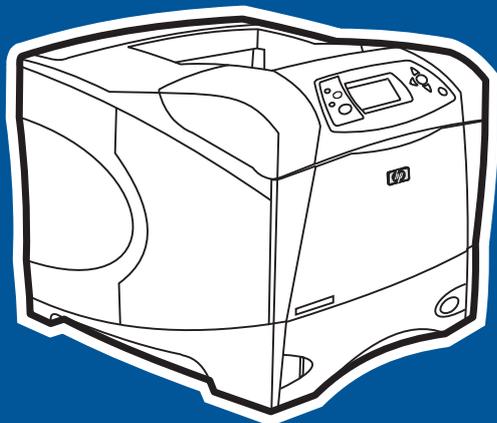


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HP LaserJet 4200, 4250, 4300 and 4350 Series printers

Service Manual



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1 Product information

Chapter contents

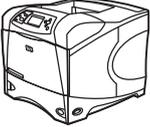
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Printer configurations

The HP LaserJet 4200, 4250, 4300 and 4350 Series printers are available in a total of six models.

Base model

Table 1-1 Printer descriptions, base models

Base model	Availability	Configuration
	HP LaserJet 4200 printer (Q2425A)	<ul style="list-style-type: none">■ 48 MB RAM, expandable to 416 MB■ One 100-sheet tray and one 500-sheet tray
	HP LaserJet 4200L printer (Q3993A) (This model is not available in all countries/regions.)	<ul style="list-style-type: none">■ 48 MB RAM, expandable to 288 MB■ One 100-sheet tray and one 500-sheet tray
	HP LaserJet 4250 printer (Q5400A)	<ul style="list-style-type: none">■ 48 MB RAM, expandable to 512 MB■ One 100-sheet tray and one 500-sheet tray
	HP LaserJet 4300 printer (Q2431A)	<ul style="list-style-type: none">■ 64 MB RAM, expandable to 416 MB■ One 100-sheet tray and one 500-sheet tray

n model

Table 1-2 Printer descriptions, n model

n model	Availability	Configuration
	HP LaserJet 4200n printer (Q2426A)	<ul style="list-style-type: none"> ■ 64 MB RAM, expandable to 416 MB – One 100-sheet tray and one 500-sheet tray ■ HP Jetdirect 10/100Base-TX print server for network connection
	HP LaserJet 4200Ln printer (Q3994A)	<ul style="list-style-type: none"> ■ 64 MB RAM, expandable to 416 MB – One 100-sheet tray and one 500-sheet tray – HP Jetdirect 10/100Base-TX print server for network connection
	HP LaserJet 4250n printer (Q5401A)	<ul style="list-style-type: none"> ■ 64 MB RAM, expandable to 512 MB – One 100-sheet tray and one 500-sheet tray – HP Jetdirect embedded print server for connecting to a 10/100Base-TX network
	HP LaserJet 4300n printer (Q2432A)	<ul style="list-style-type: none"> ■ 80 MB RAM, expandable to 416 MB ■ One 100-sheet tray and one 500-sheet tray – HP Jetdirect 10/100Base-TX print server for network connection
	HP LaserJet 4350n printer (Q5407A)	<ul style="list-style-type: none"> ■ 80 MB RAM, expandable to 512 MB ■ One 100-sheet tray and one 500-sheet tray ■ HP Jetdirect embedded print server for connecting to a 10/100Base-TX network

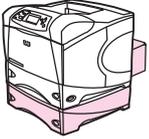
tn model

Table 1-3 Printer descriptions, tn model

tn model	Availability	Configuration
	HP LaserJet 4200tn printer (Q2427A)	<ul style="list-style-type: none">■ 64 MB RAM, expandable to 416 MB– One 100-sheet tray and two 500-sheet trays■ HP Jetdirect 10/100Base-TX print server for network connection
	HP LaserJet 4250tn printer (Q5402A)	<ul style="list-style-type: none">■ 64 MB RAM, expandable to 512 MB– One 100-sheet tray and two 500-sheet trays– HP Jetdirect embedded print server for connecting to a 10/100Base-TX network
	HP LaserJet 4300tn printer (Q2433A)	<ul style="list-style-type: none">■ 80 MB RAM, expandable to 416 MB– One 100-sheet tray and two 500-sheet trays– HP Jetdirect 10/100Base-TX print server for network connection
	HP LaserJet 4350tn printer (Q5408A)	<ul style="list-style-type: none">■ 80 MB RAM, expandable to 512 MB■ One 100-sheet tray and two 500-sheet trays– HP Jetdirect embedded print server for connecting to a 10/100Base-TX network

dtm model

Table 1-4 Printer descriptions, dtm model

dtm model	Availability	Configuration
	HP LaserJet 4200dtm printer (Q2428A)	<ul style="list-style-type: none"> ■ 64 MB RAM, expandable to 416 MB ■ One 100-sheet tray and two 500-sheet trays ■ HP Jetdirect 10/100Base-TX print server for network connection – Duplexer for automatic two-sided printing
	HP LaserJet 4250dtm printer (Q5403A)	<ul style="list-style-type: none"> ■ 80 MB RAM, expandable to 512 MB – One 100-sheet tray and two 500-sheet trays – HP Jetdirect embedded print server for connecting to a 10/100Base-TX network ■ Duplexer for automatic two-sided printing
	HP LaserJet 4300dtm printer (Q2434A)	<ul style="list-style-type: none"> ■ 80 MB RAM, expandable to 416 MB – One 100-sheet tray and two 500-sheet trays ■ HP Jetdirect 10/100Base-TX print server for network connection ■ Duplexer for automatic two-sided printing
	HP LaserJet 4350dtm printer (Q5409A)	<ul style="list-style-type: none"> – 96 MB RAM, expandable to 512 MB – One 100-sheet tray and two 500-sheet trays ■ HP Jetdirect embedded print server for connecting to a 10/100Base-TX network ■ Duplexer for automatic two-sided printing

dtns model

Table 1-5 Printer descriptions, dtns model

dtns model	Availability	Configuration
	HP LaserJet 4200dtns printer (Q2446A)	<ul style="list-style-type: none">■ 64 MB RAM, expandable to 416 MB■ One 100-sheet tray and two 500-sheet trays■ HP Jetdirect 10/100Base-TX print server for network connection– Duplexer for automatic two-sided printing– 500-sheet stacker output accessory
	HP LaserJet 4300dtns printer (Q2435A)	<ul style="list-style-type: none">– 80 MB RAM, expandable to 416 MB– One 100-sheet tray and two 500-sheet trays■ HP Jetdirect 10/100Base-TX print server for network connection■ Duplexer for automatic two-sided printing■ 500-sheet stacker output accessory

dtnsI models

Table 1-6 Printer descriptions, dtnsI model

dtnsI model	Availability	Configuration
	HP LaserJet 4200dtnsI printer (Q2447A)	<ul style="list-style-type: none"> ■ 64 MB RAM, expandable to 416 MB ■ One 100-sheet tray and two 500-sheet trays ■ HP Jetdirect 10/100Base-TX print server for network connection – Duplexer for automatic two-sided printing – 500-sheet stapler/stacker output accessory
	HP LaserJet 4250dtnsI printer (Q5404A)	<ul style="list-style-type: none"> – 80 MB RAM, expandable to 512 MB – One 100-sheet tray and two 500-sheet trays ■ HP Jetdirect embedded print server for connecting to a 10/100Base-TX network ■ Duplexer for automatic two-sided printing ■ 500-sheet stapler/stacker output accessory
	HP LaserJet 4300dtnsI printer (Q2448A)	<ul style="list-style-type: none"> ■ 80 MB RAM, expandable to 416 MB ■ One 100-sheet tray and two 500-sheet trays ■ HP Jetdirect 10/100Base-TX print server for network connection ■ Duplexer for automatic two-sided printing ■ 500-sheet stapler/stacker output accessory
	HP LaserJet 4350dtnsI printer (Q5410A)	<ul style="list-style-type: none"> ■ 96 MB RAM, expandable to 512 MB ■ One 100-sheet tray and two 500-sheet trays ■ HP Jetdirect embedded print server for connecting to a 10/100Base-TX network ■ Duplexer for automatic two-sided printing – 500-sheet stapler/stacker output accessory

Model and serial numbers

The model number and printer serial number are listed on an identification label located under the top cover on the right side of the printer. The model number is alphanumeric, such as Q2431A for the HP LaserJet 4300 product.

The serial number contains information about the country/region of origin, as well as the revision level, the production code, and the production number of the printer. An example of a serial number is USBB123456.

The label also contains power-rating and regulatory information as shown in the following figure.

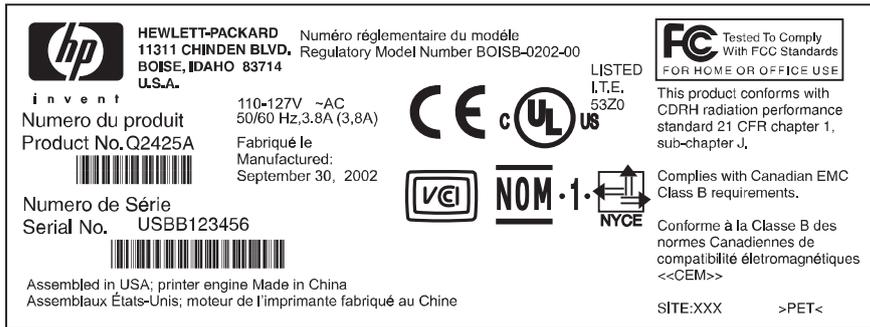


Figure 1-1 Sample model and serial number label, HP LaserJet 4300 printer

Printer overview

Hardware components

Before working with the printer, familiarize yourself with its parts.

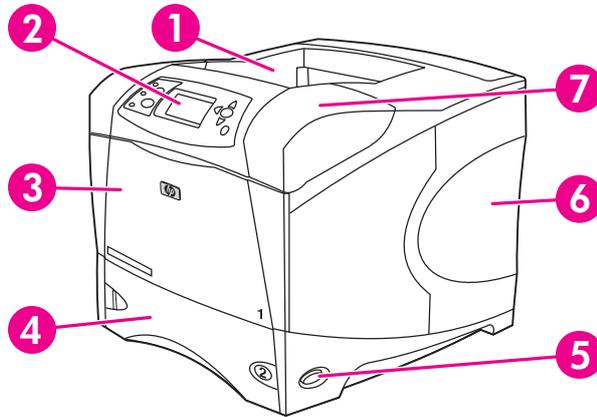


Figure 1-2 Hardware components; front view

1	Top output bin
2	Control panel
3	Tray 1 (pull to open)
4	Tray 2
5	On/off switch
6	Right-side panel (provides access to DIMMs and CompactFlash cards)
7	Top cover/cartridge-access door

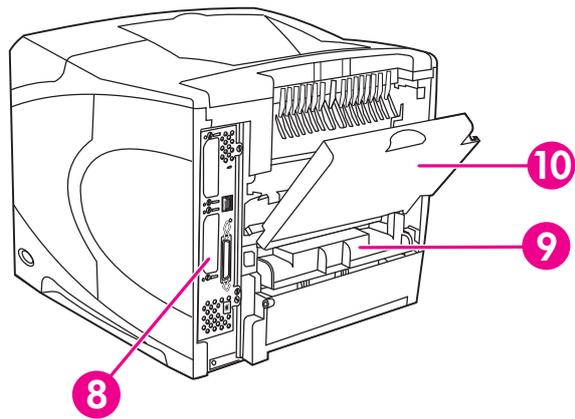


Figure 1-3 Hardware components; rear view

8	Interface ports (see Interface ports)
9	Slot for optional duplexer
10	Rear output bin (pull to open)

Interface ports

The printer has five ports: two EIO slots and three ports for connecting to a computer or a network.

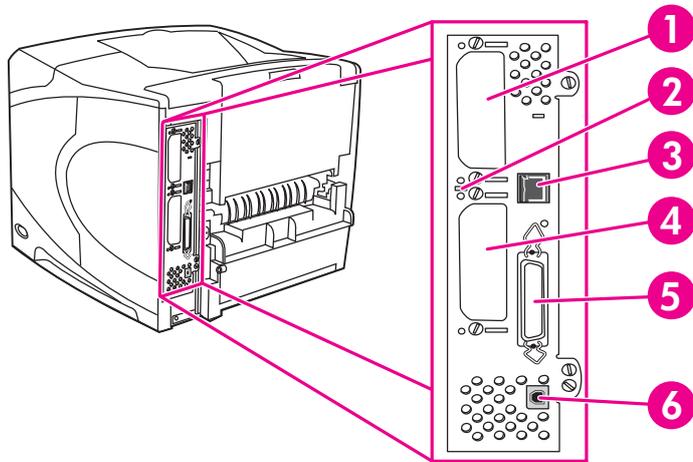


Figure 1-4 Interface ports (HP LaserJet 4250 is shown)

1	EIO slot 2
2	Diagnostic LED
3	Network connection (HP LaserJet 4250/4350 Series printers only)
4	EIO slot 1
5	IEEE 1284B-compliant parallel port
6	USB port (compatible with USB 2.0 full- and high-speed devices; HP LaserJet 4250/4350 Series printers only)

Software components

The printer comes with helpful software, including printer drivers and optional software. For easy printer setup and access to the full range of printer features, HP recommends that the user install the software that is provided.

Check the installation notes and Readme files on the printer CD for additional software and languages. HP software is not available in all languages.

Operating systems and printer components

The printer CD contains the software components and drivers for users and network administrators. The printer drivers that are provided on the CD must be installed in order to take full advantage of printer features. The other programs are recommended, but are not required for operation. Check the installation notes and Readme files on the printer CD for more information.

The CD includes software that is designed for users and network administrators who are operating in the following environments:

- Microsoft® Windows® 98 and Windows Millennium Edition (Me)
- Microsoft Windows NT® 4.0 (parallel and network connections only)
- Microsoft Windows 2000, Windows XP, and Windows Server 2003
- Apple Mac OS version 9.1 and later, and OS X version 10.1 or later

The most recent printer drivers for all supported operating systems are available at www.hp.com/go/lj4200_software, www.hp.com/go/lj4250_software, www.hp.com/go/lj4300_software, or www.hp.com/go/lj4350_software. If you do not have access to the Internet, see the support flyer that came in the printer box for information about obtaining the most recent software.

The following table lists the available software for the printer.

Software	Windows 98/ Me	Windows NT 4.0	Windows 2000/XP/ Server 2003	Mac OS	UNIX®/Linux	OS/2
Windows Installer	x	x	x			
PCL 6	x	x	x			
PCL 5	x	x	x			
PostScript emulation	x	x	x			
HP Web Jetadmin*		x	x		x	
Macintosh Installer				x		
Macintosh PostScript® (PS) Printer Description (PPD) files				x		
IBM drivers*						x
Model scripts*					x	

*Available only on the World Wide Web.

Printer drivers

Drivers included

Printer drivers provide access to the printer features and allow the computer to communicate with the printer (by using a printer language). Check the install notes, Readme, and late-breaking Readme files on the printer CD for additional software and languages.

The following printer drivers are included with the printer. The most recent drivers are available at www.hp.com/go/lj4200_software, www.hp.com/go/lj4250_software, www.hp.com/go/lj4300_software, or www.hp.com/go/lj4350_software. Depending on the configuration of Windows-based computers, the installation program for the printer software automatically checks the computer for Internet access to obtain the latest drivers.

Operating system ¹	PCL 6	PCL 5	PS	PPD ²
Windows 98, Me	x	x	x	x
Windows NT 4.0	x	x	x	x
Windows 2000, XP, Server 2003	x	x	x	x
Macintosh OS			x	x

¹ Not all printer features are available from all drivers or operating systems. See the context-sensitive help in the printer driver for available features.

² PostScript (PS) Printer Description files (PPDs)



NOTE If your system did not automatically check the Internet for the latest drivers during software installation, download them from www.hp.com/go/lj4200_software, www.hp.com/go/lj4250_software, www.hp.com/go/lj4300_software, or www.hp.com/go/lj4350_software. After you are connected, click **Downloads and Drivers** to find the driver that you want to download.

You can obtain Model Scripts for UNIX and Linux by downloading them from the Internet or by requesting them from an HP-authorized service or support provider. For Linux support see <http://www.hp.com/go/linux>. For UNIX support see http://www.hp.com/go/jetdirectunix_software. For additional information see the support flyer that came in the printer box.



NOTE If the printer driver that you want is not on the printer CD or is not listed here, check the install notes, Readme, and late-breaking Readme files to see if the printer driver is supported. If it is not supported, have the end-user contact the manufacturer or distributor of the program that is in use and request a driver for the printer.

Additional drivers

The following drivers are not included on the CD, but are available from the Internet.

- OS/2 PCL 5 or PCL 6 printer driver
- OS/2 PS printer driver
- UNIX model scripts
- Linux drivers
- HP OpenVMS drivers



NOTE The OS/2 drivers are available from IBM and are packaged with OS/2. They are not available for Simplified Chinese, Korean, Japanese, or Traditional Chinese.

Select the correct printer driver for your needs

Select a printer driver based on the way that the printer is used. Certain printer features are available only in the PCL 6 drivers. See the printer driver Help for available features.

- Use the PCL 6 driver to take full advantage of printer features. For general office printing, the PCL 6 driver is recommended to provide optimum performance and print quality.
- Use the PCL 5 driver if backward compatibility with previous PCL printer drivers or older printers is necessary.
- Use the PS driver when printing primarily from PostScript-specific programs such as Adobe® and Corel®, for compatibility with PostScript Level 3 needs, or for PS CompactFlash font support.



NOTE The printer automatically switches between PS and PCL printer languages.

Printer driver Help

Each printer driver has Help screens that can be activated by using the Help button, the **F1** button on the computer keyboard, or a question-mark symbol in the upper-right corner of the printer driver (depending on the Windows operating system that you are using). You can also open printer-driver Help by right-clicking any item in the driver, and then clicking **What's This?** These Help screens give detailed information about the specific driver. Printer driver Help is separate from software-program Help.

Using the printer drivers

Use one of the following methods to open the printer drivers from the computer:

Operating System	To change the settings for all print jobs until the software program is closed	To change the print-job default settings (for example, to turn on Print on Both Sides by default)	To change the configuration settings (for example, to add a physical option such as a tray or to enable or disable a driver feature such as Allow Manual Duplexing)
Windows 98, NT 4.0, and Me	On the File menu in the software program, click Print . Select the printer, and then click Properties . The steps can vary; this procedure is the most common.	Click Start , click Settings , and then click Printers . Right-click the printer icon, and then select Properties (Windows 98 and Me) or Document Defaults (Windows NT 4.0).	Click Start , click Settings , and then click Printers . Right-click the printer icon, and then select Properties . Click the Configure tab.
Windows 2000, XP, and Server 2003	On the File menu in the software program, click Print . Select the printer, and then click Properties or Preferences . The steps can vary; this procedure is the most common.	Click Start , click Settings , and then click Printers or Printers and Faxes . Right-click the printer icon, and then select Printing Preferences .	Click Start , click Settings , and then click Printers or Printers and Faxes . Right-click the printer icon, and then select Properties . Click the Device Settings tab.
Macintosh OS V9.1	On the File menu, click Print . Change the settings that you want on the various pop-up menus.	On the File menu, click Print . As you change settings on the pop-up menu, click Save Settings .	Click the desktop printer icon. From the Printing menu, click Change Setup .
Macintosh OS X V10.1	On the File menu, click Print . Change the settings that you want on the various pop-up menus.	On the File menu, click Print . Change the settings that you want on the various pop-up menus, and then, on the main pop-up menu, click Save Custom Setting . These settings are saved as the Custom option. To use the new settings, you must select the Custom option every time that you open a program and print.	Delete the printer and reinstall it. The driver will be auto-configured with the new options when it is reinstalled.
			 <p>NOTE Use this procedure for AppleTalk connections only. Configuration settings might not be available in Classic mode.</p>
Macintosh OS X V10.2	On the File menu, click Print . Change the settings that you want on the various pop-up menus.	On the File menu, click Print . Change the settings that you want on the various pop-up menus, and then, on the Presets pop-up menu, click Save as and type a name for the preset. These settings are saved in the Presets menu. To use the new settings, you must select the saved preset option every time you open a program and print.	Open Print Center by selecting the hard drive, clicking Applications , clicking Utilities , and then double-clicking Print Center . Click on the print queue. On the Printers menu, click Show Info . Click the Installable Options menu.
			 <p>NOTE Configuration settings might not be available in Classic mode.</p>
Macintosh OS X V10.3	On the File menu, click Print . Change the settings that you	On the File menu, click Print . Change the settings that you	Open Printer Setup Utility by selecting the hard drive,

Operating System	To change the settings for all print jobs until the software program is closed	To change the print-job default settings (for example, to turn on Print on Both Sides by default)	To change the configuration settings (for example, to add a physical option such as a tray or to enable or disable a driver feature such as Allow Manual Duplexing)
	<p>want on the various pop-up menus.</p>	<p>want on the various pop-up menus, and then, on the Presets pop-up menu, click Save as and type a name for the preset. These settings are saved in the Presets menu. To use the new settings, you must select the saved preset option every time that you open a program and print.</p>	<p>clicking Applications, clicking Utilities, and then double-clicking Printer Setup Utility. Click on the print queue. On the Printers menu, click Show Info. Click the Installable Options menu.</p>