
HP Pavilion Notebook PC

 Setup Guide

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Edition History

Edition 1 January 2000



This manual is printed on recycled paper.

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Introducing the Pavilion Notebook PC

Taking Inventory

- HP Pavilion Notebook PC.
- Main battery.
- AC adapter and power cord.
- Telephone cord—if your Pavilion includes a modem.
- Quick Start sheet.
- The *Pavilion Setup Guide*.
- Pavilion Recovery CD, which includes Windows recovery and Windows drivers.
- Microsoft Windows manual.

Software provided on your Pavilion

Software	Function
QuickLink III	Permits fax transfer to fax machines and fax software—and permits data transfer.
Adobe Acrobat Reader	Allows you to read documents in Acrobat format, which is used frequently on the Web.
MusicMatch	Plays music CDs, downloads song titles from the Internet, and creates and plays MP3 files.
VirusScan	Protects your Pavilion from files that can be harmful. See "To use the VirusScan utility" in the electronic <i>User's Guide</i> .
Electronic Registration	Permits quick and easy registration of your Pavilion. See "To register your computer" on page 18 for details.
MS Money 2000	Helps you manage finances at home and at the office using electronic checkbooks, online banking, and tools for investment tracking and tax planning.
MS Encarta 2000	Provides access to a CD-based encyclopedia.
MS Works 2000	Offers word processing, spreadsheet, database, and calendar applications, all contained in a single software program. (A CD is included, in case you have to reinstall the software.)

Intuit Quicken 2000	Allows you to manage and organize your finances, including checkbook balancing, bill paying, and budget development.
Ravisent DVD Player	For computers with a DVD drive, controls DVD play.
HP e-center	Provides easy access to preferred Internet sites that enhance business productivity.
HP DiagTools	Provides basic and advanced hardware diagnostic tests.

To find more information

Congratulations! Your HP Pavilion Notebook PC sets a new standard in personal computing. It is compact and easy to carry, and is infused with the quality and attention to detail that are the hallmark of Hewlett-Packard.

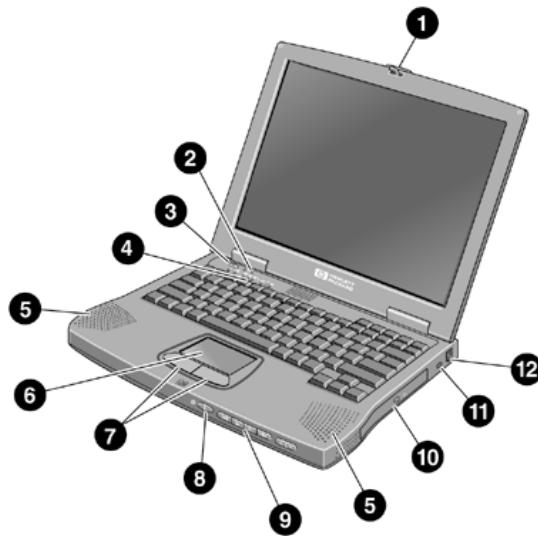
The Pavilion *Quick Start* sheet shows how to get your Pavilion up and running quickly. This *Setup Guide* shows how to set up and operate the Pavilion and where to go for help if you run into trouble.

This table lists other sources of supplementary information about Pavilion products.

Source	Description
Pavilion Notebook <i>User's Guide</i>	The User's Guide is a help file located on your hard drive. It provides detailed information about your Pavilion (Start, Programs, Pavilion Library—or double-click the desktop icon).
Pavilion Notes	This document contains late-breaking information available after the manuals were completed (Start, Programs, Pavilion Library—or double-click the desktop icon).
Introductory Microsoft manual for Windows 98.	This manual contains information about using the standard features of Microsoft Windows 98 Second Edition (SE).
Pavilion Notebook Web site	www.hp.com/notebooks
HP Customer Care Web site	www.hp.com/cposupport

Identifying the Parts of the Pavilion Notebook

Front view

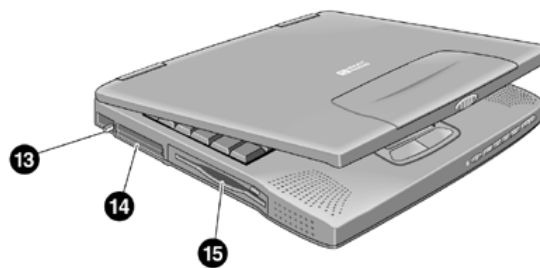


- | | |
|---|---|
| 1 | Latch to open the Pavilion |
| 2 | Built-in microphone |
| 3 | Blue power button |
| 4 | Status lights |
| 5 | Built-in speakers |
| 6 | Touch pad (pointing device) |
| 7 | Click buttons |
| 8 | CD player power (on selected CD-ROM and DVD models) |

Introducing the Pavilion Notebook PC
Identifying the Parts of the Pavilion Notebook

- 9 CD player buttons (on selected CD-ROM and DVD models)
 - 10 CD-ROM drive or DVD drive
 - 11 Kensington lock slot (security connector)
 - 12 Modem phone jack (on selected models)
-

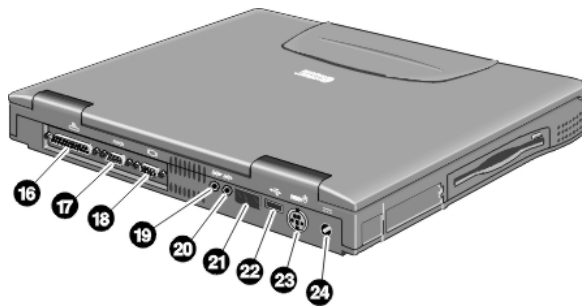
Side view



- 13 PC Card eject buttons
- 14 PC Card and CardBus slots (upper and lower)
- 15 Floppy disk drive

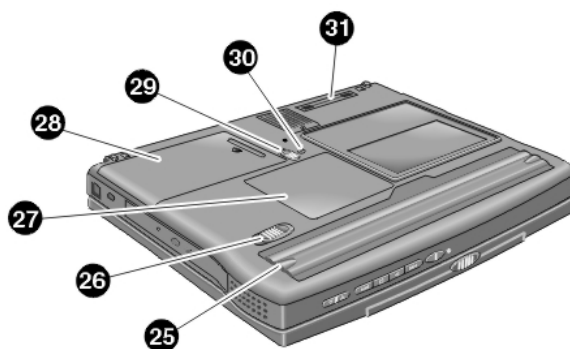
Introducing the Pavilion Notebook PC
Identifying the Parts of the Pavilion Notebook

Rear view



- 16 Parallel port
- 17 Serial port
- 18 VGA port (external monitor)
- 19 Audio out (external speaker)
- 20 Microphone jack
- 21 Infrared port
- 22 USB port
- 23 PS/2 port
- 24 AC adapter jack

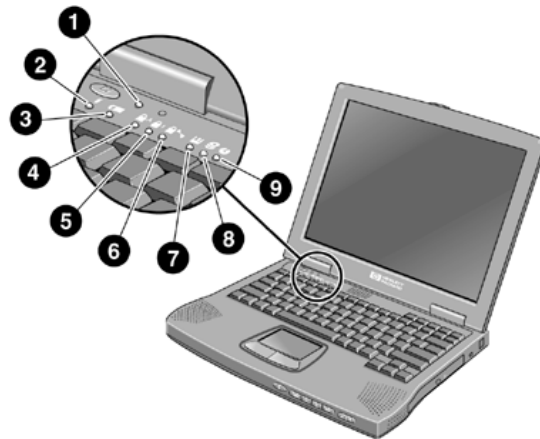
Bottom view



- 25 Battery
- 26 Battery latch
- 27 RAM expansion cover
- 28 Hard disk drive
- 29 Hard disk drive latch and locking screw
- 30 System-off button (for resetting computer)
- 31 Port replicator connector

Introducing the Pavilion Notebook PC
Identifying the Parts of the Pavilion Notebook

Status lights



- 1 Power
- 2 AC connected
- 3 Battery
- 4 Caps Lock
- 5 Num Lock
- 6 Scroll Lock
- 7 Floppy disk drive access
- 8 Hard disk drive access
- 9 CD-ROM or DVD access

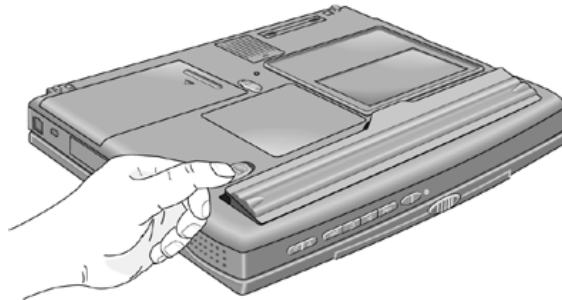
Setting Up the Computer

To install the battery

WARNING

Do not mutilate, puncture, or dispose of batteries in fire. A battery can burst or explode, releasing hazardous chemicals. A rechargeable battery must be recycled or disposed of properly.

Your computer is shipped with the battery installed. If the battery has been removed, you can install it by inserting it into the battery bay on the bottom of your computer by sliding the battery latch, as shown.



Once you have installed the battery, connect the AC adapter to the computer and recharge the battery while you work. You can also replace a low battery with another that is more fully charged.

To connect AC power

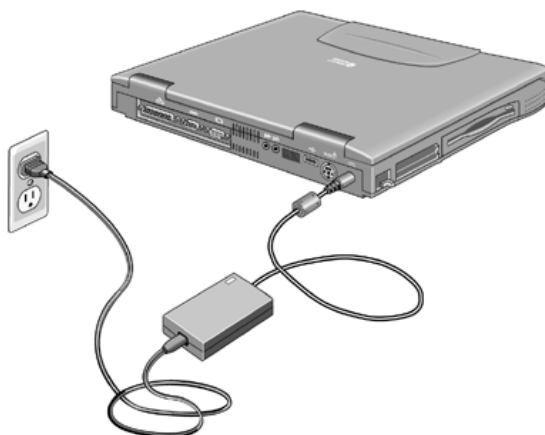
CAUTION

Use only the HP AC adapter intended for this product, model HP F1454A. Using any other AC adapter can damage the Pavilion and may void your warranty. Refer to the warranty statement for your product.

Plug in the AC adapter, then connect the AC adapter to the rear of the computer, as shown. The battery starts charging.

Introducing the Pavilion Notebook PC

Setting Up the Computer



To connect a phone line

Selected Pavilion models have a built-in modem. If your computer does not have one, you can instead use a PC Card modem or an external modem to connect to a phone line.

1. Plug one end of the phone cable into the (modem) phone jack on the computer. Be sure the cable clicks into place.
2. Plug the other end of the phone cable into a telephone jack. (If the phone cable does not fit your telephone jack, you may need to use an adapter.)

CAUTION

If you have a modem built into your computer, it may not work with multiple phone lines or a private branch exchange (PBX), cannot be connected to a coin-operated telephone, and does not work with party lines. Some of these connections may result in excess electrical voltage and could cause a malfunction in the internal modem. Check your telephone line type prior to connecting your phone line.

NOTE

The Pavilion Notebook modem supports the v.23 standard required for connecting to the MiniTel system in France. To connect to the MiniTel system, use MiniTel emulation software available in France.

To turn on the computer

Press the blue power button above the keyboard. Windows starts automatically. If you are turning on the computer for the first time, go to “To set up Windows” on page 17.

The power status light (see “Status lights” on page 14) reports the following:

- Steady green light: computer is on.
- Slow blinking: computer is in System Standby or Suspend mode.
- No light: computer is off or in Hibernate mode.

See “Managing Power Consumption” on page 38 for information about turning off your Pavilion.

Hint

If your computer does not turn on when operating on battery power, the battery may be out of power. Plug in the AC adapter and press the blue power button again.

To set up Windows

The Pavilion has Microsoft Windows 98 preinstalled on the hard disk drive. The first time you turn on your computer, the Windows Setup program automatically runs so that you can customize your setup, register your computer, and sign up with an Internet Service Provider (ISP).

Year 2000

Hewlett-Packard makes no representation or warranty about the Year 2000 readiness of non-HP products including preinstalled operating systems or application software. You should contact the software manufacturer directly to determine if you need to do anything else to ensure compliance.

Microsoft has indicated that many of its operating system software products and applications require customer installation of software patches for Year 2000 compliance and may require additional patches in the future. The need for such patches most likely applies to the operating system software and any Microsoft applications shipped with this product. You are urged to contact Microsoft at <http://www.microsoft.com/y2k>, at 1-888-MSFTY2K (U.S. and Canada only), or at your local Microsoft office.

Introducing the Pavilion Notebook PC

Setting Up the Computer

Before you begin, connect the AC adapter to your notebook, since your battery may not be sufficiently charged to complete the Windows setup. Also, be sure to connect the notebook to the phone line. For information on connecting your modem, see “To connect a phone line” on page 16.

1. Press the blue power button.
2. The Windows Setup program starts automatically.
3. Follow the instructions as they appear on the screen. For additional information about registering your computer, see “To register your computer.”

Note

If you experience any connection problems with your modem, you can try redialing, or if that doesn't work, you can skip the product registration and ISP selection.

To register your computer

Be sure to register your computer. Registering is free and fast, and it insures you will be promptly informed about new product information, product support, enhancements, and add-ons. The information that you provide during registration will be used by Hewlett-Packard and Microsoft to provide you better products and services.

There are three ways to register:

- by modem
- by phone
- by fax

By modem

Windows 98 automatically prompts you to register. To register by modem, make sure that you have connected the phone line, then follow the onscreen instructions.

If you choose not to register right away, you can register by modem later by double-clicking the HP Pavilion Registration icon on the desktop. (This icon disappears after you register.)

By phone

You can call your HP Customer Care Center and register by phone. The number, in the U.S., is (970) 635-1000.

By fax

If a printer is connected to your computer, you can print a copy of your registration and register by fax. You will find the fax number on the registration form.

Hint

Be sure to provide a Personal Identifier during registration, such as your mother's maiden name or any other short set of characters that you always remember. Whenever you call for service, this information allows us to authenticate you as the owner of this notebook.

By completing registration, you will:

- Record your ownership of the Pavilion with Hewlett-Packard and gain access to service, support, and information.
- Record your ownership of the Windows operating system with Microsoft.

To connect to an Internet Service Provider

If you don't have access to the Internet via a local area network (LAN), you may want to sign up for an ISP or configure your computer to use your existing ISP. You had an option to select an ISP the first time you turned on your computer. If you didn't sign up at that time, just connect a phone line to your computer and double-click the Easy Internet Signup icon on the desktop. The Easy Internet Signup wizard allows you to select a new or an existing provider.

To reset the screen saver

If your HP Pavilion Notebook PC was used as a demonstration unit in a retail store, it may have been configured to display the Pavilion screen saver demo continuously.

To reset your notebook:

1. Choose a different screen saver.
 - Right click on the desktop and select Properties.
 - Select the Screen Saver tab, and use the pulldown menu to choose a different screen saver.
 - Click Apply and click OK.

Introducing the Pavilion Notebook PC

Setting Up the Computer

2. Reset the power management features.
 - Select Start, Settings, Control Panel, Power Management.
 - Reset power management features as you prefer. (For example, you can use the pulldown menu under Power schemes and select the Portable/Laptop power scheme, which is appropriate for most mobile users.)
 - Click Apply and click OK.

Using the Pavilion Notebook PC

Operating the Computer

To use the Fn hot keys

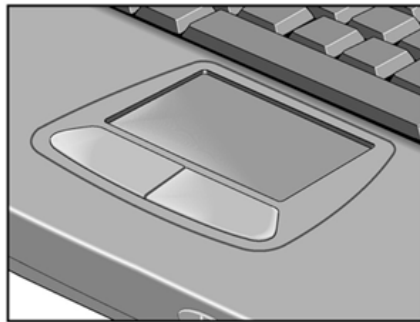


The combination of the Fn key plus another key creates a *hot key*—a shortcut key sequence—for various system controls. Press *and hold* Fn while pressing the appropriate key. (Press and hold Ctrl+Alt with the appropriate key when using an external keyboard.)

Hot key	Does this
Fn + F1	Increases the display's contrast (HPA displays only).
Fn + F2	Decreases the display's contrast (HPA displays only).
Fn + F3	Enters Standby mode.
Fn + F4	Enters Suspend mode.
Fn + F5	Enters Hibernate mode.
Fn + F6	Toggles the sound on and off (mutes sound).
Fn + UP ARROW	Increases sound volume.
Fn + DOWN ARROW	Decreases sound volume.
Fn + F12	Switches among the built-in display, an external display, and simultaneous displays.
Fn + NumLock	Toggles Scroll Lock on and off

To use the touch pad

The touch pad, a touch-sensitive pointing device that controls the motion and speed of the pointer on the screen, is built into your Pavilion.



1. Move a thumb or finger across the touch pad in the direction you want the pointer to move.
2. Use the click buttons, which function like the left and right buttons on a mouse, to make your selection. You can also tap on the touch pad instead of clicking a button.
 - To open an application, move the pointer over the icon, then press the **left button twice** rapidly.
 - To make menu selections, move the pointer to the item and press the **left button** once.
 - To open the shortcut menu for an item, move the pointer over the item and click the **right button**.
 - To drag an item, move the pointer over the item. Press and hold the left button while you move the pointer to the new location. Release the button.

Working in Comfort

WARNING

Improper use of keyboards and other input devices has been associated with ergonomic injury. For more information about reducing your risk, visit our ergonomics Web site at www.hp.com/ergo.

Thank you for selecting HP computing equipment. To optimize your comfort and productivity, it is important that you set up your work area correctly and use your HP equipment properly. With that in mind, we have developed some set-up and use recommendations for you to follow based on established ergonomic principles.

Improper and prolonged use of keyboards and input devices are among those tasks that have been associated with repetitive strain injury (RSI) to soft tissues in the hands and arms. If you experience discomfort or pain while using any computing equipment, discontinue use immediately and consult your physician as soon as possible.

In addition to the information on RSI given in this chapter, you may also consult the electronic version of Working in Comfort preloaded on the hard disk of your HP Pavilion (Start, Programs, Pavilion Library, Working in Comfort), or visit HP's Working in Comfort Web site.

About Repetitive Strain Injury

Because your comfort and safety are our primary concern, we strongly recommend that you use HP computing equipment in accordance with established ergonomic principles and recommendations.

Scientific literature suggests that there may be a relationship between injury to soft tissues—especially in the hands and arms—and prolonged, improper use of keyboards or other equipment requiring repeated motions of the hands and forearms.

This literature also suggests that there are many other risk factors that may increase the chance of such injury, commonly called Repetitive Strain Injury.

What is RSI?

Repetitive Strain Injury (RSI—also known as cumulative trauma disorder or repetitive motion injury) is a type of injury where soft tissues in the body, such as muscles, nerves, or tendons, become irritated or inflamed.

RSI has been a reported problem for those who perform repetitive tasks such as assembly line work, meatpacking, sewing, playing musical instruments, and computer work.

RSI also has been observed in those who frequently engage in activities such as carpentry, knitting, housework, gardening, tennis, windsurfing and lifting children.

What causes RSI?

The specific causes of RSI have not been established. Nevertheless, the incidence of RSI has been associated with a variety of risk factors, including:

- Too many uninterrupted repetitions of an activity or motion.
- Performing an activity in an awkward or unnatural posture.
- Maintaining static posture for prolonged periods.
- Failing to take frequent short breaks.
- Other environmental and psychosocial factors.

In addition, there have been reports associating the occurrence of RSI with the use of computer keyboards, mice, and other input devices. Also, certain medical conditions, such as rheumatoid arthritis, obesity and diabetes, may predispose some people to this type of injury.

What can I do to avoid RSI?

Some people who use computers may experience physical discomfort during their use. This discomfort may be a symptom of a repetitive strain injury.

Properly setting up and using computing equipment can help to minimize your chances of experiencing this discomfort. Well-designed and properly adjusted equipment alone may not be sufficient to eliminate all potential problems.

Maintaining good posture and positioning when working on computers also has a significant bearing on your comfort.

What if I experience discomfort?

If you are experiencing any discomfort, seek professional medical advice immediately. Typically, the earlier a problem is diagnosed and treated, the easier it is to resolve.

Preparing Your Work Environment

When using HP computing equipment, it is important that your work environment contribute to your comfort and productivity.

Using the Pavilion Notebook PC Working in Comfort

Your Chair

It's very important that your chair provides a comfortable sitting position and offers the following features:



- **A stable base, such as five legs with casters.** Make sure the casters are designed for the type of floor you have in your workspace, whether it is bare or carpeted.
- **A height- and tilt-adjustment feature.** It should be easy to adjust your chair height from 40 cm to 52 cm (15.5 inches to 20.5 inches) as measured from the top of the seat pan to the floor. If you are much taller or shorter than average, you may need a chair that can be adjusted beyond this range. Adjust your chair so that the work surface or keyboard tray is at elbow height and your feet are flat on the floor with your knees slightly bent below your hips. Ideally, the seat pan should be able to tilt both forward (minimum of 5 degrees) and backward (minimum of 10 degrees). If the chair has an adjustable seat pan, inclining the seat slightly forward will transfer some of the pressure from the spine to the thighs and feet. This will relieve pressure on your back.
- **A curved seat edge.** The front of the seat should be curved and finished in a “waterfall” edge.
- **An adjustable back support** in both height and forward and backward tilt. It is important that the backrest correctly supports the lower part, or lumbar curve, of the back.

- **A freely rotating swivel** so you can move easily from side-to-side.
- **Fully adjustable and padded armrests.** The chair arms should not interfere with adjusting the chair or moving it close to your work surface.

Your Work Surface

Ideally, you should be able to adjust the height of your work surface.

A simple way to ensure your work surface is at the correct height is to first adjust the height of the seat-pan of your chair. With your chair properly adjusted and your feet firmly on the floor, adjust the work surface height until your forearms are parallel to the floor when you have your fingers on the keyboard or other input device.

Your Work Posture

Sitting in one position for long periods can be uncomfortable. To minimize the potential for physical discomfort or injury, it's important that you maintain proper posture.



- **Back:** While sitting at your work surface, make sure your back is supported by the chair's backrest in an erect position or angled slightly backwards.
- **Arms:** Your arms should be relaxed and loose, elbows close to your sides, with forearms and hands approximately parallel to the floor.
- **Wrists:** Your wrists should be as straight as possible while using the keyboard, mouse or trackball. They should not be bent sideways, or more than 10 degrees up or down.
- **Legs:** Your thighs should be horizontal or angled slightly downward. Your lower legs should be near a right angle to your thighs. Your feet should rest flat on the floor. If necessary, use a footrest, but double check that you have your seat height adjusted correctly before getting a footrest.

Using the Pavilion Notebook PC

Working in Comfort

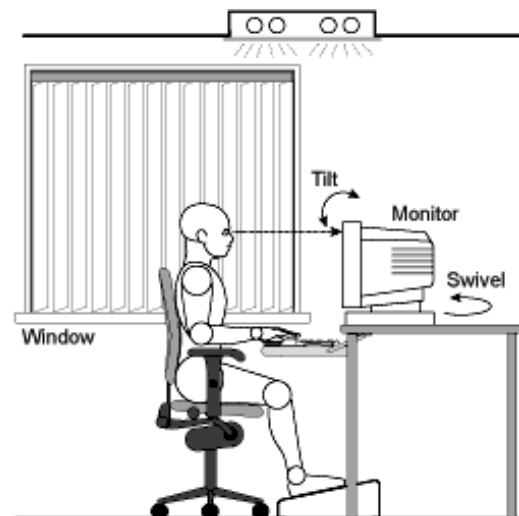
- **Head:** Your head should be upright or tilted slightly forward. Avoid working with your head or trunk twisted.
- **Overall:** Change your position frequently and take regular breaks to avoid fatigue.

Setting Up Your HP Computing Equipment

Make sure that all the elements of your HP computer system—monitor, document holder, keyboard, mice and other input devices, and headphones and speakers—are optimally arranged and adjusted to meet your personal requirements. The recommendations that follow will help you achieve this.

Your HP Monitor

It is important that your monitor screen be clean and positioned correctly to improve readability and help you work comfortably. Glare, high contrast, reflections, dirt and dust will interfere with what you see on the screen. The recommendations that follow can help you achieve a comfortable arrangement.



- The top of your monitor screen should be at or slightly below eye level. Most HP monitors come with a tilt-and-swivel feature that makes it easy to adjust the screen position.

- To avoid obscuring your view, the screen should be positioned perpendicular to your line of sight; that is, straight on.
- To avoid glare or reflection, try to position the monitor so the screen is at a right angle to your window rather than in front of it. If reflection or glare persists, tilting the screen forward may help.
- Maintain a comfortable viewing distance to the screen. Most people prefer a viewing distance of approximately 46 to 76 cm (18 to 30 inches), depending on monitor size. Character size and the amount of space available on the work surface can affect this distance.
- Text should be easy to read. To help ease eyestrain, adjust text attributes such as character size, spacing, and color. In addition, you will need to use the controls provided with your monitor to adjust the visual settings so that contrast and brightness levels are comfortable for you. High contrast and low brightness is usually the preferable combination.
- The monitor should be free from flicker. If the image on your screen is not stable, the monitor may require repair or adjustment.
- When possible, use a program that has a simple user interface, such as easily identifiable icons and pull-down menus. Also, screen information should be displayed in a structured and well-organized way.

Monitor Use Specifications

- When viewing your monitor, your head should not be tilted more than 15 degrees forward.
- You should not have to look up more than 5 degrees above horizontal or down more than 30 degrees below horizontal for normal work tasks, such as typing or reading.

Document Holders

When keying in data from a hardcopy document, placing it in a document holder rather than on a flat surface will make it easier to read. The following recommendations should be observed when using a document holder:

- The document holder should be at approximately the same height and distance from your eyes as the screen, and as close to the monitor as possible to prevent neck twisting. Some users prefer a document holder mounted to the monitor while others prefer the document holder positioned between the screen and keyboard.
- If the primary task is to view documents rather than using the monitor, the document holder may be placed directly in front of the keyboard with the monitor slightly to the side.

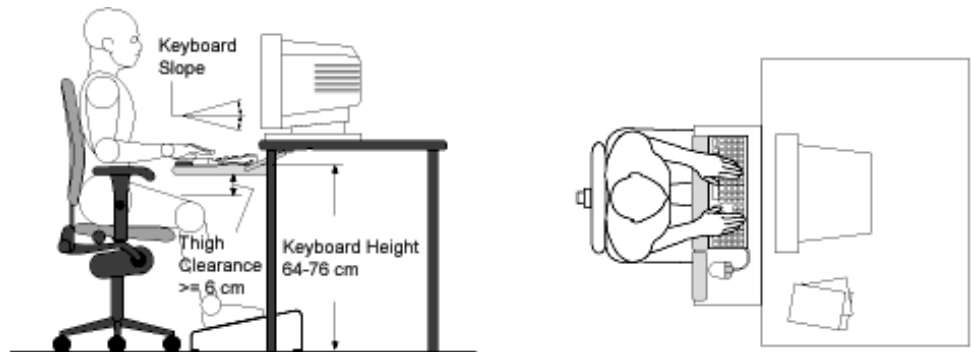
Using the Pavilion Notebook PC

Working in Comfort

- To help reduce stress on your neck and prevent eye fatigue, try to minimize the movement of your head and eyes while using a document holder.

Your HP Keyboard

The proper positioning and use of your HP keyboard is important when using HP computing equipment. Be sure to observe the following recommendations to optimize your comfort and safety:



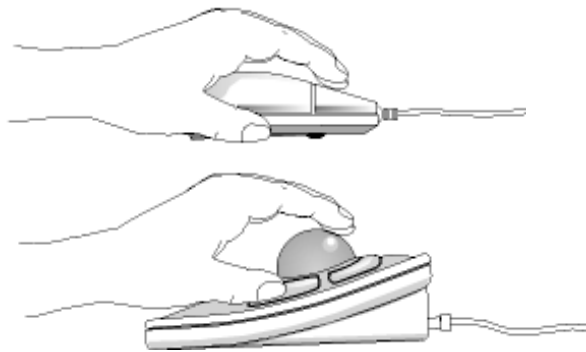
- We recommend you place your keyboard in front of the screen or document holder, whichever is viewed the most. Your HP keyboard has long cables so you can place it in the position that is most comfortable for you while you are using your system.
- Because HP keyboards vary in depth, you'll want to be sure that your work surface or keyboard tray has sufficient room to accommodate your model. The keyboard tray should be wide enough to hold both the keyboard and mouse or trackball: 66 to 71 cm (26 to 28 inches).
- Your HP keyboard may have a kickstand that can be opened or closed to raise or lower the keyboard angle. If you are in the correct sitting position with your elbows at about the same level as the work surface, you may not need to use it. However, if your elbows are below the work surface, you may wish to use the kickstand to raise the back of the keyboard.
- An adjustable keyboard tray may be useful if you cannot adjust your chair or work surface to the proper height for typing. It should adjust in height from 64 to 76 cm (25 to 30 inches) above the floor and tilt forward and backward to help you find the most comfortable position. Note that research has shown that there may be less muscle tension in shoulders and forearms with the keyboard tilted away from you.
- When using your HP keyboard, remember it takes very little pressure or force from your fingers to activate the keys. Improper typing style—the use of too much force—

can place unnecessary stress on the tendons and muscles in your hands, wrists, and forearms.

- Make sure that your hands are in a neutral position when you use your keyboard. This means that your forearms, wrists, and hands should be in a straight line.
- The keyboard has a low profile to help prevent excessive bending of your wrists while typing. Literature suggests that you should not bend your wrists sideways or more than 10 degrees up or down. Keep your wrists straight by moving your entire hand and forearm over to use the function keys or numeric keypad.
- You may use a palm rest to help keep your hands and wrists in a comfortable and neutral position when you are not typing. Some HP keyboards come with an integrated palm rest. If you use a palm rest, see that it is rounded and padded, and flush in height with the front edge of the keyboard. Note that your palms—not your wrists—should rest on the palm rest. If you don't have a palm rest, try not to rest your wrists on a sharp edge, such as a work surface edge.

Mice and Other Input Devices

Various aspects of using mice and other input devices may increase your risk of discomfort or injury. If you connect an external mouse to your Pavilion, observing the following recommendations may reduce that risk.



- As with the keyboard, try to keep your hand, wrist, and forearm in a neutral position while using your mouse or other input device.
- When using a stylus or light pen with a graphics tablet, don't grip the stylus tightly. Keep your hand and fingers relaxed and try to maintain a neutral posture in your hand, wrist and forearm.
- If you use your thumb to rotate the ball on a trackball or spaceball, keep it in a relaxed, natural shape, and maintain a neutral posture in your hand, wrist, and forearm.

Using the Pavilion Notebook PC

Working in Comfort

- Hold the mouse gently by draping your fingers over it. Keep your hand relaxed and fingers loose. Do not grip the mouse tightly.
- It takes very little pressure or force from your fingers to activate the buttons or scroll wheel on your mouse, scrolling mouse, trackball, or other input device. Using too much force can place unnecessary stress on the tendons and muscles in your hands, wrists, and forearms.
- If you are using a scrolling mouse, be sure to keep your fingers and hand in a relaxed, neutral position when activating the scroll wheel. Also, this type of mouse features software that can minimize the number of mouse movements or button clicks.
- When using a mouse, trackball, stylus and graphics tablet, or other input device, position it as close to the keyboard as possible, and keep it at the same level so you do not have to stretch while using it.
- Use a good quality mouse pad to enable the mouse to work most effectively and reduce unnecessary hand and wrist movements.
- Be sure to keep your mouse and trackball clean. Regular removal of accumulated dust and dirt helps ensure proper tracking and reduces unnecessary hand and wrist motions.

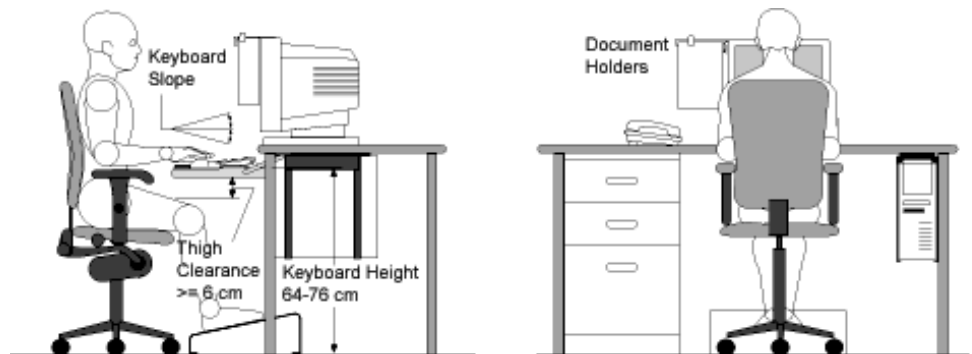
Headphones and Speakers

Listening to loud sounds for prolonged periods may permanently damage your hearing. To avoid discomfort from unexpected noise, always turn down the volume before connecting headphones or speakers to your HP equipment.

When you put on the headphones, slowly increase the volume until you find a comfortable listening level, then leave the volume control in that position.

Comfort and Safety Checklist

These recommendations are drawn from the latest available international ergonomic standards and recommendations, including ISO 9241 and ANSI/HFS 100-1988.



General

- **Work Surface Height:** Adjust either your seat height, work surface, or both, to position the work surface at approximately elbow height.
- **Work Surface Arrangement:** Make sure frequently used equipment is within easy reach. For example, if you are primarily using the keyboard, place it directly in front of you, not to the side. If you are primarily using the mouse, place it in front of your hand or arm. If you are using both a mouse and keyboard, place them both at the same work surface height and close together. If a palm rest is used, the height should be flush with the front edge of the keyboard. Other items, such as your telephone or notepad, also should be considered.
- **Monitor:** Place your monitor so that the top of the screen is at, or slightly below, eye level (up to 15 degrees).
- **Head:** Do not tilt your head forward by more than 15 degrees, and try not to turn your head toward the side.
- **Back:** While sitting at your work surface, make sure your back is supported by the chair's backrest in an erect position or angled slightly backwards.
- **Arms:** Make sure your arms and elbows are relaxed and loose, with your upper arm perpendicular to the floor or slightly forward. Keep your forearms and hands approximately parallel with the floor with elbows bent between 70 and 115 degrees. Keep your elbows close to your sides (less than 20 degrees away from your body).
- **Legs:** Your thighs should be horizontal or angled slightly downward. Your lower legs should be near a right angle to your thighs. Make sure there is sufficient room under the work surface for your legs.
- **Feet:** If after adjusting your chair you cannot rest your feet comfortably on the floor, use a footrest, preferably one that can be adjusted in height and angle.

Using the Pavilion Notebook PC

Working in Comfort

Overall

- Look away from the screen from time to time to help reduce eyestrain. Focus on distant objects briefly, and blink periodically to lubricate your eyes. You also should have your eyes checked on a regular basis and ensure your eyeglass prescription is suitable for working on a monitor screen.
- Remember to occasionally shift position and move your body. Keeping your body in one position for long periods is unnatural and stressful. When prolonged work is required, take frequent short breaks. As a rule of thumb, a five- or ten-minute break every hour is a good idea. Short, frequent breaks are more beneficial than longer less frequent breaks. Data show that people who work for long periods of time without a break may be more prone to injury.
- Changing tasks frequently will help prevent muscle stiffness. Examples: alternating between keyboarding, reading, writing, filing, and moving around in your work environment, helps you maintain a relaxed posture. Occasionally stretch the muscles in your hands, arms, shoulders, neck, and back. You should stretch at least as often as you take brief task breaks—at least once every hour.
- Discomfort may be alleviated by using alternative ergonomic designs and accessories such as ergonomically personalized chairs, palm rests, keyboard trays, alternative input devices, prescription eyeglasses, anti-glare screens, and more. Seek additional information from the sources available to you, including your employer, doctor, local office supply store, and the information sources listed in the electronic version of *Working in Comfort*, which is preloaded on the hard disk of your HP computing equipment.

Your HP Pavilion Computer

You can use your HP Pavilion computer virtually anywhere, anytime. The following recommendations should help you work more comfortably.

Note that if you are using your portable computer as your primary computer, or using it for extended periods, you should use it with a full-size keyboard, monitor, and mouse. This will give your portable computer the adjustability and comfort features of a desktop unit. HP port replicators offer quick, easy connections to these devices. More information on how to prepare your workspace environment and set up your HP equipment is available in other sections of *Working in Comfort with Your HP Computing Equipment*.

Preparing Your Mobile Work Environment

- Use a chair that provides good support for your lower back. If an adjustable chair is not available, you can use a pillow or rolled-up towel to provide lower back support.
- Try to keep your thighs parallel to the floor and your feet flat on the floor. In a mobile environment, you can do this by using a phone book or briefcase to support your feet.
- Adjust the height of either your work surface or chair to keep your arms in a neutral position. Your arms should be relaxed and loose, elbows at your sides, with the forearms and hands parallel with the floor.
- Position your notebook computer display to minimize glare and reflection. For example, on an airplane, lower the window shade, or in a hotel room, draw the curtains. You also should maintain a comfortable viewing distance, approximately 40 to 60 cm (16 to 24 inches). Adjust the angle of your display to help keep your head angled slightly downward in a comfortable position.

Using Your Mobile Computer

- Position the computer so your wrists and hands are in a neutral position. Your wrists should be as straight as possible and should not have to bend sideways or more than 10 degrees up or down. If your notebook computer does not have a built-in palm rest, you can use a rolled-up towel.
- Try to type as lightly as possible. The notebook keyboard requires little force to activate.
- Take frequent, short rest breaks. This is especially important in a mobile computing environment.
- Portable computers weigh between approximately 1.4 and 3.7 kilos (3 and 8 pounds). When traveling, be sure to carry your computer properly to minimize strain on your body. Shift the bag containing your notebook equipment frequently between your left and right hands and shoulders.

Traveling with Your Computer

Managing Power Consumption

When you are not using your computer, you will want to maximize battery operating time without compromising performance. It is not necessary to turn the computer off in order to reduce power consumption and extend battery life.

Advanced Power Management (APM) provides both manual and automated tools for reducing power consumption.

- Power management options may be invoked manually at any time by pressing the appropriate key. See “To use manual power management.”
- Power management options can also be set to occur automatically, based on timeout values that you have entered. See “To use automated power management” in the electronic *User's Guide*.

To use manual power management

You can shut down your computer manually whenever you need to with any of the following three levels of shutdown.

System standby

Action	Turns off the display and hard disk drive. Saves current session to RAM.
When	Fn+F3 or Fn+F4 or Start, Shut Down, Standby.
Resume	Press the blue power button to return to your current session.

System standby can also occur automatically when the timeout setting in the Power Management Properties window is reached.

Hibernate

Action	Saves the current session to disk, then shuts down. Provides maximum power savings while still allowing you to recover the current session.
When	Press Fn+F5.
Resume	Press the blue power button to recover your current session. This takes several seconds.

Hibernate can also occur automatically when:

- Battery power reaches a critically low level (see “To respond to a low-battery warning” on page 41).
- The timeout setting in the BIOS Setup utility is reached (default is 2 hours after System standby occurs).

Off

Action	Turning off your Pavilion provides maximum power savings. The current session is not saved and unsaved data will be lost.
When	Start, Shut Down, Shut down.
Resume	Press the blue power button to start a new session. This will take several seconds.

Sometimes the system stops responding and you are not able to turn off the Pavilion as described above. To recover, use the following in the order listed.

- If you are unable to access the Start menu, you can turn off the system by pressing and holding the blue power button for 4 seconds.
- If holding the blue power button fails, insert a pin or straightened paper clip into the system-off button on the bottom of the Pavilion (see “Bottom view” on page 13).

Note

When the system hibernates as a result of a critically low battery, you will find when resuming that all your data has been saved but that some functions may be disabled. To resume normal operation, restore power (by connecting AC power or installing a charged battery), perform a full shutdown, and then restart the computer.

Using Battery Power

To check the battery status

From the battery status light



The battery status light (second from left) reports the following information:

Green	AC attached—battery full
Orange	AC attached—battery charging
Red	AC attached—battery will not accept charge

From the Windows taskbar

The System Tray on the Windows taskbar includes a power icon that allows access to more detailed battery status information. The icon looks like a battery when AC is not connected.

- Place pointer over the power icon to display a percentage of remaining time.
- Right click the power icon to view the options for displaying power information.
- Left click the power icon to display a menu of the available power schemes.

To respond to a low-battery warning

The computer automatically alerts you when the battery power drops to a critically low level. First you will hear a high-pitched beep. Then, if you have not taken restorative action within a short time, the system hibernates.

You won't be able to turn the computer on again until you restore power by one of the following actions:

- Plug in the AC adapter (see "To connect AC power" on page 15).
- or–
- Replace the battery with one that is charged (see "To install the battery" on page 15).

Note

If you plug in the AC adapter, you can continue to work while your battery recharges.

Configuring and Expanding Your Computer

Installing RAM Modules

The Pavilion Notebook provides an optional memory expansion slot for installing up to two RAM expansion modules. Use HP SDRAM modules only; EDO RAM is not supported.

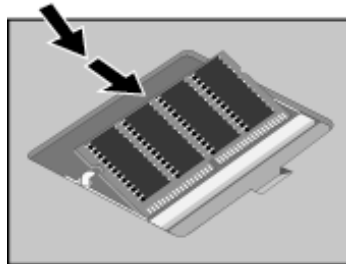
The computer chips are extremely static-sensitive. Static electricity can permanently damage computer chips. Carefully read the following caution information.

CAUTION

Handle the RAM module only by its edges. Otherwise, you may damage the module due to electrostatic discharge. Static electricity can permanently damage computer chips. It is therefore important to discharge the static electricity from your body before installing the memory module. Discharge your body's electricity by touching the metal shielding around the connectors on the rear of the Pavilion Notebook.

You'll need a small Phillips screwdriver to complete this procedure.

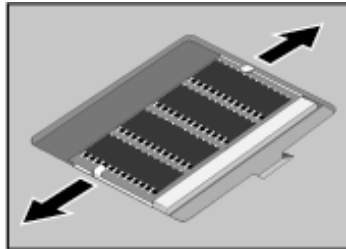
1. Click the Start button and select Shut down.
2. Unplug the AC adapter, if present, and remove the battery.
3. Remove the RAM expansion cover located on the bottom of the Pavilion using a Phillips screwdriver.



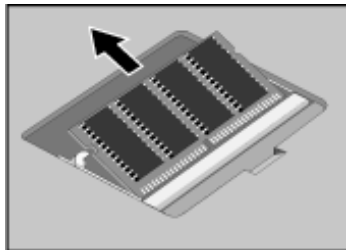
4. Insert the RAM expansion module into the connector at about a 30° angle until it's fully inserted. Then press down at both sides of the module until it latches.
5. Replace the RAM expansion module door.
6. Insert the battery.

Removing RAM Modules

After you remove the RAM expansion cover, do the following:



1. Release the two latches at the sides of the RAM expansion module by pushing them gently outward (away from the sides of the module).
2. When you release the latches, the free edge of the module pops up.

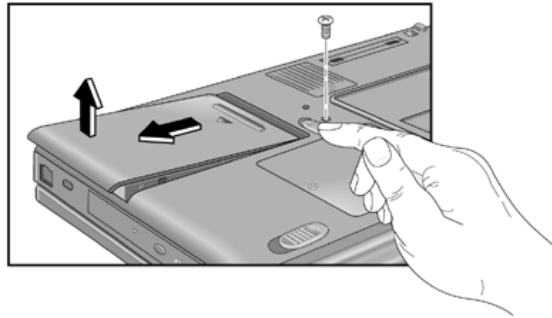


3. Pull the module out of the connector.
4. Replace the RAM expansion module door.

Replacing a Hard Disk Drive

You'll need a small Phillips screwdriver to complete this procedure.

1. From the Start menu, shut down the Pavilion.
2. Unplug the AC adapter, if present, and remove the battery.
3. Turn the unit bottom side up.
4. Use a screwdriver to remove the hard disk drive locking screw.



5. Slide and hold the hard disk drive latch.
6. Slide the hard disk drive toward the edge of the Pavilion, then lift out.
7. Insert the new hard disk drive and the locking screw.
8. Insert the battery.

Note

If you are installing a new hard disk drive, you should create a Hibernate partition on the drive before loading any software. See “Expanding the Hibernate Partition” on page 47.

Expanding the Hibernate Partition

You can create the Hibernate partition by booting from the Recovery CD. The partitioning and recovery process takes approximately 20 minutes—do not interrupt the process or unplug the AC adapter until the process is completed.

CAUTION

This procedure will format the hard disk drive and erase all data on the disk. Be sure to back up all data from your hard disk before you begin this procedure. After the hard disk drive is formatted, you'll need to reinstall any applications.

1. Back up all data from your hard disk.
2. If you wish to install additional RAM, do so now.
3. Connect the AC adapter to the computer.
4. Insert the Recovery CD in the CD-ROM (or DVD) drive. (If your system came with two Recovery CDs, insert Disc 1.)
5. Restart the computer, and when you see the HP logo, press ESC twice.
6. Select the CD-ROM drive as the boot device, and press ENTER.
7. Choose Continue.
8. Choose Advanced.
9. Select a size from the Hibernate Partition Size drop-down list.
10. If you want to create a Hibernate partition without recovering the operating system, select the “Do not load operating system” checkbox and select one of the partition options.
11. Choose Continue.
12. Click OK to begin.

If your system came with two Recovery CDs, you may be prompted to insert the other Recovery CD during the partitioning process.
13. When you are prompted to reboot your computer, remove the Recovery CD and press Ctrl+Alt+Delete.
14. Follow the onscreen instructions for setting up Windows.
15. When Windows setup is complete, reinstall any applications and restore backed up data.

Service and Support

Hewlett-Packard Limited Warranty Statement

1. HP warrants to you, the end-user customer, that HP hardware, accessories and supplies will be free from defects in materials and workmanship after the date of purchase, for the period specified in the Warranty Duration sheet included with your Pavilion. If HP receives notice of such defects during the warranty period, HP will, at its option, either repair or replace products which prove to be defective. Replacement products may be either new or equivalent in performance to new.
2. HP warrants to you that HP software will not fail to execute its programming instructions after the date of purchase, for the period specified in the Warranty Duration sheet included with your Pavilion, due to defects in material and workmanship when properly installed and used. If HP receives notice of such defects during the warranty period, HP will replace software which does not execute its programming instructions due to such defects.
3. HP does not warrant that the operation of HP products will be uninterrupted or error free. If HP is unable, within a reasonable time, to repair or replace any product to a condition as warranted, you will be entitled to a refund of the purchase price upon prompt return of the product.
4. HP products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.
5. Warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts or supplies not supplied by HP, (c) unauthorized modification or misuse, (d) operation outside of the published environmental specifications for the product, or (e) improper site preparation or maintenance.
6. TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. Some countries, states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from country to country, state to state, or province to province.
7. TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES.

EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some countries, states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

Getting Support for Your Pavilion PC

HP offers a number of ways that you can get technical support for your Pavilion. If you have questions or problems, here are the resources available to you:

- Look up information in the electronic User's Guide.
- Visit the Pavilion Notebook Web site.
- Visit the HP Customer Care Web site.
- Call HP support.

To use the Pavilion User's Guide

The Pavilion User's Guide is an electronic help system included on your hard disk. To open the User's Guide, double-click the HP Pavilion User's Guide icon on the desktop.



To locate information in the guide, use the Contents or Index tabs. The Contents tab lists the headings of all the topics in the guide. The Index tab provides an alphabetical list of the keywords in the guide; you can locate a keyword by either typing it in the box or by scrolling through the list.

To get help from the Pavilion Notebook Web site

HP has a Web site on the Internet dedicated to Pavilion Notebook owners: www.hp.com/notebooks. This Web site contains information about the various Pavilion models, warranties, and special promotions.

To get help with your Pavilion, go to the Web site, click Pavilion Notebook PCs, and then click the Technical Support button. In the technical support area, you will have access to:

- Answers to frequently asked questions
- Software, driver, and BIOS updates

- Electronic manuals
- Troubleshooting solutions

Viewing the Tips and Troubleshooting File

If you are experiencing a specific problem with your Pavilion Notebook, review the Tips and Troubleshooting file located on the Web site. To view the Tips and Troubleshooting file:

1. Go to the www.hp.com/notebooksWeb site.
2. Click Pavilion Notebook PCs.
3. Click the Technical Support button.
4. Choose the Pavilion N3100 Series.
5. Select your Pavilion Notebook model.
6. Click Manuals.
7. Locate the Tips and Troubleshooting manual, and then do one of the following:
 - To open the file in a browser window, click the guide name.
 - or-
 - To save the file to disk, right-click the guide name and choose Save Target As. Follow the on-screen instructions.

Note

The above steps were accurate at the time this was written. Due to the dynamic nature of Web sites, the specific steps above may not match exactly what you see on the site.

To get support from the HP Customer Care Web site

Another Web site useful to Pavilion owners is HP Customer Care: www.hp.com/cpsosupport/guide/home.html. This Web site provides information about:

- Self-help tools, such as bulletin boards, CD-ROM subscriptions, and service parts information
- The basic services included with your warranty, as well as descriptions of enhanced and custom services
- Obtaining software updates when you don't have a modem
- Support telephone numbers for HP products

To call the HP Customer Care Center

If you are unable to solve a problem with your Pavilion, you can call the HP Customer Care Center. The Customer Care Center will assist you at no charge, during the term of the warranty; you are responsible only for the telephone charge. During the free assistance period, HP will assist with questions about:

- Applications and operating systems included with your Pavilion
- HP-described operation environments and conditions
- HP accessories, HP upgrades, and basic operation and troubleshooting.

HP will not be able to help with questions about:

- Non-HP hardware, software, operating systems, or usage not intended for—or not included by HP with—the product
- How to repair the product yourself
- Product development or custom installations
- Consulting.

HP Customer Care Center will assist you for free during the term of the warranty; you are responsible only for the telephone charge.

The HP Customer Care telephone number is (970) 635-1000.

Refer also to the Web site www.hp.com/cpso-support/guide/home.html.

Obtaining Repair Service

To receive warranty repair service

To receive warranty repair service, contact the HP Customer Care Center in the U.S. at 970-635-1000.

The support technician will help qualify your unit for warranty repair based on the warranty applicable to your unit and original purchase date, and will provide you with repair processes. Warranty service includes the cost of shipping, handling, duties, taxes, freight, or fees to or from the service location.

Pavilion Notebook PC service is currently provided for the continental U.S.

To prepare your computer for shipment

1. **Important.** Back up your hard disk drive.

While your computer is being repaired, the hard disk may be replaced or reformatted.

2. Hewlett-Packard cannot guarantee the return of removable components. Please remove the following prior to sending your computer in for service:

- PC cards
- AC adapter and power cord
- CDs in the CD player
- Floppy disks in the floppy disk drive

3. When sending your computer to Hewlett-Packard, please use the original product packaging or other substantial packaging in order to avoid damage to the unit in transit.

Note

If the hard disk drive is defective, you will receive a replacement drive with the original HP software.

Solving Problems with your Computer

Troubleshooting Techniques

You will find solutions to common problems and troubleshooting techniques in the Tips and Troubleshooting file on the HP Pavilion Notebook Web site, www.hp.com/notebooks or www.europe.hp.com/notebooks (European mirror). This file also describes BIOS settings, system specifications, and advanced capabilities and procedures. To view the Tips and Troubleshooting file, see “To get help from the Pavilion Notebook Web site” on page 52.

Testing Hardware Operation

The Pavilion Notebook DiagTools program provides two levels of testing:

- Automated testing using the basic hardware test.
- Advanced testing using individual hardware tests.

The tests are designed to run after the system reboots. This ensures that the computer will be in a predictable state, so the diagnostic program can properly test the hardware components. The tests are nondestructive and are intended to preserve the state of the computer. The computer reboots when you exit the program, so that drivers can be loaded.

To run the diagnostic test

You can run the diagnostic test from the hard disk—or from a diagnostic floppy disk, if you created one.

1. To run from the hard disk, reboot the computer and, when you see the HP logo and message, press F10.

—or—

To run from a diagnostic floppy disk, insert the disk in the floppy drive and reboot the computer.

2. When you see the initial diagnostics screen, press F2 twice to continue.

If the initial diagnostics screen does not appear when you are using a floppy disk, run scandisk on the floppy. If you discover errors, create a new diagnostic disk, using a different floppy, before running the test again.

3. When the hardware detection finishes, check the list of detected hardware.

If a device is not detected or fails its test, it may be configured incorrectly in the BIOS Setup utility. You can confirm the problem by running BIOS Setup and checking the settings.

4. Press F2 twice to run the basic hardware test.
5. If you want to run additional hardware tests, press F2 twice. From the advanced test screen, select and run the appropriate tests. Tests are not listed if no such hardware is detected. Press the following keys to run tests:

Solving Problems with your Computer

Testing Hardware Operation

ENTER	Runs the highlighted test.
F5 or SPACE	Marks or unmarks the highlighted test.
F6	Marks or unmarks all tests in the current menu.
F7	Marks or unmarks all tests in all menus.
F10	Runs all marked tests.

6. When you have finished running advanced tests, press ESC to exit.
7. If you want to view or save system and test information, press F4 twice to create a Support Ticket log file. (If you want to view the Support Ticket, press F7.)
8. Press F3 twice to exit and reboot. (If you used a floppy disk, remove it before rebooting.)

If you saved a Support Ticket, you can also view it later. From the directory `c:\dmi\hpdiaags`, run the file `hpsuppt.exe`. The Support Ticket will appear in that directory as `hpsuppt.txt`.

To create a diagnostic floppy disk

If diagnostic testing is not available on your computer when you press F10 during reboot, you can create a diagnostic floppy disk from which to run the test.

1. On any computer with Web access, download the diagnostic software package from the Pavilion Notebook Web site www.hp.com/notebooksto to the hard disk.
2. Run the downloaded zip file to unpack the files on the hard disk.
3. Insert a formatted disk in the floppy disk drive and run `diaginst.bat` to create the diagnostic floppy disk.
4. Insert the floppy disk into your Pavilion Notebook and run the diagnostic test.

Recovering and Reinstalling Software

You can use the Recovery CD to recover an original Pavilion build, or you can use it to install the HP custom software over a user-installed alternate operating system.

The Recovery CD provides the Pavilion-specific Windows drivers to configure your custom system. Be sure to obtain the appropriate drivers for your operating system. You can find drivers:

- On the Pavilion hard drive under `c:\notebook\drivers`.
- On the Recovery CD, under `\notebook\drivers`.
- On the Pavilion Notebook Web site at www.hp.com/notebooks. This Web site contains the latest updates of software drivers for all three operating systems.

To recover the factory installation of your hard disk

The following procedure describes how to recover the original Windows operating system and software that came with your Pavilion Notebook.

CAUTION

This procedure will format the hard disk drive. After the hard disk drive is formatted, you'll need to reinstall any applications. Reformatting the hard disk drive will erase all data on the disk.

1. Back up all data from your hard disk.
2. Connect the AC adapter to the Pavilion Notebook.
3. Insert the bootable Recovery CD in the CD-ROM drive.
4. Reboot and, when you see the HP logo, press ESC twice.
5. Select the CD-ROM drive as the boot device, press ENTER, and follow any onscreen instructions.

You can find more details about recovering the factory installation of Windows on the Recovery CD: the file `readme.txt` is in the CD's root directory.

The recovery process can take as long as 30 minutes. *Do not interrupt the process or unplug the AC adapter until the process is completed.*

Specifications and Regulatory Information

Hardware and Software Specifications

For the most up-to-date information on Pavilion Notebook hardware and software specifications, go to the HP Pavilion Notebook Web site at www.hp.com/notebooks.

Safety Information

Power Cords

The power cord supplied with the Pavilion AC adapter should match the plug and voltage requirements for your local area. Regulatory approval for the AC adapter has been obtained using the power cord for the local area. However, if you travel to a different area and need to connect to a different outlet or voltage, you should use one of the power cords listed below. To purchase a power cord (including one for a country not listed below) or a replacement AC adapter (HP F1454A), contact your local Hewlett-Packard dealer or Sales and Service office.

Country	Rated Voltage and Current	HP Part Number
Canada	125 Vac (3 A)	8120-6313
Mexico		
Philippines		
Taiwan		
United States		
Europe	250 Vac (2.5 A)	8120-6314
Egypt		
Saudi Arabia		
Hong Kong	250 Vac (2.5 A)	8120-8699
Singapore		
United Kingdom		
Australia	250 Vac (2.5 A)	8120-6312
New Zealand		
Japan	125 Vac (3 A)	8120-6316
India	250 Vac (2.5 A)	8120-6317
South Africa		
People's Republic of China	250 Vac (2.5 A)	8120-8373

Battery Safety

- To avoid risk of fire, burns, or damage to your battery pack, do not allow a metal object to touch the battery contacts.
- The battery pack is suitable for use only with compatible Pavilion models. Check the *Support and Service* section of this *Setup Guide* for your local HP contact.
- Do not disassemble. There are no serviceable parts inside. Do not dispose of the battery pack in fire or water.
- Handle a damaged or leaking battery with extreme care. If you come in contact with the electrolyte, wash the exposed area with soap and water. If it contacts the eye, flush the eye with water for 15 minutes and seek medical attention.
- Do not expose the battery pack to high storage temperatures (above 60° C, 140° F).
- When the battery is not in use, store it in the battery pouch provided.
- To obtain a replacement battery, contact your local dealer or HP sales office.
- Do not charge the battery pack if the ambient temperature exceeds 45° C (113° F).
- When discarding a battery pack, contact your local waste disposal provider regarding local restrictions on the disposal or recycling of batteries.

Laser Safety

The CD-ROM and DVD drives used with the Pavilion are certified as Class 1 laser devices according to the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard and International Standards IEC 825 / IEC 825-1 (EN60825 / EN60825-1). These devices are not considered harmful, but the following precautions are recommended:

- Ensure proper use by reading and following the instructions carefully.
- If the unit requires service, contact an authorized HP service center—see the Pavilion *Support and Service* section of this *Setup Guide*.
- Do not attempt to make any adjustment of the unit.
- Avoid direct exposure to the laser beam—do not open the unit.

LED Safety

The infrared port located on the back panel of the Pavilion is classified as a Class 1 LED (light-emitting diode) device according to International Standard IEC 825-1 (EN60825-1). This device is not considered harmful, but the following precautions are recommended:

- If the unit requires service, contact an authorized HP service center—see the Pavilion Support and Service section of this *Setup Guide*.
- Do not attempt to make any adjustment of the unit.
- Avoid direct eye exposure to the infrared LED beam. Be aware that the beam is invisible light and cannot be seen.
- Do not attempt to view the infrared LED beam with any type of optical device.

Regulatory Information

This section presents information that shows how the Pavilion complies with regulations in certain regions. Any modifications to the Pavilion not expressly approved by Hewlett-Packard could void the authority to operate the Pavilion in these regions.

U.S.A.

The Pavilion generates and uses radio frequency energy and may interfere with radio and television reception. The Pavilion complies with the limits for a Class B computing device as specified in Part 15 of FCC Rules, which provide reasonable protection against such interference in a residential installation. In the unlikely event that there is interference to radio or television reception (which can be determined by removing the unit's batteries and AC adapter), try the following:

- Reorienting or relocating the receiving antenna.
- Relocating the Pavilion with respect to the receiver.
- Connecting the Pavilion AC adapter to another power outlet.

Connections to Peripheral Devices

To maintain compliance with FCC Rules and Regulations, use properly shielded cables with this device.

For more information, consult your dealer, an experienced radio/television technician, or the following booklet, prepared by the Federal Communications Commission: *How to Identify and Resolve Radio-TV Interference Problems*. This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock Number 004-000-00345-4. At the first printing of this manual, the telephone number was (202) 512-1800.

Declaration of Conformity (U.S.A.)

Responsible Party: Hewlett-Packard Company
Manager of Corporate Product Regulations
3000 Hanover Street
Palo Alto, CA 94304, U.S.A.
(650) 857-1501

declares that the product(s)

Trade name: Hewlett-Packard Company

Product name: HP Pavilion Notebook PC

Complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Canada

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Classe B prescrites dans le règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

Japan

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると受信障害を引き起こすことがあります。

取り扱い説明書に従って正しい取り扱いをして下さい。

Specifications and Regulatory Information

Regulatory Information

International

Products sold internationally by Hewlett-Packard and its authorized dealers meet the specifications listed below.

Declaration of Conformity (according to ISO/IEC Guide 22 and EN 45014)

Manufacturer:	Hewlett-Packard Company
Address:	Hewlett-Packard Company Mobile Computing Division 19310 Pruneridge Ave. Cupertino, CA 95014, U.S.A.
	declares that the following product
Product name:	HP Pavilion Notebook PC
Options:	All
	conforms to the following product specifications
Safety:	IEC 950:1991+A1,A2 ,A3, A4 / EN 60950 (1992)+A1,A2, A3, A4 GB4943-1995 IEC 825-1:1993/EN60825-1:1994
EMC:	CISPR 22:1993 / EN 55022 (1994): Class B ^[1] GB9254-1988 EN 50082-1:1992 IEC 801-2:1991 / prEN 55024-2 (1992): 4kV CD, 8kV AD IEC 801-3:1984 / prEN 55024-3 (1991): 3V/m IEC 801-4:1988 / prEN 55024-4 (1992): 0.5 kV signal lines, 1.0kV power lines FCC Title 47 CFR, Part 15 Class B ANSI C63.4: 1992 AS/NZS 3548: 1995 Rules and Regulations of Class B

**Supplementary
Information:**

The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC, EMC Directive 89/336/EEC and IEC 825-1 and carries the CE marking accordingly.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The HP F1740A and F1454A AC/DC adapter used with this product is designed to operate on all power systems, other than IT power systems.

[1] The product was tested in a typical configuration with Hewlett-Packard personal computer peripherals.

Quality Department
Hewlett-Packard Company
Mobile Computing Division

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