

HP Color LaserJet CM3530 MFP Series Service Manual



Theory of operation
Removal and replacement
Solve problems
Parts list



Additional product information:

www.hp.com/support/cljcm3530mfp
www.hp.com/go/usemyMFP



HP Color LaserJet CM3530 MFP Series

Service Manual



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1 Product basics


- [Conventions used in this guide](#)
- [Product comparison](#)
- [Product features](#)
- [Product view](#)

Conventions used in this guide

 **TIP:** Tips provide helpful hints or shortcuts.



 **NOTE:** Notes provide important information to explain a concept or to complete a task.

 **CAUTION:** Cautions indicate procedures that you should follow to avoid losing data or damaging the product.

 **WARNING!** Warnings alert you to specific procedures that you should follow to avoid personal injury, catastrophic loss of data, or extensive damage to the product.

Product comparison

Table 1-1 Product models

Model	Features
HP Color LaserJet CM3530 MFP 	<ul style="list-style-type: none"> • 100-sheet multipurpose input tray (Tray 1) • 250-sheet input tray (Tray 2) • Automatic duplex printing • Automatic document feeder (ADF) that holds up to 50 pages, face-up • 250-sheet, face-down output bin • Hi-speed USB 2.0 port • HP Jetdirect embedded print server for connecting to a 10/100Base-TX network • 512 megabytes (MB) of random access memory (RAM) • Hard drive
HP Color LaserJet CM3530fs MFP 	<ul style="list-style-type: none"> • 100-sheet multipurpose input tray (Tray 1) • 250-sheet input tray (Tray 2) • Automatic duplex printing • Automatic document feeder (ADF) that holds up to 50 pages, face-up • 250-sheet, face-down output bin • Hi-speed USB 2.0 port • HP Jetdirect embedded print server for connecting to a 10/100Base-TX network • 512 megabytes (MB) of random access memory (RAM) • Hard drive • Analog fax • Convenience stapler that can staple up to 20 sheets of paper

Product features

Table 1-2 Features

Speed and throughput	<ul style="list-style-type: none"> • Print up to 31 pages per minute (ppm) on letter-size paper and 30 ppm on A4-size paper. • Less than 11 seconds to print the first page • Recommended maximum monthly print volume of 2,000 to 6,000 pages • A 515 megahertz (MHz) microprocessor • Duplex at 75% speed from Tray 2 and 50% speed from Tray 1
Resolution	<ul style="list-style-type: none"> • 600 dots per inch (dpi) with Image Resolution Enhancement technology 3600 for optimum overall imaging • 1200 x 600 dpi for detailed line work and small text
Memory	<ul style="list-style-type: none"> • 512 MB of random-access memory (RAM), expandable to 1 gigabyte (GB) by using 200-pin small outline dual inline memory modules (SODIMM) that support 128, 256, or 512 MB of RAM. • Memory Enhancement technology (MEt) automatically compresses data to use RAM more efficiently.
User interface	<ul style="list-style-type: none"> • HP Easy Select full color control panel • An embedded Web server to gain access to support and order supplies (for network-connected products) • HP Easy Printer Care software (a Web-based status and troubleshooting tool) • Internet-enabled supply-ordering capabilities through HP Easy Printer Care software and embedded Web server
Languages and fonts	<ul style="list-style-type: none"> • HP Printer Control Language (PCL) 6 • HP PCL 5 • HP postscript level 3 emulation • Printer Management Language • 80 scalable TrueType PS typefaces
Print cartridges	<ul style="list-style-type: none"> • For information regarding print cartridges, see www.hp.com/go/learnaboutsupplies. • Authentic HP print cartridge detection • Automatic toner strip remover
Paper-handling	<ul style="list-style-type: none"> • Tray 1 (multipurpose tray): A multipurpose tray for paper, transparencies, labels, envelopes and other paper types. The tray holds up to 100 sheets of paper, 50 transparencies, or 10 envelopes. • Tray 2: 250-sheet tray. This tray automatically detects common paper sizes. Holds standard and custom-size paper. • Optional Tray 3: 500-sheet paper and heavy media tray. • Automatic document feeder (ADF): Holds up to 50 sheets of paper. • Duplex printing: Provides automatic two-sided printing (printing on both sides of the paper).

Table 1-2 Features (continued)

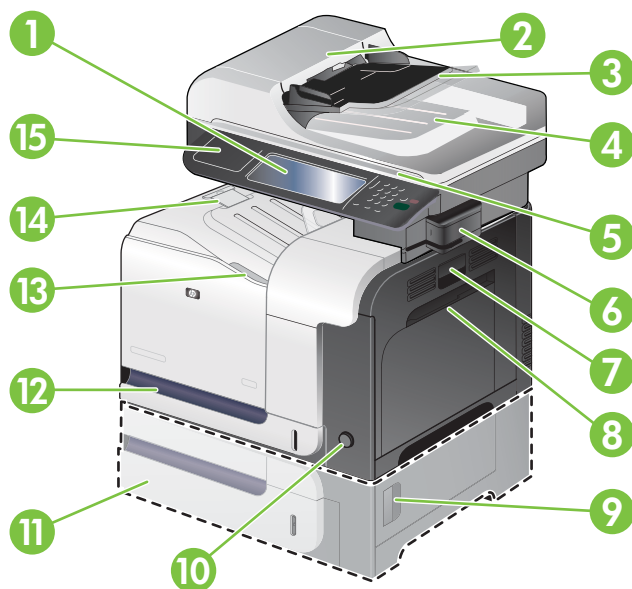
	<ul style="list-style-type: none">• ADF duplex scanning: The ADF has an automatic duplexer for scanning two-sided documents.• Standard output bin: The standard output bin is located beneath the scanner. This bin can hold up to 250 sheets of paper. The product has a sensor that indicates when the bin is full. <p>For information about supported paper sizes, see Supported paper and print media on page 56.</p> <p>For information about supported paper types, see Supported paper and print media types on page 58.</p>
Supported operating systems NOTE: IPv4 and IPsec on IPv4 available on all listed Windows operating systems IPv6 and IPsec on IPv6 only supported on Windows Vista and Windows Server 2008.	<ul style="list-style-type: none">• Windows 2000®• Windows XP® Home• Windows XP® Professional• Windows XP® Professional x64• Windows Server 2003® (32/64 bit)• Windows Vista™ (compatible)• Windows Vista™ Premium• Windows Server 2008® (32/64 bit)• Macintosh OS X V10.3 and later• Novell 5.1 and later• Red Hat Linux 7.x and later• SuSE Linux 8.x and later• HP-UX 10.20, 11.x, and 11.i• Solaris 2.5 and later (SPARC systems only)• IBM AIX 3.2.5 and later (requires software from the NOS vendor)• MPE-iX• Citrix MetaFrame Server• Windows Terminal Services
Connectivity	<ul style="list-style-type: none">• Local area network (LAN) connector (RJ-45) for the embedded HP Jetdirect print server• One enhanced input/output (EIO) slot• USB 2.0 connection• Host USB port for third-party solutions• A Foreign Interface Harness (FIH) connection (AUX) for connecting other devices• Optional analog fax card (included with the HP Color LaserJet CM3530fs MFP)• Optional HP Digital Sending Software (DSS)
Environmental features	<ul style="list-style-type: none">• Sleep setting saves energy.• High content of recyclable components and materials.• Instant-on technology

Table 1-2 Features (continued)

	<ul style="list-style-type: none">• Energy Star® compliance (except in EMEA)• Blue Angel certification (EMEA)• Cartridge and toner collection unit recycling with HP Planet Partners• Automatic color sensing
Security features	<ul style="list-style-type: none">• Secure Disk Erase• Security lock (optional)• Job storage• User PIN authentication for stored jobs• Digital Send Software (DSS) authentication• IPsec security• Support for HP High Performance hard disks
Copying and sending	<ul style="list-style-type: none">• Automatic color sensing for copies• Modes for text, graphics, and mixed text and graphics formats• Job-interrupt feature• Multiple pages per sheet• Control panel animations (for example, jam recovery)• Scan and send to e-mail<ul style="list-style-type: none">◦ Local address book for e-mail and fax◦ LDAP addressing• Send to folder• Automatic duplex (two-sided) scanning

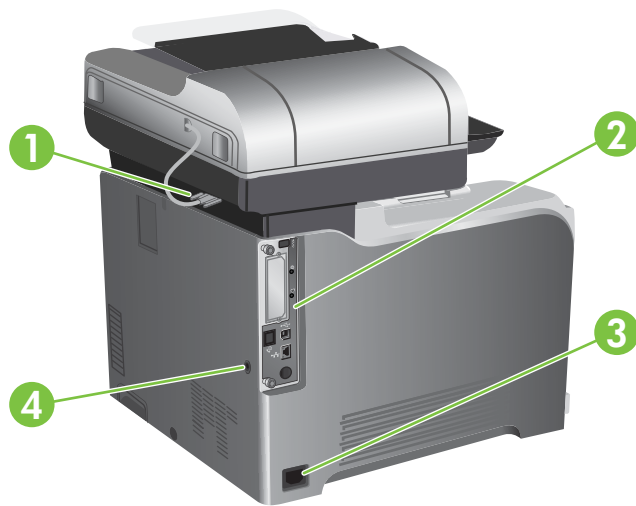
Product view

Product front view



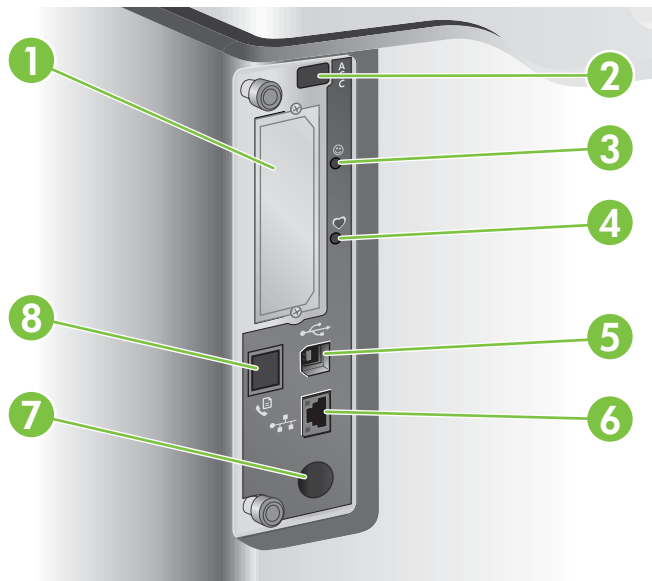
1	Color control panel
2	Document-feeder top-cover (lift open to clear jams)
3	Automatic document-feeder (ADF)
4	Document-feeder output bin
5	Scanner
6	Convenience stapler (only for the HP Color LaserJet CM3530fs MFP)
7	Right-side door (access for clearing jams)
8	Tray 1 (pull the handle to open the tray)
9	Lower-right door (access for clearing jams)
10	On/off button
11	Optional Tray 3
12	Tray 2
13	Front door (access to print cartridges and toner collection unit)
14	Standard output bin
15	Hardware integration port

Product back view



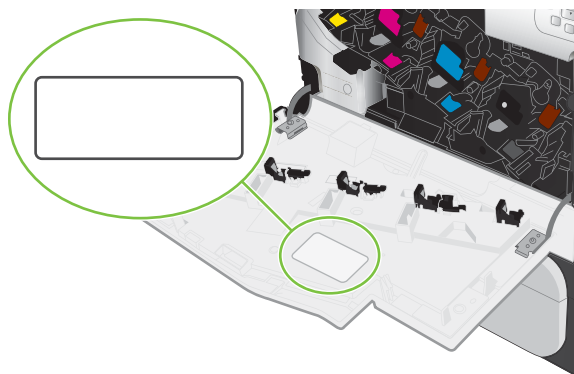
1	Connector for the ADF
2	Interface ports
3	Power connection
4	Slot for a cable-type security lock

Interface ports



1	EIO interface expansion slot
2	Host USB port (for third-party solutions)
3	Formatter connectivity LED (lit when the formatter is properly seated)
4	Heartbeat LED (blinks when the formatter is working correctly)
5	Hi-Speed USB 2.0 port
6	RJ-45 network port (includes HP Jetdirect LEDs)
7	Foreign-interface harness (for connecting third-party solutions)
8	Fax connection (only for the HP Color LaserJet CM3530fs MFP)

Serial number and model number location



Model name	Model number
HP Color LaserJet CM3530 MFP	CC519A
HP Color LaserJet CM3530fs MFP	CC520A

2 Control panel

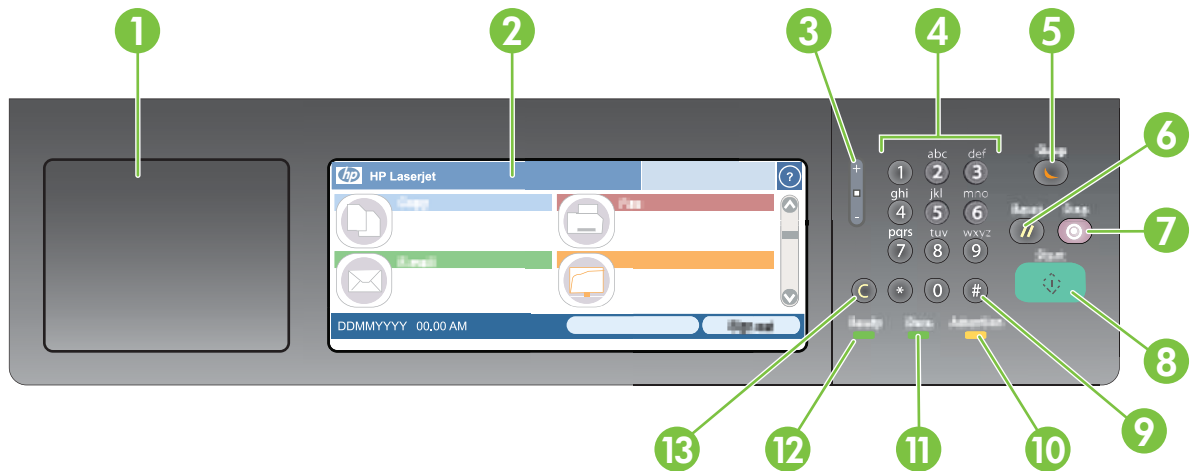
- [Use the control panel](#)
- [Navigate the Administration menu](#)
- [Information menu](#)
- [Default Job Options menu](#)
- [Time/Scheduling menu](#)
- [Management menu](#)
- [Initial Setup menu](#)
- [Device Behavior menu](#)
- [Print Quality menu](#)
- [Troubleshooting menu](#)
- [Resets menu](#)
- [Service menu](#)

Use the control panel

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




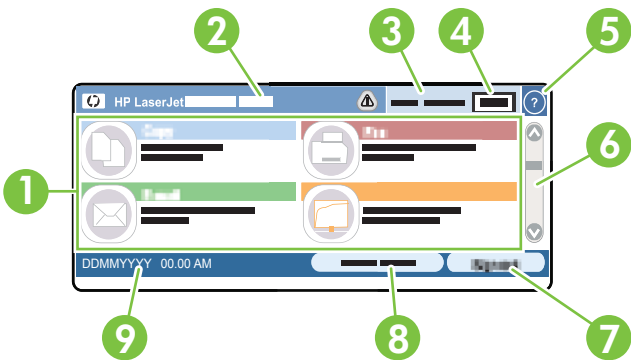
1	Hardware integration port	Area for adding third-party security devices
2	Touchscreen graphical display	Use the touchscreen to open and set up all product functions.
3	Brightness-adjustment button	Use this button to increase or decrease the brightness of the touchscreen display.
4	Numeric keypad	Use this area to specify the number of copies and other numeric values.
5	Sleep button	If the product is inactive for a long period of time, it automatically enters a sleep mode. To place the product into sleep mode or to reactivate the product, press the Sleep button.
6	Reset button	Resets the job settings to factory or user-defined default values.
7	Stop button	Stops the active job and opens the Job Status screen.
8	Start button	Begins a copy job, starts digital sending, starts a fax job, or continues a job that has been interrupted.
9	# button	Use this button to indicate a required pause for a fax number.
10	Attention light	The Attention light indicates that the product has a condition that requires intervention. Examples include an empty paper tray or an error message on the touchscreen.
11	Data light	The Data light indicates that the product is receiving data.

12	Ready light	The Ready light indicates that the product is ready to begin processing any job.
13	Clear button	Return values to their defaults.

Home screen

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







 **NOTE:** Depending on how the product has been configured, the features that appear on the home screen can vary.




1	Features	Depending on how the product is configured, the features that appear in this area can include any of the following items: <ul style="list-style-type: none">• Copy• Fax• E-mail• Secondary E-Mail• Job Status• Network Folder• Job Storage• Workflow• Supplies Status• Administration
2	Product status line	The status line provides information about the overall product 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 15 .
3	Copy type	Shows whether copies are color.
4	Copy count	The copy count box indicates the number of copies that the product is set to make.
5	Help button	Touch the Help button to open the embedded help system.
6	Scroll bar	Touch the up or down arrows on the scroll bar to see the complete list of available features.
7	Sign Out	Touch Sign Out to sign out of the product if you have signed in for access to restricted features. After you sign out, the product restores all options to the default settings.
8	Network Address	Touch Network Address to find information about the network connection.
9	Date and time	The current date and time appear here. You can select the format that the product uses to show the date and time, for example 12-hour format or 24-hour format.

Buttons on the touchscreen

The status line on the touchscreen provides information about the product status. 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 product 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 product prompts you to cancel the job or to resume it.
	Error button. The error button appears whenever the product 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 product 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 Control-panel help system on page 15 .

Control-panel help system

The product has a built-in Help system that explains how to use each screen. To open the Help system, touch the Help button  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 product alerts you of an error or warning, touch the error  or warning  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  in the upper-left corner of the screen.

The product 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 under the Administration menu.

Information menu

Administration > Information

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

Table 2-1 Information menu

Menu item	Sub-menu item	Sub-menu item	Values	Description
Configuration/Status Pages	Administration Menu Map		Print	Shows the basic structure of the Administration menu and current administration settings.
	Configuration Page		Print	A set of configuration pages that show the current product settings.
	Supplies Status Page		Print	Shows the status of supplies such as cartridges, maintenance kits, and staples.
	Usage Page		Print	Shows information about the number of pages that have been printed on each paper type and size.
	Color Usage Job Log		Print	A directory page that contains job-by-job color usage information. Page content includes the user name, application name, and number of black-only pages and color pages.
	File Directory		Print	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 product.
Fax Reports	Fax Activity Log		Print	Contains a list of the faxes that have been sent from or received by this product.
	Fax Call Report	Fax Call Report	Print	A detailed report of the last fax operation, either sent or received.
		Thumbnail on Report	Yes No (default)	Choose whether or not to include a thumbnail of the first page of the fax on the call report.
	When to Print Report	Never auto print		
		Print after any fax job		
		Print after fax send jobs		
		Print after any fax error (default)		
		Print after send errors only		
		Print after receive errors 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 product.
	Speed Dial List		Print	Shows the speed dials that have been set up for this product.

Table 2-1 Information menu (continued)

Menu item	Sub-menu item	Sub-menu item	Values	Description
Sample Pages/Fonts	Demonstration Page		Print	Printout of a page highlighting the print capabilities of the product.
	RGB Samples		Print	Printout of color samples for different RGB values. The samples act as a guide for color matching.
	CMYK Samples		Print	Printout of color samples for different CMYK values. The samples act as a guide for color matching.
	PCL Font List		Print	A list of printer control language (PCL) fonts that are currently available on the product.
	PS Font List		Print	A list of PostScript (PS) fonts that are currently available on the product.

Default Job Options menu

Administration > Default Job Options

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

Default Options for Originals

Administration > Default Job 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-sided.
	2	
Orientation	Portrait	Select the orientation that is most often used for copy or scan originals. Select Portrait if the short edge is at the top or select Landscape if the long edge is at the top.
	Landscape	
Optimize Text/Picture	Manually Adjust	Optimize the output for a particular type of original: text, pictures, or a mixture of both.
	Text	If you select Manually Adjust , specify the mix of text and pictures that is used most often.
	Printed Picture	
	Photograph	

Image adjustment

Administration > Default Job Options > Image Adjustment

Table 2-3 Image Adjustment menu

Menu item	Values	Description
Darkness	Select a value.	Select the level of density (darkness) for the output.
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.

Default Copy Options

Administration > Default Job Options > Default Copy Options

Table 2-4 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 2	Set the default number of sides for copies.
Color/Black		Auto Detect Color Black (default)	Choose whether the default copy mode is color, black, or automatically detected, based on the original.
Collate		Off On (default)	Set up the option for collating sets of copies. If On is selected, the product prints a complete copy of the print job before starting on the next copy. Otherwise, the product prints the first page of all copies before printing the second page, and so on.
Edge-To-Edge		Normal (recommended) (default) Edge-To-Edge Output	If the original document is printed close to the edges, use the Edge-To-Edge feature to avoid shadows along the edges. Combine this feature with the Reduce/Enlarge feature to ensure that the entire page appears on the copies.
Auto Include Margins		Off (default) On	This feature automatically reduces the image size during scanning so the margins are included.

Default Fax Options

Administration > Default Job Options > Default Fax Options



NOTE: This menu is available only for the HP Color LaserJet CM3530fs MFP.

Table 2-5 Fax Send menu

Menu item	Sub-menu item	Values	Description
Resolution		Standard (100x200dpi) (default)	Set the resolution for sent documents. Higher resolution images have more dots per inch (dpi), so they show more detail. Lower resolution images have fewer dots per inch and show less detail, but the file size is smaller.
		Fine (200x200dpi)	
		Superfine (300x300dpi)	
Fax Header		Prepend (default)	Select the position of the fax header on the page.
		Overlay	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 contents without moving the contents down. Using this option could prevent a single-page fax from flowing onto another page.

Table 2-6 Fax Receive menu

Menu item	Sub-menu item	Values	Description
Fax Forwarding	Fax Forwarding	Off (default)	To forward received faxes to another fax device, select Fax Forwarding and Custom . Then type the number of the other fax device into the Fax Forwarding Number field. When you select the Fax Forwarding menu item for the first time, you are prompted to set up a PIN. Type that PIN every time you use this menu. This PIN is also used to access the Fax Printing menu.
		Custom	
	Change PIN		Use this option to change the PIN for the Fax Forwarding menu.
Stamp Received Faxes	Enabled		Add the date, time, senders phone number, and page number to each page of the faxes that this product receives.
	Disabled (default)		
Fit to Page	Enabled (default)		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 feature set to Disabled , faxes larger than Letter or A4 will flow across multiple pages.
	Disabled		
Fax Paper Tray	Select from the list of trays. The default setting is Automatic .		Select the tray that holds the size and type of paper that you want to use for incoming faxes.

Default E-mail Options

Administration > Default Job Options > Default E-mail Options

Menu item	Values	Description
Document File Type	PDF (default)	Select the file format for the e-mail.
	JPEG	
	TIFF	
	M-TIFF	
Output Quality	High (large file)	Selecting higher quality for output increases the size of the output file.
	Medium (default)	
	Low (small file)	
Resolution	300 DPI	Select the resolution. Use a lower setting to create smaller files.
	200 DPI	
	150 DPI (default)	
	75 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)	Specify the TIFF version to use when saving scanned files.
	TIFF (Post 6.0)	

Default Send to Folder Options

Administration > Default Job Options > Default Send To Folder Options

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)	Select the file format for the file.
	M-TIFF	
	TIFF	
	JPEG	
TIFF Version	TIFF 6.0 (default)	Specify the TIFF version to use when saving scanned files.
	TIFF (Post 6.0)	
Output Quality	High (large file)	Selecting higher quality for output increases the size of the output file.
	Medium (default)	
	Low (small file)	
Resolution	75 DPI	Select the resolution. Use a lower setting to create smaller files.
	150 DPI (default)	
	200 DPI	
	300 DPI	
	400 DPI	
	600 DPI	

Default Print Options

Administration > Default Job Options > Default Print Options

Table 2-7 Default Print Options menu

Menu item	Sub-menu item	Values	Description
Copies Per Job		Type a value.	Set the default number of copies for print jobs.
Default Paper Size		(List of supported sizes)	Select a paper size.
Default Custom Paper Size	Unit of measure	Millimeters Inches	Configure the default paper size that is used when the 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 .
Print Sides		1-sided 2-sided	Select whether print jobs are single-sided or double-sided by default.
2-Sided Format		Long Edge (Default) Short Edge	<p>Use this feature to configure the default style for 2-sided print jobs.</p> <p>If Long Edge is selected and the job has a portrait orientation, the job will result in a book style. If the job is landscape, a calendar style (flipping up the pages) will result.</p> <p>If Short Edge is selected and the job has a portrait orientation, the job will result in a calendar style. If the job is landscape, a booklet style will result.</p>

Time/Scheduling menu

Administration > Time/Scheduling

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



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

Table 2-8 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 format that are used to time-stamp outgoing faxes.
			MMM/DD/YYYY	
			DD/MMM/YYYY	
	Date	Month		
		Day		
		Year		
	Time Format		12 hour (AM/PM) (default)	
			24 hour	
	Time	Hour		
		Minute		
		AM		
		PM		
Time Zone			Select a time zone from the list.	Select the time zone where the product is located.
	Adjust for Daylight Savings		Enabled Disabled	
Sleep Delay			1 Minute	Use this feature to select the time interval that the product should remain inactive before entering Sleep Mode.
			15 Minutes	
			20 minutes	
			30 minutes (default)	
			45 minutes	
			1 hour (60 minutes)	
			90 minutes	
			2 hours	
Wake Time	Monday		Off (default)	Select Custom to set a wake time for each day of the week. The product exits sleep mode according to this schedule. Using a sleep schedule helps conserve energy and
			Custom	
	Tuesday			

Table 2-8 Time/Scheduling menu (continued)

Menu item	Sub-menu item	Sub-menu item	Values	Description
	Wednesday			prepares the product for use so that users do not have to wait for it to warm up.
	Thursday			
	Friday			
	Saturday			
	Sunday			
Sleep Time	Monday		Off (default)	Use this feature to set a sleep time for each day of the week for periods when the product will not likely be in use (for example, at a certain time each evening). Setting a sleep time makes the product automatically go into a low-power mode. Select a day and then select Custom to set up a custom sleep time schedule.
	Tuesday		Custom	
	Wednesday			
	Thursday			
	Friday			
	Saturday			
	Sunday			
Fax Printing	Fax Printing Mode	Store all received faxes		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. When you select this menu item for the first time, you are prompted to set up a PIN. Type that PIN every time you use this menu.
		Print all received faxes (default)		Select Print all received faxes to print all incoming received faxes at the time they are received.
		Use Fax Printing Schedule	Create Fax Printing Schedule	Select Use Fax Printing Schedule to get to the Create Fax Printing Schedule menu options that allow you to set up a schedule for printing received faxes.
		Change PIN		Select Change PIN to change the PIN number that users must provide to print faxes.

Management menu

Administration > Management

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



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

Table 2-9 Management menu

Menu item	Sub-menu item	Values	Description
Network Address Button	Display		Use this feature to display the Network Address button on the Home screen.
	Hide (default)		
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 product.
	Quick Copy Job Held Timeout	Off (default)	
		1 Hour	
		4 Hours	
		1 Day	
		1 Week	
	Stored Jobs List Order	Alphabetical	
		Chronological	
Sleep mode		Disable	Use this feature to customize the sleep mode settings for this product.
		Use Sleep Delay (default)	Select Use Sleep Delay to set the product to enter sleep mode after the delay that is specified in the Time/Scheduling menu.
Manage Supplies	Replace Supplies		Sets the product behavior for when a supply item is low.
			The product displays an "Order supplies" message when a supply item is running low and a "Replace supplies" message when a supply item has reached its estimated end of life. To ensure optimal print quality, HP recommends replacing a supply item when the "Replace supplies" message is displayed. The supply does not have to be replaced at this point unless the print quality is no longer acceptable. Printing beyond this point is possible using Override at out 1 or Override at out 2 . The Override options allow the product to continue using a supply item that has reached its estimated end of life.
		Stop at low	Choose Stop at low to stop printing when a supply reaches a low condition.
		Stop at out (default)	Choose Stop at out to stop printing when the estimated end of life has been reached for a supply. Printing beyond this point is possible using Override at out 1 or Override at out 2 . The supply does not need to be replaced now unless the print quality is no longer acceptable.

Table 2-9 Management menu (continued)

Menu item	Sub-menu item	Values	Description
		Override at out 1 Override at out 2	<p>Choose Override at out 1 to allow the product to continue printing when supply items, other than the toner collection unit, have reached the end of their estimated life. Using this option will eventually result in unacceptable print quality. Consider having a replacement cartridge available for when the print quality becomes unacceptable.</p> <p>Choose Override at out 2 to allow the product to continue printing when any color supply is past the end of its estimated capacity, including the toner collection unit. This option is not recommended because of the risk of overfilling the toner collection unit, which could result in the need to service the product.</p> <p>Information about the remaining toner is not available when printing in Override mode.</p> <p>Once an HP supply has reached the end of its estimated life, HP's Premium Protection Warranty on that supply has ended. For Warranty information, see Print cartridge limited warranty statement on page 571.</p> <p>The Override options can be enabled or disabled at any time, and they do not have to be re-enabled for each supply item. The product automatically continues printing when a supply item reaches the end of its estimated life. The message "Replace supply Override in use" displays on the control panel while a supply is used in Override mode. When the supply item is replaced with a new supply, Override is de-activated until another supply item reaches the end of its estimated life.</p>
		Page Limit Range of 0 to 100000	This menu displays if you select Yes, Use Override for either override option. Select the number of pages the product continues to print while in override mode. The default is 1500.
	Supply Low/Order Threshold	Select a value in the range. The default is 5%.	Use this menu to carry out administrative supply management tasks such as changing the threshold when supplies should be ordered.
	Color Supply Out	Stop (default) Auto-continue black	This menu sets the product behavior when a color supply has reached its estimated end of life. When Auto-continue black is selected, the product will continue printing using black toner only.
Restrict Color Use	Color printing access	Enable Color (default) Color If Allowed Disable Color	This item allows the administrator to disable or restrict color printing. To use the Color If Allowed setting, set up user permissions and/or application permissions in the embedded Web server, HP Easy Printer Care software, or Web Jetadmin.
	Color copying access	Enable Color (default) Disable Color	This item allows the administrator to disable or restrict color copying.
Color/Black Mix		Auto (default) Mostly color pages Mostly black pages	This item controls how the engine switches from color mode to monochrome mode for maximum performance and print cartridge life.

Table 2-9 Management menu (continued)

Menu item	Sub-menu item	Values	Description
			Select Auto to reset the product to the factory default setting.
			Select Mostly color pages if nearly all your print jobs are color with high page coverage.
			Select Mostly black pages if you print mostly monochrome jobs or a combination of color and monochrome jobs.

Initial Setup menu

Administration > Initial Setup

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

Networking and I/O

Administration > Initial Setup > Networking and I/O

Table 2-10 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 product receives for a print job gets interrupted, this setting indicates how long the product will wait before it reports that the job has failed.
Parallel Input NOTE: This item appears only if an EIO accessory is installed.	High Speed	No Yes (default)	Use the High Speed setting to configure the speed that the parallel port uses to communicate with the host.
	Advanced Functions	Enabled (default) Disabled	Use the Advanced Functions setting to enable or disable bidirectional parallel communication.
	Embedded Jetdirect	See Table 2-11 Jetdirect menus on page 31 for the list of options.	
EIO <X> Jetdirect			

Table 2-11 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 product. 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.
	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.

Table 2-11 Jetdirect menus (continued)

Menu item	Sub-menu item	Sub-menu item	Values and Description
			<p>Manual: Use the Manual Settings menu to configure TCP/IPv4 parameters.</p>
		Default IP	<p>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).</p> <p>Auto IP: A link-local IP address 169.254.x.x is set.</p> <p>Legacy: The address 192.0.0.192 is set, consistent with older HP Jetdirect products.</p>
		DHCP Release	<p>This menu appears if Config Method was set to DHCP and a DHCP lease for the print server exists.</p> <p>No (default): The current DHCP lease is saved.</p> <p>Yes: The current DHCP lease and the leased IP address are released.</p>
		DHCP Renew	<p>This menu appears if Config Method was set to DHCP and a DHCP lease for the print server exists.</p> <p>No (default): The print server does not request to renew the DHCP lease.</p> <p>Yes: The print server requests to renew the current DHCP lease.</p>
		Manual Settings	<p>(Available only if Config Method is set to Manual) Configure parameters directly from the printer control panel:</p> <p>IP Address: The unique IP address of the printer (n.n.n.n), where n is a value from 0 to 255.</p> <p>Subnet Mask: The subnet mask for the printer (m.m.m.m), where m is a value from 0 to 255.</p> <p>Syslog Server: The IP address of the syslog server used to receive and log syslog messages.</p> <p>Default Gateway: The IP address of the gateway or router used for communications with other networks.</p> <p>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).</p>
		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	<p>Use this item to enable or disable IPv6 operation on the print server.</p> <p>Off: IPv6 is disabled.</p> <p>On (default): IPv6 is enabled.</p>

Table 2-11 Jetdirect menus (continued)

Menu item	Sub-menu item	Sub-menu item	Values and Description
		Address	<p>Manual Settings: Use this item to manually set IPv6 addresses on the print server.</p> <p>Enable: Select this item and choose On to enable manual configuration, or Off to disable manual configuration.</p> <p>Address: Use this item to type a 32 hexadecimal digit IPv6 node address that uses the colon hexadecimal syntax.</p>
		DHCPv6 Policy	<p>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.</p> <p>Router Unavailable: If a router is not available, the print server should attempt to obtain its stateful configuration from a DHCPv6 server.</p> <p>Always: Whether or not a router is available, the print server always attempts to obtain its stateful configuration from a DHCPv6 server.</p>
		Primary DNS	Use this item to specify an IPv6 address for a primary DNS server that the print server should use.
		Secondary DNS	Use this item to specify an IPv6 address for a secondary DNS server that the print server should use.
	Proxy Server		<p>Specifies the proxy server to be used by embedded applications in the product. 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.</p> <p>To specify a proxy server, enter its IPv4 address or fully-qualified domain name. The name can be up to 255 octets.</p> <p>For some networks, you may need to contact your Independent Service Provider (ISP) for the proxy server address.</p>
	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.
	Idle Timeout		This is the time period, in seconds, after which an idle TCP print data connection is closed. The default is 270 seconds. To disable the timeout, specify 0.
IPX/SPX	Enable		<p>Off: Disable the IPX/SPX protocol.</p> <p>On (default): Enable the IPX/SPX protocol.</p>
	Frame Type		<p>Selects the frame-type setting for your network.</p> <p>Auto: Automatically sets and limits the frame type to the first one detected.</p> <p>EN_8023, EN_II, EN_8022, and EN_SNAP: Frame-type selections for Ethernet networks.</p>

Table 2-11 Jetdirect menus (continued)

Menu item	Sub-menu item	Sub-menu item	Values and Description
AppleTalk	Enable		Off: Disable the AppleTalk protocol.
			On (default): Enable the AppleTalk protocol.
DLC/LLC	Enable		Off: Disable the DLC/LLC protocol.
			On (default): Enable the DLC/LLC protocol.
Security	Print Sec Page		Yes (default): Prints a page that contains the current security settings on the HP Jetdirect print server.
			No: 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 (default): For secure, encrypted communications, only HTTPS access is accepted. The print server will appear as a secure site. HTTPS Optional: Access using either HTTP or HTTPS is permitted.
	IPSec		Specify the IPSec status on the print server. Keep: IPSec status remains the same as currently configured. Disable: IPSec operation on the print server is disabled.
Diagnostics	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.
	Embedded Tests		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 product. 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 product 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.

Table 2-11 Jetdirect menus (continued)

Menu item	Sub-menu item	Sub-menu item	Values and Description
		HTTP Test	<p>This test checks operation of HTTP by retrieving predefined pages from the product, and tests the embedded Web server.</p> <p>Select Yes to choose this test, or No to not choose it.</p>
		SNMP Test	<p>This test checks operation of SNMP communications by accessing predefined SNMP objects on the product.</p> <p>Select Yes to choose this test, or No to not choose it.</p>
		Data Path Test	<p>This test helps to identify data path and corruption problems on an HP postscript level 3 emulation product. It sends a predefined PS file to the product. However, the test is paperless; the file will not print.</p> <p>Select Yes to choose this test, or No to not choose it.</p>
		Select All Tests	<p>Use this item to select all available embedded tests.</p> <p>Select Yes to choose all tests. Select No to select individual tests.</p>
		Execution Time [H]	<p>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 the product is turned off.</p> <p>Data gathered from the HTTP, SNMP, and Data Path tests is printed after the tests have completed.</p>
		Execute	<p>No: Do not initiate the selected tests.</p> <p>Yes: Initiate the selected tests.</p>
	Ping Test		<p>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:</p>
		Dest Type	Specify whether the target product is an IPv4 or IPv6 node.
		Dest IPv4	Type the IPv4 address.
		Dest 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.

Table 2-11 Jetdirect menus (continued)

Menu item	Sub-menu item	Sub-menu item	Values and Description
		Execute	Specify whether to initiate the ping test. Select Yes to initiate the test, or No to not run the test.
	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.
Link Speed			<p>The link speed and communication mode of the print server must match the network. The available settings depend on the product and installed print server. Select one of the following link configuration settings:</p> <p>CAUTION: If you change the link setting, network communications with the print server and network product might be lost.</p> <p>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 10T Half is set depending on the detected link speed of the hub/switch port. (A 1000T half-duplex selection is not supported.)</p> <p>10T Half: 10 Mbps, half-duplex operation.</p> <p>10T Full: 10 Mbps, Full-duplex operation.</p> <p>100TX Half: 100 Mbps, half-duplex operation.</p> <p>100TX Full: 100 Mbps, full-duplex operation.</p>

Table 2-11 Jetdirect menus (continued)

Menu item	Sub-menu item	Sub-menu item	Values and Description
			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

Administration > Initial Setup > Fax Setup



NOTE: This menu is available only for the HP Color LaserJet CM3530fs MFP.

Table 2-12 Fax Setup menu

Menu item	Sub-menu item	Sub-menu item	Values	Description
Fax Setup Wizard				Use this wizard to set up options for sending faxes if the analog fax accessory is installed.
Required Settings	Country/Region		(Countries/regions listed)	Configure the settings that are legally required for outgoing faxes.
	Date/Time			
	Fax Header Information	Telephone Number		
		Company Name		
PC Fax Send			Disabled	Use this feature to enable or disable PC Fax Send . PC Fax Send enables users to send faxes through the product from their computers if they have the Send Fax driver installed on their PC.
			Enabled (default)	

Table 2-12 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 that you hear while the product dials the fax number.
			Low (default)	
			High	
	Error Correction Mode		Enabled (default)	When Error Correction Mode is enabled and an error occurs during fax transmission, the product sends or receives the error portion again.
			Disabled	
	JBIG Compression		Enabled (default)	JBIG compression reduces fax-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 JBIG compression.
			Disabled	
	Maximum Baud Rate		Select a value from the list. The default is 33.6K.	Use this feature to set the maximum baud rate for receiving faxes. This can be used as a diagnostic tool for troubleshooting fax problems.
	TCF T.30 Delay Timer		Default (default)	This setting should be left at the default value and only changed when directed by an HP technical support agent. Adjustment procedures associated with this setting are beyond the scope of this guide.
			Custom	
	TCF Extend		Default (default)	This setting should be left at the default value and only changed when directed by an HP technical support agent. Adjustment procedures associated with this setting are beyond the scope of this guide.
		Custom		
Dialing Mode		Tone (default)	Select whether the product should use tone or pulse dialing.	
		Pulse		
Redial On Busy		The range is between 0 and 9. The factory default is 3 times.	Type the number of times the product 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 product should attempt to dial if the recipient fax number does not answer.	
		Once		
		Twice		NOTE: Twice is available in locations other than the United States and Canada.

Table 2-12 Fax Setup menu (continued)

Menu item	Sub-menu item	Sub-menu item	Values	Description
	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 Disabled (default)	Use this feature to specify whether the product should check for a dial tone before sending a fax.
	Dialing Prefix		Off (default) Custom	Use this feature to specify a prefix number that must be dialed when sending faxes from the product.
	Billing Codes		Off (default) Custom	When billing codes are enabled, a prompt appears that asks the user to enter the billing code for an outgoing fax. The range is between 1 and 16 digits. The default is 1 digit.
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) Custom	This setting is used to adjust for some PBX ring signals. Change this setting only when directed by an HP technical support agent.
	Ring Frequency		Default (default) Custom	This setting should be left at the default value and only changed when directed by an HP technical support agent. Adjustment procedures associated with this setting are beyond the scope of this guide.
	Ringer Volume		Off Low (default) High	Set the volume for the fax ring-tone.
	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 list can contain up to 30 numbers. When the product receives a call from one of the blocked fax numbers, it deletes the incoming fax. It also logs the blocked fax in the activity log along with job-accounting information.
		Remove Blocked Numbers	Select a fax number to remove.	
		Clear All Blocked Numbers	No (default) Yes	

E-mail Setup

Administration > Initial Setup > 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 85](#).

Table 2-13 E-mail Setup menu

Menu item	Values	Description
E-mail Setup Wizard		Use this wizard to set up basic options for the e-mail feature.
Address Validation	On (default) Off	This option enables the product to check e-mail syntax when you type an e-mail address. Valid e-mail addresses require the "@" sign and a ".".
Find Send Gateways	Find	Search the network for SMTP gateways that the product 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 product.
Test Send Gateway	Test	Test the configured SMTP gateway to see if it is functional.

Send Setup menu

Administration > Initial Setup > Send Setup

Table 2-14 Send Setup menu

Menu item	Values	Description
Replicate MFP	Enter a value (IP Address).	Copy the local Send settings from one product to another.
Allow Transfer to New DSS	Off On (default)	Use this feature to allow the transfer of the product 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	Off On (default)	This feature allows you to configure the product for use with an HP Digital Sending Software (DSS) server.
Fax Number Confirmation	Disable (default) Enable	When fax number confirmation is enabled, you are prompted to enter the fax number twice to verify that it has been typed correctly.
Fax Number Speed Dial Matching	Disable (default) Enable	If set to Enable , a screen is displayed if the fax numbers entered match a speed dial that is configured to that number. The numbers do not have to match as a group; the number must match individually. That is, if one of the fax numbers matches speed dial 2 and speed dial 6, then the screen is displayed for that fax number. When you touch Yes on the dialog, then the fax is sent or the fax number is added to the distribution list.

Device Behavior menu

Administration > Device Behavior

Table 2-15 Device Behavior menu

Menu item	Sub-menu item	Sub-menu item	Values	Description
Language			Select the language from the list.	Select a different language for control-panel messages. When you select a new language, the keyboard layout might also change.
Keyboard Layout			Select the keyboard layout from the list	Select a keyboard layout regardless of the Language setting. Select Default if you want the keyboard layout to change when the Language setting changes. This is the default setting.
Keyboard Layout Button			Display Hide	When displayed, you can use this option to select an alternate keyboard layout. The keyboard returns to the default layout after the product returns to the Ready state or if you press the Reset button.
Key Press Sound			On (default) Off	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.	Specify the amount of time that elapses between any activity on the control panel and the product resetting to the default settings.
Warning/Error Behavior	Clearable Warnings		On Job (default)	Set the amount of time that a clearable warning appears on the control panel.
	Continuable Events		Auto continue (10 seconds) (default) Touch OK to continue	Configure the product behavior when the product encounters certain errors.
	Jam Recovery		Auto (default) Off On	Configure how the product handles pages that are lost during a jam.

Table 2-15 Device Behavior menu (continued)

Menu item	Sub-menu item	Sub-menu item	Values	Description
Tray Behavior	Use Requested Tray		Exclusively (default) First	Control how the product handles jobs that have specified a specific input tray.
	Manually Feed Prompt		Always (default) Unless Loaded	Specify how a prompt should appear when the type or size for a job does not match the specified tray and the product pulls from the multipurpose tray instead.
	PS Defer Media		Enabled (default) Disabled	Select either the PostScript (PS) or HP paper-handling model.
	Use Another Tray		Enabled (default) Disabled	Turn on or off the control-panel prompt to select another tray when the specified tray is empty.
	Alternative Letterhead Mode		On Off (default)	Use this feature so that you can load letterhead or preprinted paper into the tray the same way for all print or copy jobs, whether you are printing or copying to one side of the sheet or to both sides of the sheet.
	Size/Type Prompt		Display (default) Do not display	Control whether the tray configuration message appears whenever a tray is opened or closed.
	Duplex Blank Pages		Auto (default) Yes	Control how the product handles two-sided jobs (duplexing).
General Copy Behavior	Hold off print job		On Off	Prevents print jobs from beginning to print while a walk-up user is setting up a job.
	Hold off time			Prevents non-copy print jobs from starting for a specified time after a copy job is completely printed.
	Scan Ahead		Enabled (default) Disabled	Turn on no-wait scanning. With Scan Ahead enabled, the pages in the original document are scanned to disk and held until the product becomes available.
	Auto Print Interrupt		Enabled Disabled (default)	When this feature is enabled, copy jobs can interrupt print jobs that are set to print multiple 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 product continues printing the remaining copies of the print job.
	Copy Interrupt		Enabled Disabled (default)	When this feature is enabled, a copy job that 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.
	Alternative Letterhead Mode		Off (default) On	This option allows loading of letterhead or preprinted paper the same way for all copy jobs, whether copying to one side of the paper or to both sides of the paper.

Table 2-15 Device Behavior menu (continued)

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

Table 2-15 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 for print jobs. Select Portrait if the short edge is at the top or Landscape if the long edge is at the top.
		Font Source	Select the source from the list.	Select the font source for the user-soft default font.
		Font Number	Type the font number. The range is between 0 and 102. The factory default is 0.	Specify the font number for the user soft default font by using the source that is specified in the Font Source menu item. The product 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, use this feature to select a default pitch (for a fixed-spaced font).
		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, 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)	Select any one of several 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	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 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	Select and maintain input trays by number when you are not using the printer driver, or when the software program has no option for tray selection.

Print Quality menu

Administration > Print Quality

Table 2-16 Print Quality menu

Menu item	Sub-menu item	Values	Description
Adjust Color	Highlights	Cyan Density. Magenta Density. Yellow Density. Black Density +5 to -5. Default is 0.	Adjust the darkness or lightness of highlights on a printed page. Lower values represent lighter highlights on a printed page, and higher values represent darker highlights on a printed page.
	Midtones	Cyan Density. Magenta Density. Yellow Density. Black Density +5 to -5. Default is 0.	Adjust the darkness or lightness of midtones on a printed page. Lower values represent lighter midtones on a printed page, and higher values represent darker midtones on a printed page.
	Shadows	Cyan Density. Magenta Density. Yellow Density. Black Density +5 to -5. Default is 0.	Adjust the darkness or lightness of shadows on a printed page. Lower values represent lighter shadows on a printed page, and higher values represent darker shadows on a printed page.
	Restore Color Values	Restore	Sets all the density values back to the factory default settings.
Set Registration	Test Page	Print	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)	Select the source input tray for printing the Set Registration page.
	Adjust Tray <X>	Shift from -20 to 20 along the X or Y axes. 0 is the default.	Perform the alignment procedure for each tray. When it creates an image, the product <i>scans</i> across the page from side to side as the sheet <i>feeds</i> from top to bottom into the product. 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.
Print Modes	<Paper Type>		Configure which mode is associated with which paper type.
	Restore Modes	Restore	Return all print-mode settings to the factory-default settings.
Auto Sense Mode	Tray 1 Sensing	Full Sensing (default) Transparency Only	Sets the sensing option for Tray 1 for paper types when using Auto Sense Mode . When Full Sensing is selected, the product senses every page and switches modes accordingly. The product recognizes overhead transparency and non-overhead transparency types.

Table 2-16 Print Quality menu (continued)

Menu item	Sub-menu item	Values	Description
Optimize	Background	Normal (default)	When Transparency Only is selected, the product senses only the first page and recognizes only overhead transparency types.
		Alternate 1	
		Alternate 2	
		Alternate 3	
	Registration	Normal (default)	Adjust this setting if you are having problems with color misregistration.
		Alternate	
	Transfer Control	Normal (default)	Adjust this setting if you are having problems with faint images repeated on the page.
		Alternate 1	
		Alternate 2	
		Alternate 3	
	Tray 1	Normal (default)	Select the Alternate setting if you are having problems with marks on the back side of the paper when printing from Tray 1. This increases the frequency of the cleaning cycle.
		Alternate	
	Environment	Normal (default)	Adjust this setting if you are having problems printing in low temperature and low humidity environments.
		Low Temp	
	Line Voltage	Normal (default)	Adjust this setting if the product is operating in a low-voltage environment and you are having problems with print quality such as blisters in the printed image.
		Low Voltage	
	Tracking Control	On (default)	Do not adjust this setting unless an HP-authorized support person recommends it.
		Off	
	Uniformity Control	Normal (default)	Adjust this setting if printed images have a mottled appearance.
		Alternate 1	
		Alternate 2	
		Alternate 3	
	Normal Paper	Standard (default)	Adjust this setting if you are printing on normal-weight paper that is very smooth.
		Smooth	
	Heavy Paper	Standard (default)	Adjust this setting if you are printing on heavy-weight paper that is very smooth.
		Smooth	
	Envelope Mode	Normal (default)	Adjust this setting if envelopes are partially sealed after printing.
		Reduced Temp	
	Resistance Mode	Normal (default)	Adjust this setting if you are in a low-humidity environment and you are having problems with loose toner particles after printing.
		Up	
		Down	

Table 2-16 Print Quality menu (continued)

Menu item	Sub-menu item	Values	Description
	Humidity Mode	Normal (default) High	Adjust this setting if you are in a high-humidity environment and you are having problems with light density in the printed image.
	Pre-rotation	Off (default) On	Adjust this setting if you are having problems with horizontal streaks on printed pages. Using this feature increases the warm-up time for the product.
	Fuser Temp	Normal (default) Up Down	Adjust this setting upward if toner is not fusing well. Adjust it downward if you are seeing a faint image of the page repeated at the bottom of the page or on the next page.
	Paper Curl	Normal (default) Reduced	Adjust this setting if paper is curling in a high-temperature and high-humidity environment.
	Restore Optimize		Return all the settings in the Optimize menu to the factory-default values.
Resolution	Image REt 3600 1200x600dpi		Select Image REt 3600 to produce fast, high-quality printing that is appropriate for most print jobs Select 1200x600dpi to produce the highest-quality printing available, but it may slow print speed. This setting may be useful for jobs that contain very thin lines or fine graphics.
Color REt		Enabled (default) Disabled	Enable or disable Resolution Enhancement technology (REt), which produces print output with smooth angles, curves, and edges.
Calibration/Cleaning	Auto Cleaning	Enabled Disabled (default)	When auto-cleaning is on, the product prints a cleaning page when the page count reaches the value that is set in Cleaning Interval .
	Cleaning Interval	1000 (default) 2000 5000 10000 20000	Use this feature to set the interval when the cleaning page is printed. The interval is measured by the number of pages printed.
	Auto Cleaning Size	Letter A4	Use this feature to select the size of paper used for the cleaning page.
	Process Cleaning Page	Process	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.
	Quick Calibration	Calibrate	Performs partial product calibrations.

Table 2-16 Print Quality menu (continued)

Menu item	Sub-menu item	Values	Description
	Full Calibration	Calibrate	Performs all product calibrations.
	Delay Calibration at Wake/Power On	No Yes (default)	<p>This menu controls the timing of the calibration when the printer wakes up or is turned on.</p> <ul style="list-style-type: none">• Select No to have the printer calibrate immediately when it wakes up or is turned on. The product will not print any jobs until it finishes calibrating.• Select Yes to enable a product that is asleep to accept print jobs before it calibrates. The product only accepts new jobs for a short time. It may start calibrating before it has printed all the jobs it has received. <p>NOTE: For the best results, allow the product to calibrate before printing. Print jobs performed before calibration may not be of the highest quality.</p>

Troubleshooting menu

Administration > Troubleshooting



NOTE: Many of the menu items under the Troubleshooting menu are for advanced troubleshooting purposes.

Table 2-17 Troubleshooting menu

Menu item	Sub-menu item	Sub-menu item	Values	Description
Event Log			Print	This shows the event codes and their corresponding engine cycles on the control-panel display.
Calibrate Scanner			Calibrate	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.
PQ Troubleshooting			Print	Print various diagnostic pages that help solve print-quality problems.
Fax T.30 Trace	T.30 Report		Print	Print or configure the fax T.30 trace report. T.30 is the standard that specifies handshaking, protocols, and error correction between fax machines.
		When to Print Report	Never auto print (default)	
			Print after any fax job	
			Print after fax send jobs	
			Print after any fax error	
			Print after send errors only	
Fax Transmit Signal Loss			A value between 0 and 30. The default is 0.	Set loss levels to compensate for phone-line signal loss. Do 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) Off	Disable V.34 mode if several fax failures have occurred or if phone line conditions require it.
Fax Speaker Mode			Normal (default)	A technician can use this feature technician to evaluate and diagnose fax issues by listening to the sounds of fax modulations.
			Diagnostic	
Diagnostic Page			Print	Print a diagnostic page that includes color swatches and the EP parameters table.
Disable Cartridge Check				Use this item to enter a mode where a cartridge (or color pair of cartridge and drum) can be removed to determine which particular

Table 2-17 Troubleshooting menu (continued)

Menu item	Sub-menu item	Sub-menu item	Values	Description
				color is the source of a problem. In this mode, all consumable-related errors are ignored.
Paper Path Sensors				Initiate a test of the paper-path sensors.
Paper Path Test	Test Page		Print	Generate a test page for testing the paper-handling features. Define the path for the test in order to test specific paper paths.
	Source		All trays Tray 1 Tray 2 (Additional trays are shown, if applicable.)	Specify whether the test page is printed from all trays or from a specific tray.
	Duplex		Off (default) On	Select whether the duplexer should be included in the test.
	Copies		Range: 1-500, Default is 1.	Select how many pages should be sent from the specified source as part of the test.
Manual Sensor Test				This item performs tests to determine whether the paper-path sensors are operating correctly.
Component Test	A list of available components appears.			Exercise individual parts independently to isolate noise, leaking, or other issues. To start the test, select one of the components. The test runs the number of times specified in the Repeat option. You might be prompted to remove parts from the product during the test. Press the Stop button to abort the test.
	Repeat		Once (default) Continuous	Determines the number of times the test runs.
Print/Stop Test			Continuous value from 0 to 60,000 milliseconds. Default: 0	Isolate faults by stopping the product 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 product stops at the specified time in the process.
Color Band Test	Test Page		Print	Prints a page that helps identify arcing in the high-voltage power supplies.
	Copies		Continuous value from 1 to 30. Default: 1	Specify the number of copies to print for the Color Band test.
Scanner Tests	A list of available scanner tests appears.			A service technician can use this menu item to diagnose potential problems with the product scanner.

Table 2-17 Troubleshooting menu (continued)

Menu item	Sub-menu item	Sub-menu item	Values	Description
Control Panel	LEDs			Verify that the components of the control panel are functioning correctly.
	Display			
	Buttons			
	Touchscreen			

Resets menu

Administration > Resets

Table 2-18 Resets menu

Menu item	Values	Description
Clear Local Address Book	Clear	Use this feature to clear all addresses from the address books that are stored on the product.
Clear Fax Activity Log	Yes No (default)	Use this feature to clear all events from the Fax Activity Log.
Restore Factory Telecom Setting	Restore	Use this option to restore the following settings to their factory default settings: Transmit Signal Loss, V34, Maximum Baud Rate, Speaker Mode.
Restore Factory Settings	Restore	Use this feature to restore all product settings to their factory defaults.
Reset Supplies	New Fuser Kit (Yes/No)	Notify the product that a new fuser kit has been installed.

Service menu

Administration > Service

The **Service** menu is locked and requires a PIN for access. This menu is intended for use by authorized service personnel. For information about the **Service** menu, see [Service mode functions on page 503](#).

3 Paper and print media

- [Supported paper and print media](#)
- [Supported paper and print media types](#)
- [Tray and bin capacity](#)
- [Custom paper sizes](#)
- [Load paper and print media](#)
- [Configure trays](#)
- [Choose an output bin](#)

Supported paper and print media

This product supports a number of paper sizes, and it adapts to various media.



NOTE: To obtain best results, select the correct paper size and type in the printer driver before printing.

Table 3-1 Supported paper and print media sizes

Size and dimensions	Tray 1	Tray 2	Tray 3 (optional)
Letter 216 x 279 mm (8.5 x 11 in)	✓	✓	✓
Legal 216 x 356 mm (8.5 x 14 in)	✓		✓
A4 210 x 297 mm (8.27 x 11.69 in)	✓	✓	✓
RA4 215 x 305 mm (8.5 x 12.0 in)	✓		✓
A5 148 x 210 mm (5.83 x 8.27 in)	✓	✓	✓
B5 (JIS) 182 x 257 mm (7.17 x 10.12 in)	✓	✓	✓
B6 (JIS) 128 x 182 mm (5.04 x 7.17 in)	✓		
Executive 184 x 267 mm (7.24 x 10.51 in)	✓	✓	✓
Statement 140 x 216 mm (5.5 x 8.5 in)	✓		
5x7 127 x 178 mm (5 x 7 in)	✓		
5x8 127 x 203 mm (5 x 8 in)	✓		
A6 105 x 148 mm (4.13 x 5.83 in)	✓		
Postcard (JIS) 100 x 148 mm (3.9 x 5.8 in)	✓		
Double Postcard (JIS) 148 x 200 mm (5.8 x 7.9 in)	✓		
16K	✓	✓	✓

Table 3-1 Supported paper and print media sizes (continued)

Size and dimensions	Tray 1	Tray 2	Tray 3 (optional)
184 x 260 mm (7.2 x 10.2 in)			
16K	✓	✓	✓
195 x 270 mm (7.7 x 10.6 in)			
16K	✓	✓	✓
197 x 273 mm (7.8 x 10.8 in)			
8.5 x 13	✓		✓
216 x 330 mm (8.5 x 13 in)			
Envelope Commercial #10	✓		
105 x 241 mm (4.13 x 9.49 in)			
Envelope #9	✓		
100 mm x 226 mm (3.9 x 8.9 in)			
Envelope B5	✓		
176 x 250 mm (6.93 x 9.84 in)			
Envelope C5 ISO	✓		
162 x 229 mm (6.93 x 9.84 in)			
Envelope C6	✓		
114 x 162 mm (4.49 x 6.38 in)			
Envelope DL ISO	✓		
110 x 220 mm (4.33 x 8.66 in)			
Envelope Monarch	✓		
98 x 191 mm (3.9 x 7.5 in)			
Custom	✓		
98.4 x 148 mm to 216 x 356 mm (3.9 x 5.8 in to 8.5 x 14 in)			
Custom		✓	
148 x 210 mm to 216 x 297 mm (5.83 x 8.27 in to 8.5 x 11.69 in)			
Custom			✓
148 x 210 mm to 216 x 356 mm (5.83 x 8.27 in to 8.5 x 14 in)			

Supported paper and print media types

For a complete list of specific HP-brand paper that this product supports, go to www.hp.com/support/cljcm3530mfp.

Paper type	Tray 1	Tray 2	Tray 3 (optional)
Plain Paper	✓	✓	✓
Light 60–74 g/m ²	✓	✓	✓
Midweight (96–110 g/m ²)	✓	✓	✓
Heavy (111–130 g/m ²)	✓	✓	✓
Extra Heavy (131–175 g/m ²)	✓		✓
Color Transparency	✓	✓	✓
Labels	✓		✓
Letterhead	✓	✓	✓
Preprinted	✓	✓	✓
Prepunched	✓	✓	✓
Colored	✓	✓	✓
Rough	✓	✓	✓
Bond	✓	✓	✓
Recycled	✓	✓	✓
Envelope	✓		
Cardstock	✓		✓
Mid-weight glossy (96–110 g/m ²)	✓	✓	✓
Heavy glossy (111–130 g/m ²)	✓	✓	✓
Extra-heavy glossy (131–175 g/m ²)	✓	✓	✓
Card glossy (176–220 g/m ²)	✓	✓	✓
Opaque film	✓	✓	✓
HP Tough Paper	✓	✓	✓
HP Soft Gloss (120 g/m ²)	✓	✓	✓

Paper type	Tray 1	Tray 2	Tray 3 (optional)
HP Glossy (130 g/m ²)	✓	✓	✓
HP Glossy (160 g/m ²)	✓	✓	✓
HP Glossy (220 g/m ²)	✓	✓	✓

Tray and bin capacity

Tray or bin	Paper type	Specifications	Quantity
Tray 1	Paper	Range: 60 g/m ² (16 lb) bond to 220 g/m ² (59 lb) bond	Maximum stack height: 10 mm (0.39 in) Equivalent to 100 sheets of 75 g/m ² (20 lb) bond
	Envelopes	Less than 60 g/m ² (16 lb) bond to 90 g/m ² (24 lb) bond	Up to 10 envelopes
	Labels	Maximum 0.102 mm (0.004 in) thick	Maximum stack height: 10 mm (0.39 in)
	Transparencies	Minimum 0.102 mm (0.004 in) thick	Maximum stack height: 10 mm (0.39 in) Up to 50 sheets
	Glossy paper	Range: 96 g/m ² (26 lb) bond to 220 g/m ² (59 lb) bond	Maximum stack height: 10 mm (0.39 in) Up to 50 sheets
Tray 2	Paper	Range: 60 g/m ² (16 lb) bond to 220 g/m ² (59 lb) bond	Maximum stack height: 25 mm (0.98 in) Equivalent to 250 sheets of 75 g/m ² (20 lb) bond Maximum stack height for A6 paper: 15 mm (0.59 in)
	Transparencies	Minimum 0.102 mm (0.004 in) thick	Maximum stack height: 25 mm (0.98 in)
	Glossy paper	Range: 96 g/m ² (26 lb) bond to 220 g/m ² (59 lb) bond	Maximum stack height: 25 mm (0.98 in)
Tray 3 (optional)	Paper	Range: 60 g/m ² (16 lb) bond to 220 g/m ² (59 lb) bond	Equivalent to 500 sheets of 75 g/m ² (20 lb) bond Maximum stack height: 56 mm (2.2 in)
	Transparencies	Minimum 0.102 mm (0.004 in) thick	Maximum stack height: 56 mm (2.2 in)
	Glossy paper	Range: 96 g/m ² (26 lb) bond to 220 g/m ² (59 lb) bond	Maximum stack height: 56 mm (2.2 in)
Output bin	Paper		Up to 250 sheets of 75 g/m ² (20 lb) bond

Custom paper sizes

This product supports a variety of custom paper sizes. Supported custom sizes are sizes that are within the minimum- and maximum-size guidelines for the product but are not listed in the supported paper sizes table. When using a supported custom size, specify the custom size in the print driver, and load the paper in a tray that supports custom sizes.

Load paper and print media

You can load different media in the trays and then request media by type or size by using the control panel.

Paper orientation for loading trays

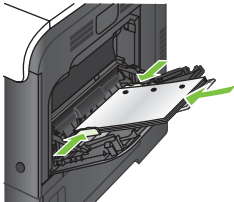
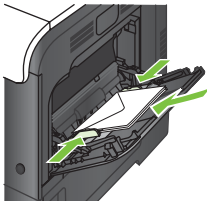
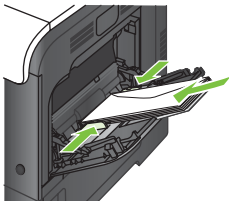
If you are using paper that requires a specific orientation, load it according to the information in the following tables.



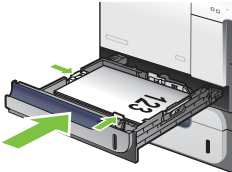
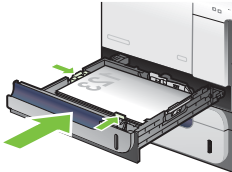
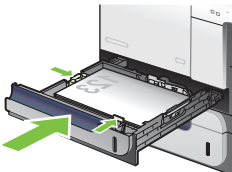
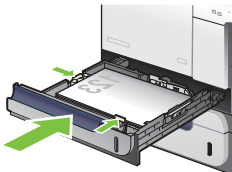
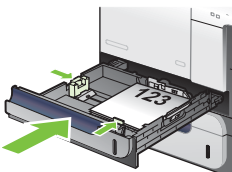
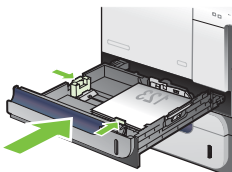
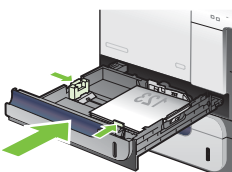
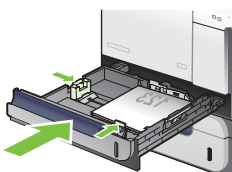
NOTE: The [Alternative Letterhead Mode](#) setting affects the way you load letterhead or preprinted paper. This setting is turned off by default. For more information, see [Device Behavior menu on page 42](#).

Tray 1

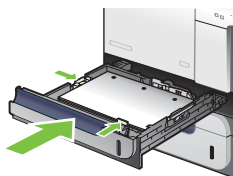
Paper type	Image orientation	Duplex mode	How to load paper	How to load paper
			Alternative Letterhead Mode = Off	Alternative Letterhead Mode = On
Preprinted or letterhead	Portrait	1-sided printing	Face down	Face up
			Top edge leading into the product	Bottom edge leading into the product
		2-sided printing	Face up	Face up
			Bottom edge leading into the product	Bottom edge leading into the product
	Landscape	1-sided printing	Face down	Face up
			Top edge toward the back of the product	Top edge toward the back of the product
		2-sided printing	Face up	Face up
			Top edge toward the back of the product	Top edge toward the back of the product
Prepunched	Portrait or landscape	1- or 2-sided printing	Holes toward the back of the product	Not applicable

Paper type	Image orientation	Duplex mode	How to load paper	How to load paper
			Alternative Letterhead Mode = Off	Alternative Letterhead Mode = On
				
Envelopes	Long edge of the envelope feeding into the product	1-sided printing	Face down Top edge leading into the product	Not applicable
				
	Short edge of the envelope feeding into the product	1-sided printing	Face down Top edge toward the back of the product	Not applicable
				

Tray 2 or optional Tray 3

Paper type	Image orientation	Duplex mode	How to load paper Alternative Letterhead Mode = Off	How to load paper Alternative Letterhead Mode = On
Preprinted or letterhead	Portrait	1-sided printing	Face up Top edge at the right side of the tray 	Face down Top edge at the left side of the tray 
		2-sided printing	Face down Top edge at the left side of the tray 	Face down Top edge at the left side of the tray 
	Landscape	1-sided printing	Face up Top edge toward the back of the product 	Face down Top edge toward the back of the product 
		2-sided printing	Face down Top edge toward the back of the product 	Face down Top edge toward the back of the product 
Prepunched	Portrait or landscape	1- or 2-sided printing	Holes toward the back of the product	Not applicable

Paper type	Image orientation	Duplex mode	How to load paper	How to load paper
			Alternative Letterhead Mode = Off	Alternative Letterhead Mode = On

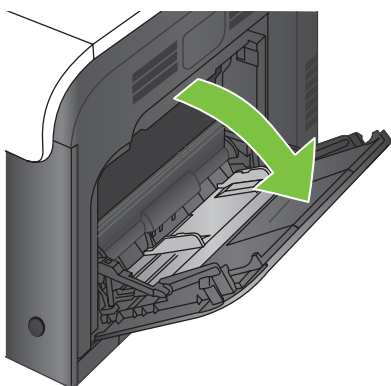


Load Tray 1

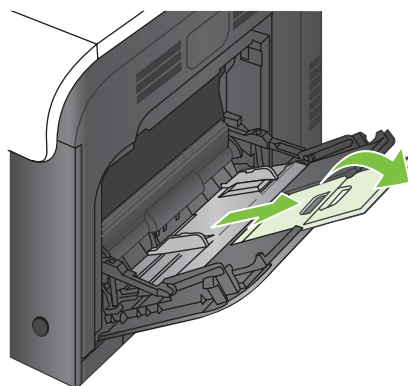
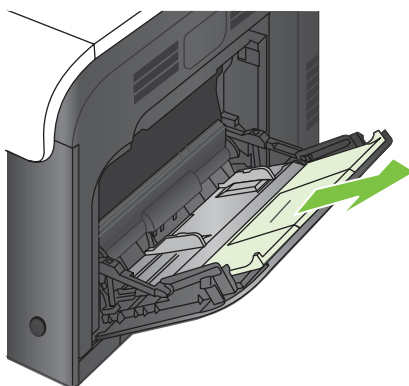
TIP: To see an animation of this procedure go to this Web site: www.hp.com/go/cljcm3530mfp-load-tray1.

CAUTION: To avoid jams, never add or remove paper from Tray 1 during printing.

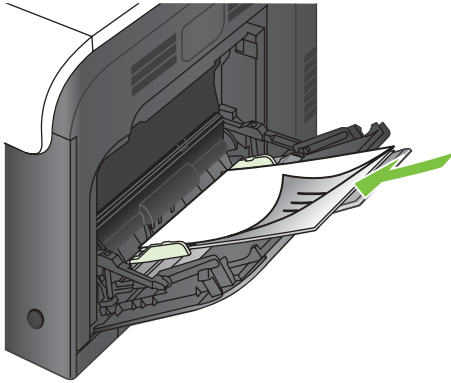
1. Open Tray 1.



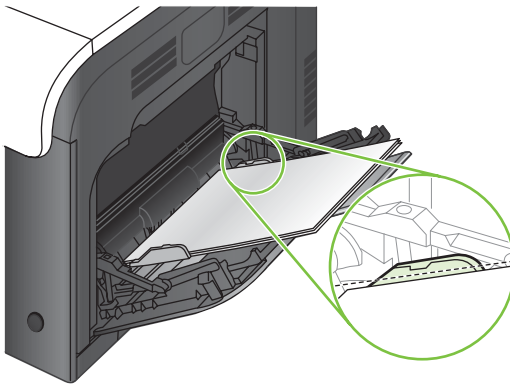
2. Fold out the tray extension to support the paper and set the side guides to the correct width.



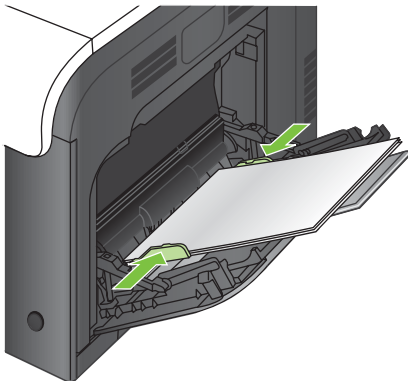
3. Load paper in the tray face down and the short, top edge going into the product first.



4. Make sure the stack fits under the tabs on the guides and does not exceed the load-level indicators.



5. Adjust the side guides so that they lightly touch the paper stack but do not bend it.



Print envelopes

If your software does not automatically format an envelope, specify **Landscape** for page orientation in your software program or printer driver. Use the following guidelines to set margins for return and destination addresses on Commercial #10 or DL envelopes:

Address type	Left margin	Top margin
Return	15 mm (0.6 in)	15 mm (0.6 in)
Destination	102 mm (4 in)	51 mm (2 in)

For envelopes of other sizes, adjust the margin settings accordingly.

Load Tray 2

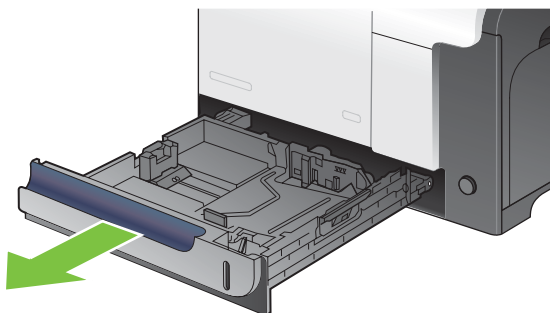
This tray holds up to 250 sheets of 75 g/m² (20 lb) paper. If the paper is heavier, the tray does not hold as many sheets. Do not overfill the tray.

△ **CAUTION:** Do not print envelopes, labels, postcards, or unsupported sizes of paper from the Tray 2. Print these types of paper only from Tray 1.

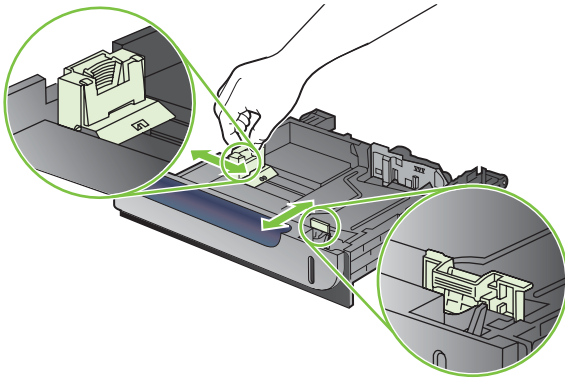
💡 **TIP:** To see an animation of this procedure go to this Web site: www.hp.com/go/cljcm3530mfp-load-tray2.

1. Slide open the tray.


📝 **NOTE:** Do not open the tray while it is in use.

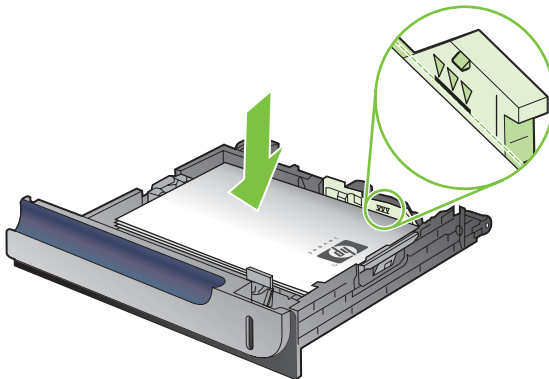



2. Adjust the paper-length and paper-width guides by squeezing the adjustment latch and sliding the guides to the size of the paper being used.



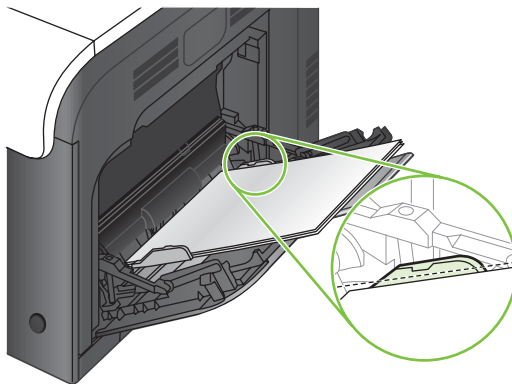
3. Load paper into the tray face up. Check the paper to verify the guides lightly touch the stack, but do not bend it.

 **NOTE:** To prevent jams, do not overfill the tray. Be sure the top of the stack is below the tray full indicator.



 **NOTE:** If the tray is not adjusted correctly, an error message might appear during printing or the paper might jam.

4. Slide the tray into the product.



5. The control panel shows the tray's paper type and size. If the configuration is not correct, follow the instructions on the control panel to change the size or type.



Load the optional 500-sheet paper and heavy media tray (Tray 3)

Tray 3 holds up to 500 sheets of standard paper.

The product automatically detects the following standard sizes of paper in Tray 3: Letter, Legal, Executive, A4, A5, and B5 (JIS).

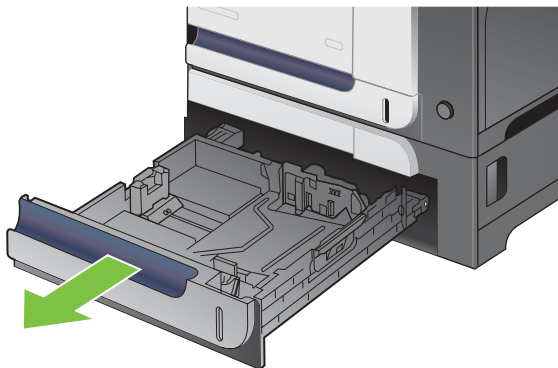
- △ **CAUTION:** Do not print envelopes or unsupported sizes of paper from Tray 3. Print these types of paper only from Tray 1.

Load standard-sized paper into Tray 3

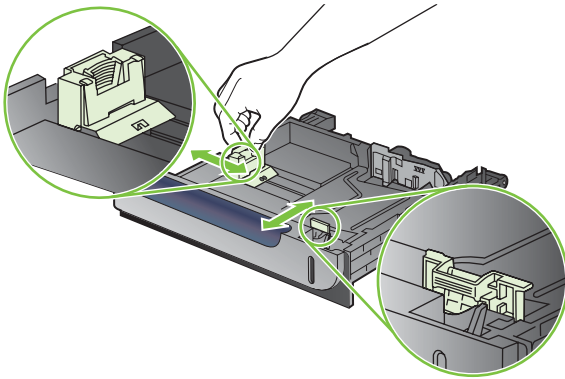
- 💡 **TIP:** To see an animation of this procedure go to this Web site: www.hp.com/go/cljcm3530mfp-load-tray3.

1. Slide open the tray.


- 📄 **NOTE:** Do not open the tray while it is in use.

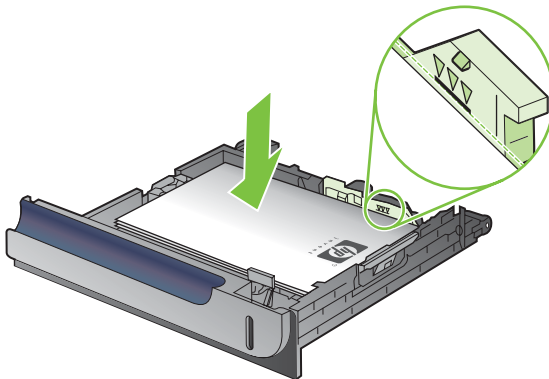



2. Adjust the paper-length and paper-width guides by squeezing the adjustment latches and sliding the guides to the size of the paper being used.



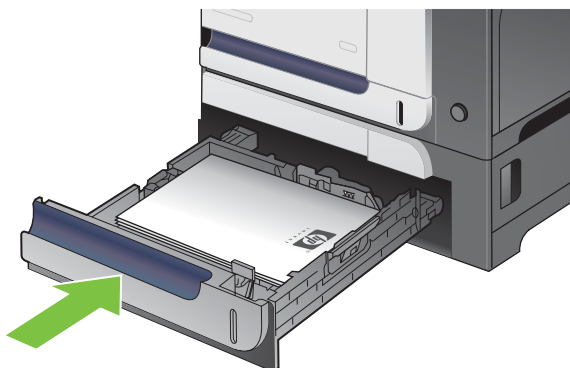
3. Load paper into the tray face up. Check the paper to verify the guides lightly touch the stack, but do not bend it.

 **NOTE:** To prevent jams, do not overfill the tray. Be sure the top of the stack is below the tray full indicator.

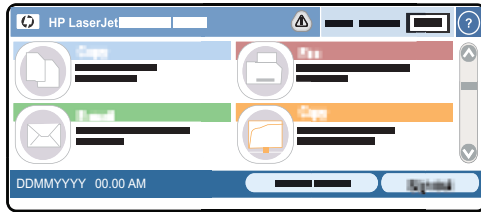


 **NOTE:** If the tray is not adjusted correctly, an error message might appear during printing or the paper might jam.

4. Slide the tray into the product.



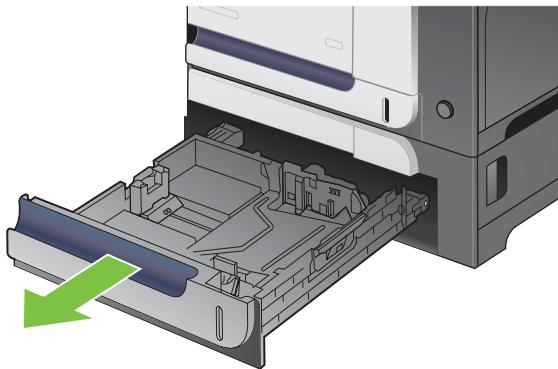
5. The control panel shows the tray's paper type and size. If the configuration is not correct, follow the instructions on the control panel to change the size or type.



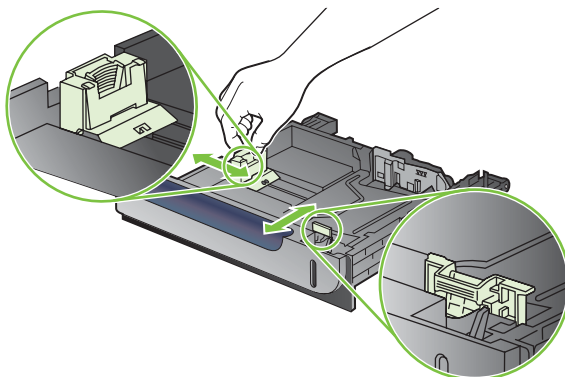
Load custom-size paper into Tray 3

To use custom media, change the size setting on the control panel to **Custom** and set the unit of measure, **X Dimension** and **Y Dimension**.

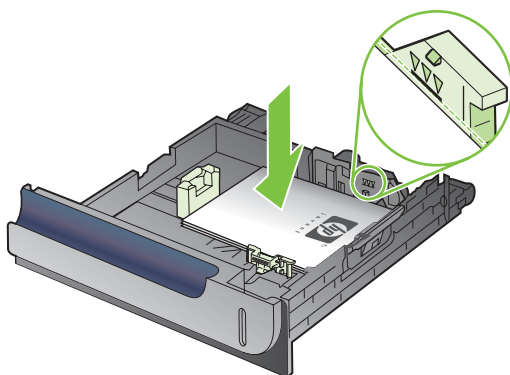
1. Slide open the tray.



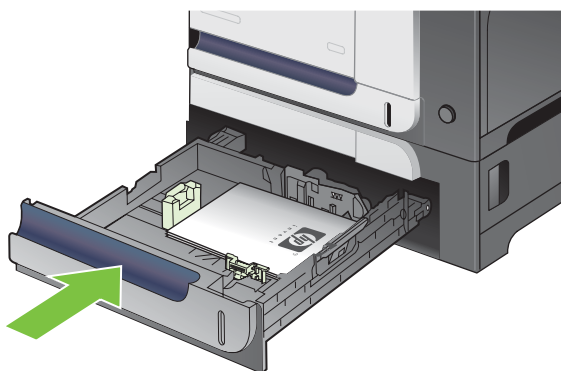
2. Adjust the paper-length and paper-width guides by squeezing the adjustment latches and sliding the guides to the size of the paper being used.



3. Load paper into the tray face up. Check the paper to verify the guides lightly touch the stack, but do not bend it.



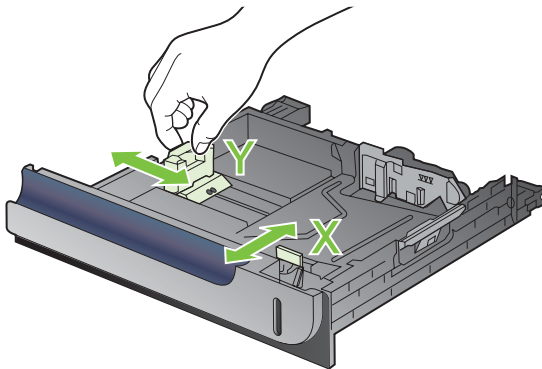
4. Slide the tray into the product. The control panel shows the paper type and size.



5. The control panel prompts you to set the paper size and type. Select the **Custom** setting, and then configure the X and Y dimensions of the custom paper size.



NOTE: See the label in the paper tray, or the following illustration, to determine the X and Y dimensions.



Configure trays

The product automatically prompts you to configure a tray for type and size in the following situations:

- When you load paper into the tray
- When you specify a particular tray or media type for a print job through the printer driver or a software program and the tray is not configured to match the print-job's settings

The following message appears on the control panel: **Tray <x> [type] [size] To change size or type, touch "Modify". To accept, touch "OK".**



NOTE: The prompt does not appear if you are printing from Tray 1 and Tray 1 is configured for **Any Custom** and **Any Type**.

NOTE: If you have used other HP LaserJet product models, you might be accustomed to configuring Tray 1 to **First** mode or **Cassette** mode. For this product, setting Tray 1 size to **Any Custom** is equivalent to **First** mode. Setting size for Tray 1 to a setting other than **Any Custom** is equivalent to **Cassette** mode.

Configure a tray when loading paper

1. Load paper in the tray. Close the tray if you are using Tray 2 or 3.
2. The tray configuration message appears.
3. Touch **OK** to accept the detected size and type, or touch **Modify** to choose a different paper size or type.
4. Select the correct size and type and then touch **OK**.

Configure a tray to match print job settings

1. In the software program, specify the source tray, the paper size, and the paper type.
2. Send the job to the product.
If the tray needs to be configured, the tray configuration message appears.
3. Load the tray with the specified type and size of paper, and then close the tray.
4. Touch **OK** to accept the detected size and type, or touch **Modify** to choose a different paper size or type.
5. Select the correct size and type and then touch **OK**.

Automatic overhead transparency sensing (auto sense mode)

The automatic media type sensor functions only when that tray is configured to the **Any Type** setting. Configuring a tray to any other type, such as Bond or Glossy, deactivates the media sensor in that tray.

The product can automatically classify paper types into one of two categories:

- Non-transparency
- Transparency

For more control, a specific type must be selected in the job or configured in a tray.

Auto-sense settings

Full sensing (Tray 1 only)

- The product distinguishes between transparencies (Transparency mode) and paper (Normal mode).
- Each time the product prints a page, it senses transparencies or non-transparencies.
- This is the slowest mode.

Transparency only

- The product distinguishes between transparencies (Transparency mode) and paper (Normal mode).
- The product assumes that the second and all subsequent pages are of the same media type as the first page.
- This is the fastest mode and is useful for high-volume printing in Normal mode.

For more information about setting these options, see [Print Quality menu on page 46](#).

Select the paper by source, type, or size

In the Microsoft Windows operating system, three settings affect how the printer driver tries to pull media when you send a print job. *Source*, *Type*, and *Size* settings appear in the **Page Setup**, **Print**, or **Print Properties** dialog boxes in most software programs. Unless you change these settings, the product automatically selects a tray using the default settings.

Source

To print by *Source* select a specific tray for the product to pull from. If you select a tray that is configured for a type or size that does not match your print job, the product prompts you to load the tray with the type or size of print media for your print job before printing it. When you load the tray, the product begins printing.

Type and Size

Printing by *Type* or *Size* means that you want the product to pull from the tray that is loaded with the correct type and size of media. Selecting media by type rather than source is similar to locking out trays and helps protect special media from accidental use. For example, if a tray is configured for letterhead and you select plain paper, the product will not pull the letterhead from that tray. Instead, it will pull from a tray that has plain paper loaded and is configured for plain paper on the product control panel. Selecting media by Type and Size results in significantly better print quality for heavy paper, glossy paper, and transparencies. Using the wrong setting might result in unsatisfactory print quality. Always print by Type for special print media, such as labels or transparencies. Print by Size for envelopes, if possible.

- To print by Type or Size, select the Type or Size from the **Page Setup** dialog box, the **Print** dialog box, or the **Print Properties** dialog box, depending on the software program.
- If you often print on a certain type or size of media, configure a tray for that type or size. Then, when you select that type or size as you print a job, the product automatically pulls media from the tray that is configured for that type or size.

Choose an output bin

The product has an ADF output bin and the standard output bin for printed pages.



1	Standard output bin
2	ADF output bin (for copy originals)

When you scan or copy documents by using the ADF, the originals are automatically delivered to the ADF output bin.

When you send print jobs to the product from a computer, the output is to the standard output bin.

4 Manage and maintain

- [Print information pages](#)
- [HP Easy Printer Care](#)
- [Embedded Web server](#)
- [Use HP Web Jetadmin software](#)
- [Product security features](#)
- [Manage supplies](#)
- [Clean the product](#)
- [Product updates](#)

Print information pages

Information pages provide details about the product and its current configuration. The following table provides the instructions for printing the information pages.

Page description	How to print the page from the product control panel
Administration Menu Map Shows the control-panel menus and available settings.	<ol style="list-style-type: none">1. At the product control panel, touch the down arrow until the Administration menu displays.2. Touch the Administration menu to open it.3. Touch the Information menu to open it.4. Touch the Configuration/Status Pages menu to open it.5. Touch the Administration Menu Map option, and then touch the Print button. <p>The content of the menu map varies, depending on the options currently installed in the product.</p> <p>For a complete list of control panel menus and possible values, see Control panel on page 11.</p>
Configuration Page Shows product settings and installed accessories.	<ol style="list-style-type: none">1. At the product control panel, touch the down arrow until the Administration menu displays.2. Touch the Administration menu to open it.3. Touch the Information menu to open it.4. Touch the Configuration/Status Pages menu to open it.5. Touch the Configuration Page option, and then touch the Print button. <p>NOTE: If the product contains an HP Jetdirect print server or an optional hard disk drive, additional configuration pages print that provide information about those devices.</p>
Supplies Status Page Shows print-cartridge toner levels.	<ol style="list-style-type: none">1. At the product control panel, touch the down arrow until the Administration menu displays.2. Touch the Administration menu to open it.3. Touch the Information menu to open it.4. Touch the Configuration/Status Pages menu to open it.5. Touch the Supplies Status Page option, and then touch the Print button. <p>NOTE: If you are using non-HP supplies, the supplies status page might not show the remaining life for those supplies.</p>
Usage Page Shows a page count for each size of paper printed, the number of one-sided (simplex) or two-sided (duplexed) pages, and the average percentage of coverage.	<ol style="list-style-type: none">1. At the product control panel, touch the down arrow until the Administration menu displays.2. Touch the Administration menu to open it.3. Touch the Information menu to open it.4. Touch the Configuration/Status Pages menu to open it.5. Touch the Usage Page option, and then touch the Print button.

Page description	How to print the page from the product control panel
Color Usage Job Log Shows job-by-job color usage information.	<ol style="list-style-type: none"> 1. At the product control panel, touch the down arrow until the Administration menu displays. 2. Touch the Administration menu to open it. 3. Touch the Information menu to open it. 4. Touch the Configuration/Status Pages menu to open it. 5. Touch the Color Usage Job Log option, and then touch the Print button.
File Directory Contains information for any mass storage devices, such as flash drives, memory cards, or hard disks, that are installed in the product.	<ol style="list-style-type: none"> 1. At the product control panel, touch the down arrow until the Administration menu displays. 2. Touch the Administration menu to open it. 3. Touch the Information menu to open it. 4. Touch the Configuration/Status Pages menu to open it. 5. Touch the down arrow until the File Directory option displays. 6. Touch the File Directory option, and then touch the Print button.
Fax Reports Five reports show fax activity, fax calls, billing codes, blocked fax numbers, and speed-dial numbers. NOTE: Fax reports are available only on product models that have fax capabilities.	<ol style="list-style-type: none"> 1. At the product control panel, touch the down arrow until the Administration menu displays. 2. Touch the Administration menu to open it. 3. Touch the Information menu to open it. 4. Touch the Fax Reports menu to open it. 5. Touch one of the following buttons to print the corresponding report: <ul style="list-style-type: none"> ◦ Fax Activity Log ◦ Fax Call Report ◦ Billing Codes Report ◦ Blocked Fax List ◦ Speed Dial List 6. Touch the Print button. <p>For more information, see the fax guide that came with the product.</p>
Sample Pages/Fonts Shows which fonts are installed in the product.	<ol style="list-style-type: none"> 1. At the product control panel, touch the down arrow until the Administration menu displays. 2. Touch the Administration menu to open it. 3. Touch the Information menu to open it. 4. Touch Sample Pages/Fonts. 5. Touch the down arrow to scroll to the PCL Font List or PS Font List option. 6. Touch the PCL Font List or PS Font List option, and then touch the Print button. <p>NOTE: The font lists also show which fonts reside on a hard disk accessory or DIMM.</p>

HP Easy Printer Care

Open the HP Easy Printer Care software


Use one of the following methods to open the HP Easy Printer Care software:


- On the **Start** menu, select **Programs**, select **Hewlett-Packard**, select **HP Easy Printer Care**, and then click **Start HP Easy Printer Care**.
- In the Windows system tray (in the lower-right corner of the desktop), double-click the HP Easy Printer Care icon.
- Double-click the desktop icon.

HP Easy Printer Care software sections

HP Easy Printer Care software can provide information about multiple HP products that are on your network as well as any products that are directly connected to your computer. Some of the items that are in the following table might not be available for every product.

The Help button (?) in the upper-right corner of each page provides more detailed information about the options on that page.


Section	Options
Device List tab When you open the software, this is the first page that appears. NOTE: To return to this page from any tab, click My HP Printers in the left side of the window.	<ul style="list-style-type: none">● Devices list: Shows the products that you can select. NOTE: The product information appears either in list form or as icons, depending on the setting for the View as option.● The information on this tab includes current alerts for the product.● If you click a product in the list, the HP Easy Printer Care opens the Overview tab for that product.
Compatible Printers	Provides a list of all the HP products that support HP Easy Printer Care software.
Find Other Printers window Add more products to the My HP Printers list	Click the Find Other Printers link in the Devices list to open the Find Other Printers window. The Find Other Printers window provides a utility that detects other network printers so that you can add them to the My HP Printers list and then monitor those products from your computer.
Overview tab Contains basic status information for the product	<ul style="list-style-type: none">● Device Status section: This section shows product-identification information and the product status. It indicates product-alert conditions, such as when a print cartridge has reached its estimated end of life. After you correct a problem with the product, click the refresh button  in the upper-right corner of the window to update the status.● Supplies Status section: Shows detailed supplies status, such as the estimated life remaining in the print cartridge and the status of the paper that is loaded in each tray.● Supplies Details link: Opens the supplies status page to view more detailed information about product supplies, ordering information, and recycling information.

Section	Options
Support tab Provides links to support information	<ul style="list-style-type: none"> • Device Status section: This section shows product-identification information and the product status. It indicates product-alert conditions, such as a print cartridge that is at its estimated end of life. After you correct a problem with the product, click the refresh button  in the upper-right corner of the window to update the status. • Device Management section: Provides links to information about HP Easy Printer Care, to advanced product settings, and to product usage reports. • Troubleshooting and Help: Provides links to tools that you can use to resolve problems, to online product support information, and to online HP experts.
Settings tab Configure product settings, adjust print-quality settings, and find information about specific product features NOTE: This tab is not available for some products.	<ul style="list-style-type: none"> • About: Provides general information about this tab. • General: Provides information about the product, such as the model number, serial number, and the settings for date and time, if they are available. • Information Pages: Provides links to print the information pages that are available for the product. • Capabilities: Provides information about product features, such as duplexing, the available memory, and the available printing personalities. Click Change to adjust the settings. • Print Quality: Provides information about print-quality settings. Click Change to adjust the settings. • Trays / Paper: Provides information about the trays and how they are configured. Click Change to adjust the settings. • Restore Defaults: Provides a way to restore the product settings to the factory defaults. Click Restore to restore the settings to the defaults.
HP Proactive Support NOTE: This item is available from the Overview and Support tabs.	When enabled, HP Proactive Support routinely scans your printing system to identify potential problems. Click the more info link to configure how frequently the scans occur. This page also provides information about available updates for product software, firmware, and HP printer drivers. You can accept or decline each recommended update.
Supplies Ordering button Click the Supplies Ordering button on any tab to open the Supplies Ordering window, which provides access to online supplies ordering. NOTE: This item is available from the Overview and Support tabs.	<ul style="list-style-type: none"> • Ordering list: Shows the supplies that you can order for each product. To order a certain item, click the Order check box for that item in the supplies list. You can sort the list by product, or by the supplies that need to be ordered the soonest. The list contains supplies information for every product that is in the My HP Printers list. • Shop Online for Supplies button: Opens the HP SureSupply Web site in a new browser window. If you have checked the Order check box for any items, the information about those items can be transferred to the Web site, where you will receive information on options for purchasing your selected supplies. • Print Shopping List button: Prints the information for the supplies that have the Order check box selected.

Section	Options
<p>Alert Settings link</p> <p>NOTE: This item is available from the Overview and Support tabs.</p>	<p>Click Alert Settings to open the Alert Settings window, in which you can configure alerts for each product.</p> <ul style="list-style-type: none"> Alerting is on or off: Activates or deactivates the alerts feature. Printer Alerts: Select the option to receive alerts for critical errors only, or for any error. Job Alerts: For products that support it, you can receive alerts for specific print jobs.
<p>Color Access Control</p> <p>NOTE: This item is available only for HP color products that support Color Access Control.</p> <p>NOTE: This item is available from the Overview and Support tabs.</p>	<p>Use this feature to permit or restrict color printing.</p>

Embedded Web server


Use the embedded Web server to view product and network status and to manage printing functions from your computer instead of from the product control panel. The following are examples of what you can do using the embedded Web server:

 **NOTE:** When the printer is directly connected to a computer, use the HP Easy Printer Care to view the printer status.

- View product status information.
- Set the type of media that is loaded in each tray.
- Determine the remaining life for all supplies and order new ones.
- View and change tray configurations.
- View and change the product control-panel menu configuration.
- View and print internal pages.
- Receive notification of product and supplies events.
- View and change network configuration.


To use the embedded Web server, you must have Microsoft Internet Explorer 5.01 or later or Netscape 6.2 or later for Windows, Mac OS, and Linux (Netscape only). Netscape Navigator 4.7 is required for HP-UX 10 and HP-UX 11. The embedded Web server works when the product is connected to an IP-based network. The embedded Web server does not support IPX-based product connections. You do not have to have Internet access to open and use the embedded Web server.

When the product is connected to the network, the embedded Web server is automatically available.

 **NOTE:** For complete information about using the embedded Web server, see the *Embedded Web Server User Guide*, which is on the product Administrator CD.

Open the embedded Web server by using a network connection

1. In a supported Web browser on your computer, type the product IP address or host name in the address/URL field. To find the IP address or host name, print a configuration page. See [Print information pages on page 80](#).

 **NOTE:** After you open the URL, you can bookmark it so that you can return to it quickly in the future.

2. The embedded Web server has four tabs that contain settings and information about the product: the **Information** tab, the **Settings** tab, the **Networking** tab, and the **Digital Sending** tab. Click the tab that you want to view.

See [Embedded Web server sections on page 86](#) for more information about each tab.

Embedded Web server sections

Tab or section	Options
Information tab Provides product, status, and configuration information	<ul style="list-style-type: none"> • Device Status: Shows the product 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% indicating that a supply has reached its estimated end of life. This page also provides supplies part numbers. To order new supplies, click Shop for Supplies in the Other Links area on the left side of the window. • Event Log: Shows a list of all product events and errors. • Usage Page: Shows a summary of the number of pages the product has printed, grouped by size and type. • Diagnostics Page: Allows you to name the product, show the company name, assign an asset number to the product, and name the primary contact who manages the product. An HP-authorized support person might ask for this information. • Device Information: Shows the product network name, address, and model information. To customize these entries, click Device Information on the Settings tab. • Control Panel: Shows messages from the control panel, such as Ready or Sleep mode on. • Color Usage Job Log: Shows the total pages printed, the number of pages printed in color, and the number of pages printed in black only. • Print: Allows you to send print-ready jobs to the product.
Settings tab Provides the ability to configure the product from your computer	<ul style="list-style-type: none"> • Configure Device: Allows you to configure product default settings. This page contains the traditional menus found on the control-panel display. • Tray Sizes/Types: Shows the size and type of paper and print media allowed for each input tray. • E-mail Server: Network only. Used in conjunction with the Alerts page to set up e-mail alerts. • Alerts: Network only. Allows you to set up to receive e-mail alerts for various product and supplies events. • AutoSend: Allows you to configure the product to send automated e-mails regarding product 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. • Authentication Manager: Allows you to determine which product functions will require a user to provide log-in information in order to use those functions. • LDAP Authentication: Allows you to configure a Lightweight Directory Access Protocol (LDAP) server to limit product access to certain users. The LDAP server will require a user to provide log-in information in order to gain access to the product. • Kerberos Authentication: Allows you to configure a Kerberos network authentication protocol, which provides strong authentication for client/server applications by using secret-key cryptography.

Tab or section	Options
	<ul style="list-style-type: none"> ● Device PIN: Allows you to configure the PIN numbers that are required to access various product functions. Use the Authentication Manager page to select Group 1 PIN or Group 2 PIN for the various functions. For example, you could configure the Copy option to require Group 1 PIN and configure the Send to E-mail option to require Group 2 PIN. ● User PIN: Allows you to add, edit, or delete individual users who are allowed to use various product functions such as copy, fax, and digital sending. ● 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 product and assign an asset number to it. Enter the name and e-mail address for the primary contact who will receive information about the product. ● 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. ● Sleep Schedule: Allows you to set or edit a wake time, sleep time, and sleep delay for the product. ● Restrict Color: Allows you to permit or restrict color printing. You can specify permissions for individual users or for jobs that are sent from specific software programs. ● Home Screen Setup: Allows you to configure which features display on the Home screen and the order in which they display. <p>NOTE: The Settings tab can be password-protected. If this product is on a network, always consult with the system administrator before changing settings on this tab.</p>
Digital Sending tab	<p>Use the pages on the Digital Sending tab to configure the digital-sending features.</p> <p>NOTE: If the product is configured to use the optional HP Digital Sending Software, the options on these tabs are not available. Instead, all digital-sending configuration is performed by using the HP Digital Sending Software.</p> <ul style="list-style-type: none"> ● General. Set up contact information for the system administrator. ● Send to Folder. Allows you to enable, disable, and configure the Send to Folder capabilities on the product. It is also used to link the product to individual folder destinations that exist in the network. As a first step, you must create and configure destination folders. These destination folders need to be operational before using this page to add the destinations to the product. ● E-mail Settings. Configure the e-mail settings for digital sending. You can specify the SMTP server, the default "From" address, and the default subject. You can also set the maximum file size that is allowed for attachments. ● E-mail Address Book. The E-mail Address Book page enables you to add e-mail addresses into the product one at a time, and to edit e-mail addresses that have already been saved in the product. You can also use the Import/Export tab to load a large list of frequently-used e-mail addresses on to the product all at once, rather than adding them one at a time. ● LDAP Settings. Allows you to configure the e-mail addresses where scanned documents can be sent. ● Import/Export. Use this tab to import or export .CSV files containing e-mail addresses, fax numbers, or user records, so that they can be accessed on this product. You can also export e-mail, fax, or user records from the product into a file

Tab or section	Options
	<p>on your computer. You can then use this file as a data backup, or you can use it to import the records onto another HP product.</p> <ul style="list-style-type: none"> • Log. View the digital-sending activity log for the product. The log contains digital-sending job information, including any errors that occur. • Preferences. Configure digital-sending defaults such as the default page-size and the default settings-reset delay. You can also configure these settings by using the product control-panel menus.
Fax tab	<p>The Fax tab contains options to configure and use the fax capabilities of the product. For additional information about fax functions, see the Fax User Guide.</p> <p>NOTE: This tab is available only for the HP Color LaserJet CM3530fs MFP.</p> <ul style="list-style-type: none"> • Use the Fax Settings screen to configure the send-to-fax features for the product. • The Fax Address Book page enables you to add fax numbers into the product one at a time, and to edit fax numbers that have already been saved in the product. You can also use the Import/Export feature on the Digital Sending tab to load a large list of frequently-used fax numbers on to the product all at once, rather than adding them one at a time. • Use the Fax Speed Dials screen to add, edit, or delete fax speed dial entries to and from the product. You can use fax speed dials to store frequently used fax numbers or lists of up to 100 fax numbers. Up to 100 speed dial entries can be configured.
Networking tab Provides the ability to change network settings from your computer	<p>Network administrators can use this tab to control network-related settings for the product when it is connected to an IP-based network. This tab does not appear if the product is directly connected to a computer, or if the product is connected to a network using anything other than an HP Jetdirect print server.</p> <p>NOTE: The Networking tab can be password-protected.</p>
Other Links Contains links that connect you to the Internet	<ul style="list-style-type: none"> • hp instant support: Connects you to the HP Web site to help you find solutions to product problems. • Shop for Supplies: Connects to the HP SureSupply Web site, where you will receive information on options for purchasing original HP supplies, such as print cartridges and paper. • Product Support: Connects to the support site for the product, from which you can search for help regarding various topics. • Show Me How: Connects to information that demonstrates specific tasks for the product. <p>NOTE: You must have Internet access in order to use any of these links. If you use a dial-up connection and did not connect when you first opened the embedded Web server, you must connect before you can visit these Web sites. Connecting might require that you close the embedded Web server and reopen it.</p>

Use HP Web Jetadmin software

HP Web Jetadmin is a Web-based software solution for remotely installing, monitoring, and troubleshooting network-connected peripherals. 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.

Device plug-ins can be installed into HP Web Jetadmin to provide support for specific product features. 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 and install the latest device plug-ins for your product.



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

Product security features

Secure the embedded Web server

Assign a password for access to the embedded Web server so that unauthorized users cannot change the product settings.

1. Open the embedded Web server. See [Embedded Web server on page 85](#).
2. Click the **Settings** tab.
3. On the left side of the window, click the **Security** menu.
4. Click the **Device Security Settings** button.
5. In the **Device Password** area, type the password next to **New Password**, and type it again next to **Verify Password**.
6. Click **Apply**. Make note of the password and store it in a safe place.

HP Encrypted High Performance Hard Disks

This product supports an optional encrypted hard disk that you can install in the EIO accessory slot. This hard disk provides hardware-based encryption so you can securely store sensitive print, copy, and scan data without impacting product performance. This hard disk uses the latest Advanced Encryption Standard (AES) and has versatile time-saving features and robust functionality.

For information about ordering these accessories see [Part numbers on page 511](#).

Secure Disk Erase

To protect deleted data from unauthorized access on the product hard drive, use the Secure Disk Erase feature in the HP Web Jetadmin software. This feature can securely erase print jobs from the hard drive.

Secure Disk Erase offers the following levels of disk security:

- **Non-Secure Fast Erase.** This is a simple file-table erase function. Access to the file is removed, but actual data is retained on the disk until it is overwritten by subsequent data-storage operations. This is the fastest mode. Non-Secure Fast Erase is the default erase mode.
- **Secure Fast Erase.** Access to the file is removed, and the data is overwritten with a fixed identical character pattern. This is slower than Non-Secure Fast Erase, but all data is overwritten. Secure Fast Erase meets the U.S. Department of Defense 5220-22.M requirements for the clearing of disk media.
- **Secure Sanitizing Erase.** This level is similar to the Secure Fast Erase mode. In addition, data is repetitively overwritten by using an algorithm that prevents any residual data persistence. This mode will impact performance. Secure Sanitizing Erase meets the U.S. Department of Defense 5220-22.M requirements for the sanitization of disk media.

Data affected

Data affected (covered) by the Secure Disk Erase feature includes temporary files that are created during the print process, stored jobs, proof and hold jobs, disk-based fonts, disk-based macros (forms), address books, and HP and third-party applications.



NOTE: Stored jobs will be securely overwritten only when they have been deleted through the **Retrieve Job** menu on the product after the appropriate erase mode has been set.

This feature will not impact data that is stored on flash-based product non-volatile RAM (NVRAM) that is used to store default settings, page counts, and similar data. This feature does not affect data that is stored on a system RAM disk (if one is used). This feature does not impact data that is stored on the flash-based system boot RAM.

Changing the Secure Disk Erase mode does not overwrite previous data on the disk, nor does it immediately perform a full-disk sanitization. Changing the Secure Disk Erase mode changes how the product cleans up temporary data for jobs after the erase mode has been changed.

Additional Information

For additional information about the HP Secure Disk Erase feature, see the HP support flyer or go to www.hp.com/go/webjetadmin.

Job storage

To securely print a private job, use the personal job feature. The job can only be printed when the correct PIN is entered at the control panel.

DSS authentication

Optional Digital Sending Software (DSS) for the product is available for purchase separately. The software provides an advanced sending program that contains an authentication process. This process requires users to type a user identification and a password before they can use any of the DSS features that require authentication.

Lock the control-panel menus

To prevent someone from changing the product configuration, you can lock the control-panel menus. This prevents unauthorized users from changing the configuration settings such as the SMTP server.

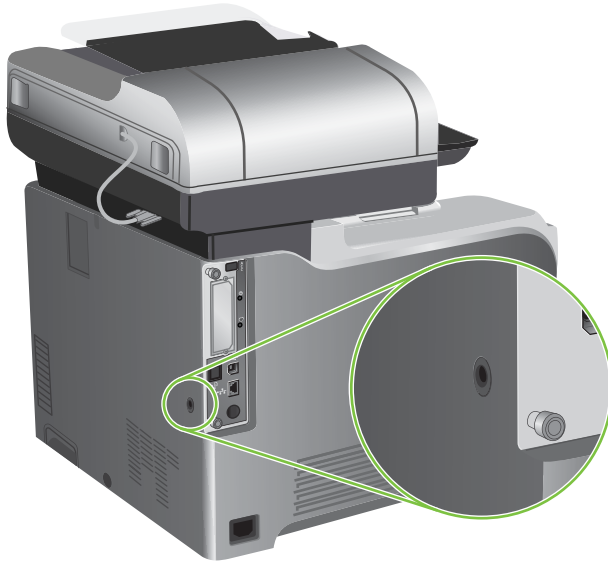
You can use HP Web Jetadmin to lock the control-panel menus on several products simultaneously. Browse to www.hp.com/go/webjetadmin to access white papers discussing security features, such as control-panel lock, that allow you to secure the product against unwanted access.

1. Open the HP Web Jetadmin program.
2. Open the **DEVICE MANAGEMENT** folder in the drop-down list in the **Navigation** panel. Navigate to the **DEVICE LISTS** folder.
3. Select the product.
4. In the **Device Tools** drop-down list, select **Configure**.
5. Select **Security** from the **Configuration Categories** list.
6. Type a **Device Password**.
7. In the **Control Panel Access** section, select **Maximum Lock**. This prevents unauthorized users from gaining access to configuration settings.

Lock the formatter cage

The formatter cage, on the back of the product, has a slot that you can use to attach a security cable. Locking the formatter cage prevents someone from removing valuable components from the formatter.

Figure 4-1 Slot for the security cable



Manage supplies

Use genuine HP print cartridges for the best printing results.


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.

HP policy on non-HP print cartridges

Hewlett-Packard Company cannot recommend the use of non-HP print cartridges, either new or remanufactured.

 **NOTE:** Any damage caused by a non-HP print cartridge is not covered under the HP warranty and service agreements.

To install a new HP print cartridge, see [Change print cartridges on page 94](#). To recycle the used cartridge, follow the instructions included with the new cartridge. For more information about recycling, see the product user guide.

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).

Replace supplies

When you use genuine HP supplies, the product automatically notifies you when supplies are reaching their estimated end of life. The notification to order supplies allows ample time to order new supplies before they need to be replaced. For more information about ordering supplies, see [Order parts, accessories, and supplies on page 510](#)

Supplies life

For information regarding specific product yield, see www.hp.com/go/learnaboutsupplies.

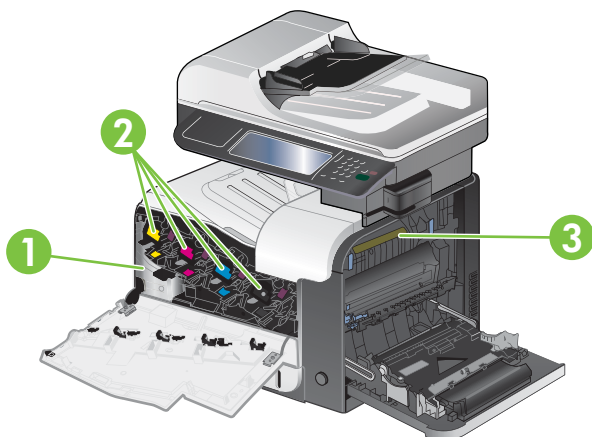
To order supplies, see [Parts and diagrams on page 509](#).

Locate supplies

Supplies are identified by their labeling and their blue plastic handles.

The following figure illustrates the location of each supply item.

Figure 4-2 Supply item locations



1	Toner collection unit
2	Print cartridges
3	Fuser

Supply replacement guidelines

To facilitate the replacement of supplies, keep the following guidelines in mind when setting up the product.

- Allow sufficient space in the front and on the right side of the product for removing supplies.
- The product should be located on a flat, sturdy surface.

For instructions on installing supplies, see the label on each supply item or see www.hp.com/go/learnaboutsupplies.

Change print cartridges

When a print cartridge approaches the end of its estimated useful life, the control panel displays a message recommending that you order a replacement. The product can continue to print using the current print cartridge until the control panel displays a message instructing you to replace the cartridge, unless you have selected the option to override the message by using the **Replace Supplies** menu. For more information about the **Replace Supplies** menu, see [Management menu on page 28](#).

The product uses four colors and has a different print cartridge for each color: black (K), magenta (M), cyan (C), and yellow (Y).

You can replace a print cartridge when the control panel displays a **Replace <color> Cartridge** message. The control panel display also indicates the color of the cartridge that has reached the end

of its estimated useful life (if a genuine HP cartridge is currently installed). Replacement instructions are provided on the label on the print cartridge.

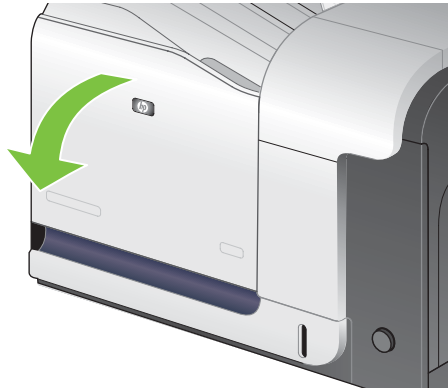
△ **CAUTION:** If toner gets on clothing, wipe it off with a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

📄 **NOTE:** Information about recycling used print cartridges is on the print-cartridge box. See the product user guide.

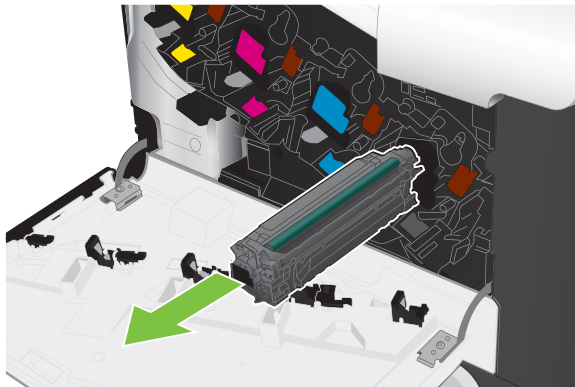
💡 **TIP:** To see an animation of this procedure go to this Web site: www.hp.com/go/cljcm3530mfp-replace-print-cartridges.

Replace print cartridges

1. Open the front door. Make sure that the door is completely open.

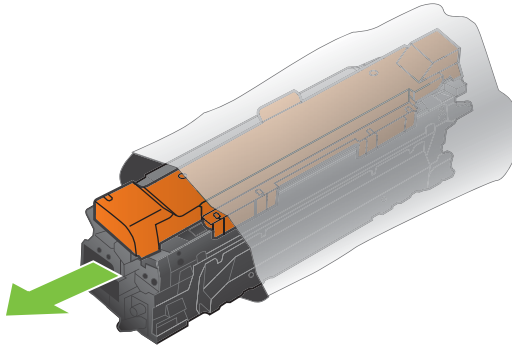



2. Grasp the handle of the used print cartridge and pull out to remove.

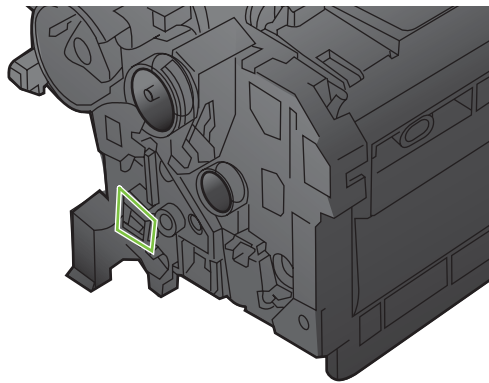


3. Store the used print cartridge in a protective bag. Information about recycling used print cartridges is on the print-cartridge box.

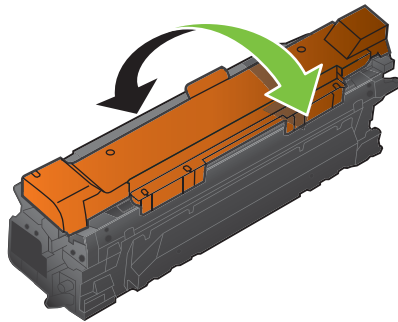
4. Remove the new print cartridge from its protective bag.



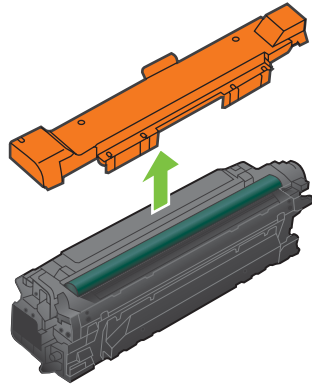
 **NOTE:** Be careful not to damage the memory tag on the print cartridge.



5. Grasp both sides of the print cartridge and distribute the toner by gently rocking the print cartridge.



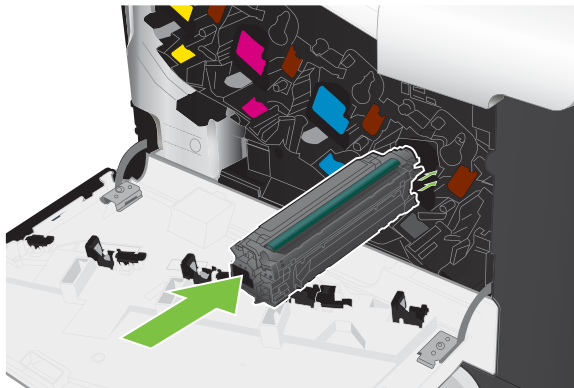
6. Remove the orange protective cover from the print cartridge.



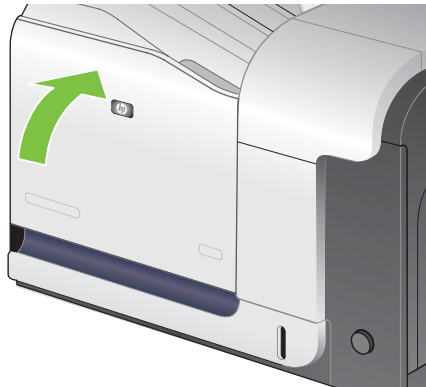
△ **CAUTION:** Avoid prolonged exposure to light.

CAUTION: Do not touch the green roller. Doing so can damage the cartridge.

7. Align the print cartridge with its slot and insert the print cartridge until it clicks into place.





8. Close the front door.



Change the toner collection unit

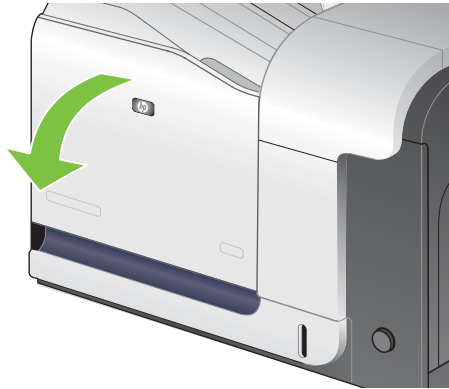
Replace the toner collection unit when the control panel prompts you.

 **NOTE:** The toner collection unit is designed for a single use. Do not attempt to empty the toner collection unit and reuse it. Doing so could lead to toner being spilled inside the product, which could result in reduced print quality. After use, return the toner collection unit to HP's Planet Partners program for recycling.

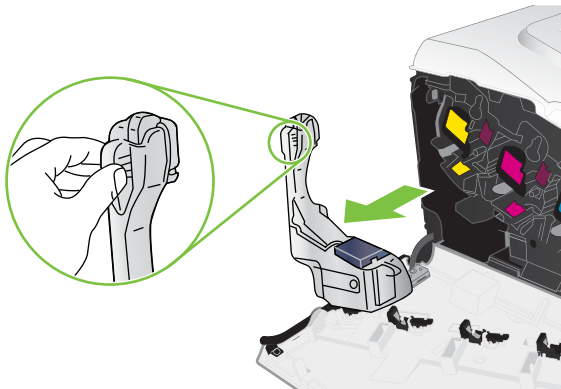
 **TIP:** To see an animation of this procedure go to this Web site: www.hp.com/go/cljcm3530mfp-replace-toner-collection-unit.

Replace the toner collection unit

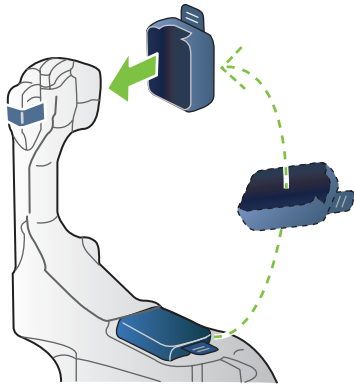
1. Open the front door. Make sure that the door is completely open.



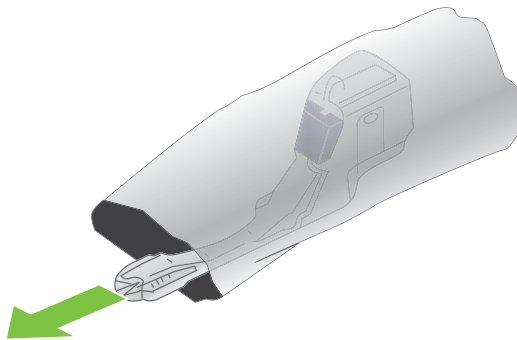
2. Grasp the blue label at the top of the toner collection unit and remove it from the product.



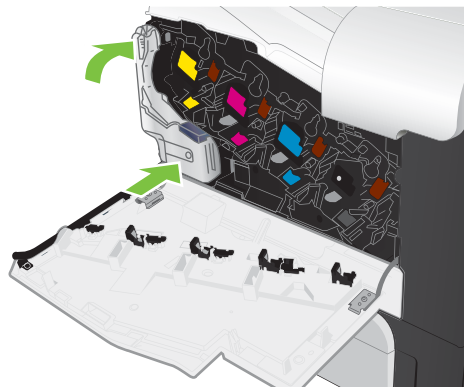
3. Place the attached blue cap over the blue opening at the top of the unit.



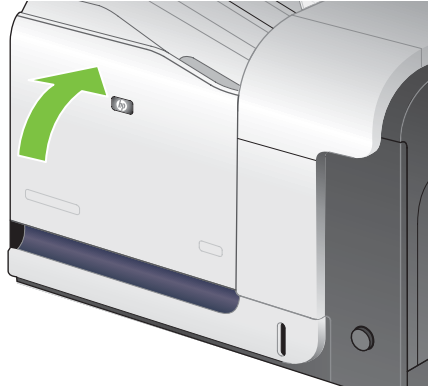
4. Remove the new toner collection unit from its packaging.




5. Insert the bottom of the new unit into the product first and then push the top of the unit until it clicks into place.



6. Close the front door.



 **NOTE:** If the toner collection unit is not installed correctly, the front door does not close completely.

To recycle the used toner collection unit, follow the instructions included with the new toner collection unit.

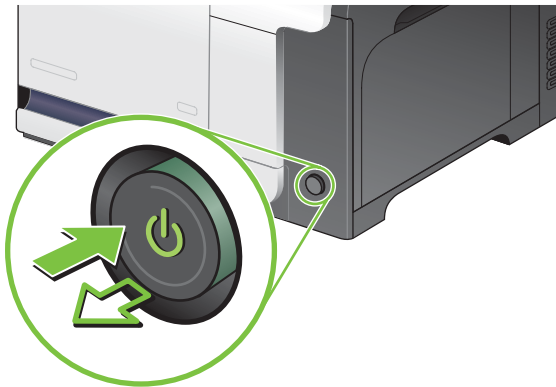
Install memory

You can install more memory for the product.


- △ **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 and then touch bare metal on the product.

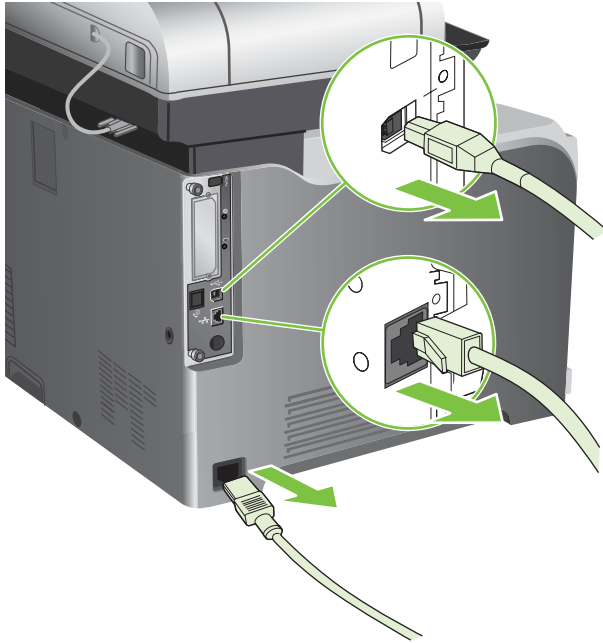
Install DDR memory DIMMs

1. Turn the product off.

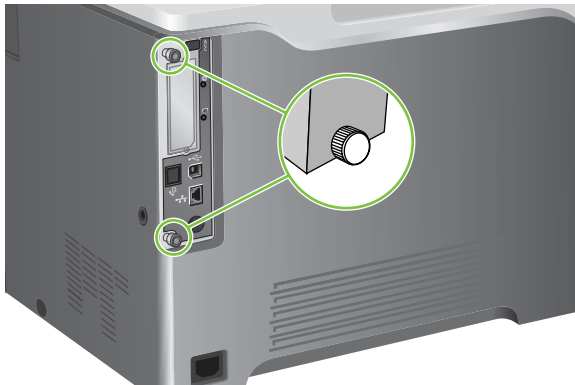


2. Disconnect all power and interface cables.

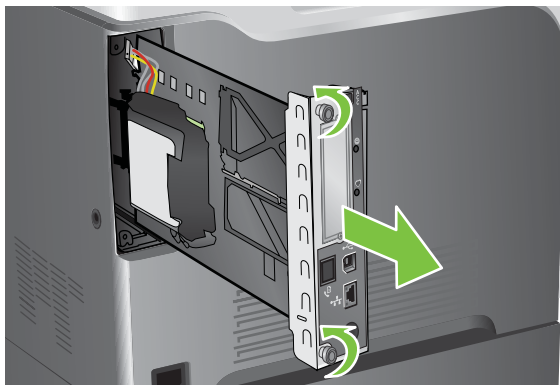
 **NOTE:** This illustration might not show all the cables.



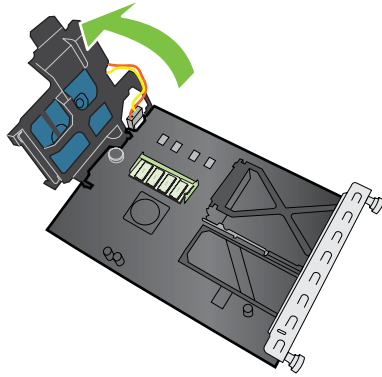
3. Locate the thumb screws on the formatter board in the rear of the product.



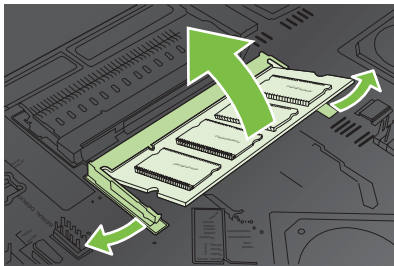
4. Unscrew the thumb screws and then pull the formatter board from the product. Place the formatter board on a clean, flat, grounded surface.



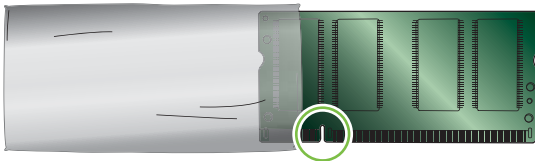
5. Release bracket that holds the hard drive, and swing it open.



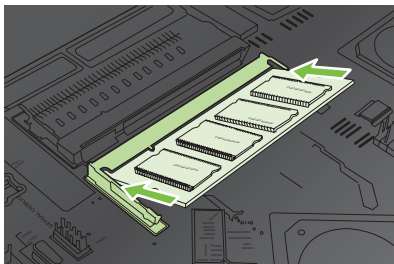
6. To replace a DIMM that is currently installed, spread the latches apart on each side of the DIMM slot, lift the DIMM up at an angle, and pull it out.



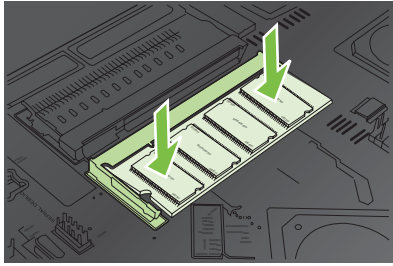
7. Remove the new DIMM from the antistatic package. Locate the alignment notch on the bottom edge of the DIMM.



8. Holding the DIMM by the edges, align the notch on the DIMM with the bar in the DIMM slot at an angle and firmly press the DIMM into the slot until it is fully seated. When installed correctly, the metal contacts are not visible.



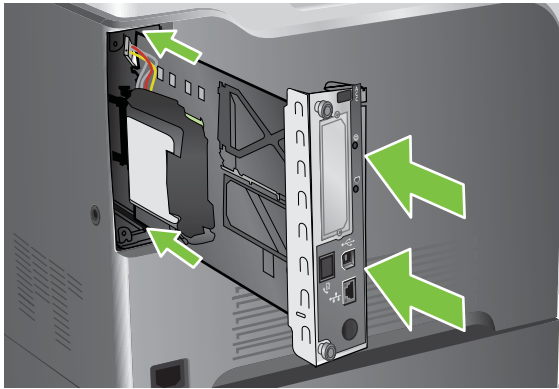
9. Push down on the DIMM until both latches engage the DIMM.



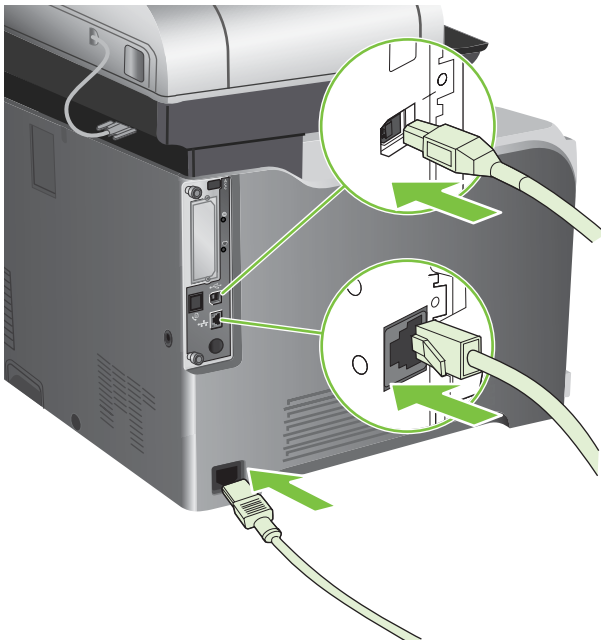
NOTE: If you have difficulty inserting the DIMM, make sure the notch on the bottom of the DIMM is aligned with the bar in the slot. If the DIMM still does not go in, make sure you are using the correct type of DIMM.

10. Align the formatter board in the tracks at the bottom of the slot, and then slide the board back into the product.

NOTE: To prevent damage to the formatter board, ensure the formatter board is aligned in the tracks at the top and the bottom of the opening.



11. Reconnect the power cable and interface cables, and turn the product on.



Enable memory for Windows

1. **Windows XP and Windows Server 2003 (using the default Start menu view):** Click **Start**, click **Settings**, and then click **Printers and Faxes**.

-or-

Windows 2000, Windows XP, and Windows Server 2003 (using the Classic Start menu view): Click **Start**, click **Settings**, and then click **Printers**.

-or-

Windows Vista: Click **Start**, click **Control Panel**, and then in the category for **Hardware and Sound** click **Printer**.

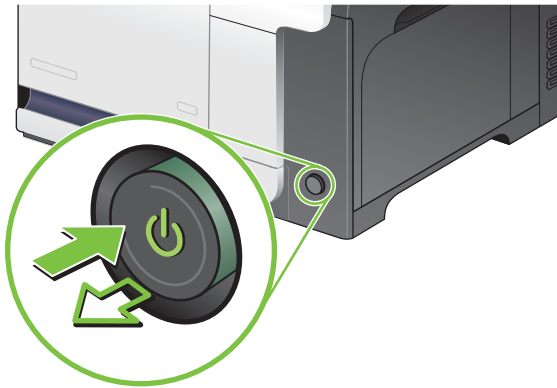
2. Right-click the driver icon, and then select **Properties**.
3. Click the **Device Settings** tab.
4. Expand the area for **Installable Options**.
5. Next to **Printer Memory**, select the total amount of memory that is installed.
6. Click **OK**.

Install an HP Jetdirect or EIO print server card or EIO hard disk

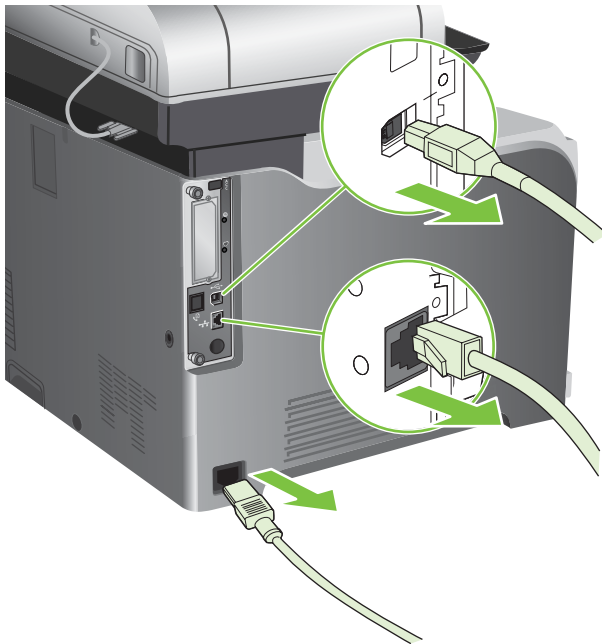
This product is equipped with an external I/O (EIO) slot. You can install an additional HP Jetdirect print server card or external EIO hard drive in the available EIO slot.

 **NOTE:** This example shows installing an HP Jetdirect print server card.

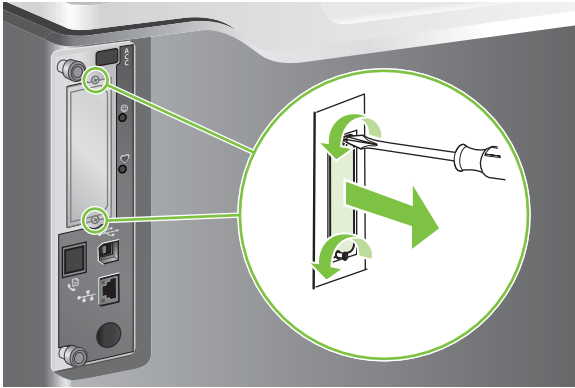
1. Turn the product off.



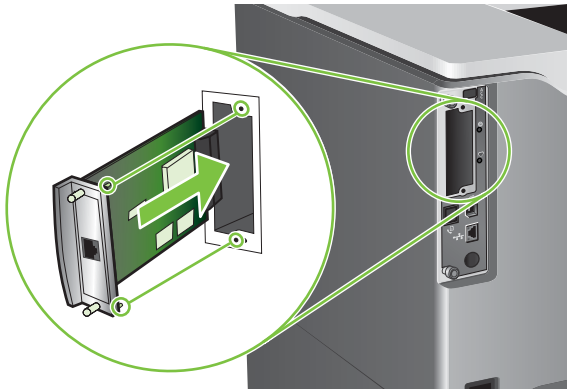
2. Disconnect all power and interface cables.



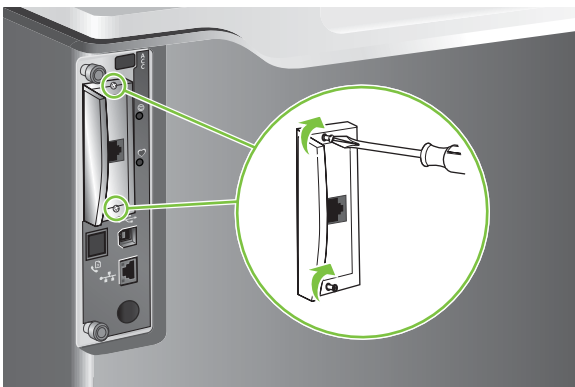
3. Loosen and remove the two retaining screws holding the cover for the EIO slot, and then remove the cover. You will not need these screws and the cover again. They can be discarded.



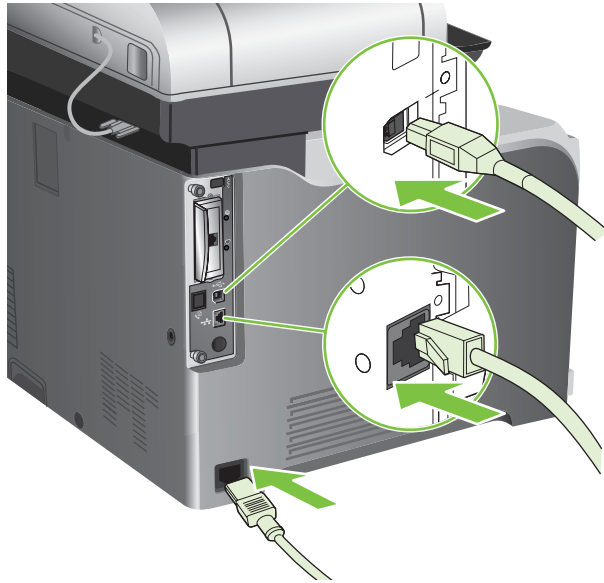
4. Firmly insert the HP Jetdirect print server card into the EIO slot.



5. Insert and tighten the retaining screws that came with the print server card.



6. Reconnect the power cable and remaining interface cables, and turn the product on.



7. Print a configuration page. An HP Jetdirect configuration page that contains network configuration and status information should also print.

If it does not print, turn the product off, and then uninstall and reinstall the print server card to ensure that it is completely seated in the slot.

8. Perform one of these steps:

- Choose the correct port. See the computer or operating system documentation for instructions.
- Reinstall the software, choosing the network installation this time.

Clean the product

To maintain print quality, clean the product thoroughly every time you replace the print cartridge and whenever print-quality problems occur.

-
- △ **WARNING!** Avoid touching the fusing area when cleaning the product. It can be hot.
- △ **CAUTION:** To avoid permanent damage to the print cartridge, do not use ammonia-based cleaners on or around the product except as directed.
-

Clean the outside of the product

- Clean the outside of the product if it is visibly marked.
- Use a soft, lint-free cloth dampened with water, or water and a mild detergent.

Clean the touchscreen

Clean the touchscreen whenever it is necessary to remove fingerprints or dust. Wipe the touchscreen gently with a clean, water-dampened, lint-free cloth.

-
- △ **CAUTION:** Use water only. Solvents or cleaners can damage the touchscreen. Do not pour or spray water directly onto the touchscreen.
-

Clean the scanner glass

- Clean the scanner glass only if dirt is visible, or if you are experiencing a decrease in copy quality, such as streaking.
- 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.



-
- △ **CAUTION:** Do not pour or spray liquids directly onto the scanner glass. Do not press hard on the glass surface. (You could break the glass).
-

Clean the document feeder

Ink and correction fluid can leave residue on the narrow glass strip to the left of the large scanner glass. If you are having problems with streaks on copies, clean the narrow glass strip.

Clean the document-feeder backing

1. Open the scanner lid.



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



3. Clean the document-feeder backing by wiping it with a clean, damp, lint-free cloth. Use an ammonia-based surface cleaner only when a water-dampened cloth does not clean the components.
4. Close the scanner lid.



Clean the document-feeder rollers

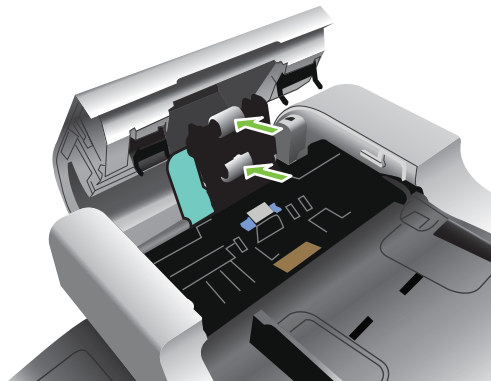
You should clean the rollers in the document feeder if you are experiencing misfeeds or if your originals show marks as they exit the document feeder.

△ **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 product.

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



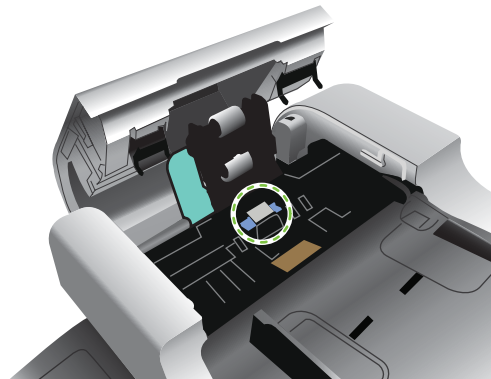
2. Locate the rollers.



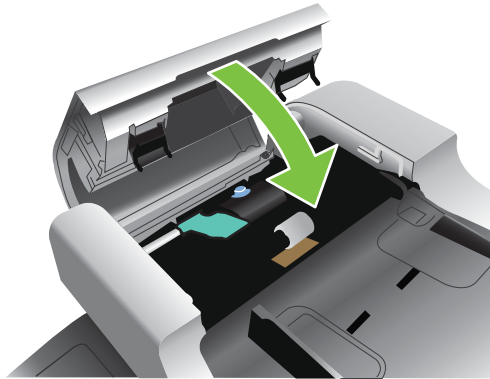
3. Wipe the rollers with a clean, water-dampened, lint-free cloth.

△ **CAUTION:** Do not pour water directly onto the rollers. Doing so might damage the product.

4. Locate the separation pad.



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



Clean the fuser

Run the product cleaning page to keep the fuser free of toner and paper particles that can sometimes accumulate. Accumulation of toner and particles can cause specks to appear on the front or back side of your print jobs.

HP recommends that you use the cleaning page when there is a print quality issue.

A **Cleaning** message appears on the product control panel display while the cleaning is taking place.

In order for the cleaning page to work correctly, print the page on copier-grade paper (not bond, heavy, or rough paper).

Create and use the cleaning page

1. Scroll to and touch **Administration**.
2. Scroll to and touch **Print Quality**.
3. Touch **Calibration/cleaning**.
4. Touch **Process cleaning page**.

Product updates

This product has remote firmware update (RFU) capability. Use this information to upgrade the product firmware.

Determine the current firmware version

1. At the product control panel, touch the down arrow until the **Administration** menu displays.
2. Touch the **Administration** menu to open it.
3. Touch the **Information** menu to open it.
4. Touch the **Configuration Page** option, and then touch the **Print** button.

The firmware datecode is listed on the Configuration page in the section called **Device Information**. The firmware datecode has this format: YYYYMMDD XX.XXX.X.

- The first string of numbers is the date, where YYYY represents the year, MM represents the month, and DD represents the date. For example, a firmware datecode that begins with 20061125 represents November 25, 2006.
- The second string of numbers is the firmware version number, in decimal format.

Download new firmware from the HP Web site

To find the most recent firmware upgrade for the product, go to www.hp.com/go/cljcm3530mfp_firmware. This page provides instructions for downloading the new firmware version.

Transfer the new firmware to the product



NOTE: The product can receive an .RFU file update when it is in a "ready" state.

The following conditions can affect the time required to transfer the file.


- The speed of the host computer that is sending the update.
- Any jobs that are ahead of the .RFU job in the queue are completed before the update is processed.
- If the process is interrupted before the firmware is downloaded, you must send the firmware file again.
- If power is lost during the firmware update, the update is interrupted and the message **Resend upgrade** appears (in English only) on the control-panel display. In this case, you must send the upgrade by using the USB port.



NOTE: The firmware update involves a change in the format of nonvolatile random-access memory (NVRAM). Any menu settings that are changed from the default settings might return to default settings and must be changed again if you want settings that are different from the defaults.

Use the flash executable file to update the firmware

This product has flash-based memory, so you can use the flash firmware executable (.EXE) file to upgrade the firmware. Download this file from www.hp.com/go/cljcm3530mfp_firmware.

 **NOTE:** To use this method, connect the product directly to your computer through a USB cable, and install the printer driver for this product on your computer.


1. Print a configuration page and note the TCP/IP address.
2. Find the .EXE file on your computer, and double-click it to open the file.
3. From the **Select Printer to Update** drop-down list, select this product. Click the **Start** button to begin the update process.

△ **CAUTION:** Do not turn the product off or try to send a print job during this process.

4. When the process is complete, a smiling face icon displays in the dialog box. Click the **Exit** button to close the dialog box.
5. Turn the product off and then on.
6. Print another configuration page and verify that the new firmware datecode is listed.


Use FTP to upload the firmware through a browser

1. Make sure the Internet browser you are using is configured for viewing folders from FTP sites. These instructions are for Microsoft Internet Explorer.
 - a. Open the browser and click **Tools**, and then click **Internet Options**.
 - b. Click the **Advanced** tab.
 - c. Select the box labeled **Enable folder view for FTP sites**.
 - d. Click **OK**.
2. Print a configuration page and note the TCP/IP address.
3. Open a browser window.
4. In the address line of the browser, type `ftp://<ADDRESS>`, where <ADDRESS> is the address of the product. For example, if the TCP/IP address is 192.168.0.90, type `ftp://192.168.0.90`.
5. Locate the downloaded .RFU file for the product.
6. Drag and drop the .RFU file onto the **PORT** icon in the browser window.


 **NOTE:** The product turns off and then on automatically to activate the update. When the update process is complete, a **Ready** message displays on the product control panel.

Use FTP to upgrade the firmware on a network connection

1. Take note of the IP address on the HP Jetdirect page. The HP Jetdirect page is the second page that prints when you print the configuration page.

 **NOTE:** Before upgrading the firmware, make sure that the product is not in Sleep mode. Also make sure that any error messages are cleared from the control-panel display.

2. Click **Start**, click **Run**, and then type `cmd` to open the command window.
3. Type: `ftp <TCP/IP ADDRESS>`. For example, if the TCP/IP address is 192.168.0.90, type `ftp 192.168.0.90`.


4. Go to the folder where the firmware file is stored.
 5. Press **Enter** on the keyboard.
 6. When prompted for the user name, press **Enter**.
 7. When prompted for the password, press **Enter**.
 8. Type `bin` at the command prompt.
 9. Press **Enter**. The message **200 Types set to I, Using binary mode to transfer files** appears in the command window.
 10. Type `put` and then the file name. For example, if the file name is `cljcm3530.rfu`, type `put cljcm3530.rfu`.
 11. The download process begins and the firmware is updated on the product. This can take several minutes. Let the process finish without further interaction with the product or computer.
-
-  **NOTE:** The product automatically turns off and then on again after processing the upgrade.
-
12. At the command prompt, type: `bye` to exit the ftp command.
 13. At the command prompt, type: `exit` to return to the Windows interface.

Use HP Web Jetadmin to upgrade the firmware

To learn how to use HP Web Jetadmin to upgrade the product firmware, go to www.hp.com/go/webjetadmin

Use Microsoft Windows commands to upgrade the firmware

To update the firmware by using a network connection, follow these instructions.

1. Click **Start**, click **Run**, and then type `cmd` to open the command window.
 2. Type the following: `copy /B <FILENAME> \\<COMPUTERNAME>\<SHARENAME>`, where `<FILENAME>` is the name of the .RFU file (including the path), `<COMPUTERNAME>` is the name of the computer from which the product is being shared, and `<SHARENAME>` is the product share name. For example: `C:\>copy /b C:\cljcm3530.rfu \\YOUR_SERVER\YOUR_COMPUTER`.
-
-  **NOTE:** If the file name or path includes a space, you must enclose the file name or path in quotation marks. For example, type: `C:\>copy /b "C:\MY DOCUMENTS\cljcm3530.rfu" \\YOUR_SERVER\YOUR_COMPUTER`.
-
3. Press **Enter** on the keyboard. The control panel shows a message that indicates the progress of the firmware upgrade. At the end of the upgrade process, the control panel shows the **Ready** message. The message **One File Copied** appears on the computer screen.

5 Theory of operation

- [Basic operation](#)
- [Engine-control system](#)
- [Laser/scanner system](#)
- [Image-formation system](#)
- [Pickup, feed, and delivery system](#)
- [Jam detection](#)
- [Optional paper feeder](#)
- [Scanning/image capture system system](#)

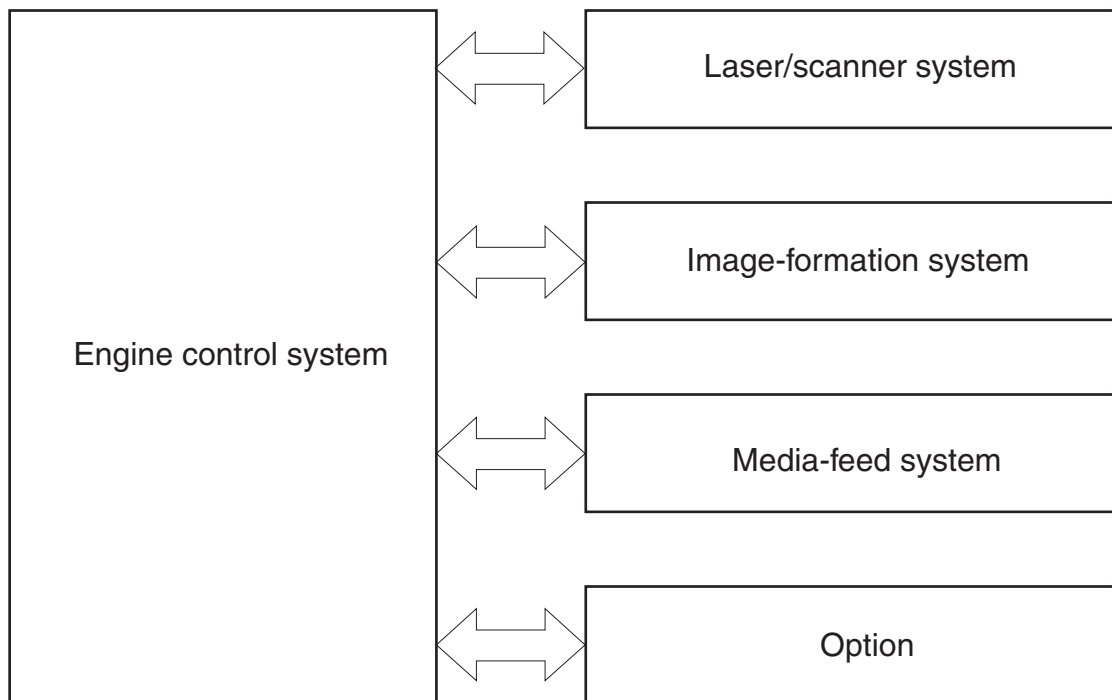
Basic operation

The product routes all high-level processes through the formatter, which stores font information, processes the print image, and communicates with the host computer.

The basic product operation comprises the following systems:

- The engine-control system, which includes the power supply and the DC controller printed circuit assembly (PCA)
- The laser/scanner system, which forms the latent image on the photosensitive drum
- The image-formation system, which transfers a toner image onto the paper
- The media feed system, which uses a system of rollers and belts to transport the paper through the product
- Option (optional paper feeder)

Figure 5-1 Relationship between the main product systems



Sequence of operation

The DC controller PCA controls the operating sequence, as described in the following table.


 **NOTE:** The terms fusing and fixing are synonymous.

Table 5-1 Sequence of operation

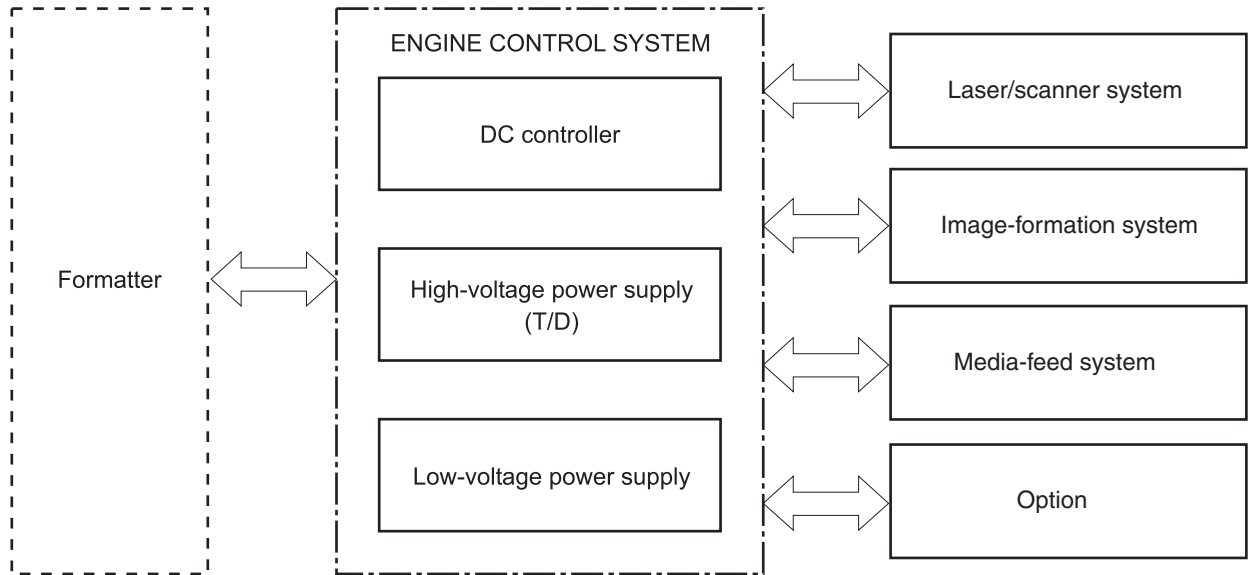
Period	Duration	Description
Waiting	From the time the power is turned on, the door is closed, or when the product exits Sleep mode until the product is ready for printing	<ul style="list-style-type: none"> • Heats the fuser sleeve • Pressurizes the fuser pressure roller • Detects the print cartridges • Detects the home position for the primary transfer roller and the developing unit • Cleans the secondary transfer roller
Standby	From the end of the waiting sequence or the last rotation until the formatter receives a print command or until the product is turned off	<ul style="list-style-type: none"> • The product is in the READY state. • The product enters Sleep mode after the specified length of time. • The product calibrates if it is time for an automatic calibration.
Initial rotation	From the time the formatter receives a print command until the paper enters the paper path	<ul style="list-style-type: none"> • Activates the high-voltage power supply • Prepares each laser/scanner unit • Warms the fuser to the correct temperature
Printing	From the time the first sheet of paper enters the paper path until the last sheet has passed through the fuser	<ul style="list-style-type: none"> • Forms the image on the photosensitive drums • Transfers the toner to the paper • Fuses the toner image onto the paper • Performs calibration after a specified number of pages
Last rotation	From the time the last sheet of paper exits the fuser until the motors stop rotating	<ul style="list-style-type: none"> • Moves the last printed sheet into the output bin • Stops each laser/scanner unit • Discharges the bias from the high-voltage power supply

Engine-control system

The engine-control system receives commands from the formatter and interacts with the other main systems to coordinate all product functions. The engine-control system consists of the following components:

- DC controller
- High-voltage power supply
- Low-voltage power supply

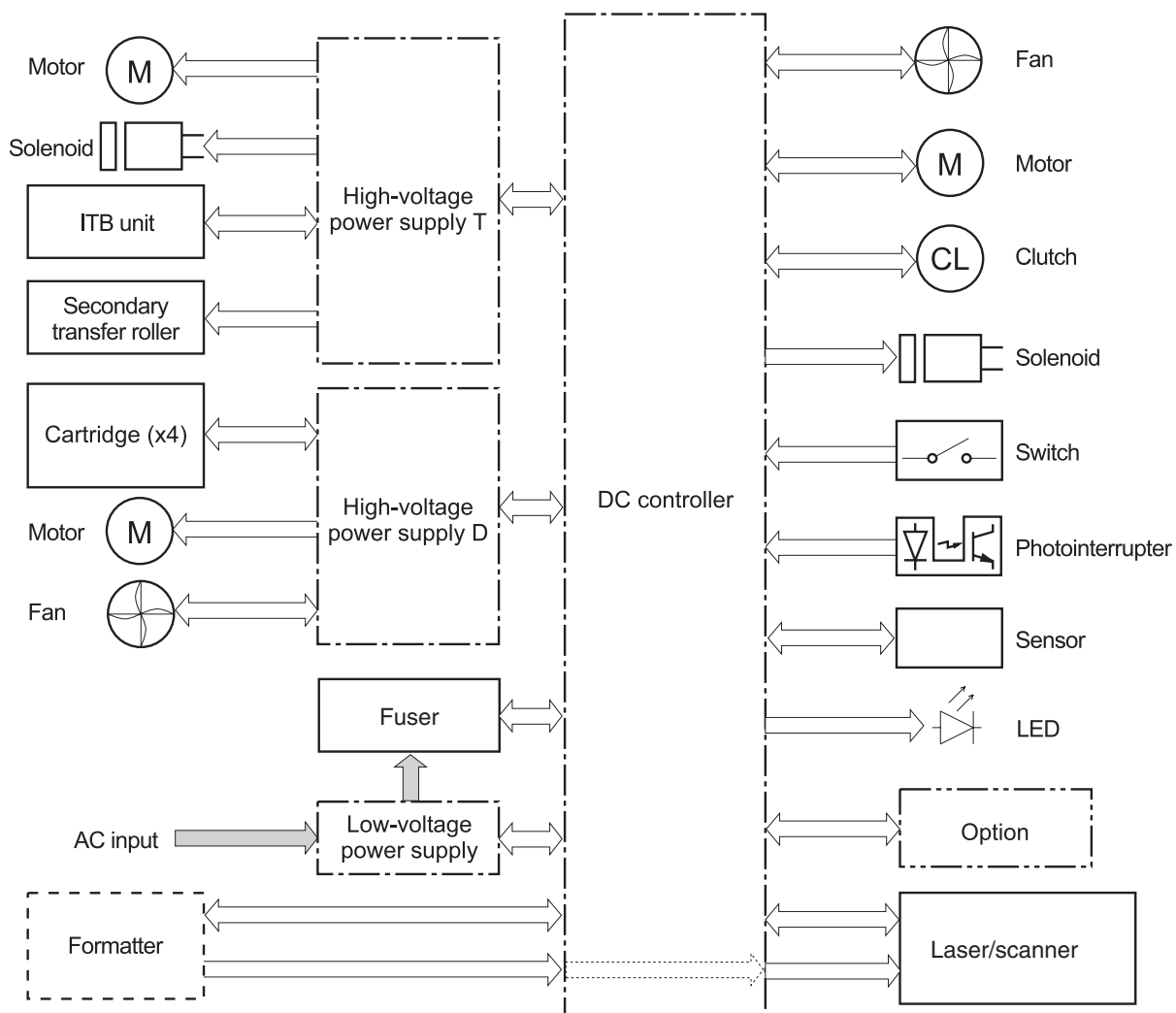
Figure 5-2 Engine-control system



DC controller

The DC controller controls the operational sequence of the printer.

Figure 5-3 DC controller block diagram



Solenoids

Table 5-2 Solenoids

Component abbreviation	Component name
SL1	Primary transfer roller disengagement solenoid
SL2	Duplex reverse solenoid
SL3	Multipurpose-tray pickup solenoid
SL4	Cassette pickup solenoid

Clutches

Component abbreviation	Component name
CL1	Duplex re-pickup clutch

Switches

Table 5-3 Switches

Component abbreviation	Component name
SW1, SW2	5V interlock switch
SW3	24V interlock switch
SW4	Power switch
	Test print switch

Sensors

Table 5-4 Sensors

Component abbreviation	Component name
SR1	Drum home position sensor 1
SR2	Drum home position sensor 2
SR3	Drum home position sensor 3
SR5	Fuser (fixing) delivery sensor
SR6	Delivery tray media full sensor
SR7	Fuser (fixing) pressure release sensor
SR8	TOP (top of page) sensor
SR9	Cassette-media-stack surface sensor
SR11	Developing home position sensor
SR13	Cassette presence sensor
SR14	Loop sensor 1
SR15	Loop sensor 2
SR17	Primary-transfer-roller disengagement sensor
SR20	Cassette-media presence sensor
SR21	MP-tray-media-presence sensor
SR22	Duplex re-pickup sensor
	OHT sensor (in)
	OHT sensor (out)
	RD sensor (front)
	RD sensor (rear)
	Environmental sensor (temperature and humidity)
	Yellow toner-level sensor
	Magenta toner-level sensor
	Cyan toner-level sensor
	Black toner-level sensor
	Toner collection-box-full sensor
	Fuser (fixing) home-position sensor

Motors and fans

The product has 11 motors and three fans. The motors drive the components in the paper-feed and image-formation systems. The fan motors cool the inside of the product.

Table 5-5 Motors

Abbreviation	Name	Purpose	Type	Failure detection
M2	Fuser (fixing) motor	Drives the Fuser (fixing) roller, the delivery roller, and the Fuser (fixing) pressure roller	DC motor	Yes
M3	Drum motor 1	Drives the photosensitive drum (yellow/magenta), developing unit (yellow), and primary charging roller (yellow/magenta)	DC motor	Yes
M4	Drum motor 2	Drives the photosensitive drum (cyan), developing unit (magenta/cyan), and primary charging roller (cyan)	DC motor	Yes
M5	Drum motor 3	Drives the photosensitive drum (black), developing unit (black), and ITB drive roller, and secondary transfer roller	DC motor	Yes
M7	Lifter motor	Drives the lifter for the cassette	DC motor	Yes
M8	Cyan/black scanner motor	Drives the scanner mirror in the cyan/black laser scanner	DC motor	Yes
M9	Yellow/magenta scanner motor	Drives the scanner mirror in the yellow/magenta laser scanner	DC motor	Yes
M10	Developing disengagement motor	Drives the developing unit disengagement	Stepping motor	No
M11	Duplex reverse motor	Drives the duplex reverse roller and duplex feed roller	Stepping motor	No
M12	Residual toner-feed motor	Drives the residual toner feed screw	DC motor	Yes
M13	Pickup motor	Drives the cassette pickup roller, MP tray pickup roller, feed roller, registration roller, and re-pickup roller	Stepping motor	No

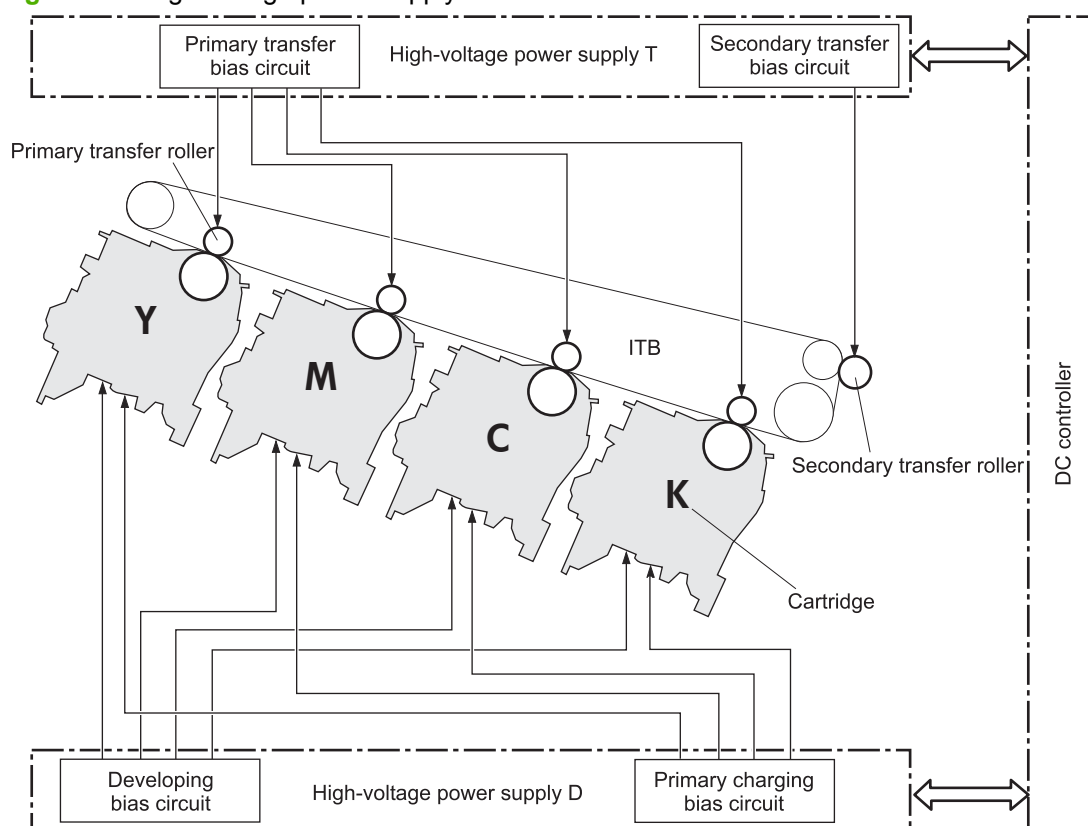
Table 5-6 Fans

Abbreviation	Name	Cooling area	Type	Speed
FM1	Power supply fan	Around the power supply unit	Intake	Full/half
FM2	Cartridge fan	Around the cartridges	Intake	Full/half
FM3	Delivery fan	Around the delivery unit	Intake	Full/half

High-voltage power supply

The high-voltage power supply delivers the high-voltage biases to the following components used to transfer toner during the image-formation process:

- Primary-charging roller (in the cartridge)
- Developing roller (in the cartridge)
- Primary-transfer roller
- Secondary-transfer roller

Figure 5-4 High-voltage power supply circuits

The high-voltage power supply contains several separate circuits.

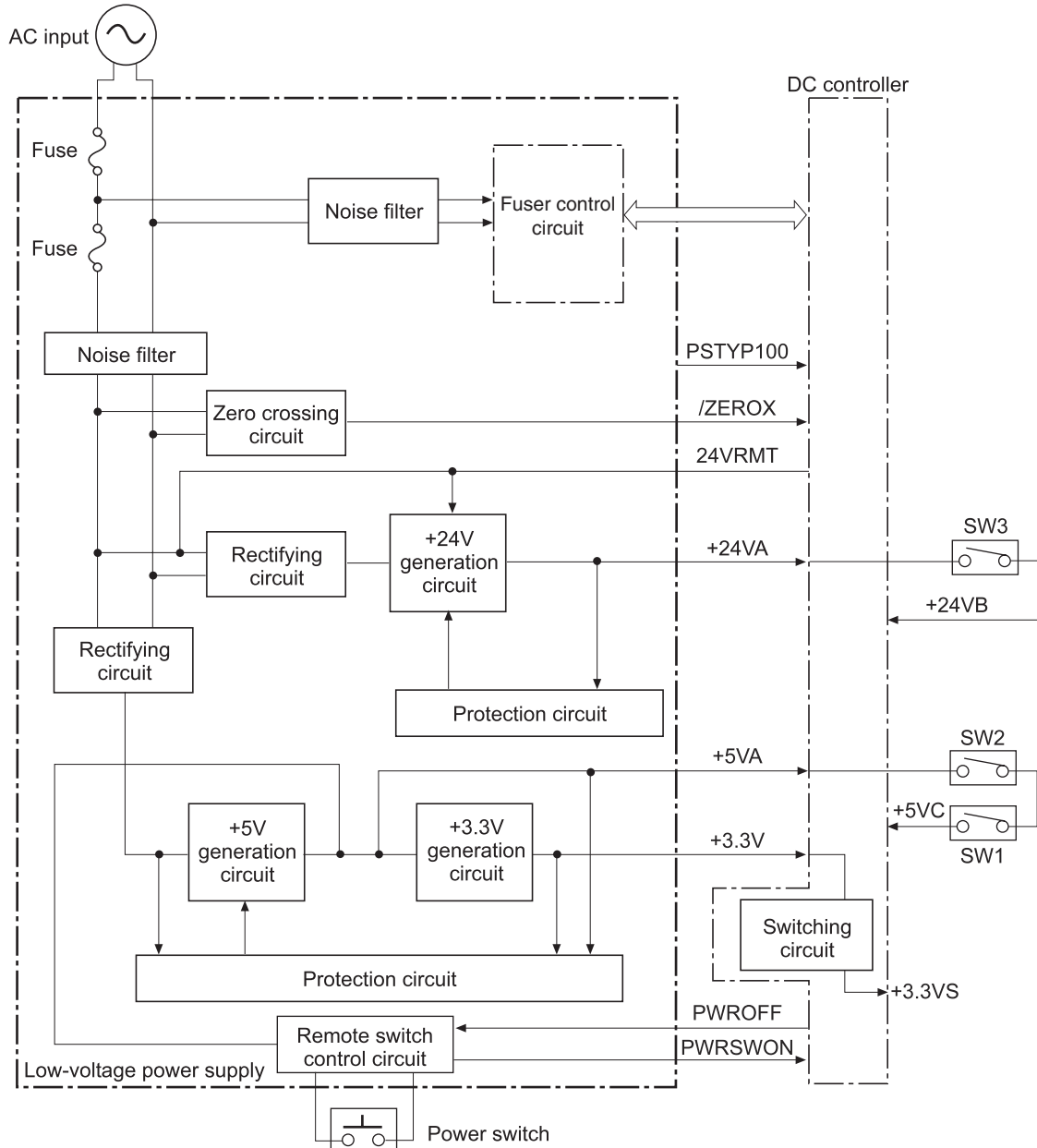
Table 5-7 High-voltage power supply circuits

Circuit	Description
Primary-charging-bias generation	DC negative bias is applied to the surface of the photosensitive drum to prepare it for image formation.
Developing-bias generation	DC negative bias adheres the toner to each photosensitive drum during the image-formation process.
Primary-transfer-bias generation	DC positive bias transfers the latent toner image from each photosensitive drum onto the ITB.
Secondary-transfer-bias generation	Two DC biases, one positive and one negative, transfer the toner from the ITB onto the paper.

Low-voltage power supply

The low-voltage power-supply circuit converts the AC power from the wall receptacle into the DC voltage that the product components use. The product has two low-voltage power-supplies for 110 Volt or 220 Volt input.

Figure 5-5 Low-voltage power-supply circuit



The low-voltage power supply converts the AC power into three DC voltages, which it then subdivides, as described in the following table.

Table 5-8 Converted DC voltages

Main DC voltage	Sub-voltage	Behavior
+24 V	+24VA	Constantly supplied

Table 5-8 Converted DC voltages (continued)

Main DC voltage	Sub-voltage	Behavior
	+24VB	Interrupted when the front door or right door open Stopped during Sleep (powersave) mode
+5 V	+5VA	Constantly supplied
	+5VC	Interrupted when the front door or right door open
+3.3 V	3.3V	Constantly supplied
	3.3VS	Stopped during Sleep (powersave) mode

Overcurrent/overvoltage protection

The low-voltage power supply stops supplying the DC voltage to the product components whenever it detects excessive current or abnormal voltage from the power source.

Safety

For personal safety, the low-voltage power supply interrupts power to the fuser, the high-voltage power supply, and the motors when the front door or right door open.

Voltage detection

The printer detects the power supply voltage that is connected to the printer. The DC controller monitors the input voltage from the power source so it can control the voltage to the fuser.

Sleep (powersave) mode

Sleep mode conserves energy by stopping the power to several components when the product is idle. If the DC controller detects voltage that is too high when the product is in Sleep mode, it determines that the low-voltage power supply has failed, and it notifies the formatter.

Low-voltage power supply failure

The DC controller determines a low-voltage power supply failure and notifies the formatter when the low-voltage power supply does not supply +24 V.

Fuser (fixing) control

The fuser-control circuit controls the fuser temperature. The product uses an on-demand fusing method.

Figure 5-6 Fuser (fixing) components

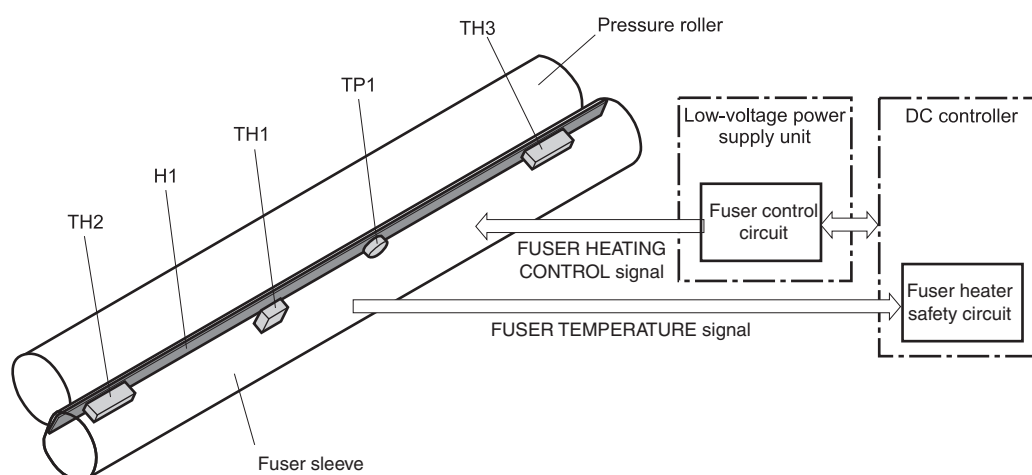


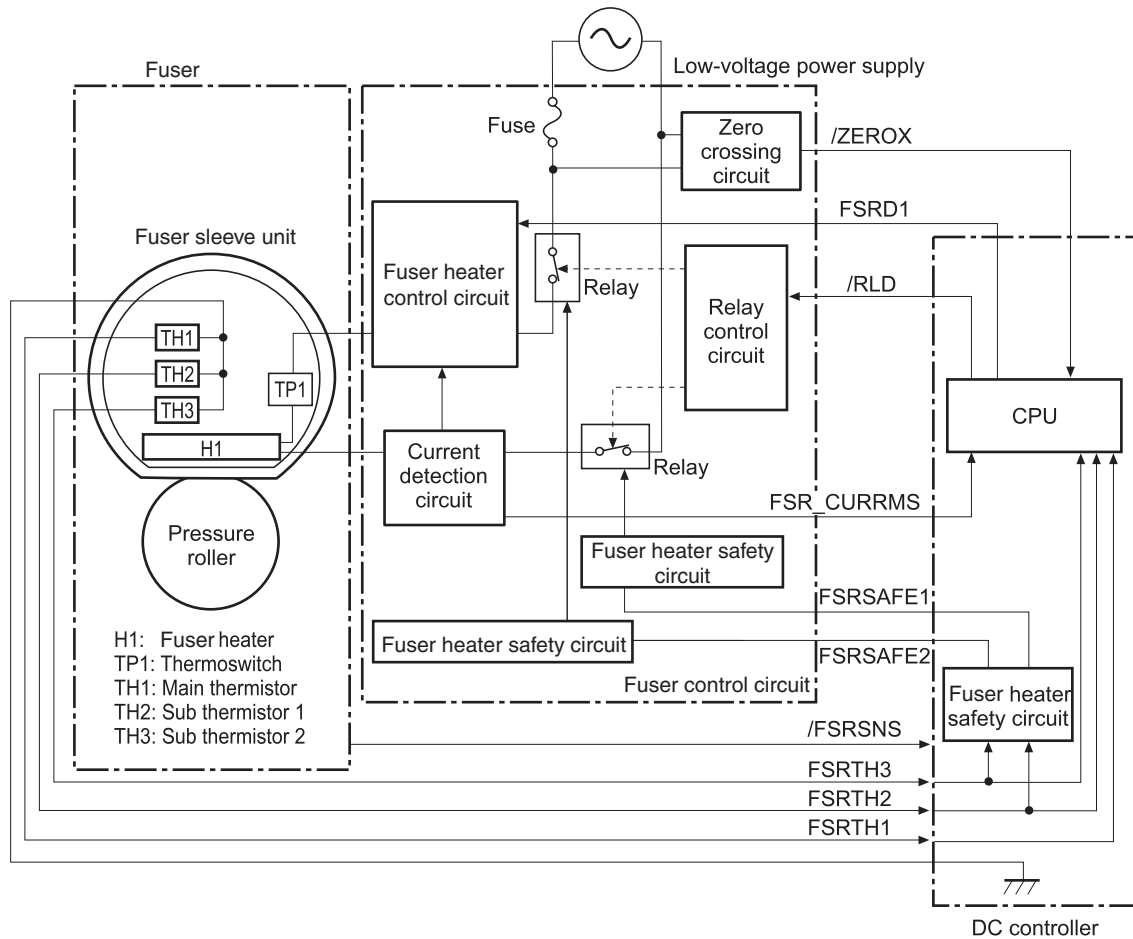
Table 5-9 Fuser (fixing) components

Type of component	Abbreviation	Name	Function
Heaters	H1	Fuser heater	Heats the fuser sleeve.
Thermistors (Contact type)	TH1	Main thermistor	Each thermistor detects the center temperature of the fuser sleeve.
	TH2	Sub thermistor	Each thermistor detects the side temperature of the fuser heater.
	TH3		
Thermoswitches (Non-contact type)	TP1	For the fuser heater	Controls the fuser-roller main heater

Fuser (fixing) temperature-control circuit

The temperatures of the two rollers in the fuser fluctuate according to the stage of the printing process. The DC controller sends commands to the fuser-control circuit to adjust temperatures.

Figure 5-7 Fuser temperature-control circuit



Fuser (fixing) over-temperature protection

To protect the fuser from excessive temperatures, the product has four layers of protective functions. If one function fails, the subsequent functions should detect the problem.

- **DC controller:** When a thermistor or thermopile detects a temperature above a certain threshold, the DC controller interrupts power to the specific heater. Following are the thresholds for each component:
 - TH1: 230° C (446° F) or higher
 - TH2: 285° C (545° F) or higher
 - TH3: 285° C (545° F) or higher
- **Fuser (fixing)-heater safety circuit:** If the DC controller fails to interrupt the power to the heaters at the prescribed temperatures, the fuser-heater safety circuit deactivates the triac-drive circuit and releases the relay, which causes the heaters to stop at slightly higher temperature thresholds.
 - TH2: 290° C (554° F) or higher
 - TH3: 290° C (554° F) or higher
- **Current-detection protection circuit:** If current flowing in each triac exceeds a specific value, the current-detection protection circuit deactivates the triac-drive circuit and releases the relay, which interrupts the power supply to the heaters.
- **Thermoswitch:** If the temperature in the heaters is abnormally high, and the temperature in the thermoswitches exceeds a specified value, the contact to the thermoswitch breaks. Breaking this contact deactivates the triac-drive circuit and releases the relay, which interrupts the power supply to the heaters. Following are the thresholds for each thermoswitch:
 - TP1: 270° C (518° F) or higher



NOTE: When the thermoswitches reach this temperature, the temperature on the fuser rollers is about 320° C (608° F).

Fuser (fixing)-failure detection

When the DC controller detects any of the following conditions, it determines that the fuser has failed. The DC controller then interrupts power to the fuser heaters and notifies the formatter.

- **Abnormally high temperatures:** Temperatures are too high for any of the following components, at any time:
 - TH1: 230° C (446° F) or higher
 - TH2: 285° C (545° F) or higher
 - TH3: 285° C (545° F) or higher
- **Abnormally low temperatures:** Temperatures are too low at any of the following components after the product has initialized.
 - TH1: 120° C (248° F) or lower
 - TP2 or TP3: 100° C (212° F) or lower

Or, the temperature drops in either of the thermopiles (TP1 and TP2) by 30° C (86° F) or more within a specified length of time.

- **Abnormal temperature rise:** The DC controller determines an abnormal temperature rise if the detected temperature of TH1 does not rise 2° C within a specified time period after the fuser (fixing) motor is turned on, or if the detected temperature of the thermistors does not rise to a specified temperature for a specified time after the fuser (fixing) motor is turned on.
- **Thermistor open:** The DC controller determines a thermistor open if:
 - The detected temperature of TH1 is kept at 12° C (53° F) or lower for a specified time after the fuser (fixing) motor is turned on.
 - The detected temperature of TH2 is kept at 4° C (39° F) or lower for a specified time.
 - The detected temperature of TH3 is kept at 4° C (39° F) or lower for a specified time.
- **Drive-circuit failure:** The DC controller determines a drive-circuit failure:
 - If the detected power supply frequency is out of a specified range when the printer is turned on or during the standby period
 - If the current detection circuit detects an out of specified current value
- **Fuser (fixing) discrepancy:** The DC controller determines a fuser type mismatch when it detects an unexpected fuser (fixing) unit presence signal. The product has two fusers for 110 V or 220 V input power.