Printer basics

Congratulations on your purchase of an HP LaserJet 9000 Series printer. If you have not done so, see the *start* guide provided with the printer for setup instructions.

Now that the printer is set up and ready to use, take a few moments to get to know the printer. This chapter introduces the following:

- Features and benefits of the printer
- Layout and basic operation of the control panel
- Interpreting control panel lights
- Using control panel menus
- Paper handling users LED status interpretation
- Helpful printer software for increased printing flexibility

Features and benefits of the printer

Print cartridge

- supplies status page with toner gauge, page count, and information about paper sizes used
- no-shake cartridge design
- authentication of HP print cartridges
- automatic seal tab removal

Paper handling options

Input

- Optional Tray 1 (Multipurpose Tray): A multipurpose tray for paper, transparencies, labels, and envelopes. Holds up to 100 sheets of paper or 10 envelopes.
- **Trays 2 and 3:** Two 500-sheet trays. These trays automatically sense standard paper sizes up to Ledger A3, and allow printing on custom-size paper.
- Optional Tray 4 (2,000-sheet Input Tray): This tray automatically senses standard paper sizes up to Ledger/A3, and allows printing on custom-size paper.
- Optional duplex printing accessory: Provides two-sided printing (both sides of paper).

Output

- Face-up bin: Holds up to 100 sheets of paper.
- Face-down bin: Holds up to 500 sheets of paper.
- Optional 3,000-sheet stacker: A stacking device.
- Optional 3,000-sheet stapler/stacker: Provides multiposition stapling for up to 50 sheets of paper per job, or equivalent job height of 5 mm (depending on paper thickness).
- Multifunction finisher: Provides 1,000 sheets of stacking capacity, stapling for as many as 50 sheets
 of paper per document, plus folding and saddle stitching of booklets that contain up to 10 sheets of
 paper.
 - Stacker bin (Bin 1): Holds up to 1,000 sheets of paper.
 - Booklet bin (Bin 2): Holds up to 50 booklets.

Connectivity

Up to three open enhanced input/output (EIO) expansion slots that support the following cards:

- HP Jetdirect EIO cards
- Ethernet (10Base-T, 10Base2)
- Token Ring
- Fast Ethernet 10/100TX
- USB, Serial
- LocalTalk
- Parallel C connection
- HP Fast InfraRed Connect (fast infrared connection)
- Foreign Interface Harness (FIH) connection (AUX)

Environmental features

- PowerSave setting saves energy (meets ENERGY STAR guidelines)
- High content of recyclable components and materials in the printer

Note

See "Protecting the environment" on page 218 for more information.

Firmware updates

Provides the ability to upgrade the printer firmware. To download the latest firmware, go to www.hp.com/go/lj9000_firmware and follow the instructions on the screen. To easily send firmware updates to multiple printers, use the HP Web JetAdmin software (go to www.hp.com/go/webjetadmin).

Optional HP EIO hard disk

The EIO hard disk accessory can be used to store selected print jobs, support RIP Once technology, and permanently store downloaded fonts and forms in the printer. Unlike standard printer memory, many items on the EIO hard disk remain in the printer even when the printer is turned off. Fonts downloaded to the EIO hard disk are available to all users of the printer.

The EIO hard disk can be write-protected through software for additional security.

Windows users

Use the HP Resource Manager to delete files and manage fonts on a mass storage device. See "HP Resource Manager" on page 26. For more information, see the printer software help.

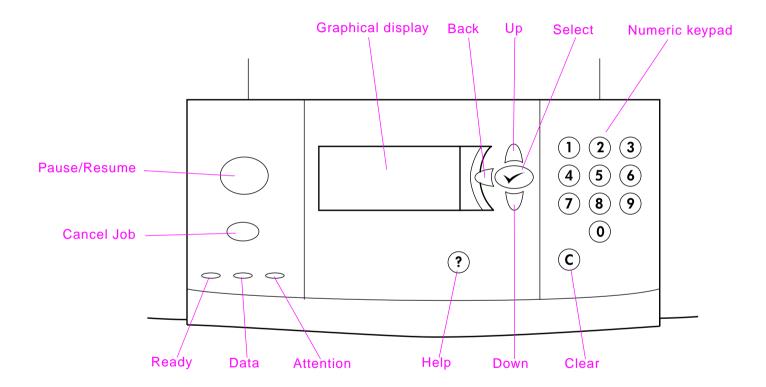
Hewlett-Packard occasionally introduces new software tools for use with your printer and accessories. These tools are available from the Internet. For more information, see the *introduce* guide on the product CD, or go to www.hp.com/cposupport/ for the addresses of the HP website.

Macintosh users

Use the HP LaserJet Utility to download fonts and files. For more information, see "HP LaserJet Utility (Macintosh)" on page 25 or the HP LaserJet Utility Guide online help included with your HP LaserJet Utility software.

Layout and basic operation of the control panel

The control panel includes three light emitting diode (LED) indicator lights, four navigation keys, dedicated help, two job-specific buttons, a numeric key pad, and a graphical display (capable of displaying up to four lines of text).



Key	Function	
◀	Backs up one step from a selection or from a 10-key entry.	
(BACK ARROW)		
A	Navigates to the previous item in the list.	
(UP ARROW)		
(SELECT)	 Saves the selected value for that item. An asterisk (*) appears next to the selection, indicating that it is the new default. Default settings remain when the printer is switched off or is reset (unless you reset all factory defaults from the Resets menu). 	
	 Prints one of the printer information pages from the control panel. 	
С	Returns a numeric entry to its previous value.	
(CLEAR)		
▼	Navigates to the next item in the list.	
(Down Arrow)		
?	Gets help about the message currently displayed.	
(HELP)		
CANCEL JOB	Cancels the current print job in process. The time it takes to cancel depends on the size of the print job. (Press it only once.)	
Pause/Resume	 Returns to the ready or busy state from menus or online help. Toggle between PAUSE and RESUME. 	
NUMERIC KEYPAD	Enters numeric values.	

Interpreting control panel lights

Light		Indication
Ready		
	Off	The printer is offline or has an error.
	On	The printer is ready to print.
	Blinking	The printer is going offline; please wait.
Data		
	Off	The printer has no data to print.
	On	The printer has data to print, but is not ready or is offline.
	Blinking	The printer is processing or is printing the data.
Attention		
	Off	The printer has no error.
	On	The printer has a critical error. Turn the printer off and then on.
	Blinking	Action is required. See the control panel display.

Using control panel menus

For a complete list of control panel items and possible values, see "Control panel menus" on page 172. When additional trays or other accessories are installed in the printer, new menu items automatically appear.

To print a control panel menu map

See "Menu map" on page 154 for information about how to print a control panel menu map.

To change a control panel setting

- 1 Press \checkmark to enter the menus.
- 2 Use ▲ or ▼ to scroll to the menu you want, and press ✓ to select it. Depending on the menu, you might have to repeat this step to select a submenu.
- 3 Use ▲ or ▼ to scroll to the item you want, and press ✓ to select it.
- 4 Use ▲ or ▼ to scroll to the value you want, and press ✓ to select it. An asterisk (*) appears next to the selection in the display, indicating that it is now the default.
- 5 Press Pause/Resume to exit the menu.

Note

Settings in the printer driver and software override control panel settings. (Software settings override printer driver settings.) If you cannot access a menu or an item, it is either not an option for the printer, or your network administrator has locked the function. (The control panel reads ACCESS DENIED MENUS LOCKED.) See your network administrator.

Paper handling users LED status interpretation

Use the following table to interpret the status LED on the optional 2,000-sheet input tray (optional Tray 4), optional 3,000-sheet stacker, and 3,000-sheet stapler/stacker.

Light	Optional 2,000-sheet input tray	Optional 3,000-sheet stacker or 3,000-sheet stapler/stacker
Solid green	The accessory is on and ready.	The accessory is on and ready.
Blinking green	The accessory is in service mode.	The accessory is in service mode.
Solid amber	The accessory is experiencing a hardware malfunction.	The accessory is experiencing a hardware malfunction.
Blinking amber	The accessory has a jam, or a page needs to be removed from the tray, even if the page is not jammed.	The accessory has a jam, or a page needs to be removed from the unit, even if the page is not jammed.
	The lower right door might be open.	The accessory is not correctly attached to the printer.
Off	The printer might be in PowerSave mode. Press any key of your choice.	The printer might be in PowerSave mode. Press any key of your choice.
	The accessory is not receiving power.	The accessory is not receiving power.

Helpful printer software for increased printing flexibility

Windows software

Network Administrator

- HP Common Installer
- HP Internet Installer
- HP Disk Image Utility
- HP Common Drivers

Client

- HP Common Installer
- HP Common Drivers

Macintosh software

Network Administrator

- HP Common Installer
- HP Disk Image Utility
- HP Common Drivers Macintosh Client

Client

- PPDs/PDEs
- HP LaserJet Utility*
- Fonts*
- Help Files* (English only)

The printer drivers provided on the CD must be installed to take full advantage of the printer features. The other programs are recommended, but are not required for operation. See the readme file for more information.

^{*} These products are not supported in Traditional Chinese, Simplified Chinese, Korean, Japanese, Czech, Russian, and Turkish languages.

For network printer configuration and management, use the HP Web JetAdmin software which is a server-based tool that network administrators can gain access to using a Web browser. For supported host systems and available languages or to download the software, go to www.hp.com/go/webjetadmin, or use the link on the CD.

The most recent drivers, additional drivers, and other software are available from the Internet. Depending on the configuration of Windows-driven computers, the installation program for the printer software automatically checks the computer for Internet access to obtain the latest software. If you do not have access to the Internet, see the *introduce* guide on the product CD to obtain the most recent software.

Included with the printer is a CD containing the HP LaserJet Printing System. On the CD are software components, documentation, and drivers that benefit users and network administrators. See the readme file for the most current information.

19

The CD includes software designed for end users and network administrators operating in the following environments:

- Microsoft Windows 9X and Windows Me
- Microsoft Windows NT 4.0 and Windows 2000
- IBM OS/2 version 3.0 or greater (Web)
- Apple Mac OS 7.5 or greater
- Linux (Web)
- AutoCad

The printing system also includes software for network administrators using the following network operating systems:

- Novell NetWare 3.x, 4.x, or 5.x
- Microsoft Windows 9X and Windows Me
- Microsoft Windows NT 4.0, Windows 2000, and Windows Me
- Apple MAC OS (EtherTalk)
- Linux (Web)
- UNIX (Web)

Network printer installation for UNIX and other network operating systems is available from the Web or through a local HP-authorized distributor.

Printer drivers

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

Drivers included with the printer

The most recent drivers are available at www.hp.com/cposupport/. 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.

	PCL 5e	PCL 6	PS ^a	
Windows 9X and Windows Me	✓	✓	✓	
Windows NT 4.0 and Windows 2000	✓	✓	✓	
Macintosh computer ^b			✓	

- a. PostScript (PS) Level 3 emulation is referred to as PS throughout this use guide.
- b. Only PostScript Printer Description (PPDs) files are included. (See "PostScript Printer Description Files (PPDs) and Printer Dialog Extension (PDEs)" on page 24). If you need the Apple LaserWriter 8 printer driver, it comes with the Macintosh operating system (OS), or it can be obtained directly from Apple.

Choose the correct printer driver for your needs

• Use the PCL 6 driver to take full advantage of the printer features. The PCL 6 driver is recommended unless backward compatibility with previous PCL drivers or older printers is necessary.

- Use the PCL 5e driver if you want print results to look comparable to those from older printers, or for font DIMM support.
- Use the PS driver for compatibility with PostScript Level 3 needs.

Note

The printer automatically switches between PS and PCL printer languages.

For the Macintosh, use the Apple LaserWriter 8.6 or above printer driver, which are PS drivers.

Printer driver help

Each printer driver has help screens that can be activated either from the Help button, the F1 key, or the question mark symbol in the upper right corner in the printer driver (depending on the Windows operating system used). These help screens give detailed information about the specific driver. Printer driver help is separate from the software application help.

Additional drivers

You can obtain the following additional printer drivers by downloading them from the Internet, or by requesting them from an HP-authorized service or support provider. (See www.hp.com/cposupport/ for more information.)

- OS/2 PCL5e and PCL 6 printer driver
- OS/2 PS2 printer driver
- AutoCAD

Note

If the CD does not include the desired driver or if it is not listed here, check the software application installation disks or readme files to see if they include support for the printer. If not, contact the software manufacturer or distributor and request a driver for the printer.

Software for Windows

Use the printing system software to install the printer. If you are installing the printer on a network (Novell NetWare or Microsoft Windows network) from a Windows 9X, Windows NT 4.0, Windows 2000, or Windows ME system, the printing system software will guide you through the installation process, and will properly configure the network printer.

Note

If the printer is used on a network, the network clients and servers must be properly configured to communicate on the network.

For additional network printer configuration and management, use HP Web JetAdmin. HP Web JetAdmin is a browser-based management tool and should be installed only on the network administrator's computer. For the latest list of supported host systems, visit HP Customer Care Online at www.hp.com/go/webjetadmin.

Access the Windows printer driver

To configure the driver, access it in one of the following ways:

Operating system	Temporarily change settings (from a software application)	Change default settings (across all software applications)
Windows 9X and Windows ME	From the File menu, click Print , and then click Properties . (The actual steps can vary; this is the most common method.)	Click the Start button, point to Settings , and then click Printers . Right-click the appropriate printer icon, and choose Properties .
Windows NT 4.0 and Windows 2000	From the File menu, click Print , and then click Properties . (The actual steps can vary; this is the most common method.)	Click the Start button, point to Settings , and then click Printers . Right-click and choose Document Defaults or Properties .

Note
Settings in the printer driver and software application override control panel settings. (Software application settings override printer driver settings.)

Software for Macintosh computers

Apple LaserWriter driver, version 8.6 or later

The Apple LaserWriter 8.6 printer driver comes with the Mac OS, or can be obtained directly from Apple.

PostScript Printer Description Files (PPDs) and Printer Dialog Extension (PDEs)

PPDs, for OS 9 and earlier, in combination with the LaserWriter 8.6 printer driver, access the printer features and allow the computer to communicate with the printer. An installation program for the PPDs and other software is provided on the CD. Use the Apple LaserWriter 8.6 Driver that comes with the computer.

Use PDEs for OS X.

HP LaserJet Utility (Macintosh)

The HP LaserJet Utility allows control of features that are not available in the driver. The illustrated screens make selecting printer features from the Macintosh computer easier than ever. Use the HP LaserJet Utility to do the following:

- customize the printer control panel messages.
- name the printer, assign it to a zone on the network, download files and fonts, and change most of the printer settings.
- set a password for the printer.
- from the computer, lock out functions on the printer control panel to prevent unauthorized access. (See the printer software help.)
- configure and set the printer for IP printing.
- initialize disk or flash memory.
- manage fonts in random access memory (RAM), disk, or flash memory.
- administer job retention features.

See the HP LaserJet utility help for more information.

Fonts

Eighty screen fonts are installed that correspond with the PS fonts resident in the printer.

Software for networks

HP Web JetAdmin software

HP Web JetAdmin is a web-based tool for proactive management and configuration of network-connected peripherals. For the latest list of supported host operating systems, visit the HP Web JetAdmin site a www.hp.com/go/webjetadmin.

HP Jetdirect Printer Installer for UNIX

The HP Jetdirect Printer Installer for UNIX is a simple printer installation utility for HP-UX and Sun Solaris networks. It is available to download at www.hp.com/support/net_printing.

HP Resource Manager

The HP Resource Manager should be installed only on the network administrator's computer. The HP Resource Manager allows you to control the optional hard disk and optional flash memory features not found in the drivers. Bidirectional communication is required.

Note

HP Resource Manager is not available for the Macintosh. If you are using a Macintosh, these features are available in the HP LaserJet Utility (version 3.5.1 or greater).

Use the HP Resource Manager to do the following:

- initialize disk and flash memory
- download, delete, and manage fonts to disk and flash memory across networks
 - PostScript Type 1, PostScript Type 42 (TrueType fonts converted to PostScript format), TrueType, and PCL bitmap fonts. (To download Type 1 fonts, Adobe Type Manager must be loaded and running.)

Note

For more information, see the embedded Web server user guide at www.hp.com/cposupport/.

Home pages

The home pages of the embedded Web server are the informational pages for the printer. These include:

Printer status page

This page shows the printer control panel and any current message. The control panel status lights and buttons are also displayed, so you can change the printer control panel menu settings from this page. Consumable life levels and the input tray media configuration are also displayed.

Configuration page

The printer configuration page is displayed from this site in the embedded Web server. For more information, see "Configuration page" on page 155.

Event log page

This page shows the printer event log. For more information, see "Event log page" on page 162.

Supplies page

This page shows the levels of the consumables for the printer.

Usage page

This page shows how much of each media type has been used by the printer.

Device identification page

This page lets you name the device for network management needs, and shows the IP address and server for the printer.

Device pages

The device pages of the embedded Web server allow you to configure the printer from your computer. These pages can be password protected. Always consult with your network administrator before changing the printer configuration.

Configure printer page

This page lets you configure all printer settings.

Alerts page

This page lets you configure notification recipients for various printer events.

E-mail page

The e-mail addresses of notification recipients of printer events are entered in this page.

Order supplies page

The remaining life of various consumables is shown on this page, and links to the HP website for ordering supplies is also displayed.

Contact information page

The name and e-mail address of the primary point of contact for information about the printer is entered into this page. The primary point of contact is usually the network administrator.

Security page

This page configures the password information for the embedded Web server. Password information should be configured only by the network administrator.

Other links page

This page is used to enter other websites into the embedded Web server. These sites are displayed on the navigational bar throughout the embedded Web server pages.

Refresh rate page

This page configures how often the embedded Web server obtains information from the printer regarding printer status.

Language page

The language that the embedded Web server is displayed in is configured from this page.

Device identification page

This page lets you name the device for network management needs, and shows the IP address and server for the printer.

Network pages

The network pages of the embedded Web server provide access to HP Jetdirect network configuration parameters and status. These include:

Network settings page

This page provides access to network protocol configuration parameters and other settings.

Support settings page

This page lets you configure links for support assistance.

Admin password page

This page lets you limit user access to network configuration parameters for this printer.

Access control page

This page allows an administrator to limit client system access to this printer.

Diagnostic pages

These pages provide access to network statistics and configuration page settings useful for troubleshooting.