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HP Notebook PC

**Startup Guide**

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## Edition History

Edition 3 . . . . . December 2000



This manual is printed on recycled paper.

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## Introducing the Notebook Computer

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## Taking Inventory

Congratulations! Your notebook computer sets a new standard in personal computing. Although compact and easy to carry, your computer is made with the quality and attention to detail that are the hallmark of Hewlett-Packard.

Your computer has several features that make it convenient to use:

- The display is brighter than those on previous HP notebook computers.
- Two buttons provide convenient options for starting and stopping the computer.
- Volume controls are located within easy reach on the computer's right side, and the audio-off button and light let you cut off all sound quickly when needed.
- All cable connectors are near the back of the computer, keeping cables away from your working area.

This manual shows how to set up and operate your computer, as well as what to do if you run into trouble.

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### What's in the Box?

- HP notebook PC.
- Main battery (installed).
- CD-ROM or DVD drive module (installed).
- Floppy disk drive module.
- External floppy disk drive cable.
- ac adapter and power cord.
- Quick Start sheet.
- *Startup Guide*.
- *Recovery CD*, for restoring Windows and all software included with your computer.
- Microsoft Windows manual.
- Mediamatics CD (for models with a DVD drive).



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## Software bundled on your computer

Your computer includes the following software.

<b>Software</b>	<b>Function</b>
Softex Bay Manager	Lets you swap most modules in the plug-in bay without needing to shut down and reboot the computer (Windows ME only).
Agaté Tioman Hot-Swap	Lets you swap most modules in the plug-in bay without needing to shut down and reboot the computer (Windows 95 and 98 only).
QuickLink	Permits fax transfer to fax machines and fax software, and permits data transfer (Windows ME and 98 only).
HP e-center	Provides easy access to e-pages and e-services—including backup, e-mail, and fax transfer (North America English only).
VirusScan	Protects your computer from potentially harmful files.
Adobe Acrobat Reader	Allows you to read documents in Acrobat format frequently used on the Internet.
MusicMatch Jukebox	Lets you download, organize, encode, and play MP3 files (Windows ME and 98 only).
Microsoft Works	Provides word processor, spreadsheet, calendar, and more (Windows ME only).
Microsoft Encarta	Provides an online encyclopedia (Windows ME only).
Microsoft Money	Helps manage personal finances (Windows ME only).
HP DiagTools	Provides hardware diagnostic tests.
DVD Express	Controls DVD play (for models with a DVD drive).
HP TopTools	Allows network managers and administrators to check the hardware and software on your computer and how well they are working (not on Pavilion models).

Introducing the Notebook Computer  
**Taking Inventory**

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## To find more information

The following table lists other sources of information about your computer and related products.

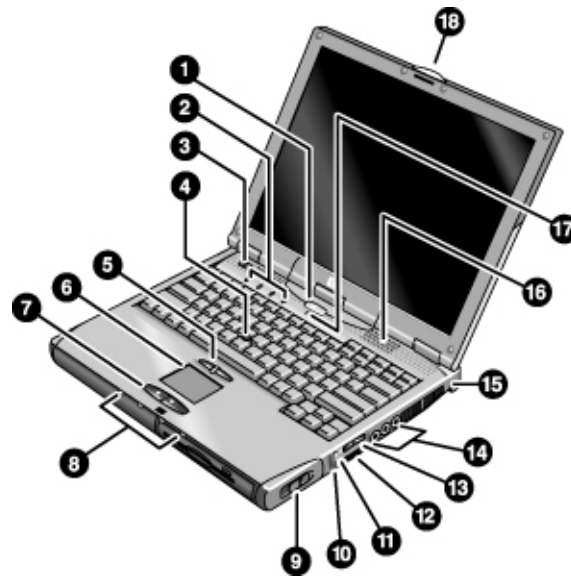
<b>Source</b>	<b>Description and Location</b>
<i>Startup Guide</i>	This printed manual introduces your computer. It also contains setup instructions, basic operation guidelines, troubleshooting information, and warranty information.
<i>Online Reference Guide</i>	The full <i>Reference Guide</i> is shipped on the computer's hard drive, and provides a complete source for operating and maintaining the computer. Look in the HP Library group, or on the <i>Recovery CD</i> in \hp\Library. For Windows ME, click Start, Help, Your HP Notebook, HP Reference Guide.
Online HP Notes	For late-breaking information available after the manuals were completed, see the HP Notes in the online HP Library, or on the <i>Recovery CD</i> in \hp\Library. For Windows ME, click Start, Help, Your HP Notebook, HP Notes.
Microsoft Windows manual	This is shipped with your computer and contains information about using the version of Microsoft Windows shipped with your computer.
HP Notebook Web Site	<a href="http://www.hp.com/notebooks">www.hp.com/notebooks</a> <a href="http://www.europe.hp.com/notebooks">www.europe.hp.com/notebooks</a> (European mirror).
HP Customer Care Web Site	<a href="http://www.hp.com/go/support">www.hp.com/go/support</a> .
Corporate Evaluator's Guide	This provides information about installing alternate operating systems, as well as how to configure your notebook computer in a corporate, networked environment. Located at the HP Notebook Web site.

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## Identifying Parts of the Computer

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### Front View

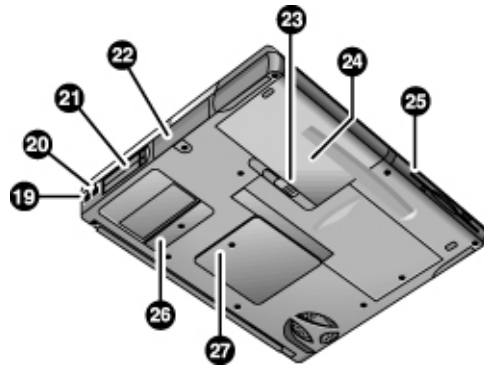


- |   |   |
|---|---|
| 1. Sleep button. Suspends and resumes operation.  | 10. System-off switch.  |
| 2. Keyboard status lights (left to right: Caps Lock, Num Lock, Keypad Lock, Scroll Lock).   | 11. Audio-off button and audio-off light.   |
| 3. Power slide button. Turns the computer on and off.   | 12. Infrared port (below the volume control).   |
| 4. Pointing stick (pointing device).  | 13. Volume control.   |
| 5. Click buttons and scroll button.   | 14. Audio jacks (left to right): audio out (headphones), external microphone, audio in. |
| 6. Touch pad (pointing device).   | 15. Kensington lock slot (security connector).  |
| 7. Click buttons.   | 16. Built-in speakers (one on each side).   |
| 8. Main status lights (left to right): power mode, hard disk activity, charging status for main battery, and charging status for secondary battery. | 17. Built-in microphone.  |
| 9. Module eject latch.  | 18. Latch for opening the computer.   |

Introducing the Notebook Computer  
**Identifying Parts of the Computer**

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Bottom View

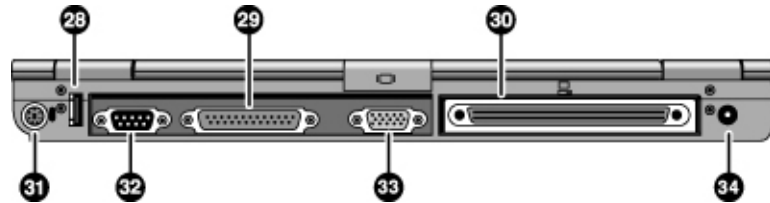


- 19. Modem port (on certain models).
- 20. LAN port (on certain models).
- 21. PC Card and CardBus slots (upper and lower).
- 22. Hard disk drive.
- 23. Main battery latch.

- 24. Main battery.
- 25. Plug-in module bay. Can contain a CD-ROM or DVD drive, floppy disk drive, secondary battery, or other plug-in module.
- 26. Mini-PCI cover (no user parts inside).
- 27. RAM cover.

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## Back View

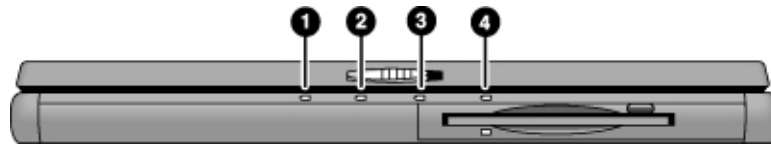


- 28. Universal serial bus port (USB).
- 29. Parallel port (LPT1). Use this port for a parallel printer or other parallel device, or to connect the floppy disk drive externally.
- 30. Docking port.
- 31. PS/2 keyboard or PS/2 mouse port (supports Y adapter).
- 32. Serial port (COM1). Use this port for a serial mouse, modem, printer, or other serial device.
- 33. External monitor port.
- 34. ac adapter jack.

## Status Lights

The computer includes a number of status lights that report power and battery status, drive activity, and keyboard functions such as caps lock and num lock.

The following diagram shows the status lights on the front of the computer.



1. **Power mode.**

- Green: computer is on or in Display-off mode (Windows ME, 98 or 2000).
- Amber: computer is in Standby mode or Display-off mode (Windows 95).
- No light: computer is off or in Hibernate mode.
- Red light: computer failed when resuming, and must be reset.

2. **Hard disk drive activity.**

- Green: computer is accessing the hard disk drive.

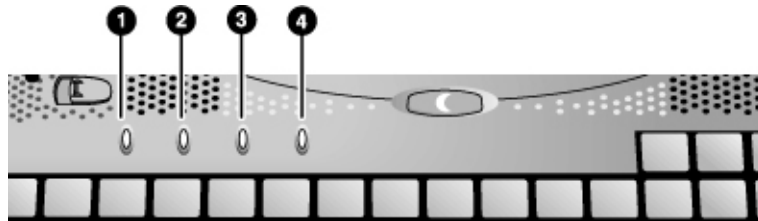
3. **Main battery status.**

- Green: The ac adapter is connected and the battery is fully charged.
- Amber: The ac adapter is connected and the battery is charging.
- Red. The ac adapter is connected and the battery is missing or has a fault.
- Off: The ac adapter is not connected.

4. **Secondary battery status.**

- Green: The ac adapter is connected and the battery is fully charged.
- Amber: The ac adapter is connected and the battery is charging.
- Red. The battery has a fault.
- Off: The ac adapter is not connected, a secondary battery is not installed, or the battery is not charging.

The keyboard status lights, located above the keyboard, indicate the states of the keyboard locks.



1. **Caps Lock.** Caps Lock is active.
2. **Num Lock.** Num Lock is active. (The Keypad Lock must also be on to use the embedded keypad.)
3. **Keypad Lock.** The embedded keypad is active (Fn+F8). Num Lock must also be on for the numeric keys—otherwise, cursor control is active.
4. **Scroll Lock.** Scroll Lock is active.

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## Setting Up Your Computer

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### WARNING

**Improper use of keyboards and other input devices has been associated with ergonomic injury. For information about reducing your risk, see Working in Comfort in the online HP Library (for Windows ME, click Start, Help, Your HP Notebook), or visit our ergonomics Web site, [www.hp.com/ergo](http://www.hp.com/ergo). For a summary about working with a notebook computer, see “Working in Comfort with a Notebook PC” on page 26.**

**If you are using your notebook computer as your primary computer, or using it for extended periods, you should use it with a full-size keyboard, monitor, and mouse. This can reduce the risk of ergonomic injury. See Working in Comfort in the online HP Library (for Windows ME, click Start, Help, Your HP Notebook).**

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When you set up your computer for the first time, you'll need to install and charge the battery, connect the ac adapter, turn on the computer, and run the Windows setup program.

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### Step 1 – Install the battery

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### WARNING

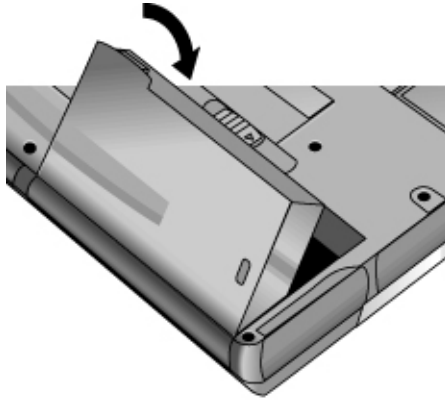
**Do not mutilate or puncture batteries. Do not dispose of batteries in fire, or they can burst or explode, releasing hazardous chemicals. Rechargeable batteries must be recycled or disposed of properly.**

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Your computer is shipped with the battery installed. If the battery has been removed, you should install it:

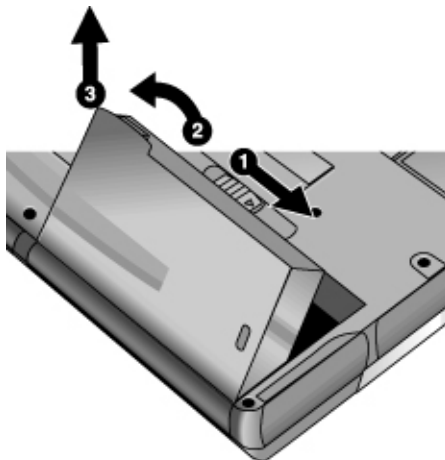
1. Turn the computer upside down.
2. Insert the front (rounded) end of the battery into the battery compartment on the bottom of the computer, and lower the back end in until it clicks into place.





**To remove the battery**

- Slide the battery's release latch, then lift the battery out of its compartment.



Introducing the Notebook Computer  
**Setting Up Your Computer**

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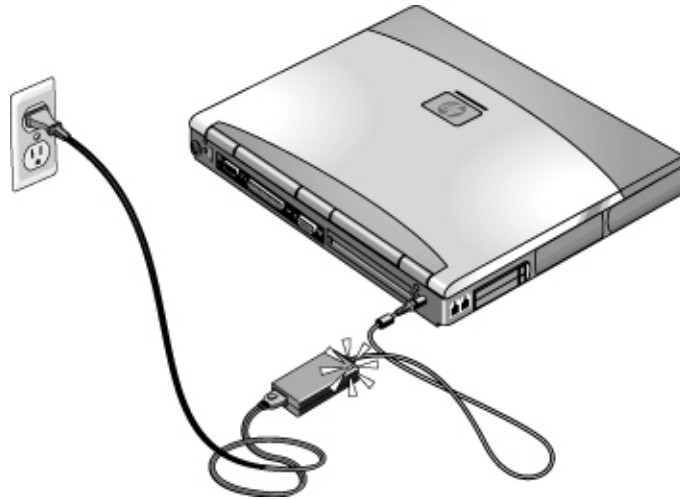
**Step 2 – Connect ac power**

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**CAUTION**

**Use only the HP ac adapter included with your computer (or other approved adapter). Using any other ac adapter could damage the computer and may void your warranty (see the warranty statement in this manual).**

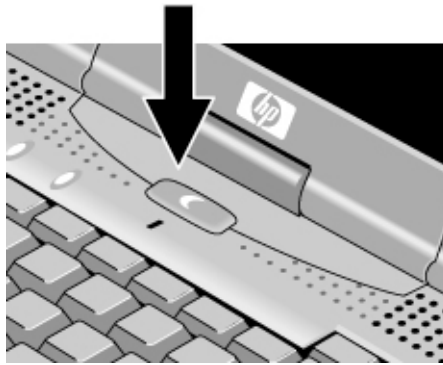
- Plug in the ac adapter, and connect it to the ac adapter jack on the back of the computer. The computer's battery then starts charging.



While the battery is charging, you can continue with step 3.

### Step 3 – Turn on the computer

- Press the blue sleep button above the keyboard. The computer then boots up, and Windows starts automatically.



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**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 sleep button again. Leave the ac adapter plugged in for at least an hour.

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## Step 4 – Set up Windows

Your notebook computer has Microsoft Windows ME, 95, 98, or 2000 preinstalled on its hard disk drive. The first time you turn on your computer, the Windows Setup program runs automatically so you can customize your setup.

- Follow the Setup program's instructions as they appear on the screen. If the program prompts you to enter the Product ID code, you will find this code on the bottom of the computer.

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### **Pavilion models**

When the Setup program finishes, the Windows welcome screen appears. The welcome screen gives you the option to register your computer. Registering is free and fast, and it ensures you will receive quicker, more personalized support from Hewlett-Packard.

To register by modem, connect a phone line to the modem port—or, if your model has no built-in modem, to a modem you connect—then click the Register button in the welcome screen or double-click the HP Notebook Registration icon on the desktop. Follow the onscreen instructions. (See the online *Reference Guide* for details about using the built-in modem.)

To register by phone, call your HP Customer Care Center—see “To contact the HP Customer Care Center” on page 54 for the phone number.

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## Using Your Computer

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## Operating Your Computer

You can start and stop your computer using its blue sleep button. However, at certain times you may want to use other methods to start or stop the computer—depending on power considerations, types of active connections, and start-up time.

For information on caring for and protecting your computer, see “Operating Your Computer” in the online *Reference Guide*.

---

### To start and stop the computer

<b>Power mode</b>	<b>To enter this mode</b>	<b>To turn on again</b>
<b>Display-off mode</b> Saves minimal power. Turns off the display and hard disk. Restarts quickly. Maintains network connections.	Allow timeout.	Press any key or move a pointing device to restore the display (“Instant-On”).
<b>Standby mode</b> Saves significant power. Turns off the display and other components. Maintains current session in RAM. Restarts quickly. Restores network connections.	Press blue sleep button –or– click Start, Suspend (Windows 95) or Start, Shutdown, Standby (Windows ME, 98 or 2000) –or– allow timeout.	Press the blue sleep button to display your current session (“Instant-On”).
<b>Hibernate mode</b> Saves maximum power. Saves current session to disk, then shuts down. Restores network connections.	Press Fn+F12 –or– Click Start, Shut Down, Hibernate (Windows ME or 2000) –or– allow timeout.	Press the blue sleep button to restart and restore your previous session.
<b>Shut down (off)</b> Saves maximum power. Turns off without saving current session. At startup, resets everything, starts a new session, and restores network connections.	Click Start, Shut Down (recommended) –or– slide the power button.	Press the blue sleep button to restart with a new session.

You can also customize the way these power modes work. See the chapter titled “Traveling with Your Computer” in the online *Reference Guide*.

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**Hint**

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To boot from a floppy drive or CD-ROM or DVD drive, press ESC during reboot when the HP logo and prompt appear. Then select the removable floppy drive or CD-ROM/DVD drive as the temporary boot device.

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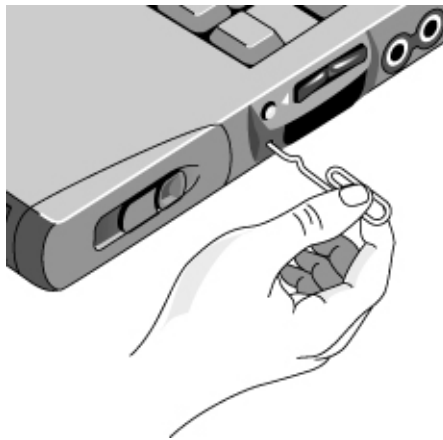
## To reset the computer

Occasionally, you may find that Windows or the computer has stopped responding, and will not let you turn the computer off. If this happens, try the following in the order listed.

1. If possible, shut down Windows: press CTRL+ALT+DEL, then click Shut Down.
2. Slide and hold the power button for 4 seconds, until the display shuts down, then press the blue sleep button to restart.

–or, if this fails–

Insert a straightened paper clip into the system-off switch on the right side of the computer, then press the blue sleep button to restart.



## To use the pointing devices

Your computer includes two built-in pointing devices: the pointing stick and touch pad.



1. Pointing stick (pressure-sensitive pointing device).
2. Click buttons and scroll button. The click buttons work like the left and right buttons on a standard mouse. The scroll button works with the pointing stick to scroll the contents of a window.
3. Touch pad (touch-sensitive pointing device).
4. Click buttons. These also work like the left and right buttons on a standard mouse.

### Moving and selecting

1. Place your hands in a normal typing position.
2. **Pointing stick.** With your index finger, press the pointing stick in the direction you want the pointer to move.  
**Touch pad.** Move a thumb or finger across the touch pad in the direction you want the pointer to move.
3. Use the left and right click buttons, which function like the left and right buttons on a mouse, to make your selection:
  - To open an application, move the pointer over the icon and double-click the left button.
  - To make menu selections, move the pointer to the menu item and click the left button.
  - 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. Then press *and hold* the left button while you move the pointer to the new location, and release the button.



### Scrolling with the scroll button

- Hold down the scroll button and move the pointer using the pointing stick. The contents of the window scroll in the direction you move the pointer.

To customize the operation of the touch pad or pointing stick, see “Operating Your Computer” in the online *Reference Guide*.

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## 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. To use a hot key, press *and hold* Fn, press the appropriate second key, then release both keys.

### This hot key

Fn+F1  
Fn+F2  
Fn+F5  
Fn+F7  
Fn+F8  
Fn+F12  
Fn+NumLock  
Fn+UP ARROW  
Fn+DOWN ARROW

### Does this

Decreases the display brightness.  
Increases the display brightness.  
Toggles among the built-in display, an external display, and simultaneous display on both.  
Audio mute  
Toggles the built-in keypad on and off. Does not affect an external keyboard. If Num Lock is on, then the numeric functions are active; otherwise, cursor control is active.  
Enters Hibernate mode.  
Toggles Scroll Lock on and off.  
Increases sound volume.  
Decreases sound volume.

External keyboards support only Fn+F5, Fn+F7, and Fn+F12. To use these, press and hold left CTRL+left ALT, press the appropriate second key, then release both keys.

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## Working in Comfort with a Notebook PC

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### 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](http://www.hp.com/ergo)—or see *Working in Comfort in the online HP Library* (for Windows ME, click Start, Help, Your HP Notebook).**

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

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### Note

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 docking accessories 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 *Working in Comfort*, which is preloaded on the hard disk in the HP Library (for Windows ME, click Start, Help, Your HP Notebook) and available on the *Recovery CD* in \hp\Library—as well as at [www.hp.com/ergo](http://www.hp.com/ergo).

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### 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.



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## Traveling with Your Computer

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## Using Battery Power

For information about how your computer regulates its power consumption, and how you can manually reduce power consumption and extend the life of the computer's battery, see the chapter titled "Traveling with Your Computer" in the online *Reference Guide*.

---

### To check battery status

#### **From the battery status lights**

Your computer has two battery status lights, one for the main battery and one for the optional secondary battery in the module bay—see "Status Lights" on page 14.

#### **From the Windows taskbar**

The Windows taskbar includes a power icon that provides detailed battery status information. The icon looks like a battery when ac is not connected.

- Place the pointer over the power icon to display the remaining battery charge. This value is shown as either a percentage of charge remaining, or as time remaining.
- Double-click the power icon to open the Battery Meter window.

#### **From the Windows Control Panel**

- Click Start, Settings, Control Panel, then double-click Power. This provides access to all of Windows' power-information options.

#### **On the battery**

1. Remove the battery from the computer—see "Step 1 – Install the battery" on page 16.
2. Press the contact pad on the back of the battery. The number of lights that turn on indicates the remaining charge (each light represents 20% of a full charge).

---

## To respond to a low-battery warning

The computer automatically alerts you when the battery power drops to a critically low level. The computer first emits a high-pitched beep. Then, if you do not restore power within a short time, the computer goes into Hibernate mode.

Once the computer enters Hibernate mode, you won't be able to turn it on again until you restore power by doing one of the following:

- Replace the battery with a charged one. See “Step 1 – Install the battery” on page 16.
- Plug in the ac adapter. See “Step 2 – Connect ac power” on page 18.
- Install a charged secondary battery in the plug-in module bay.

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**Note**

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





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## Making Connections

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## Using Plug-In Modules

You can use any compatible plug-in module with your computer's module bay, such as:

- CD-ROM or DVD drive.
- LS-120 or Zip drive.
- CD read/write drive.
- Second hard drive.
- Floppy disk drive.

You can also attach the floppy disk drive to your computer's parallel port using the external floppy drive cable.

- Secondary battery.

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### CAUTION

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**Never remove a plug-in module without first notifying Windows—see “To replace a plug-in module” on page 35. Otherwise, you could lose data.**

For information about connecting your modem or LAN (depending on the model), or about connecting PC Cards or external devices, see the chapter titled “Making Connections” in the online *Reference Guide*. See the same online manual for modem AT commands.

---

### To install hot-swap support

If your computer uses Windows ME, 95 or 98, it also includes “hot-swap” software that lets you swap most modules in the computer's plug-in bay without needing to shut down and reboot the computer.

If a plug-in module icon or BayManager icon is displayed in the taskbar, hot-swap support is already installed. If the icon is not present, you can install the software as follows:

- **Windows ME:** Click Start, Programs, Softex BayManager, Setup, then follow the onscreen instructions.
- **Windows 95 or 98:** Click Start, Programs, Agaté Tioman for HP, Setup, then follow the onscreen instructions.

---

## To replace a plug-in module

Windows ME, 95 or 98 uses hot-swap software to let you swap most plug-in modules without shutting down the computer. Before replacing a hard drive module, however, you must first shut down the computer.

Windows 2000 displays the Unplug or Eject Hardware icon at the right end of the taskbar when a drive module is present.

---

### CAUTION

**Before disconnecting a CD-ROM drive, DVD drive, or any other type of drive, you must either use the icon in the taskbar or shut down the computer—otherwise, you could lose data. For Windows ME, you must also do this before you insert a drive.**

**Exception: for Windows ME, 95 or 98, you must shut down the computer before connecting or disconnecting a hard disk drive.**

**Handle and store a module carefully when it's out of the computer. Do not drop it or apply excessive pressure to its surfaces—this could damage its internal mechanisms. Do not touch the metallic pins on the computer's connectors, module connectors, or cable connectors. Static electricity can damage internal components.**

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1. Close all files that are open from the plug-in module.
2. **Windows ME:** If the BayManager icon is present in the taskbar, right-click the icon, then click Remove/Swap Bay Device. When prompted, remove the module if one is present. Don't click OK until you've inserted the desired module, if any.

**Windows 95 or 98:** If the plug-in module icon is present in the taskbar, right-click the icon, then click Remove Device. When prompted to remove the module, click OK. (You don't have to do this if the bay is empty or contains a battery.)

**Windows 2000:** Left-click the Unplug or Eject Hardware icon on the taskbar, and select the module you want to remove. When prompted to remove the module, click OK. (You don't have to do this if the bay is empty or contains a battery.)



—or—

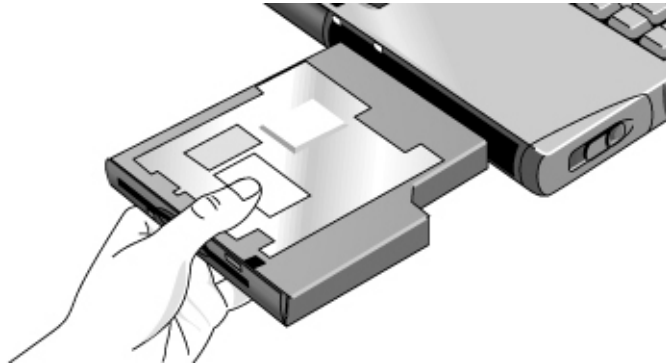
For any system: Click Start, Shut Down, Shut down. For Windows ME, 95 or 98, you *must* do this if you are removing or inserting a hard disk drive in the module bay.

## Making Connections Using Plug-In Modules

3. Press the button on the module release latch, and slide the latch toward the front of the computer.



4. Grasp the module and pull it out.



5. Slide the new plug-in module into the computer until it clicks into place.
6. For Windows ME, click OK to close the BayManager window.

If you have a CD-ROM drive or other module in the module bay, you can connect the floppy disk drive to the parallel port. See “Using Plug-In Modules” in the online *Reference Guide*.

---

## Configuring and Expanding Your Computer

---

## Using the BIOS Setup Utility

The BIOS (Basic Input and Output System) Setup utility enables you to make changes to the computer's system configuration, and to tailor the operation of your computer to your individual work needs.

The settings made in BIOS Setup generally control the computer's hardware, and so greatly affect how the computer operates.

---

### To run the BIOS Setup utility

1. Click Start, Shut Down, Restart.
2. When the HP logo appears, press F2 to enter BIOS Setup.
3. The pointing devices are not active in BIOS Setup, so you will need to use the keyboard to navigate:
  - Press the LEFT and RIGHT arrow keys to move among menus.
  - Press the UP and DOWN arrow keys to move among parameters in a menu.
  - Press F5 or F6 to move through values for the current parameter, or press ENTER to change a setting.
4. After you select the options you want, press F10 or use the Exit menu to exit BIOS Setup.
5. If the settings cause a conflict between devices during reboot, the system prompts you to run BIOS Setup, and marks the conflicting settings.

For a complete list of BIOS Setup menus, settings, and options, see the online *Reference Guide*.

---

## Installing a RAM Expansion Module

The computer has no memory (RAM) built in but has two slots that hold two RAM modules. One slot contains a RAM module installed at the factory. You can use both slots to expand your RAM.

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### To install a RAM expansion module

You'll need a small Phillips screwdriver for these steps.

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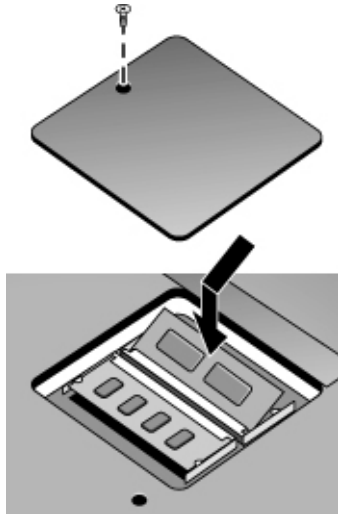
#### CAUTION

**Your computer's chips are extremely sensitive to static electricity, and can be permanently damaged by it. Handle the RAM module only by its edges. Before installing the memory module, discharge your body's static electricity by touching the metal shielding around the connectors on the rear of the computer.**

1. Click Start, Shut Down, Shut down.
2. **Important:** Unplug the ac adapter, if present, and remove the battery. Remove the secondary battery if one is installed.
3. Turn the unit bottom-side up, remove the screw holding the RAM cover, and remove the cover.

Configuring and Expanding Your Computer  
**Installing a RAM Expansion Module**

4. Insert the RAM board into the connector at about a 30° angle until it is fully inserted. Then press down at both sides until both latches snap closed.



5. Replace the cover.
  6. Insert the battery.
- To remove the RAM board, release the two latches at the sides of the board.



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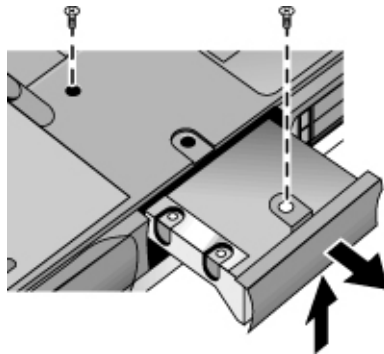
## Replacing a Hard Disk Drive

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### To replace the hard disk drive

You'll need a small Phillips screwdriver for this procedure.

1. Unplug the ac adapter if you're using one, and remove the battery.
2. Turn the unit bottom side up and remove both hard drive screws.
3. Raise the cover on the end of the drive so that its retainer tab is free of the computer casing, then gently pull the hard drive out of the computer.



4. Gently slide the new drive into the hard drive compartment. Press firmly to make sure the connector seats properly.
5. Slide the cover down into place (so the retainer tab engages the casing), and reinstall both hard drive screws.

---

**Important**

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If you are installing a new hard disk drive, you should create a Hibernate partition on the drive before loading any software. See “To recover the factory installation of your hard disk” on page 50.

To install the holder on a new hard disk drive or prepare a new hard disk for use, see “Replacing a Hard Disk Drive” in the online *Reference Guide*.



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## Troubleshooting Your Computer

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## Troubleshooting Techniques

This section contains solutions to a few basic problems you might have with your computer. Try the solutions one at a time, in the order in which they are presented.

Here are some other sources of information for troubleshooting:

- See the troubleshooting chapter in the online *Reference Guide* for a more complete list of troubleshooting suggestions.
- Click Start, Help, and use the Windows Troubleshooters.
- See the Microsoft Windows manual shipped with the computer.
- See the HP Notes in the online HP Library for updated information (for Windows ME, click Start, Help, Your HP Notebook).
- Find technical tips and software updates for the computer at the HP Customer Care Web site ([www.hp.com/go/support](http://www.hp.com/go/support)).
- Test your computer by running the DiagTools test program. See “Testing the Hardware” on page 48.
- Contact your dealer or Hewlett-Packard—see “To contact the HP Customer Care Center” on page 54. Please have your computer with you when you call.

---

### Display Problems

#### **If the computer is on, but the screen is blank**

- Move the mouse or pointing stick, or tap the touch pad. This will wake the display if it is in Display-off mode.
- Press Fn+F5 in case the internal display was disabled. (Do this three times to return to the state you started from.)
- If the computer is cold, allow it to warm up.

#### **If the screen is difficult to read**

- Try setting the display resolution to its default setting of 1024×768 or 1400 × 1050: click Start, Settings, Control Panel, Display, Settings.

## Hard Disk Drive Problems

### **If the computer's hard drive doesn't spin**

- Make sure the computer has power. If necessary, connect the ac adapter, and make sure it is fully plugged into a power source and into the rear of the computer.
- Remove and reinsert the hard drive. See “Replacing a Hard Disk Drive” on page 41.

### **If files are corrupted**

- In Windows 95 or 98, run the Scandisk surface scan to check the hard disk. From the Start menu, click Programs, Accessories, System Tools, Scandisk.
- For Windows ME or 2000, open My Computer, select the disk you want to scan, click File, Properties, and use the Tools tab.
- Run the VirusScan program. See the chapter titled “Using Your Computer” in the online *Reference Guide*.
- Test the hard disk drive with the DiagTools diagnostics. See “Testing the Hardware” on page 48.
- If necessary, you can format the hard disk and reinstall the original factory software. See “To recover the factory installation of your hard disk” on page 50.

---

## Keyboard and Pointing Device Problems

### **If the pointer is difficult to control**

- Adjust the pointer controls: click Start, Settings, Control Panel, the double-click Mouse.

### **If the touch pad or pointing stick doesn't work**

- Don't move the pointer or touch the touch pad while the computer is rebooting or resuming from Standby mode. If this happens, try the following:
  - Press a key on the keyboard to restore normal operation.
  - Suspend and resume operation using the sleep button.
  - Shut down and restart Windows.

## Troubleshooting Your Computer

### Troubleshooting Techniques

- If an external mouse is connected, the built-in pointing devices are normally disabled. You can change this setting with the BIOS Setup utility—see “Using the BIOS Setup Utility” on page 38.
- Restart the computer: click Start, Shut Down, Restart.

---

## Performance Problems

For best performance with Windows 2000, your computer should have at least 96 to 128 MB of memory (RAM).

### If the computer stops responding

- Press CTRL+ALT+DEL to end the application that is not responding.
- Slide and hold the power button for at least four seconds to turn off and reset the computer. Then press the blue sleep button to turn the computer back on.
- If nothing happens, insert a straightened paper clip into the system-off switch on the right side of the computer. Then press the blue sleep button to turn the computer back on.

---

## Power and Battery Problems

### If the computer turns off immediately after it turns on

- Battery power is probably extremely low. Plug in the ac adapter or insert a charged battery.

### If the computer keeps beeping

- The computer beeps for 15 seconds when battery power is low. Save your work, shut down Windows immediately, and insert a charged battery or plug in the ac adapter.

### If the battery doesn't charge

- Make sure the ac adapter is fully plugged into the power source and the computer, and that the light on the adapter is on.
- If you're using a power strip, remove the ac adapter from the power strip and plug it directly into a wall outlet.
- Make sure the battery is fully installed and locked in place.

- Move the computer away from any nearby heat source. Unplug the ac adapter and allow the battery to cool down. If the battery gets too hot, it will not charge properly.
- If available, try another battery and ac adapter.

---

## Startup Problems

### **If the computer doesn't respond when you turn it on**

- Connect the ac adapter.
- Press the blue sleep button to try turning on the unit.
- Reset the computer by inserting a straightened paper clip into the system-off switch on the right side of the computer. Then press the blue sleep button to turn it on.
- If the computer still doesn't respond, remove the battery and ac adapter, remove any PC cards, and undock the computer if docked. Then plug in the ac adapter again, and reset the computer using the system-off switch.

### **If the computer won't boot from battery power**

- Make sure the battery is properly inserted and fully charged. Check the battery's charge by removing it and pressing the pad on the back of the battery. The lights show the charge level.
- If you have a secondary battery, install it and try starting the computer.
- If available, try another battery.

---

## Testing the Hardware

The DiagTools hardware diagnostic program included with your computer provides two levels of testing:

- Automated testing using its 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 non-destructive and are intended to preserve the state of the computer. The computer reboots when you exit the program so drivers can be loaded.

---

### To run the DiagTools diagnostic test

1. Click Start, Shut Down, Restart.
2. When the HP logo appears, press F10 to start the diagnostic test.
3. Go through the first several screens.
4. When the hardware detection finishes, check the list of detected hardware.

---

#### Hint

If a device is not detected or fails its test, it might be configured incorrectly in the BIOS Setup utility. You can confirm this by running BIOS Setup and checking the settings. See “To run the BIOS Setup utility” on page 38.

5. **Run the basic test.** Press F2 to start the basic hardware test.

If the basic test fails, you can press F6 and start a Wizard that runs a set of advanced tests for the failed component.

6. If you intend to exit without running the advanced tests, press F4 to save system and test information in the Support Ticket log file. Then press F3 to exit.
7. **Optional: Run the advanced tests.** Press F2 to open the advanced test screen.



8. Select and run the appropriate tests. Tests are not listed if no such hardware is detected. Press the following keys to run tests:

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.

9. When you are finished running tests, press ESC to exit the advanced tests.
10. **Optional: Save the Support Ticket.** Press F4 to save system and test information in the Support Ticket log file.
11. **Exit.** Press F3 to exit and reboot.
12. **Optional: Check the log.** The log file contains a list of all test results and errors. Run C:\Dmi\Hpdiags\Hpsuppt.exe to retrieve the log file to this directory and open it in Notepad. (If Hpsuppt.exe is not on your hard disk, you can download it from the HP Customer Care Web site, [www.hp.com/go/support](http://www.hp.com/go/support).)

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## Recovering and Reinstalling Software

You can use the *Recovery CD* to recover the original software build for your computer. The *Recovery CD* also provides Windows drivers specific to your computer to configure a custom system. You can find drivers in these locations:

- On your computer's hard drive under C:\hp\Drivers.
- On the *Recovery CD* under \hp\Drivers.
- On the HP Customer Care Web site ([www.hp.com/go/support](http://www.hp.com/go/support)). This Web site contains the latest updates of software drivers for different operating systems.

---

### To recover the factory installation of your hard disk

Use the *Recovery CD* to reinstall the original factory software on your computer's hard disk. You use the same process to create a larger Hibernate/diagnostics partition on your hard disk (Windows ME, 95 or 98 only) or to create a Hibernate/diagnostics partition on a new hard disk.

---

#### CAUTION

**This procedure formats the computer's hard disk drive and erases all data on the disk. After the hard disk is formatted, you'll need to reinstall your applications.**

**Do not interrupt the following process or unplug the ac adapter until the process is complete.**

1. **Important.** Back up all data from your hard disk. The following steps delete all data from the disk.
2. Plug in the ac adapter.
3. Insert the *Recovery CD* in the CD-ROM drive.
4. Click Start, Shut Down, Restart.
5. When you see the HP logo, press ESC.
6. Select the CD or DVD drive as the boot device.

7. When the *Recovery CD* dialog box appears, follow the displayed instructions. If prompted, accept the recommended partition size. If you install the factory software, the recovery process can take up to 10 minutes.

If you want to create the Hibernate/diagnostics partition without installing the factory software, click *Advanced* and select the option to not install the operating system.

8. When prompted to reboot the computer, press CTRL+ALT+DEL and follow any instructions that appear onscreen.



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## Support and Service

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## Getting Assistance for Your Computer

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### To get help from the web

HP has several Web sites on the Internet dedicated to providing information to HP notebook computer users. The following sites are especially useful for helping you get support for your computer:

- **HP Customer Care Web site.** Get technical information and software updates.  
[www.hp.com/go/support](http://www.hp.com/go/support)  
Click Assistance for information about bulletin boards, CD-ROM subscriptions, and service parts.
- **HP Notebook Computer Web site.** Get the latest information about technical support, including e-mail and telephone support, plus information about warranty and support programs.  
[www.hp.com/notebooks](http://www.hp.com/notebooks)

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### To contact the HP Customer Care Center

HP Customer Care Centers will assist you free of charge during the term of the warranty (you are responsible for the telephone charges).

**During the free assistance period, HP will assist with questions about:**

- Included applications and operating systems.
- 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 included (by HP) with the product.
- How to repair the product yourself.

- Product development, custom installations.
- Consulting.

To contact the Customer Care Center by email, visit the HP Notebook Web site ([www.hp.com/notebooks](http://www.hp.com/notebooks)) under Support.

To call the Customer Care Center, check the HP Notebook website ([www.hp.com/notebooks](http://www.hp.com/notebooks)) under Support for the most complete and current list of phone numbers. If your HP notebook product is not normally sold by HP in the country of use, you must call a Customer Care Center that supports your notebook model. Currently, service and support assistance is provided only in the following countries:

**Pavilion N6000 series**

United States only: (970) 635-1000

**OmniBook 6000**

See the following table.

Support and Service  
**Getting Assistance for Your Computer**

<p><b>North America</b> United States: (970) 635-1000 Canada: (905)-206-4663 Mexico: Mexico City 52-58-9922, outside Mexico City 01-800-472-6684, Guadalajara 669-9500, Monterrey 378-4240</p> <p><b>South America</b> Argentina: 5411-4778-8380 or 0810-555-5520 Brazil: Sao Paulo (11) 3747-7799, other cities 0800-157751 Venezuela: 58-2-239-5664</p> <p><b>Europe</b> Austria: +43-(0)7114-20-1080 Belgium (Dutch): 32-(0)2-626-8806 Belgium (French): 32-(0)2-626-8807 Czech Republic: 42-(0)2-6130-7310 Denmark: +45-39-29-4099 Finland: 358-(0)203-47-288 France: +33 (0)1-43-62-34-34 Germany: +49-(0)180-52-58-143 Greece: +30-(0)1-619-64-11 Hungary: +36-(0)1-382-1111 Ireland: +353-(0)1-662-5525 Italy: +39-02-264-10350 Netherlands: +31-(0)20-606-8751 Norway: +47-22-11-6299 Poland: +48-22-519-06-00 Portugal: +351-21-317-6333 Russia: Moscow +7-095-797-3520, St. Petersburg +7-812-346-7997</p>	<p>Spain: +34-902-321-123 Sweden: +46-(0)8-619-2170 Switzerland: +41-(0)848-80-11-11 Israel: +972-(0)9-952-4848 Turkey: +90-212-221-69-69 United Kingdom: +44-(0)207-512-52-02 English (international): +44-(0)171-512-52-02</p> <p><b>Asia and Australia</b> Australia: 61-3-8877-8000 China: 800-810-5959 Hong Kong: 852-800-96-7729 India: 91-11-682-6035 Indonesia: 62-21-350-3408 Japan: 81-3-3335-8333 Korea: Seoul 82-2-3270-0700, outside Seoul 080 999-0700 Malaysia: Penang 60-3-295-2566, outside Penang 03-295-2566 New Zealand: 64-9-356-6640 Philippines: 63-2-867-3551 Singapore: 65-272-5300 Taiwan: 886-2-2717-0055 Thailand: 66-2-661-4000 Vietnam: 84-8-823-4530</p> <p><b>Africa/Middle East</b> Inise RSA: 086-000-1030 Outside RSA: +27-11-258-9301</p>
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## To receive repair service

If the HP notebook product is not normally sold by HP in the country of use, it must be returned for service to a country in which it is sold and supported. For example, Pavilion notebook products are currently serviced in only the United States.

**If your computer is under warranty.** To receive warranty repair service, contact an HP-authorized reseller, or contact the HP Customer Care Center—see “To contact the HP Customer Care Center” on page 54. 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 may include the cost of shipping, handling, duties, taxes, freight, or fees to or from the service location.

**If your computer is no longer under warranty.** Contact an HP-authorized reseller or the HP Customer Care Center (see “To contact the HP Customer Care Center” on page 54). The support provider will let you know about repair charges and processes.

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## To prepare your computer for shipment

See “To receive repair service” above to determine if your computer must be sent in for service. If so, prepare your computer for shipment as follows.

1. **Important.** Back up your hard disk drive. The hard disk may need to be replaced or reformatted while your computer is being repaired.
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.
  - Any removable media, such as CDs, DVDs, or floppy disks.
  - Any plug-in module not involved in the problem and not requested for repair.
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.

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### Note

If the hard disk drive is defective, you will receive a replacement drive that is either unformatted or loaded with software for verification. You should restore the computer’s original software using your *Recovery CD* (see “To recover the factory installation of your hard disk” on page 50) or other recovery method.

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## 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 HP notebook computer. 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 computer, 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's limited warranty is valid in any country or locality where HP has a support presence for this product and where HP has marketed this product. The level of warranty service you receive may vary according to local standards. HP will not alter form, fit or function of the product to make it operate in a country for which it was never intended to function for legal or regulatory reasons.
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.



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## Specifications and Regulatory Information

Specifications and Regulatory Information  
**Hardware Specifications**

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## Hardware Specifications

Because we are constantly improving our products, the specifications shown below are subject to change. For the latest specifications, see the HP Notebook Web site ([www.hp.com/notebooks](http://www.hp.com/notebooks)).

<b>Physical Attributes</b>	Size (14-inch display): 316 × 261 × 33 mm (12.4 × 10.3 × 1.3 in). Size (15-inch display): 325 × 261 × 35 mm (12.8 × 10.3 × 1.4 in). Weight: 2.3–2.9 kg (5.0–6.4 lb), depending on configuration. Magnesium display cover.
<b>Processor and Bus Architecture</b>	550- to 650-MHz Celeron processor with 128-KB four-way set-associative L2 cache. –or– 600- to 850-MHz Intel Mobile Pentium III processor with Speed Step technology with 256-KB four-way set-associative L2 cache. 1.6-V core, 2.5-V external, low-power processor. 32-KB (16-KB instruction, 16-KB data) L1 cache. 32-bit PCI bus.
<b>Graphics</b>	14.1- or 15.0-inch XGA (1024 × 768 × 16M colors) or SXGA+ (1400 × 1050 × 16M colors) active-matrix (TFT) display. Zoomed Video support for lower PC Card slot. 3D and OpenGL graphics support. <b>Celeron models:</b> ATI Mobility M graphics accelerator with 4-MB display RAM, 2x AGP graphics capability. <b>Pentium III models:</b> ATI Mobility M1 graphics accelerator with 8-MB display RAM, 2x AGP graphics capability.
<b>Power</b>	Rechargeable lithium-ion battery with LED charge-level gauge (11.1 or 14.8 Vdc). Battery life (one battery): up to 3 hours typical (varies with model and usage). Fast battery recharge: 80% in 1.5 hour, 100% in 2 hours. Low-battery warning. Suspend/resume capability. Universal 60-watt ac adapter: 100–240 Vac (50/60 Hz) input, 19 Vdc output. Optional secondary battery available for module bay.
<b>Mass Storage</b>	5- to 20-GB removable hard drive. 1.44-MB floppy drive module. 24x CD-ROM or 6x DVD drive module (or higher). Optional drive modules available.
<b>RAM</b>	Two slots for RAM expansion up to 512 MB. 64 or 128 MB RAM installed in one slot. 100-MHz RAM bus.

<b>Audio System</b>	<p>16-bit Sound Blaster Pro-compatible stereo sound.          Stereo sound via two built-in speakers (500 Hz to 10 kHz range).          3D-enhanced PCI bus audio with Zoomed Video support.          Built-in microphone.          Separate audio-off button with indicator light.          Headphone-out, microphone-in, and audio line-in.</p>
<b>Keyboard and Pointing Devices</b>	<p>87-key touch-type QWERTY keyboard with 101/102 key emulation.          Embedded numeric keypad.          12 function (Fn) keys.          Two pointing devices: pointing stick (TrackPoint technology licensed from IBM) and touch pad.</p>
<b>Communications</b>	<p><b>LAN/Modem Models (3Com):</b>          LAN          - Ethernet 10Base-T (10 Mbps) and 100Base-TX (100 Mbps) support.          - Supports wake-on-LAN, remote wake-up (Windows ME or 98), fast IP, DMI, dRMON.          - MBA (Managed Boot Agent) support for PXE/BINL, BOOTP, NCP/IPX, DHCP.          Modem          - Data speed: 56 Kbps (V.90) maximum.          - Fax speed: 14.4 Kbps, Class 1 and 2.          - Modulation: V.21, V.22, V.22bis, V.23, V.32, V.32bis, V.34, V.90, X2, Bell 103, Bell 212A.          - Synchronous transfer: V.80.          - Compression: V.42bis, MNP5.          - Error correction: V.42, MNP2-4.          - Fax: Group 3 fax, Class 1. V.17, V.27ter, V.29, V.21 channel 2.  <b>Modem-Only Models (Ambit):</b>          Data speed: 56 Kbps (V.90) maximum.          Fax speed: 14.4 Kbps, Class 1 and 2.          Modulation: V.21, V.22, V.22bis, V.23, V.32, V.32bis, V.34, V.90, Bell 103, Bell 212A.          Synchronous transfer: V.80.          Compression: V.42bis, MNP5.          Error correction: V.42, MNP2-4.          Fax: Group 3 fax, Class 1. V.17, V.27ter, V.29, V.21.</p>
<b>Input/Output</b>	<p>Universal serial bus (USB).          9-pin, 115,200-bps serial (16550 UART).          25-pin bi-directional ECP/EPP parallel.          15-pin VGA video-out with DDC support. (Resolution up to 1600 × 1200 × 64K or 16M colors. Refresh rate up to 60 to 100 Hz, depending on resolution.)          Dual display.          PS/2 keyboard/mouse.          4-Mbps IrDA-compliant infrared port.</p>
<b>Expandability</b>	<p>One Type III or two Type II 16-/32-bit PC Card slots (3.3- and 5-V support).          CardBus enabled.          Plug-in module bay for accessory modules.          Optional port replicator, mini dock, and docking system (not supported on Pavilion models).</p>

Specifications and Regulatory Information  
**Hardware Specifications**

<b>Security Features</b>	User and administrator passwords. System, hard drive, and docking passwords. PC identification displayed at boot. DMI-accessible electronic serial number. Kensington MicroSaver lock slot.
<b>Environmental Limits</b>	Operating temperature: 5 to 35 °C (41 to 95 °F). Operating humidity: 20 to 90 percent RH (5 to 35 °C). Operating altitude: up to 3000 m (10,000 ft) at 25 °C (77 °F). Storage temperature: -20 to 50 °C (-4 to 122 °F).
<b>Major ICs</b>	CPU: Intel Mobile Pentium III or Celeron processor. South Bridge: PIIX4M. Display controller: ATI Mobility M or M1. Audio controller: ESS Maestro-3E and ESS ES1921. CardBus controller: TI PCI 1420. Keyboard/embedded controller: National PC87570. BIOS flash: SST28SF040. Super I/O: National NS97338.



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## Safety Information

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### Power Cords

The power cord supplied with the computer's 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, contact your local Hewlett-Packard dealer or Sales and Service office.

Country	Rated Voltage and Current	HP Part Number
Canada Mexico Philippines Taiwan United States	125 Vac (3 A)	8120-6313
East and West Europe Egypt Saudi Arabia	250 Vac (2.5 A)	8120-6314
Hong Kong Singapore United Kingdom	250 Vac (2.5 A)	8120-8699
Australia New Zealand	250 Vac (2.5 A)	8120-6312
Japan	125 Vac (3 A)	8120-6316
India South Africa	250 Vac (2.5 A)	8120-6317
Argentina	250 Vac (2.5 A)	8120-8367
Chile	250 Vac (2.5 A)	8120-8452
People's Republic of China	250 Vac (2.5 A)	8120-8373

## Ergonomics

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**WARNING**

**Improper use of keyboards and other input devices has been associated with ergonomic injury. For information about reducing your risk, see Working in Comfort in the online HP Library (for Windows ME, click Start, Help, Your HP Notebook, Working in Comfort), or visit our ergonomics Web site, [www.hp.com/ergo](http://www.hp.com/ergo).**

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## Battery Safety

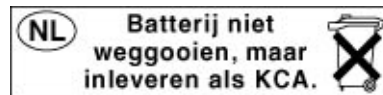
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**Note**

The following batteries are compatible only with HP notebook computers:

- HP F2014 and F2019
- Sanyo 3UR18650-2-QC-RT
- Panasonic CGR-B/634AE

- To avoid risk of fire, burns, or damage to your battery pack, do not allow a metal object to touch the battery contacts.
- Do not disassemble the battery. 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 storage temperatures above 60 °C (140 °F).
- When the battery is not in use, store it in the battery pouch provided.
- When discarding a battery pack, contact your local waste disposal provider regarding local restrictions on the disposal or recycling of batteries.
- 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).



## Laser Safety

The CD-ROM and DVD drives used with the computer are certified as a 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 “To contact the HP Customer Care Center” on page 54.
- Do not attempt to make any adjustment of the unit.
- Avoid direct exposure to the laser beam—do not open the unit.

CLASS 1 LASER PRODUCT LASER KLASSE 1
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## LED Safety

The infrared port located on the right side of the computer 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 “To contact the HP Customer Care Center” on page 54.
- 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.

CLASS 1 LED PRODUCT LEDSCHÜTZKLASSE 1 PRODUKT
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## Regulatory Information

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

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### U.S.A.

The computer generates and uses radio frequency energy and may interfere with radio and television reception. The computer 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 computer with respect to the receiver.
- Connecting the computer's 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**

**Responsible Party:** Hewlett-Packard Company  
Manager of Corporate Product Regulations  
3000 Hanover Street  
Palo Alto, CA 94304  
(415) 857-1501  
declares that the product(s)

**Trade name:** Hewlett-Packard Company

**Product name:** HP OmniBook 6000 and HP Pavilion N6xxx (x is any digit 0-9)

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.

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## 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.

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## European Union

The equipment has been approved in accordance with Council Decision 98/482/EC for pan-European single terminal connection to the public switched telephone network (PSTN). However, due to differences between the individual PSTNs provided in different countries, the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN network termination point.

In event of problems, you should contact your equipment supplier in the first instance.

## Specifications and Regulatory Information

### Regulatory Information

This equipment has been designed to work in all of the countries of the European Economic Area (Public Switched Telephone Networks). Network compatibility is dependent on internal software settings. Contact your equipment supplier if it is necessary to use the equipment on a different telephone network. For further product support, contact Hewlett-Packard—see “To contact the HP Customer Care Center” on page 54.

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### 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。

#### Japan Telecommunications Approval

JATE approval number: A00-0143JP, A99-0700JP

Name of Equipment: T18M038.00, 3CN3AX556

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### Russia

Продукт сертифицирован в системе ГОСТ Р  
Модем сертифицирован в системе ЭЛЕКТРОСВЯЗЬ



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## 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's Name:** Hewlett-Packard Company  
**Manufacturer's Address:** Hewlett-Packard Company  
Mobile Computing Division  
19310 Pruneridge Ave.  
Cupertino, CA 95014, U.S.A.

declares that the following product

**Product Name:** HP notebook PC  
**Model Numbers:** HP OmniBook 6000 and HP Pavilion N6xxx (x is any digit 0-9)  
**Product Options:** All

conforms to the following product specifications

**Safety:** IEC 950: 1991 +A1,A2,A3,A4 / EN 60950: 1992 +A1,A2,A3,A4,A11  
GB4943-1995  
**EMC:** CISPR 22: 1993 +A1,A2 / EN 55022: 1994 +A1,1995 +A2: 1997, Class B [1]  
EN 61000-3-2:1995 +A1: 1998 +A2: 1998 / EN 61000-3-3:1995  
GB9254-1988, FCC Title 47 CFR, Part 15 Class B/ANSI C63.4: 1992  
AS/NZS 3548: 1995 Rules and Regulations of Class B  
EN50082-1: 1997  
EN 61000-4-2: 1995: 4kV CD, 8kV AD, EN 61000-4-3: 1995: 3V/m  
EN 61000-4-4: 1995: 0.5kV Signal Lines, 1kV Power Lines  
EN 61000-4-5: 1995, EN 61000-4-6: 1996, EN 61000-4-11: 1994, ENV 50204: 1995  
**Telecom:** TBR 21: 1998, EG 201 121: 1998

**Supplementary Information:** The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC, amended by 92/31/EEC & 93/68/EEC, and the R&TTE Directive 1999/5/EC (Annex II) and carries the CE marking accordingly.

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

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 F1454A and F1781A ac/dc adapter used with this product is designed to operate on all power systems, other than IT power systems.

Corvallis, OR,  
October 31, 2000



Jerry Erickson, R&D Product Execution Manager

European Contact for regulatory topics only: Hewlett Packard GmbH, HQ-TRE, Herrenberger Straße 130, 71034 Boeblingen, Germany. Fax: +49 7031 143143).

USA Contact: Hewlett Packard Co., Corporate Product Regulations Manager, 3000 Hanover Street, Palo Alto, CA 94304, U.S.A. Phone: +1 (415) 857-1501.

Specifications and Regulatory Information  
**Regulatory Information**



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