

Notebook Tour

Document Part Number: 396853-001

March 2006

This guide explains the computer hardware features.

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Components

This chapter explains the hardware features of the computer.

To see a list of hardware installed in the computer:

1. Select **Start > My Computer**.
2. In the left pane of the System Tasks window, select **View system information**.
3. Select **Hardware** tab > **Device Manager**.

You can also add hardware or modify your device configurations using Device Manager.



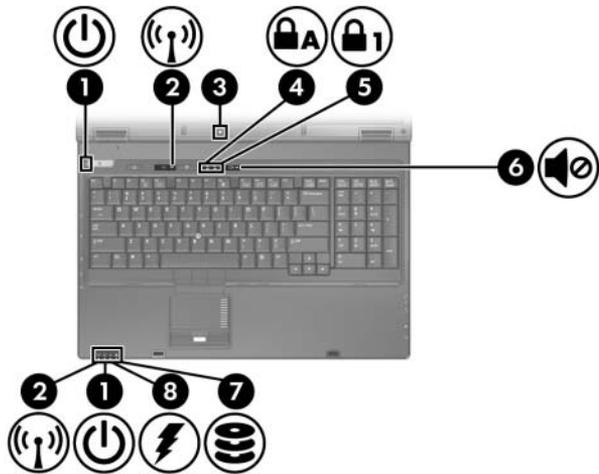
Components included with the computer may vary by region and by model. The illustrations in this guide identify the standard external features included in most computer models.

Top components

Lights



Your computer may look slightly different from the illustrations in this chapter.



Component	Description
❶ Power lights*	On: The computer is on. Blinking: The computer is in standby. Blinking rapidly: An AC adapter with a higher power rating should be connected. Off: The computer is off or in hibernation.
❷ Wireless lights† (2)	On: An integrated wireless device, such as a wireless local area network (LAN) device and/or a Bluetooth® device is turned on.

(Continued)

Component	Description
③ Light sensor	Detects available light
④ Caps lock light	On: Caps lock is on.
⑤ Num lock light	On: Num lock is on.
⑥ Volume mute light	On: System sound is turned off.
⑦ IDE (Integrated Drive Electronics) drive light	Blinking: The hard drive or optical drive is being accessed.
⑧ Battery light	Amber: A battery pack is charging. Green: A battery pack is close to full charge capacity. Blinking amber: A battery pack that is the only available power source has reached a low-battery condition. When the battery reaches a <i>critical</i> low-battery condition, the battery light begins blinking more quickly. Off: If the computer is plugged into an external power source, the light is turned off when all batteries in the computer are fully charged. If the computer is not plugged into an external power source, the light is turned off until the battery reaches a low-battery condition.

*There are 2 power lights. Both display the same information. The light on the power button is visible only when the computer is open; the other power light is always visible on the front of the computer.

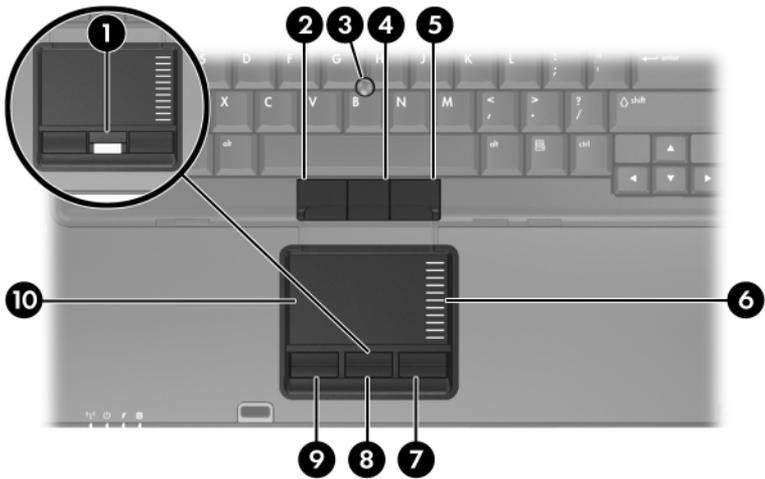
†There are 2 wireless lights. Both display the same information. The light on the wireless button is visible only when the computer is open; the other wireless light is always visible on the front of the computer.

Pointing devices



Your computer may look slightly different from the illustrations in this chapter.

The pointing stick (select models only) and TouchPad controls can be used interchangeably. The following illustration and table describe the computer pointing devices, which vary by model.



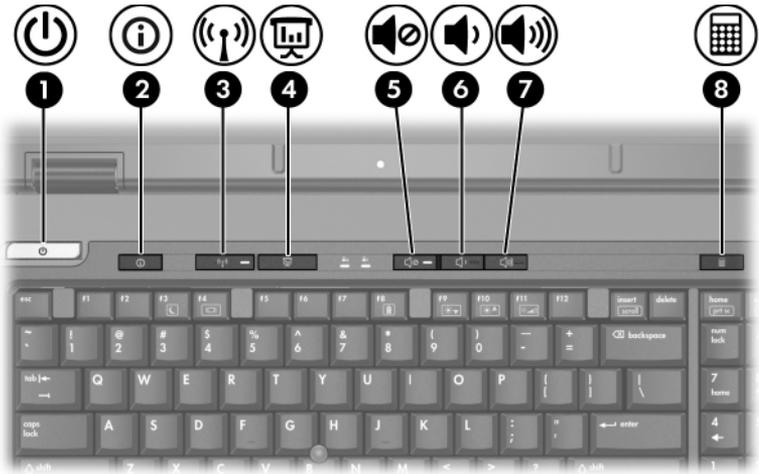
Component	Description
❶ Fingerprint reader (select models only)*	Allows a fingerprint logon to Microsoft® Windows® instead of a password logon. On select models, a center button replaces the fingerprint reader.
❷ Left pointing stick button (select models only)	Functions like the left button on an external mouse.
❸ Pointing stick (select models only)	Moves the pointer and selects or activates items on the screen.

(Continued)

Component	Description
④ Center pointing stick button (select models only)	Functions like the center button on an external mouse.
⑤ Right pointing stick button (select models only)	Functions like the right button on an external mouse.
⑥ TouchPad scroll zone*	Scrolls up or down.
⑦ Right TouchPad button	Functions like the right button on an external mouse.
⑧ Center TouchPad button (select models only)	Functions like the center button on an external mouse. On select models, a fingerprint reader replaces the center button.
⑨ Left TouchPad button*	Functions like the left button on an external mouse.
⑩ TouchPad*	Moves the pointer and selects or activates items on the screen. Can be set to perform other mouse functions, such as scrolling, selecting, and double-clicking.

*This table describes default settings. To view and change TouchPad preferences, select **Start > Control Panel > Printers and Other Hardware > Mouse**.

Buttons and switches



Component	Description
<p>1 Power button*</p>	<p>When the computer is</p> <ul style="list-style-type: none"> ■ Off, press to turn on the computer. ■ In standby, briefly press to exit standby. ■ In hibernation, briefly press to exit hibernation. <p>If the computer has stopped responding and Windows shutdown procedures cannot be used, press and hold the power button for at least 5 seconds to turn off the computer.</p>

(Continued)

Component	Description
② Info Center button	Launches Info Center, which enables you to open the following software solutions: Altiris Local Recovery, Contact HP, Help and Support, Accessories Product Tour (Options Demo), ProtectTools Security Manager, Software Setup, System Information, and Wireless Assistant.
③ Wireless button*	<p data-bbox="540 483 919 565">Turns the wireless feature on or off, but does not create a wireless connection.</p> <p data-bbox="540 591 932 672"> To establish a wireless connection, a wireless network must already be set up.</p>
④ Presentation button	Starts the Presentation feature.
⑤ Volume mute button	Mutes system sound.
⑥ Volume down button	Decreases system volume.
⑦ Volume up button	Increases system volume.
⑧ Calculator button	Turns on Windows calculator function.

*This table describes default settings. For information about changing default settings, refer to the user guides located in the Help and Support Center.

Keys



Component	Description
❶ esc key	Displays system information when pressed in combination with the fn key.
❷ fn key	Executes frequently used system functions when pressed in combination with a function key or the esc key.
❸ Windows logo key	Displays the Microsoft Windows Start menu.

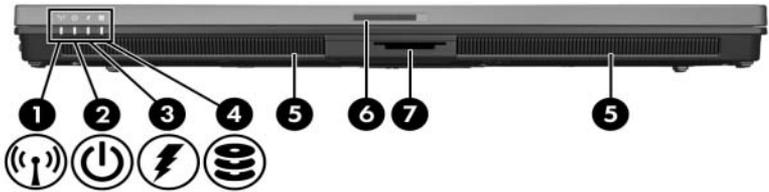
(Continued)

Component	Description
④ Windows applications key	Displays a shortcut menu for items beneath the pointer.
⑤ Integrated numeric keypad	Can be used like the keys on an external numeric keypad.
⑥ Function keys	Execute frequently used system functions when pressed in combination with the fn key.  Refer to the table in “ Hotkey quick reference ” for a description of each hotkey.

Hotkey quick reference

To perform this function	Press
Display system information	fn+esc
Clear system information	esc or enter
Initiate standby	fn+f3
Resume from standby	Power button
Alternate between computer display and external display	fn+f4
View battery information	fn+f8
Clear battery information	fn+f8
Decrease screen brightness	fn+f9
Increase screen brightness	fn+f10
Turn on and off light sensor	fn+f11

Front components



Component	Description
❶ Wireless light	On: An integrated wireless device, such as a wireless local area network (LAN) device and/or a Bluetooth® device is turned on.
❷ Power light	On: The computer is on. Blinking: The computer is in standby. Blinking rapidly: An AC adapter with a higher power rating should be connected. Off: The computer is off or in hibernation.

(Continued)

Component	Description
③ Battery light	<p>Amber: A battery pack is charging.</p> <p>Green: A battery pack is close to full charge capacity.</p> <p>Blinking amber: A battery pack that is the only available power source has reached a low-battery condition. When the battery reaches a <i>critical</i> low-battery condition, the battery light begins blinking more quickly.</p> <p>Off: If the computer is plugged into an external power source, the light is turned off when all batteries in the computer are fully charged. If the computer is not plugged into an external power source, the light is turned off until the battery reaches a low-battery condition.</p>
④ IDE (Integrated Drive Electronics) drive light	Blinking: The hard drive or optical drive is being accessed.
⑤ Speakers (2)	Produce system sound.
⑥ Display release latch	Opens the computer.
⑦ Digital Media Slot	Supports 7 optional digital card formats: Secure Digital (SD) Memory Card, MultiMediaCard, Memory Stick, Memory Stick Pro, Memory Stick Duo (with adapter), SmartMedia card, and xD-Picture Card.

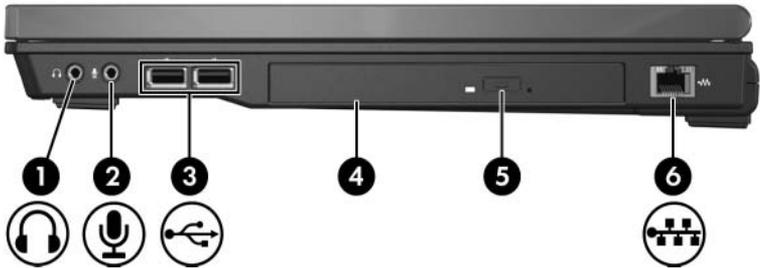
Rear components



Component	Description
1 Security cable slot	Attaches an optional security cable to the computer. △ The security cable is designed to act as a deterrent, but may not prevent the computer from being mishandled or stolen.
2 Vent*	Provides airflow to cool internal components. △ To prevent overheating, do not obstruct vents. Use the computer only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or a soft surface, such as pillows or thick rugs or clothing, to block airflow. 🖊 The computer fan starts up automatically to cool internal components and prevent overheating. It is normal for the internal fan to cycle on and off during routine operation.
3 RJ-11 (modem) jack	Connects a modem cable.

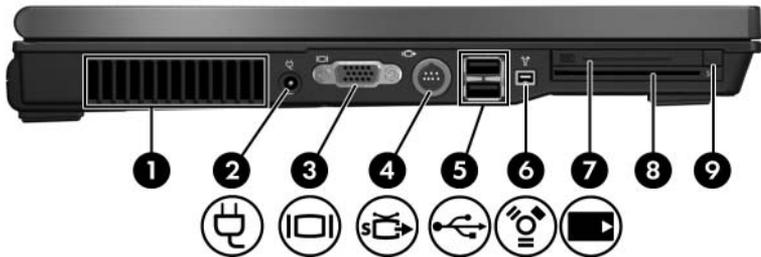
*Depending on computer model, vents vary in number and location.

Right-side components



Component	Description
❶ Audio-out (headphone) jack	Produces system stereo sound when connected to optional powered stereo speakers, headphones, ear buds, a headset, or television audio.
❷ Audio-in (microphone) jack	Connects an optional headset or microphone.
❸ USB ports (2)	Connect USB 1.1- and 2.0-compliant devices to the computer using a standard USB cable. Either port can also connect an optional External MultiBay II to the computer. The MultiBay II must be plugged into an external power source.
❹ Optical drive	Reads an optical disc.
❺ Optical drive button	Releases the media tray.
❻ RJ-45 (network) jack	Connects a network cable.

Left-side components



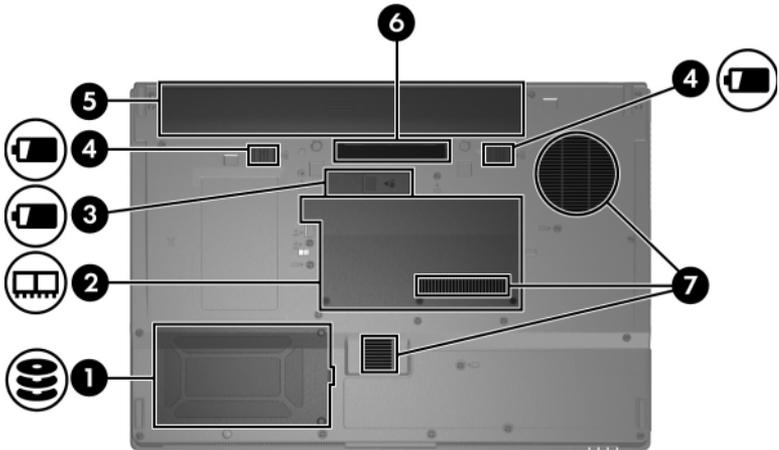
Component	Description
❶ Vent*	<p>Provides airflow to cool internal components.</p> <p>⚠ To prevent overheating, do not obstruct vents. Use the computer only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or a soft surface, such as pillows or thick rugs or clothing, to block airflow.</p> <p>✎ The computer fan starts up automatically to cool internal components and prevent overheating. It is normal for the internal fan to cycle on and off during routine operation.</p>
❷ Power connector	Connects an AC adapter or an optional power adapter.
❸ External monitor port	Connects an external monitor.

(Continued)

Component	Description
④ S-Video-out jack	Connects an optional S-Video device such as a television, VCR, camcorder, overhead projector, or video capture card.
⑤ USB ports (2)	Connect USB 1.1- and 2.0-compliant devices to the computer using a standard USB cable. Either port can also connect an optional External MultiBay II to the computer. The MultiBay II must be plugged into an external power source.
⑥ 1394 port	Connects an optional IEEE 1394 device, such as a camcorder.
⑦ PC Card slot	Supports optional Type I and Type II 32-bit (CardBus) or 16-bit PC Cards.
⑧ Smart card slot	Supports optional smart cards.
⑨ PC Card eject button	Ejects the PC Card from the PC Card slot.

*Depending on computer model, vents vary in number and location.

Bottom components



Component	Description
① Hard drive bay	Holds the hard drive.
② Expansion memory module and Mini Card compartment	Contains the expansion memory module slot, and a wireless LAN device.
	<p>⚠ To prevent an unresponsive system and the display of a warning message, replace with only a Mini Card device authorized for use in the computer by the governmental agency that regulates wireless devices in your country. If you replace a device and then receive a warning message, remove the device to restore computer functionality. Then contact Customer Care.</p>

(Continued)

Component	Description
③ Accessory battery connector	Connects an optional accessory battery.
④ Primary battery pack release latches (2)	Release the primary battery pack from the battery bay.
⑤ Primary battery bay	Holds the primary battery pack.
⑥ Docking connector	Connect the computer to an optional docking device.
⑦ Vents*	<p>Provide airflow to cool internal components.</p> <p> To prevent overheating, do not obstruct vents. Use the computer only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or a soft surface, such as pillows or thick rugs or clothing, to block airflow.</p> <p> The computer fan starts up automatically to cool internal components and prevent overheating. It is normal for the internal fan to cycle on and off during routine operation.</p>

*Depending on computer model, vents vary in number and location.

Wireless antennae

There are 2 wireless antennae that send and receive wireless device signals. They are not visible from the outside of the computer.

For wireless regulatory notices pertaining to your region, refer to the *Regulatory, Safety and Environmental Notices* located in the Help and Support Center.



Additional hardware components



Component	Description
❶ Power cord*	Connects an AC adapter to an AC outlet.
❷ AC adapter	Converts AC power to DC power.
❸ Primary battery pack*	Powers the computer when the computer is not plugged into external power.

*Modem cables, battery packs, and power cords vary in appearance by region and country.

Labels

The labels affixed to the computer provide information you may need when you troubleshoot system problems or travel internationally with the computer.

- **Service tag**—Provides the product name, product number (P/N), and serial number (S/N) of your computer. Have this information available when you contact Customer Care. The service tag label is affixed to the bottom of the computer. The information on the service tag is also available through the Help and Support Center.
- **Microsoft Certificate of Authenticity**—Contains the Microsoft Windows Product Key. You may need the Product Key to update or troubleshoot the operating system. This certificate is affixed to the bottom of the computer.
- **Wireless certification label(s)**—Provide information about optional wireless devices and the approval markings on some of the countries in which the devices have been approved for use. An optional device may be a wireless local area network (WLAN) device or an optional Bluetooth® device. If your computer model includes one or more wireless devices, one or more certification labels are included with your computer. You may need this information when traveling internationally. Wireless certification labels are affixed to the bottom of the computer.
- **Modem approval label**—Provides regulatory information about the modem and lists the agency approval markings required by some of the countries in which the modem has been approved for use. You may need this information when traveling internationally. The modem approval label is affixed to the bottom of the computer.
- **Regulatory label**—Provides regulatory information about the computer. The regulatory label is affixed to the bottom of the computer.

Specifications

The following sections provide information on the operating environment specifications and power specifications of the computer.

Operating environment

The operating environment information in the following table may be helpful if you plan to use or transport the computer in extreme environments.

Factor	Metric	U.S.
Temperature		
Operating (not writing to optical disc)	0°C to 35°C	32°F to 95°F
Operating (writing to optical disc)	5°C to 35°C	41°F to 95°F
Nonoperating	-20°C to 60°C	-4°F to 140°F
Relative humidity (noncondensing)		
Operating	10% to 90%	10% to 90%
Nonoperating	5% to 95%	5% to 95%
Maximum altitude (unpressurized)		
Operating (14.7 to 10.1 psia*)	-15 m to 3,048 m	-50 ft to 10,000 ft
Nonoperating (14.7 to 4.4 psia*)	-15 m to 12,192 m	-50 ft to 40,000 ft

*Pounds per square inch absolute (psia) is another unit of measurement for altitude.

Rated input power

The power information in this section may be helpful if you plan to travel internationally with your computer.

The computer operates on DC power, which can be supplied by an AC or a DC power source. Although the computer can be powered from a stand-alone DC power source, it is strongly recommended that the computer be powered only with an AC adapter or a DC power cord supplied by or approved for an HP computer.

The computer is capable of accepting DC power within the following specifications.

Input power	Rating
Operating voltage	18.5 V dc @ 3.5 A - 65 W
Operating current	3.5 A

This product is designed for IT power systems in Norway with phase-to-phase voltage not exceeding 240 V rms.

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First Edition March 2006

Document Part Number: 396853-001