateway address or the LDAP gateway address. Print a Configuration page to find the current SMTP and LDAP gateway addresses. Use the following procedures to check if the SMTP and LDAP gateway addresses are valid.

Validate the SMTP gateway address

- NOTE: This procedure is for Windows operating systems.
 - 1. Open an MS-DOS command prompt: click Start, click Run, and then type cmd.
 - Type telnet followed by the SMTP gateway address and then the number 25, which is the port over which the MFP is communicating. For example, type telnet 123.123.123.123 25 where "123.123.123" represents the SMTP gateway address.
 - 3. Press Enter. If the SMTP gateway address is *not* valid, the response contains the message Could not open connection to the host on port 25: Connect Failed.
 - 4. If the SMTP gateway address is not valid, contact the network administrator.

Validate the LDAP gateway address

- NOTE: This procedure is for Windows operating systems.
 - 1. Open Windows Explorer. In the address bar, type LDAP: // immediately followed by the LDAP gateway address. For example, type LDAP: //12.12.12.12 where "12.12.12" represents the LDAP gateway address.
 - 2. Press Enter. If the LDAP gateway address is valid, the Find People dialog box opens.
 - 3. If the LDAP gateway address is not valid, contact the network administrator.

Solve common Windows problems

Error message:

"General Protection FaultException OE"

"Spool32"

"Illegal Operation"

Cause	Solution
	Close all software programs, restart Windows, and try again.
	Select a different printer driver. If the device PCL 6 printer driver is selected, switch to the PCL 5 or HP postscript level 3 emulation printer driver, which can be done from a software program.
	Delete all temp files from the Temp subdirectory. Determine the name of the directory by opening the AUTOEXEC.BAT file and looking for the statement "Set Temp =". The name after this statement is the Temp directory. It is usually C:\TEMP by default, but can be redefined.
	See the Microsoft Windows documentation that came with the computer for more information about Windows error messages.

Solve common Macintosh problems

In addition to the problems that are listed in Solve general device problems on page 170, this section lists problems that can occur when using Mac OS X.

Setup for USB and IP printing is performed through the **Desktop Printer Utility**. The device will not appear in the Chooser.

The printer driver is not listed in the Print Center or Printer Setup Utility.

Cause	Solution
The device software might not have been installed or was installed incorrectly.	Make sure that the PPD is in the following hard drive folder: Library/Printers/PPDs/Contents/Resources/ <lang>.lproj, where "<lang>" represents the two-letter language code for the language that you are using. If necessary, reinstall the software. See the getting started guide for instructions.</lang></lang>
The Postscript Printer Description (PPD) file is corrupt.	Delete the PPD file from the following hard drive folder: Library/Printers/PPDs/Contents/Resources/ <lang>.lproj, where "<lang>" represents the two-letter language code for the language that you are using. Reinstall the software. See the getting started guide for instructions.</lang></lang>

The device name, IP address, or Rendezvous host name does not appear in the printer list in the Print Center or Printer Setup Utility.

Cause	Solution
The device might not be ready.	Make sure that the cables are connected correctly, the device is on, and the Ready light is on. If you are connecting through a USB or Ethernet hub, try connecting directly to the computer, or use a different port.
The wrong connection type might be selected.	Make sure that USB, IP Printing, or Rendezvous is selected, depending on the type of connection that exists between the device and the computer.
The wrong device name, IP address, or Rendezvous host name is being used.	Check the device name, IP address, or Rendezvous host name by printing a configuration page. See Use information pages On page 146 . Verify that the name, IP address, or Rendezvous host name on the configuration page matches the device name, IP address, or Rendezvous host name in the Print Center or Printer Setup Utility.
The interface cable might be defective or of poor quality.	Replace the interface cable. Make sure to use a high-quality cable.

The printer driver does not automatically set up the selected device in the Print Center or Printer Setup Utility.

Cause	Solution
The device might not be ready.	Make sure that the cables are connected correctly, the device is on, and the Ready light is on. If you are connecting through a USB or Ethernet hub, try connecting directly to the computer or use a different port.

The printer driver does not automatically set up the selected device in the Print Center or Printer Setup Utility.

Cause	Solution
The device software might not have been installed or was installed incorrectly.	Make sure that the PPD file is in the following hard drive folder: Library/Printers/PPDs/Contents/Resources/ <lang>.lproj, where "<lang>" represents the two-letter language code for the language that you are using. If necessary, reinstall the software. See the getting started guide for instructions.</lang></lang>
The PPD file is corrupt.	Delete the PPD file from the following hard drive folder: Library/Printers/PPDs/Contents/Resources/ <lang>.lproj, where "<lang>" represents the two-letter language code for the language that you are using. Reinstall the software. See the getting started guide for instructions.</lang></lang>
The device might not be ready.	Make sure that the cables are connected correctly, the device is on, and the Ready light is on. If you are connecting through a USB or Ethernet hub, try connecting directly to the computer or use a different port.
The interface cable might be defective or of poor quality.	Replace the interface cable. Make sure to use a high-quality cable.

A print job was not sent to the device that you wanted.

Cause	Solution
The print queue might be stopped.	Restart the print queue. Open Print Monitor and select Start Jobs .
The wrong device name or IP address is being used. Another device with the same or similar name, IP address, or Rendezvous host name might have received your print job.	Check the device name, IP address, or Rendezvous host name by printing a configuration page See <u>Use information pages</u> on page 146. Verify that the device name, IP address, or Rendezvous host name on the configuration page matches the device name, IP address, or Rendezvous host name in the Print Center or Printer Setup Utility.

An encapsulated PostScript (EPS) file does not print with the correct fonts.

Cause	Solution
This problem occurs with some programs.	 Try downloading the fonts that are contained in the EPS file to the device before printing.
	Send the file in ASCII format instead of binary encoding.

You are unable to print from a third-party USB card.

Cause	Solution
This error occurs when the software for USB printers is not installed.	When adding a third-party USB card, you might need the Apple USB Adapter Card Support software. The most current version of this software is available from the Apple Web site.

When connected with a USB cable, the device does not appear in the Print Center or Printer Setup Utility after the driver is selected.

Cause	Solution
This problem is caused by either a software or a hardware	Software troubleshooting
component.	Check that your Macintosh supports USB.
	 Verify that your Macintosh operating system is Mac OS X version 10.3 or later.
	 Ensure that your Macintosh has the appropriate USB software from Apple.
	Hardware troubleshooting
	Check that the device is turned on.
	 Verify that the USB cable is connected correctly.
	 Check that you are using the appropriate Hi-Speed USB 2.0 cable.
	 Ensure that you do not have too many USB devices drawing power from the chain. Disconnect all of the devices from the chain, and connect the cable directly to the USB port on the host computer.
	 Check to see if more than two nonpowered USB hubs are connected in a row on the chain. Disconnect all of the devices from the chain and connect the cable directly to the USB port on the host computer.
	NOTE: The iMac keyboard is a nonpowered USB hub.

Solve Linux problems

For information about Linux problem solving, go to the HP Linux support Web site: hp.sourceforge.net/.

Solve PostScript problems

The following situations are specific to the PostScript (PS) language and might occur when several printer languages are being used. Check the control-panel display for messages that might help resolve problems.

NOTE: To receive a printed or screen message when PS errors occur, open the **Print Options** dialog box and click the selection next to the PS Errors section that you want.

General problems

The job prints in Courier (the default typeface) instead of the typeface that you requested.

Cause	Solution
The requested typeface is not downloaded.	Download the font that you want and send the print job again. Verify the font type and location. Download the font to the device if applicable. See the software documentation for more information.
A legal page prints with clipped margins.	
Cause	Solution
The print job was too complex.	You might need to print your job at 600 dpi, reduce the complexity of the page, or install more memory.
A PS error page prints.	
Cause	Solution
The print job might not be a PS job.	Make sure that the print job is a PS job. See whether the software program expected a setup or PS header file to be sent

to the device.

A Accessories and consumables

This section provides information about ordering parts, supplies, and accessories. Use only parts and accessories that are specifically designed for this printer.

- Order parts, accessories, and supplies
- Part numbers

ENWW 227

Order parts, accessories, and supplies

To order parts, accessories, and supplies, contact your dealer.

Part numbers

The following list of accessories was current at the time of printing. Ordering information and availability of the accessories might change during the life of the printer.

Accessories

Item	Description Part number	
Optional 500-sheet tray and feeder unit	Optional tray to increase paper capacity. Holds Letter, A4, Legal, A5, B5 (JIS), Executive, and 8.5 x 13 inch paper sizes.	Q5968A
	The printer can accommodate up to three optional 500-sheet feeders.	
Envelope feeder	Holds up to 75 envelopes.	Q2438A
Duplexer (duplex printing accessory)	Allows automatic printing on both sides of the paper.	Q5969A
3-bin mailbox	Provides three output bins that hold a total of 700 sheets.	Q5692A
500-sheet stapler/stacker	Allows for high-volume output with automatic job finishing. Staples up to 30 sheets of paper.	Q5691A
5,000-staple cartridge	Provides one staple cartridge.	C8091A
Storage cabinet	Raises the height of the MFP and provides room to store paper.	Q5970A
HP LaserJet analog fax accessory 300	Provides fax capability for the MFP.	Q3701A

Print cartridges

Item	Description	Part number
HP LaserJet print cartridge	18,000-page cartridge	CE267C

ENWW Part numbers 229

Maintenance kits

Item	Description	Part number
Printer maintenance kit.	110-volt printer maintenance kit	Q5998A
Includes a replacement fuser, a transfer roller, a transfer-roller tool, a pickup roller, eight feed rollers, and one pair of disposable gloves. Includes instructions for installing each component. The printer maintenance kit is a consumable item, and its cost is not covered under the warranty or most extended warranty options.	220-volt printer maintenance kit	Q5999A
ADF maintenance kit	Contains maintenance parts for the ADF	Q5997A
Includes a roller assembly, a separation pad, and mylar shields.		
The ADF maintenance kit is a consumable item, and its cost is not covered under the warranty or most extended warranty options.		

Memory

Item	Description	Part number
100-pin DDR memory DIMM (dual inline	64 MB	Q2625A
nemory module)	128 MB	Q2626A
Boosts the ability of the printer to handle large or complex print jobs.	256 MB	Q2627A
Hard disk	Greater than 20-GB permanent storage for fonts and forms. Also used for making multiple original prints and for jobstorage features.	J6054B

Cables and interfaces

Item	Description	Part number
Enhanced I/O (EIO) cards	HP Jetdirect 620n Fast Ethernet (10/100Base-TX) print server	J7934A
HP Jetdirect print server multi-protocol EIO network cards	HP Jetdirect Connectivity card for USB, serial, and LocalTalk connections	J4135A

Print media

For more information about media supplies, go to www.hp.com/go/ljsupplies.

Item	Description	Part number
HP LaserJet paper For use with HP LaserJet printers. Good for letterhead, high-value memos, legal documents, direct mail, and correspondence.	Letter (8.5 x 11 inch), 500 sheets/ ream, 10-ream carton	HPJ1124/North America
	Legal (8.5 x 14 inch), 500 sheets/ ream, 10-ream carton	HPJ1424/North America
Specifications: 96 bright, 24lb (90g/m²).	ALetter (220 x 280mm), 500 sheets/ ream, 5-ream carton	Q2398A/Asia-Pacific countries/ regions
	A4 (210 x 297mm), 500 sheets/ream, 5-ream carton	Q2400A/Asia-Pacific countries/ regions
	A4 (210 x 297mm), 500 sheets/ream	CHP310/Europe
HP Printing paper For use with HP LaserJet and inkjet printers. Created especially for small and home offices. Heavier and brighter than copier paper. Specifications: 92 bright, 22lb.	Letter (8.5 x 11 inch), 500 sheets/ ream, 10-ream carton	HPP1122/North America and Mexico
	Letter (8.5 x 11 inch), 500 sheets/ ream, 3-ream carton	HPP113R/North America
	A4 (210 x 297mm), 500 sheets/ream, 5-ream carton	CHP210/Europe
	A4 (210 x 297mm), 300 sheets/ream, 5-ream carton	CHP213/Europe
HP Multipurpose paper	Letter (8.5 x 11 inch), 500 sheets/	HPM1120/North America
For use with all office equipment-laser and inkjet printers, copiers, and fax machines. Created for businesses that want one paper for all their office needs. Brighter and smoother than other office papers. Specifications: 90 bright, 20lb (75g/m²).	ream, 10-ream carton Letter (8.5 x 11 inch), 500 sheets/ ream, 5-ream carton	HPM115R/North America HP25011/North America
	Letter (8.5 x 11 inch), 250 sheets/	HPM113H/North America
	ream, 12-ream carton Letter (8.5 x 11 inch), 3-hole, 500 sheets/ream, 10-ream carton	HPM1420/North America
	Legal (8.5 x 14 inch), 500 sheets/ ream, 10-ream carton	

ENWW Part numbers 231

Item	Description	Part number	
HP Office paper	Letter (8.5 x 11 inch), 500 sheets/ ream, 10-ream carton	HPC8511/North America and Mexico	
For use with all office equipment-laser and inkjet printers, copiers, and fax machines. Good for high-volume printing.	Letter (8.5 x 11 inch), 3-hole, 500 sheets/ream, 10-ream carton	HPC3HP/North America	
Specifications: 84 bright, 20lb (75g/m²).	Legal (8.5 x 14 inch), 500 sheets/ ream, 10-ream carton	HPC8514/North America	
	Letter (8.5 x 11 inch), Quick Pack; 2,500-sheet carton	HP2500S/North America and Mexico	
	Letter (8.5 x 11 inch), Quick Pack 3-hole; 2,500-sheet carton	HP2500P/North America	
	ALetter (220 x 280mm), 500 sheets/ ream, 5-ream carton	Q2408A/Asia-Pacific countries/ regions	
	A4 (210 x 297mm), 500 sheets/ream, 5-ream carton	Q2407A/Asia-Pacific countries/ regions	
	A4 (210 x 297mm), 500 sheets/ream, 5-ream carton	CHP110/Europe	
	A4 (210 x 297mm), Quick Pack; 2500 sheets/ream, 5-ream carton	CHP113/Europe	
HP Office recycled paper	Letter (8.5 x 11 inch), 500 sheets/ ream, 10-ream carton	HPE1120/North America	
For use with all office equipment-laser and inkjet printers, copiers, and fax machines. Good for high-volume printing.	Letter (8.5 x 11 inch), 3-hole, 500 sheets/ream, 10-ream carton	HPE113H/North America	
Satisfies U.S. Executive Order 13101 for environmentally preferable products.	Legal (8.5 x 14 inch), 500 sheets/ ream, 10-ream carton	HPE1420/North America	
Specifications: 84 bright, 20lb, 30% post-consumer content.			
HP LaserJet transparencies	Letter (8.5 x 11 inch), 50 sheets to a carton	92296T/North America, Asia-Pacific countries/regions, and Europe	
For use only with HP LaserJet monochrome printers. For crisp, sharp text and graphics, rely on the only transparencies specifically designed and tested to work with monochrome HP LaserJet printers.	A4 (210 x 297mm), 50 sheets to a carton	922296U/Asia-Pacific countries/ regions and Europe	
Specifications: 4.3-mil thickness.			

B Specifications

- Physical specifications
- <u>Electrical specifications</u>
- Acoustic specifications
- Operating environment

ENWW 233

Physical specifications

Table B-1 Product dimensions

Product	Height	Depth	Width	Weight¹
HP LaserJet M4349x MFP	667mm (26.3 inches)	483mm (19.0 inches)	762mm (30.0 inches)	52.4kg (115.5lb)
Optional 500-sheet feeder	122mm (4.8 inches)	483mm (19.0 inches)	559mm (22.0 inches)	8.3kg (18.3lb)
Optional cabinet	440mm (17.3 inches)	762mm (30.0 inches)	825.5mm (32.5 inches)	41.8kg (92.2lb)
Optional stapler/stacker				6.0kg (13.2lb)
Optional 3-bin mailbox				5.8kg (12.8lb)
Optional Envelope feeder				2.5kg (5.5lb)
Optional duplexer				2.5kg (5.5lb)

Without print cartridge

Table B-2 Product dimensions, with all doors and trays fully opened

Product	Height	Depth	Width
HP LaserJet M4349x MFP	101cm (39.8 inches)	876mm (34.5 inches)	142.2cm (56.0 inches)

Electrical specifications

⚠ **WARNING!** Power requirements are based on the country/region where the printer is sold. Do not convert operating voltages. This can damage the printer and void the product warranty.

Table B-3 Power requirements for the HP LaserJet M4349x MFP

Specification	110-volt models	230-volt models
Power requirements	110 to 127 volts (10%)	220 to 240 volts (10%)
	50/60Hz (2Hz)	50/60Hz (2Hz)
Rated current	10.0 Amps	4.5 Amps

Table B-4 Power consumption for the HP LaserJet M4349x MFP (average, in watts)¹

Product model	Copying	Printing ²	Ready	Sleep	Off
HP LaserJet M4349x MFP	800W	790W³	49W	15W	0.25W

Values subject to change. See www.hp.com/support/ljm4349mfp for current information.

² Power numbers are the highest values measured using all standard voltages.

³ Printing and copying speeds are 45ppm Letter size and 43ppm A4 size.

⁴ Default time from Ready mode to Sleep = 60 minutes.

⁵ Recovery time from Sleep to start of printing = less than 10 seconds.

⁶ Heat dissipation in Ready mode = 167 BTU/hour.

Acoustic specifications

Table B-5 Sound power and pressure level for the HP LaserJet M4349x MFP¹

Sound power level	Declared per ISO 9296
Printing ²	L _{WAd} = 7.0Bels (A) [70dB(A)]
Copying	L _{WAd} = 7.2Bels (A) [72dB(A)]
Ready	L _{pAm} =33dB (A)
Sound pressure level	Declared per ISO 9296
Printing ²	L _{pAm} =55dB (A)
Copying	L _{pAm} =56dB (A)
Ready	L _{pAm} =33dB (A)

¹ Values subject to change. See www.hp.com/support/ljm4349mfp for current information.

Operating environment

Table B-6 Necessary conditions

Environmental condition	Printing	Storage/standby
Temperature (printer and print cartridge)	15 to 32.5°C (59 to 89°F)	-20 to 40°C (-4 to 104°F)
Relative humidity	10%to80%	10%to90%

² Speed is 43ppm A4 size.

³ Configuration tested: Base model, simplex printing with A4 paper size.

C Regulatory information

This section contains the following regulatory information:

- FCC regulations
- Environmental product stewardship program
- <u>Telecom statement</u>
- Declaration of conformity
- Safety statements

ENWW 237

FCC regulations

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If this equipment is not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase separation between equipment and receiver.
- Connect equipment to an outlet on a circuit different from that to which the receiver is located.
- Consult your dealer or an experienced radio/TV technician.

NOTE: Any changes or modifications to the printer that are not expressly approved by HP could void the user's authority to operate this equipment.

Use of a shielded interface cable is required to comply with the Class B limits of Part 15 of FCC rules.

Environmental product stewardship program

Protecting the environment

Hewlett-Packard Company is committed to providing quality products in an environmentally sound manner. This product has been designed with several attributes to minimize impacts on our environment.

Ozone production

This product generates no appreciable ozone gas (O_3) .

Power consumption

Power usage drops significantly while in Ready and Sleep modes, which saves natural resources and saves money without affecting the high performance of this product. This product qualifies for ENERGY STAR® (Version 3.0), which is a voluntary program to encourage the development of energy-efficient office products.



ENERGY STAR® and the ENERGY STAR mark are U.S. registered marks. As an ENERGY STAR partner, Hewlett-Packard Company has determined that this product meets ENERGY STAR Guidelines for energy efficiency. For more information, see www.energystar.gov.

Toner consumption

Economode uses significantly less toner, which might extend the life of the print cartridge.

Paper use

This product's manual/optional automatic duplex feature (two-sided printing, see Use automatic duplex printing on page 108 (Windows) or Use automatic duplex printing on page 112 (Mac)) and N-up printing (multiple pages printed on one page) capability can reduce paper usage and the resulting demands on natural resources.

Plastics

Plastic parts over 25 grams are marked according to international standards that enhance the ability to identify plastics for recycling purposes at the end of the product's life.

HP LaserJet print supplies

It's easy to return and recycle your empty HP LaserJet print cartridges—free of charge—with HP Planet Partners. HP is committed to providing inventive, high-quality products and services that are environmentally sound, from product design and manufacturing to distribution, operation and recycling processes. We ensure your returned HP LaserJet print cartridges are recycled properly, processing them to recover valuable plastics and metals for new products and diverting millions of tons of waste from landfills. Since this cartridge is being recycled and used in new materials, it will not be returned to you. Your empty HP LaserJet print cartridges are recycled responsibly when you participate in the HP Planet Partners program. Thank you for being environmentally responsible!

In many countries/regions, this product's printing supplies (for example, print cartridges) can be returned to HP through the HP Printing Supplies Returns and Recycling Program. An easy-to-use and free take back program is available in more than 35 countries/regions. Multilingual program information and instructions are included in every new HP LaserJet print cartridge and supplies package.

HP print supplies returns and recycling program information

Since 1992, HP has offered HP LaserJet supplies return and recycling free of charge. In 2004, HP Planet Partners for LaserJet Supplies was available in 85% of the world market where HP LaserJet supplies are sold. Postage-paid and pre-addressed labels are included within the instruction guide in most HP LaserJet print cartridge boxes. Labels and bulk boxes are also available through the Web site: www.hp.com/recycle.

Use the label to return empty, original HP LaserJet print cartridges only. Please do not use this label for non-HP cartridges, refilled or remanufactured cartridges, or warranty returns. Printing supplies or other objects inadvertently sent to the HP Planet Partners program cannot be returned.

More than 10 million HP LaserJet print cartridges were recycled globally in 2004 through the HP Planet Partners supplies recycling program. This record number represents 26 million pounds of print cartridge materials diverted from landfills. Worldwide, in 2004, HP recycled an average of 59% of the print cartridge by weight consisting primarily of plastic and metals. Plastics and metals are used to make new products such as HP products, plastic trays, and spools. The remaining materials are disposed of in an environmentally responsible manner.

- U.S. returns. For a more environmentally responsible return of used cartridges and supplies, HP encourages the use of bulk returns. Simply bundle two or more cartridges together and use the single, pre-paid, pre-addressed UPS label that is supplied in the package. For more information in the U.S., call 1-800-340-2445 or visit the HP Web site at www.hp.com/recycle.
- Non-U.S. returns. Non-U.S. customers should visit the <u>www.hp.com/recycle</u> Web site for further information regarding availability of the HP Supplies Returns and Recycling Program.

Paper

This product is capable of using recycled papers when the paper meets the guidelines outlined in the *HP LaserJet Printer Family Print Media Guide*. This product is suitable for the use of recycled paper according to EN12281:2002.

Material restrictions

This HP product contains mercury in the fluorescent lamp of the scanner and/or control panel liquid crystal display that may require special handling at end-of-life.

This HP product contains a battery that might require special handling at end-of-life. The batteries contained in or supplied by Hewlett-Packard for this product include the following:

HP LaserJet M4349x device	
Туре	Carbon monofluoride lithium battery BR1632
Weight	1.5 g
Location	On formatter board
User-removable	No





廢電池請回收

For recycling information, you can go to www.hp.com/recycle, or contact your local authorities or the Electronics Industries Alliance: www.eiae.org.

Disposal of waste equipment by users in private households in the **European Union**



This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

Material Safety Data Sheet (MSDS)

Material Safety Data Sheets (MSDS) for supplies containing chemical substances (for example, toner) can be obtained by contacting the HP Web site at www.hp.com/go/msds or www.hp.com/go/msds or www.hp.com/go/msds or www.hp.com/hpinfo/community/environment/productinfo/safety.

For more information

To obtain information about these environmental topics:

- Product environmental profile sheet for this and many related HP products
- HP's commitment to the environment
- HP's environmental management system
- HP's end-of-life product return and recycling program
- Material Safety Data Sheets

Visit www.hp.com/go/environment or www.hp.com/hpinfo/globalcitizenship/environment.

Telecom statement

The HP LaserJet M4349x models have the HP LaserJet Analog Fax Accessory 300 already installed to provide communication to the public switch telephone network (PSTN) for fax functionality. See the *HP LaserJet Analog Fax Accessory 300 User Guide* for all regulatory approval information and regulatory notices associated with the fax functionality and that device.

ENWW Telecom statement 243

Declaration of conformity

Declaration of Conformity

according to ISO/IEC Guide 22 and EN 45014

Manufacturer's Name: Hewlett-Packard Company DoC#: BOISB-0407-01-Rel. 6

Manufacturer's Address: 11311 Chinden Boulevard,

Boise, Idaho 83714-1021, USA

declares, that the product

Product Name: HP LaserJet M4345/M4349 MFP Series
Regulatory Model Number³): BOISB-0407-00 and BOISB-0407-01

Including: Q5691A, Q5692A, Q5968A, BOISB-0308-00³⁾

Product Options: ALL

Toner Cartridges: Q5945A, CE267C

conforms to the following Product Specifications:

Safety: IEC 60950-1:2001 / EN60950-1: 2001 +A11

IEC 60825-1:1993 +A1 +A2 / EN 60825-1:1994 +A1 +A2 (Class 1 Laser/LED Product)

GB4943-2001

EMC: CISPR 22:2005/EN 55022:2006 -- Class B¹⁾

EN 61000-3-2:2006 EN 61000-3-3:1995 +A1 EN 55024:1998 +A1 +A2

FCC Title 47 CFR, Part 15 Class B2) / ICES-003, Issue 4

GB9254-1998, GB17625.1-2003 TBR-21:1998; EG 201 121:1998

Supplementary Information:

Telecom:4)

The product herewith complies with the requirements of the R&TTE Directive 1999/5/EC Annex II, EMC Directive 2004/108/EC and the Low Voltage Directive 2006/95/EC, and carries the CE-Marking (

- 1) The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems.
- 2) For regulatory purposes, this product is assigned a Regulatory model number. This number should not be confused with the marketing names or the product number(s).
- 3) All worldwide modular approvals for analog fax accessory obtained by Hewlett-Packard under the regulatory model number BOISB-0308-00 incorporate the Multi-Tech Systems MT5634SMI Socket Modem Module.
- 4) Telecom standards and R&TTE Directive compliance apply to BOISB-0407-01.

Boise, Idaho , USA

March 2009

For regulatory topics only:

European Contact: Your Local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department HQ-TRE / Standards

Europe, Herrenberger Strasse 140, D-71034 Böblingen, Germany, (FAX: +49-7031-14-3143) www.hp.com/go/

certificates

USA Contact: Product Regulations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160, Boise, ID 83707-0015, USA,

(Phone: 208-396-6000)

Safety statements

Laser safety

The Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration has implemented regulations for laser products manufactured since August 1, 1976. Compliance is mandatory for products marketed in the United States. The device is certified as a "Class 1" laser product under the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard according to the Radiation Control for Health and Safety Act of 1968. Since radiation emitted inside the device is completely confined within protective housings and external covers, the laser beam cannot escape during any phase of normal user operation.

⚠ WARNING! Using controls, making adjustments, or performing procedures other than those specified in this user guide may result in exposure to hazardous radiation.

Canadian DOC regulations

Complies with Canadian EMC Class B requirements.

« Conforme à la classe B des normes canadiennes de compatibilité électromagnétiques. « CEM ». »

VCCI statement (Japan)

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

取扱説明書に従って正しい取り扱いをして下さい。

Power cord statement (Japan)

製品には、同梱された電源コードをお使い下さい。同梱された電源コードは、他の製品では使用出来ません。

EMC statement (Korea)

B급 기기	이 기기는 가정용(B급)으로 전자파적합등록을 한 기
(가정용 방송통신기기)	기로서 주로 가정에서 사용하는 것을 목적으로 하
	며, 모든 지역에서 사용할 수 있습니다.

Laser statement for Finland

Luokan 1 laserlaite

Klass 1 Laser Apparat

HP LaserJet M4349x, laserkirjoitin on käyttäjän kannalta turvallinen luokan 1 laserlaite. Normaalissa käytössä kirjoittimen suojakotelointi estää lasersäteen pääsyn laitteen ulkopuolelle. Laitteen turvallisuusluokka on määritetty standardin EN 60825-1 (1994) mukaisesti.

ENWW Safety statements 245

VAROITUS!

Laitteen käyttäminen muulla kuin käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än i bruksanvisning specificerats, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

HUOLTO

HP LaserJet M4349x - kirjoittimen sisällä ei ole käyttäjän huollettavissa olevia kohteita. Laitteen saa avata ja huoltaa ainoastaan sen huoltamiseen koulutettu henkilö. Tällaiseksi huoltotoimenpiteeksi ei katsota väriainekasetin vaihtamista, paperiradan puhdistusta tai muita käyttäjän käsikirjassa lueteltuja, käyttäjän tehtäväksi tarkoitettuja ylläpitotoimia, jotka voidaan suorittaa ilman erikoistyökaluja.

VARO!

Mikäli kirjoittimen suojakotelo avataan, olet alttiina näkymättömällelasersäteilylle laitteen ollessa toiminnassa. Älä katso säteeseen.

VARNING!

Om laserprinterns skyddshölje öppnas då apparaten är i funktion, utsättas användaren för osynlig laserstrålning. Betrakta ej strålen. Tiedot laitteessa käytettävän laserdiodin säteilyominaisuuksista: Aallonpituus 775-795 nm Teho 5 m W Luokan 3B laser.

D Working with memory and print server cards

This section explains the memory features of the printer and provides steps for expansion.

- Overview
- Adding printer memory
- Checking DIMM installation
- Save resources (permanent resources)
- Enabling memory for Windows
- Using HP Jetdirect print server cards

ENWW 247

Overview

Memory is upgradeable by replacing the memory DIMM. DIMMs are available in 32, 48, 64, 128, and 512 MB.

For ordering information, see Order parts, accessories, and supplies on page 228

NOTE: Single inline memory modules (SIMMs) used in previous HP LaserJet printers are not compatible with the printer.

The printer also has one EIO slot for expanding the printer networking capabilities. The EIO slot can be used to upgrade the printer with an additional network connection, such as a wireless print server, network card, or a connectivity card for a serial or AppleTalk connection.

NOTE: The HP LaserJet M4349x MFP comes with a network device already installed. The EIO slot may be used to provide networking capabilities in addition to those already built into the printer.

To find out how much memory is installed in the printer, or to find out what is installed in the EIO slots, print a configuration page. See <u>Use information pages on page 146</u>.

Adding printer memory

You might want to add more printer memory to the printer if you often print complex graphics, print PostScript (PS) documents, or use many downloaded fonts. Added memory also gives you more flexibility in supporting job-storage features, such as quick copying.

Installing printer memory

△ CAUTION: Static electricity can damage DIMMs. When handling DIMMs, either wear an antistatic wrist strap or frequently touch the surface of the DIMM antistatic package, then touch bare metal on the printer.

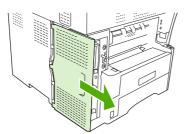
The HP LaserJet M4349x MFP comes with one DIMM slot. If desired, you can replace a DIMM installed in the slot with a higher memory DIMM.

If you have not already done so, print a configuration page to find out how much memory is installed in the printer before adding more memory. See <u>Use information pages on page 146</u>.

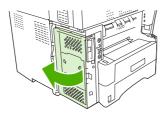
1. After the configuration page has printed, turn the printer off and disconnect the power cord.



- 2. Disconnect all interface cables.
- **3.** At the back of the device, remove the side cover by placing your fingers in the indented area and sliding the cover off.



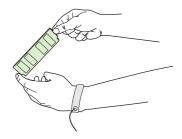
4. Open the formatter-cage door by grasping the metal tab and pulling the door open.



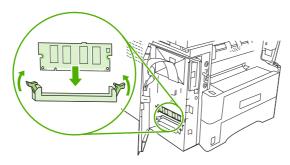
5. Remove the DIMM from the antistatic package.



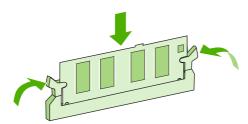
△ CAUTION: To reduce the possibility of damage caused by static electricity, always wear an electrostatic discharge (ESD) wrist strap or touch the surface of the antistatic package before handling DIMMs.



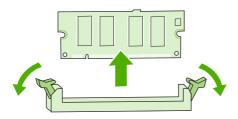
6. Hold the DIMM by the edges, and align the notches on the DIMM with the DIMM slot. (Check that the locks on each side of the DIMM slot are open.)



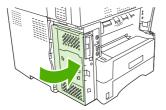
7. Press the DIMM straight into the slot, and press firmly. Make sure the locks on each side of the DIMM snap into place.



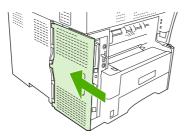
NOTE: To remove a DIMM, first release the locks.



8. Close the formatter-cage door.



9. Replace the formatter cover.



- **10**. Reconnect the interface cable(s).
- 11. Reconnect the power cord, and turn the device on.



Checking DIMM installation

After installing the DIMM, make sure that the installation was successful.

To verify that the DIMM is installed correctly

- 1. Turn the printer on. Check that the Ready light is illuminated after the printer has gone through the startup sequence. If an error message appears, the DIMM might have been incorrectly installed. See Use information pages on page 146.
- 2. Print a configuration page (see Use information pages on page 146).
- 3. Check the memory section on the configuration page and compare it to the configuration page that was printed before the memory installation. If the amount of memory has not increased, the DIMM might not be installed correctly, or the DIMM might be defective. Repeat the installation procedure. If necessary, install a different DIMM.
- NOTE: If you installed a printer language (personality), check the "Installed Personalities and Options" section on the configuration page. This area should list the new printer language.

Save resources (permanent resources)

Utilities or jobs that you download to the device sometimes include resources (for example, fonts, macros, or patterns). Resources that are internally marked as permanent remain in the device memory until you turn the device power off.

Use the following guidelines if you use the page description language (PDL) ability to mark resources as permanent. For technical details, see an appropriate PDL reference for PCL or PS.

- Mark resources as permanent only when it is absolutely necessary that they remain in memory while the device power is turned on.
- Send permanent resources to the device only at the beginning of a print job and not while the device is printing.

NOTE: Overusing permanent resources or downloading them while the device is printing might affect device performance or the ability to print complex pages.

Enabling memory for Windows

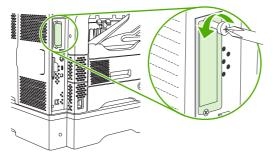
- 1. On the **Start** menu, point to **Settings**, and click **Printers** or **Printers** and **Faxes**.
- 2. Select this printer and select **Properties**.
- 3. On the **Configure** tab, click **More**.
- 4. In the **Total Memory** field, type or select the total amount of memory that is now installed.
- 5. Click OK.
- 6. Go to Checking DIMM installation on page 252.

Using HP Jetdirect print server cards

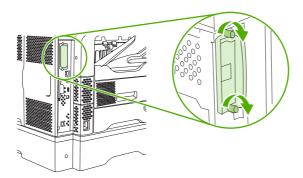
Follow these procedures to install or remove an EIO card.

Install an HP Jetdirect print server card

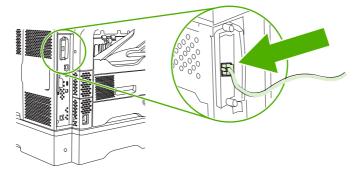
- Turn off the device.
- Remove the two screws and cover plate from the EIO slot on the back of the device.



- NOTE: Do not discard the screws or the cover plate. Save them for future use if you remove the EIO card.
- Install the EIO card in the EIO slot and tighten the screws.



Connect the network cable to the EIO card.



- Turn on the device, and then print a configuration page to verify that the new EIO device is recognized. See Use information pages on page 146.
- NOTE: When you print a configuration page, an HP Jetdirect configuration page that contains network configuration and status information also prints.

Remove an HP Jetdirect print server card

- 1. Turn off the device.
- 2. Disconnect the network cable from the EIO card.
- 3. Loosen the two screws from the EIO card, and then remove the EIO card from the EIO slot.
- **4.** Place the cover plate from the EIO slot onto the back of the device. Insert and tighten the two screws.
- 5. Turn on the device.

Index

Symbols/Numerics	address books, e-mail	bins, output
3-bin mailbox	auto-complete function 132	paper curl, problem-
capacity 5	LDAP support 128	solving 170
jams, clearing 193	address, device	blank copies, problem-
media specifications 75	Macintosh, problem-	solving 215
media types supported 72	solving 221	blank pages
part number 9, 229	ADF	printing 106
reattach error message 181	capacity 5	problem-solving 171
3-bin mailbox	maintenance kit 230	blocked fax list, printing 147
selecting 89	media specifications 76	blurred print, problem-
500-sheet tray. See tray 3	sizes supported 131	solving 210
500-sheet trays	ADF output bin	Bonjour Settings 153
adding 9	capacity 5	books
insert or close error	selecting 89	copying 124
message 180	adhesive labels. See labels	both sides, copying 120
jams, clearing 190	Administration menu, control	both sides, printing on
loading 79	panel 21	error messages 174, 175,
locking and unlocking 9	alerts, e-mail 148, 153	178, 179, 181
media sizes supported 73	Alternative Letterhead Mode 85	loading paper 112
part numbers 9, 229	anticounterfeit supplies 155	Macintosh settings 153
unexpected size or type error	AppleTalk setting 62	problem-solving 171
message 176	AppleTalk settings 35	buffer overflow errors 175
	Attention light	buttons, control panel
A	locating 18	locating 18
access denied message 174	authentication error	touchscreen 20
accessories	messages 174	
locking and unlocking 9	autoconfiguration, drivers 12	C
ordering 228	automatic two-sided printing path	cabinet/stand
part numbers 9, 229	copying documents 120	locking and unlocking 9
acoustic specifications 235	AUX connection 5	part number 9, 229
activity log, fax 147		calibrating scanner 50, 161
address book, e-mail	В	call report, fax 147
deleting addresses 134	batteries included 241	Canadian DOC regulations 245
address books, e-mail	billing codes report, fax 147	canceling
adding addresses 133	bins	copy jobs 126
clearing 54	capacities 5	printing 113
LDAP server errors 180	full, error messages 181	canceling a print request 113
recipient lists 133	jams, clearing 193	capacity
recipient lists, creating 133	reattach error message 181	3-bin mailbox 5, 75
	selecting 89	500-sheet tray 73

ENWW Index 257

ADF 5, 76	Macintosh 153	creased paper, problem-
envelope feeder 74	printing 146	solving 208
output bins 5	connectivity features 5	crooked pages 207
stacker 75	control panel	curled paper, problem-
stapler 75	access denied 174	solving 207, 213
stapler/stacker 5	Administration menu 21	curly paper, problem-solving 170
tray 1 72	buttons 18	custom-size paper
card stock	cleaning page, printing 157	3-bin mailbox
guidelines for using 69	copy-screen 116	specifications 75
output path 89	E-mail Setup menu 43	500-sheet tray
printing on 87	e-mail screen 130	specifications 73
cartridges	Fax Setup menu 40	driver settings 106
authentication 155	help 20	loading 78, 81
genuine HP 154	Home screen 19	printing on 87
management menu 31	Information menu 22	tray 1 specifications 72
non-HP 154	Initial Setup menu 32	customer support
	•	Linux 224
recycling 240	jam messages 184	LIIIUX 224
replacing 154	lights 18	D
storage 154	Management menu 31	_
cartridges, print	messages, alphabetical	dark copying 213
error messages 179, 180	list 174	Data light
jams, clearing 185	messages, numerical	locating 18
part numbers 229	list 174	date, setting 29
cartridges, staple	messages, types of 173	declaration of conformity 244
empty, stop or continue	Resets menu 54	default settings
settings 94	Send Setup menu 43	Resets menu 54
jams 199	Service menu 55	density
loading 94	settings 13	problem-solving 203
low error message 182	Time/Scheduling menu 29	settings 153
part numbers 9, 229	touchscreen buttons 20	diagnostics
characters, misformed 206	copying	networks 36
chosen personality not	books 124	digital faxing 143
available 179	canceling 126	digital sending
cleaning	collating 123	about 127, 131
about 158	control-panel navigation 116	address books 133
document feeder delivery	error messages 182	configuring e-mail 128
system 157	features 4, 115	control-panel settings 130
document feeder rollers 158	Job Mode 125	error messages 179, 180,
exterior 156	media, problem-solving 213	182
lid backing 157	multiple originals 125	folders 136
paper path 157	photos 124	job settings 135
scanner glass 156	problem-solving 214	LDAP support 128
clock	problems, preventing 212	loading documents 131
error message 174	quality, problem-solving 212	recipient lists 133
close door error messages 179	size, problem-solving 215	sending documents 131
coated paper 86	two-sided documents 120	Setup menu 43
collating copies 123	counterfeit supplies 155	SMTP support 128
configuration page	Courier font, problem-solving 225	validating gateway
Information menu 22	cover pages 106, 111	addresses 219
	· •	workflow 137

258 Index ENWW

DIMMS	media types supported 72	environment for printer
error messages 176	part number 9, 229	specifications 235
installing 249	duplexer	environmental stewardship
part numbers 230	Macintosh settings 153	program 239
verifying installation 252	printing with 112	EPS files, problem-solving 222
disk	problem-solving 171	Error button, control panel
EIO slots 248	duplexing	touchscreen 20
installing 255	copying documents 120	error messages
removing 256	copying documents 120	alphabetical list 174
<u> </u>	E	e-mail alerts 148, 153
disposal, end-of-life 241	e-mail	•
DLC/LLC settings 35		jams 184
Document feeder	about 127, 131	numerical list 174
cleaning delivery system 157	address books 133	types of 173
error messages 179	configuring 128	Ethernet cards 5
jams, clearing 197	error messages 179, 180,	Ethernet cards, part
jams, frequent 198	182	numbers 230
document feeder	LDAP errors 180	European Union, waste
copying two-sided	sending documents 131	disposal 241
documents 120	e-mail alerts 148, 153	e-mail
dots, problem-solving 203, 209,	E-mail Setup menu 43	address books 133
213	EIO accessory	auto-complete function 132
double-sided copying 120	settings 32	control-panel settings 130
double-sided printing	EIO cards	job settings 135
error messages 174, 175,	buffer overflow 175	LDAP support 128
178, 179, 181	errors 178	loading documents 131
loading paper 112	installing 255	recipient lists 133
Macintosh settings 153	part numbers 230	sending documents 131
problem-solving 171	removing 256	SMTP support 128
	slots 248	• •
downloading software 11	electrical specifications 234	validating gateway
dpi, settings 153	embedded Web server 16	addresses 219
drivers		-
Macintosh settings 110	end-of-life disposal 241	F
Macintosh, problem-	energy specifications 234	face-down output 89
solving 221	enlarging documents 105	face-up output 89
operating systems	envelope feeder	fax accessory
supported 11	envelope specifications 74	connecting phone line 142
preconfiguration 13	error messages 179	installing 140
presets (Macintosh) 110	jams, clearing 187	part number 9, 229
quick sets (Windows) 104	load error message 180	printing schedule 30
settings 13, 14	media types supported 72	user guide 139
universal 12	part number 9, 229	Fax Activity Log
Update Now 13	specifications 83	clearing 54
Windows settings 104	envelopes	fax reports, printing 22, 147
dropouts, problem-solving 204	loading 78	Fax Setup menu 40
duplex printing accessory	margins 68, 83	faxes
error messages 174, 175,	specifications 67, 73	receiving, problem-
178, 179, 181	storing 68, 77	solving 217
jams 191	wrinkled, problem-solving 208	sending, problem-solving 216
media specifications 74	environment for device	faxing, digital 143
media specifications 14	problem-solving 201	feeding problems, media 213
	problem-solving 201	reeding problems, media 213

ENWW Index 259

file directory, printing 147 File Upload, Macintosh 153 Finnish laser safety statement 245 Firmware Update, Macintosh 153 first page blank 106 use different paper 106, 111 folders error messages 180 sending to 136 fonts EPS files, problem- solving 222 included 4 list, printing 22, 147 permanent resources 253 problem-solving 225 Upload Macintosh 153	heavy paper output path 89 printing on 87 held jobs 96 Help button, control panel touchscreen 20 help, control panel 20 Home button, control panel touchscreen 20 Home screen, control panel 19 HP Driver Preconfiguration 13 HP fraud hotline 155 HP Jetdirect print server configuring 62 error messages 178 installing 255 part numbers 230 removing 256 settings 32	installers, Windows 16 installing EIO cards 255 fax accessory 140 memory (DIMMs) 249 insufficient memory 175, 180 interface ports included 5 internal clock errors 174 Internet fax 143 IP address Macintosh, problem- solving 221 IPX/SPX setting 35, 61 J jams 3-bin mailbox 193 500-sheet trays 190
fraud hotline 155	HP media, ordering 230	common causes of 183
FTP, sending to 137	HP Printer Utility 153	control-panel messages 184
fuser	HP Printer Utility, Macintosh 15	Document feeder 197
error messages 176	HP Universal Print Driver 12	duplex printing accessory 191
jams, clearing 194	HP Web Jetadmin 16, 152	e-mail alerts 148
paper wrapping errors 181	humidity	envelope feeder 187
fuser modes 70	problem-solving 201 specifications 235	frequent, troubleshooting 198 fuser 194
G	specifications 233	locations 184
gateways	1	output bin 193
configuring 128	I/O configuration	print quality after 201
error messages 179	network configuration 59	print-cartridge area 185
finding 129	settings 32	print-quality problems 185
testing 129	Illegal Operation errors 220	staple 199
validating addresses 219	image defects, problem-	stapler/stacker 193
General Protection FaultException	solving 201	top-cover 185
OE 220	image quality	tray 1 188
glass	copy, improving 212	Japanese VCCI statement 245
cleaning 156	copy, problem-solving 212	Jetadmin, HP Web 16, 152
sizes supported 131	print, problem-solving 201	Jetdirect print server
graphical display, control	image repetition, problem-	configuring 62
panel 18	solving 210	error messages 178
gray background, problem-	Information menu 22	installing 255
solving 204	information pages 146	part numbers 230
	Information tab, embedded Web	removing 256
H	server 150	settings 32
hard disk	Initial Setup menu 32	Job Mode, copying 125
part number 230	input trays. See trays	job storage
heavy media, guidelines for	insert tray error messages 180	accessing 96
using 69	install cartridge error	features 96
	message 180	private 98

260 Index ENWW

proof and noid 96	error messages 180	Material Safety Data Sneet
QuickCopy 99	labels 84	(MSDS) 242
settings 31	preprinted paper 85	media
stored 100	scanner glass 131	3-bin mailbox
jobs	sizes supported 131	specifications 75
Macintosh settings 153	staples 94	500-sheet tray
	transparencies 85	specifications 73
K	tray 1 78	ADF specifications 76
keys, control panel	unexpected size or type error	card stock 69
locating 18	message 176	curled 170, 207, 213
touchscreen 20	Lock Resources, Macintosh 153	custom-size 106
kits, maintenance	locking	custom-size, printing 87
part number 230	accessories 9	document size, selecting 105
Korean EMC statement 245	loose toner, problem-solving 205	duplexer specifications 74
	loose toner, troubleshooting 185	envelope feeder
L	low on staples 182	specifications 74
labels		first page 106, 111
loading 78	M	fuser modes 70
printing 84	Macintosh	heavy 69
specifications 68	AppleTalk settings 35	HP, ordering 230
LAN fax 143	driver settings 14, 110	legal, clipped margins 225
LAN-connector 5	drivers supported 11	letterhead 70
languages, printer 4	drivers, problem-solving 221	loading 78
laser safety statements 245	HP Printer Utility 153	pages per sheet 107, 111
LDAP servers	problems, solving 221	preprinted 85
connecting to 128	removing software 15	preprinted 65
error messages 180	software 15	prepunched 85
validating gateway	software components 16	problem-solving 201, 213
addresses 219	supported operating	problem-solving trays 170
legal paper	systems 11	skewed 207
clipped margins 225	USB card, problem-	small 87
letterhead	solving 222	specifications 64, 66
guidelines for using 70	mailbox, 3-bin	•
printing on 85	capacity 5	stacker specifications 75
lid, cleaning 157	jams, clearing 193	stapler specifications 75
light copying 213	-	stapling 92
light print	media specifications 75	storing 77
problem-solving 203	media types supported 72 part number 229	tray 1 specifications 72
lights	part numbers 9	types supported 72
_	•	wrinkled 208
control panel 18 lines, problem-solving	reattach error message 181	memory
copies 212	mailbox, 3-bin	autoconfiguration 12
link speed settings 39	selecting 89	DIMM error messages 176
Linux drivers 11, 224	maintenance kit	included 15
loading	part number 230	installing DIMMs 249
_	Management menu 31	insufficient 175, 180
500-sheet trays 79	margins	part numbers 230
coated paper 86	legal paper, problem-	permanent resources 253
custom-size paper 87	solving 225	permanent storage error
documents, sizes	margins, envelopes 68, 83	messages 178
supported 131	material restrictions 241	

ENWW Index 261

supply errors 174	HP Jetdirect print server error	P
verifying installation 252	messages 178	pages per sheet 107, 111
Menu button 18	HP Web Jetadmin 152	paper
menu map	IP address 59	3-bin mailbox
Information menu 22	IPX/SPX settings 35	specifications 75
printing 146	link speed settings 39	500-sheet tray
menus, control panel	Macintosh settings 153	specifications 73
access denied 174	protocol configuration page,	ADF specifications 76
Administration 21	printing 39	coated 86
E-mail Setup 43	security 36	curled 170, 207, 213
Fax Setup 40	SMTP servers 128	custom-size 106
Information 22	subnet mask 60	custom-size, printing 87
Initial Setup 32	TCP/IP parameters 59	document size, selecting 105
Management 31	TCP/IP settings 32	duplexer specifications 74
Resets 54	testing SMTP settings 129	first page 106, 111
Send Setup 43	validating gateway	fuser modes 70
Service 55	addresses 219	HP, ordering 230
Time/Scheduling 29	noise specifications 235	legal, clipped margins 225
mercury-free product 241	non-HP supplies 154	loading 78
messages	not responding, problem-	pages per sheet 107, 111
alphabetical list 174	solving 172	preprinted 85
e-mail alerts 148, 153	Novell login required 181	prepunched 85
jams 184	NVRAM errors 178	problem-solving 201, 213
numerical list 174		problem-solving trays 170
types of 173	0	skewed 207
misformed characters, problem-	online help, control panel 20	small 87
solving 206	operating environment	specifications 64, 66
multifeeds 214	specifications 235	stacker specifications 75
multiple pages per sheet 107,	operating systems	stapler specifications 75
111	supported 11	stapling 92
multipurpose tray. See tray 1	order, page 89	storing 77
	ordering	tray 1 specifications 72
N	media, HP 230	types supported 72
n-up printing 107, 111	part numbers for 229	wrinkled 208
narrow paper, printing on 87	supplies and accessories 228	paper path
Network Folder, scan to 136	output bins	cleaning 157
Networking tab, embedded Web	capacities 5	testing 198
server 151	full, error messages 181	parallel port
networks	jams, clearing 193	features 5
AppleTalk settings 35	reattach error message 181	part numbers
configuring 59	selecting 89	cables 230
configuring gateway	output path open error	EIO cards 230
addresses 128	message 181	maintenance kit 230
connectivity features 5	output quality	media, HP 230
default gateway 60	after jams 185	memory 230
diagnostics 36	copy, improving 212	print cartridges 229
disabling DLC/LLC 62	copy, problem-solving 212	trays 229
disabling protocols 61	print, problem-solving 201	pausing a print request 113
DLC/LLC settings 35		
finding SMTP gateways 129		

262 Index ENWW

PCL drivers	environment 201	Macintosh issues 221
operating systems	gray background 204	media 201, 213
supported 11	image defects 201	messages, types of 173
universal 12	jams, after 201	networks 36
permanent resources 253	light print 203	output quality 201
permanent storage errors 178	lines 204	PostScript problems 225
phone line, connecting fax	loose toner 205	printing 172
accessory 142	media 201	receiving faxes 217
photos	misformed characters 206	repeating defects 206
copying 124	problem-solving 201	repetitive images 210
loading 131	repeating defects 206	scattered lines 209
PINs, private jobs 98	repetitive images 210	sending faxes 216
ports	scattered lines 209	skewed pages 207
included 5	smeared toner 205	slow printing 171
problem-solving	specks 203	smeared toner 205
Macintosh 222	tire tracks 208	specks 203
postcards 87	white lines 208	text 171
PostScript	white spots 209	text quality 206, 210
problem-solving 225	printer drivers. See drivers	tire tracks 208
PostScript Printer Description	printer languages 4	trays 170
(PPD) files	printer maintenance kit	white spots 209
included 15	part number 230	Windows issues 220
power	printing	wrinkled paper 208
specifications 234	output bin, selecting 89	proof and hold jobs 96
PPDs	printing system software 11	protocol configuration page,
included 15	priority, settings 13	printing 39
preconfiguration, driver 13	private jobs 98	punched paper
preprinted forms	problem-solving	printing on 85
guidelines for using 70	blank pages 171	Q
preprinted paper	blurred print 210	quality
printing on 85 prepunched paper	copy quality 212 copy size 215	after jams 185
printing on 85	copying 212, 214	copy, improving 212
presets (Macintosh) 110	curled paper 170, 207	copy, problem-solving 212
print cartridges	dropouts 204	print, problem-solving 201
authentication 155	duplexing 171	quick sets 104
error messages 179, 180	e-mail alerts 148, 153	quien solo 101
genuine HP 154	environment 201	R
jams, clearing 185	EPS files 222	Ready light
management menu 31	Error button, control panel	locating 18
non-HP 154	touchscreen 20	reattach output bin error
part numbers 229	fonts 225	message 181
recycling 240	gateway addresses 219	receiving faxes
replacing 154	gray background 204	problem-solving 217
storage 154	image defects 201	recipient lists 133
Print Document On 105	legal paper 225	recycling 240
print quality	light print 203	reducing documents 105
after jams 185	lines 204, 208	removing Macintosh software 15
blurred 210	lines, copies 212	repeating defects, problem-
dropouts 204	Linux 224	solving 206, 210

ENWW Index 263

replacing	recipient lists 133	envelope feeder
staple cartridges 94	sending documents 131	specifications 74
replacing printing cartridges 154	SMTP support 128	printing small or custom 87
reset button 18	scanning to folder 136	stacker specifications 75
Resets menu, control panel 54	scanning to workflow 137	stapler specifications 75
resizing documents 105	security	tray 1 specifications 72
resolution	settings 36	unexpected, error
	_	•
problem-solving quality 201	security features 6	message 176
settings 153	Send Setup menu 43	sizes, media
Resolution Enhancement	Send to Folder 136	selecting trays 88
technology (REt) 153	Send to Workflow 137	skewed pages 207
resource saving 253	sending faxes	Sleep button 18
REt (Resolution Enhancement	problem-solving 216	Sleep mode
technology) 153	sending to e-mail	settings 29, 31
retention, job	about 127, 128, 131	sleep settings
accessing 96	address books 133	power specifications 234
features 96	error messages 179, 180,	slow printing, problem-
private 98	182	solving 171
proof and hold 96	sending documents 131	slow speed, problem-solving
QuickCopy 99	sending to e-mail	fax receiving 217
stored 100	address books 133	small paper, printing on 87
reverse page order 89	job settings 135	smeared toner, problem-
rollers	LDAP support 128	solving 205
cleaning document	loading documents 131	SMTP gateways
_	_	
feeder 158	recipient lists 133	error messages 182 SMTP servers
S	sending documents 131	
	settings 130	configuring gateway
safety statements 245	SMTP support 128	address 128
saving resources, memory 253	validating gateway	connecting to 128
scaling documents 105	addresses 219	finding gateways 129
scanner calibration 50, 161	Service menu, control panel 55	testing 129
scanner glass	settings	validating gateway
cleaning 156	driver presets	addresses 219
scanner lid backing, cleaning 157	(Macintosh) 110	software
scanning e-mail	drivers 14	embedded Web server 16
validating gateway	priority 13	HP Printer Utility 153
addresses 219	quick sets (Windows) 104	HP Web Jetadmin 16
scanning to e-mail	Settings tab, embedded Web	Macintosh 15, 16
about 127, 131	server 151	settings 13
address books 133	SIMMs, incompatibility 248	supported operating
configuring 128	size, copy	systems 11
error messages 179, 180,	problem-solving 215	uninstalling Macintosh 15
182	size, media	Web sites 11
sending documents 131	3-bin mailbox	Windows 16
scanning to e-mail	specifications 75	specifications
address books 133	500-sheet tray	acoustic 235
control-panel settings 130	specifications 73	electrical 234
job settings 135	ADF specifications 76	envelopes 67
LDAP support 128	duplexer specifications 74	labels 68
loading documents 131	aupiesei specifications 14	
loading documents 101		operating environment 235

264 Index ENWW

paper 64, 66	Home screen, control	T
transparencies 69	panel 19	TCP/IP settings 32
specifications, media	HP Printer Utility,	technical support
envelope feeder 74	Macintosh 153	Linux 224
specks, problem-solving 203,	messages, types of 173	temperature specifications 235
209	Status button 18	tests
speed	Stop button 18	networks 36
fax receiving, problem-	Stop button, control panel	text, problem-solving
solving 217	touchscreen 20	blurred 210
problem-solving 171	stopping a print request 113	blurry 213
troubleshooting 164	storage cabinet	dropouts 204
speed dial list, printing 147	locking and unlocking 9	garbled 171
Spool32 errors 220	part number 9, 229	misformed characters 206
spots, problem-solving 203, 209	storage, job	time, setting 29
standard output bin	accessing 96	Time/Scheduling menu, control
capacity 5	features 96	panel 29
jams, clearing 193	Macintosh settings 153	timeout settings 32
reattach error message 181	private 98	tire tracks, problem-solving 208
selecting 89	proof and hold 96	toner
staple cartridges	QuickCopy 99	adhesion problems,
. •	• •	solving 213
empty, stop or continue	settings 31 stored 100	_
settings 94		density setting 153
jams 199	stored jobs 100	loose, problem-solving 205
loading 94	storing	smeared, problem-
low error message 182	envelopes 68, 77	solving 205
part numbers 9, 229	paper 77	top cover
stapler	print cartridges 154	jams, clearing 185
printing to 92	straight-through paper path 89	transparencies
stapler/stacker	streaks, problem-solving 213	HP, ordering 232
capacity 5	subnet mask 60	loading 78
empty, stop or continue	supplies	printing 85
settings 94	authentication 155	specifications 69
loading staples 94	counterfeit 155	tray 1
media specifications 75	e-mail alerts 148	envelopes, printing 83
media types supported 72	management menu 31	insert or close error
paper jams 193	memory errors 174	message 180
part number 9, 229	non-HP 154	jams, clearing 188
reattach error message 181	ordering 228	load error message 180
selecting 89	part numbers 9, 229	loading 78
staple jams 199	recycling 240	media sizes supported 72
too many pages error	replacing print cartridges 154	media types supported 72
message 182	Resets menu 54	problem-solving 170
stapling documents 92	status page, printing 146	unexpected size or type error
Start button 18	status, viewing with embedded	message 176
Start button, control panel	Web server 150	tray 2
touchscreen 20	status, viewing with HP Printer	problem-solving 170
status	Utility 153	tray 3
e-mail alerts 148	support	problem-solving 170
embedded Web server 150	Linux 224	

ENWW Index 265

trays	Update Now feature, drivers 13
double-sided printing 109,	usage page, printing 146
112	USB configuration 58
feeding problems, solving 214	USB port
insert or close error	problem-solving
message 180	Macintosh 222
jams, clearing 188, 190	Use Different Paper/Covers 106
loading 78	
Macintosh settings 153	V
media size specifications 73	validating gateway
media types supported 72	addresses 219
part numbers 229	vertical white or faded
problem-solving 170	stripes 212
unexpected size or type error	voltage specifications 234
message 176	100
troubleshooting	W
checklist 164	wake time, setting 29
control panel messages,	Warning button, control panel
numerical 174	touchscreen 20
error messages, alphabetical	watermarks 104
list 174	wavy paper, problem-
error messages, numerical	solving 170, 207 Web sites
list 174	fraud reports 155
jams, clearing 184	HP Web Jetadmin,
jams, frequent 198	downloading 152
paper path test 198	Linux support 224
speed 164	Material Safety Data Sheet
staple jams 199	(MSDS) 242
TrueType fonts included 4 two-sided copying 120	paper specifications 64, 66
two-sided copyling 120	software, downloading 11
error messages 174, 175,	universal print driver 12
178, 179, 181	weight, media specifications
loading paper 112	3-bin mailbox 75
Macintosh settings 153	500-sheet tray 73
problem-solving 171	ADF 76
typefaces	duplexer 74
included 4	envelope feeder 74
types, media	stacker 75
selecting trays by 88	stapler 75
	tray 1 72
U	white lines or spots, problem-
unable to connect, copy, or	solving 208
send 182	white or faded stripes 212
unexpected size or type error	Windows
messages 176	driver settings 14, 104
uninstalling Macintosh	drivers supported 11
software 15	problem-solving issues 220
universal print driver 12	software components 16
unlocking accessories 9	

supported operating
systems 11
universal print driver 12
Windows 2000 fax 143
workflow, send to 137
wrinkled paper, problemsolving 208

266 Index ENWW

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